# LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

# ADMINISTRATIVE RECORD

# **CHRONOLOGICAL INDEX**

Volume 4 of 9

2008

Bate Stamp Numbers 00065713 - 00066661

**Prepared for** 

Department of the Army Longhorn Army Ammunition Plant

1976 - 2008

# LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS <u>ADMINISTRATIVE RECORD – CHRONOLOGICAL INDEX</u>

#### VOLUME 4 of 9

2008

# Note: Volume 4, Year 2008, Letters A, B, and C are listed Out of Date in Sequence and should have been inserted in the Year 1997 update to the Administrative Record.

| A. | Title:      | Report – Closure Report for Closure of 29 Active (Group I) and 11<br>Transition (Group 2) Sumps |
|----|-------------|---|
|    | Author(s):  | Thiokol Corporation for Longhorn Army Ammunition Plant  |
|    | Recipient:  | TCEQ  |
|    | Date:       | September 1996  |
|    | Bate Stamp: | 00065713 - 00065732   |
|    |             |   |

- B. Title: Letter Closure of Sumps at Longhorn Army Ammunition Plant Author(s): James A. McPherson, Commander's Representative, Department of the Army
  Recipient: Lila Beckley, TCEQ
  Date: February 19, 1997
  Bate Stamp: 00065733
- C. Title: Letter Closure Report for 29 Active (Group I) and 11 Transition (Group 2) Sumps, Approval of Report Author(s): Cathy Remmert, Senior Coordinator, TCEQ Recipient: Ira C. Nathan, Chief Operations Review Division, US Army Date: February 28, 1997 Bate Stamp: 00065734 - 00065735

# Note: Volume 4, Year 2008, Letter D is Out of Date in Sequence and should have been inserted in the Year 2004 update to the Administrative Record.

D. Title: Memorandum of Agreement Between the Department of the Army and the Department of the Interior for the Interagency Transfer of Lands at the Longhorn Army Ammunition Plant for the Caddo Lake National Wildlife Refuge, Harrison County, Texas
Author(s): Department of the Army, Department of the Interior
Recipient: All
Date: 2004
Bate Stamp: 00065736 - 00065753

# LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS ADMINISTRATIVE RECORD – CHRONOLOGICAL INDEX

VOLUME 4 of 9

2008

# Note: Volume 4, Year 2008, Letters E, F, and G are Out of Date in Sequence and should have been inserted in the Year 2007 update to the Administrative Record.

| E. | Title:<br>Author(s):<br>Recipient:<br>Date:<br>Bate Stamp: | Letter – Draft Final Site Investigation Report, LHAAP-06, -51, -55, -64, -66,<br>and -68<br>Fay Duke, Project Manager, TCEQ<br>Rose Zeiler, Site Manager, LHAAP<br>September 21, 2007<br>00065754 - 00065757  |
|----|--|---|
| F. | Title:<br>Author(s):<br>Recipient:<br>Date:<br>Bate Stamp: | Letter – Draft Final Data Evaluation Report, Chemical Concentration in Soil<br>Samples Associated with LHAAP-35/36 Sumps<br>Fay Duke, Project Manager, TCEQ<br>Rose Zeiler, Site Manager, LHAAP<br>September 24, 2007<br>00065758 - 00065759                    |
| G. | Title:<br>Author(s):<br>Recipient:<br>Date:<br>Bate Stamp: | Email – Draft Final Data Evaluation Report, Chemical Concentration in Soil<br>Samples Associated with LHAAP-35/36 Sumps<br>Fay Duke, Project Manager, TCEQ<br>Rose Zeiler, Site Manager, LHAAP<br>September 24, 2007<br>00065760                                |
| Н. | Title:<br>Author(s):<br>Recipient:<br>Date:<br>Bate Stamp: | Reports – Final Proposed Plans for LHAAP-08, Former Sewage Treatment<br>Plant; LHAAP-32, Former TNT Waste Disposal Plant; and LHAAP-48 (Y-<br>Area) and LHAAP-35C(53) (Static Test Area)<br>Shaw<br>All Stakeholders<br>January 10, 2008<br>00065761 - 00065800 |

I. Title: Letter – Memorandum: LHAAP-59 SPLP Soil Sample Analyses Author(s): Rose Zeiler, Site Manager, LHAAP Recipient: Fay Duke, Project Manager, TCEQ Date: January 15, 2008 Bate Stamp: 00065801 - 00065803

# LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS ADMINISTRATIVE RECORD – CHRONOLOGICAL INDEX

### VOLUME 4 of 9

2008

| J. | Title:   | Letter – Final Site Investigation Report, Revision 1 for LHAAP-06, LHAAP-07, LHAAP-51, LHAAP-55, LHAAP-64, LHAAP-66, and LHAAP-68                              |
|----|--|--|
|    | Author(s):<br>Recipient:<br>Date:<br>Bate Stamp:           | Fay Duke, Project Manager, TCEQ<br>Rose Zeiler, Site Manager, LHAAP<br>January 16, 2008<br>00065804  |
| K. | Title:<br>Author(s):<br>Recipient:<br>Date:<br>Bate Stamp: | Letter – Comprehensive Land Use Control Management Plan<br>Fay Duke, Project Manager, TCEQ<br>Rose Zeiler, Site Manager, LHAAP<br>January 17, 2008<br>00065805 |
| L. | Title:   | Report – Final Data Evaluation Report, Chemical Concentrations in Soil   |
|    | Author(s):<br>Recipient:<br>Date:<br>Bate Stamp:           | Shaw<br>All Stakeholders<br>January 21, 2008<br>00065806 – 00065901  |
| M. | Title:   | Report – Final Data Evaluation Report, Chemical Concentrations in Soil<br>Samples Associated with LHAAP-35/36 Sumps, Volume II of III                          |
|    | Recipient:<br>Date:<br>Bate Stamp:                         | All Stakeholders<br>January 21, 2008<br>00065902 - 00066400  |
| N. | Title:   | Report – Final Data Evaluation Report, Chemical Concentrations in Soil<br>Samples Associated with LHAAP-35/36 Sumps, Volume III of III                         |
|    | Author(s):<br>Recipient:<br>Date:<br>Bate Stamp:           | Shaw<br>All Stakeholders<br>January 21, 2008<br>00066401 - 00066661  |

# LONGHORN ARMY AMMUNITION PLANT

CLOSURE REPORT

# CLOSURE OF 29 ACTIVE AND 11 TRANSITION SUMPS

Prepared For: Longhorn Army Ammunition Plant Karnack, Texas

> Prepared By: Thiokol Corporation

A CONTRACTOR OF THE OWNER

September 1996

# TABLE OF CONTENTS

## **VOLUME I**

| 1.0 | INTRODUCTION                                    |          |
|-----|---|----------|
|     | 1.1 Organization of Report Content              | 1        |
|     | 1.2 LHAAP Location                              | 2        |
| 2.0 | DESCRIPTION OF FIELD WORK                       | 2        |
|     | 2.1 Wastewater and Sludge Sampling Methodology. | 2        |
|     | 2.2 Waste Disposition                           | <u>4</u> |
|     | 2.3 Sump Decontamination                        |          |
|     | 2.4 Concrete Sampling Methodology               | 0        |
|     | 2.5 Sump Concrete Disposal                      | 6        |

# LIST OF TABLES

| Table 1   | Waste Generated               | <br>5 |
|-----------|-------------------------------|-------|
| Table 2   | Final Status Active Sumps     |       |
| Table 2-A | Final Status Transition Sumps | 9     |

### LIST OF FIGURES

| Figure 1 | Longhorn Army Ammunition Plant Area Map |  |
|----------|---|--|
|----------|---|--|

### LIST OF APPENDICES

| Appendix A | Closure plan approval letter from TNRCC<br>State of Oklahoma Disposal Plan                                      |
|------------|---|
| Appendix B | Inventory of Wastes Generated Active Sumps<br>Inventory of Waste Generated Transition Sumps                     |
| Appendix C | Decontamination Water Analysis  |
| Appendix D | Manifests   |
| Appendix E | Background Levels From Sumps Investigation Background Data<br>Background Sample of Concrete from Building 54-H. |
| Appendix F | Closure Plan for Wastewater Sumps, May 1995   |
| Appendix G | Shops & Power Area Site Plan<br>Plant 2 Site Plan<br>Plant 3 Site Plan<br>Burning Ground 3 Site Plan            |

# VOLUME II

Ì

# ACTIVE SUMPS

| <u>LHAAP</u> | ASSOCIATED | <b>TNRCC</b> |
|--------------|------------|--------------|
| SUMP ID #    | BUILDING   | <u>ID #</u>  |
| 01           | P-1        | 030          |
| 02           | P-3        | 031          |
| 03           | P-3        | 032          |
| 07           | P-116      | 036          |
| 10           | P-118      | 039          |
| 11           | P-118      | 040          |
| 12           | P-118      | 041          |
| 20           | B-11       | 049          |
| 22           | B-13       | 051          |
| 24           | B-15       | 053          |
| 27           | P-9        | 056          |
| 32           | 212-14     | 061          |
| 34           | 212-16     | 063          |
| 35           | 212-18     | 064          |
| 41           | 212-35     | 070          |
| 42           | 212-37     | 071          |
| 65           | 45-E       | 094          |
| 66           | 45-E       | 095          |
|              |            |              |

# VOLUME III

 $\langle , \rangle$ 

## ACTIVE SUMPS

| <u>LHAAP</u> | ASSOCIATED | TNRCC       |
|--------------|------------|-------------|
| SUMP ID #    | BUILDING   | <u>ID #</u> |
| 72           | 54-F       | 101         |
| 73           | 54-G       | 102         |
| 75           | 54-G       | 104         |
| 76           | 54-H       | 105         |
| <b>77</b> ·  | .54-H      | 106         |
| 111          | 722-P      | 140         |
| 112          | 722-P      | 141         |
| 114          | 25-X       | 143         |
| 122          | 401-C      | 151         |
| 800          | 23T        | 153         |
| NA           | 723        | 154         |
|              |            |             |

# **VOLUME IV**

<u>(</u>

`,

# GROUP 2 (TRANSITION) SUMPS

| <u>LHAAP</u> | ASSOCIATED | TNRCC     |
|--------------|------------|-----------|
| SUMP ID #    | BUILDING   | <u>D#</u> |
| 38           | 212-33     | 067       |
| 40           | 212-33     | 069       |
| 44           | 25-C       | 073       |
| 45           | 25-C       | 074       |
| 47           | 25-D       | 076       |
| . 48         | 26-E       | 077       |
| 51           | 26-E       | 080       |
| 53           | 29-D       | 082       |
| 55           | 31-G       | 084       |
| . 61         | 42-H       | 090       |
| 70           | 50-G       | 099       |

#### INTRODUCTION

1.

This document is the Closure Report prepared as part of the Agreed Order requirements for closure of wastewater sumps at Longhorn Army Ammunition Plant. The purpose of this report is to document the information gathered during the field investigation characterizing waste, waste disposal, sump decontamination, sump disposal, and final sump status.

The closure of wastewater sumps was initiated by the "Closure Plan for Wastewater Sumps, May 1995", required by item 1 of the Agreed Order between the Department of the U.S. Army and the Texas Natural Resource Conservation Commission on 16 November 1995.

The closure of 29 active sumps and 11 transition sumps was begun after TNRCC approval of the Closure Plan for Wastewater Sumps dated 27 June, 1995. The closure procedure, as required by the Agreed Order involve only the sumps and their contents. Delineation and remediation of any releases from the sumps will be completed in accordance with the Federal Facility Agreement and applicable RCRA regulations.

Active and transition sumps have been closed as required by the closure plan with the exception of one unit. This unit, NOR number 154 was actually a weir at the laundry. As approved by the TNRCC on 11 October 1995, this unit was removed from any closure requirements. Correspondence concerning the laundry weir is provided in volume III of this closure report.

#### 1.1 Organization of Report Content

Volume I of this report contains a general description of the sump closure methodology and supporting documentation for the overall project. All tables, figures, and appendices are provided in volume I.

Volumes II, III, and IV contain a specific description of the work done and the supporting documentation for the closure of each sump. The contents of volumes II, III, and IV are separated into a section for each sump. Volumes II and III provide data on "Active" sumps and volume IV provides data on "Transition" sumps. Below is a list of the supporting documentation for closure in each section on a specific sump.

#### Section Contents

Sump Closure Certification Work Done Waste Determination Summary Sheet Concrete Determination Summary Sheet Location Map Sump Structural Drawing Analytical Results Chain of Custody Reports

#### **1.2 LHAAP Location**

LHAAP is located on the northwest shore of Caddo Lake in northeast Texas. The plant is adjacent to the communities of Karnack and Uncertain and 14 miles northeast of Marshall, Texas and 40 miles west of Shreveport, Louisiana. Figure 1 illustrates the plant's location relative to the state of Texas and more specifically Marshall, Texas.

#### 2.0 DESCRIPTION OF FIELD WORK

Field work began immediately upon receipt of the approval letter from the TNRCC (Appendix A). As the first order of business trenches to each sump were blocked off with concrete to prevent stormwater runon infiltration prior to any work being done. The prevention of stormwater entering the sumps minimized the quantity of wastewater being generated. The sumps were then sampled, decontaminated, and removed or filled with dirt as specified in the closure plan.

### 2.1 Wastewater and Sludge Sampling Methodology

Liquid and sludge samples were removed from each sump to analyze for volatile organic compounds, semi-volatile organic compounds, and RCRA metals. In addition specific samples were analyzed for explosives, isophorone diisocyanate (IPDI), and total petroleum compounds at



areas where the sumps might have been contaminated with these items. Appendix IX of the Closure Plan for Wastewater Sumps presents a list of the sumps where additional sampling and analysis was conducted. Samples were pulled from locations as specified by the closure plan. All nondisposable equipment was decontaminated by washing with Alconox and rinsing with water, final rinsing with de-ionized water, and finishing with a hexane spray prior to collecting samples.

Quality Assurance/quality control (QA/QC) samples were collected to verify that the sampling and analytical techniques were being performed properly. Equipment blanks were taken at regular intervals to insure proper decontamination of equipment. Trip blanks were sent in with each shipment of samples to check the performance of the laboratory. No QA/QC samples showed any detectable levels of any contaminant. Analytical results for all QA/QC samples are located in Appendix C.

#### 2.2 Waste Disposition

1

Waste Disposition Summary Sheets were prepared for each sump to identify waste constituents in each sump and to determine the proper disposition of the waste. The waste disposition summary sheet is simply a summary of the analytical data from the laboratory and a waste determination on a single page. This summary sheet was used in the field by the equipment operators and technicians to correctly label and route the waste to its proper location. Summary sheets are included in this report in each section on specific sumps.

Liquid wastes were removed with a vacuum truck. If the wastewater was determined hazardous, it was shipped offsite to a TSD facility. If the wastewater was determined to be non-hazardous it was treated by evaporation at the onsite wastewater treatment plant.

Immediately after the removal of liquids from the waste unit, sludge's were removed and placed into 30-gallon drums. A backhoe with a small bucket was utilized to remove the bulk of the waste from the sump and long handles shovels removed the sludge residue from the sump. Plastic was spread on the ground to capture any sludge that spilled during containerization. A large funnel was placed into the 30-gallon drums to facilitate transfer of the sludge from the backhoe bucket to the drum without spills. During sludge removal operators were not allowed to enter the sump at any SUMP CLAND PROJECT WASTE GENERATED

Ţ

 $\bigcirc$ 

| Waste Generated                    | Active  | sunps<br>galions | Transhion<br>pounds | Sumps<br>gailons | Tola    | ll<br>gallons |  |
|------------------------------------|---------|------------------|---------------------|------------------|---------|---------------|--|
| Sump K044 Sludge                   | 54,896  |                  | 47,638              |                  | 102,534 |               |  |
| Contaminated Solids (gloves, etc.) | 30      |                  | 35                  |                  | 150     |               |  |
| Decontamination Water, Hazardous,  |         |                  |                     |                  |         |               |  |
| Offsite Treatment                  | 87,695  | 10,515           | 34,928              | 4,188            | 122,623 | 14,703        |  |
| Hazardous Water, Offsite Treatment | 63,125  | 7,569            | 46,988              | 5,634            | 110,113 | 13,203        |  |
| Non Hazardous Water, Onsite        |         |                  |                     |                  |         |               |  |
| Treatment                          | 73,417  | 8,803            | 43,293              | 5,191            | 116,710 | 13,994        |  |
| Concrete Debris, Hazardous, Above  |         |                  |                     |                  |         |               |  |
| Land Ban Treatment Levels          | 173,400 |                  | 97,256              |                  | 270,656 |               |  |
| Concrete Debris, Hazardous Below   |         |                  |                     |                  |         |               |  |
| Land Ban Treatment Levels          | 307,080 |                  | 114,224             |                  | 421,304 |               |  |
| Concrete Debris, Non-Hazardous,    |         |                  |                     |                  |         |               |  |
| Class II Waste                     | 30,000  |                  | 46,000              |                  | 76,000  |               |  |

00065722

TABLE 1

time. Operators did not enter any sump until the sump was emptied and washed with high pressure water. Sumps were entered upon clearance from the safety officer.

Sludge determined to be potentially reactive was treated at the Longhorn AAP Burning Ground. The ash residue from the deactivated sludge was sampled and analyzed for constituents that were in the sludge that was treated. If the ash exhibited levels of metals as determined by a TCLP test, it was treated and landfilled in a hazardous waste landfill. Ash that exhibited any level of a Flisted solvent was treated if required and landfilled in a hazardous waste landfill.

#### 2.3 Sump Decontamination

After removal of bulk sludge and residues from the sump, the unit was washed with high pressure water from a portable pump. Rinsewater was collected and analyzed for hazardous constituents prior to disposal. Results from decontamination water analysis are located in Appendix C. Treatment of rinsewater was handled the same as liquid wastes removed from the sumps.

Selected sumps were blasted with carbon dioxide pellets to remove potentially reactive residues from sump walls. Residue removed during the dry-ice blasting process was disposed in accordance with the sludge removed from the sump.

#### 2.4 Concrete Sampling Methodology

After all sumps were decontaminated, concrete samples were spalled from the sump in accordance with the closure plan. Samples were spalled with an pnuematic chisel. The samples were collected in a one-liter jar and shipped on ice to the laboratory. The samples were analyzed for total volatile organic compounds, semi-volatile organic compounds, and 8-RCRA metals.

#### 2.5 Sump Concrete Disposal

Concrete spalled from sumps that contained detectable levels of F-listed solvents were considered hazardous. These sumps were removed and shipped to a hazardous waste landfill. Areas where the sumps were removed were backfilled with clean soil. Sumps that contained F-listed solvents above Land Disposal Restriction (LDR) levels were treated by microencapsulation to meet those standards. Sumps that contained F-listed solvents below LDR levels were certified and landfilled without microencapsulation. Hazardous waste sumps were disposed of at USPCI-Lone Mountain,

a Laidlaw facility in Waynoka Oklahoma. A State of Oklahoma one-time disposal plan is included in Appendix A.

Sumps that were not EPA hazardous and did leach semi-volatile compounds were compared to the Texas Waste Classification rule 30 TAC 335.521, Table 1. The sumps were classified accordingly, removed and landfilled at the Pinehill Landfill in Kilgore, Texas. A copy of an Authorization for Disposal of a Special Waste is included in Appendix A.

Concrete containing RCRA metals at levels 20 times greater than the EPA hazardous level were analyzed for that metal utilizing the TCLP. If the results were non-hazardous in accordance with EPA guidelines and less than background as determined by the Longhorn AAP Soil Background Survey, they were filled in place with clean soil. All active and transition sumps that did require additional TCLP testing did not exhibit leachable levels of metals above the background levels.

To determined typical levels of metals in "clean" concrete, a sample was taken from an outside wall at building 54-H. Levels of total metals in the sample were very similar to levels taken from sumps that had been decontaminated. Results of the analysis are located in Appendix E

Concrete determined to not contain a F-listed solvent, but did contain a semi-volatile solvent such as Di-n-butylphthalate, a common ingredient in plastic and paint, were tested for leachability using the TCLP procedure. If the analysis was non-detect for these constituents the sumps they were filled in place as non-hazardous sumps in accordance with the closure plan.

00065725

\_:

# SUMP CLOSURE PROJECT SUMP STATUS

| TRANSITION SUMPS |                 |                   |                              |                       |  |  |
|------------------|-----------------|-------------------|------------------------------|-----------------------|--|--|
| SUMP<br>NO.      | BUILDING<br>NO. | FILL-IN-<br>PLACE | NON<br>HAZARDOUS<br>LANDFILL | HAZ-WASTE<br>LANDFILL |  |  |
| 38               | 212-32          | YES               |                              |                       |  |  |
| . 40             | 212-33          | YES               |                              |                       |  |  |
| 44               | 25-C            | YES               |                              |                       |  |  |
| 45               | 25-C            |                   | YES                          |                       |  |  |
| 47               | 25-D            |                   |                              | YES                   |  |  |
| 48               | 26-E            |                   |                              | YES                   |  |  |
| 51               | 26-E            | YES               |                              |                       |  |  |
| 53               | 29-D            | YES               |                              |                       |  |  |
| 55               | 31-G            |                   | YES                          |                       |  |  |
| 61               | 42-H            |                   |                              | YES                   |  |  |
| 70               | 50-G            |                   |                              | YES                   |  |  |

Ĵ

# SUMP CLOSURE PROJECT SUMP STATUS

| ACTIVE SUMPS |              |              |             |           |  |  |  |
|--------------|--------------|--------------|-------------|-----------|--|--|--|
|              |              |              | NON         |           |  |  |  |
| SUMP         | BUILDING     | FILL-IN-     | HAZARDOUS   | HAZ-WASTE |  |  |  |
| NO.          | NO.          | PLACE        | LANDFILL    | LANDFILL  |  |  |  |
| 00 7 1       | P-1          | YES          |             |           |  |  |  |
| 2            | P-3          | YES          |             |           |  |  |  |
| 3            | P-3          | YES          |             |           |  |  |  |
| 7            | P-116        | YES          |             |           |  |  |  |
| 10           | P-118        | YES          | <i>.</i>    |           |  |  |  |
| 11           | P-118        | YES          |             |           |  |  |  |
| 12           | P-118        | YES          |             |           |  |  |  |
| 20           | B-11         |              |             | YES       |  |  |  |
| 22           | B-13         |              |             | YES       |  |  |  |
| 24           | B-15         | YES          |             |           |  |  |  |
| 27           | P-9          |              |             | YÉS       |  |  |  |
| 32           | 212-14       | YES          |             |           |  |  |  |
| 34           | 212-16       |              | YES         |           |  |  |  |
| 35           | 212-18       |              | YES         |           |  |  |  |
| 41           | 212-35       |              |             | YES       |  |  |  |
| 42           | 212-37       |              |             | YES       |  |  |  |
| 65           | 45-E         |              | YES         |           |  |  |  |
| 66           | 45-E         | YES          |             |           |  |  |  |
| 72           | 54-F         |              |             | YES       |  |  |  |
| 73           | 54-G         |              |             | YES       |  |  |  |
| 75           | 54-G         | YES          |             | 1.        |  |  |  |
| 76           | 54-H         | 1            |             | YES       |  |  |  |
| 77           | 54-H         | YES          |             |           |  |  |  |
| 111          | 722-P*       | NA           | NA          | ŇA        |  |  |  |
| 112          | 722-P        | ·            | YES         |           |  |  |  |
| 114          | 25-X         |              |             | YES       |  |  |  |
| 122          | 401-C        | YES          |             |           |  |  |  |
| 800          | 23-T         | YES          |             |           |  |  |  |
|              | 722P* (decon | taminated an | d recycled) | •         |  |  |  |

P. O. BOX 9000 - KILGORE, TEXAS 75663-9000 - 903/984-0551 - FAX 903/984-5914



Analytical Chemistry • Utility Operations

Page 1 of 4 TEST REPORT: 316215

Haddhalladaalad Thiokol Corporation ATTN: Procurement P.O. Box 1029 Marshall, TX 75671 Attention: Bill Corrigan

Sample Identification: 54 - H, Concrete Background Collected By: Bill Corrigan Date & Time Taken: 01/30/96 1616

Other Data: Longhorn - AAP Bottle Data:

- #01 Plastic or Glass Liter Preserved with NaOH
- #03 Mercury Digestion
  - Derived in lab from:
- #02 ICP Digestion
  - Derived in lab from: 01 (4 g)

#### Sample Matrix: Solid Report Date: 02/12/96

Received: 01731/96

#### Client: THK1

| e Í  | í              |   |         |       |               |         |                 |     |
|------|----------------|---|---------|-------|---------------|---------|-----------------|-----|
| 1    | AMETER         |   | RESULTS | UNITS | ANALYZED      | EQL     | METHOD          | BY  |
| ·· _ | Total Solids   |   | 98      | *     | 2234 02/07/96 | 1       | APHA 2540 G     | JWB |
|      | Total Silver   |   | ND *    | mg/kg | 1223 02/08/96 | 0.10    | EPA Method 6010 | SKM |
|      | Total Arsenic  |   | 12 *    | mg/kg | 1223 02/08/96 | 1.0     | EPA Method 6010 | SKM |
|      | Total Barium   |   | 87 *    | mg/kg | 1223 02/08/96 | 0.10    | EPA Method 6010 | SKM |
|      | Total Cadmium  |   | 1.2 *   | mg/kg | 1223 02/08/96 | 0.10    | EPA Method 6010 | SKM |
|      | Total Chromium |   | 11 *    | mg/kg | 1223 02/08/96 | 0.20    | EPA Method 6010 | SKM |
|      | Total Mercury  |   | ND *    | mg/kg | 1133 02/10/96 | 0.00051 | EPA Method 7470 | MCH |
|      | Total Lead     |   | ND *    | mg/kg | 1223 02/08/96 | 1.0     | EPA Method 6010 | SKM |
|      | Total Selenium | • | ND *    | mg/kg | 1223 02/08/96 | 1.0     | EPA Method 6010 | SKM |
|      |                |   |         |       |               |         |                 |     |

#### Sample Preparation Steps for 316215

| As Received to Dry Weight Basis  | Converted |      | 10:1602/12/96 | Calculation        | NGT |
|----------------------------------|-----------|------|---------------|--------------------|-----|
| Fax This Report AS Soon As DONE: | FAXED     |      | 13:4402/12/96 | FAX                |     |
| Metals Digestion - Solids        | 50/4      | ml/g | 1600 02/07/96 | EPA Method 3050 Fl | PJD |
| " als Digestion - Hg Solid       | 50/1      | ml/g | 0800 02/09/96 | EPA Method 7471    | MCH |

Continued



P. O. BOX 9000 - KILGORE, TEXAS 75663-9000 - 903/984-0551 - FAX 903/984-5914

# Analytical Chemistry • Utility Operations

316215 Continued

Page 2 of 4

|          | Qua]        | lity As | suranc | e for th    | ne SET wit             | h Sample | 316215 |                   |     |
|----------|-------------|---------|--------|-------------|------------------------|----------|--------|-------------------|-----|
| Sample # | Description | Result  | Units  | Dup/Std Val | ue Spk Conc.<br>Solids | Percent  | Time   | Date              | Ву  |
|          | Blank       | 0.0000  | a      | 10001       |                        |          | 2234   | 02/07/96          | JWB |
| 216078   | Dumligate   | 78      | 2<br>% | 78          |                        | 0        | 2234   | 02/07/96          | JWB |
| 316078   | Duplicate   | 98      | •<br>& | 97          |                        | 1        | 2234   | 02/07/96          | JWB |
| 210213   | Dupitcace   |         | *      | Total       | Silver                 | -        |        |                   |     |
|          | Blank       | <0.010  | ppm    |             |                        |          | 1223   | 02/08/96          | SKM |
|          | Standard    | 1.9     | ppm    | 2.0         |                        | 95       | 1223   | 02/08/96          | SKM |
|          | Standard    | 0.96    | mqq    | 1.0         |                        | 96       | 1223   | 02/08/96          | SKM |
|          | Standard    | 0.97    | ppm    | 1.0         |                        | 97       | 1223   | 02/08/96          | SKN |
|          | Standard    | 0.92    | ppm    | 1.0         |                        | 92       | 1223   | 02/08/96          | SKM |
|          | Standard    | 1.8     | ppm    | 2.0         |                        | 90       | 1223   | 02/08/96          | SKM |
|          | Standard    | 2.0     | ppm    | 2.0         |                        | 100      | 1223   | 02/08/96          | SKM |
|          | Standard    | 1.0     | ppm    | 1.0         |                        | 100      | 1223   | 02 <b>/08/9</b> 6 | SKM |
| 316072   | Duplicate   | ND      | mg/kg  | ND          |                        | 0        | 1223   | 02/08/96          | SKM |
| 316072   | Spike       |         | ppm    |             | 1.0                    | 96       | 1223   | 02/08/96          | SKM |
|          |             |         |        | Total A     | Arsenic                |          |        |                   |     |
|          | Blank       | <0.10   | ppm    |             |                        |          | 1223   | 02/08/96          | SKM |
| . i      | Standard    | 9.9     | ppm    | 10          |                        | 99       | 1223   | 02/08/96          | SKM |
| (        | Standard    | 4.8     | ppm    | 5.0         |                        | 96       | 1223   | 02/08/96          | SKM |
|          | Standard    | 4.8     | ppm    | 5.0         |                        | 96       | 1223   | 02/08/96          | SXM |
|          | Standard    | 4.8     | ppm    | 5.0         |                        | 96       | 1223   | 02/08/96          | SKM |
|          | Standard    | 9.8     | ppm    | 10          |                        | 98       | 1223   | 02/08/96          | SKM |
|          | Standard    | 5.2     | ppm    | 5.0         |                        | 104      | 1223   | 02/08/96          | SKM |
| 316072   | Duplicate   | ND      | mg/kg  | ND          |                        | 0        | 1223   | 02/08/96          | SKM |
| 316072   | Spike       |         | ppm    |             | 5.0                    | 92       | 1223   | 02/08/96          | SKM |
|          |             |         |        | Total       | Barium                 |          |        |                   |     |
|          | Blank       | <0.010  | ppm    |             |                        |          | 1223   | 02/08/96          | SKM |
|          | Standard    | 9.9     | ррж    | 10          |                        | 99       | 1223   | 02/08/96          | SKM |
|          | Standard    | 4.8     | ppm    | 5.0         |                        | 96       | 1223   | 02/08/96          | SKM |
|          | Standard    | 4.8     | ppm    | 5.0         |                        | 96       | 1223   | 02/08/96          | SKM |
| -        | Scandard    | 9.8     | ppm    | 10          |                        | 98       | 1223   | 02/08/96          | SKM |
|          | Standard    | 5.0     | ppm    | 5.0         |                        | 100      | 1223   | 02/08/96          | SKM |
| 316072   | Duplicate   | 82      | mg/kg  | 110         |                        | 29       | 1223   | 02/08/96          | SKM |
| 316072   | Spike       |         | ppm    |             | 5,0                    | 91       | 1223   | 02/08/96          | SKM |
|          |             |         |        | Total (     | Cadmium                |          |        |                   |     |
|          | Blank       | <0.010  | ppm    |             |                        |          | 1223   | 02/08/96          | SKM |
|          | Standard    | 4.9     | ppm    | 5.0         |                        | 98       | 1223   | 02/08/96          | SKM |
|          | Standard    | 2.3     | ppm    | 2.5         |                        | 92       | 1223   | 02/08/96          | SKM |
|          | Standard    | 2.3     | ppm    | 2.5         |                        | 92       | 1223   | 02/08/96          | SKM |
|          | Standard    | 4.9     | ppm    | 5.0         |                        | 98       | 1223   | 02/08/96          | SKM |
| .*       | Standard    | 2.5     | ppm    | 2.5         |                        | 100      | 1223   | 02/08/96          | SKM |
| ()72     | Duplicate   | 0.46    | mg/kg  | 0.31        |                        | 39       | 1223   | 02/08/96          | SKM |

Continued



P. O. BOX 9000 - KILGORE, TEXAS 75663-9000 - 903/984-0551 - FAX 903/984-5914

# Analytical Chemistry • Utility Operations

316215 Continued

Page 3 of 4

|        | levelo # | Description | Result   | Units | Dup/Std Value | Spk Conc. | Percent | Time | Date     | Ву          |
|--------|----------|-------------|----------|-------|---------------|-----------|---------|------|----------|-------------|
| د<br>د | ampie #  | Snike       |          | mara  |               | 2.0       | 87      | 1223 | 02/08/96 | skm         |
| 5      | 10072    | opine       |          |       |               |           |         |      |          |             |
|        |          |             |          |       | Total Ch      | romium    |         |      |          |             |
|        |          | Blank       | <0.020   | ppm   | -             |           |         | 1223 | 02/08/96 | SKM         |
|        |          | Standard    | 9.7      | ppm   | 10            |           | 97      | 1223 | 02/08/96 | skm         |
|        |          | Standard    | 4.8      | ppm   | 5.0           |           | 96      | 1223 | 02/08/96 | SKM         |
|        | •        | Standard    | 4.7      | maa   | 5.0           |           | 94      | 1223 | 02/08/96 | SKM         |
|        |          | Standard    | 9.8      | ppm . | 10            |           | 98      | 1223 | 02/08/96 | SKM         |
|        |          | Standard    | 5.0      | ppm   | 5.0           |           | 100     | 1223 | 02/08/96 | SKM         |
| 3      | 316072   | Duplicate   | 5.8      | mg/kg | 5.7           |           | 2       | 1223 | 02/08/96 | SKM         |
| 3      | 16072    | Spike       |          | ppm   |               | 5.0       | 80      | 1223 | 02/08/96 | SKM         |
| . "    |          |             |          |       |               |           |         |      |          |             |
|        |          |             |          |       | Total Me      | rcury     |         |      |          |             |
|        |          | Blank       | <0.00050 | ppm   |               |           |         | 1133 | 02/10/96 | MCH         |
|        |          | Standard    | 0.019    | ppm   | 0.020         |           | 95      | 1133 | 02/10/96 | MCH         |
|        |          | Standard    | 0.0096   | והקק  | 0.010         |           | 96      | 1133 | 02/10/96 | MCH         |
|        |          | Standard    | 0.0099   | maa   | 0.010         |           | 99      | 1133 | 02/10/96 | MCH         |
| -      | 316209   | Duplicate   | ND       | mg/kg | ND            |           | 0       | 1133 | 02/10/96 | MCH         |
| -      | 316209   | Spike       |          | ppm   |               | 0.010     | 97      | 1133 | 02/10/96 | MCH         |
| .1     |          |             |          |       |               |           |         |      |          |             |
| - (    |          |             |          |       | Total         | Lead      |         |      |          |             |
|        | 2        | Blank       | <0.10    | ppm   |               |           |         | 1223 | 02/08/96 | SKM         |
|        |          | Standard    | 9.8      | ppm   | 10            |           | 98      | 1223 | 02/08/96 | SKM         |
|        |          | Standard    | 4.6      | mqq   | 5.0           |           | 92      | 1223 | 02/08/96 | SKM         |
|        |          | Standard    | 4.5      | ppm   | 5.0           |           | 90      | 1223 | 02/08/96 | SKM         |
|        |          | Standard    | 4.8      | ppm   | 5.0           |           | 96      | 1223 | 02/08/96 | SKM         |
|        |          | Standard    | 5.1      | ppm   | 5.0           |           | 102     | 1223 | 02/08/96 | SKM         |
|        |          | Standard    | 4.9      | ppm   | 5.0           |           | 98      | 1223 | 02/08/96 | SKM         |
|        |          | Standard    | 9.8      | ppm   | 10            |           | 98      | 1223 | 02/08/96 | SKM         |
|        |          | Standard    | 5.0      | ppm   | 5.0           |           | 100     | 1223 | 02/08/96 | SKM         |
| 3      | 316072   | Duplicate   | 8.6      | mg/kg | 9.7           |           | 12      | 1223 | 02/08/96 | SKM         |
| 3      | 316072   | Spike       |          | ppm   |               | 5.0       | 92      | 1223 | 02/08/96 | SKM         |
|        | 4        | -           |          |       |               | 7         |         |      |          |             |
|        |          |             |          |       | Total Se      | lenium    |         |      | 00/00/0C | C VM        |
|        |          | Blank       | <0.10    | ppm   |               |           |         | 1223 | 02/08/96 | SXM         |
|        |          | Standard    | 9.7      | ppm   | 10            |           | 97      | 1223 | 02/08/96 | CIM         |
|        |          | Standard    | 4.8      | ppm   | 5.0           |           | 96      | 1223 | 02/08/96 | CIM         |
|        |          | Standard    | 4.8      | ppm   | 5.0           |           | 96      | 1223 | u2/U8/90 | GIN         |
|        |          | Standard    | 4.7      | ppm   | 5.0           |           | 94      | 1223 | 02/08/90 | onn<br>onn  |
|        |          | Standard    | 9.8      | ppm   | 10            |           | 98      | 1223 | 02/08/96 | onm<br>over |
|        |          | Standard    | 5.1      | ppm   | 5.0           |           | 102     | 1223 | 02/08/96 | SKM         |
| :      | 316072   | Duplicate   | ND       | mg/kg | ND            |           | 0       | 1223 | 02/08/96 | SKM         |
| ;      | 316072   | Spike       |          | ppm   |               | 5.0       | 80      | 1223 | 02/08/96 | SKM         |
|        |          |             |          |       |               |           |         |      |          |             |

Weight Basis

Continued



P. O. BOX 9000 - KILGORE, TEXAS 75663-9000 - .903/984-0551 - FAX 903/984-5914

Analytical Chemistry • Utility Operations

316215 Continued

Page 4 of 4

EQL is Estimated Quantitation Limit. The EQL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL). Our analytical result must be above our EQL before we report a value for any parameter. Otherwise, we report ND (Not Detected above EQL).

These analytical results relate to the sample tested. This report may not be reproduced except in full without written approval of Ana-Lab Corp.

I certify that the results were generated using the above specified methods.

Ph.D., President teside,

| -   | •                          |                  |                            |           | -  |
|---|----------------------------|------------------|----------------------------|-----------|--|
| LUNCH LUNCHART LUN<br>LONCH ANY AMMUNITION PL<br>P. O. C. 1149<br>MARSHALL, TEXAS 75671 | ANT CHAI                   | N-OF-C           | aby RECORD                 | C O       | tractor P.D.No   |
| FROUEDT NAME/MUNBER SUMP  | Clasure Projec<br>Corrigan | +                | LA3 DEST<br>Fhone No       | INATION   | Analab<br>FAX (903) 679-2910                                   |
| Sungla Sacple<br>Munter Location & Description  | Sala a Tira<br>Collected   | Ånelysis<br>Type | Container/<br>Freservative | Initials  | Urrice (903) 679-2219<br>Cendition en Esceiși<br>(Nace & Date) |
| Concrete SH-H.<br>Baugground Longhorn . AMP   | 1-30-96                    | R8-RCRA          | 1 11the glast              | weith     | 316275   |
|   |                            |                  |                            |           |  |
| · · ·   |                            |                  |                            |           |  |
| •   |                            |                  |                            |           |  |
|   |                            |                  |                            |           |  |
|   |                            |                  |                            |           |  |
|   |                            |                  |                            |           |  |
| -   | · · ·                      |                  |                            |           |  |
|   |                            |                  |                            |           |  |
|   |                            |                  |                            |           |  |
| Gratial Instructions * 19   | tal Metals - 1             | Please fax       | results.                   |           |  |
| CIRCUTTEE: (Name, Company   | /, Date and Ti             | ire)             |                            |           | C  |
| . Pullinguraned By While .  | Come Think, 1-5            | 0080 75-12       | : Relinqu                  | ished Fy_ |  |
| Received By   |                            |                  | Raceive                    | A BY_A    | 65   |
| G. 7 linguished By  |                            | /                | 4. Relinqu                 | ished By  |  |
|   |                            |                  |                            |           |  |

.....

1

-

Table 5-4 - BACKGROUND LEVELS From Sumps Investigation Background Data (Units = mg/kg)

| · · · · · · · · · · · · · · · · · · · |           |                              |                                      |
|---------------------------------------|-----------|------------------------------|--------------------------------------|
| CONSTITUENT                           | MEAN      | SAMPLE STANDARD<br>DEVIATION | 95% UCL<br>(BACKGROUND) <sup>1</sup> |
| Aluminum                              | 30,157.92 | 88,295.41                    | 27,483.33 <sup>2</sup>               |
| Antimony                              |           |                              | 8.2 <sup>3</sup>                     |
| Arsenic                               | 2.57      | 1.19                         | 2.99                                 |
| Barium                                | 114.32    | 68.05                        | 138.12                               |
| Cadmium                               |           |                              | 2.04                                 |
| Calcium                               | 1,372.17  | 1741.68                      | 2,065.34 <sup>2</sup>                |
| Chromium                              | 17.45     | 6.26                         | 19.64                                |
| Cobalt                                | 10.40     | 6.88                         | 12.81                                |
| Copper                                | 7.20      | 4.97                         | 8.94                                 |
| Iron                                  | 19,897.08 | 11,034.39                    | 23,757.67                            |
| Lead                                  | 7.58      | 2.56                         | 8.47                                 |
| Magnesium                             | 1,828.71  | 1,622.79                     | 2,396.47                             |
| Manganese                             | 315.74    | 382.60                       | 449.60                               |
| Mercury                               | -         | -                            | .24                                  |
| Potassium                             | 913.63    | 607.02                       | 1,126.00                             |
| Selenium                              | -         | -                            | 2.04                                 |
| Silver                                | -         | <u> </u>                     | 2.04                                 |
| Strontium                             | 19.73     | 16.02                        | 25.33                                |
| Zinc                                  | 39.88     | 31.91                        | 51.05                                |

<sup>1</sup> The 95% UCL (Upper Confidence Limit) was established as x+t (s/sqrt n) where x=mean of the untransformed data, s=standard deviation of the untransformed data, t=Student t-statistical, n=number of samples

<sup>2</sup> The 95% UCL was established as:  $e(x+0.5s^2 + sH/sqrt n-1)$  where e=constant (base of the natural log, equal to 2.718, x=mean of the transformed data, s=standard deviation of the transformed data, H=H-statistic (from table published in Gilbert 1987, n=number of samples)

<sup>3</sup> The majority of values are less than the detection limit. The highest value; however, exceeds the detection limit by more than a factor of 2. the 95% UCL was established as the highest measured value.

<sup>4</sup> The majority (or all) values are less than the detection limit. The highest value does not exceed 2 times the detection limit. The 95% UCL was established as 2 times the detection.



#### DEPARTMENT OF THE ARMY LONGHORINLOUISIANA ARMY AMMUNITION PLANTS P.O. 80X 658 DOYLINE, LOUISIANA 71023-0656

00065733

February 19, 1997

ATTINITION OF

SIOLH-OR

1 1 11

SUBJECT: Closure of Sumps at Longhorn Army Ammunition Plant

Ms. Lila Beckley Texas Natural Resource Conservation Commission TNRCC MC-128 Post Office Box 13087 Austin, TX 78711-3087

Dear Ms. Beckley:

Waste water sumps at Longhorn Army Ammunition Plant have been removed and properly disposed. As part of the removal action, portions of drainage troughs were also removed and disposed.

Remaining concrete drainage troughs and other related components are to be investigated as part of the Phase III, Group 4 Remedial Investigation. This investigation will include soil and groundwater in the immediate area of the troughs and sumps. Trough contents (i.e. dried sediment) and surrounding soils will be investigated for indication of historical use related leaks or spills.

The point of contact is Ms. Yolane Hartsfield, 918-669-7530.

Sincerely,

am April he

JAMES A. McPHERSON Commander's Representative

CF: TNRCC (Diane Poteet)

00065734

Barry R. McBee, Chairman R. B. "Ralph" Marquez, Commissioner John M. Baker, Commissioner Dan Pearson, Executive Director



# **TEXAS NATURAL RESOURCE CONSERVATION COMMISSION**

Protecting Texas by Reducing and Preventing Pollution

February 28, 1997

Mr. Ira C. Nathan, Chief, Operations Review Division Longhorn Army Ammunition Plant Attn: SIOLH-OR P.O. Box 658 Doyline, LA 71023

Re: Longhorn Army Ammunition Plant (LHAAP) Solid Waste Registration No. 30990 Closure Report for 29 Active (Group 1) and 11 Transition (Group 2) Sumps Approval of Report

Dear Mr. Nathan:

The staff of the Texas Natural Resource Conservation Commission (TNRCC) has completed a review of the four-volume report referenced above. This report, received by the TNRCC on September 30, 1996, was submitted as required by Ordering Provision Nos. 1 and 13 of the December 4, 1995 Agreed Order. According to LHAAP representatives, the report for the remaining sumps addressed in the closure plan, the Group 3 (85 DERA) sumps, will be submitted within the next few months.

The September 1996 report documents activities conducted pursuant to the May 1995 *Closure Plan* for Wastewater Sumps, approved with modifications by TNRCC letter of June 27, 1995. As stated previously in various correspondence, both the closure plan and the sump closure requirements of Ordering Provision No. 1 of the Agreed Order address the sumps themselves and their contents. Although decontamination goals for the sumps were laid out in the closure plan, final determination of closure standards (i.e., 30 Tex. Admin. Code Chapter 335 Subchapter S and applicable RCRA requirements) should be made after assessment of the media surrounding the sumps and any remaining sump system components (e.g., troughs). As stated in your letter of February 19, 1997, investigation of these remaining areas will be completed as part of the upcoming Phase III, Group 4 Remedial Investigation.

In general, the approved plan entitled *Closure Plan for Wastewater Sumps* required classification and disposal of the sump contents, sump decontamination and, if necessary, sump removal. According to the report, 13 of the 29 Active sumps and 6 of the 11 Transition sumps were Mr. Ira C. Nathan Page 2

removed for off-site disposal. The remaining decontaminated sumps, as well as the excavated areas where sumps had been removed, have been backfilled with clean fill.

Based on a review of the September 1996 report and other relevant information provided by LHAAP representatives, it appears that the activities conducted generally conformed with the specifications in the approved plan. The report, therefore, is approved.

As a reminder, after completion of formal closure activities and acceptance by the TNRCC of the appropriate closure certifications and other documentation, LHAAP should make any necessary updates to its Notice of Registration, particularly for the solid waste management units affected by the closure activities.

Please be aware that it is the continuing obligation of persons associated with a site to assure that municipal hazardous waste and industrial solid waste are managed in a manner which does not cause the discharge or imminent threat of discharge of waste into or adjacent to waters in the state, a nuisance, or the endangerment of the public health and welfare as required by 30 Tex. Admin. Code Section 335.4. If the actual closure fails to comply with these requirements, the burden remains on LHAAP to take any necessary and authorized actions to correct such conditions.

If you or your representatives have any questions regarding this matter, please contact Lila Beckley of I&HW Team I at (512) 239-2130 or at Mail Code 128 at the letterhead address.

Sincerely,

the Kennert

Cathy Remanert, Senior Coordinator I&HW Team I, Waste Section Enforcement Division

#### CR/lmb

Michael Brashear, Waste Program Manager, TNRCC Tyler Regional Office
Bud Jones, TNRCC Tyler Regional Office
Diane Poteet, TNRCC Pollution Cleanup Division (MC 143)

# MEMORANDUM OF AGREEMENT BETWEEN THE DEPARTMENT OF THE ARMY AND THE DEPARTMENT OF THE INTERIOR FOR THE INTERAGENCY TRANSFER OF LANDS AT THE LONGHORN ARMY AMMUNITION PLANT FOR THE CADDO LAKE NATIONAL WILDLIFE REFUGE HARRISON COUNTY, TEXAS

This Memorandum of Agreement ("MOA") provides for the permanent terms and conditions for the Transfer of Property at the Longhorn Army Ammunition Plant ("LHAAP"), Harrison County, Texas, from the Department of the Army ("Army"), through the General Services Administration ("GSA"), to the Department of the Interior, U.S. Fish and Wildlife Service ("FWS"). The FWS requested all of LHAAP during the federal screening process. LHAAP consists of approximately 8,400 acres (see Exhibit 1).

The FWS intends to accept the Property through the process outlined in this MOA and the GSA transfer process. As part of this process, the Army will hold the specific parcels of the Property until a parcel becomes a Candidate Parcel. Once a parcel becomes a Candidate Parcel, the Army shall offer the parcel for transfer to FWS subject to the terms and conditions of this MOA.

The Army reported LHAAP to the GSA as excess real property. Through an agreement between Army and FWS dated October 21, 2000, Army authorized FWS to undertake wildlife and habitat management activities at LHAAP while the Army continues with remediation activities. Pursuant to the October 21, 2000, agreement, FWS established the Caddo Lake National Wildlife Refuge as an "Overlay Refuge," pending the ultimate disposition of LHAAP (see Exhibit 2 – Overlay Refuge Map).

The Caddo Lake National Wildlife Refuge is established to protect one of the highest quality old-growth bottomland hardwood forests in the southeastern United States, and associated wetlands. The mission of the National Wildlife Refuge System ("Refuge System") is to administer lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans [16 U.S.C. 668dd(a)(2)]. The Secretary of the Interior will ensure that the biological integrity, diversity, and environmental health of the Refuge System resources are maintained and that wildlife-dependent recreational uses will receive priority consideration as required by the National Wildlife Refuge System Administration Act of 1966, as amended [16 U.S.C. 668dd(a)(4)]. The environmental response actions taken on wildlife refuges must be protective of human health and the environment.

The authorities for the transfers covered by this MOA include the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 471-535) as amended, the Fish and Wildlife Coordination Act (16 U.S.C. 661- 666c), the Fish and Wildlife Act of 1956 (16 U.S.C. 742a-

#### CADDO LAKE OVERLAY NATIONAL WILDLIFE REFUGE





742j), as amended, and the Act of May 19, 1948, Public Law 80-537 (16 U.S.C 667b-667d), as amended.

## I. **DEFINITIONS**

- A. "Army" means the Department of the Army, U.S. Department of Defense.
- **B.** "CLI" means the Caddo Lake Institute.
- C. "Candidate Parcels" means those parcels of the Property that the Army has determined to be suitable for transfer from the Army to FWS under Section III.
- **D. "Environmental Contaminants"** mean any of the following: (1) hazardous substance, pollutant, or contaminant under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. 9601(14) and (33); (2) petroleum and any petroleum product or derivative; (3) Munitions and Explosives of Concern ("MEC"); (4) Recovered Chemical Warfare Material ("RCWM"); (5) biological warfare agents; or (6) nuclear or radiological material as regulated by the Nuclear Regulatory Commission.
- **E. "FWS"** means the U.S. Fish and Wildlife Service, U.S. Department of the Interior.
- F. "GSA" means the U.S. General Services Administration.
- G. "Land Use Controls" or "LUCs" means any type of physical, legal, or administrative mechanisms used to restrict the use of, or limit access to, real property to ensure that there are no unacceptable risks to human health, safety, or the environment. LUCs consist of Engineering Controls (i.e., physical means of treating, containing or monitoring Environmental Contaminants, or limiting access to a site where contamination remains) and/or Institutional Controls (i.e., non-engineering measures, such as legal or administrative mechanisms, whether temporary or permanent).
- H. "MOA" means this Memorandum of Agreement between the Army and the FWS.
- I. "Overlay Refuge" means those lands within LHAAP under the jurisdiction, custody, and control of the Army, but over which FWS exercises natural resource management activities by agreement with and permission from the Army (see Exhibit 2).
- **J. "Parties"** means the U.S. Department of the Army and the U.S. Fish and Wildlife Service.

- **K.** "**Production Area**" means the area shown as Parcel #1 on Exhibit 1.
- L. "Property" means the former Longhorn Army Ammunition Plant as shown in Exhibit 1.
- **M. "Response Action"** means any action taken in response to Environmental Contaminants, including removal, remedial, corrective, closure, and enforcement actions and associated operation, maintenance, and monitoring actions.
- **N. "Transfer"** means the transfer of administrative jurisdiction, which includes custody of, control over, and accountability for federal interests in real property.
- **O. "Transferred Parcel"** means any parcel transferred by Army, through GSA, to the administrative jurisdiction of FWS.

### **II. PREVIOUS AGREEMENTS:**

- A. Existing Memoranda of Agreements. The Parties have entered into three prior agreements concerning LHAAP and the Caddo Lake National Wildlife Refuge (NWR): (1) Memorandum of Understanding between CLI, FWS, and Army dated September 15, 1999; (2) Memorandum of Agreement signed by Army, FWS and CLI on May 22, 2000; and (3) Memorandum of Agreement between Army and FWS dated October 21, 2000, establishing the Caddo Lake NWR. To the extent any of the prior agreements conflict with this agreement, this Agreement supersedes the prior agreements and controls with respect to Transferred Parcels. The Parties agree that the prior agreements continue to represent the intent and understandings of the Parties in moving toward transfer of the Property, and may be used by the Parties, as appropriate, to interpret the intent of this Agreement. The prior agreements continue to control with respect to overlay refuge areas on LHAAP that have not transferred to the FWS.
- **B. CLI Lease.** The Parties agree that the transfer of certain parcels may be subject to an existing lease between CLI and the Army, first executed in 1996 and amended on August 9, 1999. Unless revoked or terminated prior to transfer, the lease term is from October 1, 1996, through September 30, 2026. The CLI-Army lease (No. DACA63-1-97-0501) encompasses two areas consisting of approximately 1,295 acres and 15 acres. The lease allows CLI to engage in environmental and natural resource education, scientific research, natural and cultural area conservation and protection, and other activities, and contains specific rights and options to lease or purchase, the terms of which are more particularly set forth in the lease documents. The Transfer of the Property shall include the assignment of the Army's lease with CLI to FWS.

- **III. SUITABILITY FOR TRANSFER DETERMINATIONS.** With respect to all LHAAP Candidate Parcels, the Parties shall, to the maximum extent possible, coordinate and cooperate with one another to identify issues and potential disputes and resolve disputes, in advance of making their formal suitability for transfer determinations.
  - A. Clear Title. Before becoming a Candidate Parcel, boundary disputes affecting the Candidate Parcel shall be resolved by the Army in coordination with GSA. FWS may determine a Candidate Parcel is not suitable for transfer if a Candidate Parcel has a title issue or boundary dispute.
  - FWS Suitability for Transfer Determination. The Army shall provide FWS **B**. with technical information that may include, but not be limited to: Technical Letters, Preliminary Assessment/Site Inspection Reports, Proposed Plans and Decision Documents along with supporting documentation, such as Remedial Investigations/Feasibility Studies. For parcels requiring Response Actions, the information will also include a written determination by the EPA that no further Response Action is required or that all remedial actions are operating properly and successfully for the Candidate Parcel offered for transfer. After FWS receipt of documentation from Army, FWS shall determine whether a Candidate Parcel is suitable for Refuge purposes. As part of this determination, the FWS will review the documentation provided by Army. To the extent possible and appropriate, the FWS shall use the information provided by Army in conducting its own environmental site assessment for the Candidate Parcel; however, the FWS may conduct additional contaminants investigation activities as necessary to determine if the Candidate Parcel is suitable for Transfer. Within 90 days following receipt of the documentation provided by the Army, the FWS shall notify the Army, in writing, of its determination on the suitability for transfer of the Candidate Parcel.
  - C. Army Environmental Condition of Property. Upon FWS' determination that the Candidate Parcel is suitable for transfer, the Army shall complete an Environmental Condition of Property ("ECOP") on the Candidate Parcel. The ECOP shall summarize what is known about the environmental condition of the property and shall include supporting documentation. The ECOP shall include a statement by the Army that the Candidate Parcel is suitable for Transfer to FWS. The Army shall provide a copy of the ECOP to FWS.
  - **D. Disputes.** If the Parties disagree on whether a Candidate Parcel is suitable for transfer, the dispute shall be resolved through the Dispute Resolution procedures set forth in Section X of this MOA.

## IV. COORDINATION AND COOPERATION FOR THIRD PARTY TRANSFERS.

The Parties understand that the preferred end state will yield maximum acreage for transfer directly to FWS for refuge management. All of the Property is potentially available to FWS for refuge management. The Army, however, may initiate a third party transfer for (1) Candidate Parcels that the FWS, in accordance with Section III above, determines are not suitable for transfer; and (2) the Production Area. The FWS and the Army agree to fully cooperate with each other in identifying third party recipients for these two categories of property so that the proposed use is compatible with Refuge purposes. The intent is for FWS to be involved in helping the Army find a property recipient that will be a compatible neighbor, to the extent that such a third party transfer arrangement can be reached in accordance with the GSA real property disposal process.

For the Candidate Parcels that FWS determines are not suitable for transfer and for the Production Area, the Army will work with GSA to screen the parcel consistent with the Federal Property Act (40 U.S.C. §471 *et. seq.*) and its implementing regulations. If no further interest is expressed through the required excess property screening process, then a reasonable effort will be made to market such parcels for a conservation conveyance under the provisions of Public Law 107-314, Section 2812 (10 U.S.C. §2694a). After offering a parcel for conservation reuse, Army will seek to transfer the parcel based upon GSA's highest and best use criteria. The Army will work with FWS and GSA to conclude a transfer that is compatible with the neighboring Refuge.

- A. Prior to the Army's transfer of property to a third party, the Army will coordinate with and solicit input from the FWS. The Army will provide in writing to the FWS: (1) the name of proposed third party recipient; (2) the intended use(s) of the parcel; and (3) the Army's rationale for concluding that the proposed use is consistent with FWS's existing or proposed uses of adjacent Refuge parcels as will be identified in any Refuge Management Plan.
- **B.** The FWS will review and comment on the Army's proposed third party transfer. FWS will notify the Army, within 30 days of notice of Army's intent to transfer to a third party, that the proposed use of the parcel is compatible or incompatible with Refuge purposes. If the proposed use is incompatible, FWS will provide an explanation. Compatibility determinations will only include evaluations of how the proposed use would affect the ability of the Refuge to meet its mandated purposes. The Parties may contact the third party prior to rendering a decision to encourage dialog on how the proposed use might be modified to be compatible. If FWS concerns cannot be accommodated and the Army would still like to move forward with the proposed transfer, the Army will initiate Dispute Resolution in accordance with the process established in Section X.
- **C.** To the extent that restrictive covenants or conservation easements are deemed necessary to preserve the Parties' intent with respect to compatibility, the Parties will work cooperatively with GSA to include such restrictive covenants or

easements. Such restrictive covenants or easements will not require the Army to enforce the provisions of the deed or easement.

### V. TRANSFER OF ADMINISTRATIVE JURISDICTION

- A. **Transfer.** Upon the determination by FWS that a Candidate Parcel is suitable for transfer in accordance with Section III, the Army and FWS shall take all necessary actions, in cooperation with GSA, to transfer the parcel to FWS as expeditiously as possible. The Army shall transfer the Candidate Parcel, through GSA, to FWS, without reimbursement, and FWS will accept such Transfer within 90 days. When FWS accepts the Transfer of a Candidate Parcel, it becomes a Transferred Parcel.
- **B. Easements and Agreements.** The Parties agree that transfers of Candidate Parcels to FWS may be subject to certain property rights of third parties, such as easements for public roads, access roads, and utilities. Army will identify and provide documentation for any such easements and leases that currently exist on the property. With respect to Candidate Parcels, the Army shall not amend any existing, or enter into any additional leases, easements, or other real estate agreements, or transfer or convey any interests in such parcels, except with the consent of FWS.
- **C. Mineral Leases.** Nothing in this MOA shall be construed to alter the rights and obligations under existing mineral leases.
- D. Water Rights. All water rights in the Property are presently permitted to the United States based upon the former use of the Property as an ammunition production facility. Nothing in the MOA shall be deemed to abandon the water rights of the United States. The Parties agree that the first property transfer will include the transfer of 75% of the permitted water rights to the FWS. The remaining 25% of the permitted water rights will remain with the Army. On the effective date of this MOA, Army will take all necessary steps to assist and support FWS in complying with the requirements of Texas law by sending a letter agreeing to the processing of a Change of Ownership and Change in Use Application to transfer 75% of the consumptive and non-consumptive appropriated water rights for the Property to the Texas Commission of Environmental Quality, Water Supply Division. The FWS is responsible for all fees required by the State of Texas to process these changes. In addition, in the future and only as necessary, the Parties agree to discuss a potential reallocation of water rights as reuse uncertainties are resolved. The outcome of any reallocation discussion will in no way, as determined by the FWS, adversely affect the current or proposed FWS use of the property as a wildlife refuge.

- **E. Land Surveys.** Surveys for the boundary of the Property have been completed by FWS. If FWS rejects any Candidate Parcels for Transfer in writing as described in Section III, then the Army will provide to FWS survey plats, descriptions, and supporting records only for those Candidate Parcels that the Army will transfer to a third party.
- **F. Information.** The Army shall, as soon as practicable, provide FWS with all information concerning Environmental Contaminants including information related to environmental investigations, documentation, past or proposed Response or restoration actions, or other compliance, closure, operation, maintenance, or related activity associated with LHAAP Candidate Parcels.
- **G. Records.** Prior to Army's disposal of any LHAAP records, Army and FWS shall jointly identify all LHAAP records (e.g., property records, environmental records, historical or cultural resources surveys) that shall be transferred to FWS or otherwise preserved.
- **H.** Equipment and Facilities Retained for FWS. FWS has identified and requested in writing those buildings, facilities, and equipment on the Property that FWS wishes to have transferred.
- I. Access to Army Retained Parcels. Army shall provide to FWS reasonable access to Army-retained parcels for Refuge management purposes.
- J. Withdrawal of Request for Property. The FWS will notify GSA that it is withdrawing its request for property: following a determination by the FWS that the property is not suitable for transfer in accordance with Section III of this MOA; following the identification of a third party transferee in accordance with Section IV of this MOA; or the Parties otherwise agree that the Army cannot obtain cleanup objectives in a timely manner or it is infeasible to transfer the property to the FWS. In addition, if such parcel is part of the Overlay Refuge, FWS and Army shall determine if modification to any existing Memoranda of Agreement described in Section II.A are necessary.

### VI. ENVIRONMENTAL CONTAMINANTS AND FUTURE RESPONSE ACTIONS

A. Federal Facilities Agreement. The Army and FWS acknowledge that the Property is listed as a National Priorities List (NPL) site under the CERCLA. The Army has provided FWS with a copy of the Longhorn Army Ammunition Plant Federal Facility Agreement ("FFA") entered into by the EPA, the Texas Commission on Environmental Quality ("TCEQ"), and the Army on December 30, 1991. FWS acknowledges receipt of this document. The Army agrees to provide FWS with any future proposed amendments to the FFA. Army will consult with FWS concerning such amendments and consider its comments prior to amending the FFA. The environmental remediation of the Property by the Army shall be in accordance with the FFA negotiated with the EPA. The Army and FWS agree that should a conflict arise between the terms of the FFA as it presently exists or as amended and the provisions of this MOA, the terms of the FFA will take precedence over the provisions of this MOA. The Army will inform FWS of any such conflicts affecting the FWS use of its parcel. Both Parties to this MOA are required to provide notice to EPA and TCEQ of any modifications, amendments or termination of the MOA. FWS and its successors and assigns shall take no action inconsistent with the terms of the FFA. FWS will be afforded an opportunity to participate in the Monthly Managers Meeting and the Technical Review Committee.

- B. Continuing Army Responsibility. The Army shall have sole responsibility to fund and to conduct all necessary Response Actions (including Land Use Controls) consistent with this MOA, to address releases or threatened releases of Environmental Contaminants on the Transferred Parcels (including any off-Refuge migration) existing at the time of the effective date of this MOA, whether known at the effective date of this MOA, or subsequently discovered, or from the use, management, storage, release or disposal of Environmental Contaminants by the Army during its occupancy or use of the Transferred Parcels. The Army shall also be responsible for Environmental Contaminants that are in the future regulated as hazardous under federal or state (as defined under CERCLA, 42 U.S.C. 9601(27)) law applicable to the Transferred Parcels and that require a Response Action as a result of a release or threatened release of which the Parties jointly agree (or is determined through dispute resolution) requires a Response Action to protect human health and the environment.
- C. Land Use Controls. LUCs may be required for certain portions of the Transferred Parcels. FWS agrees to comply with LUCs imposed on the property and assist Army by monitoring, maintaining, and enforcing those LUCs that fall within the normal course of refuge management. Following consultation with the Army, FWS will determine what falls within the normal course of refuge management.
- **D. Enforcement Actions and Administrative Indemnification.** To the extent authorized by law and consistent with this MOA, the Army shall be responsible for responding to any administrative or legal actions brought to enforce the requirements of applicable laws or regulations concerning Environmental Contaminants. With respect to the Transferred Parcels, it is the intent of the Parties that any administrative or legal actions necessary to enforce the requirements of applicable laws or regulations concerning Environmental
Contaminants for which the Army has retained responsibility should be taken against the Army, and not against the FWS.

- **E. Safety Training Associated with MEC.** The Army shall provide MEC safety training for FWS personnel. The training shall include recognition of MEC, a map identifying all known locations that may contain MEC, and procedures for reporting suspected MEC. In addition, the Army will provide FWS with MEC safety materials appropriate for distribution to its agents and visitors to the Refuge. FWS will provide MEC safety information to its agents and visitors to the Refuge.
- **F.** Access to Army for Response Actions and Environmental Compliance. FWS shall provide the Army, EPA, and TCEQ and their officers, agents, employees, contractors, and subcontractors with access to the Transferred Parcels as may be reasonably required to carry out the Army's obligations under this MOA and the FFA. The Army shall be responsible for controlling public access to Response Action areas, as appropriate, and providing FWS with reasonable notice regarding access to the areas. The Parties will make reasonable efforts to coordinate access for Response Actions with refuge management activities. In cases of emergency, however, the Army has the right to enter immediately and shall notify FWS as soon as practicable, but no later than 72 hours after entry.
- G. Emergency Response Actions. In the event of an emergency situation or the need to abate imminent and substantial threats to human health or the environment caused by existing or newly discovered Environmental Contaminants, FWS shall provide notice to the Army and take steps to secure the affected area to prevent public access and/or warn the public against entry into the affected area. If Army has not responded within 72 hours of receiving notice, FWS may undertake Response Actions with respect to the Environmental Contaminants.
- H. Roads and Bridges. FWS shall maintain roads and bridges within the Transferred Parcels that are needed by Army for Response Actions or to obtain access to LHAAP Parcels that have not transferred, and that are needed by FWS for refuge activities, to a standard no higher than that needed by FWS for refuge purposes. The Army shall retain maintenance responsibility for roads and bridges within the Transferred Parcels that are needed only by Army for access to Response Actions on Transferred Parcels or to other LHAAP Army-retained parcels. The repair of any damage, other than normal wear and tear, caused by the Army or its contractors to FWS-maintained roads, shall be the responsibility of Army.
- I. Discovery of Additional Environmental Contaminants

- 1. Notice. If FWS discovers additional Environmental Contaminants on the Transferred Parcel, or otherwise identifies previously unidentified conditions associated with such Environmental Contaminants that may require a Response Action, it shall notify Army of such contaminants as soon as reasonably possible after such discovery.
- 2. Army Action Upon Notice. As soon as practicable, but no later than 30 days after the Army receives notice from FWS, or any third party regulatory agency, or other third parties, of the presence or reasonably likely presence of Environmental Contaminants, the Army shall conduct an on-site inspection and provide written notification to FWS of Army's proposed course of action. FWS will, to the maximum extent practicable, give the Army an opportunity to execute any required Response Actions.
- 3. FWS Authority to Respond. The Parties recognize that, under certain circumstances, FWS may decide it is necessary to exercise its authority to undertake Response Actions with respect to Environmental Contaminants. Before doing so, FWS will provide notice to the Army and, to the maximum extent practicable, give the Army an opportunity to execute any required Response Actions. Circumstances in which FWS may exercise its authority to respond may include, but are not limited to: (i) emergency situations; (ii) the need to abate imminent and substantial threats to human health or the environment caused by existing or newly-discovered Environmental Contaminants, (iii) the need to take steps to secure an area to prevent public access or warn the public against entry, or (iv) pursuant to a written agreement between the Parties after on-site inspection of site conditions.
- 4. **Reimbursement.** For Army to pay FWS for response costs associated with Environmental Contaminants under one of the circumstances listed in Sections VI.G or VI.I.3, above, the Army and FWS must agree to such costs in writing and in accordance with applicable law prior to FWS taking any Response Action. Army shall promptly review requests for payment pursuant to such agreement, and upon approval by Army and subject to audit and funding for such purposes, Army will make all reasonable effort to reimburse FWS within 60 days. In case of an emergency in which FWS conducts a Response Action without a prior written agreement with Army, the Army shall seek and use its best efforts to determine the appropriateness of that Response Action undertaken relative to former Army activities on the Property and attempt to obtain the specific appropriations from Congress to reimburse FWS for reasonable and necessary response costs associated with the Response Action by FWS. To the extent FWS violates a LUC that creates a release, FWS will be responsible for any costs associated with the release.

- J. Additional Response Actions. The Army shall conduct additional Response Actions and/or remove or modify LUCs, as determined appropriate through the CERCLA 5 year reviews. The Army shall conduct additional Response Actions, at a minimum, where (1) the remedy fails (e.g., the remedy fails to achieve Response Action objectives or a LUC fails that is not due to the acts or omissions of FWS); (2) a new Environmental Contaminant is discovered that is not addressed by the original Response Action; or (3) changes in laws and regulations governing cleanup standards necessitate additional Response Actions. Any Response Actions required under this paragraph shall be conducted in accordance with the terms of Section VI.I above.
- K. Remedy Reviews. If a Response Action results in Environmental Contaminants remaining on a Transferred Parcel above levels that allow for unrestricted use and unlimited exposure, the Army, in cooperation with FWS, shall review such action no less than every five years after initiation of the Response Action in accordance with the National Contingency Plan (40 C.F.R. Section 300.430(f)(4)(ii)). The review will include an assessment of whether the remedy is functioning as intended, whether the assumptions are still valid, and whether anything has occurred on a Transferred Parcel that calls into question the protectiveness of the remedy. In addition, the review will assess whether LUCs remain protective and continue to be justified in light of changed circumstances or new technology. The results of the reviews shall be documented in the CERCLA Five Year Review Report.
- L. Law Enforcement. FWS shall be responsible for all Federal law enforcement on the Transferred Parcels.
- VII. NOTICES AND POINTS OF CONTACT. All notices required or permitted under this MOA shall be in writing and shall be deemed sufficiently served when delivered by hand, if a receipt is obtained therefore, or when actually received if delivered by mail, and if delivered by mail shall be mailed registered or certified first class mail, return receipt requested, postage pre-paid. All notices shall be sent to:

| A. | Army POC: | Longhorn AAP Site Manager |
|----|-----------|---------------------------|
|    |           | Box 3, B1440              |
|    |           | Fort Chaffee, AR 72905    |

B. FWS POC: USFWS P.O. Box 1306 Albuquerque, NM 87103-1306 Attention: Refuge Supervisor, Texas, NWRS

Or For Delivery: 500 Gold Avenue, S.W. Room 8210 Albuquerque, NM 87102

- VIII. TORT CLAIMS. Army shall process and adjudicate all administrative claims and defend litigation asserted under the Federal Tort Claims Act that arise from any activity of Army with respect to Transferred Parcels, any Environmental Contaminants under this MOA and applicable laws, or out of any failure of Army to comply with applicable laws or the terms and conditions of this MOA. FWS shall process and adjudicate all administrative claims and defend litigation asserted under the Federal Tort Claims Act that are not the responsibility of Army or occur as a result of any failure of FWS to comply with applicable laws or the terms and conditions of this mode. Each Party shall cooperate with the other in providing information relating to any such tort claims.
- **IX. FUNDING.** Unless otherwise agreed, all Parties will be solely responsible for funding their respective responsibilities under this MOA. Nothing in this MOA shall be construed as obligating funds in violation of the Anti-Deficiency Act, 31 U.S.C. 1341.
- X. **DISPUTE RESOLUTION.** If a dispute arises, the Army site manager and the FWS project leader shall make a good faith effort to settle the dispute informally, at the local level. If a dispute arises that cannot be resolved informally at that level, either Party may initiate Dispute Resolution.
  - A. To initiate Dispute Resolution, the disputing Party shall advise the other Party of its intent to invoke Dispute Resolution and give written notice of the dispute. The notice shall include a detailed explanation of the dispute. Upon receipt of such notice the Parties shall make their best efforts to resolve the dispute within 14 calendar days.
  - **B.** If the Parties do not resolve the dispute at the local level within 14 days, the dispute will be elevated to the Director, BRAC, Hampton Field Office and to the Fish and Wildlife Service's Regional Director for the Southwest Region. Within 30 days of receiving the dispute, the Director Hampton Field Office and the Fish and Wildlife Service's Regional Director for the Southwest Region shall confer and attempt to resolve the dispute.
  - **C.** If the dispute is not resolved within 60 days of its receipt, the disputing Party may elevate the dispute to the Assistant Secretary of the Army (Installation and Environment) and the Director of the Fish and Wildlife Service. Within 30 days of the elevation of the dispute, the Parties shall confer and resolve the dispute.

- **XI. RESERVATION OF RIGHTS.** Nothing in this MOA shall limit the rights of either Party to take action against entities not party to this MOA who may be liable for Environmental Contaminants. In addition, nothing in this MOA will prevent or otherwise restrict the right of GSA to dispose of the property, or any portion thereof, in accordance with the applicable real property disposal laws and regulations.
- XII. NO THIRD PARTY RIGHTS. This MOA is intended only to set forth the terms and conditions for the transfer of the Property described herein, and is not intended to create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law by any person against the United States, its agencies, or any other person.
- XIII. EFFECTIVE DATE, MODIFICATION, AND TERMINATION. This MOA shall become effective upon approval by both the Army and FWS. Modifications may be proposed at any time by either Party, and shall become effective pursuant to the terms of such modifications, as agreed to by the Parties. This MOA shall remain in effect until such time as the Parties mutually agree to its termination.

### SIGNATURES

Craig Manson Assistant Secretary for Fish and Wildlife and Parks U.S. Department of Interior DATE

Joseph W. Whitaker Deputy Assistant Secretary of the Army (Installations and Housing) OASA(I&E) DATE

### **Exhibits**

Exhibit 1 – Map of Longhorn Army Ammunition Plant

Exhibit 2 – Overlay Refuge Map

#### SIGNATURES

Core -

Craig Manson Assistant Secretary for Fish and Wildlife and Parks U.S. Department of Interior

...

LWWITT

Joseph W. Whitaker Deputy Assistant Secretary of the Army (Installations and Housing) OASA(I&E)

2 9 APR 2004

٢

DATE

#### Exhibits

ı

Exhibit 1 - Map of Longhom Army Ammunition Plant

·, ·

Exhibit 2 - Overlay Refuge Map

#### LONGHORN ARMY AMMUNITION PLANT



Exhibit 1

#### CADDO LAKE OVERLAY NATIONAL WILDLIFE REFUGE

### Exhibit 2



Buddy Garcia, Chairman Larry R. Soward, Commissioner Glenn Shankle, Executive Director



00065754

### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 21, 2007

Ms. Rose Zeiler Army / BRAC Site Manager Longhorn Army Ammunition Plant Post Office Box 220 Ratcliff, AR 72951

Re: Longhorn Army Ammunition Plant (LHAAP) Response to Comments for Draft Final Site Investigation Report, LHAAP-06, -51, -55, -64, -66, and -68

Dear Ms. Zeiler:

The Texas Commission on Environmental Quality (TCEQ) has completed review of Army's responses to agency comments to the referenced report, the revised analytical tables and the results of the additional sampling for the above referenced report. We concur that the above referenced sites can be closed under the Texas Risk Reduction Rule Standard 2 (RRR Std 2) for non-residential settings.

Although we concur that no active remediation is necessary at these sites, please note that under RRR Standard 2, site closure/remediation, in order to comply with the non-residential soil requirements, a deed certification must be filed in the county record. The deed certification must indicate that future land use is considered suitable for non-residential use. An example format of the deed certification is provided in 30 Texas Administrative Code §335.569.

If you have any questions or need additional information, please feel free to contact me at (512) 239-2443.

Sincerely

Fay Duke, Project Manager Team 2, Environmental Cleanup Section II Remediation Division

FD/mm

Mr. Stephen L. Tzhone, U. S. Environmental Protection Agency Region 6, Dallas, TX
 Mr. Cliff Murray, U.S. Army Corps of Engineers, Tulsa, OK
 Dr. Barry Forsythe, U.S. Fish and Wildlife Service, Dallas, TX
 Mr. Paul Bruckwicki, U.S. Fish and Wildlife Service, Karnack, TX

Comments on LHAAP report from EPA Scott Harris.txt From: Harris.Scott@epamail.epa.gov Sent: Thursday, March 08, 2007 10:22 AM To: Tzhone.Stephen@epamail.epa.gov Cc: fduke@tnrcc.state.tx.us; Villarreal.Chris@epamail.epa.gov; Josiam.Raji@epamail.epa.gov; Cobb, Dave; rose.zeiler@us.army.mil Subject: Comments on LHAAP report

Steve,

Based on my review of the January 2007 Draft Final Site Investigation Report LHAAP-06, LHAAP-07, LHAAP-51, LHAAP-55, LHAAP-64, LHAAP-66, and LHAAP-68, I have no comments.

00065755

Scott

 office
 214-665-7114

 Fax
 214-665-6660

 cell
 214-789-9656

 harris.scott@epa.gov

00065756 Email Re RTC on LHAAP-06 07 51 55 64 66 68 DF Report.txt From: Tzhone.Stephen@epamail.epa.gov Sent: Thursday, September 27, 2007 1:42 PM To: Rose Zeiler Cc: Cliff SWT Murray; John R SWT Lambert; Srivastav, Praveen; Cobb, Dave; Eidson, Frank; Everett, Kay; Fay Duke Subject: Re: RTC on LHAAP-06, 07, 51, 55, 64, 66, 68 DF Report Attachments: ikt50400.PDF; RTC Tables - 1 through 10.pdf; DF RTC\_TCEQ comments - LHAAP-06 07 51 55 64 66 68\_081607.pdf Hi Rose, The EPA has no additional comments on the TCEQ conditional approval, RTCs, or the LHAAP-06, 07, 51, 55, 64, 66, 68 DF Report. Stephen L. Tzhone Superfund Remedial Project Manager USEPA Region 6 (6SF-RA) 214.665.8409 tzhone.stephen@epa.gov "Fay Duke" <FDUKE@tceq.stat e.tx.us> то "Praveen Srivastav" <Praveen.Srivastav@shawgrp.com>, "Rose Zeiler" 09/21/2007 02:55 PM <rose.zeiler@us.army.mil> CC Stephen Tzhone/R6/USEPA/US@EPA, "Dave Cobb" <Dave.Cobb@shawgrp.com>, "Frank Eidson <Frank.Eidson@shawgrp.com>, "Kay Everett' <Kay.Everett@shawgrp.com>, "Cliff SWT Murray" <Cliff.Murray@SWT03.usace.army.mi 1>, "John R SWT Lambert" <John.R.Lambert@SWT03.usace.army. mil>Subject Re: RTC on LHAAP-06, 07, 51, 55, 64, 66, 68 DF Report

Rose/Praveen, Enclosed is our conditional approval.

(See attached file: ikt50400.PDF)

| Email Re RTC on LHAAP-06<br>"Srivastav,<br>Praveen"         | 07 51 55 64 66 68 DF Report.txt                              | 00065757 |
|---|--|----------|
| <praveen.srivast<br>av@shawgrp.com&gt;</praveen.srivast<br> | "Fay Duke"   |          |
| 08/16/2007 07:59<br>PM                                      | <pre><fouke@tceq.state.tx.us></fouke@tceq.state.tx.us></pre> |          |
|   | 66, 68 DF Report   |          |
|   |  |          |

Fay:

Attached are the responses to TCEQ comments on the Draft Final LHAAP-07, 07, 51, 55, 64, 66, 68 Report. Please provide your review comments or concurrence at your earliest convenience.

(See attached file: RTC Tables - 1 through 10.pdf)

(See attached file: DF RTC\_TCEQ comments - LHAAP-06 07 51 55 64 66 68\_081607.pdf)

Thanks

Praveen Srivastav, Ph.D., PG, PMP Project Manager Shaw Environmental & Infrastructure 3010 Briarpark Drive, Suite 4N Houston, TX77042 713-996-4588 direct 281-639-8743 cell 713-996-4436 fax

www.shawgrp.com



## **TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

Protecting Texas by Reducing and Preventing Pollution

September 24, 2007

Ms. Rose Zeiler Army / BRAC Site Manager Longhorn Army Ammunition Plant Post Office Box 220 Ratcliff, AR 72951

### Re: Longhorn Army Ammunition Plant (LHAAP) Draft Final Data Evaluation Report, Chemical Concentration in Soil Samples Associated with LHAAP-35/36 Sumps

Dear Ms. Zeiler:

The Texas Commission on Environmental Quality (TCEQ) has completed review of Draft Final Data Evaluation Report (Shaw Environmental, Inc. August 2007). This report presents an evaluation of chemical concentrations in soil samples associated with the 126 wastewater sumps and 20 waste rack sumps, known collectively as site LHAAP 35/36 at the Longhorn Army Ammunition Plant Superfund Site.

These sumps were previously investigated by the U.S. Army Corps of Engineers and Army contractors and subsequently closed. The closures of most of the sumps have been approved by TCEQ. However, it was determined additional evaluations of the soil around the former sumps were required. Although various soil data associated with each of the sumps have previously been collected for the 2002 and 2003 baseline risk assessment reports for the majority of the sump sites, it was determined that additional soil data around the sumps were necessary to complete the evaluation of the risk posed by soil around these sumps. The report summarizes the results of the additional data collection and risk evaluation to determine whether the additional data would change the conclusions of the previous risk assessments. Our comments/approval are provided below.

Soil samples collected adjacent to sumps associated with sites LHAAP-04, -29, -39 and -66 have concentrations below the TCEQ Risk Base Screening Values (RSBVs). Therefore, we concur that no active remediation would be required for soil around these sumps for the protection of human exposure to on-site soil. However, we note that additional evaluation may be necessary to ensure concentrations in soil would not serve as a continuous source of contamination to groundwater and surface water.

Previous risk assessment indicated acceptable risk to an industrial worker from exposure to chemicals in soil from sites LHAAP-18/24, -35(58), -46, and -47. For soil samples collected adjacent to sumps associated with sites LHAAP-18/24, -35A(58), -46, and -47 that have concentrations above the RBSVs, exposure point concentrations for chemicals which exceeded the RBSV were developed. The evaluation of the exposure point concentration values developed using the sampling results subsequent to the 2003 risk assessment indicates that the additional data contributes negligible increases to the cancer risk and noncancer hazard values of the previous risk assessment with resulting risk values still in the acceptable range. Therefore, we concur that no active remediation would be required for soil around these sumps for

Ms. Rosen Zeiler Page 2

the protection of human exposure to on-site soil at LHAAP-, 18/24, 35A(58), -46 and -47. However, we note that additional evaluations are necessary to ensure concentrations in soil would not serve as a continuous source of contamination to groundwater and surface water. This is especially imperative in the area surrounding Building 25C where perchlorate contamination was observed to have migrated into the surface water. We understand a cover was placed in areas adjacent to Bulding 25C as a temporary abatement. We believe that a permanent remedy should be evaluated to ensure that contaminated soil would not impact the surface water.

Additionally, please note that under the Risk Reduction Rule, site closure/remediation, in order to comply with the non-residential soil requirements, a deed certification must be filed in the county record. The deed certification must indicate that future land use is considered suitable for non-residential use. An example format of the deed certification is provided in 30 Texas Administrative Code §335.569.

Finally, we note that many soil samples analyzed for semivolatiles (SVOCs) were diluted and yet no SVOC compounds were detected. The dilution of samples resulted in an elevation of sample quantitation limits that exceeded the RBSVs. Please provide the rationale for the need to dilute these samples.

If you have any questions or need additional information, please feel free to contact me at (512) 239-2443.

Sincerely

alle

Fay Duke, Project Manager Team 2, Environmental Cleanup Section II Remediation Division Texas Commission on Environmental Quality

FD/mm

Mr. Stephen L. Tzhone, U. S. Environmental Protection Agency Region 6, Dallas, TX
 Mr. Cliff Murray, U.S. Army Corps of Engineers, Tulsa, OK
 Dr. Barry Forsythe, U.S. Fish and Wildlife Service, Dallas, TX
 Mr. Paul Bruckwicki, U.S. Fish and Wildlife Service, Karnack, TX

From: Fay Duke [mailto:FDUKE@tceq.state.tx.us]
Sent: Monday, September 24, 2007 6:17 PM
To: rose.zeiler@us.army.mil
Cc: Harris.Scott@epa.gov; Stephen Tzhone; Josiam.Raji@epamail.epa.gov; paul\_bruckwicki@fws.gov; Cobb, Dave; Srivastav, Praveen; Cliff SWT Murray; John R SWT Lambert; Dale Vodak; Jeffrey P USAEC Armstrong
Subject: DF Data Evaluation Report LHAAP 35/36

Rose,

Enclosed please find the TCEQ comments on the Draft Final Data Evaluation Report, Chemical Concentration in Soil Samples Associated with LHAAP-35/36 Sumps.

Additionally, I had an editorial comment that I did not include in the letter. On page 4-21, Section 4.4.31, the last sentence should read " The evaluation of mercury manganese is described in Section 4.5."

Please let me know if you should have any questions or concerns.

Fay Duke, Project Manager TCEQ Environmental Cleanup Section II MC-221 for Superfund correspondence MC-127 for Corrective Action correspondence MC-221 for VCP correspondence PO Box 13087 Austin, Texas 78711-3087

512-239-2443 512-239-1212 (Fax)



<sup>®</sup> Shaw Environmental & Infrastructure, Inc.

A World of Solutions

January 10, 2008

Shaw/TERC 07-002

Mr. Cliff Murray U.S. Army Corps of Engineers – Tulsa District 1645 South 101<sup>st</sup> - East Avenue Tulsa, Oklahoma 74128-4629

#### RE: Task Order No. 109

Total Environmental Restoration Contract (TERC) Contract No. DACA56-94-D-0020 Environmental Investigation and Remediation at Longhorn Army Ammunition Plant, Karnack, Texas *Final Proposed Plans LHAAP-08 (Former Sewage Treatment Plant), LHAAP-32 (Former TNT Waste Disposal Plant), LHAAP-48 (Y-Area), and LHAAP-35C* (53) (Static Test Area), Longhorn Army Ammunition Plant, Karnack, Texas

Dear Mr. Murray:

Shaw Environmental, Inc. is pleased to submit the attached *Final Proposed Plans* LHAAP-08 (Former Sewage Treatment Plant), LHAAP-32 (Former TNT Waste Disposal Plant), LHAAP-48 (Y-Area), and LHAAP-35C (53) (Static Test Area). We are also sending copies of the documents directly to individuals on the attached project document distribution list.

Please contact me if you have any questions or require additional information.

Sincerely,

Nicole Olson

John Elliott, PMP Project Manager

## Longhorn Distribution List

| Member                         | Agency   | Address  | Phone No.<br>e-mail address   | No. of<br>Copies  |
|--------------------------------|--|--|---|-------------------|
| Cliff Murray<br>Tulsa District | U.S. Army Corp of<br>Engineers                           | US Army Corp of Engineers<br>1645 South 101 <sup>st</sup> – East Avenue<br>Tulsa, Oklahoma 74128-4529  | Office: 918-669-7573<br>Cliff.Murray@SWT03.usace.army.mil             | 2                 |
| Dr. Rose Zeiler                | BRAC; Longhorn<br>Site Manager                           | P.O. Box 220<br>Ratcliff, AR 72951<br>727 South Brooklyn Rd<br>Ratcliff, AR 72951  | Office: 479-635-0110<br>rose.zeiler@us.army.mit                       | 1                 |
| Golden Davis                   | U.S. Army<br>Environmental<br>Command                    | U.S. Army Environmental Command<br>IMAE-CDS/DAVIS(VERSAR)<br>5179 Hoadley Road (E4480)<br>APG, MD 21010-5401   | Office: 410-436-1507<br>golden.davis@us.army.mil                      | 1                 |
| Stephen Tzhone                 | US Environmental<br>Protection Agency                    | US Environmental Protection Agency<br>Superfund Division (6SF-AT)<br>1445 Ross Avenue<br>Dallas, TX 75202-2733   | Office: 214-665-8409<br>tzhone.stephen@epamail.epa.gov                | 2                 |
| Fay Duke                       | Texas Commission<br>of Environmental<br>Quality          | Texas Commission on Environmental Quality<br>TCEQ Environmental Cleanup Section II, Team<br>2 (MC-221)<br>12100 Park 35 Circle, Bldg D<br>Austin, TX 78753 | Office: 512-239-2443<br>fduke@tceq.state.tx.us                        | 2 - most<br>4-eco |
| Dale Vodak                     | Texas Commission<br>of Environmental<br>Quality          | Texas Commission on Environmental Quality<br>2916 Teague Drive<br>Tyler, TX 75701  | Office: 903-535-5147<br>dvodak@tceq.state.tx.us                       | 1                 |
| Paul Bruckwicki                | US Fish and Wildlife<br>Service                          | US Fish and Wildlife Service<br>PO Box 230<br>Karnack, TX 75661 (mailing only)<br>Caddo Lake NWR<br>Hwy 134 & Spur 449<br>Karnack, TX 75661                | Office: 903-679-4536<br>Cell: 903-407-0852<br>paul bruckwicki@fws.gov | 1                 |
| Barry Forsythe                 | US Fish & Wildlife<br>Service<br>EPA Liaison<br>(6SF-LT) | US Fish & Wildlife Service<br>EPA Liaison (6SF-LT)<br>1445 Ross Avenue, Suite 1200<br>Dallas, TX 75202   | Office: 214-665-8467<br>forsythe.barry@epa.gov                        | 1-eco             |

. . .

Total external distribution for routine final (non eco) reports = 10



January 10, 2008

DAIM-BD-LO

Ms. Fay Duke Texas Commission on Environmental Quality Environmental Cleanup Section II (MC-221) 12100 Park 35 Circle Austin, TX 78753

Re: Final Proposed Plans LHAAP-08 (Former Sewage Treatment Plant), LHAAP-32 (Former TNT Waste Disposal Plant), LHAAP-48 (Y-Area), and LHAAP-35C (53) (Static Test Area), Longhorn Army Ammunition Plant, Karnack, Texas, January 2008

Dear Ms. Duke,

The above-referenced documents are transmitted to you for your files.

Point of contact for this action is the undersigned. I may be contacted at 479-635-0110, or by email at <u>rose.zeiler@us.army.mil</u>.

Sincerely,

Rose M. Zeiler

Rose M. Zeiler, Ph.D. Longhorn AAP Site Manager

Copies furnished: Stephen Tzhone, USEPA Region 6, Dallas, TX Paul Bruckwicki, Caddo Lake NWR, TX Cliff Murray, COE – Tulsa District, OK John R. Lambert, COE – Tulsa District, OK J. Elliott, Shaw, Houston, TX (for project file)



January 10, 2008

DAIM-BD-LO

Mr. Steve Tzhone US Environmental Protection Agency Superfund Division (6SF-AT) 1445 Ross Avenue Dallas, TX 75202-2733

Re: Final Proposed Plans LHAAP-08 (Former Sewage Treatment Plant), LHAAP-32 (Former TNT Waste Disposal Plant), LHAAP-48 (Y-Area), and LHAAP-35C (53) (Static Test Area), Longhorn Army Ammunition Plant, Karnack, Texas, January 2008

Dear Mr. Tzhone,

The above-referenced documents are transmitted to you for your files.

Point of contact for this action is the undersigned. I may be contacted at 479-635-0110, or by email at <u>rose.zeiler@us.army.mil</u>.

Sincerely,

Rose M. Zjiler

Rose M. Zeiler, Ph.D. Longhorn AAP Site Manager

Copies furnished: Fay Duke, TCEQ, Austin, TX Paul Bruckwicki, Caddo Lake NWR, TX Cliff Murray, COE – Tulsa District, OK John R. Lambert, COE – Tulsa District, OK J. Elliott, Shaw, Houston, TX (for project file)

# FINAL

# PROPOSED PLAN FOR LHAAP-08 FORMER SEWAGE TREATMENT PLANT

## **ISSUED BY: U.S. ARMY**



Longhorn Army Ammunition Plant Karnack, Texas

January 2008

### THE U.S ARMY ANNOUNCES PROPOSED PLAN FOR LHAAP-08

In this Proposed Plan the U.S. Army presents its proposal for no action at LHAAP-08, the former sewage treatment plant at Longhorn Army Ammunition Plant (LHAAP). The purpose of the Proposed Plan is to facilitate public involvement in the remedy selection process. The Proposed Plan provides the public with basic background information about LHAAP-08, recommends that no action is necessary to ensure the protection of human health and the environment, and explains the rationale for recommending no action.

The U.S. Army is issuing this Proposed Plan for public review, comment, and participation to fulfill part of its public participation responsibilities under Sections 117(a), 113(k)(2)(B), and 121(f)(1)(G) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 as amended by the Superfund Amendments and Reauthorization Act of 1986, and under Section 300.430(f)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This Proposed Plan summarizes information that can be found in greater detail in the Remedial Investigation (RI) Report Addendum, the Baseline Human Health and Screening Ecological Risk Assessment, the Installation-Wide Baseline Ecological Risk Assessment, and other supporting documents that are contained in the Administrative Record for LHAAP-08. The project management team, including the U.S. Army, U.S. **Environmental Protection Agency** (USEPA), and the Texas Commission on Environmental Quality (TCEQ), encourages the public to review these

#### Dates to remember: MARK YOUR CALENDER

#### **PUBLIC COMMENT PERIOD:**

January 13, 2008 to February 14, 2008 The U.S. Army will accept written comments on the Proposed Plan during the public comment period.

**PUBLIC MEETING:** The U.S. Army will hold a public meeting to explain the Proposed Plan for LHAAP-08. Oral and written comments will be accepted at the meeting. The meeting will be held on January 29, 2008 from 6:30 p.m. to 8:30 p.m. at Karnack Community Center.

For more information, see the Administrative Record at the following location:

Marshall Public Library, 300 S. Alamo Marshall, Texas 75670 Business Hours: Monday – Thursday (10:00 a.m. – 8:00 p.m.) Friday – Saturday (10:00 a.m. – 5:00 p.m.)

For further information on LHAAP-08, please contact: Dr. Rose M. Zeiler Site Manager Longhorn Army Ammunition Plant P.O. Box 220 Ratcliff, Arkansas, 72951 Phone No.: 903.679.3192 Direct No.: 479.635.0110 E-mail address: rose.zeiler@us.army.mil

documents to gain a more comprehensive understanding of the environmental conditions at LHAAP-08, and also to review and comment on the recommendation for no action presented in this Proposed Plan.

The U.S. Army, the lead agency for environmental response actions at LHAAP, is acting in partnership with USEPA Region 6 and TCEQ. As the lead agency, the U.S. Army is charged with planning and implementing remedial actions at LHAAP. Regulatory agencies assist the U.S. Army by providing technical support, project review, project comment, and oversight in accordance with the Federal Superfund law and the existing Federal Facilities Agreement.

### SITE BACKGROUND

LHAAP is located in central-east Texas in the northeastern corner of Harrison County (**Figure 1**). The installation originally occupied nearly 8,500 acres between State Highway 43 at Karnack, Texas, and the western shore of Caddo Lake. The nearest cities are Marshall, Texas, approximately 14 miles to the southwest, and Shreveport, Louisiana, approximately 40 miles to the southeast.

Caddo Lake, a large freshwater lake situated on the Texas-Louisiana border and a drinking water source for multiple communities, bounds LHAAP to the north and east.

The U.S. Army has transferred approximately 7,000 acres at LHAAP to the U.S. Fish and Wildlife Service (USFWS) for management as The Caddo Lake National Wildlife Refuge. The property transfer process is continuing as response is completed at individual sites.

Due to releases of chemicals from operation and maintenance activities at the facility, LHAAP was placed on the Superfund National Priorities List (NPL) on August 9, 1990. Activities to remediate contamination associated with the listing of LHAAP as a Superfund site began in 1990. After being listed on the NPL, the U.S. Army, the USEPA, and the Texas Water Commission (currently known as the TCEQ) entered into a **CERCLA Section 120 Federal Facility** Agreement (FFA) for remedial activities at LHAAP. The FFA became effective December 30, 1991. LHAAP operated until 1997 when it was placed on inactive status and classified by the U.S. Army

Armament, Munitions, and Chemical Command as excess property.



Figure 1 Location of the Longhorn Army Ammunition Plant Harrison County, Texas

### LHAAP-08

LHAAP-08 was the sewage treatment plant that operated from 1942 to 1997. LHAAP-08 is located in the central portion of LHAAP and covers an area of approximately 1 acre. The plant was modified over time to handle hydraulic capacity of 0.5 million gallons per day. The sewage treatment plant received domestic wastewater through 6-inch and 15-inch pipelines. The plant also received storm water, boiler blow down, laundry waste, vehicle wash rack waste, and effluent from film development at the Xray facility. The sewage treatment plant was not used to treat water from trinitrotoluene (TNT) manufacturing facilities. The plant discharged treated effluent into Goose Prairie Creek and

Caddo Lake (Jacobs Engineering Group, 2002).

The sewage treatment plant included stabilization ponds, Dunbar filters, sludge drying beds, and an Imhoff tank. The stabilization ponds received brine consisting of saltwater backwash from softeners and filters used to condition the water before it was sent to boilers. Dunbar filters were originally used in treatment of domestic sewage mixed with wastewater from the X-ray film development laboratory. Sludge drying beds received sludge generated in a grit chamber and aerobic digester. An Imhoff tank, considered the primary treatment of wastewater, consisted of two chambers that allowed suspended solids to drop out and pass through a slot from the upper chamber into the lower chamber. Anaerobic digestion occurred in the lower chamber.

### SITE CHARACTERISTICS

LHAAP-08 is located in the northern area of LHAAP (Figure 2). The site is located in the Goose Prairie Creek drainage system, which drains approximately 30 percent of the installation. Shallow groundwater in the vicinity of LHAAP flows to the east toward Harrison Bayou.

In December 2000, soil and groundwater samples were collected from LHAAP-08. Two groundwater monitoring wells were installed at 18 and 19 feet below ground surface (bgs). Soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), explosive compounds, metals, perchlorate, dioxin/furan compounds, pesticides, and polychlorinated biphenyls (PCBs).

No measurable concentrations of SVOCs, explosive compounds, pesticides, or PCBs were detected in any soil sample. One VOC, methylene chloride, was detected in one soil sample at a low concentration near its detection limit. Lead, mercury, and silver were detected with concentrations evenly distributed among the samples in soil, with the exception of one elevated silver concentration measured in soil located near the Dunbar filters, which processed waste from the Xray film development laboratory. This concentration was confined to within 3 to 5 feet of the sampling location. Two dioxin compounds (octachlorodibenzo-pdioxin and hexachlorodibenzo-p-dioxin) were detected at low concentrations in seven of the eight soil samples analyzed.

Four soil samples were collected in June 2000 for perchlorate analysis only. One of the samples taken from the 1 to 2 foot interval contained detectable perchlorate at a concentration of 32 micrograms per kilogram ( $\mu$ g/kg).

No detectable concentrations of SVOCs, explosive compounds, perchlorate, pesticides, or PCBs were detected in the groundwater samples. Acetone, a common laboratory contaminant was the only VOC with a detectable groundwater concentration. Fourteen metals were detected in groundwater samples at low concentrations. Eight dibenzodioxin or dibenzofuran compounds were detected at low levels, with octachlorodibenzo-pdioxin the most widespread.

A human health risk assessment was conducted in 2003, which indicated no unacceptable cancer risk or noncancer hazard to a trespasser or a maintenance worker from exposure to the above chemicals detected in soil or groundwater (Jacobs Engineering Group, 2003).



### SUMMARY OF SITE RISKS

The most reasonably anticipated future use of this site is industrial/recreational as a national wildlife refuge. This anticipated future use is based on a Memorandum of Agreement (U.S. Army, 2004) between the USFWS and the U.S. Army in which is documented the transfer process of the Longhorn Army Ammunition Plant acreage to USFWS to become the Caddo Lake National Wildlife Refuge. Presently the Caddo Lake National Wildlife Refuge occupies over 7,000 acres of the former installation. The property must be kept as a national wildlife refuge unless there is an act of Congress that removes the parcel, or the land is exchanged in accordance with the National Wildlife Refuge System Administration Act of 1966 and the National Wildlife Refuge System Act Amendments of 1974.

### Human Health Risks

The baseline human health risk assessment was conducted for LHAAP-08 to determine current and future effects of contaminants on human health and to support technical review and risk management decisions (Jacobs Engineering Group, 2003).

The NCP, 40 Code of Federal Regulations Part 300, establishes a range of acceptable levels of cancer risk for Superfund sites between one in 10,000 and one in 1 million additional cancer cases if cleanup action is not taken at a site. Expressed in scientific notation, this translates to an acceptable risk range of  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$ over a defined period of exposure to site related contaminants.

In addition to a cancer risk, chemical contaminants that are ingested, inhaled, or

dermally absorbed may present noncancer hazards to different organs of the human body. The non-cancer hazard or toxic effect is expressed as a Hazard Index (HI). EPA considers an HI exceeding 1.0 to be an unacceptable non-cancer hazard.

During the risk assessment, cancer risk and the non-cancer HI were calculated for a current trespasser scenario and a future industrial maintenance worker scenario. In these scenarios, exposure to the site environmental media was evaluated (e.g., soil and groundwater) (Jacobs Engineering Group, 2003). The baseline human health risk assessment calculated the HI for exposure to soil to be 0.005 for the current trespasser, and 0.24 for the future maintenance worker. The cancer risk for soil was  $1.4 \times 10^{-8}$  and  $1.7 \times 10^{-7}$ for the trespasser and maintenance worker, respectively. Both the HI and cancer risk are acceptable for exposure to chemicals in soil by both current trespassers and future maintenance workers.

Both the non-cancer HI and cancer risk were acceptable for groundwater. The HI estimated for future maintenance worker exposure to groundwater by drinking or showering was 0.21 and the cancer risk was  $7.3 \times 10^{-5}$ . All risk above  $1 \times 10^{-6}$  is due to dioxin and furan congeners, which are reported as an equivalent (2,3,7,8tetrachloradibenzo-p-dioxin [TCDD]) concentration (Jacobs Engineering Group, 2003). Although risk is within the acceptable  $1 \times 10^{-6}$  to  $1 \times 10^{-4}$  range, the estimate was considered to be elevated due to the use of undetected dioxin congener concentrations in the calculations. All congeners analyzed were reported either as not detected or as estimated values having concentrations above their detection limit but below the reporting limit (J-qualified) values.

Risk assessment calculations for dioxin/furan congeners involve the toxicity equivalent factors (TEFs) provided in TCEQ guidance, which are used to convert the detected congeners to a relative 2,3,7,8-TCDD concentration, termed the 2,3,7,8-TCDD toxicity equivalent (TEQ) concentration.

The calculations used in the Jacobs Engineering Group (2003) risk assessment were repeated using only the J-qualified congener concentrations. The resulting 2,3,7,8-TCDD TEQ concentration was 0.01 nanograms per liter (ng/L), which is below the MCL for 2,3,7,8-TCDD TEQ of 0.03 ng/L.

The assessment of risk to current trespassers and future industrial maintenance workers from exposure to chemicals in soil and groundwater at LHAAP-08 indicated that potential human health risks are within the acceptable range established by the USEPA. Therefore, no action is necessary at LHAAP-08.

Limited monitoring in the form of Five-Year Reviews is required because this site has not been evaluated for unrestricted use. The risk evaluation, which was based on the reasonably anticipated future use as a wildlife refuge, does not address unrestricted use. The Five-Year Reviews will serve to document that the use of the site is consistent with the industrial/recreational exposure scenario evaluated in the risk assessment.

### Ecological Risk

The ecological risk for the site LHAAP-08 was addressed in the installation-wide Baseline Ecological Risk Assessment (BERA) (Shaw, 2007). For the BERA, the entire installation was divided into three large sub-areas (i.e., the Industrial Sub-Area, Waste Sub-Area, and Low Impact Sub-Area) for the terrestrial evaluation. The individual sites at LHAAP were grouped into one of these sub-areas, which were delineated based on commonalities of historic use, habitat type, and spatial proximity to each other. The conclusions regarding the potential for chemicals detected at individual sites to adversely affect the environment must be made in the context of the overall conclusions of the sub-area in which the site falls. Site LHAAP-08 lies within the Industrial Sub-Area.

The BERA concluded that no unacceptable risk was present in the Industrial Sub-Area (Shaw, 2007) and therefore, no further action is needed at LHAAP-08 for the protection of ecological receptors.

The land on which LHAAP-08 is located is excess to the Army's needs and is intended for transfer to the USFWS for incorporation into the Caddo Lake National Wildlife Refuge. Future anticipated use is consistent with an industrial/recreational level of exposure.

### RECOMMENDATION

No action is proposed for this site. This recommendation is based on the existing data and determination of no unacceptable risk to human health. A Record of Decision based on this recommendation will allow this site to be removed from the list of LHAAP environmental sites requiring additional effort by the U.S. Army. The recommendation for no action is consistent with the criteria required under CERCLA.

Notification of industrial/recreational use will accompany all transfer documents and will be recorded in the County Courthouse. Five-Year Reviews will be performed to document that the land use remains consistent with the industrial/recreational exposure scenario evaluated in the risk assessment.

### **COMMUNITY PARTICIPATION**

The U.S. Army, USEPA, and TCEQ provide information regarding LHAAP-08 through public meetings, the Administrative Record file for the facility, and announcements published in the Shreveport Times and Marshall News Messenger newspapers. The public is encouraged to gain a more comprehensive understanding of the site.

The dates for the public comment period, the date, location, and time of the public meeting, and the locations of the Administrative Record files are provided on the front page of this Proposed Plan.

Any significant changes to the Proposed Plan, as presented in this document, will be identified and explained in the Record of Decision.

#### **Primary Reference Documents for LHAAP-08**

Jacobs Engineering Group, 2002, Final Remedial Investigation Report Addendum for the Group 4 Sites Remedial Investigation Report, Sites 04, 08, 67 and Hydrocarbon Study at the Longhorn Army Ammunition Plant, Karnack, Texas, February.

Jacobs Engineering Group, 2003, Final Baseline Human Health and Screening Ecological Risk Assessment, Group 4 Sites, Sites 04, 08, 35A, 35B, 35C,46, 47, 48, 50, 60,67, Goose Prairie Creek, Saunder's Branch, Central Creek, and Caddo Lake, Longhorn Army Ammunition Plant, Karnack, Texas, June.

Shaw Environmental, Inc., 2007, Installation-Wide Baseline Ecological Risk Assessment, Longhorn Army Ammunition Plant, Karnack, Texas, Volume 1: Step 3 Report; Houston, Texas, November.

United States Army, 2004, Memorandum of Agreement Between the Department of the Army and the Department of the Interior for the Interagency Transfer of Lands at the Longhorn Army Ammunition Plant for the Caddo Lake National Wildlife Refuge, Harrison County, Texas, signed by the Department of the Interior on April 27, 2004 and the Army on April 29, 2004.

#### GLOSSARY OF TERMS

Administrative Record — The body of reports, official correspondence, and other documents that establish the official record of the analysis, cleanup, and final closure of a CERCLA site.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** — This law authorizes the Federal Government to respond directly to releases (or threatened releases) of hazardous substances that may be a danger to public health, welfare, or the environment. The U.S. Army currently has the lead responsibility for these activities.

**Environmental Media** — A major environmental category that surrounds or contacts humans, animals, plants, and other organisms (e.g., surface water, ground water, soil, or air) and through which chemicals or pollutants move.

**Exposure** — Contact of an organism with a chemical or physical agent. Exposure is quantified as the amount of the agent available at the exchange boundaries of the organism (e.g., skin, lung, digestive tract, etc.) and available for absorption.

**Groundwater** — Underground water that fills pores in soil or openings in rocks to the point of saturation.

**Remedial Action** — The actual construction or implementation phase of a Superfund site cleanup that follows remedial design.

**Superfund** — The common name used for CERCLA; also referred to as the Trust Fund. The Superfund Program was established to help fund cleanup of hazardous waste sites. It also allows legal action to force those responsible for sites to clean them up.

#### ACRONYMS AND ABBREVIATIONS

| µg/kg  | micrograms per kilogram           |
|--------|-----------------------------------|
| BERA   | Baseline Ecological Risk          |
|        | Assessment                        |
| CERCLA | Comprehensive Environmental       |
|        | Response, Compensation, and       |
|        | Liability Act                     |
| FFA    | Federal Facility Agreement        |
| HI     | Hazard Index                      |
| LHAAP  | Longhorn Army Ammunition          |
|        | Plant                             |
| NCP    | National Oil and Hazardous        |
|        | Substances Pollution Contingency  |
|        | Plan                              |
| ng/L   | nanograms per liter               |
| NPL    | National Priorities List          |
| PCB    | polychlorinated biphenyl          |
| RI     | remedial investigation            |
| ROD    | Record of Decision                |
| SVOC   | semivolatile organic compound     |
| TCDD   | tetrachlorodibenzo-p-dioxin       |
| TCEQ   | Texas Commission on               |
|        | Environmental Quality             |
| TEQ    | toxicity equivalent concentration |
|        | of dioxin and furan congeners     |
| TNT    | trinitrotoluene                   |
| USEPA  | U.S. Environmental Protection     |
|        | Agency                            |
| USFWS  | U.S. Fish and Wildlife Service    |
| VOC    | volatile organic compound         |

## **USE THIS SPACE TO WRITE YOUR COMMENTS**

Your input on the Proposed Plan for the LHAAP-08 is important to the U.S. Army. Comments provided by the public are valuable in helping the U.S. Army select a final remedy for the site.

You may use the space below to write your comments, then fold and mail to Dr. Rose M. Zeiler, P.O. Box 220, Ratcliff, Arkansas 72951. Comments must be postmarked by February 14, 2008. If you have questions about the comment period, please contact Dr. Rose M. Zeiler at 903.679.3192 or directly at 479.635.0110. Those with electronic communications capabilities may submit their comments to the U.S. Army via Internet at the following e-mail address: rose.zeiler@us.army.mil

| <br> |
|------|
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
| <br> |
| <br> |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |
|      |

## **FINAL**

# PROPOSED PLAN FOR LHAAP-32, FORMER TNT WASTE DISPOSAL PLANT

## **ISSUED BY: U.S. ARMY**



# Longhorn Army Ammunition Plant Karnack, Texas

January 2008

### THE U.S ARMY ANNOUNCES PROPOSED PLAN FOR LHAAP-32

In this Proposed Plan the U.S. Army presents its proposal for no action at LHAAP-32, a former trinitrotoluene (TNT) waste disposal plant at Longhorn Army Ammunition Plant (LHAAP). The primary purpose of the Proposed Plan is to facilitate public involvement in the remedy selection process. The Proposed Plan will provide the public with basic background information about LHAAP-32, recommend that no action is necessary to ensure the protection of human health and the environment and explain the rationale for recommending no action.

The U.S. Army is issuing this Proposed Plan for public review, comment, and participation to fulfill part of its public participation responsibilities under Section 117(a), 113(k)(2)(B), and 121(f)(1)(G) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 as amended by the Superfund Amendments and Reauthorization Act of 1986, and under Section 300.430(f)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This Proposed Plan summarizes information that can be found in greater detail in the Remedial Investigation Report, the Data Gaps Investigation Report, Final Site Evaluation Report, Installation-Wide Baseline Environmental Risk Assessment, and other supporting documents that are contained in the Administrative Record for LHAAP-32. The project management team, including the U.S. Army, U.S. **Environmental Protection Agency** (USEPA), and the Texas Commission on Environmental Quality (TCEQ), encourages the public to review these documents to gain a more comprehensive understanding of the environmental

#### Dates to remember: MARK YOUR CALENDER

#### **PUBLIC COMMENT PERIOD:**

January 13, 2008 to February 14, 2008 The U.S. Army will accept written comments on the Proposed Plan during the public comment period.

**PUBLIC MEETING:** The U.S. Army will hold a public meeting to explain the Proposed Plan for LHAAP-32. Oral and written comments will be accepted at the meeting. The meeting will be held on January 29, 2008 from 6:30 p.m. to 8:30 p.m. at Karnack Community Center.

For more information, see the Administrative Record at the following location:

Marshall Public Library 300 S. Alamo Marshall, Texas 75670 Business Hours: Monday – Thursday (10:00 a.m. – 8:00 p.m.) Friday – Saturday (10:00 a.m. – 5:00 p.m.)

#### For further information on LHAAP-32, please contact: Dr. Rose M. Zeiler Site Manager Longhorn Army Ammunition Plant P.O. Box 220 Ratcliff, Arkansas, 72951 Phone No.: 903.679.3192 Direct No.: 479.635.0110 E-mail address: rose.zeiler@us.army.mil

conditions at LHAAP-32, and also to review and comment on the recommendation for no action presented in this Proposed Plan.

The U.S. Army, the lead agency for environmental response actions at LHAAP, is acting in partnership with USEPA Region 6 and TCEQ. As the lead agency, the U.S. Army is charged with planning and implementing remedial actions at LHAAP. Regulatory agencies assist the U.S. Army by providing technical support, project review, project comment, and oversight in accordance with the Federal Superfund law and the existing Federal Facilities Agreement.

### SITE BACKGROUND

LHAAP is located in central-east Texas in the northeastern corner of Harrison County (**Figure 1**). The installation originally occupied nearly 8,500 acres between State Highway 43 at Karnack, Texas, and the western shore of Caddo Lake. The nearest cities are Marshall, Texas, approximately 14 miles to the southwest, and Shreveport, Louisiana, approximately 40 miles to the southeast.

Caddo Lake, a large freshwater lake situated on the Texas-Louisiana border and a drinking water source for multiple communities, bounds LHAAP to the north and east.

The U.S Army has transferred approximately 7,000 acres to the U.S. Fish and Wildlife Service (USFWS) for management as The Caddo Lake National Wildlife Refuge. The property transfer process is continuing as response is completed at individual sites.

Due to releases of chemicals from operation and maintenance activities at the facility, LHAAP was placed on the Superfund National Priorities List (NPL) on August 9, 1990. Activities to remediate contamination associated with the listing of LHAAP as a Superfund site began in 1990. After being listed on the NPL, the U.S. Army, the USEPA, and the Texas Water Commission (currently known as the TCEQ) entered into a **CERCLA Section 120 Federal Facility** Agreement (FFA) for remedial activities at LHAAP. The FFA became effective December 30, 1991. LHAAP operated until 1997 when it was placed on inactive status and classified by the U.S. Army Armament, Munitions, and Chemical Command as excess property.



Figure 1 Location of the Longhorn Army Ammunition Plant Harrison County, Texas

### LHAAP-32

LHAAP-32 was the TNT Waste Disposal Plant that operated from 1942 to 1945. The plant treated wastewater generated at the nearby TNT Production Area (LHAAP-29). The wastewater was transferred to the disposal area through a 6-inch wooden pipeline and stored in holding tanks until treated. Wastewater was neutralized with sodium hydroxide and evaporated. Condensate was collected, stored, and released via the "blue water" ditch to Goose Prairie Creek. The thickened and neutralized wastes were stored until burned at the Incinerator Facility located within LHAAP-32. The remaining ashes were disposed at the Old Landfill (LHAAP-16) until early 1944, when an ash sluicing system was added to the LHAAP-32 treatment plant to dispose of the solids. The resultant solids were conveyed by a ditch to Goose Prairie Creek. This "blue water" ditch also

carried acidic cooling water from the disposal plant to the Neutralizing Plant next to the Bulk Toluene Storage Area in LHAAP-29.

### SITE CHARACTERISTICS

Between 1982 and 2005 several investigations were conducted in a phased approach to determine the nature and extent of contamination at LHAAP-32 (**Figure 2**). Media investigated included soil, groundwater, surface water, and sediment.

Results of the initial investigations indicated elevated levels of metals at one soil sampling location and high levels of explosive constituents in the upper 0.5 feet of soil at another sampling location. No significant contamination was detected in sediment or surface water.

A human health risk assessment was conducted in 2002, which indicated unacceptable risk to a maintenance worker primarily from a high concentration of TNT detected in the former settling pond (Jacobs Engineering Group, Inc. [Jacobs], 2002). Because the unacceptable risk was caused by a single high detection of TNT, it was decided to resample that location and the area around it to confirm the previous results.

In 2004, additional sampling of soil was conducted within the former settling pond where a high level of TNT was previously detected, to replicate and delineate the high TNT concentration (Shaw Environmental, Inc. [Shaw], 2005a). Soil samples were also collected from the former treatment facility building to determine if a release occurred in the past. In addition, groundwater samples were collected from three monitoring wells at the site.

The high detection of TNT in the soil was not replicated during the 2004 re-

sampling. Results of the investigations indicated that only one soil sample located within the former settling pond had a significant detection of TNT; however, the TNT concentration was three orders of magnitude lower than previously detected in the area. One subsurface soil sample collected from the northeastern corner of the former treatment building showed a significant detection of lead. Migration of the soil contaminants at these isolated locations would be impeded due to the lithology of the soil, which consists of stiff clay at the site.

Initial groundwater sampling results indicated that antimony, arsenic, and lead were detected above maximum contaminant levels (MCLs) in groundwater. These chemicals are not related to past operations at LHAAP-32. Instead, they were suspected to be related to the turbidity of the groundwater samples. In order to determine whether or not the chemicals were related to sample turbidity, Shaw re-sampled the wells using low-flow methods. Re-sampling results confirmed that elevated metal levels were associated with high turbidity and not representative of groundwater conditions at the site. No explosives were detected in any of the groundwater samples.

### SUMMARY OF SITE RISKS

The most reasonably anticipated future use of this site is industrial/recreational as a national wildlife refuge. This anticipated future use is based on a Memorandum of Agreement (U.S. Army, 2004) between the USFWS and the U.S. Army in which is documented the transfer process of the LHAAP acreage to the USFWS to become the Caddo Lake National Wildlife Refuge. Presently the Caddo Lake National Wildlife Refuge occupies over 7,000 acres of the former



installation. The property must be kept as a national wildlife refuge unless there is an act of Congress that removes the parcel, or the land is exchanged in accordance with the National Wildlife Refuge System Act of 1966 and the National Wildlife Refuge System Act Amendments of 1974.

### Human Health Risks

The baseline human health risk assessment was conducted for LHAAP-32 to determine current and future effects of contaminants on human health and to support technical review and risk management decisions.

The NCP, 40 Code of Federal Regulations Part 300, establishes a range of acceptable levels of cancer risk for Superfund sites that range between one in 10,000 and one in 1 million additional cancer cases if cleanup action is not taken at a site. Expressed in scientific notation, this translates to an acceptable risk range of  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$  over a defined period of exposure to site related contaminants.

In addition to a cancer risk, chemical contaminants that are ingested, inhaled, or dermally absorbed may present noncancer hazards to different organs of the human body. The non-cancer hazard or toxic effect is expressed as hazard index (HI). USEPA considers an HI exceeding 1.0 to be an unacceptable non-cancer hazard.

During the risk assessment conducted by Jacobs (Jacobs 2002), cancer risk and the non-cancer HI were calculated for a current trespasser scenario and a future industrial worker scenario. The trespasser was assumed to encounter surface soil only (0 to 0.5 feet below ground surface [bgs]). The industrial maintenance worker was assumed to encounter both surface soil and subsurface soil (0 to 2 feet below ground surface [bgs]). The baseline human health risk assessment calculated the HI for the soil to be 35 for the current trespasser, and 230 for the future maintenance worker. The cancer risk for the soil was  $9.2 \times 10^{-5}$  and  $1.2 \times 10^{-3}$  for the trespasser and maintenance worker, respectively. Both the HI and cancer risk were unacceptable for the future maintenance worker, due to the one high detection of TNT. Noncancer hazard and cancer risk were acceptable for groundwater (Jacobs, 2002).

After the soil sampling effort of 2004-2005, Shaw conducted a human health risk evaluation for a future residential receptor's exposure to soil (Shaw, 2005b). The residential baseline human health risk assessment was conducted using data reported in the baseline human health risk assessment for industrial use (Jacobs. 2002) and supplemented by data from more recent additional sampling events by Shaw (2005a). The recent soil sampling did not replicate the extraordinarily high TNT concentration from the one location collected during the previous sampling effort, and all samples from the additional borings had very low or non-detected concentration of TNT. It was therefore determined that elevated concentrations of TNT either do not exist or are so highly localized that they are unlikely to be encountered by humans. Therefore, the LHAAP stakeholders determined that TNT data from the one location with a high TNT level should be eliminated from the risk assessment. The analytical data for the additional samples (Shaw, 2005a) were included in the residential risk assessment (Shaw, 2005b) because it was considered representative of that location. The hypothetical future resident was assumed to encounter both surface and subsurface soil (0 to 15 feet bgs). The estimated cancer risk for soil exposure for

the hypothetical future resident is  $2 \times 10^{-5}$ and the noncancer HI is 0.3; both values are within the acceptable risk range established by USEPA.

Lead is unique among chemicals of concern at LHAAP-32 in that the USEPA does not evaluate lead toxicity using the non-cancer hazard approach. The USEPA specifies a computer model to estimate the level of lead in blood of children through the first seven years of age. If the estimated blood level exceeds a cutoff level (10 micrograms per deciliter  $\left[ \mu g/dL \right]$ ) in more than 5 percent of the population, the USEPA identifies lead as a chemical of concern. The computer model was applied to the lead concentrations in both soil and groundwater at LHAAP-32 and the results estimated a blood concentration of 2.5  $\mu g/dL$  in less than 0.2 percent of the population, indicating that lead is not a chemical of concern for residential use of the LHAAP-32 site.

Antimony, arsenic, and lead, were detected in groundwater above MCLs during previous sampling events. The residential risk assessment for LHAAP-32 indicated that the shallow groundwater does not meet Safe Drinking Water Act requirements and would not be acceptable for residential use. However, the assessment was affected by uncertainties associated with the collection and analysis of groundwater samples. Because previous groundwater samples were not collected using low-flow purging methods, it is probable that the samples contain metals adsorbed to suspended particles or in colloidal form. Such suspended forms would tend to cause an overestimate of the concentration of dissolved chemicals and exceed the MCL values. Re-sampling of groundwater utilizing the low flow method to reduce turbidity effects indicated that elevated
metal levels were associated with high turbidity and not representative of the groundwater at the site.

Thus, no further action is recommended for this site.

#### Ecological Risk

The ecological risk for the site LHAAP-32 was addressed in the installation-wide **Baseline Ecological Risk Assessment** (BERA) (Shaw, 2007). For the BERA, the entire installation was divided into three large sub-areas (i.e., the Industrial Sub-Area, Waste Sub-Area, and Low Impact Sub-Area) for the terrestrial evaluation. The individual sites at LHAAP were grouped into one of these sub-areas, which were delineated based on commonalities of historic use, habitat type, and spatial proximity to each other. The conclusions regarding the potential for chemicals detected at individual sites to adversely affect the environment must be made in the context of the overall conclusions of the sub-area in which the site falls. Site LHAAP-32 lies within the Industrial Sub-Area.

The BERA concluded that no unacceptable risk was present in the Industrial Sub-Area (Shaw, 2007) and therefore, no further action is needed at LHAAP-32 for the protection of ecological receptors.

The land on which LHAAP-32 is located is excess to the Army's needs and is intended for transfer to USFWS for incorporation into the Caddo Lake National Wildlife Refuge. Future anticipated use is consistent with a residential/recreational level of exposure.

#### RECOMMENDATION

No action is proposed for this site. This recommendation is based on the existing data and determination of no unacceptable risk to human health. A Record of Decision (ROD) based on this recommendation will allow this site to be removed from the list of LHAAP environmental sites requiring additional effort by the U.S. Army. The recommendation for no action is consistent with the criteria required under CERCLA.

#### **COMMUNITY PARTICIPATION**

The U.S. Army, USEPA, and TCEQ provide information regarding LHAAP-32 through public meetings, the Administrative Record file for the facility, and announcements published in the Shreveport Times and Marshall News Messenger newspapers. The public is encouraged to gain a more comprehensive understanding of the site.

The dates for the public comment period, the date, location, and time of the public meeting, and the locations of the Administrative Record files are provided on the front page of this Proposed Plan.

Any significant changes to the Proposed Plan, as presented in this document, will be identified and explained in the ROD.

#### Primary Reference Documents for LHAAP-32

Jacobs, 2001, Final Remedial Investigation Report (Volume 1-3) for the Group 2 Sites: 12, 17, 18/24, 29, and 32, at the LHAAP, Karnack, Texas, April.

Jacobs, 2002, Final Baseline Human Health and Screening Ecological Risk Assessment for the Group 2 Sites, Sites 12, 17, 18/24, 29, 32, and 49, Harrison Bayou and Caddo Lake, LHAAP, Karnack, Texas, August.

Shaw, 2005a, Draft Final Data Gaps Investigation Report, Longhorn Army Ammunition Plant, Karnack, Texas, May.

Shaw, 2005b, Final Site Evaluation Report, LHAAP-32, Former TNT Waste Disposal Plant, Longhorn Army Ammunition Plant, Karnack, Texas, November.

Shaw, 2007, Installation-Wide Baseline Ecological Risk Assessment, Longhorn Army Ammunition Plant, Karnack, Texas, Volume 1: Step 3 Report; Houston, Texas, November.

United States Army, 2004, Memorandum of Agreement Between the Department of the Army and the Department of the Interior for the Interagency Transfer of Lands at the Longhorn Army Ammunition Plant for the Caddo Lake National Wildlife Refuge, Harrison County, Texas, signed by the Department of the Interior on April 27, 2004 and the Army on April 29, 2004.

# <u>0006</u>5783

#### GLOSSARY OF TERMS

Administrative Record — The body of reports, official correspondence, and other documents that establish the official record of the analysis, cleanup, and final closure of a CERCLA site.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** — This law authorizes the Federal Government to respond directly to releases (or threatened releases) of hazardous substances that may be a danger to public health, welfare, or the environment. The U.S. Army currently has the lead responsibility for these activities.

**Environmental Media** — A major environmental category that surrounds or contacts humans, animals, plants, and other organisms (e.g., surface water, ground water, soil or air) and through which chemicals or pollutants move.

**Exposure** — Contact of an organism with a chemical or physical agent. Exposure is quantified as the amount of the agent available at the exchange boundaries of the organism (e.g., skin, lung, digestive tract, etc.) and available for absorption.

**Groundwater** — Underground water that fills pores in soil or openings in rocks to the point of saturation.

**Remedial Action** — The actual construction or implementation phase of a Superfund site cleanup that follows remedial design.

**Superfund** — The common name used for CERCLA; also referred to as the Trust Fund. The Superfund Program was established to help fund cleanup of hazardous waste sites. It also allows legal action to force those responsible for sites to clean them up.

#### ACRONYMS AND ABBREVIATIONS

| bgs    | below ground surface             |
|--------|----------------------------------|
| BERA   | Baseline Ecological Risk         |
|        | Assessment                       |
| CERCLA | Comprehensive Environmental      |
|        | Response, Compensation, and      |
|        | Liability Act                    |
| FFA    | Federal Facility Agreement       |
| HI     | hazard index                     |
| Jacobs | Jacobs Engineering, Inc.         |
| LHAAP  | Longhorn Army Ammunition Plant   |
| MCL    | maximum contaminant levels       |
| NCP    | National Oil and Hazardous       |
|        | Substances Pollution Contingency |
|        | Plan                             |
| NPL    | National Priorities List         |
| ROD    | record of decision               |
| Shaw   | Shaw Environmental, Inc.         |
| TCEQ   | Texas Commission on              |
|        | Environmental Quality            |
| TNT    | trinitrotoluene                  |
| USEPA  | U.S. Environmental Protection    |
|        | Agency                           |
| USFWS  | U.S. Fish and Wildlife Service   |

## **USE THIS SPACE TO WRITE YOUR COMMENTS**

Your input on the Proposed Plan for the LHAAP-32 is important to the U.S. Army. Comments provided by the public are valuable in helping the U.S. Army select a final remedy for the site.

You may use the space below to write your comments, then fold and mail to Dr. Rose M. Zeiler, P. O. Box 220, Ratcliff, Arkansas 72951. Comments must be postmarked by February 14, 2008. If you have questions about the comment period, please contact Dr. Rose M. Zeiler at 903.679.3192 or directly at 479.635.0110. Those with electronic communications capabilities may submit their comments to the U.S. Army via Internet at the following e-mail address: rose.zeiler@us.army.mil

# **FINAL**

# PROPOSED PLAN FOR LHAAP-48 (Y-AREA) AND LHAAP-35C (53) (STATIC TEST AREA)

# **ISSUED BY: U.S. ARMY**



Longhorn Army Ammunition Plant Karnack, Texas

January 2008

#### THE U.S ARMY ANNOUNCES PROPOSED PLAN FOR LHAAP-48 AND LHAAP-35C (53)

In this Proposed Plan the U.S. Army presents its proposal for no action at LHAAP-48, formerly known as the Y-Area, and LHAAP-35C (53), a former static test area at Longhorn Army Ammunition Plant (LHAAP). The primary purpose of the Proposed Plan is to facilitate public involvement in the remedy selection process. The Proposed Plan will provide the public with basic background information about LHAAP-48 and LHAAP-35C (53), recommend that no action is necessary to ensure the protection of human health and the environment, and explain the rationale for recommending no action.

The U.S. Army is issuing this Proposed Plan for public review, comment, and participation to fulfill part of its public participation responsibilities under Sections 117(a), 113(k)(2)(B), and 121(f)(1)(G) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 as amended by the Superfund Amendments and Reauthorization Act of 1986, and Section 300.430(f)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This Proposed Plan summarizes information that can be found in greater detail in the Remedial **Investigation Report (Jacobs Engineering** Group [Jacobs], 2002), Data Gaps Investigation Report (Shaw Environmental, Inc. [Shaw], 2007a), Site Evaluation Report (Shaw, 2007b), the Installation-Wide Baseline Ecological Risk Assessment (Shaw, 2007c), and other supporting documents that are contained in the Administrative Record for LHAAP-48 and LHAAP-35C (53). The project management team, including the U.S. Army, U.S. Environmental

#### Dates to remember: MARK YOUR CALENDER

#### **PUBLIC COMMENT PERIOD:**

January 13, 2008 to February 14, 2008 The U.S. Army will accept written comments on the Proposed Plan during the public comment period.

**PUBLIC MEETING:** The U.S. Army will hold a public meeting to explain the Proposed Plan for LHAAP-48 and LHAAP-35C (53). Oral and written comments will be accepted at the meeting. The meeting will be held on January 29, 2008 from 6:30 p.m. to 8:30 p.m. at Karnack Community Center.

For more information, see the Administrative Record at the following location:

Public Library Marshall Public Library 300 S. Alamo Marshall, Texas 75670 Business Hours: Monday – Thursday (10:00 a.m. – 8:00 p.m.), Friday – Saturday (10:00 a.m. – 5:00 p.m.)

For further information on LHAAP-48 and LHAAP-35C (53), please contact: Dr. Rose M. Zeiler Site Manager Longhorn Army Ammunition Plant P.O. Box 220 Ratcliff, Arkansas, 72951 Phone No.: 903.679.3192 Direct No.: 479.635.0110 E-mail address: rose.zeiler@us.army.mil

Protection Agency (USEPA), and the Texas Commission on Environmental Quality (TCEQ), encourages the public to review these documents to gain a more comprehensive understanding of the environmental conditions at LHAAP-48 and LHAAP-35C (53), and also to review and comment on the recommendation for no action presented in this Proposed Plan. The U.S. Army, the lead agency for environmental response actions at LHAAP, is acting in partnership with USEPA Region 6 and TCEQ. As the lead agency, the U.S. Army is charged with planning and implementing remedial actions at LHAAP. Regulatory agencies assist the U.S. Army by providing technical support, project review, project comment, and oversight in accordance

with the Federal Superfund law and the existing Federal Facilities Agreement.

## SITE BACKGROUND

LHAAP is located in central-east Texas in the northeastern corner of Harrison County (**Figure 1**). The installation originally occupied approximately 8,500 acres between State Highway 43 at Karnack, Texas, and the western shore of Caddo Lake. The nearest cities are Marshall, Texas, approximately 14 miles to the southwest, and Shreveport, Louisiana, approximately 40 miles to the southeast.

Caddo Lake, a large freshwater lake situated on the Texas-Louisiana border and a drinking water source for several neighboring Louisiana communities, bounds LHAAP to the north and east.

The U.S. Army has transferred approximately 7,000 acres to the USFWS for management as The Caddo Lake National Wildlife Refuge. The property transfer process is continuing as environmental response efforts are completed at individual sites.

Due to releases of chemicals from operation and maintenance activities at the facility, LHAAP was placed on the Superfund National Priorities List (NPL) on August 9, 1990. Activities to remediate contamination associated with the listing of LHAAP as a Superfund site began in 1990. After being listed on the NPL, the U.S. Army, the USEPA, and the Texas Water Commission (currently known as the TCEQ) entered into a **CERCLA Section 120 Federal Facility** Agreement (FFA) for remedial activities at LHAAP. The FFA became effective December 30, 1991. LHAAP operated until 1997 when it was placed on inactive status and classified by the U.S. Army Armament, Munitions, and Chemical Command as excess property.



Figure 1. Location of the Longhorn Army Ammunition Plant Harrison County, Texas

The two sites discussed in this Proposed Plan have been identified to have potential environmental concerns. The most reasonably anticipated future use of LHAAP-48 and LHAAP-35C (53) is industrial or recreational as a national wildlife refuge. This anticipated future use is based on a Memorandum of Agreement (U.S. Army, 2004) between the USFWS and the U.S. Army in which the transfer process of the LHAAP acreage to USFWS is documented, to become the Caddo Lake National Wildlife Refuge. Presently the Caddo Lake National Wildlife Refuge occupies over 7,000 acres of the former installation. The property must be kept as a national wildlife refuge unless there is an act of Congress that removes the parcel or the land is exchanged in accordance with the National Wildlife Refuge System Act of 1966 and the National Wildlife Refuge System Act Amendments of 1974.

A site description, site characteristics, and a summary of site risks are provided below separately for each site, followed by a recommendation for the sites. The location of sites LHAAP-48 and LHAAP-35C (53) are depicted in **Figure 2**.

#### LHAAP-48

LHAAP-48, also known as the Y-Area, covers an area of approximately 16 acres. The center of the site is located at the intersection of Yoakum Drive and Starr Ranch Road. LHAAP-48 was built during the construction of Plant 3 (1953-1955) and was used for the production of igniters and illumination devices. LHAAP-48 was active until about 1997. There were nine waste process sumps and three waste rack sumps associated with this area.

#### LHAAP-48 Site Characteristics

LHAAP-48 is located in the east-central portion of LHAAP (**Figure 2**). The surface features at LHAAP-48 include asphalt-paved roads and parking areas around the buildings. The perimeter of LHAAP-48 is a mixture of heavily wooded areas and grasslands. The topography slopes gently to the southeast



Figure 2. Site Location Map

and surface runoff from the northern part of the site enters a drainage ditch leading to Central Creek to the south. Runoff from the southern portion of LHAAP-48 eventually enters Central Creek to the southeast, which drains to Caddo Lake. Groundwater flow at the site has a general south and southeast flow direction.

Soil and groundwater were sampled in a phased manner between 1991 and 2005 to determine the nature and extent of contamination.

Soil samples were analyzed for some or all of the following during various phases of investigation: volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), metals, explosive compounds, pesticides, polychlorinated biphenyls (PCBs), dioxins/furans, and perchlorate.

Soil samples were collected at several locations and depths including the areas surrounding the sumps. Detected compounds in soil included VOCs, SVOCs, metals, PCBs, pesticides, and dioxins/furans. A human health risk assessment conducted in 2003 indicated no unacceptable cancer risk or non-cancer hazard to a future maintenance worker or trespasser from the detected compounds in the soil (Jacobs, 2003).

Six monitoring wells were installed at the site for the purposes of collecting groundwater data. Five wells with stainless steel screens were installed in 1994 in the shallow groundwater-bearing zone. One well was installed in 2004 in the intermediate zone with a polyvinyl chloride (PVC) screen. Groundwater samples were collected from 1994 to 2005 and analyzed for some or all of the following during the various sampling events: VOCs, SVOCs, metals, explosive compounds, pesticides, PCBs, dioxins/furans, and perchlorate.

In 2003, a human health risk assessment indicated unacceptable risk from groundwater to a maintenance worker, primarily from thallium and dioxins detected in the early sampling rounds (Jacobs, 2003). Other metals, including arsenic, antimony, chromium, and lead were detected in groundwater in the initial sampling round above their associated maximum contaminant level (MCL). An MCL is a national primary drinking water standard.

Prior to 2003, groundwater samples were collected with methods that could agitate the water and cause particulates (solids) to be drawn into the well and become suspended in the water. If a water sample contained particulates (high turbidity), then the total concentration of the compound from both the water and the particulate matter would be provided. Turbid samples can indicate an elevated concentration of a compound that is not representative of the actual concentration in the groundwater. Turbid samples may be filtered to reduce the suspended particulates in the water to more accurately represent the compound's concentration in the water.

In 2004, as part of a data gaps investigation, additional groundwater samples were collected using a low-flow sampling method to reduce the turbidity in samples (Shaw, 2007a). Samples were collected from two shallow zone wells and one intermediate zone well and analyzed for thallium, dioxin/furans, and perchlorate. In 2005, additional groundwater samples were collected and analyzed for VOCs, metals, dioxins/furans, and perchlorate (Shaw, 2007b).

Metals detected above their MCL prior to 2004 were not detected or were detected at levels below their associated MCL in subsequent sampling events in both

filtered and unfiltered samples collected with the low-flow sampling method, with the exception of chromium (Shaw, 2007a, 2007b).

In 2004, chromium was detected in two shallow zone wells in unfiltered samples at concentrations that exceeded the MCL of 100 micrograms per liter  $(\mu g/L)$  (Shaw, 2007b). Corrosion of the stainless steel well screens and particulates in the water are suspected to have caused these readings to be elevated. In May 2005, an additional sampling event was conducted to collect and analyze filtered and unfiltered samples to determine the influence of particulates (turbidity) on the sample results. After the samples were filtered, the chromium levels were reduced (e.g., from  $2,510 \mu g/L$  to 60.7 $\mu$ g/L and 715  $\mu$ g/L to 379  $\mu$ g/L) (Shaw, 2007b). The detection of chromium exceeding the MCL in only one shallow well (LHSMW62) for the filtered samples was thought to be related to suspended sediments with the origin of chromium being from corrosion of stainless steel well screens.

In September 2006, a new PVC-screened well (48WW02) was installed near LHSMW62. Chromium concentrations in the groundwater from the new PVC well were below the MCL, which indicates that corroded stainless steel well screen materials were the source of the elevated chromium results (Shaw, 2007b).

SVOCs, explosive compounds, pesticides, or PCBs were not detected or were detected at low levels in the groundwater samples in all sampling rounds.

The only detected VOC to exceed the MCL was trichloroethene (TCE) in a 1996 sampling round with a concentration of 9  $\mu$ g/L, which exceeds the MCL for TCE of 5  $\mu$ g/L. However, since 1998, TCE has not been detected.

Dioxin/furan compounds were detected in all the sampling rounds. Dioxin/furans are a family of compounds comprised of individual compounds called congeners. To evaluate dioxins, a 2,3,7,8tetrachlorodibenzo-*p*-dioxin (TCDD) toxicity equivalent quotient (TEQ) concentration is calculated using toxicity equivalent factors (TEFs) for the individual congeners (Van den Berg, et al., 1998). (See Glossary of Terms for further explanation.) The 2,3,7,8-TCDD TEQ is compared to the MCL for 2,3,7,8-TCDD of 30 picograms per liter (pg/L). The calculated 2,3,7,8-TCDD TEQ based on all sampling data was below the MCL (Shaw, 2007b).

Perchlorate was not detected in groundwater at LHAAP-48.

## Summary of LHAAP-48 Risks

Risks to human health (industrial workers and residential users) and to ecological receptors were evaluated and are discussed below.

## Human Health Risks

## Soil

The Remedial Investigation Report (Jacobs, 2002) and the Baseline Human Health Risk Assessment and Screening Ecological Risk Assessment (Jacobs, 2003) evaluated the data through 1998 for LHAAP-48 to determine current and future effects of contaminants on human health, and to support technical review and risk management decisions. An industrial risk assessment evaluates the risk to a worker who is not residing at the site, while residential risk evaluates the potential exposure for a resident. Thus, the baseline residential human health risk assessment presents a more conservative approach than an industrial risk assessment. As part of the Site Evaluation Report (Shaw, 2007b), a baseline human health risk assessment was conducted for

LHAAP-48 to determine the effects of contaminants in groundwater and soil for a hypothetical future residential user. The baseline residential human health risk assessment (Shaw, 2007c) was conducted using data reported in the baseline human health risk assessment for industrial use (Jacobs, 2002) supplemented by data from subsequent sampling events (Shaw, 2007a, 2007b).

The NCP, 40 Code of Federal Regulations Part 300, established a range of acceptable levels of cancer risk for Superfund sites. These values range between a higher risk of one in 10,000 and a lower risk of one in 1 million additional cancer cases if cleanup action is not taken at a site. Expressed in scientific notation, this translates to an acceptable risk range of  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$  over a defined period of exposure to site-related contaminants.

In addition to a cancer risk, chemical contaminants that are ingested, inhaled, or dermally absorbed may present noncancer hazards to different organs of the human body. The non-cancer hazard of toxic effect is expressed as a hazard index (HI). USEPA considers an HI exceeding 1.0 to be an unacceptable non-cancer hazard.

The human health risk assessment for a future industrial worker indicated acceptable cancer risk and non-cancer hazard from the soil within 0-2 feet bgs at LHAAP-48. The calculated risk was within the acceptable range at  $1.4 \times 10^{-5}$  and the HI of 0.088 was less than 1 (Jacobs, 2003).

The risk to future residents from soil was evaluated using data collected prior to the Jacobs (2003) industrial risk assessment. Results of the assessment of risk to hypothetical residents from exposure to chemicals in soil at LHAAP-48 indicate that cumulative potential risks are within the acceptable range, with the cancer risk of  $6 \times 10^{-5}$  and the HI of 0.4 was less than 1 (Shaw, 2007b), even though estimated risks associated with dioxins and vinyl chloride exceed  $1 \times 10^{-6}$ . A risk management approach to take no further action at LHAAP-48 meets the Risk Reduction Standard 3 requirement that the cumulative excess cancer risk to exposed populations (including sensitive subgroups) shall not be greater than  $1 \times 10^{-4}$  [30 TAC §335.563(b)].

## Groundwater

The groundwater was determined to pose an unacceptable cancer risk of  $1.3 \times 10^{-4}$ and an unacceptable HI of 36 to the future maintenance worker under the industrial use scenario. Approximately 95 percent of the total groundwater cancer risk for an industrial user ( $1.2 \times 10^{-4}$ ) was from 2,3,7,8-TCDD. Thallium generated an HI of 25 and accounted for approximately 69 percent of the groundwater HI (Jacobs, 2003).

Additional groundwater sampling conducted at LHAAP-48 in 2004 and 2005 suggests that elevated concentrations of dioxins/furans and metals were due to the high turbidity of the groundwater samples. Metals, including thallium, arsenic, antimony, and lead were not detected or were detected at levels below their associated MCL when samples (both unfiltered and filtered) were collected with the low-flow sampling method (Shaw, 2007a, 2007b). Dioxins were also not detected or detected at low concentrations, and the calculated 2,3,7,8-TCDD TEQ was below the MCL (Shaw, 2007b).

Chromium was detected at concentrations above the MCL in the low-flow unfiltered samples from two stainless steel wells (Shaw, 2007b). After filtering the samples, chromium only exceeded the MCL in one well. The groundwater results (unfiltered and filtered) from the new PVC-screened well did not have detections of chromium above the MCL (Shaw, 2007b). Thus, it can be concluded that the source of the isolated high chromium readings in the groundwater was corrosion of the stainless steel well components, and the groundwater in the area meets the requirements of the Safe Drinking Water Act.

The other contaminants, including dioxins/furans associated with human health risk in the industrial risk assessment (Jacobs, 2003), were either not detected or were below MCLs.

Therefore, no action is necessary at LHAAP-48 due to a future residential user's exposure to soil or groundwater.

#### Ecological Risk

The ecological risk for the site LHAAP-48 was addressed in the installation-wide **Baseline Ecological Risk Assessment** (BERA) (Shaw, 2007c). For the BERA, the entire installation was divided into three large sub-areas (i.e., the Industrial Sub-Area, Waste Sub-Area, and Low Impact Sub-Area) for the terrestrial evaluation. The individual sites at LHAAP were grouped into one of these sub-areas, which were delineated based on commonalities of historic use, habitat type, and spatial proximity to each other. The conclusions regarding the potential for chemicals detected at individual sites to adversely affect the environment must be made in the context of the overall conclusions of the sub-area in which the site falls. Site LHAAP-48 lies within the Industrial Sub-Area.

The BERA concluded that no unacceptable risk was present in the Industrial Sub-Area (Shaw, 2007c) and therefore, no further action is needed at LHAAP-48 for the protection of ecological receptors.

## LHAAP-35C (53)

LHAAP-35C (53) was a former static test area used for testing of illumination devices and static test firing of rocket motors and covers an area of approximately 40.3 acres. Structures for this site included a test tunnel and a data acquisition system for flares, rocket motor test stands of earth and concrete, and conditioning facilities for reproducing arctic and tropical temperatures. The site was active through 1998. Four waste process sumps were associated with this area (Jacobs, 2002).

#### LHAAP-35C (53) Site Characteristics

LHAAP-35C (53) is located in the eastcentral portion of LHAAP (**Figure 2**). The surface features at LHAAP-35C (53) include a mixture of asphalt-paved roads and parking areas around the former structures in the area. Central Creek borders the site to the northwest and Harrison Bayou borders the site to the southeast. Surface drainage flows predominantly to the southeast. Groundwater flow at the site has a general northeast direction.

Soil and groundwater were sampled in a phased manner between 1982 and 2005 to determine the nature and extent of contamination.

Soil samples were analyzed for some or all of the following during the various phases of investigation: VOCs, SVOCs, metals, explosive compounds, pesticides, PCBs, and dioxins/furans. Detected compounds in soil included VOCs, SVOCs, metals, pesticides, and dioxins/furans. A human health risk assessment conducted in 2003 indicated no unacceptable cancer risk or non-cancer hazard to a future maintenance worker from the detected compounds in the soil (Jacobs, 2003).

Six monitoring wells were installed at the site for the purpose of collecting groundwater data. One well was installed in 1982 in the shallow groundwater bearing zone. In 1994, five wells were installed with one in the intermediate zone and four in the shallow zone (Jacobs, 2002). The wells were completed with stainless steel screens. Seven temporary wells constructed of PVC materials were installed in 2003 in the shallow zone (Plexus, 2005). Groundwater samples were collected from 1982 to 2005 and analyzed for some or all of the following during the various sampling events: VOCs, SVOCs, metals, explosive compounds, pesticides, PCBs, dioxins/furans, total petroleum hydrocarbons, cyanide, and perchlorate.

Detected compounds in the water included metals, VOCs, SVOCs, dioxins/furans, and explosives. In 2003, a human health risk assessment indicated unacceptable risk from groundwater to a maintenance worker, primarily from thallium in the early sampling rounds (Jacobs, 2003). Other metals, including arsenic, lead, antimony, thallium, and chromium were detected above their associated MCL.

As discussed in the LHAAP-48 section, sampling methods used prior to 2003 could cause turbid samples. In 2003/2004, temporary PVC wells were installed to determine if there was a potential source of chromium contamination at the site (Plexus, 2005). Many of the groundwater samples had high turbidity readings and were filtered prior to analysis. Chromium was not detected in these samples (Plexus, 2005).

In 2004 and 2005, additional groundwater samples were collected using a low-flow sampling method to reduce the turbidity in samples (Shaw, 2007a, 2007b). These samples were collected from five shallow wells and one intermediate well and analyzed for VOCs, metals, dioxin/furans, and perchlorate. Groundwater samples were also collected in 2005 from three of the temporary wells and were analyzed for VOCs and metals to determine if chromium and VOCs were pervasive at the site (Shaw, 2007b).

The 2004/2005 sampling using low-flow methods did not detect thallium above its MCL in filtered or unfiltered samples (Shaw, 2007a, 2007b; Plexus, 2005). Chromium was only detected once in an unfiltered sample at a concentration of 171  $\mu$ g/L. After filtering the sample, chromium had an estimated (J qualified) concentration of 3.37J µg/L, which is well below the MCL of 100 µg/L (Shaw, 2007b). This indicates that the elevated chromium concentration in the unfiltered sample was due to the turbidity of the sample. The suspended solids in the water were likely to have originated from the corrosion of stainless steel well materials indicated by the elevated concentrations of metals associated with stainless steel, such as nickel (Shaw, 2007b). Additional evidence that chromium is not a site-related chemical at the site was provided by Jacobs (2002) and Plexus (2005). These studies indicate that a source of chromium is not present in the site soils.

Detection of metals appears to be sporadic or to marginally exceed MCLs, appears to be related to the poor quality of the samples (turbidity), and not representative of the groundwater in the surrounding soil. Metals in the groundwater do not pose a current threat to human health (Shaw, 2007b).

SVOCs, explosive compounds, pesticides, perchlorate, or PCBs were not detected or were detected at low levels in the

groundwater samples in all sampling rounds.

VOCs, including TCE,1,2-dichloroethane, and bis(2-ethylhexyl)phthalate were detected in groundwater in the early sampling rounds prior to 1998 at concentrations above their MCLs. In 2003/2004, temporary wells were installed to determine the presence or absence of VOCs that were detected in the early sampling round. A few VOCs were detected at low concentrations below MCLs in the 2003/2004 sampling event (Plexus, 2005). Sampling to verify the presence of contaminants above MCLs did not confirm earlier detections (Plexus, 2005). In later sampling rounds, VOCs were not detected or were detected at levels below their MCLs (Shaw, 2007a, 2007b) with the exception of TCE in one temporary well where TCE was detected at 5.01  $\mu$ g/L, marginally above the MCL of 5 µg/L (Shaw, 2007b).

Dioxin/furan compounds were detected in all the sampling rounds. The calculated 2,3,7,8-TCDD TEQ based on all sampling data was below the MCL of 30 pg/L (Shaw, 2007b) (see LHAAP-48 for discussion on TEQ).

## Summary of LHAAP-35C (53) Risks

Risks to human health (industrial and residential user) and to ecological receptors were evaluated and are discussed below.

## Human Health Risks

## Soil

The Remedial Investigation Report (Jacobs, 2002), and the Baseline Human Health Risk Assessment and Screening Ecological Risk Assessment (Jacobs, 2003) evaluated the data for LHAAP-35C (53) through 1998 to determine current and future effects of contaminants on human health, and to support technical review and risk management decisions.

An industrial risk assessment evaluates the risk to a worker who is not residing at the site, while residential risk evaluates the potential exposure for a resident. As part of the Site Evaluation Report (Shaw, 2007b), a baseline human health risk assessment was conducted for LHAAP-35C(53) to determine the effects of contaminants in groundwater and soil for a hypothetical future residential user. The baseline residential human health risk assessment (Shaw, 2007c) was conducted using data reported in the baseline human health risk assessment for industrial use (Jacobs, 2002) supplemented by data from sampling events conducted by Shaw in 2005 and 2006. Detected compounds were screened as required by TCEQ guidance to determine if they were a chemical of potential concern to a future residential user.

The NCP, 40 Code of Federal Regulations Part 300, established a range of acceptable levels of cancer risk for Superfund sites. These values range between a higher risk of one in 10,000 and a lower risk of one in 1 million additional cancer cases if cleanup action is not taken at a site. Expressed in scientific notation, this translates to an acceptable risk range of  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$  over a defined period of exposure to site related contaminants.

In addition to cancer risk, chemical contaminants that are ingested, inhaled, or dermally absorbed may present noncancer hazards to different organs of the human body. The non-cancer hazard of toxic effect is expressed as an HI. USEPA considers an HI exceeding 1.0 to be an unacceptable non-cancer hazard.

The human health risk assessment for a future industrial worker indicated acceptable cancer risk and non-cancer hazard from soil at LHAAP-35C (53). The calculated risk for an industrial worker was within the acceptable range at

 $1.2 \times 10^{-5}$  and the noncancer HI was 0.053 (Jacobs, 2003).

The risk to future residents from soil was evaluated using data collected prior to the Jacobs (2003) industrial risk assessment. Results of the assessment of risk to hypothetical residents from exposure to chemicals in soil at LHAAP-35C (53) indicate that potential risks are within the acceptable range with a cancer risk of  $8 \times 10^{-6}$  and the HI of 0.3 was less than 1 (Shaw, 2007b), even though estimated risks associated with dioxins exceed  $1 \times 10^{-6}$ .

A risk management approach to take no further action at LHAAP-35C (53) meets the Risk Reduction Standard 3 requirement that the cumulative excess cancer risk to exposed populations (including sensitive subgroups) shall not be greater than  $1 \times 10^{-4}$  [30 TAC §335.563(b)].

## Groundwater

The groundwater was determined to have a cancer risk within the acceptable range at  $8 \times 10^{-5}$  and an unacceptable noncancer hazard with an HI of 22 to the future maintenance worker under the industrial use scenario (Jacobs, 2003). Thallium generated an HI of 22 and accounted for approximately 99 percent of the groundwater HI (Jacobs, 2003). In subsequent samples collected by low-flow methods (used to minimize turbidity). thallium concentrations were below the MCL (Shaw, 2007b). Compounds that were detected in early sampling rounds were either not detected or were detected at low concentrations below or marginally above their MCLs. Thus, contaminants in groundwater associated with human health risk in previous industrial risk assessments were either not detected or were below MCLs.

Therefore, no action is necessary at LHAAP-35C (53) due to a future residential or industrial user's exposure to soil or groundwater.

## Ecological Risk

The ecological risk for the site LHAAP-35C (53) was addressed in the installation-wide Baseline Ecological Risk Assessment (BERA) (Shaw, 2007c). For the BERA, the entire installation was divided into three large sub-areas (i.e., the Industrial Sub-Area, Waste Sub-Area, and Low Impact Sub-Area) for the terrestrial evaluation. The individual sites at LHAAP were grouped into one of these sub-areas, which were delineated based on commonalities of historic use, habitat type, and spatial proximity to each other. The conclusions regarding the potential for chemicals detected at individual sites to adversely affect the environment must be made in the context of the overall conclusions of the sub-area in which the site falls. Site LHAAP-35C (53) lies within the Industrial Sub-Area.

The BERA concluded that no unacceptable risk was present in the Industrial Sub-Area (Shaw, 2007c) and therefore, no further action is needed at LHAAP-35C (53) for the protection of ecological receptors.

## RECOMMENDATION

No action is proposed for both LHAAP-48 and LHAAP-35C (53). This recommendation is based on the existing data and determination of no unacceptable risk to human health, and compliance with the MCLs. Because there are no unacceptable risks, and chemicals in groundwater have concentrations below MCLs, no remediation alternatives or Remedial Action Objectives are required. A Record of Decision based on this recommendation will allow these sites to

be removed from the list of LHAAP environmental sites requiring additional effort by the U.S. Army. The recommendation for no action is consistent with the criteria required under CERCLA.

## **COMMUNITY PARTICIPATION**

The U.S. Army, USEPA, and TCEQ provide information regarding LHAAP-48 and LHAAP-35C (53) through public meetings, the Administrative Record file for the facility, and announcements published in the Shreveport Times and Marshal News Messenger newspapers. The public is encouraged to gain a more comprehensive understanding of these sites.

The dates for the public comment period, the date, location, and time of the public meeting, and the locations of the Administrative Record files are provided on the front page of this Proposed Plan.

Any significant changes to the Proposed Plan, as presented in this document, will be identified and explained in the Record of Decision.

#### Primary Reference Documents for LHAAP-48 and LHAAP-35C (53)

Jacobs Engineering Group (Jacobs), 2002, Final Remedial Investigation Report, Group 4 Sites, Sites 04, 08, 35A, 35B, 35C, 46, 47, 48, 50, 60, 67, Goose Prairie Creek, Volume 1: Report, Longhorn Army Ammunition Plant, Karnack, Texas, January.

Jacobs, 2003, Final Baseline Human Health and Screening Ecological Risk Assessment for the Group 4 Sites, Sites 04, 08, 35A, 35B, 35C, 46, 47, 48, 50, 60, 67, Goose Prairie Creek, Saunder's Branch, Central Creek, and Caddo Lake, Longhorn Army Ammunition Plant, Karnack, Texas, June.

Plexus Scientific Corporation, 2005, Environmental Site Assessment Phase I and II Report, Final, Production Areas, Longhorn Army Ammunition Plant, Karnack, Texas, February.

Shaw Environmental, Inc. (Shaw), 2007a, Final Data Gaps Investigation Report, Longhorn Army Ammunition Plant, Karnack, Texas, April.

Shaw, 2007b, Final Site Evaluation Report, LHAAP-48 (Former Igniter Production Area) and LHAAP-35C (53) (Former Static Test Area), Longhorn Army Ammunition Plant, Karnack, Texas, April.

Shaw, 2007c, Installation-Wide Baseline Ecological Risk Assessment, Longhorn Army Ammunition Plant, Karnack, Texas, Volume I Step 3 Report, Houston, Texas, November.

Texas Commission on Environmental Quality (TCEQ) Risk Reduction Rules (30 TAC §335) as updated by the TCEQ memorandum entitled, *Implementation of the Existing Risk Reduction Rule*, also known as the Consistency Memorandum, July 23<sup>rd</sup>, 1998.

U.S. Army, 2004, Memorandum of Agreement Between the Department of the Army and the Department of the Interior for the Interagency Transfer of Lands at the Longhorn Army Ammunition Plant for the Caddo Lake National Wildlife Refuge, Harrison County, Texas, signed by the Department of the Interior on April 27, 2004 and the Army on April 29, 2004.

U. S. Environmental Protection Agency (USEPA), 1994, National Oil and Hazardous Substances Pollution Contingency Plan, 40 Code of Federal Regulations Part 300, 59 Federal Register 47384, October 10.

Van den Berg, M., Birnbaum, L., Bosveld, A.T.C., Brunstrom, B., Cook, P., Feeley, M., Giesy, J.P., Hanberg, A., Hasegawa, R., Kennedy, S.W., Kubiak, T., Larsen, J.C., van Leeuwen, F.X.R., Liem, A.K.D., Nolt, C., Peterson, R.E., Poellinger, L., Safe, S., Schrenk, D., Tillitt, D., Tysklind, M., Younes, M., Waern, F. and Zacharewski, T., 1998, *Toxic Equivalency Factors (TEFs) for PCBs, PCDDs, PCDFs for Humans and Wildlife*, Environmental Health Perspectives 106(12):775-792.

#### GLOSSARY OF TERMS

Administrative Record — The body of reports, official correspondence, and other documents that establish the official record of the analysis, cleanup, and final closure of a CERCLA site.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** — This law authorizes the Federal Government to respond directly to releases (or threatened releases) of hazardous substances that may be a danger to public health, welfare, or the environment. The U.S. Army currently has the lead responsibility for these activities.

**Dioxins** — Dioxin is not a single compound, but a family of compounds consisting of dioxins and furans with a wide range of toxicity. Dioxins are formed as an unwanted byproduct of industrial processes or from other process such as burning trash.

**Environmental Media** — A major environmental category that surrounds or contacts humans, animals, plants, and other organisms (e.g., surface water, ground water, soil, or air) and through which chemicals or pollutants move.

**Exposure** — Contact of an organism with a chemical or physical agent. Exposure is quantified as the amount of the agent available at the exchange boundaries of the organism (e.g., skin, lung, digestive tract, etc.) and available for absorption.

**Filtered Sample** — Groundwater samples filtered at the laboratory to reduce suspended particulates in the sample to more accurately depict the contaminants in the water.

**Groundwater** — Underground water that fills pores in soil or openings in rocks to the point of saturation.

**Hazard Index** — Where appropriate, the sum of more than one chemical-specific hazard quotients and/or multiple exposure pathways. When the hazard index exceeds unity, there may be concern for potential health effects.

**Hazard Quotient** —The ratio of a receptor's estimated chemical intake ("dose") to a reference dose for that chemical.

Low-flow Sampling Method — Prior to 2003, groundwater samples at LHAAP were collected with high volume pumps or bailers that could potentially agitate the water in the well and cause particulates to be suspended in the water. If particulates are suspended in a water sample (turbid sample), concentrations of the compounds in the water can be elevated since the analysis will provide results of both the water and particulates. New sampling methods using a low-flow method to reduce the suspension of particulates in the samples were implemented in the most recent sampling rounds. **Maximum Contaminant Level (MCL)** — The maximum contaminant level is based on the National Primary Drinking Water Standard. The TCEQ has adopted MCLs at the regulatory cleanup level for both industrial and residential uses. Any detected compounds in the groundwater samples with an MCL were evaluated by comparing them to their associated MCL. MCL comparisons are performed using an average or other site-representative concentration.

**Proposed Plan** — A report for public comment highlighting the key factors that form the basis for the selection of the preferred remediation alternative.

**Remedial Action** — The actual construction or implementation phase of a Superfund site cleanup that follows remedial design.

**Risk Assessment** — An analysis of the potential adverse health effects (current and future) caused by hazardous substances at a site in the absence of any actions to control or mitigate these releases (i.e., under an assumption of no action). The assessment contributes to decisions regarding appropriate response alternatives.

**Superfund** — The common name used for CERCLA; also referred to as the Trust Fund. The Superfund Program was established to help fund cleanup of hazardous waste sites. It also allows legal action to force those responsible for sites to clean them up.

**Toxicity Equivalent Factor (TEF)** — The toxicity equivalent factor is the factor used with the individual dioxin family members that represents its toxicity potency, with the most potent having a factor of 1 and the least toxic members have the lowest factors (Van den Berg et al., 1998). The TEFs are used along with the concentrations of the individual dioxin family members to calculate the TEQ.

**Toxicity Equivalent Quotient (TEQ)** — A value that is the sum of the products of the individual family (e.g., furans) member compound concentrations multiplied by their TEFs. The product's sum represents the toxicity of an equivalent concentration of 2,3,7,8-tetrachlorodibenzop-dioxin (2,3,7,8-TCDD).

| ACRONYMS AN | D ABBREVIATIONS                     |
|-------------|-------------------------------------|
|             |                                     |
| µg/L        | micrograms per liter                |
| pg/L        | picograms per liter                 |
| BERA        | Baseline Ecological Risk Assessment |
| CERCLA      | Comprehensive Environmental         |
|             | Response, Compensation, and         |
|             | Liability Act                       |
| FFA         | Federal Facility Agreement          |
| HI          | hazard index                        |
| Jacobs      | Jacobs Engineering Group            |
| LHAAP       | Longhorn Army Ammunition Plant      |
| MCL         | maximum contaminant level           |
| NCP         | National Oil and Hazardous          |
|             | Substances Pollution Contingency    |
|             | Plan                                |
| NPL         | National Priorities List            |
| PCB         | polychlorinated biphenyl            |
| Plexus      | Plexus Scientific Corporation       |
| PVC         | polyvinyl chloride                  |
| Shaw        | Shaw Environmental, Inc.            |
| SVOC        | semivolatile organic compound       |
| TCDD        | tetrachlorodibenzo-p-dioxin         |
| TCE         | trichloroethene                     |
| TCEQ        | Texas Commission on Environmental   |
|             | Quality                             |
| TEF         | toxicity equivalent factor          |
| TEQ         | toxicity equivalent quotient        |
| USEPA       | U.S. Environmental Protection       |
|             | Agency                              |
| USFWS       | U.S. Fish and Wildlife Service      |
| VOC         | volatile organic compound           |

## **USE THIS SPACE TO WRITE YOUR COMMENTS**

Your input on the Proposed Plan for the LHAAP-48 and LHAAP-35C (53) is important to the U.S. Army. Comments provided by the public are valuable in helping the U.S. Army select a final remedy for the site.

You may use the space below to write your comments, then fold and mail to Dr. Rose M. Zeiler, P. O. Box 220, Ratcliff, Arkansas 72951. Comments must be postmarked by February 14, 2008. If you have questions about the comment period, please contact Dr. Rose M. Zeiler at 903.679.3192 or directly at 479.635.0110. Those with electronic communications capabilities may submit their comments to the U.S. Army via Internet at the following e-mail address: rose.zeiler@us.army.mil.



January 15, 2008

DAIM-BD-LO

Ms. Fay Duke TCEQ Environmental Cleanup Section II MC-221 12100 Park 35 Circle Austin, TX 78753

Re: Memorandum: LHAAP-59 SPLP Soil Sample Analyses

Dear Ms. Duke:

The purpose of this letter and enclosed memorandum is to document the Administrative Record with the results of two soil samples collected for Synthetic Precipitation Leaching Procedure (SPLP) analysis at LHAAP-59 after finalization of the Site Investigation Report (August 2007). These samples were collected in response to your letter dated September 12, 2007 requesting confirmation of 59SB01-0-1FT. Results of the analyses confirmed that alpha- and gamma-chlordane concentrations in soil at this site do not present the potential for a future release of leachate in excess of Texas groundwater Medium-Specific Concentrations (MSC).

Point of contact for this action is the undersigned. I may be contacted at 479-635-0110, or by email at rose.zeiler@us.army.mil.

Sincerely, Kisem Zuler

Rose M. Zeiler, Ph.D. Longhorn AAP Site Manager

One Enclosure Copies Furnished: Steve Tzhone, EPA Region VI, Dallas, TX Paul Bruckwicki, USFWS, Karnack, TX John R. Lambert, Tulsa District, OK Cliff Murray, Tulsa District, OK John Elliott (Admin Record), Houston, TX



3010 Briarpark Drive Houston, Texas 77042 713-996-4400 Fax: 281-368-4401

# Memorandum

Date: October 11, 2007

To: John Elliott

CC: Praveen Srivastav

From: Frank Eidson

RE: Analysis of Soil Samples Collected from LHAAP-59 on September 14, 2007

The document *Final Site Investigation Report LHAAP-59, Longhorn Army Ammunition Plant, Karnack, Texas,* was submitted for review by the Texas Commission on Environmental Quality (TCEQ) in August 2007. The document included an assessment of a soil sample (59SB01A-0-1FT) using the Synthetic Precipitation Leaching Procedure (SPLP) as provided by the TCEQ Risk Reduction Rules (30 TAC §335). The report concluded that the concentrations of alpha-chlordane, gamma-chlordane, and heptachlor epoxide in both soil and SPLP leachate were below their respective TCEQ Medium-Specific Concentrations (MSCs), and that no further action is required.

The TCEQ noted that the concentrations of the two chlordane isomers in sample 59SB01A-0-1FT, which was collected on June 21, 2007, were significantly less than the concentrations in the original sample 59SB01-01 (collected on August 2, 2006) and suggested that two additional samples be collected near 59SB-01 to confirm the absence of elevated pesticide levels in the area. Therefore, Shaw collected two additional samples on September 14, 2007 from points five feet to the north and south of the subject location. The samples were 59SB01A-North (0-1) and 59SB01A-South (0-1), and a field duplicate sample (59SB01A-South-FD).

Analytical results for the above two soil samples and of SPLP leachate for the two subject pesticides are shown in **Table 1.** Alpha- and gamma-chlordane concentrations in the soil samples (**Table 1b**) confirm variability at the 59SB01 sampling location. Alpha- and gamma-chlordane concentrations in sample 59SB01A-North (0-1) exceed the groundwater protective MSC for soil (GWP-Ind). The sample from the 59SB01A-South (0-1) location has pesticide concentrations below GWP-Ind levels.

Results of the SPLP analysis indicate that alpha- and gamma-chlordane were either not detected in SPLP leachates or were detected at concentrations below the MSC for groundwater (GW-Ind) (**Table 1a**). Because these leachate concentrations are below GW-Ind MSCs, the results demonstrate that these chemicals in soil do not pose the potential for a future release of leachate in excess of groundwater MSC values and are considered to be protective for nonresidential worker exposure, as specified in 30TAC§335.559(g)(2)(B).

Soil concentrations of alpha- and gamma-chlordane in soil are below risk-based TCEQ MSCs that are protective of industrial workers from direct contact with chlordane isomers by inhalation, ingestion, and dermal exposure (SAI-Ind values shown in **Table 1b**). Because these comparisons show that chlordane concentrations are protective of groundwater and of workers potentially exposed by direct contact with soil, the resampling effort of September 14, 2007 indicates that no further action is required at the 59SB01 location at LHAAP-59.

Table 1a

#### Concentrations of Chemicals in Leachate from Synthetic Precipitation Leaching Procedure (SPLP) (SW-846 Method 1312) Conducted on Soil Samples from LHAAP-59 Longhorn Army Ammunition Plant

Karnack, Texas

|            | L               | TCEQ        | 59SB01A-01 Location Samples |              |                     |                     |     |      |                     |     |      |
|------------|-----------------|-------------|-----------------------------|--------------|---------------------|---------------------|-----|------|---------------------|-----|------|
| SAMPLE_NO  |                 |             | Method                      | Method       | <b>Risk-Based</b>   | 59SB01A-North (0-1) |     |      | 59SB01A-South (0-1) |     |      |
|            |                 | SAMPLE_DATE | Detection                   | Quantitation | MSC                 | 14-Sep-07           |     |      | 14-Sep-07           |     |      |
| Test Group | Parameter       | Units       | Limit (MDL)                 | Limit (MQL)  | GW-Ind <sup>a</sup> | Result              | DIL | Qual | Result              | DIL | Qual |
| PESTICIDES | alpha-Chlordane | ug/L        | 0.0102                      | 0.0510       | 8.2E-01             | 0.3220              | 1   | Р    | ND                  | 1   | U    |
| PESTICIDES | gamma-chlordane | ug/L        | 0.0102                      | 0.0510       | 8.2E-01             | 0.0722              | 1   |      | ND                  | 1   | U    |

a Value provided by the Texas Commission on Environmental Quality (TCEQ) as updated through March 2006 available on the TCEQ website at http://www.tceg.state.tx.us/remediation/rrr.html.

GW-Ind: TCEQ risk-based MSC for groundwater under industrial land use assumptions.

MCC. TCEQ fisk-based Modium Chapter in Concentration elegance standard

MSC: TCEQ risk-based Medium-Specific Concentration cleanup standard

ND: Chemical not detected in this sample above MDL and MQL values shown

P: Laboratory reports >40% difference in concentrations measured by two gas chromatographic columns. Values is considered as estimated (J-qualified).

U: Not detected at or above adjusted sample detection limit

# Table 1b Concentrations of Chemicals in Soil Samples Used in the Synthetic Precipitation Leaching Procedure (SPLP) (SW-846 Method 1312) Longhorn Army Ammunition Plant Karnack, Texas

| LOCATION_CODE |                 |             |             |                   | TCEQ                 | TCEQ                 |           | 59SB    | 01A-01 Lo | ocation Sar | nples   |      |
|---------------|-----------------|-------------|-------------|-------------------|----------------------|----------------------|-----------|---------|-----------|-------------|---------|------|
|               |                 | Method      | Method      | <b>Risk-Based</b> | <b>Risk-Based</b>    | 59SB0                | 1A-North  | า (0-1) | 59SB0     | 1A-Sout     | h (0-1) |      |
|               |                 | SAMPLE_DATE | Detection   | Quantitation      | MSC                  | MSC                  | 14-Sep-07 |         |           | 14-Sep-07   |         |      |
| Test Group    | Parameter       | Units       | Limit (MDL) | Limit (MQL)       | GWP-Ind <sup>a</sup> | SAI-Ind <sup>a</sup> | Result    | DIL     | Qual      | Result      | DIL     | Qual |
| PESTICIDES    | alpha-Chlordane | ug/kg       | 0.34400     | 1.7200            | 8.2E+01              | 8.0E+03              | 355.00    | 1       | Р         | 32.2        | 1       | Р    |
| PESTICIDES    | gamma-chlordane | ug/kg       | 0.34400     | 1.7200            | 8.2E+01              | 7.6E+03              | 271.00    | 1       | Р         | 7.66        | 1       |      |

a Value provided by the Texas Commission on Environmental Quality (TCEQ) as updated through March 2006 available on the TCEQ website at http://www.tceq.state.tx.us/remediation/rrr.html.

GWP-Ind: TCEQ risk-based MSC for soil that is protective groundwater from contaminant leaching under industrial land use assumptions

SAI-Ind: TCEQ risk-based MSC for soil that is protective of direct contact exposures (inhalation, ingestion, dermal contact) under industrial land use assumptions P: Laboratory reports >40% difference in concentrations measured by two gas chromatographic columns. Values is considered as estimated (J-qualified).

00065804

## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 16, 2008

Ms. Rose Zeiler Army / BRAC Site Manager Longhorn Army Ammunition Plant Post Office Box 220 Ratcliff, AR 72951

#### Re: Longhorn Army Ammunition Plant (LHAAP) Final Site Investigation Report, Revision 1 for LHAAP-06, LHAAP-07, LHAAP-51, LHAAP-55, LHAAP-64, LHAAP-66, and LHAAP-68

Dear Ms. Zeiler:

The Texas Commission on Environmental Quality (TCEQ) has completed review of the Final Site Investigation Report, Revision 1 for LHAAP-06, LHAAP-07, LHAAP-51, LHAAP-55, LHAAP-64, LHAAP-66, and LHAAP-68 (Shaw Environmental, Inc., December 2007). The report summarizes the results of the additional sampling and recommends no further action for soil at these sites. We concur that the above referenced sites can be closed under the Texas Risk Reduction Rule Standard 2 (RRR Std 2) for non-residential settings.

We concur that no active remediation is necessary at these sites. However, in order to comply with the non-residential soil requirements for RRR Standard 2, site closure, a deed certification must be filed in the county record. The deed certification must indicate that future land use is considered suitable for non-residential use. An example format of the deed certification is provided in 30 Texas Administrative Code §335.569.

If you have any questions or need additional information, please feel free to contact me at (512) 239-2139.

Sincerely

Fay Duke, Project Manager Team 2, Environmental Cleanup Section II Remediation Division

FD/mm

cc: Mr. Stephen L. Tzhone, U. S. Environmental Protection Agency Region 6, Dallas, TX
 Mr. Cliff Murray, U.S. Army Corps of Engineers, Tulsa, OK
 Dr. Barry Forsythe, U.S. Fish and Wildlife Service, Dallas, TX
 Mr. Paul Bruckwicki, U.S. Fish and Wildlife Service, Karnack, TX

00065805

## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 17, 2008

Ms. Rose Zeiler Army / BRAC Site Manager Longhorn Army Ammunition Plant Post Office Box 220 Ratcliff, AR 72951

Re: Longhorn Army Ammunition Plant (LHAAP) TCEQ Reference Number: SUP126 Comprehensive Land Use Control Management Plan

Dear Ms. Zeiler:

The Texas Commission on Environmental Quality (TCEQ) has completed review of the Comprehensive Land Use Control (LUC) Management Plan. The purpose of this management plan is to ensure that all site-specific LUCs are compiled into one comprehensive location for both pre-transfer and post-transfer use. We have no comments but have the following request. To ensure that future land use is consistent with the assessment scenario, we recommend that the LUC Management Plan include the land use restriction notices for all environmental restoration sites remediated or closed based on industrial land use criteria.

If you should have any questions or need additional information, please feel free to contact me at (512) 239-2443.

Sincerely

ð.!

Fay Duke, Project Manager Team 2, Environmental Cleanup Section II Remediation Division

FD/mm

Mr. Stephen L. Tzhone, U. S. Environmental Protection Agency Region 6, Dallas, TX
 Mr. Cliff Murray, U.S. Army Corps of Engineers, Tulsa, OK
 Dr. Barry Forsythe, U.S. Fish and Wildlife Service, Dallas, TX
 Mr. Paul Bruckwicki, U.S. Fish and Wildlife Service, Karnack, TX



Date: <u>January 21, 2008</u> Project No.:<u>117591.007A100</u>

#### TRANSMITTAL LETTER:

*To:* Mr. Cliff Murray

Address: US Army Corps of Engineers - Tulsa

CESWT-PP-M

1645 South 101st East Ave

Tulsa, Oklahoma 74128

*Re:* Final Data Evaluation Report, Chemical Concentrations in Soil Samples Associated with LHAAP-35/36 Sumps, Longhorn Army Ammunition Plant, Karnack, Texas, January 2008

Contract No. W912QR-04-D-0027/DS02

| For: Review | As Requ          | uested          | Approval Corrections Submittal x Other  |
|-------------|------------------|-----------------|---|
| Item No:    | No. of<br>Copies | Date:           | Document Title  |
| 1           | 1                | January<br>2008 | <b>Final Data Evaluation Report, Chemical Concentrations in Soil</b><br><b>Samples Associated with LHAAP-35/36 Sumps</b><br>Longhorn Army Ammunition Plant - Karnack, Texas |
|             |                  |                 |   |

Cliff – Enclosed are the modified pages for the above named document. Please replace the designated pages of your existing Draft Final version of the above-named report with the attached pages. Also attached is the Response to Comment Table with which the regulators concurred.

This constitutes the final document.

The response to comment table, revised title and cover pages, and replacement pages have been distributed according to the list below.

Please call if there are any questions or comments.

Sincerely:

David P. Cobb Project Manager

Description of Attachments and Distribution List Next Page



#### **Description of Attachments:**

Response to Comment Table Instruction Sheet for Replacement Pages Volume I Spine, Inside Cover, and Binder Cover Volume II Spine, Inside Cover, and Binder Cover Volume III Spine, Inside Cover, and Binder Cover Volume I Pages 1-2 through 1-3 Volume I Pages 4-2 through 4-11

#### **Distribution List for Replacement Pages:**

Ms. Rose Zeiler – BRAC-LHAAP Mr. Jeff Armstrong – AETC Ms. Fay Duke – TCEQ (2) Mr. Dale Vodak - TCEQ Mr. Stephen Tzhone – USEPA (2) Mr. Paul Bruckwicki –USFWS



January 21, 2008

DAIM-BD-LO

Mr. Stephen Tzhone US Environmental Protection Agency Superfund Division (6SF-AT) 1445 Ross Avenue Dallas, TX 75202-2733

Re: Final Data Evaluation Report, Chemical Concentrations in Soil Samples Associated with LHAAP-35/36 Sumps Longhorn Army Ammunition Plant, Karnack, Texas, January 2008

Dear Mr. Tzhone,

The above-referenced document has been prepared by Shaw Environmental, Inc. (Shaw) on behalf of the Army as part of Shaw's performance based contract for the facility and is being submitted for your records. Please replace the designated pages of the existing Draft Final version of the above-named report with the attached pages, covers, and spines. After replacement of the affected pages, this document constitutes the Final version of the abovenamed report.

The point of contact for this action is the undersigned. I ask that David Cobb, Shaw's Project Manager, be copied on any communications related to the project. I may be contacted at 479-635-0110, or by email at <u>rose.zeiler@us.army.mil</u>.

Sincerely,

Rose M. Zjiler

Rose M. Zeiler, Ph.D. Longhorn AAP Site Manager

Copies furnished: Fay Duke, TCEQ, Austin, TX Paul Bruckwicki, Caddo Lake NWR, TX Cliff Murray, COE – Tulsa District, OK John Lambert, COE – Tulsa District, OK David Cobb, Shaw – Stoughton, MA P. Srivastav, Shaw – Houston, TX (for project files)



January 21, 2008

DAIM-BD-LO

Ms. Fay Duke Texas Commission on Environmental Quality TCEQ Environmental Cleanup Section II MC-221 12100 Park 35 Circle Austin, TX 78753

Re: Final Data Evaluation Report, Chemical Concentrations in Soil Samples Associated with LHAAP-35/36 Sumps Longhorn Army Ammunition Plant, Karnack, Texas, January 2008

Dear Ms. Duke,

The above-referenced document has been prepared by Shaw Environmental, Inc. (Shaw) on behalf of the Army as part of Shaw's performance based contract for the facility and is being submitted for your records. Please replace the designated pages of the existing Draft Final version of the above-named report with the attached pages, covers, and spines. After replacement of the affected pages, this document constitutes the Final version of the abovenamed report.

The point of contact for this action is the undersigned. I ask that David Cobb, Shaw's Project Manager, be copied on any communications related to the project. I may be contacted at 479-635-0110, or by email at <u>rose.zeiler@us.army.mil</u>.

Sincerely,

Rose M. Zjiles

Rose M. Zeiler, Ph.D. Longhorn AAP Site Manager

Copies furnished: Stephen Tzhone, USEPA Region 6, Dallas, TX Paul Bruckwicki, Caddo Lake NWR, TX Cliff Murray, COE – Tulsa District, OK John Lambert, COE – Tulsa District, OK David P. Cobb, Shaw – Stoughton, MA P. Srivastav, Shaw – Houston, TX (for project files)

#### Instruction Sheet for Replacement Pages Final Data Evaluation Report Chemical Concentrations in Soil Samples Associated with LHAAP-35/36 Sumps Longhorn Army Ammunition Plant Karnack, Texas January 2008

- Remove the "Draft Final" inside cover (title) sheets for Volumes I, II, and II and replace with the new "Final" inside cover sheets dated January 2008 attached.
- 2. Remove the "Draft Final" outside binder cover (title) sheet and corresponding spines for Volumes I, II, and III and replace with the new "Final" binder covers and corresponding spines.
- In Volume I, remove page 1-2 and replace with the new pages 1-2 and 1-3 in Section 1.0.
- In Volume I, remove pages 4-2 through 4-11 and replace with the new pages
   4-2 through 4-11 in Section 4.0.

00065811

Reviewers: Fay Duke, TCEQ; Scott Harris, USEPA

Respondent Concurs (C), Does Not Concur (D), or Takes Exception (E)
 Commenter Agrees (A) with response, or Does not Agree (D) with response.

| Comment<br># Pa | ge Section/<br>Paragraph | Comment   | C, D',<br>or E | Response   | D <sup>2</sup> |
|-----------------|--------------------------|---|----------------|--|----------------|
| Fay Duke – Texa | s Commission on Env      | ironmental Quality  |                |  |                |
| General         |                          | The Texas Commission on Environmental Quality<br>(TCEQ) has completed review of Draft Final Data<br>Evaluation Report (Shaw Environmental, Inc., August<br>2007). This report presents an evaluation of chemical<br>concentrations in Soil samples associated with the 126<br>wastewater sumps and 20 waste rack sumps, known<br>collectively as site LHAAP 35/36 at the Longhorn Army<br>Ammunition Plant Superfund Site.  | С              | Noted.   | A              |
|                 |                          | These sumps were previously investigated by the U.S.<br>Army Corps of Engineers and Army contractors and<br>subsequently closed. The closures of most of the<br>sumps have been approved by TCEQ. However, it was<br>determined additional evaluations of the soil around the<br>former sumps were required. Although various soil<br>data associated with each of the sumps have previously<br>been collected for the 2002 and 2003 baseline risk<br>assessment reports for the majority of the sump sites,<br>it was determined that additional soil data around the<br>sumps were necessary to complete the evaluation of<br>the risk posed by soil around these sumps. The report<br>summarized the results of the additional data collection<br>and risk evaluation to determine whether the additional<br>data would change the conclusions of the previous risk<br>assessments. Our comments/approval are provided<br>below. |                |  |                |
| 1               |                          | Soil samples collected adjacent to sumps associated<br>with sites LHAAP-04, -29, -39 and -66 have<br>concentrations below the TCEQ Risk Base Screening<br>Values (RBSVs). Therefore, we concur that no active<br>remediation would be required for soil around these<br>sumps for the protection of human exposure to on-site<br>soil. However, we note that additional evaluation may<br>be necessary to ensure concentrations in soil would not<br>serve as a continuous source of contamination to<br>groundwater and surface water.   | C              | The sites in this report are being evaluated<br>according to Risk Standard 3. The use of RBSVs is<br>described in the July 23 <sup>rd</sup> , 1998 TCEQ<br>memorandum entitled, <i>Implementation of the<br/>Existing Risk Reduction Rule</i> , hereafter referred to<br>as the Consistency Memorandum. Section III of<br>the Consistency Memorandum provides for the use<br>of RBSVs to further identify contaminants which<br>do not need to be included in the baseline risk<br>assessment required under Standard 3. | A              |

00065812

Reviewers: Fay Duke, TCEQ; Scott Harris, USEPA

Respondent Concurs (C), Does Not Concur (D), or Takes Exception (E)
 Commenter Agrees (A) with response, or Does not Agree (D) with response.

| 10.00 | Comment Page | Section/ | Comment | C, D <sup>1</sup> , Response C  | or .<br>)2 |
|-------|--------------|----------|---------|---|------------|
| 2     |              |          |         | Generally stated, the 2002 and 2003 risk<br>assessments by Jacobs concluded that risks<br>associated with chemicals in soil at Group 2 and<br>Group 4 sites were within the acceptable range.<br>The purpose of the subject document is to<br>determine whether soil data collected in 2005 and<br>2006 from former sump locations would change<br>the conclusions of the original risk assessments.<br>This was accomplished by comparing chemical<br>concentrations to Standard 3 RBSVs and, where<br>applicable, to exposure point concentrations of the<br>original risk assessments. The subject report<br>indicates that the conclusions of the original risk<br>assessments are still valid, i.e. the risk from the<br>soil is acceptable. |            |
|       |              |          |         | Baseline risk assessments account for risk<br>associated with exposure to groundwater by<br>directly estimating risk from chemicals detected in<br>groundwater. The contribution of chemicals<br>transported from soil is captured in the direct<br>assessment of groundwater contamination.  |            |
|       |              |          |         | It is important to note that the soil around the<br>sumps, as addressed in the subject report,<br>represents a very minor fraction as compared to<br>the entire sites where the majority of the sumps<br>were physically located (e.g. LHAAP-29, 46, and<br>47). As documented in this report, and concurred<br>by the regulators in their comments, the soil at the<br>former sump locations does not pose a direct<br>contact human health risk. Potential impacts to<br>groundwater and surface water should be<br>evaluated on a larger area basis and will be<br>addressed, where applicable, in feasibility studies<br>for the entire LHAAP sites within which the sumps<br>were physically located.  |            |

00065813

Reviewers: Fay Duke, TCEQ; Scott Harris, USEPA

Respondent Concurs (C), Does Not Concur (D), or Takes Exception (E)
 Commenter Agrees (A) with response, or Does not Agree (D) with response.

| Comment | Page | Section/ | Comment  | C, D <sup>1</sup> ,<br>or E | Response  | A OF<br>D <sup>2</sup> |
|---------|------|----------|--|-----------------------------|---|------------------------|
|         |      |          | Room with a subminister of a subminister and a subminister of a subminister of a subminister of a subminister o  |                             | The purpose of this document and its relation to feasibility studies and response actions at other sites will be clarified in the objective section of the revised document.  |                        |
| 2       |      |          | Previous risk assessment indicated acceptable risk to an industrial worker from exposure to chemicals in soil from sites LHAAP-18/24, -35(58), -46, and -47. For soil samples collected adjacent to sumps associated with sites LHAAP-18/24, -35A(58, -46, and -47 that have concentrations above the RBSVs, exposure point concentrations for chemicals which exceeded the RBSV were developed. The evaluation of the exposure point concentration values developed using the sampling results subsequent to the 2003 risk assessment indicates that the additional data contributes negligible increases to the cancer risk and noncancer hazard values of the previous risk assessment with resulting risk values still in the acceptable range. Therefore, we concur that no active remediation would be required for soil around these sumps for the protection of human exposure to on-site soil at LHAAP-, 18/24, 35A(58), -46 and -47. However, we note that additional evaluations are necessary to ensure concentrations in soil would not serve as a continuous source of contamination to groundwater and surface water. | С                           | See above response.   | A                      |
|         |      |          | This is especially imperative in the area surrounding<br>Building 25C where perchlorate contamination was<br>observed to have migrated into the surface water. We<br>understand a cover was placed in areas adjacent to<br>Building 25C as a temporary abatement. We believe<br>that a permanent remedy should be evaluated to ensure<br>that contaminated soil would not impact the surface   |                             | Regarding perchlorate contamination in the soil<br>near Building 25C, a permanent remedy is being<br>evaluated in the feasibility study for site LHAAP-47<br>that will address the risk from direct contact with<br>soil as well as impact to groundwater and surface<br>water. |                        |
| 3       |      |          | Additionally, please note that under the Risk Reduction<br>Rule, site closure/remediation, in order to comply with<br>the non-residential soil requirements, a deed  | С                           | Concur. If required, notifications will be filed for<br>the sites within which the sumps are physically<br>located.   | A                      |

## **Review Comments to**

Draft Final Data Evaluation Report, Chemical Concentration in Soil Samples Associated with LHAAP-35/36 Sumps Longhorn Army Ammunition Plant, Karnack, Texas Dated August 2007

## 00065814

Reviewers: Fay Duke, TCEQ; Scott Harris, USEPA

#### 1. Respondent Concurs (C), Does Not Concur (D), or Takes Exception (E) 2. Commenter Agrees (A) with response, or Does not Agree (D) with response.

| Comment<br># | Page   | Section/<br>Paragraph | Comment   | C, D <sup>1</sup> ,<br>or E | Response   | A or<br>D <sup>2</sup> |
|--------------|--------|-----------------------|---|-----------------------------|--|------------------------|
|              |        |                       | certification must be filed in the county record. The<br>deed certification must indicate that future land use is<br>considered suitable for non-residential use. An example<br>format of the deed certification is provided in 30 Texas<br>Administrative Code §335.569.   |                             |  |                        |
| 4            |        |                       | Finally, we note that many soil samples analyzed for<br>semivolatiles (SVOCs) were diluted and yet no SVOC<br>compounds were detected. The dilution of samples<br>resulted in an elevation of sample quantitation limits<br>that exceeded the RBSVs. Please provide the rationale<br>for the need to dilute these samples.    | C                           | Section 4.1.1 of the report describes the role of<br>dilution factors in the data evaluation, and specific<br>applications of dilution factors are described for<br>each sump location where they occur. Because<br>sample dilution might result from several causes,<br>the following text will be inserted at the end of<br>paragraph 4 of Section 4.1.1. called Sample<br>Quantitation Limit (SQL):<br>Some samples required dilution to quantitate a<br>chemical initially present at high concentrations<br>that exceeded the linear range of instrument<br>response. Other dilutions were required by matrix<br>interference, (e.g., soil properties that interfere<br>with an extraction step, or an extract that could<br>not be evaporated down to the required 1mL<br>volume before analysis). For such samples, the<br>analyst prepares samples with increasing dilution<br>factors. The analytical results are reported for the<br>lowest dilution that provides measurements within<br>the linear response range, and meets quality<br>control criteria. The diluted samples are identified<br>in Section 4 tables by showing the dilution factor<br>for each sample. | A                      |
| Scott Harris | - U.S. | Environmental Pro     | tection Agency  |                             | L  |                        |
| General      |        |                       | The U.S. Environmental Protection Agency has<br>reviewed the Draft Final Data Evaluation Report for the<br>referenced sites and the respective TCEQ comments,<br>and concur with TCEQ that no soil remediation appears<br>necessary. TCEQ makes valid points regarding<br>additional evaluation to ensure protection of water | С                           | Noted.   | A                      |

## 00065815

Reviewers: Fay Duke, TCEQ; Scott Harris, USEPA

1. Respondent Concurs (C), Does Not Concur (D), or Takes Exception (E)

2. Commenter Agrees (A) with response, or Does not Agree (D) with response.

| Comment Page | Section/<br>Paragraph |                        | Comment                 |            | C. D';<br>or E  | Response | A or<br>D <sup>2</sup> |
|--------------|-----------------------|------------------------|-------------------------|------------|---|----------|------------------------|
|              | reso                  | urces, the use of in   | stitutional controls (i | i.e., deed | NUMBER OF STREET, STREE |          |                        |
|              | rest                  | riction) for nonreside | ential use and the ef   | fects of   |   |          |                        |
|              | sam                   | ple dilutions on SV(   | DC results.             |            |   | <br>     |                        |

## FINAL DATA EVALUATION REPORT CHEMICAL CONCENTRATIONS IN SOIL SAMPLES ASSOCIATED WITH LHAAP-35/36 SUMPS LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

## **VOLUME I OF III: TEXT AND FIGURES**







Prepared for U.S. Army Corps of Engineers Tulsa District 1645 South 101st East Avenue Tulsa, Oklahoma

Prepared by Shaw Environmental, Inc. 3010 Briarpark, Suite 400 Houston, Texas 77042

Contract No. W12QR-04-D-0027, Task Order No. DS02 Shaw Project No. 117591

January 2008
# Table of Contents\_

| List of | Figures        | S                     | . viii     |  |
|---------|----------------|-----------------------|------------|--|
| List of | List of Tables |                       |            |  |
| Acrony  | ims an         | d Abbreviations       | .xvi       |  |
| -       |                |                       |            |  |
| 1.0     | Introd         | uction                | 1-1        |  |
|         | 1.1            | Objectives            | 1-1        |  |
|         | 1.2            | Site Description      | 1-2        |  |
|         | 1.3            | Document Organization | 1-2        |  |
| 2.0     | Field I        | nvestigation          | 2-1        |  |
|         | 2.1            | Methods               | 2-1        |  |
|         | 2.2            | Sample Locations      | 2-1        |  |
| 3.0     | Samp           | le Results            | 3-1        |  |
|         | 3.1            | Sump-001              | 3-1        |  |
|         | 3.2            | Sump-002              | 3-1        |  |
|         | 3.3            | Sump-003              | 3-1        |  |
|         | 3.4            | Sump-004              | 3-2        |  |
|         | 3.5            | Sump-005              | 3-2        |  |
|         | 3.6            | Sump-006              | 3-2        |  |
|         | 3.7            | Sump-007              | 3-2        |  |
|         | 3.8            | Sump-008              | 3-3        |  |
|         | 3.9            | Sump-009              | 3-3        |  |
|         | 3.10           | Sump-010              | 3-3        |  |
|         | 3.11           | Sump-011              | 3-3        |  |
|         | 3.12           | Sump-012              | 3-3        |  |
|         | 3.13           | Sump-013              | 3-4        |  |
|         | 3.14           | Sump-014              | 3-4        |  |
|         | 3.15           | Sump-015              | 3-4        |  |
|         | 3.16           | Sump-016              | 3-4        |  |
|         | 3.17           | Sump-017              | 3-4        |  |
|         | 3.18           | Sump-018              | 3-5        |  |
|         | 3.19           | Sump-019              | 3-5        |  |
|         | 3 20           | Sump-020              | 3-5        |  |
|         | 3.21           | Sump-021              | 3-5        |  |
|         | 3.27           | Sump 027              | 3-5        |  |
|         | 3 23           | Sump-023              | 3-6        |  |
|         | 3.20           | Sump 020              | 3-6        |  |
|         | 3.24           | Sump 024              | 3-6        |  |
|         | 3.20           | Sump 025              | 3-6        |  |
|         | 3.20           | Sump 020              | 3-6        |  |
|         | J.∠7<br>3.20   | Sumn_028              | 3-0<br>2_7 |  |
|         | J.∠0<br>3.20   | Sumn_020              | J-7<br>2_7 |  |
|         | J.∠7<br>3 30   | Sumn_020              | J-7<br>2_7 |  |
|         | 0.00           | Juliip-030            | J-1        |  |

| 3.31         | Sump-031   | 3-7             |
|--------------|------------|-----------------|
| 3.32         | Sump-032   | 3-7             |
| 3.33         | Sump-033   | 3-7             |
| 3.34         | Sump-034   | 3-8             |
| 3.35         | Sump-035   | 3-8             |
| 3.36         | Sump-036   | 3-8             |
| 3.37         | Sump-037   | 3-8             |
| 3.38         | Sump-038   | 3-8             |
| 3.39         | Sump-039   | 3-8             |
| 3.40         | Sump-040   | 3-8             |
| 3.41         | Sump-041   | 3-9             |
| 3.42         | Sump-042   | 3-9             |
| 3.43         | Sump-043   | 3-9             |
| 3.44         | Sump-044   | 3-9             |
| 3.45         | Sump-045   | 3-9             |
| 3.46         | Sump-046   | . 3-10          |
| 3.47         | Sump-047   | . 3-10          |
| 3.48         | Sump-048   | . 3-10          |
| 3.49         | Sump-049   | . 3-10          |
| 3.50         | Sump-050   | . 3-10          |
| 3.51         | Sump-051   | . 3-11          |
| 3.52         | Sump-052   | . 3-11          |
| 3.53         | Sump-053   | . 3-11          |
| 3.54         | Sump-054   | . 3-11          |
| 3.55         | Sump-055   | . 3-11          |
| 3.56         | Sump-056   | . 3-11          |
| 3.57         | Sump-057   | . 3-12          |
| 3.58         | Sump-058   | . 3-12          |
| 3.59         | Sump-059   | . 3-12          |
| 3.60         | Sump-060   | .3-12           |
| 3.61         | Sump-061   | .3-12           |
| 3.62         | Sump-062   | . 3-12          |
| 3.63         | Sump-063   | . 3-13          |
| 3.64         | Sump-064   | . 3-13          |
| 3.65         | Sump-065   | . 3-13          |
| 3.66         | Sump-066   | . 3-13          |
| 3.67         | Sump-067   | . 3-13          |
| 3.68         | Sump-068   | . 3-13          |
| 3.09<br>2.70 | Sullip-009 | . 3-14          |
| 3.7U<br>2.71 | Sullip-070 | . 3-14          |
| 3./I<br>2 72 | Sump 072   | . 3-14<br>2 1 1 |
| 3.12<br>2.72 | Sullip-U/2 | . 3-14          |
| 3./3<br>27/  | Sump 074   | . 3-14<br>2 1 F |
| <u>კ.</u> /4 | Sump 075   | . პ-15<br>ე 1 г |
| ა./১         | Sullih-012 | . 3-15          |

| 3.76  | Sump-076   | . 3-15 |
|-------|------------|--------|
| 3.77  | Sump-077   | . 3-15 |
| 3.78  | Sump-078   | . 3-15 |
| 3.79  | Sump-079   | . 3-16 |
| 3.80  | Sump-080   | . 3-16 |
| 3.81  | Sump-081   | . 3-16 |
| 3.82  | Sump-082   | . 3-16 |
| 3.83  | Sump-083   | . 3-16 |
| 3.84  | Sump-084   | . 3-16 |
| 3.85  | Sump-085   | . 3-17 |
| 3.86  | Sump-086   | . 3-17 |
| 3.87  | Sump-087   | . 3-17 |
| 3.88  | Sump-088   | . 3-17 |
| 3.89  | Sump-089   | . 3-17 |
| 3.90  | Sump-090   | . 3-18 |
| 3.91  | Sump-091   | . 3-18 |
| 3.92  | Sump-092   | . 3-18 |
| 3.93  | Sump-093   | . 3-18 |
| 3.94  | Sump-106   | . 3-18 |
| 3.95  | Sump-107   | . 3-18 |
| 3.96  | Sump-108   | . 3-19 |
| 3.97  | Sump-109   | . 3-19 |
| 3.98  | Sump-110   | . 3-19 |
| 3.99  | Sump-111   | . 3-19 |
| 3.100 | Sump-112   | . 3-19 |
| 3.101 | Sump-113   | . 3-19 |
| 3.102 | Sump-114   | . 3-20 |
| 3.103 | Sump-115   | . 3-20 |
| 3.104 | Sump-116   | . 3-20 |
| 3.105 | Sump-117   | . 3-20 |
| 3.106 | Sump-118   | . 3-20 |
| 3.107 | Sump-121   | . 3-20 |
| 3.108 | Sump-122   | . 3-20 |
| 3.109 | Sump-125   | . 3-21 |
| 3.110 | WRSump-004 | . 3-21 |
| 3.111 | WRSump-005 | . 3-21 |
| 3.112 | WRSump-006 | . 3-21 |
| 3.113 | WRSump-007 | . 3-21 |
| 3.114 | WRSump-008 | . 3-22 |
| 3.115 | WRSump-009 | . 3-22 |
| 3.116 | WRSump-010 | . 3-22 |
| 3.117 | WRSump-011 | . 3-22 |
| 3.118 | WRSump-012 | . 3-22 |
| 3.119 | WRSump-013 | . 3-22 |
| 3.120 | WRSump-014 | . 3-23 |

|     | 3.121 | WRSur      | mp-015               |      |
|-----|-------|------------|----------------------|------|
|     | 3.122 | WRSur      |                      |      |
|     | 3.123 | WRSur      | mp-017               |      |
|     | 3.124 | WRSur      |                      |      |
|     | 3.125 | WRSur      | np-019               |      |
|     | 3.126 | WRSur      | mp <sup>-</sup> 021  |      |
| 4.0 | Data  | Evaluation | on                   |      |
|     | 4.1   | Risk-Ba    | ased Screening       |      |
|     |       | 4.1.1      | Definitions          |      |
|     | 4.2   | Site LH    | IAAP-46 (Sub-Area 1) |      |
|     |       | 4.2.1      | Sump-001             |      |
|     |       | 4.2.2      | Sump-002             |      |
|     |       | 4.2.3      | Sump-003             |      |
|     |       | 4.2.4      | Sump-004             |      |
|     |       | 4.2.5      | Sump-005             |      |
|     |       | 4.2.6      | Sump-006             |      |
|     |       | 4.2.7      | Sump-007             |      |
|     |       | 4.2.8      | Sump-008             |      |
|     |       | 4.2.9      | Sump-009             |      |
|     |       | 4.2.10     | Sump-010             |      |
|     |       | 4.2.11     | Sump-011             |      |
|     |       | 4.2.12     | Sump-012             |      |
|     |       | 4.2.13     | Sump-013             |      |
|     |       | 4.2.14     | Sump-014             |      |
|     |       | 4.2.15     | Sump-015             |      |
|     |       | 4.2.16     | Sump-016             |      |
|     |       | 4.2.17     | Sump-017             |      |
|     |       | 4.2.18     | Sump-018             |      |
|     |       | 4.2.19     | Sump-019             |      |
|     |       | 4.2.20     | Sump-020             |      |
|     |       | 4.2.21     | Sump-021             |      |
|     |       | 4.2.22     | Sump-022             |      |
|     |       | 4.2.23     | Sump-023             |      |
|     |       | 4.2.24     | Sump-024             |      |
|     |       | 4.2.25     | Sump-025             |      |
|     |       | 4.2.26     | Sump-026             |      |
|     |       | 4.2.27     | Sump-027             |      |
|     |       | 4.2.28     | Sump-028             |      |
|     |       | 4.2.29     | Sump-029             |      |
|     |       | 4.2.30     | Sumps-030            |      |
|     |       | 4.2.31     | Sump-031             |      |
|     |       | 4.2.32     | Sump -032            |      |
|     |       | 4.2.33     | Sump-033             |      |
|     |       | 4.2.34     | Sump-034             | 4-11 |
|     |       | 4.2.35     | Sump-035             |      |

|     | 4.2.36   | Sump-036  | . 4-11 |
|-----|----------|---|--------|
|     | 4.2.37   | Sump-037  | . 4-11 |
|     | 4.2.38   | Sump-038  | . 4-12 |
|     | 4.2.39   | Sump-039  | . 4-12 |
|     | 4.2.40   | Sump-040  | . 4-12 |
|     | 4.2.41   | Sump-041  | . 4-12 |
|     | 4.2.42   | Sump-042  | . 4-12 |
|     | 4.2.43   | Sump-043  | . 4-12 |
|     | 4.2.44   | Sump-107  | . 4-12 |
|     | 4.2.45   | Sump-108  | . 4-12 |
|     | 4.2.46   | Sump-109  | . 4-13 |
|     | 4.2.47   | Sump-110  | . 4-13 |
|     | 4.2.48   | WRSump-004  | . 4-13 |
|     | 4.2.49   | WRSump-005  | . 4-13 |
|     | 4.2.50   | WRSump-006  | . 4-13 |
|     | 4.2.51   | WRSump-007  | . 4-13 |
|     | 4.2.52   | WRSump-008  | . 4-14 |
|     | 4.2.53   | WRSump-009  | . 4-14 |
|     | 4.2.54   | WRSump-010  | . 4-14 |
|     | 4.2.55   | WRSump-011  | . 4-14 |
|     | 4.2.56   | WRSump-012  | . 4-15 |
|     | 4.2.57   | WRSump-015  | . 4-15 |
|     | 4.2.58   | WRSump-016  | . 4-15 |
|     | 4.2.59   | WRSump-019  | . 4-15 |
|     | 4.2.60   | WRSump-021  | . 4-15 |
| 4.3 | Evaluat  | ion of Risks from Chemicals Exceeding RBSVs in Post-2002 Samples at LHAAP | -46    |
|     | Sumps    | - · · ·   | . 4-16 |
|     | 4.3.1    | Arsenic   | . 4-16 |
|     | 4.3.2    | Aluminum, Mercury, and Vanadium   | . 4-16 |
|     | 4.3.3    | Summary   | . 4-17 |
| 4.4 | Site LH  | AAP-47 (Sub-Area 2)   | . 4-17 |
|     | 4.4.1    | Sump-044  | . 4-18 |
|     | 4.4.2    | Sump-045  | . 4-18 |
|     | 4.4.3    | Sump-046  | . 4-18 |
|     | 4.4.4    | Sump-047  | . 4-18 |
|     | 4.4.5    | Sump-048  | . 4-18 |
|     | 4.4.6    | Sump-049  | . 4-18 |
|     | 4.4.7    | Sump-050  | . 4-18 |
|     | 4.4.8    | Sump-051  | . 4-18 |
|     | 4.4.9    | Sump-052  | . 4-19 |
|     | 4.4.10   | Sump-053  | . 4-19 |
|     | 4.4.11   | Sump-054  | . 4-19 |
|     | 4.4.12   | Sump-055  | . 4-19 |
|     | 4.4.13   | Sump-056  | . 4-19 |
|     | <u> </u> | Sump-057  | 4-19   |

|     | 4.4.15  | Sump-058   | . 4-19 |
|-----|---------|--|--------|
|     | 4.4.16  | Sump-059   | . 4-19 |
|     | 4.4.17  | Sump-060   | . 4-20 |
|     | 4.4.18  | Sump-061   | . 4-20 |
|     | 4.4.19  | Sump-062   | . 4-20 |
|     | 4.4.20  | Sump-063   | . 4-20 |
|     | 4.4.21  | Sump-064   | . 4-20 |
|     | 4.4.22  | Sump-065   | . 4-20 |
|     | 4.4.23  | Sump-066   | . 4-20 |
|     | 4.4.24  | Sump-067   | . 4-21 |
|     | 4.4.25  | Sump-068   | . 4-21 |
|     | 4.4.26  | Sump-069   | . 4-21 |
|     | 4.4.27  | Sump-070   | . 4-21 |
|     | 4.4.28  | Sump-071   | . 4-21 |
|     | 4.4.29  | Sump-072   | . 4-21 |
|     | 4.4.30  | Sump-073   | . 4-21 |
|     | 4.4.31  | Sump-074   | . 4-21 |
|     | 4.4.32  | Sump-075   | . 4-22 |
|     | 4.4.33  | Sump-076   | . 4-22 |
|     | 4.4.34  | Sump-077   | . 4-22 |
|     | 4.4.35  | Sump-078   | . 4-22 |
|     | 4.4.36  | Sump-079   | . 4-22 |
|     | 4.4.37  | Sump-080   | . 4-22 |
|     | 4.4.38  | Sump-081   | . 4-22 |
|     | 4.4.39  | Sump-082   | . 4-22 |
|     | 4.4.40  | Sump-083   | . 4-23 |
|     | 4.4.41  | Sump-084   | 4-23   |
|     | 4.4.42  | Sump-085   | 4-23   |
|     | 4.4.43  | Sump-086   | 4-23   |
|     | 4.4.44  | Sump-087   | . 4-23 |
|     | 4.4.45  | Sump-088   | 4-23   |
|     | 4.4.46  | Sump-089   | 4-24   |
|     | 4.4.47  | Sump-090   | . 4-24 |
|     | 4.4.48  | Sump-091   | . 4-24 |
|     | 4.4.49  | Sump-092   | . 4-24 |
|     | 4.4.50  | Sump-093   | . 4-24 |
|     | 4.4.51  | Sump-121   | . 4-24 |
|     | 4.4.52  | WRSump-014   | . 4-24 |
|     | 4.4.53  | WRSump-017   | 4-25   |
|     | 4.4.54  | WRSump-018   | 4-25   |
| 4.5 | Evalua  | tion of Risks from Chemicals Exceeding RBSVs in Post-2002 Samples at LHAAP | 2-47   |
|     | Sumps   | -  | 4-25   |
|     | 4.5.1   | Summary  | . 4-26 |
| 4.6 | Sites L | HAAP-04, 35A(58), 60, 66, and 68 (Sub-Area 3)                              | . 4-26 |
|     | 4.6.1   | Sump-106   | 4-27   |

|       | 4.6.2    | Sump-111   | 4-27  |
|-------|----------|--|-------|
|       | 4.6.3    | Sump-112   | 4-27  |
|       | 4.6.4    | Sump-113   | 4-27  |
|       | 4.6.5    | Sump-117   | 4-27  |
|       | 4.6.6    | Sump-125   | 4-27  |
| 4.7   | Sites L  | HAAP-18, and 39 (Sub-Area 4)   | 4-27  |
|       | 4.7.1    | Sump-114   | 4-27  |
|       | 4.7.2    | Sump-115   | 4-28  |
|       | 4.7.3    | Sump-116   | 4-28  |
| 4.8   | Site LF  | HAAP-29 (Sub-Area 5, Part 1 of 2)  | 4-28  |
|       | 4.8.1    | Sump-118   | 4-28  |
| 4.9   | Site L⊦  | HAAP-45 (Sub-Area 5, Part 2 of 2)  | 4-28  |
|       | 4.9.1    | WRSump-013   | 4-28  |
| 4.10  | Evalua   | ation of Risks from Chemicals Exceeding RBSVs in Post-2002 Samples at Sub-Area | as 3  |
|       | and 4    | · · · · · · · · · · · · · · · · · · ·  | 4-28  |
|       | 4.10.1   | Evaluation of Manganese Quantitated at LHAAP-35A(58)                           | 4-29  |
|       | 4.10.2   | Evaluation of Vanadium, Tetrachloroethene, and Vinyl Chloride at LHAAP-18/24   | 4-29  |
|       | 4.10.3   | Summary  | 4-30  |
| Sumn  | nary and | d Conclusions  | . 5-1 |
| Refer | rences   |  | . 6-1 |

5.0 6.0

# List of Figures \_\_\_\_\_

- Figure 2-1Soil Sample and Sump Location Map (Sub-Area 1)
- Figure 2-2 Soil Sample and Sump Location Map (Sub-Area 2)
- Figure 2-3 Soil Sample and Sump Location Map (Sub-Area 3)
- Figure 2-4 Soil Sample and Sump Location Map (Sub-Area 4)
- Figure 2-5 Soil Sample and Sump Location Map (Sub-Area 5, Part 1 of 2)
- Figure 2-6 Soil Sample and Sump Location Map (Sub-Area 5, Part 2 of 2)

# List of Tables \_\_\_\_\_

| Sump and Waste Rack Sump Master List                                 |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump UU  |
| Concentrations of Chemicals in Soil Samples Associated with Sump 002 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 003 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 004 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 005 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 006 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 00/ |
| Concentrations of Chemicals in Soil Samples Associated with Sump 008 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 009 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 010 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 011 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 012 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 013 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 014 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 015 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 016 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 017 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 018 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 019 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 020 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 021 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 022 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 023 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 024 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 025 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 026 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 027 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 028 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 029 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 030 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 031 |
| Concentrations of Chemicals in Soil Samples Associated with Sump 032 |
|  |

| Table 3-33 | Concentrations of Chemicals in Soil Samples Associated with Sump 033 |
|------------|--|
| Table 3-34 | Concentrations of Chemicals in Soil Samples Associated with Sump 034 |
| Table 3-35 | Concentrations of Chemicals in Soil Samples Associated with Sump 035 |
| Table 3-36 | Concentrations of Chemicals in Soil Samples Associated with Sump 036 |
| Table 3-37 | Concentrations of Chemicals in Soil Samples Associated with Sump 037 |
| Table 3-38 | Concentrations of Chemicals in Soil Samples Associated with Sump 038 |
| Table 3-39 | Concentrations of Chemicals in Soil Samples Associated with Sump 039 |
| Table 3-40 | Concentrations of Chemicals in Soil Samples Associated with Sump 040 |
| Table 3-41 | Concentrations of Chemicals in Soil Samples Associated with Sump 041 |
| Table 3-42 | Concentrations of Chemicals in Soil Samples Associated with Sump 042 |
| Table 3-43 | Concentrations of Chemicals in Soil Samples Associated with Sump 043 |
| Table 3-44 | Concentrations of Chemicals in Soil Samples Associated with Sump 044 |
| Table 3-45 | Concentrations of Chemicals in Soil Samples Associated with Sump 045 |
| Table 3-46 | Concentrations of Chemicals in Soil Samples Associated with Sump 046 |
| Table 3-47 | Concentrations of Chemicals in Soil Samples Associated with Sump 047 |
| Table 3-48 | Concentrations of Chemicals in Soil Samples Associated with Sump 048 |
| Table 3-49 | Concentrations of Chemicals in Soil Samples Associated with Sump 049 |
| Table 3-50 | Concentrations of Chemicals in Soil Samples Associated with Sump 050 |
| Table 3-51 | Concentrations of Chemicals in Soil Samples Associated with Sump 051 |
| Table 3-52 | Concentrations of Chemicals in Soil Samples Associated with Sump 052 |
| Table 3-53 | Concentrations of Chemicals in Soil Samples Associated with Sump 053 |
| Table 3-54 | Concentrations of Chemicals in Soil Samples Associated with Sump 054 |
| Table 3-55 | Concentrations of Chemicals in Soil Samples Associated with Sump 055 |
| Table 3-56 | Concentrations of Chemicals in Soil Samples Associated with Sump 056 |
| Table 3-57 | Concentrations of Chemicals in Soil Samples Associated with Sump 057 |
| Table 3-58 | Concentrations of Chemicals in Soil Samples Associated with Sump 058 |
| Table 3-59 | Concentrations of Chemicals in Soil Samples Associated with Sump 059 |
| Table 3-60 | Concentrations of Chemicals in Soil Samples Associated with Sump 060 |
| Table 3-61 | Concentrations of Chemicals in Soil Samples Associated with Sump 061 |
| Table 3-62 | Concentrations of Chemicals in Soil Samples Associated with Sump 062 |
| Table 3-63 | Concentrations of Chemicals in Soil Samples Associated with Sump 063 |
| Table 3-64 | Concentrations of Chemicals in Soil Samples Associated with Sump 064 |
| Table 3-65 | Concentrations of Chemicals in Soil Samples Associated with Sump 065 |
| Table 3-66 | Concentrations of Chemicals in Soil Samples Associated with Sump 066 |
| Table 3-67 | Concentrations of Chemicals in Soil Samples Associated with Sump 067 |
| Table 3-68 | Concentrations of Chemicals in Soil Samples Associated with Sump 068 |
| Table 3-69 | Concentrations of Chemicals in Soil Samples Associated with Sump 069 |
| Table 3-70 | Concentrations of Chemicals in Soil Samples Associated with Sump 070 |
| Table 3-71 | Concentrations of Chemicals in Soil Samples Associated with Sump 071 |
| Table 3-72 | Concentrations of Chemicals in Soil Samples Associated with Sump 072 |
| Table 3-73 | Concentrations of Chemicals in Soil Samples Associated with Sump 073 |
| Table 3-74 | Concentrations of Chemicals in Soil Samples Associated with Sump 074 |
| Table 3-75 | Concentrations of Chemicals in Soil Samples Associated with Sump 075 |
| Table 3-76 | Concentrations of Chemicals in Soil Samples Associated with Sump 076 |
|            |  |

| Table 3-77  | Concentrations of Chemicals in Soil Samples Associated with Sump 077    |
|-------------|---|
| Table 3-78  | Concentrations of Chemicals in Soil Samples Associated with Sump 078    |
| Table 3-79  | Concentrations of Chemicals in Soil Samples Associated with Sump 079    |
| Table 3-80  | Concentrations of Chemicals in Soil Samples Associated with Sump 080    |
| Table 3-81  | Concentrations of Chemicals in Soil Samples Associated with Sump 081    |
| Table 3-82  | Concentrations of Chemicals in Soil Samples Associated with Sump 082    |
| Table 3-83  | Concentrations of Chemicals in Soil Samples Associated with Sump 083    |
| Table 3-84  | Concentrations of Chemicals in Soil Samples Associated with Sump 084    |
| Table 3-85  | Concentrations of Chemicals in Soil Samples Associated with Sump 085    |
| Table 3-86  | Concentrations of Chemicals in Soil Samples Associated with Sump 086    |
| Table 3-87  | Concentrations of Chemicals in Soil Samples Associated with Sump 087    |
| Table 3-88  | Concentrations of Chemicals in Soil Samples Associated with Sump 088    |
| Table 3-89  | Concentrations of Chemicals in Soil Samples Associated with Sump 089    |
| Table 3-90  | Concentrations of Chemicals in Soil Samples Associated with Sump 090    |
| Table 3-91  | Concentrations of Chemicals in Soil Samples Associated with Sump 091    |
| Table 3-92  | Concentrations of Chemicals in Soil Samples Associated with Sump 092    |
| Table 3-93  | Concentrations of Chemicals in Soil Samples Associated with Sump 093    |
| Table 3-94  | Concentrations of Chemicals in Soil Samples Associated with Sump 106    |
| Table 3-95  | Concentrations of Chemicals in Soil Samples Associated with Sump 107    |
| Table 3-96  | Concentrations of Chemicals in Soil Samples Associated with Sump 108    |
| Table 3-97  | Concentrations of Chemicals in Soil Samples Associated with Sump 109    |
| Table 3-98  | Concentrations of Chemicals in Soil Samples Associated with Sump 110    |
| Table 3-99  | Concentrations of Chemicals in Soil Samples Associated with Sump 111    |
| Table 3-100 | Concentrations of Chemicals in Soil Samples Associated with Sump 112    |
| Table 3-101 | Concentrations of Chemicals in Soil Samples Associated with Sump 113    |
| Table 3-102 | Concentrations of Chemicals in Soil Samples Associated with Sump 114    |
| Table 3-103 | Concentrations of Chemicals in Soil Samples Associated with Sump 115    |
| Table 3-104 | Concentrations of Chemicals in Soil Samples Associated with Sump 116    |
| Table 3-105 | Concentrations of Chemicals in Soil Samples Associated with Sump 117    |
| Table 3-106 | Concentrations of Chemicals in Soil Samples Associated with Sump 118    |
| Table 3-107 | Concentrations of Chemicals in Soil Samples Associated with Sump 121    |
| Table 3-108 | Concentrations of Chemicals in Soil Samples Associated with Sump 122    |
| Table 3-109 | Concentrations of Chemicals in Soil Samples Associated with Sump 125    |
| Table 3-110 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 004 |
| Table 3-111 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 005 |
| Table 3-112 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 006 |
| Table 3-113 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 007 |
| Table 3-114 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 008 |
| Table 3-115 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 009 |
| Table 3-116 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 010 |
| Table 3-117 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 011 |
| Table 3-118 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 012 |
| Table 3-119 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 013 |
| Table 3-120 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 014 |

\_\_\_\_\_

| Table 3-121 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 015                |
|-------------|--|
| Table 3-122 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 016                |
| Table 3-123 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 017                |
| Table 3-124 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 018                |
| Table 3-125 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 019                |
| Table 3-126 | Concentrations of Chemicals in Soil Samples Associated with WR Sump 021                |
|             |  |
| Table 4-1   | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 001 |
| Table 4-2   | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 002 |
| Table 4-3   | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 003 |
| Table 4-4   | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 004 |
| Table 4-5   | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 005 |
| Table 4-6   | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 006 |
| Table 4-7   | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 007 |
| Table 4-8   | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 008 |
| Table 4-9   | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 009 |
| Table 4-10  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 010 |
| Table 4-11  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 011 |
| Table 4-12  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 012 |
| Table 4-13  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 013 |
| Table 4-14  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 014 |
| Table 4-15  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 015 |
| Table 4-16  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 016 |
| Table 4-17  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 017 |
| Table 4-18  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 018 |
| Table 4-19  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 019 |
| Table 4-20  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 020 |
| Table 4-21  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 021 |
| Table 4-22  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 022 |
| Table 4-23  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 023 |
| Table 4-24  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 024 |
| Table 4-25  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 025 |
| Table 4-26  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 026 |
| Table 4-27  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 027 |
| Table 4-28  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 028 |
| Table 4-29  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 029 |
| Table 4-30  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 030 |
| Table 4-31  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 031 |
| Table 4-32  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 032 |
| Table 4-33  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 033 |
| Table 4-34  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 034 |
| Table 4-35  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 035 |
| Table 4-36  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 036 |
| Table 4-37  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump 037 |

| Table 4-38  | Comparison of Ch                      | nemical Cor                  | ncentrations in So                   | oil to        | Risk-             | Bas             | ed Screening                | Values, Sur                 | np 038         |
|-------------|---------------------------------------|------------------------------|--------------------------------------|---------------|-------------------|-----------------|-----------------------------|-----------------------------|----------------|
| Table 4-39  | Comparison of Ch                      | nemical Cor                  | ncentrations in So                   | oil to        | Risk-             | Bas             | ed Screening                | Values, Sur                 | np 039         |
| Table 4-40  | Comparison of Ch                      | nemical Cor                  | ncentrations in So                   | oil to        | Risk-             | Bas             | ed Screening                | Values, Sur                 | np 040         |
| Table 4-41  | Comparison of Ch                      | nemical Cor                  | ncentrations in So                   | oil to        | Risk-             | Bas             | ed Screening                | Values, Sur                 | np 041         |
| Table 4-42  | Comparison of Ch                      | nemical Cor                  | ncentrations in So                   | oil to        | Risk-             | Bas             | ed Screening                | Values, Sur                 | np 042         |
| Table 4-43  | Comparison of Ch                      | nemical Cor                  | ncentrations in So                   | oil to        | Risk-             | Bas             | ed Screening                | Values, Sur                 | np 043         |
| Table 4-44  | Comparison of Ch                      | nemical Cor                  | ncentrations in So                   | oil to        | Risk-             | Bas             | ed Screening                | Values, Sur                 | np 107         |
| Table 4-45  | Comparison of Ch                      | nemical Cor                  | ncentrations in So                   | oil to        | Risk-             | Bas             | ed Screening                | Values, Sur                 | np 108         |
| Table 4-46  | Comparison of Ch                      | nemical Cor                  | ncentrations in So                   | oil to        | Risk-             | Bas             | ed Screening                | Values, Sur                 | np 109         |
| Table 4-47  | Comparison of Ch                      | nemical Cor                  | ncentrations in So                   | oil to        | Risk-             | Bas             | ed Screening                | Values, Sur                 | np 110         |
| Table 4-48  | Comparison of WRS Sump-004            | Chemical                     | Concentrations                       | in            | Soil              | to              | Risk-Based                  | Screening                   | Values,        |
| Table 4-49  | Comparison of WRS Sump-005            | Chemical                     | Concentrations                       | in            | Soil              | to              | Risk-Based                  | Screening                   | Values,        |
| Table 4-50  | Comparison of WRS Sump-006            | Chemical                     | Concentrations                       | in            | Soil              | to              | Risk-Based                  | Screening                   | Values,        |
| Table 4-51  | Comparison of WRS Sump-007            | Chemical                     | Concentrations                       | in            | Soil              | to              | Risk-Based                  | Screening                   | Values,        |
| Table 4-52  | Comparison of WRS Sump-008            | Chemical                     | Concentrations                       | in            | Soil              | to              | Risk-Based                  | Screening                   | Values,        |
| Table 4-53  | Comparison of WRS Sump-009            | Chemical                     | Concentrations                       | in            | Soil              | to              | Risk-Based                  | Screening                   | Values,        |
| Table 4-54  | Comparison of WRS Sump-010            | Chemical                     | Concentrations                       | in            | Soil              | to              | Risk-Based                  | Screening                   | Values,        |
| Table 4-55  | Comparison of<br>WRS Sump-011         | Chemical                     | Concentrations                       | in            | Soil              | to              | Risk-Based                  | Screening                   | Values,        |
| Table 4-56  | Comparison of WRS Sump-012            | Chemical                     | Concentrations                       | in            | Soil              | to              | Risk-Based                  | Screening                   | Values,        |
| Table 4-57  | Comparison of<br>WRS Sump-015         | Chemical                     | Concentrations                       | in            | Soil              | to              | Risk-Based                  | Screening                   | Values,        |
| Table 4-58  | Comparison of<br>WRS Sump-016         | Chemical                     | Concentrations                       | in            | Soil              | to              | Risk-Based                  | Screening                   | Values,        |
| Table 4-59  | Comparison of WRS Sump-019            | Chemical                     | Concentrations                       | in            | Soil              | to              | Risk-Based                  | Screening                   | Values,        |
| Table 4-60  | Comparison of WRS Sump-021            | Chemical                     | Concentrations                       | in            | Soil              | to              | Risk-Based                  | Screening                   | Values,        |
| Table 4-61  | Upper Confidence<br>or More Values Ex | e Limits of I<br>xceed Risk- | Vean Concentrat<br>Based Screening   | tions<br>a Va | in So<br>lues, t  | oil at<br>Sam   | LHAAP-46 L                  | ocations wh<br>d After 2003 | ere One        |
| Table 4-62a | Incremental Lifet<br>Maintenance Wor  | ime Cance<br>kers to Che     | er Risk (ILCR)<br>emicals in Soil As | for<br>soci   | Pote<br>ated v    | ntial<br>vith 3 | Ingestion E<br>Sumps at the | Exposure of I HAAP-16 S     | Future<br>Site |
| Table 4-62b | Hazard Index (H                       | I) for Pote<br>Associated    | ential Ingestion                     | Expo<br>ne I  | osure<br>HAAP     | of<br>-46       | Future Maint                | enance Wo                   | rkers to       |
| Table 4-63a | Incremental Lifet<br>Maintenance Wor  | ime Cance<br>kers to Airb    | er Risk (ILCR)                       | for<br>in So  | Poter<br>Sil at t | ntial<br>he L   | Inhalation E                | Exposure of                 | Future         |

# List of Tables (continued)\_\_\_\_\_

| Table 4-63b | Hazard Index (HI) for Potential Inhalation Exposure of Future Maintenance Workers to Airborne Chemicals in Soil at the LHAAP-46 Site                                |
|-------------|---|
| Table 4-64a | Incremental Lifetime Cancer Risk (ILCR) for Potential Dermal Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-46 Site |
| Table 4-64b | Hazard Index (HI) for Potential Dermal Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-46 Site                       |
| Table 4-65a | Exposures and Incremental Lifetime Cancer Risks for Potential Exposure of Future Maintenance Workers to Soil at the LHAAP-46 Site                                   |
| Table 4-65b | Exposures and Noncancer Hazards for Potential Exposure of Future Maintenance Workers to Soil at the LHAAP-46 Site   |
| Table 4-66a | Revision of Cancer Risk Estimates Based on Pre-2003 Measurements of Metals in Soil by Using Post-2003 Soil Analysis Results, LHAAP-46                               |
| Table 4-66b | Revision of Noncancer Hazard Estimates Based on Pre-2003 Measurements of Metals in Soil by Using Post-2003 Soil Analysis Results                                    |
| Table 4-67  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-044  |
| Table 4-68  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-046  |
| Table 4-69  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-047  |
| Table 4-70  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-048  |
| Table 4-71  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-049  |
| Table 4-72  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-050  |
| Table 4-73  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-051  |
| Table 4-74  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-052  |
| Table 4-75  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-053  |
| Table 4-76  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-054  |
| Table 4-77  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-055  |
| Table 4-78  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-056  |
| Table 4-79  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-057  |
| Table 4-80  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-058  |
| Table 4-81  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-059  |
| Table 4-82  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-060  |
| Table 4-83  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-061  |
| Table 4-84  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-064  |
| Table 4-85  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-065  |
| Table 4-86  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-066  |
| Table 4-87  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-067  |
| Table 4-88  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-069  |
| Table 4-89  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-070  |
| Table 4-90  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-071  |
| Table 4-91  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-072  |
| Table 4-92  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-073  |
| Table 4-93  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-074  |
| Table 4-94  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-075  |
| Table 4-95  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-076  |
| Table 4-96  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-077  |

| Table 4-97   | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-081    |
|--------------|---|
| Table 4-98   | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-082    |
| Table 4-99   | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-083    |
| Table 4-100  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-084    |
| Table 4-101  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-085    |
| Table 4-102  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-086    |
| Table 4-103  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-087    |
| Table 4-104  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-088    |
| Table 4-105  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-089    |
| Table 4-106  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-090    |
| Table 4-107  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-091    |
| Table 4-108  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-092    |
| Table 4-109  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-093    |
| Table 4-110  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-121    |
| Table 4-111  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values,             |
|              | WR Sump-014   |
| Table 4-112  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values,             |
|              | WR Sump-017   |
| Table 4-113  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, WR Sump-018 |
| Table 4-114  | Upper Confidence Limits of Mean Concentrations in Soil at LHAAP-47 Locations Where One    |
|              | or More Values Exceed Risk-Based Screening Values, Samples Collected After 2003           |
| Table 4-115a | Revision of Cancer Risk Estimates Based on Pre-2003 Measurements of Metals in Soil by     |
|              | Using Post-2003 Soil Analysis Results, LHAAP-47   |
| Table 4-115b | Revision of Noncancer Hazard Estimates Based on Pre-2003 Measurements of Metals in Soil   |
|              | by Using Post-2003 Soil Analysis Results, LHAAP-47  |
| Table 4-116  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-111    |
| Table 4-117  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-112    |
| Table 4-118  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-113    |
| Table 4-119  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-117    |
| Table 4-120  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-125    |
| Table 4-121  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-114    |
| Table 4-122  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-115    |
| Table 4-123  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-116    |
| Table 4-124  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, Sump-118    |
| Table 4-125  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values, WR Sump-013 |
| Table 4-126a | Incremental Lifetime Cancer Risk (ILCR) for Potential Ingestion Exposure of Future        |
|              | Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-35A(58)       |
|              | Site  |
| Table 4-126b | Hazard Index (HI) for Potential Ingestion Exposure of Future Maintenance Workers to       |
|              | Chemicals in Soil Associated with Sumps at the LHAAP-35A(58) Site                         |
| Table 4-127a | Incremental Lifetime Cancer Risk (ILCR) for Potential Inhalation Exposure of Future       |
|              | ממוזונטרומווינט מיטואפרא נט אוואטורופ טרופרוווגמוא ווטודו אטוו מנ נוופ ברואאר -אאנאט אוני |

| Table 4-127b | Hazard Index (HI) for Potential Inhalation Exposure of Future Maintenance Workers to Airborne Chemicals from Soil at the LHAAP-35A(58) Site                               |
|--------------|---|
| Table 4-128a | Incremental Lifetime Cancer Risk (ILCR) for Potential Dermal Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-35A(58) Site  |
| Table 4-128b | Hazard Index (HI) for Potential Dermal Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-35A(58) Site                        |
| Table 4-129a | Exposures and Incremental Lifetime Cancer Risk (ILCR) for Potential Exposure of Future Maintenance Workers to Soil at the LHAAP-35A(58) Site                              |
| Table 4-129b | Exposures and Noncancer Hazards for Potential Exposure of Future Maintenance Workers to Soil at the LHAAP-35A(58) Site  |
| Table 4-130a | Revision of Cancer Risk Estimates Based on Pre-2003 Measurements of Metals in Soil by Using Post-2003 Soil Analysis Results, LHAAP-35A(58)                                |
| Table 4-130b | Revision of Noncancer Hazard Estimates Based on Pre-2003 Measurements of Metals in Soil by Using Post-2003 Soil Analysis Results, LHAAP-35A(58)                           |
| Table 4-131a | Incremental Lifetime Cancer Risk (ILCR) for Potential Ingestion Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-18/24 Site |
| Table 4-131b | Hazard Index (HI) for Potential Ingestion Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-8/24 Site                        |
| Table 4-132a | Incremental Lifetime Cancer Risk (ILCR) for Potential Inhalation Exposure of Future Maintenance Workers to Airborne Chemicals from Soil at the LHAAP-18/24 Site           |
| Table 4-132b | Hazard Index (HI) for Potential Inhalation Exposure of Future Maintenance Workers to Airborne Chemicals from Soil at the LHAAP-18/24 Site                                 |
| Table 4-133a | Incremental Lifetime Cancer Risk (ILCR) for Potential Dermal Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-18/24 Site    |
| Table 4-133b | Hazard Index (HI) for Potential Dermal Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-18/24 Site                          |
| Table 4-134a | Exposures and Incremental Lifetime Cancer Risks for Potential Exposure of Future Maintenance Workers to Soil at the LHAAP-18/24 Site                                      |
| Table 4-134b | Exposures and Noncancer Hazards for Potential Exposure of Future Maintenance Workers to Soil at the LHAAP-18/24 Site  |
| Table 4-135a | Revision of Cancer Risk Estimates Based on Pre-2003 Measurements of Metals in Soil by Using Post-2003 Soil Analysis Results. LHAAP-18/24                                  |
| Table 4-135b | Revision of Noncancer Hazard Estimates Based on Pre-2003 Measurements of Metals in Soil by Using Post-2003 Soil Analysis Results, LHAAP-18/24                             |

. . .

# List of Appendices\_\_\_\_\_

Appendix A Sump Information (not previously included in Administrative Record)

# Acronyms and Abbreviations\_\_\_\_\_

| bgs     | below ground surface  |
|---------|---|
| COPC    | chemical of potential concern   |
| DCS     | detectability check sample  |
| DRO-GRO | diesel range organic-gasoline range organic                               |
| EPC     | exposure point concentration  |
| HI      | hazard index  |
| ILCR    | incremental lifetime cancer risk  |
| Jacobs  | Jacobs Engineering Group, Inc.  |
| LHAAP   | Longhorn Army Ammunition Plant  |
| MARC    | multiple award remediation contract                                       |
| MDL     | method detection limit  |
| MEK     | methyl ethyl ketone   |
| mg/kg   | milligrams per kilogram   |
| mm      | millimeter  |
| MQL     | method quantitation limit   |
| OHM     | OHM Remediation Services Corp.  |
| PBAA    | polybutadiene acrylic acid  |
| PQL     | practical quantitation limit  |
| RBSV    | risk based screening values   |
| RI      | remedial investigation  |
| RRR     | Risk Reduction Rule   |
| Shaw    | Shaw Environmental, Inc.  |
| SQL     | sample quantitation limit   |
| SVOC    | semivolatile organic compound   |
| TAC     | Texas Administrative Code   |
| TCE     | trichloroethene   |
| TCEQ    | Texas Commission on Environmental Quality                                 |
| Thiokol | Thiokol Corporation   |
| TNRCC   | Texas Natural Resource Conservation Commission (currently named the TCEQ) |
| TPH     | total petroleum hydrocarbons  |
| UCL     | upper confidence limit  |
| UPL     | upper prediction limit  |
| USACE   | U.S. Army Corps of Engineers  |
| VOC     | volatile organic compound   |

# 1.0 Introduction

This report, prepared by Shaw Environmental, Inc. (Shaw) for the U.S. Army Corps of Engineers (USACE), Tulsa District, under Task Order DS02 of the Louisville District's Multiple Award Remediation Contract (MARC) No. W912QR-04-D-0027, presents an evaluation of chemical concentrations in soil samples associated with wastewater sumps near process facilities at the former Longhorn Army Ammunition Plant (LHAAP) near Karnack, Texas. The sumps were physically located within or near sites LHAAP-04, 18, 29, 39, 46, 47, 48, 35C(53), 35A(58), 59, and 66, and have been collectively designated as site LHAAP-35/36, with 125 wastewater sumps in LHAAP-35 and 20 waste rack sumps in LHAAP-36.

The sumps were previously investigated by the U.S. Army Corps of Engineers (USACE, 1994 and 1995). Forty wastewater sumps were subsequently removed and closed under Resource Conservation and Recovery Act (Thiokol Corporation [Thiokol], 1996). The 1996 closure report was approved via a 1997 correspondence from the Texas Natural Resource Conservation Commission (TNRCC, 1997). The closure of 85 additional wastewater sumps was reported in a report by OHM Remediation Services Corp. (OHM, 1997). While all of the wastewater sumps were closed, the documentation included in TNRCC (1997) and closure certifications included in OHM (1997) indicated that the soil around the former sumps required further evaluation. No documentation related to the closure of the 20 waste rack sumps was found.

Environmental sampling and analysis efforts at the sumps and in the areas surrounding them are described in the Remedial Investigation (RI) reports (Jacobs Engineering Group, Inc. [Jacobs], 2001, 2002a) and baseline risk assessments for LHAAP sites (Jacobs, 2002b, 2003). Documentation pertaining to investigations, closure, and removal of sumps is included in various reports (USACE, 1995; Thiokol, 1996; OHM, 1997). Several of these reports were not previously included in the administrative record for LHAAP, and are included on a compact disc as **Appendix A**.

The purpose of the effort by Shaw was to collect additional samples to characterize soil around the former wastewater sump locations as required in the TNRCC correspondence so that a future course of action may be determined for each sump. The purpose was also to collect data around waste rack sumps to determine a course of action since these sumps were not evaluated previously.

# 1.1 Objectives

The objectives of this report are to: (a) compile soil data, referred to as pre-2002 data, associated with each sump that were collected for risk assessments for the majority of sump sites (Jacobs, 2002b, 2003); (b) evaluate the post-2002 data, collected primarily by Shaw in 2006, with respect

to applicable risk-based TCEQ standards to determine whether the additional data would change the conclusions of previous risk assessments; and (c) recommend a course of action for each sump. Generally stated, the previous risk assessments (Jacobs, 2002b; 2003) concluded that risks associated with chemicals in soil at Group 2 and Group 4 sites were within the acceptable range. The purpose of this report is to determine whether soil data collected in 2005 and 2006 from former sump locations would change the conclusions of the original risk assessments. The approach followed in this report is to first present post-2002 data for each sump followed by a comparison of the data to the available risk-based standards. If an exceedance of a standard is noted for a chemical, the chemical is then evaluated with respect to the risk assessment (Jacobs 2002b; 2003) for the site within which the sump was located.

Baseline risk assessments account for risk associated with exposure to groundwater by directly estimating risk from chemicals detected in groundwater. The potential contribution of chemicals transported from soil is captured in the direct assessment of groundwater contamination. The soil around the sumps represents a very minor fraction of the entire sites where the majority of the sumps were physically located. Potential impacts to groundwater and surface water should be evaluated on a larger basis and addressed through feasibility studies for the entire LHAAP sites within which the sumps were physically located.

# *1.2 Site Description*

LHAAP was active from the early 1940s to the late 1990s for the manufacturing of explosives, pyrotechnics, and rocket motors for World War II, the Korean War, and the Cold War. LHAAP was placed on inactive status in 1997. Aside from the abundant wildlife, the installation is predominantly unoccupied. Many of the production facilities have been demolished. LHAAP now consists of a heavily vegetated landscape with flat to slightly undulating terrain. Many of the production buildings had sumps that collected washdown water. Sumps were also associated with waste racks where containers (e.g. drums) were cleaned or stored.

There are 125 wastewater sumps included in LHAAP-35 and 20 waste rack sumps are included in LHAAP-36 (**Table 1-1**). The sumps were physically located within or near sites LHAAP-04, 18, 29, 39, 46, 47, 48, 35C(53), 35A(58), 59, and 66, and have been collectively designated as site LHAAP-35/36.

# 1.3 Document Organization

The field investigation activities conducted in 2006 (Shaw, 2006a,b) are summarized in **Section 2.0**. A brief description of processes that contributed wastewater to each sump, and the analytical results for soil samples associated with the sump, including those collected in previous studies, are described in **Section 3.0**. **Section 4.0** presents a comparison of chemical concentrations in samples collected subsequent to the 2002 and 2003 risk assessments to Risk

Based Screening Values (RBSVs) provided by the Texas Commission on Environmental Quality (TCEQ), and a discussion of potential risks associated with chemicals that exceed the RBSV concentrations. **Section 5.0** presents a summary of comparisons to regulatory values, and associated risks. References are provided in **Section 6.0**.

# 2.0 Field Investigation

Shaw collected soil samples near former sump locations according to the work plan (Shaw, 2006).

# 2.1 Methods

Borings were advanced at the sump locations in accordance with the investigation plan for sumps (Shaw, 2006a). All sampling locations were hand augured to 5 feet below ground surface (bgs) unless the planned boring terminated less than 5 feet bgs. No surface samples (0 to 0.5 feet bgs) were analyzed for volatile organic compounds (VOCs). Borings deeper than 5 feet bgs were advanced using direct push technology.

# 2.2 Sample Locations

Sample locations were selected upon review of existing information (Shaw, 2006). Because previous risk assessments showed that no further action is required at LHAAP-48 and -35C(53), sumps addressed in those assessments were excluded from this evaluation (**Table 1-1**).

Seven of the 145 sumps in LHAAP-35/36 were excluded from further investigation based on a review of results of previous information (USACE 1995; Thiokol, 1996; OHM, 1997; Jacobs, 2001, 2002b). Nineteen additional sumps and waste rack sumps were described in the previous risk assessments and evaluation reports for sites LHAAP-48/35C(53) and LHAAP-059, and were excluded from further sampling. Sump 084 and Sump 106 are located sufficiently close that the same soil samples served to characterize the associated soil potentially affected by both sumps. Although LHAAP-45 was transferred to the U.S. Fish and Wildlife Service, one waste rack sump located adjacent to the site, WRSump013, was included in this evaluation (**Table 1-1**).

For the purpose of investigation and presentation of results, the sumps were divided into subareas. Sub-Area 1 includes sumps located within site LHAAP-46 (**Figure 2-1**). Sub-Area 2 includes sumps located within LHAAP-47, and one sample from LHAAP-35B(37) (**Figure 2-2**). Sub-Area 3 includes sumps from LHAAP-04, 35A(58), 59, 60, 66, 68, and 69 (**Figure 2-3**). Sub-Area 4 includes sumps from LHAAP-18, and 39 (**Figure 2-4**). Sub-Area 5 Part 1 includes a sump located northwest of LHAAP-29 (**Figure 2-5**); Sub-Area 5 Part 2 includes a sump near LHAAP-45 (**Figure 2-6**).

The samples collected at each former sump location are presented in **Section 3.0**, which includes a brief description of the LHAAP processes in specific buildings, and process related chemicals that were related to each sump. This information was developed from RI reports (Jacobs, 2001, 2002a) and the subsequent environmental site assessment document (Plexus, 2005).

# 3.0 Sample Results

For each former sump location in LHAAP-35/36, this section presents a brief summary of production operations and the results of sampling and analysis associated with the sump. The results include both the post-2002 data (primarily from the 2006 investigation by Shaw) and the pre-2002 data that served as the basis for the earlier risk assessments (Jacobs, 2002b; Jacobs, 2003). A master footnote and abbreviation legend is provided with the tables.

# 3.1 Sump-001

Sump 001 is associated with Building P-1 at LHAAP-46. Building P-1 was used as an aluminum weighing building. The building stored metal powders used in the manufacture of the Atomic Explosion Simulator and signal/smoke flares (Plexus, 2005). Potential contaminants at Building P-1 include aluminum, boron, hexamethylenetetramine, magnesium, vinyl chloride, silicon, tungsten, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-1**.

# *3.2 Sump-002*

Sump 002 is associated with Building P-3 at LHAAP-46 Building P-3 was used as an oxidizer process building for blending and drying black powder and processing sodium nitrate. Building use included storage of lead oxide, barium nitrate, potassium perchlorate, and sodium oxalate used in the manufacture of signal/smoke flares (Plexus, 2005). Potential contaminants at Building P-3 include aluminum, barium chromate, cesium nitrate, iron oxide, barium nitrate, magnesium, perfluorooctanoic acid, potassium perchlorate, potassium nitrate, potassium sulfate, sodium nitrate, strontium nitrate, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-2**.

# *3.3 Sump-003*

Sump 003 is associated with Building P-3 at LHAAP-46 Building P-3 was used as an oxidizer process building for blending and drying black powder and processing sodium nitrate. Building use included storage of lead oxide, barium nitrate, potassium perchlorate, and sodium oxalate used in the manufacture of signal/smoke flares (Plexus, 2005). Potential contaminants at Building P-3 include aluminum, barium chromate, cesium nitrate, iron oxide, barium nitrate, magnesium, perfluorooctanoic acid, potassium perchlorate, potassium nitrate, potassium sulfate, sodium nitrate, strontium nitrate, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-3**.

#### 3.4 Sump-004

Sump 004 is associated with Building P-3 at LHAAP-46 Building P-3 was used as an oxidizer process building for blending and drying black powder and processing sodium nitrate. Building use included storage of lead oxide, barium nitrate, potassium perchlorate, and sodium oxalate used in the manufacture of signal/smoke flares (Plexus, 2005). Potential contaminants at Building P-3 include aluminum, barium chromate, cesium nitrate, iron oxide, barium nitrate, magnesium, perfluorooctanoic acid, potassium perchlorate, potassium nitrate, potassium sulfate, sodium nitrate, strontium nitrate, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-4**.

# *3.5 Sump-005*

Sump 005 is associated with Building P-3 at LHAAP-46. Building P-3 was used as an oxidizer process building for blending and drying black powder and processing sodium nitrate. Building use included storage of lead oxide, barium nitrate, potassium perchlorate, and sodium oxalate used in the manufacture of signal/smoke flares (Plexus, 2005). Potential contaminants at Building P-3 include aluminum, barium chromate, cesium nitrate, iron oxide, barium nitrate, magnesium, perfluorooctanoic acid, potassium perchlorate, potassium nitrate, potassium sulfate, sodium nitrate, strontium nitrate, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-5**.

# *3.6 Sump-006*

Sump 006 is associated with Building P-116 at LHAAP-46. Building P-116 was used as a mixing and consolidation building for illuminant mixing/consolidation, metal powder oxidizer and binder mixing, sodium nitrate handling, and expelling charge pack-out. In 1994, approximately 75 gallons of hydraulic oil leaked in the building (Plexus, 2005). Potential contaminants at P-116 include diesel, isopropyl alcohol, and potassium sulfate (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-6**.

# 3.7 Sump-007

Sump 007 is associated with Building P-116 at LHAAP-46. Building P-116 was used as a mixing and consolidation building for illuminant mixing/consolidation, metal powder oxidizer and binder mixing, sodium nitrate handling, and expelling charge pack-out. In 1994, approximately 75 gallons of hydraulic oil leaked in the building (Plexus, 2005). Potential contaminants at P-116 include diesel, isopropyl alcohol, and potassium sulfate (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-7**.

#### 3.8 Sump-008

Sump 008 is associated with Building P-117 at LHAAP-46. Building P-117 was used as a mixing and consolidation building for illuminant consolidation, sodium nitrate handling, 60/81mm pressing, and magnesium powder mixing. Mixers were cleaned using sawdust with methylene chloride (Plexus, 2005). Potential contaminants at Building P-117 include VOCs, semivolatile organic compounds (SVOCs), explosives and metals (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-8**.

# 3.9 Sump-009

Sump 009 is associated with Building P-117 at LHAAP-46. Building P-117 was used as a mixing and consolidation building for illuminant consolidation, sodium nitrate handling, 60/81mm pressing, and magnesium powder mixing. Mixers were cleaned using sawdust with methylene chloride (Plexus, 2005). Potential contaminants at Building P-117 include VOCs, SVOCs, explosives and metals (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-9**.

# 3.10 Sump-010

Sump 010 is associated with Building P-118 at LHAAP-46. Building P-118 was used as a small pyrotechnic item manufacturing building for pyrotechnic cartridge manufacturing involving sodium nitrate grinding, magnesium handling, trip flare consolidation, first fire dispensing, decontamination kit hand line operations, and pellet coating (Plexus, 2005). Potential contaminants at Building P-118 include acetone, diesel, isopropyl alcohol, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-10**.

# 3.11 Sump-011

Sump 011 is associated with Building P-118 at LHAAP-46. Building P-118 was used as a small pyrotechnic item manufacturing Building for pyrotechnic cartridge manufacturing involving sodium nitrate grinding, magnesium handling, trip flare consolidation, first fire dispensing, decontamination kit hand line operations, and pellet coating (Plexus, 2005). Potential contaminants at Building P-118 include acetone, diesel, isopropyl alcohol, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-11**.

# 3.12 Sump-012

Sump 012 is associated with Building P-118 at LHAAP-46. Building P-118 was used as a small pyrotechnic item manufacturing building for pyrotechnic cartridge manufacturing involving sodium nitrate grinding, magnesium handling, trip flare consolidation, first fire dispensing, decontamination kit hand line operations, and pellet coating (Plexus, 2005). Potential

contaminants at Building P-118 include acetone, diesel, isopropyl alcohol, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-12**.

# 3.13 Sump-013

Sump 013 is associated with Building P-118 at LHAAP-46. Building P-118 was used as a small pyrotechnic item manufacturing building for pyrotechnic cartridge manufacturing involving sodium nitrate grinding, magnesium handling, trip flare consolidation, first fire dispensing, decontamination kit hand line operations, and pellet coating (Plexus, 2005). Potential contaminants at Building P-118 include acetone, diesel, isopropyl alcohol, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-13**.

# 3.14 Sump-014

Sump 014 is associated with Building B-5 at LHAAP- 46. Building B-5 was used as a blender building. Potential contaminants at Building B-5 include SVOCs, VOCs, total petroleum hydrocarbons (TPH), metals, and explosives (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-14**.

# 3.15 Sump-015

Sump 015 is associated with Building B-7 at LHAAP-46. Building B-7 was used as a blender building for illuminant mixing and flare composition (Plexus, 2005). Potential contaminants at Building B-7 include acetone, aluminum, barium nitrate, boron, 2-butanone, cesium nitrate, cobalt napthenate, diesel, ferric oxide, hexamethylenetetramine, isopropyl alcohol, magnesium, potassium nitrate, potassium perchlorate, silicon, sodium nitrate, strontium nitrate, vinyl chloride, zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-15**.

# 3.16 Sump-016

Sump 016 is associated with Building B-7 at LHAAP-46. Building B-7 was used as a blender building for illuminant mixing and flare composition (Plexus, 2005). Potential contaminants at Building B-7 include Acetone, aluminum, barium nitrate, boron, 2-butanone, cesium nitrate, cobalt napthenate, diesel, ferric oxide, hexamethylenetetramine, isopropyl alcohol, magnesium, potassium nitrate, potassium perchlorate, silicon, sodium nitrate, strontium nitrate, vinyl chloride, zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-16**.

# 3.17 Sump-017

Sump 017 is associated with Building B-9 at LHAAP-46. Building B-9 was used as a pyrotechnic production building for illuminant consolidation and charging, spotting charge assembly and pack out, and flare composition drying (Plexus, 2005). Potential contaminants at Building B-9 include acetone, diesel, SVOCs, and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-17**.

#### 3.18 Sump-018

Sump 018 is associated with Building B-9 at LHAAP-46. Building B-9 was used as a pyrotechnic production building for illuminant consolidation and charging, spotting charge assembly and pack out, and flare composition drying (Plexus, 2005). Potential contaminants at Building B-9 include acetone, diesel, SVOCs, and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-18**.

# 3.19 Sump-019

Sump 019 is associated with Building B-10 at LHAAP-46. Building B-10 was used as a blender building to store metal powders and smoke charge powders in blender buckets used in the manufacture of the M142 Atomic Explosion Simulator. Mixing and blending of 105mm pyrotechnic rounds was also conducted in Building B-10 (Plexus 2004). Potential contaminants at Building B-10 cesium nitrate, potassium nitrate, and rubidium nitrate (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-19**.

# 3.20 Sump-020

Sump 020 is associated with Building B-11 at LHAAP-46. Building B-11 was used as a blender building for illuminant mixing, first fire mixing, flare/igniter composition and intermediate charge composition (Plexus, 2005). Potential contaminants at Building B-11 include acetone, aluminum, 2-butanone, barium nitrate, cobalt napthenate, isopropyl alcohol, magnesium, potassium nitrate, potassium perchlorate, silicon, strontium nitrate, vinyl chloride, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-20**.

# 3.21 Sump-021

Sump 021 is associated with Building B-12 at LHAAP-46. Building B-12 was constructed as a blender building and used for illuminant mixing, 4.2-inch slurry mixing, sound unit composition, flare composition mixing, and hand signal mixing (Plexus, 2005). Potential contaminants at Building B-12 include acetone, aluminum, 2-butanone, barium nitrate, cobalt napthenate, isopropyl alcohol, magnesium, potassium nitrate, potassium perchlorate, silicon, strontium nitrate, vinyl chloride, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-21**.

# 3.22 Sump-022

Sump 022 is associated with Building B-13 at LHAAP-46. Building B-13 was used as a blender building for illuminant drying, continuous illuminant mixing, continuous dry material mixing, M509 grenade manufacturing, and granulate flare composition/slider composition (Plexus, 2005). Potential contaminants at Building B-13 include acetone, fluoroelastomer, magnesium, tetrafluoroethylene (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-22**.

#### 3.23 Sump-023

Sump 023 is associated with Building B-14 at LHAAP-46. Building B-14 was used as a blender building to process the green and yellow flare composition for the manufacturing of signal/smoke/Illumination flares (Plexus, 2005). Potential contaminants include acetone, aluminum,2-butanone, barium nitrate, cobalt napthenate, isopropyl alcohol, magnesium, potassium perchlorate, silicon, sodium nitrate, strontium nitrate, vinyl chloride, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-23**.

# 3.24 Sump-024

Sump 024 is associated with Building B-15 at LHAAP-46. Building B-15 was used as a blender building and for M509 grenade manufacturing, 40mm granulation and drying, and illuminant curing (Plexus, 2005). Potential contaminants at Building B-15 include cesium nitrate, potassium nitrate, and rubidium nitrate (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-24**.

# 3.25 Sump-025

Sump 025 is associated with Building B-16 at LHAAP-46. Building B-16 was used as a blender building for propellant consolidation, black powder blending, heat-sealing expelling charges, 40mm delay consolidation, 155mm delay line, metal powders storage, and fuse production (Plexus, 2005). Potential contaminants at Building B-16 include potassium nitrate and sulfur (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-25**.

# 3.26 Sump-026

Sump 026 is associated with Shed C at LHAAP-46. Shed C was used for relay consolidation, heat sealing of expelling charges, black powder dispensing, sewing, expelling charge assembly, sound unit composition weighing and assembly, igniter assembly, and black powder dumping (Plexus, 2005). Potential contaminants at Shed C include potassium nitrate and sulfur (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-26**.

# 3.27 Sump-027

Sump 027 is associated with Building P-9 at LHAAP-46. Building P-9 was used as a bucket washing building for cleaning and degreasing metal parts (Plexus, 2005). Potential contaminants at Building P-9 include acetone, acrylic elastomer, SVOC, VOC (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-27**.

# 3.28 Sump-028

Sump 028 is associated with Building P-122 at LHAAP-46. Building P-122 was used as an oxidizer process building (Plexus, 2005). Potential contaminants are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-28**.

# 3.29 Sump-029

Sump 029 is associated with Building P-123 at LHAAP-46. Building P-123 was used as storage and processing building to weigh/store and transfer magnesium powder (Plexus, 2005). Potential contaminants are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-29**.

#### 3.30 Sump-030

Sump 030 is associated with Building 212-12 at LHAAP-46. Building 212-12 was used to consolidate the Time Train Ring for the M65A1 (60mm) Fuse (Plexus, 2005). Potential contaminants at Building 212-12 include aluminum, magnesium, SVOC, VOC, zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-30**.

# 3.31 Sump-031

Sump 031 is associated with Building 212-12 at LHAAP-46. Building 212-12 was used to consolidate the Time Train Ring for the M65A1 (60mm) Fuse (Plexus, 2005). Potential contaminants at Building 212-12 include aluminum, magnesium, SVOC, VOC, zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-31**.

# 3.32 Sump-032

Sump 032 is associated with Building 212-14 at LHAAP-46. Building 212-14 was used for pressing pyrotechnic mixes, illuminant consolidation, fuse delay consolidation, flare composition, black powder loading, and pellet drilling. Press operations were conducted using a 75-ton hydraulic press (Plexus, 2005). Potential contaminants at Building 212-14 include aluminum, diesel, magnesium, isopropyl alcohol, SVOCs, VOCs, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-32**.

# 3.33 Sump-033

Sump 033 is associated with Building 212-14 at LHAAP-46. Building 212-14 was used for pressing pyrotechnic mixes, illuminant consolidation, fuse delay consolidation, flare composition, black powder loading, and pellet drilling. Press operations were conducted using a 75-ton hydraulic press (Plexus, 2005). Potential contaminants at Building 212-14 include aluminum, diesel, magnesium, isopropyl alcohol, SVOCs, VOCs, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-33**.

# 3.34 Sump-034

Sump 034 is associated with Building 212-16 at LHAAP-46. Building 212-16 was used to press M206 pyrotechnic mixes (Plexus, 2005). Potential contaminants at Building 212-16 include magnesium, tetrafluoroethylene, methyl ethyl ketone (MEK), and arsenic (Shaw 2006). Results of soil sample analysis are shown in **Table 3-34**.

# 3.35 Sump-035

Sump 035 is associated with Building 212-18. Building 212-18 was used as a mill for pyrotechnic mixes involving groove and surge and drill and groove operations (Plexus, 2005). Potential contaminants at Building 212-18 include magnesium, tetrafluoroethylene, MEK, and arsenic (Shaw 2006). Results of soil sample analysis are shown in **Table 3-35**.

# 3.36 Sump-036

Sump 036 is associated with Building P-122 at LHAAP-46. Building P-122 was used as an oxidizer process building (Plexus, 2005). Potential contaminants at Building P-122 are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-36**.

# 3.37 Sump-037

Sump 037 is associated with Building 212-29 at LHAAP-46. Building 212-29 was used as a composition surge magazine for the screening and weighing of tetranitrocarbazole (Plexus, 2005). Potential contaminants at Building 212-29 are explosives (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-37**.

# 3.38 Sump-038

Sump 038 is associated with Building 212-32 at LHAAP-46. Building 212-32 was used for pellet grooving (Plexus, 2005). Potential contaminants at Building 212-32 are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-38**.

# 3.39 Sump-039

Sump 039 is associated with Building 212-33 at LHAAP-46. Building 212-33 was used for mixing first fire composition and intermediate charges, red phosphorous smoke mixture and trip flare charges (Plexus, 2005). Potential contaminants at Building 212-33 include acetone, barium chromate, isopropyl alcohol, potassium nitrate, potassium perchlorate, sulfur, SVOC, tungsten VOC (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-39**.

# 3.40 Sump-040

Sump 040 is associated with Building 212-33 at LHAAP-46. Building 212-33 was used for mixing first fire composition and intermediate charges, red phosphorous smoke mixture and trip

flare charges (Plexus, 2005). Potential contaminants at Building 212-33 include acetone, barium chromate, isopropyl alcohol, potassium nitrate, potassium perchlorate, sulfur, SVOC, tungsten VOC (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-40**.

# 3.41 Sump-041

Sump 041 is associated with Building 212-35 at LHAAP-46. Building 212-35 was used for mixing first fire composition and intermediate charges, smoke mixture and trip flare charges (Plexus, 2005). Potential contaminants at Building 212-35 include acetone, barium chromate, boron, magnesium, cesium nitrate, ethyl alcohol, fluoroelastomer copolymer, isopropyl alcohol, potassium nitrate, potassium perchlorate, and rubidium nitrate (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-41**.

# 3.42 Sump-042

Sump 042 is associated with Building 212-37 at LHAAP-46. Building 212-37 was used for raw material preparation, intermediate charge and first fire mix, smoke mixture charges and zirconium weighing (Plexus, 2005). Potential contaminants at Building 212-37 include acetone, barium chromate, boron, diesel, isopropyl alcohol, fluoroelastomer copolymer, isopropyl alcohol, magnesium, potassium nitrate, potassium perchlorate, sulfur, SVOCs, VOCs and tungsten (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-42**.

# 3.43 Sump-043

Sump 043 is associated with Building 212-38 at LHAAP-46. Building 212-38 was used for raw material preparation, intermediate charge and first fire mix, smoke mixture charges and zirconium weighing (Plexus, 2005). Potential contaminants at Building 212-38 include cesium nitrate, potassium nitrate, rubidium nitrate, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-43**.

# 3.44 Sump-044

Sump 044 is associated with Building 25-C at LHAAP-47. Building 25-C was used as an ammonium perchlorate grinding building (Plexus, 2005). Potential contaminants at Building 25-C include ammonium perchlorate, chlorates, nitrates (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-44**.

# 3.45 Sump-045

Sump 045 is associated with Building 25-C at LHAAP-47. Building 25-C was used as an ammonium perchlorate grinding building (Plexus, 2005). Potential contaminants at Building 25-C include ammonium perchlorate, chlorates, nitrates (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-45**.

# 3.46 Sump-046

00065846

Sump 046 is associated with Building 25-C at LHAAP-47. Building 25-C was used as an ammonium perchlorate grinding building (Plexus, 2005). Potential contaminants at Building 25-C include ammonium perchlorate, chlorates, nitrates (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-46**.

# 3.47 Sump-047

Sump 047 is associated with Building 25-D at LHAAP 47. Building 25-D was used as a blender building and subsequently modified to receive bulk ammonium perchlorate shipments (Plexus, 2005). Potential contaminants at Building 25-D include chlorates, magnesium carbonate, nitrates, perchlorates, and sodium nitrate (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-47**.

#### 3.48 Sump-048

Sump 048 is associated with Building 26-E at LHAAP-47. Building 26-E was used as a standardization building for perchlorate handling, mixing and casting composition for the 155-millimeter (mm) rocket assisted projectile, phosphorous weighing and drying, pyrotechnics dispensing, and solvent dispensing (Plexus, 2005). Potential contaminants at Building 26-E include aluminum, chlorates, diesel, isopropyl alcohol, magnesium, magnesium carbonate, nitrates, perchlorates, SVOCs, sodium nitrate, VOCs, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-48**.

# 3.49 Sump-049

Sump 049 is associated with Building 26-E at LHAAP-47. Building 26-E was used as a standardization building for perchlorate handling, mixing and casting composition for the 155-mm rocket assisted projectile, phosphorous weighing and drying, pyrotechnics dispensing, and solvent dispensing (Plexus, 2005). Potential contaminants at Building 26-E include aluminum, chlorates, diesel, isopropyl alcohol, magnesium, magnesium carbonate, nitrates, perchlorates, SVOCs, sodium nitrate, VOCs, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-49**.

#### 3.50 Sump-050

Sump 050 is associated with Building 26-E at LHAAP-47. Building 26-E was used as a standardization building for perchlorate handling, mixing and casting composition for the 155-mm rocket assisted projectile, phosphorous weighing and drying, pyrotechnics dispensing, and solvent dispensing (Plexus, 2005). Potential contaminants at Building 26-E include aluminum, chlorates, diesel, isopropyl alcohol, magnesium, magnesium carbonate, nitrates,



perchlorates, SVOCs, VOCs, sodium nitrate, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-50**.

#### 3.51 Sump-051

Sump 051 is associated with Building 26-E at LHAAP-47. Building 26-E was used as a standardization building for perchlorate handling, mixing and casting composition for the 155-mm rocket assisted projectile, phosphorous weighing and drying, pyrotechnics dispensing, and solvent dispensing (Plexus, 2005). Potential contaminants at Building 26-E include Aluminum, chlorates, diesel, isopropyl alcohol, magnesium, magnesium carbonate, nitrates, perchlorates, SVOCs, sodium nitrate, VOCs, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-51**.

#### *3.52 Sump-052*

Sump 052 is associated with Building 28-G at LHAAP-47. Building 28-G was used as a change house for motor case preparation. Potential contaminants at Building 28-G include SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-52**.

# 3.53 Sump-053

Sump 053 is associated with Building 29-D at LHAAP-47. Building 29-D was used as an oxidizer grinding building (Plexus, 2005). Potential contaminants at Building 29-D include chlorates, magnesium carbonate, nitrates, perchlorates, and sodium nitrate (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-53**.

# 3.54 Sump-054

Sump 054 is associated with Building 31-G at LHAAP-47. Building 31-G was used for fuel material preparation, weighing and mixing. (Plexus, 2005). Potential contaminants at Building 31-G include aluminum, magnesium, oxamide, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-54**.

# 3.55 Sump-055

Sump 055 is associated with Building 31-G at LHAAP-47. Building 31-G was used for fuel material preparation, weighing and mixing. (Plexus, 2005). Potential contaminants at Building 31-G include aluminum, magnesium, oxamide, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-55**.

# *3.56 Sump-056*

Sump 056 is associated with Building 32-H at LHAAP-47. Building 32-H was used as a fixture preparation building for cleaning/degreasing metal parts prior to spray coating with Teflon

(Plexus, 2005). Potential contaminants at Building include SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-56**.

# 3.57 Sump-057

Sump 057 is associated with Building 33-G at LHAAP-47. Building 33-G was used as a fuel mixing building. A tank farm was associated with this building (Plexus, 2005). Potential contaminants at Building 33-G are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-57**.

# 3.58 Sump-058

Sump 058 is associated with Building 36-B at LHAAP-47. Building 36-B was used as a sample preparation building (Plexus, 2005). Potential contaminants at Building 36-B include polybutadiene acrylic acid (PBAA) and polysulfide perchlorate (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-58**.

# 3.59 Sump-059

Sump 059 is associated with Building 41-E at LHAAP-47. Building 41-E was used as a propellant mixing building (Plexus, 2005). Potential contaminants at Building 41-E include PBAA and polysulfide perchlorate (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-59**.

# 3.60 Sump-060

Sump 060 is associated with Building 42-E at LHAAP-47. Building 42-E was used for propellant mixing (Plexus, 2005). Potential contaminants at Building include PBAA and polysulfide perchlorate (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-60**.

# 3.61 Sump-061

Sump 061 is associated with Building 42-H at LHAAP-47. Building 42-H was used for solid rocket propellant production (Plexus, 2005). Potential contaminants at Building include PBAA and polysulfide perchlorate (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-61**.

# 3.62 Sump-062

Sump 062 is associated with Building 45-E at LHAAP-47. Building 45-E was used as a casting, curing, and finishing building for rocket motors. Lining, patching and caulking of the first and second stage of Pershing Rocket motors was performed in this building (Plexus, 2005). Potential contaminants at Building 45-E include PBAA, polysulfide perchlorate, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-62**.

# 3.63 Sump-063

Sump 063 is associated with Building 45-E at LHAAP-47. Building 45-E was used as a casting, curing, and finishing building for rocket motors. Lining, patching and caulking of the first and second stage of Pershing Rocket motors was performed in this building (Plexus, 2005). Potential contaminants at Building 45-E include PBAA, polysulfide perchlorate, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-63**.

# 3.64 Sump-064

Sump 064 is associated with Building 45-E at LHAAP-47. Building 45-E was used as a casting, curing, and finishing building for rocket motors. Lining, patching and caulking of the first and second stage of Pershing Rocket motors was performed in this building (Plexus, 2005). Potential contaminants at Building 45-E include PBAA, polysulfide perchlorate, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-64**.

# 3.65 Sump-065

Sump 065 is associated with Building 45-E at LHAAP-47. Building 45-E was used as a casting, curing, and finishing building for rocket motors. Lining, patching and caulking of the first and second stage of Pershing Rocket motors was performed in this building (Plexus, 2005). Potential contaminants at Building 45-E include PBAA, polysulfide perchlorate, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-65**.

# 3.66 Sump-066

Sump 066 is associated with Building 45-E at LHAAP-47. Building 45-E was used as a casting, curing, and finishing building for rocket motors. Lining, patching and caulking of the first and second stage of Pershing Rocket motors was performed in this building (Plexus, 2005). Potential contaminants at Building 45-E include PBAA, polysulfide perchlorate, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-66**.

# 3.67 Sump-067

Sump 067 is associated with Building 45-E at LHAAP-47. Building 45-E was used as a casting, curing, and finishing building for rocket motors. Lining, patching and caulking of the first and second stage of Pershing Rocket motors was performed in this building (Plexus, 2005). Potential contaminants at Building 45-E include PBAA, polysulfide perchlorate, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-67**.

# 3.68 Sump-068

Sump 068 is associated with Building at LHAAP-47. Building 46-A was used as a casting and curing building for production of PBX explosive propellant (Plexus, 2005). Potential

contaminants at Building 46-A include SVOCs, VOCs, TPH, metals and explosives (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-68**.

#### 3.69 Sump-069

Sump 069 is associated with Building 46-B at LHAAP-47. Building 46-Bwas used as a finisher building for motor finishing, initially, and subsequently for propellant mixing (Plexus, 2005). Potential contaminants at Building 46-B include PBAA, polysulfide perchlorate, SVOCs, and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-69**.

# 3.70 Sump-070

Sump 070 is associated with Building 50-G at LHAAP-47. Building 50-G was used as a cleaning bay to clean/degrease rocket motor parts (Plexus, 2005). Potential contaminants at Building 50-G include diesel, PBAA, polysulfide perchlorate, SVOCs, and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-70**.

# 3.71 Sump-071

Sump 071 is associated with Building 54-F at LHAAP-47. Building 54-F was used as a motor casting building for casting and curing of motor rockets, illuminant drying, grenade fuse assembly, pellet manufacturing, and flare composition (Plexus, 2005). Potential contaminants at Building 54-F include PBAA and polysulfide perchlorate (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-71**.

# 3.72 Sump-072

Sump 072 is associated with Building 54-F at LHAAP-47. Building 54-F was used as a motor casting building for casting and curing of motor rockets, pellet coating, ammonium perchlorate grinding and flare composition (Plexus, 2005). Potential contaminants at Building 54-F include PBAA and polysulfide perchlorate (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-72**.

# 3.73 Sump-073

Sump 073 is associated with Building 54-G at LHAAP-47. Building 54-G was used as a motor casting building for casting and curing of motor rockets, illuminant drying, grenade fuse assembly, pellet manufacturing, and flare composition (Plexus, 2005). Potential contaminants at Building 54-G include acetone, diesel, hexane, isopropyl alcohol, magnesium, PBAA, perfluorooctanoic acid, potassium sulfate, polysulfide perchlorate, SVOCs, and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-73**.

# 3.74 Sump-074

00065851

Sump 074 is associated with Building 54-G at LHAAP-47. Building 54-G was used as a motor casting building for casting and curing of motor rockets, illuminant drying, grenade fuse assembly, pellet manufacturing, and flare composition (Plexus, 2005). Potential contaminants at Building 54-G include acetone, diesel, hexane, isopropyl alcohol, magnesium, PBAA, perfluorooctanoic acid, potassium sulfate, polysulfide perchlorate, SVOCs, and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-74**.

# 3.75 Sump-075

Sump 075 is associated with Building 54-G at LHAAP-47. Building 54-G was used as a motor casting building for casting and curing of motor rockets, illuminant drying, grenade fuse assembly, pellet manufacturing, and flare composition (Plexus, 2005). Potential contaminants at Building 54-G include acetone, diesel, hexane, isopropyl alcohol, magnesium, PBAA, perfluorooctanoic acid, potassium sulfate, polysulfide perchlorate, SVOCs, and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-75**.

# 3.76 Sump-076

Sump 076 is associated with Building 54-H at LHAAP-47. Building 54-H was used as a motor casting building for grenade fuse assembly, flare composition, and potassium perchlorate drying (Plexus, 2005). Potential contaminants at Building 54-H include acetone, diesel, hexane, isopropyl alcohol, magnesium, perfluorooctanoic acid, potassium sulfate, SVOCs, and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-76**.

# 3.77 Sump-077

Sump 077 is associated with Building 54-H at LHAAP-47. Building 54-H was used as a motor casting building for grenade fuse assembly, flare composition, and potassium perchlorate drying (Plexus, 2005). Potential contaminants at Building 54-H include acetone, diesel, hexane, isopropyl alcohol, magnesium, perfluorooctanoic acid, potassium sulfate, SVOCs, and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-77**.

# 3.78 Sump-078

Sump 078 is associated with Building 68-C at LHAAP-47. Building 68-C was used finishing building for black powder surge, fuse assembly and button bomb manufacturing (Plexus, 2005). Potential contaminants at Building 68-C include red phosphorous, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-78** 

#### 3.79 Sump-079

Sump 079 is associated with Building 68-C at LHAAP-47. Building 68-C was used finishing building for black powder surge, fuse assembly and button bomb manufacturing (Plexus, 2005). Potential contaminants at Building 68-C include red phosphorous, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-79**.

#### 3.80 Sump-080

Sump 080 is associated with Building 68-C at LHAAP-47. Building 68-C was used finishing building for black powder surge, fuse assembly and button bomb manufacturing (Plexus, 2005). Potential contaminants at Building 68-C include red phosphorous, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-80**.

#### 3.81 Sump-081

Sump 081 is associated with Building 68-F at LHAAP-47. Building 68-F was used as a finishing building for assembly and packaging of illuminating mortars, illuminant and aluminum consolidation, fuse rework, first fire dispensing, and consolidation for red phosphorous smoke (Plexus, 2005). Potential contaminants at Building 68-F include metals, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-81**.

#### 3.82 Sump-082

Sump 082 is associated with Building 68-F at LHAAP-47. Building 68-F was used as a finishing building for assembly and packaging of illuminating mortars, illuminant and aluminum consolidation, fuse rework, first fire dispensing, and consolidation for red phosphorous smoke (Plexus, 2005). Potential contaminants at Building 68-F include metals, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-82**.

# 3.83 Sump-083

Sump 083 is associated with Building 68-F at LHAAP-47. Building 68-F was used as a finishing building for assembly and packaging of illuminating mortars, illuminant and aluminum consolidation, fuse rework, first fire dispensing, and consolidation for red phosphorous smoke (Plexus, 2005). Potential contaminants at Building 68-F include metals, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-83**.

# 3.84 Sump-084

Sump 084 is associated with Building 68-G at LHAAP-47. Building 68-G was used as a finishing building for button bomb loading and assembly, practice rocket manufacturing, first fire and black powder dispensing, rocket fuse testing and manufacture of M115 and M116
simulators (Plexus, 2005). Potential contaminants at Building 68-G are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-84**.

# 3.85 Sump-085

Sump 085 is associated with Building 68-G at LHAAP-47. Building 68-G was used as a finishing building for button bomb loading and assembly, practice rocket manufacturing, first fire and black powder dispensing, rocket fuse testing and manufacturing of M115 and M116 simulators (Plexus, 2005). Potential contaminants at Building 68-G are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-85** 

# 3.86 Sump-086

Sump 086 is associated with Building 68-G at LHAAP-47. Building 68-G was used as a finishing building for button bomb loading and assembly, practice rocket manufacturing, first fire and black powder dispensing, rocket fuse testing and manufacturing of M115 and M116 simulators (Plexus, 2005). Potential contaminants at Building 68-G are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-86**.

# 3.87 Sump-087

Sump 087 is associated with Building 68-G at LHAAP-47. Building 68-G was used as a finishing building for button bomb loading and assembly, practice rocket manufacturing, first fire and black powder dispensing, rocket fuse testing and manufacturing of M115 and M116 simulators (Plexus, 2005). Potential contaminants at Building 68-G are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-87**.

# 3.88 Sump-088

Sump 088 is associated with Building 68-G at LHAAP-47. Building 68-G was used as a finishing building for button bomb loading and assembly, practice rocket manufacturing, first fire and black powder dispensing, rocket fuse testing and manufacturing of M115 and M116 simulators (Plexus, 2005). Potential contaminants at Building 68-G are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-88**.

# 3.89 Sump-089

Sump 089 is associated with Building 68-G at LHAAP-47. Building 68-G was used as a finishing building for button bomb loading and assembly, practice rocket manufacturing, first fire and black powder dispensing, rocket fuse testing and manufacturing of M115 and M116 simulators (Plexus, 2005). Potential contaminants at Building 68-G are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-89**.

# 3.90 Sump-090

00065854

Sump 090 is associated with Building 68-G at LHAAP-47. Building 68-G was used as a finishing building for button bomb loading and assembly, practice rocket manufacturing, first fire and black powder dispensing, rocket fuse testing and manufacture of M115 and M116 simulators (Plexus, 2005). Potential contaminants at Building 68-G are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-90** 

# 3.91 Sump-091

Sump 091 is associated with Building 75-I at LHAAP-47. Building 75-I was used as a finishing and packing building for cleaning and spray coating motors and parts, black powder drying, pellet extruding, and charge consolidation (Plexus, 2005). Potential contaminants at Building 75-I include aluminum, magnesium, SVOCs, VOCs, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-91**.

# 3.92 Sump-092

Sump 092 is associated with Building 75-I at LHAAP-47. Building 75-I was used as a finishing and packing building for cleaning and spray coating motors and parts, black powder drying, pellet extruding, and charge consolidation (Plexus, 2005). Potential contaminants at Building 75-I include aluminum, magnesium, SVOCs, VOCs, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-92** 

# 3.93 Sump-093

Sump 093 is associated with Building 75-I at LHAAP-47. Building 75-I was used as a finishing and packing building for cleaning and spray coating motors and parts, black powder drying, pellet extruding, and charge consolidation (Plexus, 2005). Potential contaminants at Building 75-I include aluminum, magnesium, SVOCs, VOCs, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-93**.

# 3.94 Sump-106

Sump 106 is associated with Building 401 at LHAAP-66. Building 401 is a gas powered heating plant/power house located at LHAAP-66 (Plexus, 2005). Potential contaminants at Building 401 include metals, VOCs, SVOCs and polychlorinated biphenyls (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-94**.

# *3.95 Sump-107*

Sump 107 is associated with Building 403 at LHAAP-46. Building 403 was used as a pyrotechnic production operations building for pyrotechnic material pressing, pellet consolidation and charge assembly (Plexus, 2005). Potential contaminants at Building 403

include ethyl acetate and magnesium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-95**.

### 3.96 Sump-108

Sump 108 is associated with Building 406 at LHAAP-46. Building 406 was used as a chemical process building (Plexus, 2005). Potential contaminants at Building 406 include metals and explosives (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-96**.

# 3.97 Sump-109

Sump 109 is associated with Building 408 at LHAAP-46. Building 408 was used as a mixing and pressing building for pyrotechnic items loading, assembly and packing (Plexus, 2005). Potential contaminants at Building 408 include perchlorates, metals, and explosives (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-97**.

# 3.98 Sump-110

Sump 110 is associated with Building 207 at LHAAP-46. Building 207 was used as a maintenance calibration facility and as a research and development laboratory for a smoke test device (Plexus, 2005). Potential contaminants at Building 207 include metals, SVOCs, and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-98**.

# 3.99 Sump-111

Sump 111 is associated with Building 722-P at LHAAP-35A. Building 722-P was used as a paint shop (Plexus, 2005). Potential contaminants at Building 722-P include metals, SVOCs, VOCs and TPH diesel range organic-gasoline range organic (DRO-GRO) (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-99**.

# 3.100 Sump-112

Sump 112 is associated with Building 722-P at LHAAP-35A. Building 722-P was used as a paint shop (Plexus, 2005). Potential contaminants at Building 722-P include metals, SVOCs, VOCs and TPH DRO-GRO (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-100**.

# 3.101 Sump-113

Sump 113 is associated with Building 744 at LHAAP-35A. Building 744 was used as a service station in association with a grease rack at Building 744-A. (Plexus, 2005). Potential contaminants at Building 744 are unknown. For Building 744-A potential contaminants include metals, SVOCs, VOCs and TPH DRO-GRO (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-101**.

# 3.102 Sump-114

Sump 114 is associated with Building 25-X at LHAAP-39. Building 25-X was used as a cleaning slab and pit for cleaning containers that once carried explosive waste (Plexus, 2005). Potential contaminants at Building 25-X include VOCs, SVOCs, and explosives (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-102**.

# 3.103 Sump-115

Sump 115 is associated with Building 33-X at LHAAP-18. Building 33-X was used as a general-purpose storage shed (Plexus, 2005). Potential contaminants at Building 33-X are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-103**.

# 3.104 Sump-116

Sump 116 is associated with Building 37-X at LHAAP-18. Building 37-X was used as an air curtain destructor (Plexus, 2005). Potential contaminants at Building 37-X are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-104**.

# 3.105 Sump-117

Sump 117 is associated with Building 744-A at LHAAP-58. Building 744-A was used as a grease rack (Plexus, 2005). Potential contaminants at Building 744-A include metals, SVOCs, VOCs, and TPH DRO-GRO (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-105**.

# 3.106 Sump-118

Sump 118 is associated with Building 813, an independent production facility located northwest of LHAAP-29. Building 813 was used for assembly of pyrotechnic items (Plexus, 2005). Potential contaminants at Building 813 include SVOCs, VOCs, and TPH DRO-GRO (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-106**.

# 3.107 Sump-121

Sump 121 is associated with Building 32-H at LHAAP-47. Building 32-H was used as a fixture preparation building spray coating metal parts with Teflon, and degreasing with trichloroethylene, and Teflon curing in ovens (Plexus, 2005). Potential contaminants at Building 32-H include SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-107**.

# 3.108 Sump-122

Sump 122 is associated with Building 401-C at LHAAP-04. Building 401-C was used for wastewater storage (Plexus, 2005). Potential contaminants at Building 401-C include metals,

SVOCs, VOCs, TPH DRO-GRO, herbicides and pesticides (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-108**.

# 3.109 Sump-125

Sump 125 is associated with Building 723 at LHAAP-58. Building 723 was used as a fixed laundry facility (Plexus, 2005). Potential contaminants at Building 723 include chlorinated solvents (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-109**.

# 3.110 WRSump-004

WRSUMP004 is associated with Building P-1 at LHAAP-46. Building P-1 was used as an aluminum weighing building. The building stored metal powders used in the manufacturing of the Atomic Explosion Simulator and signal/smoke flares (Plexus, 2005). Potential contaminants at Building P-1 include aluminum, boron, hexamethylenetetramine, magnesium, vinyl chloride, silicon, tungsten, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-110**.

# 3.111 WRSump-005

WRSUMP005 is associated with Building P-117 at LHAAP-46. Building P-117 was used as a mixing and consolidation building for illuminant consolidation, sodium nitrate handling, 60/81mm pressing, and magnesium powder mixing. Mixers were cleaned using sawdust with methylene chloride (Plexus, 2005). Potential contaminants at Building P-117 include VOCs, SVOCs, explosives and metals (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-111**.

# 3.112 WRSump-006

WRSUMP006 is associated with Building P-118 at LHAAP-46. Building P-118 was used as a small pyrotechnic item manufacturing building for pyrotechnic cartridge manufacturing involving sodium nitrate grinding, magnesium handling, trip flare consolidation, first fire dispensing, decontamination kit hand line operations, and pellet coating (Plexus, 2005). Potential contaminants at Building P-118 include acetone, diesel, isopropyl alcohol, SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-112**.

# 3.113 WRSump-007

WRSUMP007 is associated with Building P-122 at LHAAP-46. Building P-122 was used as an oxidizer process building (Plexus, 2005). Potential contaminants are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-113**.

# 3.114 WRSump-008

WRSUMP008 is associated with Building B-8 at LHAAP-46. Building B-8 was used as a blender building for production of the M21 Simulator and pyrotechnic material blending (Plexus, 2005). Potential contaminants at Building B-8 include explosives (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-114**.

# 3.115 WRSump-009

WRSUMP009 is associated with Building S-113 at LHAAP-46. Potential contaminants at Building S-113 include SVOCs, VOCs, explosives and metals (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-115**.

# 3.116 WRSump-010

WRSUMP010 is associated with Building P-12 at LHAAP-46. Building P-12 was used for pyrotechnic production. Potential contaminants at Building P-12 include SVOCs, VOCs, explosives and metals (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-116**.

# 3.117 WRSump-011

WRSUMP011 is associated with Building B-13 at LHAAP-46. Building B-13 was used as a blender building for illuminant composition (Plexus, 2005). Potential contaminants at Building B-13 include SVOCs and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-117**.

# 3.118 WRSump-012

WRSUMP012 is associated with Building P-113 at LHAAP-46. Building B-13 was used as a blender building for illuminant drying, continuous illuminant mixing, continuous dry material mixing, M509 grenade manufacturing, and granulate flare composition/slider composition (Plexus, 2005). Potential contaminants at Building B-13 include acetone, fluoroelastomer, magnesium, tetrafluoroethylene (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-118**.

# 3.119 WRSump-013

WRSUMP013 is associated with LHAAP-45, the Magazine Area, which is described as a munitions storage area with a total area of more than 800 acres consisting of 58 bunkers. The bunkers were used to store munitions products, and was in use from 1942 through 1995. WRSUMP013 is located in the vicinity of the loading dock area near bunker 811-50 outside the southwest site boundary of LHAAP-45 (Plexus, 2005). Results of soil sample analysis are shown in **Table 3-119**.

# 3.120 WRSump-014

WRSUMP014 is associated with Building 29-A at LHAAP-37. Building 29-A was used control and chemistry lab for raw material testing and some bench-scale production (Plexus, 2005). Potential contaminants at Building 29-A include SVOCs, VOCs, metals and explosives (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-120**.

# 3.121 WRSump-015

WRSUMP015 is associated with Building 212-14 at LHAAP-15. Building 212-14 was used for pressing pyrotechnic mixes, illuminant consolidation, fuse delay consolidation, flare composition, black powder loading, and pellet drilling. Press operations were conducted using a 75-ton hydraulic press (Plexus, 2005). Potential contaminants at Building 212-14 include aluminum, diesel, magnesium, isopropyl alcohol, SVOCs, VOCs, and zirconium (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-121**.

# 3.122 WRSump-016

WRSUMP016 is associated with Building 407 at LHAAP-46. Building 407 was used for illuminant testing (Plexus, 2005). Potential contaminants at Building 407 include SVOCs, VOCs and metals (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-122**.

# 3.123 WRSump-017

WRSUMP017 is associated with Building 68-G at LHAAP-47. Building 68-G was used as a finishing building for button bomb loading and assembly, practice rocket manufacturing, first fire and black powder dispensing, rocket fuse testing and manufacturing of M115 and M116 simulators (Plexus, 2005). Potential contaminants at Building 68-G are unknown (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-123**.

# 3.124 WRSump-018

WRSUMP018 is associated with Building 54-H at LHAAP-47. Building 54-H was used as a motor casting building for grenade fuse assembly, flare composition, and potassium perchlorate drying (Plexus, 2005). Potential contaminants at Building 54-H include acetone, diesel, hexane, isopropyl alcohol, magnesium, perfluorooctanoic acid, potassium sulfate, SVOCs, and VOCs (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-124**.

# 3.125 WRSump-019

WRSUMP019 is associated with Building 212-20 at LHAAP-19. Building 212-20 was used for pyrotechnic production (Plexus, 2005). Potential contaminants at Building 212-20 include SVOCs, VOCs, TPH, metals and explosives (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-125**.

# 3.126 WRSump-021

WRSUMP021 is associated with Building P-11 at LHAAP-46. Building P-11 was used for pyrotechnic production (Plexus, 2005). Potential contaminants at Building P-11 include SVOCs, VOCs, TPH, metals and explosives (Shaw, 2006). Results of soil sample analysis are shown in **Table 3-126**.

# 4.0 Data Evaluation

Chemicals of potential concern (COPCs) for possible further consideration at LHAAP-35/36 were identified from the results shown in **Tables 3-1** through **3-126** by following criteria provided in the TCEQ Risk Reduction Rule (RRR) given in Title 30 of the Texas Administrative Code Chapter 335 (30 TAC §335).

Analytical data were evaluated as follows:

- Samples with all validation qualifiers were included in the residential risk assessment except for "R"-qualified data, which were rejected from the data set.
- "U"- qualified data indicate undetected concentrations below the method detection limit (MDL) shown
- "J"- qualified data indicate estimated concentrations detected with concentrations measured between the MDL and the method quantitation limit (MQL) value shown
- "E"- qualified data indicate measurements exceeding the upper calibration limit, therefore, the concentration is estimated.

Samples collected prior to 2002 were evaluated in previous risk assessments (Jacobs, 2002b; 2003). Because potential health risks associated with these samples have been evaluated, and were found to be within acceptable limits, they are not evaluated in this document. This evaluation addresses additional samples collected in 2006 at selected sumps, where adequate data was previously not available, to determine whether the soil around the sumps posed human health risk.

The COPCs for the LHAAP-35/36 soil evaluation were identified using risk-based screening criteria developed from 30 TAC §335 and subsequent guidance (TCEQ, 1998, 2001, 2003) to identify chemicals that would contribute significantly to human health risk.

Data from soil near former sump locations were grouped according to LHAAP sites and Sub-Areas (**Figures 2-1** through **2-6**) to identify and evaluate COPCs. This grouping allows the evaluation of COPCs at sump locations in the context of previous assessments, and is consistent with the objective to determine whether the additional data would change the conclusions of previous risk assessments (**Section 1.1**).

# 4.1 Risk-Based Screening

Essential human nutrients (calcium, chloride, iron, magnesium, potassium, and sodium) were eliminated from further consideration as COPCs (TCEQ, 1998, 2001, 2003).

A risk-based screening step was used to identify chemicals that would contribute significantly to human health risk. The RBSVs used are given in TCEQ (1998) guidance and in tables included in this chapter (TCEQ, 2006). The RBSVs are concentrations that are protective of human health exposure via ingestion, inhalation, and dermal absorption pathways at a 1E-06 target risk level for carcinogens and a 0.1 target hazard quotient for noncarcinogens. In cases where contaminants have both carcinogenic and noncancer toxicity factors, the RBSV represents the lower (more conservative) value. The RBSVs are protective of both residential and commercial/industrial land-use scenarios.

The RBSV values for TPH components analyzed according to TCEQ Method TX1005 were developed as follows:

- For results reported as "Carbon Range C12-C28 and Carbon Range C28-C35" concentrations, the value used is the lowest of RBSVs for >12-16 C, >16-21 C, and >21-35 C (aromatic) boiling fraction of TPH, given in TCEQ (2006) guidance (4.0E+02 milligrams per kilogram [mg/kg]).
- For results reported as "Carbon Range C6-C12" concentrations, the value used is the RBSV for the >8C-C10 (aromatic) boiling fraction of TPH, given in TCEQ (2006) guidance (1.7E+02 mg/kg).

# 4.1.1 Definitions

Terms used in this report to describe concentrations at or near the detection limit are defined as follows:

*Practical quantitation limit (PQL). The PQL* is the concentration of the lowest non-zero standard in the laboratory's calibration curve adjusted for laboratory reagent matrix type and sample size. The PQL is analogous to the MQL reported by the laboratory and described in Section 7 of SW846-Method 8000B. The PQL is used under the 30 TAC 335 rule to evaluate the capability of the analytical method used by the laboratory to quantitate the chemicals at concentrations below a regulatory level.

When the PQL of the most sensitive standard available method is greater than the regulatory level, the PQL from that method is used as the regulatory limit in lieu of the regulatory level as allowed in 30 TAC 335.

Sample quantitation limit (SQL). The SQL is the PQL adjusted for sample-specific factors affecting the quantitation of the chemical measured in an environmental sample, such as dilution or moisture content, and flagged with a "U" qualifier to indicate the chemical was not detected in the in the sample. Some samples required dilution to quantitate a chemical initially present at high concentrations that exceeded the linear range of instrument response. Other dilutions were required by matrix interference, (e.g., soil properties that interfere with an extraction step, or an

extract that could not be evaporated down to the required 1mL volume before analysis). For such samples, the analyst prepares samples with increasing dilution factors. The analytical results are reported for the lowest dilution that provides measurements within the linear response range, and meets quality control criteria. The diluted samples are identified in Section 4 tables by showing the dilution factor for each sample.

*Method detection limit (MDL).* The MDL the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from the analysis of a sample in a given matrix type containing the analyte (TCEQ, 1998, Appendix B.1.1.2).

The laboratory establishes the MDL for the chemical and verifies the value on at least a quarterly basis using a detectability check sample (DCS) to demonstrate that the laboratory can detect the chemical at that MDL. The DCS is a laboratory reagent grade matrix sample spiked with the chemical at or within two times the laboratory's MDL and carried through the entire sample preparation and analysis procedures.

*Sample detection limit (SDL).* The SDL is the laboratory's MDL for the chemical adjusted for sample-specific factors affecting the detection of the chemical measured in an environmental sample, such as dilution or percent moisture, and flagged or qualified with a "U" or "<" to indicate the chemical was not detected in the sample. As agreed upon between the TCEQ and LHAAP during a May 17, 2007 telephone conference, the SDL is used in this document to report nondetected results for chemicals only when the PQL is being used as the regulatory limit for the chemical.

*Method Quantitation Limit.* The MQL is the concentration of the lowest non-zero standard in the laboratory's calibration curve. MQL values that were provided by the analytical laboratory for its quality assurance program, and which meets the SW-846 requirements for the method (USEPA, 1997) were used in the screening step.

*Background.* For metals, a screening comparison to LHAAP background concentrations was used to determine whether detected metal concentrations might be related to LHAAP operations or naturally occurring background levels. The LHAAP-specific background concentrations for soil were developed using data that represent background concentrations for surface soil (0-0.5 feet bgs) and subsurface soil (1.5-2.5 feet bgs) (Shaw, 2004b). Because the samples collected at LHAAP-35/36 sumps were taken at several depth intervals, the depth interval of surface and subsurface samples for sumps and background soil data do not correspond exactly. Therefore, the LHAAP-35/36 concentrations were compared to the lower of surface and subsurface background concentrations. This approach provides a more conservative evaluation.

Based on TCEQ recommendations, 95% upper prediction limits (UPLs) of the background data sets (Shaw, 2004b) were calculated and used in this evaluation. The 95% UPL value represents the concentration that will be above the next single measurement with 95 percent confidence, and was calculated as follows.

The distributions of background concentrations are shown in the original soil background document (Shaw, 2004b) and are repeated in **Table 4-1**. If the background data have either the normal or lognormal distribution the 95% UPL was calculated according to the equation (USEPA, 1992):

UPL<sub>0.95</sub> = X + 
$$t_{n-1,0.95}$$
 x S x  $(1+1/n)^{1/2}$  Equation 1

where:

| I             | UPL <sub>0.95</sub> | = | the 95% UPL   |
|---------------|---------------------|---|---|
| 2             | X                   | = | mean background concentration                               |
| t<br>confider | n-1,0.95            | = | Student's t value for n-1 degrees of freedom and 95 percent |
| S             | 5                   | = | standard deviation of the mean                              |

n = number of samples

If the data were shown to be both normally and lognormally distributed, the distribution having the higher p value above 0.05 was used for the 95% UPL calculation. If the data were lognormally distributed, the 95% UPL value used (**Table 4-1**) is the antilogarithm of the value calculated by Equation 1.

Nonparametric methods were used if the data do not have either the normal or lognormal distribution. The 95% UPL concentration was determined by ranking the data from highest to lowest and calculating the 95<sup>th</sup> percentile rank according to the equation:

$$UPL_{0.95} = 95^{th}$$
 percentile = 0.95(n+1) Equation 2

where:

 $UPL_{0.95}$  = concentration occupying the 95<sup>th</sup> percentile rank

 $95^{\text{th}}$  percentile = the  $95^{\text{th}}$  percentile rank of the data set

n = number of samples

This 95<sup>th</sup> percentile is the same as the 95% UPL according to the assumptions made in Equation 1.

The applicable RBSVs used for screening were developed according to TCEQ (1998) guidance and current tables (TCEQ, 2006). For chemicals having a PQL or the background concentration higher than the RBSV, the higher of the PQL or background concentration was chosen as the applicable RBSV for the chemical, as described in §335.563(j)(1) for Risk Reduction Standard 3.

The soil screening step involves comparison of the detected concentration to the applicable RBSV. Chemicals with detected concentrations equal to or below the applicable RBSV levels were eliminated from further evaluation. Chemicals having concentrations above the applicable RBSV were further evaluated to determine whether they would contribute significantly to the risk estimates for the LHAAP site provided in the Jacobs (2002b, 2003) risk assessments.

Screening of data for chemical concentrations in soil are shown in tables below. A master footnote and abbreviation legend that applies to all data evaluation tables is provided with the tables. The SVOC compounds that exceed the applicable RBSV as a result of dilution are indicated in the screening tables by shading.

# 4.2 Site LHAAP-46 (Sub-Area 1)

Locations of sumps associated with LHAAP-46 are shown in **Figure 2-1**. Evaluations of data for soil from LHAAP-46 are shown in **Tables 4-1** through **4-60**. A master footnote and abbreviation legend is provided with the tables.

# 4.2.1 Sump-001

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-1**. All chemicals except vanadium and selected SVOCs have concentrations below the RBSV. The chemicals having soil concentrations below RBSV concentrations were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRS04-SB01-01 was diluted by a factor of 10, which resulted in an elevation of the SQL for the SVOCs, even though the SVOCs were not detected in the sample. The evaluation of vanadium is described in **Section 4.3**.

# 4.2.2 Sump-002

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-2**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the

Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.3**.

### 4.2.3 Sump-003

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-3**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.4 Sump-004

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-4**. All chemicals except vanadium have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of vanadium is described in **Section 4.3**.

# 4.2.5 Sump-005

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-5**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-005.

# 4.2.6 Sump-006

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-6**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.7 Sump-007

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-7**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.8 Sump-008

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-8**. All chemicals except aluminum and selected SVOCs have concentrations below the RBSV. The chemicals having soil concentrations below RBSV concentrations were removed from further

consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRSMP005-SB01-01 was diluted by a factor of 5, which resulted in an elevation of the SQL for the SVOCs above the MQL, even though the SVOCs were not detected in the sample. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.9 Sump-009

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-9**. All chemicals except aluminum and selected SVOCs have concentrations below the RBSV. The chemicals having soil concentrations below RBSV concentrations were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRSMP005-SB01-01 was diluted by a factor of 5, which resulted in an elevation of the SQL for the SVOCs above the MQL, even though the SVOCs were not detected in the sample. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.10 Sump-010

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-10**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-010.

# 4.2.11 Sump-011

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-11**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-011.

# 4.2.12 Sump-012

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-12**. All chemicals except selected SVOCs had concentrations below the RBSV. The chemicals having soil concentrations below RBSV concentrations were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRS06-SB01-01 was diluted by a factor of 10, which resulted in an elevation of the SQL for the SVOCs above the MQLs, even though the SVOCs were not detected in the sample.

# 4.2.13 Sump-013

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-13**. All chemicals except selected SVOCs had concentrations below the RBSV. The chemicals having soil concentrations below RBSV concentrations were removed from further consideration in the

baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRS06-SB01-01 was diluted by a factor of 10, which resulted in an elevation of the SQL for the SVOCs above the MQLs, even though the SVOCs were not detected in the sample.

# 4.2.14 Sump-014

Soil samples from the Sump-014 location were analyzed for perchlorate in 2002 (**Table 4-14**). Because all chemicals had concentrations below the RBSV level, no further action is required at Sump-014.

# 4.2.15 Sump-015

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-15**. Because all chemicals had concentrations below the RBSV level, no further action is required at Sump-015.

# 4.2.16 Sump-016

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-16**. Because all chemicals had concentrations below the RBSV level, no further action is required at Sump-015.

# 4.2.17 Sump-017

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-17**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.18 Sump-018

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-18**. All chemicals except aluminum and selected SVOCs have concentrations below the RBSV. The chemicals having soil concentrations below RBSV concentrations were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRS10-SB02-01 was diluted by a factor of 10, which resulted in an elevation of the SQL for the SVOCs above the MQL, even though the SVOCs were not detected in the sample. The evaluation of aluminum is described in **Section 4.3**.

### 4.2.19 Sump-019

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-19**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-019.

### 4.2.20 Sump-020

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-20**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-020.

### 4.2.21 Sump-021

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-21**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.3**.

### 4.2.22 Sump-022

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-22**. All chemicals except arsenic, vanadium, and selected SVOCs have concentrations below the RBSV. The chemicals having soil concentrations below RBSV concentrations were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRS10-SB02-01 was diluted by a factor of 2, which resulted in an elevation of the SQL value for the SVOCs above the MQL, even though the SVOCs were not detected in the sample. The evaluation of arsenic and vanadium is described in **Section 4.3**.

# 4.2.23 Sump-023

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-23**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-023.

### 4.2.24 Sump-024

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-24**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.25 Sump-025

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-25**. All chemicals except aluminum have concentrations below the RBSV, and were removed from

further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.26 Sump-026

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-26a**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.27 Sump-027

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-27**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-027.

# 4.2.28 Sump-028

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-28**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-028.

# 4.2.29 Sump-029

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-29**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-029.

# 4.2.30 Sumps-030

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-30**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.31 Sump-031

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-31**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.32 Sump -032

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-32**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-032.

### 4.2.33 Sump-033

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-33**. All chemicals except aluminum, vanadium, and selected SVOCs have concentrations below the RBSV. The chemicals having soil concentrations below RBSV concentrations were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Samples WRS06-SB01-01 and WRS-015-SB01-01 were diluted by a factor of 10, and sample WRS-015-SB02-01 was diluted by a factor of 20, which resulted in an elevation of the SQL for SVOCs above the MQLs, even though the SVOCs were not detected in the sample. The evaluation of aluminum and vanadium is described in **Section 4.3**.

### 4.2.34 Sump-034

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-34**. All chemicals except aluminum, vanadium, and selected SVOCs have concentrations below the RBSV. The chemicals having soil concentrations below RBSV concentrations were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRS-015-SB01-01 was diluted by a factor of 10 and WRS-015-SB02-01 was diluted by a factor of 20, which resulted in an elevation of the SQL for the SVOCs above the MQL, even though the SVOCs were not detected in the sample. The evaluation of aluminum and vanadium is described in **Section 4.3**.

### 4.2.35 Sump-035

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-35**. All chemicals except mercury have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of mercury is described in **Section 4.3**.

### 4.2.36 Sump-036

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-36**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-036.

# 4.2.37 Sump-037

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-37**. All chemicals except aluminum and selected SVOCs have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRS10-SB02-01 was diluted by a factor of 10, which resulted in an elevation of the SQL for the SVOCs above the MQL, even though the SVOCs were not detected in the sample. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.38 Sump-038

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-38**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-038.

# 4.2.39 Sump-039

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-39**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-039.

# 4.2.40 Sump-040

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-40**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-040.

# 4.2.41 Sump-041

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-41**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-041.

# 4.2.42 Sump-042

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-42**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.43 Sump-043

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-43.** Because all chemicals have concentrations below the RBSV, no further action is required at Sump-043.

# 4.2.44 Sump-107

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-44.** Because all chemicals have concentrations below the RBSV, no further action is required at Sump-107.

# 4.2.45 Sump-108

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-45**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-108.

### 4.2.46 Sump-109

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-46.** Because all chemicals have concentrations below the RBSV, no further action is required at Sump-109.

### 4.2.47 Sump-110

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-47**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-110.

### 4.2.48 WRSump-004

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-48**. All chemicals except for vanadium and selected SVOCs have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRS04-SB01-01 was diluted by a factor of 10, which resulted in an elevation of the SQL for the SVOCs above the MQL, even though the SVOCs were not detected in the sample. The evaluation of vanadium is described in **Section 4.3**.

### 4.2.49 WRSump-005

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-49**. All chemicals except aluminum and selected SVOCs have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRSMP005-SB01-01 was diluted by a factor of 5, which resulted in an elevation of the SQL for the SVOCs above the MQL, even though the SVOCs were not detected in the sample. The evaluation of aluminum is described in **Section 4.3**.

#### 4.2.50 WRSump-006

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-50**. All chemicals except selected SVOCs have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample (WRS06-SB01-01) was diluted by a factor of 10, which resulted in an elevation of the SQL for the SVOCs above the MQL, even though the SVOCs were not detected in the sample.

#### 4.2.51 WRSump-007

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-51**. All chemicals except selected SVOCs have concentrations below the RBSV, and were removed from

further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRS07-SB02-01 was diluted by a factor of 10, which resulted in an elevation of the SQL for the SVOCs above the MQL, even though the SVOCs were not detected in the sample.

# 4.2.52 WRSump-008

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-52**. Because all chemicals have concentrations below the RBSV, no further action is required at WRSump-008.

# 4.2.53 WRSump-009

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-53**. All chemicals except selected SVOCs have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRS09-SB02-01 was diluted by a factor of 10, which resulted in an elevation of the SQL for the SVOCs above the MQL, even though the SVOCs were not detected in the sample.

# 4.2.54 WRSump-010

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-54**. All chemicals except aluminum and selected SVOCs have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRS10-SB02-01 was diluted by a factor of 10, which resulted in an elevation of the SQL for the SVOCs above the MQL, even though the SVOCs were not detected in the sample. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.55 WRSump-011

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-55**. All chemicals except aluminum and selected SVOCs have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Samples WRS011-SB01-01 and WRS011-SB01-01 were diluted by a factor of 10, which resulted in an elevation of the SQL for the SVOCs above the MQL, even though the SVOCs were not detected in the sample. The evaluation of aluminum is described in **Section 4.3**.

# 4.2.56 WRSump-012

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-56**. Because all chemicals have concentrations below the RBSV, no further action is required at WRSump-012.

# 4.2.57 WRSump-015

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-57**. All chemicals except aluminum, vanadium, and selected SVOCs have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample WRS-015-SB01-01 was diluted by a factor of 10 and WRS-15-SB02-01 was diluted by a factor of 20, which resulted in an elevation of the MQL, which resulted in an elevation of the SQL value for the SVOCs above the MQL, even though the SVOCs were not detected in the sample. The evaluation of aluminum and vanadium is described in **Section 4.3**.

# 4.2.58 WRSump-016

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-58.** All chemicals except vanadium have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1.** The evaluation of vanadium is described in **Section 4.3.** 

# 4.2.59 WRSump-019

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-59**. All chemicals except vanadium and selected SVOCs have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

WRS019-SB01-01, WRS019-SB01-01-QC, WRS019-SB02-01 were diluted by a factor of 5, which resulted in an elevation of the MQL for SVOCs, even though the SVOCs were not detected in the sample. The evaluation of vanadium is described in **Section 4.3**.

# 4.2.60 WRSump-021

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-60**. All chemicals except selected SVOCs have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Data Evaluation Report

# 00065876

WRS021-SB01-01 was diluted by a factor of 10 and WRS021-SB02-01 was diluted by a factor of 20, which resulted in an elevation of the MQL for the SVOCs, even though the SVOCs were not detected in the sample.

# 4.3 Evaluation of Risks from Chemicals Exceeding RBSVs in Post-2002 Samples at LHAAP-46 Sumps

Screening of chemical concentrations in soil at LHAAP-46 indicates that concentrations of aluminum, arsenic, mercury, or vanadium were quantitated in one or more samples at concentrations above RBSV levels (**Tables 4-1** through **4-60**). The analytical results for these metals in all soil samples from sump locations where a metal concentration exceeds the RBSV in at least one sample are summarized in **Table 4-61**, which shows the mean, standard deviation, sample size, and the 95% upper confidence limit (UCL) of the mean. All concentrations detected above the MDL (J-qualified values), and the full value of the SQL representing a proxy values for concentrations. Bootstrapping (Efron and Tibshirani, 1993) is among the statistical methods described in USEPA (2002) guidance for calculating UCLs and exposure point concentrations (EPCs) for use in risk assessments.

The Jacobs (2003) risk assessment for LHAAP-46 evaluated future maintenance exposures to chemicals in soil by the ingestion, inhalation, and dermal contact pathways. That risk assessment calculated pathway Incremental Lifetime Cancer Risk (ILCR) values and Hazard Index (HI) values for each metal; and the total soil ILCR and HI values for exposures to all chemicals by all exposure pathways.

# 4.3.1 Arsenic

Because arsenic was not identified as a COPC in the Jacobs (2003) risk assessment for LHAAP-46, ILCR and HI values were calculated for the future maintenance worker exposure to arsenic in soil using the EPC values developed from post-2002 samples (**Table 4-61**). Risk and hazard estimates were calculated using the equations, exposure factors, toxicity factors, and physical and chemical properties provided in TCEQ (1998) guidance as updated through March 2006. Site-specific properties were used as indicated in the calculations. The calculations of ILCR and HI values for arsenic are shown in **Tables 4-62** through **4-65**, and are summarized in **Table 4-66**.

# 4.3.2 Aluminum, Mercury, and Vanadium

Aluminum, mercury, and vanadium were evaluated in the Jacobs (2003) risk assessment for LHAAP-46 that evaluated exposures to soil by the ingestion, inhalation, and dermal contact pathways. Because these three metals are noncarcinogens, all human health risks from worker exposures to soil are evaluated in the calculated pathway HI for each metal, and the total soil HI calculated for exposures to all chemicals in soil by all exposure pathways.

The pathway HI values for each metal given in the Jacobs (2003) risk assessment, and the total soil HI values for all chemicals and all exposure pathways are summarized in **Table 4-66b**. The post-2002 EPC concentration of mercury is less than the EPC evaluated in the Jacobs (2003) assessment. Therefore, the post-2002 mercury concentration would not increase the HI values reported in the Jacobs (2003) assessment.

The post-2002 EPC concentration of aluminum (1.17E+04 mg/kg) is greater than the Jacobs (2003) EPC (8.07E+03 mg/kg) (see **Table 4-66b**). The calculated HI for exposure of a future maintenance worker to aluminum in soil at a concentration of 8.07E+03 mg/kg was 1.30E-02 (Jacobs, 2003). Therefore, the estimated post-2002 HI for exposure of a future worker to aluminum in soil is 1.3E-02 x 1.17E+04 mg/kg / 8.07E+03 mg/kg = 1.89E-02, which represents a net increase in the HI of 1.89E-02 - 1.30E-02 = 5.9E-03 (**Table 4-66b**).

The post-2002 EPC concentration of vanadium (3.03E+01 mg/kg) is greater than the Jacobs (2003) EPC (2.89E+01 mg/kg) (see **Table 4-66b**). The calculated HI for exposure of a future maintenance worker to vanadium in soil at a concentration of 2.89E+01 mg/kg was 1.40E-02 (Jacobs, 2003). Therefore, the estimated post-2002 HI for exposure of a future worker to vanadium in soil is  $1.40E-02 \times 3.03E+01 \text{ mg/kg}/2.89E+01 \text{ mg/kg} = 1.47E-02$ , which represents a net increase in the HI of 1.47E-02 - 1.40E-02 = 6.7E-04 (see **Table 4-66b**).

# 4.3.3 Summary

Application of the arsenic concentrations reported for post-2002 soil samples to the Jacobs (2003) risk assessment would increase the Jacobs (2003) ILCR estimate from 1.7E-05 to 1.8E-05 (**Table 4-66a**), which is still within the acceptable risk range of 1E-06 to 1E-04 (USEPA, 1994) and within the risk range established in 30TAC§335.563(b).

Application of the aluminum, mercury, and vanadium concentrations reported for post-2002 soil samples to the Jacobs (2003) risk assessment would increase the Jacobs (2003) HI estimate from 1.2E-01 to 1.8E-01 (**Table 4-66b**), which is still below the acceptable maximum HI of 1 [USEPA, 1994; 30TAC§335.563(c)].

Because it is demonstrated that EPC values developed using post-2002 sampling results contribute negligible increases to the Jacobs (2003) risk assessment cancer risk and noncancer hazard values, and all concentrations of other chemicals are below the RBSV values, no further action is required for the soil around the sumps at LHAAP-46.

# 4.4 Site LHAAP-47 (Sub-Area 2)

Locations of sumps associated with LHAAP-47 are shown in **Figure 2-2**. Evaluations of data for soil from LHAAP-47 are shown in **Tables 4-67** through **4-113**. Refer to the Master Footnote and Abbreviation Legend for a description of notes and abbreviations.

### 4.4.1 Sump-044

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-67**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-044.

### 4.4.2 Sump-045

Because there were no samples collected since 2003 at the Sump-045 locations, and risks associated with samples collected prior to 2003 were evaluated in the Jacobs (2003) risk assessment, no further action is required at Sump-045.

### 4.4.3 Sump-046

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-68**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-046.

### 4.4.4 Sump-047

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-69**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-047.

### 4.4.5 Sump-048

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-70**. All chemicals except mercury have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of mercury is described in **Section 4.5**.

### 4.4.6 Sump-049

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-71**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-049.

### 4.4.7 Sump-050

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-72**. All chemicals except vanadium have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of vanadium is described in **Section 4.5**.

### 4.4.8 Sump-051

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-73**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-051.

### 4.4.9 Sump-052

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-74**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-052.

### 4.4.10 Sump-053

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-75**. All chemicals except vanadium have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of vanadium is described in **Section 4.5**.

### 4.4.11 Sump-054

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-76**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-054.

### 4.4.12 Sump-055

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-77**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-055.

### 4.4.13 Sump-056

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-78**. All chemicals except selected SVOCs have concentrations below the RBSV. The chemicals having soil concentrations below RBSV concentrations were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample 35-SMP056-SB01-01 was diluted by a factor of 10, which resulted in an elevation of the SQL for the SVOCs above the MQLs, even though the SVOCs were not detected in the sample.

#### 4.4.14 Sump-057

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-79**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-057.

#### 4.4.15 Sump-058

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-80**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-058.

### 4.4.16 Sump-059

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-81**. Because chemicals have concentrations below the RBSV, no further action is required at Sump-059.

# 4.4.17 Sump-060

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-82**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-060.

# 4.4.18 Sump-061

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-83**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-061.

# 4.4.19 Sump-062

Soil samples associated with this sump were collected prior to 2001 and evaluated in the Jacobs (2003) risk assessment, and are not reevaluated in this document.

### 4.4.20 Sump-063

Soil samples associated with this sump were collected prior to 2001 and evaluated in the Jacobs (2003) risk assessment, and are not reevaluated in this document.

# 4.4.21 Sump-064

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-84.** All chemicals except selected SVOCs have concentrations below the RBSV. The chemicals having soil concentrations below RBSV concentrations were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample 35-SMP064-SB01-01 was diluted by a factor of 5 which resulted in an elevation of the SQL for the SVOCs above the MQLs, even though the SVOCs were not detected in the sample.

# 4.4.22 Sump-065

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-85**. All chemicals except selected SVOCs have concentrations below the RBSV. The chemicals having soil concentrations below RBSV concentrations were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample 35-SMP064-SB01-01 was diluted by a factor of 5, which resulted in an elevation of the SQL above the MQL, even though the SVOCs were not detected in the sample.

# 4.4.23 Sump-066

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-86**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-066.

# 4.4.24 Sump-067

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-87**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-067.

# 4.4.25 Sump-068

Soil samples associated with this sump were collected prior to 2001 and evaluated in the Jacobs (2003) risk assessment, and are not reevaluated in this document.

# 4.4.26 Sump-069

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-88**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-069.

# 4.4.27 Sump-070

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-89**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-070.

# 4.4.28 Sump-071

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-90**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-071.

### 4.4.29 Sump-072

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-91**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-072.

# 4.4.30 Sump-073

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-92**. All chemicals except mercury have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of mercury is described in **Section 4.5**.

### 4.4.31 Sump-074

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-93**. All chemicals except manganese and selected SVOCs have concentrations below the RBSV and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of mercury is described in **Section 4.5**.

Sample 35-SMP074-SB02-01 was diluted by a factor of 5, which resulted in an elevation of the SQL above the MQL, even though the SVOCs were not detected in the sample.

# 4.4.32 Sump-075

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-94**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-075.

# 4.4.33 Sump-076

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-95**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-076.

# 4.4.34 Sump-077

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-96**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.5**.

# 4.4.35 Sump-078

Soil samples associated with this sump were collected prior to 2001 and evaluated in the Jacobs (2003) risk assessment, and are not reevaluated in this document.

# 4.4.36 Sump-079

Soil samples associated with this sump were collected prior to 2001 and evaluated in the Jacobs (2003) risk assessment, and are not reevaluated in this document.

# 4.4.37 Sump-080

Soil samples associated with this sump were collected prior to 2001 and evaluated in the Jacobs (2003) risk assessment, and are not reevaluated in this document.

# 4.4.38 Sump-081

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-97**. All chemicals except aluminum and vanadium have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum and vanadium is described in **Section 4.5**.

# 4.4.39 Sump-082

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-98**. All chemicals except aluminum and vanadium have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum and vanadium is described in **Section 4.5**.

#### 4.4.40 Sump-083

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-99**. All chemicals except aluminum and vanadium have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum and vanadium is described in **Section 4.5**.

### 4.4.41 Sump-084

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-100**. All chemicals except aluminum and vanadium have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum and vanadium is described in **Section 4.5**.

### 4.4.42 Sump-085

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-101**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-085.

#### 4.4.43 Sump-086

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-102**. All chemicals except aluminum and vanadium have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum and vanadium is described in **Section 4.5**.

### 4.4.44 Sump-087

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-103**. All chemicals except aluminum and vanadium have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum and vanadium is described in **Section 4.5**.

### 4.4.45 Sump-088

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-104**. All chemicals except selected SVOCs have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1** 

Samples 35-SMP088-SB01-01 and 35-SMP088-SB02-01 were diluted by a factor of 5, which resulted in an elevation of the SQL above the MQL, even though the SVOCs were not detected in the sample.

# 4.4.46 Sump-089

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-105**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-089.

# 4.4.47 Sump-090

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-106**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-090.

# 4.4.48 Sump-091

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-107**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.5**.

# 4.4.49 Sump-092

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-108**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-092.

# 4.4.50 Sump-093

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-109**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-093.

# 4.4.51 Sump-121

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-110**. All chemicals except selected SVOCs have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**.

Sample 35-SMP121-SB01-02 was diluted by a factor of 20, which resulted in an elevation of the SQL above the MQL, even though the SVOCs were not detected in the sample.

# 4.4.52 WRSump-014

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-111**. All chemicals except vanadium and selected SVOCs have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical

relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of vanadium is described in **Section 4.5**.

Sample WRS14-SB01-01 was diluted by a factor of 10, which resulted in an elevation of the SQL above the MQL, even though the SVOCs were not detected in the sample.

# 4.4.53 WRSump-017

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-112**. All chemicals except aluminum have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum is described in **Section 4.5**.

# 4.4.54 WRSump-018

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-113**. All chemicals except aluminum and vanadium have concentrations below the RBSV and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of aluminum and vanadium is described in **Section 4.5**.

# 4.5 Evaluation of Risks from Chemicals Exceeding RBSVs in Post-2002 Samples at LHAAP-47 Sumps

Screening of chemical concentrations in soil at LHAAP-47 indicates that concentrations of aluminum, mercury, manganese or vanadium were quantitated in one or more samples at concentrations above RBSV levels (**Tables 4-67** through **4-113**). The analytical results for these metals in all soil samples from sump locations where a metal concentration exceeds the RBSV in at least one sample are summarized in **Table 4-114**, which shows the mean, standard deviation, sample size, and the 95% UCL of the mean. All concentrations detected above the MDL (J-qualified values), and the full value of the SQL representing a proxy value for concentrations reported as not detected (U-qualified) concentrations were used in all statistical calculations. Bootstrapping (Efron and Tibshirani, 1993) is among the statistical methods described in USEPA (2002) guidance for calculating UCLs and EPCs for use in risk assessments.

The Jacobs (2003) risk assessment for LHAAP-47 evaluated future maintenance exposures to chemicals in soil by the ingestion, inhalation, and dermal contact pathways. That risk assessment calculated pathway ILCR values and HI values for each metal; and the total soil ILCR and HI values for exposures to all chemicals by all exposure pathways.

Because aluminum, mercury, manganese, and vanadium are noncarcinogens, application of the concentrations of these metals reported for post-2002 soil samples to the Jacobs (2003) risk assessment would not increase the Jacobs (2003) ILCR estimate for LHAAP-47 (**Table 4-115a**).

Aluminum, manganese, mercury, and vanadium were evaluated in the Jacobs (2003) risk assessment for LHAAP-47 that evaluated exposures to soil by the ingestion, inhalation, and dermal contact pathways. Because these four metals are noncarcinogens, all human health risks from worker exposures to soil are evaluated in the calculated pathway HI for each metal, and the total soil HI calculated for exposures to all chemicals in soil by all exposure pathways.

The pathway HI values for each metal given in the Jacobs (2003) risk assessment, and the total soil HI values for all chemicals and all exposure pathways are summarized in **Table 4-115b**. The Post-2003 EPC concentration of manganese, mercury, and vanadium are less than the EPC evaluated in the Jacobs (2003) assessment. Therefore, the post-2002 concentrations of these metals would not increase the HI values reported in the Jacobs (2003) assessment.

The post-2002 EPC concentration of aluminum (1.25E+04 mg/kg) is greater than the Jacobs (2003) EPC (8.82+03 mg/kg) (see **Table 4-115**). The calculated HI for exposure of a future maintenance worker to aluminum in soil at a concentration of 8.82E+03 mg/kg was 1.50E-02 (Jacobs, 2003). Therefore, the estimated post-2002 HI for exposure of a future worker to aluminum in soil is  $1.5E-02 \times 1.25E+04$  mg/kg / 8.82E+03 mg/kg = 2.12E-02, which represents a net increase in the HI of 2.12E-02 - 1.50E-02 = 6.21E-03 (**Table 4-115b**).

# 4.5.1 Summary

Application of the aluminum, manganese, mercury, and vanadium concentrations reported for post-2002 soil samples to the Jacobs (2003) risk assessment would increase the Jacobs (2003) HI estimate from 4.6E-01 to 4.7E-01 (**Table 4-115b**), which is still below the acceptable maximum HI of 1 [USEPA, 1994; 30TAC§335.563(c)]. None of these metals are carcinogens; therefore, there is no impact to the ILCR from these metals.

Because it is demonstrated that EPC values developed using post-2002 sampling results contribute negligible increases to the Jacobs (2003) risk assessment cancer risk and noncancer hazard values, and all concentrations of other chemicals are below the RBSV values, no further action is required for the soil around sumps at LHAAP-47.

# 4.6 Sites LHAAP-04, 35A(58), 60, 66, and 68 (Sub-Area 3)

Locations of sumps associated with LHAAP-04, 35A(58), 60, 66, and 68 are shown in **Figure 2-3**. Evaluations of data for soil from these sites are shown in **Tables 4-116** through **4-121**. Refer to the Master Footnote and Abbreviation Legend for a description of notes and abbreviations.

# 4.6.1 Sump-106

Soil samples associated with Sump-106 are identical to those associated with Sump-084 (see Section 4.4.41).

### 4.6.2 Sump-111

Sump-111 was located at LHAAP-35A(58) (**Figure 2-3**). Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-116**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-111.

### 4.6.3 Sump-112

Sump-112 was located at LHAAP-35A(58) (**Figure 2-3**). Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-117**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-112.

### 4.6.4 Sump-113

Sump-113 was located at LHAAP-35A(58) (**Figure 2-3**). Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-118**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-113.

### 4.6.5 Sump-117

Sump-117 was located at LHAAP-35A(58) (**Figure 2-3**). Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-119**. All chemicals except manganese have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of manganese is described in **Section 4.10**.

# 4.6.6 Sump-125

Sump-125 was located at LHAAP-35A(58) (**Figure 2-3**). Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-120**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-125.

# 4.7 Sites LHAAP-18, and 39 (Sub-Area 4)

Locations of sumps associated with LHAAP-18 and 39 are shown in **Figure 2-4**. Evaluations of data for soil from these sites are shown in **Tables 4-121** through **4-123**. Refer to the Master Footnote and Abbreviation Legend for a description of notes and abbreviations.

# 4.7.1 Sump-114

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-121**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-114.

# 4.7.2 Sump-115

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-122**. All chemicals except six SVOCs have concentrations below the RBSV.

# 4.7.3 Sump-116

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-123**. All chemicals except vanadium, selected SVOCs, trichloroethene (TCE), and vinyl chloride have concentrations below the RBSV, and were removed from further consideration in the baseline risk assessment evaluation of the chemical relative to the Jacobs (2003) risk assessment as described in **Section 1.1**. The evaluation of vanadium is described in **Section 4.5**. The evaluation of vanadium, TCE, and vinyl chloride are described in **Section 4.10**.

# 4.8 Site LHAAP-29 (Sub-Area 5, Part 1 of 2)

The location of the sump near LHAAP-29 is shown in **Figure 2-5**. Evaluations of data for soil from this site are shown in **Table 4-124**. Refer to the Master Legend for a description of notes and abbreviations.

# 4.8.1 Sump-118

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-124**. Because all chemicals have concentrations below the RBSV, no further action is required at Sump-118.

# 4.9 Site LHAAP-45 (Sub-Area 5, Part 2 of 2)

Locations of sump associated with LHAAP-45 are shown in **Figure 2-6**. Evaluations of data for soil from this site are shown in **Table 4-126**. Refer to the Master Legend for a description of notes and abbreviations.

# 4.9.1 WRSump-013

Screening of soil concentrations versus RBSV concentrations is shown in **Table 4-125**. All chemicals except six SVOCs have concentrations below the RBSV.

# 4.10 Evaluation of Risks from Chemicals Exceeding RBSVs in Post-2002 Samples at Sub-Areas 3 and 4

Screening of chemical concentrations in soil at Sub-Areas 3 and 4 indicates a few chemicals with concentrations above the RBSV level in isolated samples.

Manganese was quantitated at a concentration above the RBSV in sample 35-SMP117-SB01-02, located near Sump-117 at LHAAP-35A(58) (**Table 4-119**). Manganese was not identified as a COPC in previous risk assessments at LHAAP-35A(58) (Jacobs, 2003).
Vanadium was quantitated at a concentration above the RBSV in sample 35-SMP116-SB01-01 located near Sump-116 at LHAAP-18/24, and samples 35-SMP116-SB01-02 and 35-SMP116-SB02-02 had detected or estimated (J-qualified) concentrations of TCE and vinyl chloride above RBSV values (**Table 4-123**). Vanadium, TCE, and vinyl chloride were not identified as COPCs in previous risk assessments at LHAAP-18/24 (Jacobs, 2002a).

## 4.10.1 Evaluation of Manganese Quantitated at LHAAP-35A(58)

Because manganese was not identified as a COPC in the Jacobs (2003) risk assessment for LHAAP-35A(58), ILCR and HI values were calculated for the future maintenance worker exposure to manganese in soil using the single concentration quantitated above the RBSV (**Table 4-119**). Risk and hazard estimates were calculated using the equations, exposure factors, toxicity factors, and physical chemical properties provided in TCEQ (1998) guidance as updated through March 2006. Site-specific properties were used as indicated in the calculations. The calculations of ILCR and HI values for arsenic are shown in **Tables 4-126** through **4-129**, and are summarized in **Table 4-130**.

Because manganese is a noncarcinogen, application of the maximum quantitated manganese concentration reported for post-2002 soil samples (**Table 4-119**) to the Jacobs (2003) risk assessment would not affect the Jacobs (2003) ILCR estimate for LHAAP-35A(58) (**Table 4-129a**), which is within the acceptable risk range of 1E-06 to 1E-04 (USEPA, 1994) and within the risk range established in 30TAC§335.563(b).

Application of the manganese concentration to the Jacobs (2003) risk assessment would increase the Jacobs (2003) HI estimate from 4.7E-01 to 5.9E-01 (**Table 4-130b**), which is still below the acceptable maximum HI of 1 [USEPA, 1994; 30TAC§335.563(c)].

Because it is demonstrated that maximum quantitated manganese concentration measured in soil from Post-2003 sampling events contributes negligible increase to the Jacobs (2003) risk assessment cancer risk and noncancer hazard values, and all concentrations of other chemicals are below the RBSV values, no further action is required for soil associated with sumps at LHAAP-35A(58).

## 4.10.2 Evaluation of Vanadium, Tetrachloroethene, and Vinyl Chloride at LHAAP-18/24

Because vanadium, TCE, and vinyl chloride were not identified as a COPC in the Jacobs (2002c) risk assessment for LHAAP-18/24, ILCR and HI values were calculated for the future maintenance worker exposure to these chemicals in soil using the maximum concentrations quantitated above the RBSV (**Table 4-123**).

Risk and hazard estimates were calculated using the equations, exposure factors, toxicity factors, and physical chemical properties provided in TCEQ (1998) guidance as updated through March

2006. The calculations of ILCR and HI values for arsenic are shown in **Tables 4-131** through **4-134**.

The total soil ILCR and HI values for exposure of a future maintenance worker to all chemicals and all exposure pathways given in the Jacobs (2002c) risk assessment are summarized in **Table 4-135**. Because LHAAP-18/24 has undergone interim action, the Jacobs (2002c) risk assessment was based on two scenarios; Scenario 1 was based on an EPC that included two samples collected within the 5,000-foot interception trench and Scenario 2 that excluded these samples. Only negligible differences were reported for these two scenarios; the ILCR estimates for the two scenarios are identical, and the HI values are 4.2E-02 and 3.8E-02 for Scenarios 1 and 2, respectively. The HI calculated for Scenario 1 is used in the following discussion.

### 4.10.3 Summary

Application of the ILCR values calculated for vanadium, TCE and vinyl chloride concentrations to the pre-2002 risk assessment would increase the Jacobs (2002b) ILCR estimate from 5.0E-07 to 7.5E-05 (**Table 4-135a**), which is within the acceptable risk range of 1E-06 to 1E-04 (USEPA, 1994) and within the risk range established in 30TAC§335.563(b).

Application of the HI values calculated for the three chemicals to the pre-2002 risk assessment would increase the Jacobs (2002c) HI estimate from 4.2E-02 to 3.5E-01 (**Table 4-135b**), which is still below the acceptable maximum HI of 1 [USEPA, 1994; 30TAC§335.563(c)].

Because it is demonstrated that EPC values developed using post-2002 sampling results contribute negligible increases to the Jacobs (2002c) risk assessment cancer risk and noncancer hazard values, and all concentrations of other chemicals are below the RBSV values, no further action is required for soil associated with sumps at LHAAP-18/24.

## 5.0 Summary and Conclusions

Previous risk assessments (Jacobs, 2002b, 2003) indicated acceptable risk to an industrial worker from exposure to chemicals in soil from sites LHAAP-18/24, 46, 47, and 35A(58). Soil associated with former wastewater sumps near process facilities at these sites, and others, have been collectively designated as LHAAP-35/36. Data collected prior to 2002 were included in the previous assessments and were not evaluated here. The approach followed in this report is to first present post-2002 data for each sump followed by a comparison of the data to available RBSVs. If an exceedance of an RBSV is noted for a chemical, the chemical is then evaluated with respect to the risk assessment (Jacobs 2002b; 2003) for the site within which the sump lies.

Application of the aluminum, arsenic, mercury, and vanadium concentrations reported for post-2002 soil samples collected near sumps associated with LHAAP-46 to the Jacobs (2003) LHAAP-46 risk assessment contributed negligible increases to the Jacobs (2003) risk assessment cancer risk and noncancer hazard values, with resultant values still in the acceptable range. Therefore, no further action is required for the soil around sumps at LHAAP-46.

Application of the aluminum, mercury, manganese, and vanadium concentrations reported for Post-2003 soil samples collected near sumps associated with LHAAP-47 to the Jacobs (2003) LHAAP-47 risk assessment contributed negligible increases to the Jacobs (2003) risk assessment cancer risk and noncancer hazard values, with resultant values still in the acceptable range. Therefore, no further action is required for soil around sumps at LHAAP-47.

Application of the maximum manganese concentration measured in soil near sumps associated with LHAAP-35A(58) to the Jacobs (2003) LHAAP-35A(58) risk assessment contributed negligible increases to the Jacobs (2003) risk assessment cancer risk and noncancer hazard values, with resultant values still in the acceptable range. Therefore, no further action is required for soil around sumps at LHAAP-35A(58).

Application of the vanadium, TCE, and vinyl chloride concentrations measured in soil near sumps associated with LHAAP-18/24 to the Jacobs (2003) LHAAP-18/24 risk assessment contributed negligible increases to the Jacobs (2002b) risk assessment cancer risk and noncancer hazard values, with resultant values still in the acceptable range. Therefore, no further action is required for soil around sumps at LHAAP-18/24.

There are no LHAAP-35/36 sump locations associated with LHAAP-04, -29, -39, or -66 (see **Figures 2-3** through **2-6**) that had chemicals with concentrations in soil exceeding RBSVs.

Because it is demonstrated that post-2002 sampling results contribute negligible increases to the previous risk assessments, and the cancer risk and noncancer hazard values are well within the acceptable ranges, no further action is required for soil associated with sumps at LHAAP-35/36.

## 6.0 References

Efron, B., R. J. Tibshirani, 1993. An Introduction to the Bootstrap. Monographs on Statistics and Applied Probability 57, Chapman & Hall. New York. 436 pp.

Jacobs Engineering Group, Inc. (Jacobs), 2001, *Final Remedial Investigation Report (Volume 1-3) for the Group 2 Sites: 12, 17, 18/24, 29, and 32, at the LHAAP, Karnack, Texas, April.* 

Jacobs, 2002a, Final Remedial Investigation Report, Group 4 Sites, Sites 04, 08, 35A, 35B, 35C, 46, 47, 48, 50, 60,67, Goose Prairie Creek, Volume 1: Report, Longhorn Army Ammunition Plant, Karnack, Texas, Oak Ridge, Tennessee, April.

Jacobs, 2002b, Final Baseline Human Health and Screening Ecological Risk Assessment, Group 2 Sites, Sites 12, 17, 18/24, 29, 32, 49, Harrison Bayou and Caddo Lake, Volume 1: Report, Longhorn Army Ammunition Plant, Karnack, Texas, Oak Ridge, Tennessee, August.

Jacobs, 2003, Final Baseline Human Health and Screening Ecological Risk Assessment for the Group 4 Sites, Sites 04, 08, 35A, 35B, 35C, 46, 47, 48, 50, 60, 67, Goose Prairie Creek, Saunder's Branch, and Caddo Lake, Volume 1, Longhorn Army Ammunition Plant, Karnack, Texas, Oak Ridge, Tennessee.

OHM Remediation Services Corp. (OHM), 1997, Closure Report, Removal and Closure of Wastewater Sumps, Longhorn Army Ammunition Plant, Karnack, Texas, Houston, Texas, April.

Plexus Scientific, Inc. (Plexus), 2005, *Final Environmental Site Assessment Phase I and II Report, Production Areas, Longhorn Army Ammunition Plant, Karnack, Texas,* February.

Shaw Environmental, Inc. (Shaw), 2004, *Final Background Soil Study Report, Longhorn Army Ammunition Plant, Karnack Texas,* July.

Shaw, 2006, Final Addendum 7 Additional Investigation at LHAAP-35/36, Sumps and Waste Rack Sumps to Final Installation-Wide Work Plan, Longhorn Army Ammunition Plant, Karnack, Texas, September.

Texas Commission on Environmental Quality (TCEQ), 1998, Interoffice Memorandum from Ronald R. Pedde to Remediation Division Staff regarding implementation of the existing risk reduction rules (a.k.a. TNRCC Consistency Memorandum), July as updated through March 2006.

TCEQ, 2001, Interoffice Memorandum from Joseph T. Haney, Jr., (TCEQ) to Camarie Perry, Office or Permitting, Remediation & Registration, *Evaluation of the Potential Health Impacts of Exposure to Iron, Calcium, Magnesium, Potassium, sodium, and Phosphorus through Soil Ingestion*, October.

TCEQ, 2003, Interoffice Memorandum, *Compounds for which Calculation of a Human Health MSC is Not Required*, October, available online http://www.tnrcc.state.tx.us/permitting/rrr.htm.

TCEQ, 2006, Texas Risk Reduction Rules (30TAC§335) as updated through March 2006.

Texas Natural Resource Conservation Commission (TNRCC, now the TCEQ), 1997, *Closure Report for 29 Active (Group 1) and 11 Transition (Group 2) Sumps, Solid Waste Registration No.* 30990, *Approval of Report*, Letter from Cathy Remmert to Ira C. Nathan, February 28.

Thiokol Corporation, (Thiokol), 1996, Closure Report, Closure of 29 Active and 11 Transition Sumps, Longhorn Army Ammunition Plant, Karnack, Texas, September.

U.S. Environmental Protection Agency (USEPA), 1989, *Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A)*, Interim Final, EPA/540/1-89/002, U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Washington, DC, September.

USEPA, 1992, *Guidance for Data Usability in Risk Assessment (Part A)*, EPA Publication 9285.7-09A, PB92-973356, Office of Emergency and Remedial Response, April.

USEPA, 1994, National Oil and Hazardous Substances Pollution Contingency Plan, 40 Code of Federal Regulations Part 300, 59 Federal Register 47384, October 10.

USEPA, 1997, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)*, 3<sup>rd</sup> Edition, Update IIIA (June 1999) or most recent update, Office of Solid Waste and Emergency Response, Washington, D.C., http://www.epa.gov/epaoswer/hazwaste/test/main.htm> (March 2006).

USEPA, 2002, Calculating Upper Confidence Limits For Exposure Point Concentrations At Hazardous Waste Sites, OSWER 9285.6-10, Office of Emergency and Remedial Response, U.S. Environmental Protection Agency Washington, D.C., December.

U.S. Army Corps of Engineers (USACE), 1994, Final Phase II – Work Plan of 125 Waste Process Sumps and 20 Waste Rack Sumps, Longhorn Army Ammunition Plant, August.

USACE, 1995, Draft Phase II Investigations of 125 Waste Process Sumps and 20 Waste Rack Sumps, Longhorn Army Ammunition Plant, October.

Figures



# Legend

- 2006 Soil Boring Location
- Sump

```
Historical Soil Sample Locations
```

- Surface Soil
- Soil Boring
- ----- Road
- Stream
  - Former Building or Concrete Slab
- Site
- Lake

| S            | umps in Sub | p-Area 1              |         |
|--------------|-------------|-----------------------|---------|
| Location No. | Site ID     | Building              | Depth   |
| SUMP001      | LHAAP-46    | P-1                   | 5.0     |
| SUMP002      | I HAAP-46   | P-3                   | 5.0     |
| SUMP003      | I HAAP-46   | P-3                   | 5.0     |
| SUMP004      |             | P-3                   | 5.0     |
| SUMP005      |             | P_3                   | 4.0     |
| SUMP005      |             | F-3                   | 4.0     |
| SUMPOOS      | LHAAP-46    | P-116                 | 11.0    |
| SUMP007      | LHAAP-46    | P-116                 | 9.0     |
| SUMP008      | LHAAP-46    | P-117                 | 5.0     |
| SUMP009      | LHAAP-46    | P-117                 | 7.0     |
| SUMP010      | LHAAP-46    | P-118                 | 9.0     |
| SUMP011      | LHAAP-46    | P-118                 | 11.0    |
| SUMP012      | LHAAP-46    | P-118                 | 10.0    |
| SUMP013      | LHAAP-46    | P-118                 | 9.0     |
| SUMP014      | LHAAP-46    | B-5                   | 4.0     |
| SUMP015      | LHAAP-46    | B-7                   | 5.0     |
| SUMP016      | I HAAP-46   | B-7                   | 4.0     |
| SUMP017      | LHΔΔΡ-46    | B-9                   | 2.5     |
| SUMP018      |             | B-0                   | 5.0     |
| SUMP010      |             | D-9<br>P 10           | 5.0     |
|              |             | <u>Б-10</u>           | 5.0     |
| SUMP020      | LHAAP-46    | B-11                  | 5.5     |
| SUMP021      | LHAAP-46    | B-12                  | 3.5     |
| SUMP022      | LHAAP-46    | B-13                  | 7.0     |
| SUMP023      | LHAAP-46    | B-14                  | 3.5     |
| SUMP024      | LHAAP-46    | B-15                  | 1.5     |
| SUMP025      | LHAAP-46    | B-16                  | 5.0     |
| SUMP026      | LHAAP-46    | SHED C                | 3.5     |
| SUMP027      | LHAAP-46    | P-9                   | 5.0     |
| SUMP028      | I HAAP-46   | P-122                 | 3.0     |
| SUMP029      | LHAAP-46    | P-123                 | 11.0    |
| SUMP030      |             | 212-12                | 3.0     |
| SUMD021      |             | 212 12                | 3.0     |
| SUMP031      |             | 212-12                | 3.0     |
|              |             | 212-14                | 3.5     |
|              | LHAAP-40    | 212-14                | 4.0     |
| SUMP034      | LHAAP-46    | 212-16                | 3.0     |
| SUMP035      | LHAAP-46    | 212-18                | 3.5     |
| SUMP036      | LHAAP-46    | P-122                 | Unknown |
| SUMP037      | LHAAP-46    | 212-29                | 3.0     |
| SUMP038      | LHAAP-46    | 212-32                | 2.0     |
| SUMP039      | LHAAP-46    | 212-33                | Unknown |
| SUMP040      | LHAAP-46    | 212-33                | 3.0     |
| SUMP041      | LHAAP-46    | 212-35                | 3.0     |
| SUMP042      | LHAAP-46    | 212-37                | 3.0     |
| SUMP043      | I HAAP-46   | 212-38                | 1.5     |
| SUMP107      | I HAAP-46   | 403                   | 2.0     |
| SUMP108      |             | 406                   | 1.5     |
| SUMP100      |             | 100                   | 20      |
|              |             | 207                   | 4.0     |
|              |             | 20/                   | 4.2     |
| WRSUMP004    | LHAAP-46    | P-1                   | 4.0     |
| WRSUMP005    | LHAAP-46    | P-117                 | 4.0     |
| WRSUMP006    | LHAAP-46    | P-118                 | 4.0     |
| WRSUMP007    | LHAAP-46    | P-122                 | 4.0     |
| WRSUMP008    | LHAAP-46    | B-8                   | 4.0     |
| WRSUMP009    | LHAAP-46    | S-113                 | 4.0     |
| WRSUMP010    | LHAAP-46    | P-12                  | 4.0     |
| WRSUMP011    | LHAAP-46    | B-13                  | 4.0     |
| WRSUMP012    | LHAAP-46    | P-113                 | 4.0     |
| WRSUMP015    | I HAAP-46   | 212-14                | 4.0     |
| WRSLIMP016   |             | 407                   | 4.0     |
| WRSLIMD010   |             | <u>-</u> 07<br>212₋20 | 4.0     |
| M/DCIMP004   |             | D 14                  | 4.0     |
| VVKSUIVIPU21 | LINAAP-46   | P-11                  | 4.0     |

| 0                 | 100       | 200                                 | 400<br>Feet                             |  |
|-------------------|-----------|-------------------------------------|---|--|
| Shaw <sup>®</sup> | U.S       | 5. ARMY COR<br>TULSA<br>TULSA, (    | PS OF ENGINEERS<br>DISTRICT<br>OKLAHOMA |  |
|                   |           | FIGURE 2-                           | 1                                       |  |
| SOIL SA           | MPLE      | AND SUMP<br>(SUB-AREA<br>LHAAP-35/3 | LOCATION MAP<br>1)<br>36                |  |
| LONG              | HORN<br>K | ARMY AMMU<br>ARNACK, TEX            | INITION PLANT<br>XAS                    |  |
|                   |           |                                     |   |  |



# <u>0006</u>5897

# Legend 2006 Soil Boring Location Sump Historical Soil Sample Locations Surface Soil Soil Boring Road Stream Former Building or Concrete Slab Site Lake Sumps in Sub-Area 2 Location No. Site ID Building Depth SUMP044 LHAAP-47 25-C 4.0 SUMP045 LHAAP-47 25-C 6.5 SUMP046 LHAAP-47 25-C Unknown SUMP048 LHAAP-47 26-E Unknown SUMP050 LHAAP-47 26-E 4.0 SUMP051 LHAAP-47 26-E 6.0 SUMP052 LHAAP-47 29-D 7.0 SUMP053 LHAAP-47 31-G 5.0 SUMP055 LHAAP-47 31-G 4.5 SUMP056 LHAAP-47 32-H 3.0 SUMP057 LHAAP-47 32-H 3.0 SUMP058 LHAAP-47 42-E 5.0 SUMP059 LHAAP-47 42-E 5.0 SUMP060 LHAAP-47 42-E 5.0 SUMP061 LHAAP-47 45-E 4.0 SUMP062 LHAAP-47 45-E 4.0 SUMP063 LHA Sumps in Sub-Area 2

| 0                 | 150               | 300                             |                                      | 600<br>Feet |
|-------------------|-------------------|---------------------------------|--------------------------------------|-------------|
| Shaw <sup>®</sup> | U.S. /            | ARMY COF<br>TULSA<br>TULSA,     | RPS OF ENG<br>A DISTRICT<br>OKLAHOMA | GINEERS     |
|                   | F                 | FIGURE 2                        | -2                                   |             |
| SOIL SA           | MPLE A<br>(S<br>L | ND SUMF<br>SUB-AREA<br>HAAP-35/ | P LOCATIO<br>A 2)<br>/36             | N MAP       |
| LONG              | HORN A            | RMY AMMI<br>RNACK, TE           | UNITION PL/<br>EXAS                  | ANT         |
|                   |                   |                                 |                                      |             |











## FINAL DATA EVALUATION REPORT CHEMICAL CONCENTRATIONS IN SOIL SAMPLES ASSOCIATED WITH LHAAP-35/36 SUMPS LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

## **VOLUME II OF III: TABLES FOR SECTIONS 1.0 AND 3.0**







Prepared for U.S. Army Corps of Engineers Tulsa District 1645 South 101st East Avenue Tulsa, Oklahoma

Prepared by Shaw Environmental, Inc. 3010 Briarpark, Suite 400 Houston, Texas 77042

Contract No. W12QR-04-D-0027, Task Order No. DS02 Shaw Project No. 117591

January 2008

**Tables** 



#### Master Footnote and Abbreviation List

- <sup>a</sup> Value provided by the Texas Commission on Environmental Quality (TCEQ) as updated through March 2006 available on the TCEQ website at <a href="http://www.tceq.state.tx.us/assets/public/remediation/rrr/msc-rbscn\_2006.xls">http://www.tceq.state.tx.us/assets/public/remediation/rrr/msc-rbscn\_2006.xls</a>.
- 1,2-Dichloroethene = Value shown is lower of the cis- or trans-1,2-dichloroethene values.

95% UPL = Upper Prediction Limit of background concentration

Background Concentrations = Lower of surface and subsurface soil background concentrations used in these comparisons.

#### Boxed and bold = Concentration exceeds Applicable RBSV

Carbon Range C12-C28 = Value shown is the lowest of >12-16C, >16-21 C, and >21-35 C (aromatic) boiling fraction of total petroleum hydrocarbons RBSVs given in TCEQ March 2006 guidance.

Carbon Range C12-C28 = Value shown is the RBSV for the >8C-10C (aromatic) boiling fraction of total petroleum hydrocarbons given in TCEQ March 2006 guidance. m- or p- xylene = Value shown is the lower of m-, or p-xylene values given in TCEQ March 2006 guidance.

Shading indicates value equal to MDL modified by dilution and percent solids factors for chemicals that are undetected and have an applicable RBSV equal to the MQL. Weight of Evidence = EPA designator indicating that chemical is a known human carcinogen (A) or not a human carcinogen (D).

- D Analyte was quantified as a secondary dilution factor
- DIL dilution factor
- FD Field duplicate sample
- Ft feet
- H Estimate is high
- J Estimated value. Chemical was detected above the method detection limit but below the MQL.
- L Estimate is low
- LQ laboratory qualifier
- MDL Method Detection Limit
- MQL Method Quantitation Limit
- mg/kg milligrams per kilogram
- mg/I milligrams per liter
- NA Not applicable
- NE Value not established.
- RBSV risk based screening value
- REG Regular sample
- U Compound validated as not detected above MQL shown
- VQ data validator qualifier

#### Table 1-1 Sump and Waste Rack Sump Master List Longhorn Army Ammunition Plant Karnack, Texas

| HAAP-96         Data Sump                           |                | Noarost Sito | Building | Sub-Aroa | Easting   | Northing          | Sump Depth | Commont <sup>a</sup> |
|---|----------------|--------------|----------|----------|-----------|-------------------|------------|----------------------|
| BUNDPOID         LHAAP-46         P-1         1         300580.0         6082332.6         5.0           SUMPO02         LHAAP-46         P-3         1         3305918.0         6082332.6         5.0           SUMPO03         LHAAP-46         P-3         1         3305908.0         6082320.8         5.0           SUMPO05         LHAAP-46         P-3         1         3305908.0         608337.7         4.0           SUMPO06         LHAAP-46         P-116         1         3307022.0         608337.7         5.0           SUMPO07         LHAAP-46         P-117         1         330705.0         608230.5         9.0           SUMPO08         LHAAP-46         P-118         1         330705.0         608243.5         9.0           SUMPO10         LHAAP-46         P-118         1         330730.0         608243.6         7.0           SUMPO12         LHAAP-46         P-118         1         330750.0         608243.8         10.0         SUMPO13           SUMPO14         LHAAP-46         B-7         1         3305651.0         608243.4         4.0         SUMPO14         LHAAP-46         B-7         1         3305651.0         608243.4         4.0         SU  | LHAAP-35 Sumps | Nearest One  | Dunung   | Sub-Alea | Lasting   | Northing          | (ieet)     | Comment              |
| SUMPO2         LHAAP-46         P-3         1         3399918.0         9983306.1         5.0           SUMPO3         LHAAP-46         P-3         1         3396906.0         6983307.1         5.0           SUMPO3         LHAAP-46         P-3         1         3396906.0         6983337.7         1.0           SUMPO05         LHAAP-46         P-116         1         3397026.0         698337.9         1.0           SUMPO07         LHAAP-46         P-117         1         3397026.0         698337.9         5.0           SUMPO09         LHAAP-46         P-117         1         3397050.0         698337.9         5.0           SUMPO10         LHAAP-46         P-118         1         3397050.0         6982385.2         1.0           SUMP011         LHAAP-46         P-118         1         339794.0         698239.4         4.0           SUMP013         LHAAP-46         B-7         1         3396961.0         6982349.4         4.0           SUMP015         LHAAP-46         B-7         1         339742.0         6982465.5         5.0           SUMP016         LHAAP-46         B-7         1         339742.0         698279.9         5.0   | SUMPOOT        |              | P_1      | 1        | 3305660.0 | 6063271 3         | 5.0        |                      |
| SUMP003         LHAAP-46         P-3         1         2305900         0.989306.1         5.0           SUMP004         LHAAP-46         P-3         1         3305990.0         698320.8         5.0           SUMP005         LHAAP-46         P-116         1         3307920.0         698317.7         1.0           SUMP007         LHAAP-46         P-116         1         330704.0         698317.7         5.0           SUMP008         LHAAP-46         P-117         1         330704.0         698337.0         5.0           SUMP009         LHAAP-46         P-118         1         3307030.0         698236.6         7.0           SUMP010         LHAAP-46         P-118         1         3307030.0         698236.6         1.0           SUMP013         LHAAP-46         P-18         1         330763.0         698246.6         5.0           SUMP014         LHAAP-46         B-7         1         3306670.0         698246.6         5.0           SUMP015         LHAAP-46         B-7         1         3306671.0         698246.6         5.0           SUMP015         LHAAP-46         B-1         1         330664.0         698258.6         5.0  | SUMP002        |              | P-3      | 1        | 3305918.0 | 6963332.6         | 5.0        |                      |
| SUMPO04         LHAP-46         P-3         1         3306030         6983333.7         4.0           SUMPO05         LHAP-46         P-3         1         3307026.0         698333.7         4.0           SUMPO06         LHAP-46         P-116         1         3307026.0         698333.7         4.0           SUMPO07         LHAP-46         P-117         1         3307026.0         6983324.6         7.0           SUMPO09         LHAP-46         P-117         1         3307053.0         6983324.6         7.0           SUMPO10         LHAP-46         P-118         1         3307053.0         6982396.5         9.0           SUMPO12         LHAP-46         P-118         1         330720.0         6982396.8         9.0           SUMPO13         LHAP-46         B-7         1         330567.0         6982342.4         4.0           SUMPO16         LHAP-46         B-7         1         330564.0         6982405.0         5.0           SUMPO17         LHAP-46         B-7         1         330564.0         6982269.0         2.5           SUMPO18         LHAP-46         B-7         1         330564.0         6982269.0         5.0 <t< td=""><td>SUMP003</td><td></td><td>P-3</td><td>1</td><td>3305906.0</td><td>6963306 1</td><td>5.0</td><td></td></t<>  | SUMP003        |              | P-3      | 1        | 3305906.0 | 6963306 1         | 5.0        |                      |
| SUMPOS         LHAP-46         P-3         1         3335980         9893377         2.0           SUMPOS         LHAP-46         P-116         1         3307022.0         6983177.5         11.0           SUMPOS         LHAP-46         P-117         1         3307020.0         698377.9         5.0           SUMPOS         LHAP-46         P-117         1         3307020.0         698337.9         5.0           SUMPOS         LHAP-46         P-118         1         3307020.0         698230.6         9.0           SUMPO10         LHAP-46         P-118         1         3307020.0         698230.6         10.0           SUMPO12         LHAP-46         B-7         1         330650.0         6862405.0         10.0           SUMPO15         LHAP-46         B-7         1         330650.0         6862405.0         2.5           SUMPO15         LHAP-46         B-7         1         330651.0         6862405.0         2.5           SUMPO15         LHAP-46         B-7         1         330651.0         6862405.0         2.5           SUMPO15         LHAP-46         B-1         1         330654.0         686251.2         5.0           SUMPO   | SUMP004        |              | P-3      | 1        | 3306009.0 | 6963290.8         | 5.0        |                      |
| SUMPOOS         CHANP-46         P-116         1         33070220         6983370.5         11.0           SUMPOO7         LHANP-46         P-116         1         3307026.0         6983370.5         11.0           SUMPO08         LHANP-46         P-117         1         3307026.0         6983371.8         7.0           SUMPO10         LHANP-46         P-117         1         3307026.0         6982347.6         7.0           SUMPO11         LHANP-46         P-118         1         3307026.0         6982430.5         9.0           SUMPO12         LHANP-46         P-118         1         3307026.0         6982430.6         9.0           SUMPO13         LHANP-46         P-118         1         3307027.0         6982428.8         4.0           SUMPO14         LHANP-46         B-7         1         3306661.0         6982434.4         4.0           SUMPO15         LHANP-46         B-7         1         3306664.0         6982245.0         5.0           SUMPO16         LHANP-46         B-10         1         3306564.0         6982245.0         5.0           SUMPO17         LHANP-46         B-11         1         3306564.0         6982240.0         5.0   | SUMP005        |              | P-3      | 1        | 3305998.0 | 6963333.7         | 4.0        |                      |
| SUMPOO         LIAAP-46         P-116         1         SUMPOO         LIAAP-46         P-117         1         SUMPOO         LIAAP-46         P-117         1         SUMPOO         SUMPOO         LIAAP-46         P-117         1         SUMPOO         SUMPOO         LIAAP-46         P-117         1         SUMPOO         SUMPOO         LIAAP-46         P-118         1         SUMPOO         SUMPOO         LIAAP-46         P-118         1         SUMPOO         SUMPOO         LIAAP-46         P-118         1         SUMPOO         SUMPOO         SUMPOO         LIAAP-46         P-118         1         SUMPOO         SUMPOO         SUMPOO         LIAAP-46         P-118         1         SUMPOO         SUMPOO <th< td=""><td>SUMP006</td><td></td><td>P-116</td><td>1</td><td>3307022.0</td><td>6063177.5</td><td>4.0</td><td></td></th<> | SUMP006        |              | P-116    | 1        | 3307022.0 | 6063177.5         | 4.0        |                      |
| SUMPO08         LHARP-46         P-117         1         33070130         C6983224.6         7.0           SUMPO09         LHARP-46         P-117         1         3307030.0         6982326.6         7.0           SUMPO10         LHARP-46         P-118         1         3307035.0         6982430.5         9.0           SUMPO11         LHARP-46         P-118         1         3307025.0         6982430.8         9.0           SUMPO12         LHARP-46         P-118         1         3307025.0         6982430.8         9.0           SUMPO15         LHARP-46         B-7         1         3306661.0         6982434.4         4.0           SUMPO16         LHARP-46         B-7         1         3306661.0         6982428.0         2.5           SUMPO17         LHARP-46         B-7         1         3306664.0         6982245.0         2.5           SUMPO18         LHARP-46         B-10         1         3306545.0         6082245.0         2.5           SUMPO19         LHARP-46         B-11         1         3306545.0         6982245.0         5.0           SUMPO20         LHARP-46         B-12         1         3306564.0         6982245.0         7.0 </td <td>SUMP007</td> <td></td> <td>P-116</td> <td>1</td> <td>3307022.0</td> <td>6963140.4</td> <td>9.0</td> <td></td>  | SUMP007        |              | P-116    | 1        | 3307022.0 | 6963140.4         | 9.0        |                      |
| SUMP09         LHAR-46         P.117         1         3307003.0         688323.46         7.0           SUMP010         LHARP-46         P.118         1         3307065.0         6862365.2         9.0           SUMP011         LHARP-46         P.118         1         330705.0         6862365.2         9.0           SUMP012         LHARP-46         P.118         1         330703.0         6862368.6         9.0           SUMP014         LHARP-46         P.118         1         330730.0         6862368.6         9.0           SUMP014         LHARP-46         P.118         1         330750.0         6862282.8         4.0           SUMP015         LHARP-46         B-7         1         3305661.0         6962282.0         2.5           SUMP017         LHARP-46         B-9         1         330574.0         6962293.0         2.5           SUMP020         LHARP-46         B-11         1         3305654.0         6962290.7         3.5           SUMP021         LHARP-46         B-13         1         3305644.0         6962290.7         7.0           SUMP022         LHARP-46         B-16         1         330610.0         696290.7         3.5  | SUMP008        |              | P-117    | 1        | 3307020.0 | 6963357.9         | 5.0        |                      |
| SUMP010         LinkaP46         P-118         1         3307052.0         982430.5         9.0           SUMP011         LinkaP46         P-118         1         3307053.0         6862438.6         10.0           SUMP012         LinkaP46         P-118         1         3307304.0         6862438.6         10.0           SUMP013         LinkaP46         P-118         1         3307304.0         686228.6         9.0           SUMP015         LinkaP46         B-7         1         3305661.0         696228.2         4.0           SUMP017         LinkaP46         B-7         1         3305664.0         696228.0         2.5           SUMP019         LinkaP46         B-9         1         330564.0         696243.5         5.0           SUMP019         LinkaP46         B-10         1         330564.0         696291.7         3.5           SUMP021         LinkaP46         B-16         1         330564.0         696291.7         3.5           SUMP023         LinkaP46         B-16         1         330564.0         696290.7         3.5           SUMP024         LinkaP46         B-16         1         330561.0         696293.7         3.5  | SUMP009        |              | P-117    | 1        | 3307003.0 | 6963324.6         | 7.0        |                      |
| SUMP011         LinApP46         P-118         1         3307052.0         9862365.2         11.0           SUMP012         LinApP46         P-118         1         330702.0         6862396.6         9.0           SUMP014         LinApP46         P-118         1         3307302.0         6862396.6         9.0           SUMP014         LinApP46         P-118         1         330762.0         6862396.6         9.0           SUMP016         LinApP46         B-7         1         3305661.0         6962243.4         4.0           SUMP017         LinApP46         B-9         1         330564.0         696259.5         0.0           SUMP018         LinApP46         B-10         1         3305663.0         696259.9         5.0           SUMP020         LinApP46         B-11         1         3305664.0         696259.7         3.5           SUMP021         LinApP46         B-12         1         3305664.0         696279.7         3.5           SUMP022         LinApP46         B-14         1         330563.0         696289.7         3.5           SUMP023         LinApP46         B-16         1         330563.0         696299.7         3.5 <t< td=""><td>SUMP010</td><td></td><td>P-118</td><td>1</td><td>3307055.0</td><td>6962430 5</td><td>9.0</td><td></td></t<>   | SUMP010        |              | P-118    | 1        | 3307055.0 | 6962430 5         | 9.0        |                      |
| SUMP012         LHARP46         P-118         1         3307302.0         6862438.6         1.0.0           SUMP013         LHARP46         P-118         1         3307304.0         6862436.6         9.0           SUMP014         LHARP46         B-5         1         330567.0         666228.2         4.0           SUMP015         LHARP46         B-7         1         3305664.0         6862434.4         4.0           SUMP017         LHARP46         B-9         1         3305664.0         6862434.4         4.0           SUMP019         LHARP46         B-9         1         3305664.0         6962465.5         5.0           SUMP019         LHARP46         B-10         1         330564.0         6962475.2         5.5           SUMP020         LHARP46         B-11         1         330564.0         6962495.2         5.5           SUMP021         LHARP46         B-12         1         330561.0         6962775.2         7.0           SUMP023         LHARP46         B-16         1         3306310.0         6962893.7         3.5           SUMP024         LHARP46         B-16         1         330651.0         6962937.3         3.5  | SUMP011        |              | P-118    | 1        | 3307053.0 | 6962355.2         | 11.0       |                      |
| SUMP013         LHAAP46         P-118         1         3307204.0         6862369.6         9.0           SUMP014         LHAAP46         B-5         1         330667.0         6862328.8         4.0           SUMP015         LHAAP46         B-7         1         3305661.0         6696234.4         4.0           SUMP016         LHAAP46         B-7         1         3305664.0         6962252.0         2.5           SUMP018         LHAAP46         B-9         1         3305742.0         6962465.5         5.0           SUMP018         LHAAP46         B-10         1         3305651.0         6962465.5         5.0           SUMP020         LHAAP46         B-11         1         330651.0         6962265.9         5.0           SUMP022         LHAAP46         B-13         1         330654.0         6962290.7         3.5           SUMP023         LHAAP46         B-16         1         330664.0         6962290.7         3.5           SUMP024         LHAAP46         B-16         1         330664.0         696229.5         5.0           SUMP025         LHAAP46         P-12         1         330664.0         696224.5         5.0 <td< td=""><td>SUMP012</td><td>LHAAP-46</td><td>P-118</td><td>1</td><td>3307302.0</td><td>6962438.8</td><td>10.0</td><td></td></td<>  | SUMP012        | LHAAP-46     | P-118    | 1        | 3307302.0 | 6962438.8         | 10.0       |                      |
| SUMP014         LHAAP-46         B-5         1         3036770         6962282.8         4.0           SUMP015         LHAAP-46         B-7         1         330660.0         696243.4         4.0           SUMP017         LHAAP-46         B-7         1         330564.0         696228.0         2.5           SUMP018         LHAAP-46         B-9         1         330574.0         6962255.0         2.5           SUMP019         LHAAP-46         B-9         1         330654.0         6962255.9         5.0           SUMP019         LHAAP-46         B-10         1         330656.0         6962559.9         5.0           SUMP021         LHAAP-46         B-11         1         330654.0         696259.7         3.5           SUMP022         LHAAP-46         B-14         1         330654.0         696229.7         3.5           SUMP024         LHAAP-46         B-14         1         330654.0         696229.5         5.0           SUMP025         LHAAP-46         B-14         1         330651.0         696298.7         3.5           SUMP026         LHAAP-46         P-12.2         1         330677.0         696298.7         3.5 <td< td=""><td>SUMP013</td><td></td><td>P-118</td><td>1</td><td>3307304.0</td><td>6962369.6</td><td>9.0</td><td></td></td<>   | SUMP013        |              | P-118    | 1        | 3307304.0 | 6962369.6         | 9.0        |                      |
| SUMP015         LHAAP-46         B-7         1         3305660.0         6962436.0         5.0           SUMP016         LHAAP-46         B-7         1         3305661.0         6962434.4         4.0           SUMP018         LHAAP-46         B-9         1         3305664.0         6962252.0         2.5           SUMP018         LHAAP-46         B-9         1         3305742.0         6962465.5         5.0           SUMP019         LHAAP-46         B-10         1         3305653.0         6962265.9         5.0           SUMP020         LHAAP-46         B-11         1         330664.0         6962269.7         3.5           SUMP023         LHAAP-46         B-15         1         3306318.0         696229.6         1.5           SUMP024         LHAAP-46         B-16         1         3306318.0         696229.5         5.0           SUMP025         LHAAP-46         B-15         1         330636.0         696237.1         3.5           SUMP026         LHAAP-46         P-12         1         330676.0         6961317.4         5.0           SUMP028         LHAAP-46         P-12.1         1         330675.0         696125.5         3.0   | SUMP014        |              | B-5      | 1        | 3305677.0 | 6962282.8         | 4.0        |                      |
| SUMP016         LHARP-46         B-7         1         3303651.0         5962434.4         4.0           SUMP017         LHARP-46         B-9         1         3303661.0         696228.0         2.5           SUMP018         LHARP-46         B-9         1         330374.0         6962280.0         2.5           SUMP019         LHARP-46         B-10         1         3303632.0         6962645.2         5.5           SUMP021         LHARP-46         B-12         1         330651.0         6962691.7         3.5           SUMP023         LHARP-46         B-13         1         330651.0         6962809.7         3.5           SUMP024         LHARP-46         B-16         1         3306318.0         6962894.5         5.0           SUMP025         LHARP-46         B-16         1         3306294.0         6862171.2         3.0           SUMP026         LHARP-46         P-122         1         330672.0         696173.4         3.0           SUMP028         LHARP-46         P-123         1         330677.0         6961495.4         3.0           SUMP030         LHARP-46         212-14         1         330575.0         6961408.2         3.5      <   | SUMP015        |              | B-7      | 1        | 3305660.0 | 6962405.0         | 5.0        |                      |
| SUMP017         LHAAP-46         B-9         1         3303664.0         6962528.0         2.5           SUMP018         LHAAP-46         B-9         1         3303742.0         6962465.5         5.0           SUMP019         LHAAP-46         B-10         1         3303632.0         6962528.0         5.0           SUMP020         LHAAP-46         B-11         1         330563.0         6962645.2         5.5           SUMP021         LHAAP-46         B-12         1         3305610.0         6962690.7         3.5           SUMP022         LHAAP-46         B-15         1         3306644.0         6962890.7         3.5           SUMP024         LHAAP-46         B-16         1         3306631.0         6962890.7         3.5           SUMP025         LHAAP-46         B-16         1         3306634.0         696289.7         3.5           SUMP026         LHAAP-46         P-122         1         3306635.0         11.0         1.1.0           SUMP029         LHAAP-46         P-122         1         3306767.0         6963455.0         11.0           SUMP030         LHAAP-46         212-12         1         3305755.0         6961495.8         3.0   | SUMP016        |              | B-7      | 1        | 3305651.0 | 6962434.4         | 4.0        |                      |
| SUMP01         LHARP-46         B-9         1         SUMP01         LHARP-46         B-10         1         SUMP01         LHARP-46         B-10         1         SUMP01         LHARP-46         B-11         1         SUMP02         LHARP-46         B-11         1         SUMP02         LHARP-46         B-12         1         SUMP02         LHARP-46         B-12         1         SUMP02         LHARP-46         B-13         1         SUMP02         LHARP-46         B-14         1         SUMP02         LHARP-46         B-14         1         SUMP02         LHARP-46         B-15         1         SUMP02         LHARP-46         B-16         1         SUMP02         LHARP-46         B-16         1         SUMP02         LHARP-46         P-9         1         SUMP02         LHARP-46         P-9         1         SUMP02         LHARP-46         P-9         1         SUMP02         LHARP-46         P-122         1         SUMP02         LHARP-46         P-122         1         SUMP02         LHARP-46         P-122         1         SUMP02         LHARP-46         P122         1         SUMP03         LHARP-46         P122         1         SUMP03         LHARP-46         P122         1         SUMP03 <t< td=""><td>SUMP017</td><td></td><td>B-9</td><td>1</td><td>3305664.0</td><td>6962528.0</td><td>2.5</td><td></td></t<>                               | SUMP017        |              | B-9      | 1        | 3305664.0 | 6962528.0         | 2.5        |                      |
| SUMP010         LHAP-46         B-10         1         3306332.0         6662559.9         5.0           SUMP020         LHAAP-46         B-11         1         3306632.0         6662569.7         5.5           SUMP021         LHAAP-46         B-12         1         3306631.0         69622691.7         3.5           SUMP022         LHAAP-46         B-13         1         3306634.0         6962290.7         3.5           SUMP023         LHAAP-46         B-16         1         3306311.0         6962290.7         3.5           SUMP024         LHAAP-46         B-16         1         3306318.0         6962293.7         3.5           SUMP025         LHAAP-46         B-16         1         3306310.0         6962293.7         3.5           SUMP027         LHAAP-46         P-12         1         3306720.0         6963455.0         11.0           SUMP030         LHAAP-46         P-122         1         3306720.0         6961425.4         3.0           SUMP031         LHAAP-46         212-12         1         3306720.0         6961457.8         3.0           SUMP032         LHAAP-46         212-14         1         3306750.0         6961457.8         3.0   | SUMP018        |              | B-9      | 1        | 3305742.0 | 6962466 5         | 5.0        |                      |
| SUMP103         LHAR-46         B-11         1         3305263.0         6962645.2         5.5           SUMP021         LHAR-46         B-12         1         3306516.0         6962691.7         3.5           SUMP022         LHAR-46         B-13         1         3306516.0         6962290.7         3.5           SUMP023         LHAR-46         B-14         1         3306514.0         6962890.7         3.5           SUMP024         LHAR-46         B-16         1         3306518.0         6962892.4         5.0           SUMP026         LHAR-46         B-16         1         3306535.0         696283.7         3.5           SUMP026         LHAR-46         P-9         1         3306503.0         6963123.4         5.0           SUMP028         LHAR-46         P-122         1         3306770.0         6963125.4         3.0           SUMP030         LHAR-46         P121         1         3305725.0         6961405.2         3.0           SUMP031         LHAR-46         212-14         1         3305755.0         6961405.8         3.0           SUMP033         LHAR-46         212-18         1         3305755.0         6961405.8         3.0 <t< td=""><td>SUMP019</td><td></td><td>B-10</td><td>1</td><td>3306332.0</td><td colspan="2">06332.0 6962559.9</td><td></td></t<>  | SUMP019        |              | B-10     | 1        | 3306332.0 | 06332.0 6962559.9 |            |                      |
| SUMP021         LHAAP-46         B-12         1         3306316.0         6962691.7         3.5           SUMP022         LHAAP-46         B-13         1         3306636.0         6962891.7         3.5           SUMP023         LHAAP-46         B-13         1         3306636.0         6962890.7         3.5           SUMP024         LHAAP-46         B-16         1         3306364.0         6962890.7         3.5           SUMP025         LHAAP-46         B-16         1         3306530.0         6962983.7         3.5           SUMP026         LHAAP-46         P-9         1         3306630.0         6963123.4         5.0           SUMP028         LHAAP-46         P-122         1         3306767.0         6963455.0         11.0           SUMP030         LHAAP-46         P-122         1         3305728.0         6961273.4         3.0           SUMP031         LHAAP-46         212-12         1         3305755.0         6961408.2         3.5           SUMP032         LHAAP-46         212-14         1         3305755.0         6961495.8         3.0           SUMP033         LHAAP-46         212-29         1         3306775.0         6962514.6         3.0   | SUMP020        |              | B-10     | 1        | 3305653.0 | 6962645.2         | 5.0        |                      |
| SUMP021         LHAAP-46         B-13         1         3305654.0         6962775.2         7.0           SUMP023         LHAAP-46         B-14         1         3305654.0         6962890.7         3.5           SUMP024         LHAAP-46         B-15         1         330564.0         6962890.6         1.5           SUMP025         LHAAP-46         B-16         1         3305630.0         6962924.5         5.0           SUMP026         LHAAP-46         B-16         1         3305635.0         6963123.4         5.0           SUMP027         LHAAP-46         P-9         1         3306767.0         6963455.0         11.0           SUMP028         LHAAP-46         P-122         1         3305728.0         6961273.4         3.0           SUMP030         LHAAP-46         212-12         1         330575.0         6961408.2         3.5           SUMP032         LHAAP-46         212-14         1         330575.0         6961495.8         3.0           SUMP033         LHAAP-46         212-18         1         330575.0         6961495.8         3.5           SUMP033         LHAAP-46         212-29         1         330677.0         6963213.1         Unknown   | SUMP021        |              | B-11     | 1        | 3306316.0 | 6062601 7         | 3.5        |                      |
| SUMP023         LHAAP-46         B-13         1         3306311.0         6662890.7         3.5           SUMP024         LHAAP-46         B-15         1         3306311.0         6662890.7         3.5           SUMP025         LHAAP-46         B-15         1         3306311.0         6662890.7         3.5           SUMP026         LHAAP-46         B-16         1         3306310.0         6962983.7         3.5           SUMP027         LHAAP-46         P-9         1         3306350.0         6963123.4         5.0           SUMP028         LHAAP-46         P-122         1         3305720.0         6961255.4         3.0           SUMP030         LHAAP-46         212-12         1         3305725.0         6961405.2         3.5           SUMP032         LHAAP-46         212-14         1         3305750.0         6961495.8         3.0           SUMP033         LHAAP-46         212-18         1         3305750.0         6961652.4         3.5           SUMP036         LHAAP-46         212-29         1         330575.0         6961495.8         3.0           SUMP033         LHAAP-46         212-31         1         3306575.0         6961652.4         3.0  | SUMP022        |              | B-12     | 1        | 3305654.0 | 6962775.2         | 7.0        |                      |
| SUMP024         LHAAP-46         B-15         1         3305644.0         662290.6         1.5           SUMP025         LHAAP-46         B-16         1         3305644.0         6662890.6         1.5           SUMP026         LHAAP-46         B-16         1         3305635.0         6962924.5         5.0           SUMP027         LHAAP-46         P-12         1         3305635.0         6963123.4         5.0           SUMP028         LHAAP-46         P-122         1         3305635.0         6963125.0         11.0           SUMP028         LHAAP-46         212-12         1         3305720.0         6961255.4         3.0           SUMP030         LHAAP-46         212-14         1         3305750.0         6961495.8         3.0           SUMP033         LHAAP-46         212-16         1         3305750.0         6961495.8         3.0           SUMP035         LHAAP-46         P122         1         3305750.0         6961495.8         3.0           SUMP036         LHAAP-46         P122         1         3305750.0         6961495.8         3.0           SUMP038         LHAAP-46         212-33         1         3305750.0         6961495.8         3.0  | SUMP023        |              | B-13     | 1        | 3306311.0 | 6962809.7         | 3.5        |                      |
| SUMP025         LHAAP-46         B-16         1         SUMP026         LHAAP-46         SHED C         1         3306318.0         6962923.7         5.0           SUMP026         LHAAP-46         SHED C         1         3306318.0         6963171.2         3.0           SUMP028         LHAAP-46         P-9         1         3306808.0         6963171.2         3.0           SUMP029         LHAAP-46         P-122         1         3306767.0         6963455.0         11.0           SUMP030         LHAAP-46         212.12         1         3305728.0         6961273.4         3.0           SUMP031         LHAAP-46         212.14         1         3305750.0         6961408.2         3.5           SUMP032         LHAAP-46         212.14         1         3305750.0         6961495.8         3.0           SUMP034         LHAAP-46         212.14         1         3305750.0         6961452.4         3.5           SUMP035         LHAAP-46         212.29         1         3305750.0         6962513.1         Unknown           SUMP036         LHAAP-46         212.29         1         3306770.0         6961393.1         3.0           SUMP039         LHAAP-46 <td< td=""><td>SUMP024</td><td></td><td>B-14</td><td>1</td><td>3305644.0</td><td>6062800.6</td><td>1.5</td><td></td></td<>  | SUMP024        |              | B-14     | 1        | 3305644.0 | 6062800.6         | 1.5        |                      |
| SUMP026         LHAAP-46         SHED C         1         SUMP027         LHAAP-46         SHED C         1         3306299.0         6962983.7         3.5           SUMP027         LHAAP-46         P-9         1         3306299.0         6963123.4         5.0           SUMP028         LHAAP-46         P-122         1         330676.0         6963455.0         11.0           SUMP030         LHAAP-46         212-12         1         3305722.0         6961273.4         3.0           SUMP031         LHAAP-46         212-14         1         3305755.0         6961408.2         3.5           SUMP032         LHAAP-46         212-14         1         3305755.0         6961495.8         3.0           SUMP033         LHAAP-46         212-18         1         330575.0         6961495.8         3.0           SUMP036         LHAAP-46         212-14         1         330575.0         6961495.8         3.0           SUMP037         LHAAP-46         212-21         1         330575.0         696241.6         3.0           SUMP036         LHAAP-46         212-32         1         330679.0         696282.8         2.0           SUMP038         LHAAP-46         212-33 </td <td>SUMP025</td> <td></td> <td>B-16</td> <td>1</td> <td>3306318.0</td> <td>6962030.0</td> <td>5.0</td> <td></td>   | SUMP025        |              | B-16     | 1        | 3306318.0 | 6962030.0         | 5.0        |                      |
| SUMP027         LHAR-46         P:0         1         3306233.0         3305233.7         33.7           SUMP028         LHAR-46         P:122         1         3306608.0         6963171.2         3.0           SUMP028         LHARP-46         P:122         1         330677.0         6963455.0         11.0           SUMP030         LHARP-46         212.12         1         330572.0         6961255.4         3.0           SUMP031         LHARP-46         212.12         1         3305752.0         6961273.4         3.0           SUMP032         LHARP-46         212.14         1         3305755.0         6961408.2         3.5           SUMP033         LHARP-46         212.14         1         330575.0         6961495.8         3.0           SUMP036         LHARP-46         212.18         1         3306775.0         696122.4         3.5           SUMP036         LHARP-46         P122         1         3306277.0         696214.6         3.0           SUMP039         LHARP-46         212.33         1         3306377.0         6961428.8         2.0           SUMP039         LHARP-46         212.33         1         3306377.0         6961393.1         3.0 <td>SUMP026</td> <td></td> <td>SHED C</td> <td>1</td> <td>3306299.0</td> <td>6962983 7</td> <td>3.5</td> <td></td>  | SUMP026        |              | SHED C   | 1        | 3306299.0 | 6962983 7         | 3.5        |                      |
| SUMP028         LHAAP-46         P-122         1         3306030.0         6963171.2         3.0           SUMP029         LHAAP-46         P-123         1         330677.0         6963455.0         11.0           SUMP030         LHAAP-46         212-12         1         3305722.0         6961255.4         3.0           SUMP031         LHAAP-46         212-12         1         3305728.0         6961273.4         3.0           SUMP032         LHAAP-46         212-14         1         3305755.0         6961408.2         3.5           SUMP033         LHAAP-46         212-14         1         3305755.0         6961495.8         3.0           SUMP034         LHAAP-46         212-18         1         330575.0         6961495.8         3.0           SUMP035         LHAAP-46         212-29         1         330677.0         6961495.8         3.0           SUMP038         LHAAP-46         212-32         1         3306377.0         696138.1         3.0           SUMP039         LHAAP-46         212-33         1         3306345.0         6961393.1         3.0           SUMP040         LHAAP-46         212-37         1         3306345.0         6961626.6  | SUMP027        |              | P-9      | 1        | 3305635.0 | 6963123.4         | 5.0        |                      |
| SUMP029         LHAAP-46         P123         1         3306767.0         6963455.0         11.0           SUMP030         LHAAP-46         212-12         1         3305722.0         6961273.4         3.0           SUMP031         LHAAP-46         212-12         1         3305725.0         6961273.4         3.0           SUMP032         LHAAP-46         212-14         1         3305725.0         6961408.2         3.5           SUMP033         LHAAP-46         212-14         1         3305755.0         6961495.8         4.0           SUMP035         LHAAP-46         212-18         1         3305753.0         6961495.8         3.5           SUMP036         LHAAP-46         212-29         1         3306753.0         6961495.8         3.5           SUMP038         LHAAP-46         212-29         1         3306775.0         6961418.3         Unknown           SUMP039         LHAAP-46         212-32         1         3306377.0         6961418.3         Unknown           SUMP039         LHAAP-46         212-33         1         3306345.0         6961535.7         3.0           SUMP040         LHAAP-46         212-37         1         3306345.0         696162.2   | SUMP028        |              | P-122    | 1        | 3306808.0 | 6963171.2         | 3.0        |                      |
| SUMP030         LHAAP-46         212-12         1         3305722.0         6961255.4         3.0           SUMP031         LHAAP-46         212-12         1         3305725.0         6961273.4         3.0           SUMP032         LHAAP-46         212-14         1         3305725.0         6961408.2         3.5           SUMP033         LHAAP-46         212-14         1         3305755.0         6961495.8         3.0           SUMP034         LHAAP-46         212-16         1         3305753.0         6961652.4         3.5           SUMP035         LHAAP-46         212-29         1         3305775.0         6962313.1         Unknown           SUMP037         LHAAP-46         212-29         1         330577.0         696228.8         2.0           SUMP038         LHAAP-46         212-33         1         3306377.0         6961418.3         Unknown           SUMP040         LHAAP-46         212-33         1         3306377.0         6961418.3         Unknown           SUMP041         LHAAP-46         212-37         1         3306377.0         6961282.6         3.0           SUMP043         LHAAP-46         212-35         1         3306366.0         6961622.6 <td>SUMP029</td> <td></td> <td>P-122</td> <td>1</td> <td>3306767.0</td> <td>6963455.0</td> <td>11.0</td> <td></td>  | SUMP029        |              | P-122    | 1        | 3306767.0 | 6963455.0         | 11.0       |                      |
| SUMP031         LHARP-46         212-12         1         3305728.0         6961207.4         3.0           SUMP032         LHARP-46         212-14         1         3305728.0         6961408.2         3.5           SUMP033         LHAAP-46         212-14         1         3305755.0         6961408.2         3.5           SUMP034         LHAAP-46         212-16         1         3305755.0         6961495.8         3.0           SUMP035         LHAAP-46         212-18         1         3305755.0         6961495.8         3.0           SUMP036         LHAAP-46         212-29         1         330575.0         6962313.1         Unknown           SUMP037         LHAAP-46         212-32         1         3306377.0         6961483.8         2.0           SUMP039         LHAAP-46         212-33         1         3306377.0         6961393.1         3.0           SUMP040         LHAAP-46         212-37         1         3306362.0         6961535.7         3.0           SUMP041         LHAAP-46         212-37         1         3306345.0         696162.2         1.5           SUMP043         LHAAP-46         212-37         1         3306361.0         6957854.1   | SUMP030        |              | 212-12   | 1        | 3305722.0 | 6961255.4         | 3.0        |                      |
| SUMP032         LHARP-46         212-14         1         3005725.0         6961408.2         3.5           SUMP033         LHARP-46         212-14         1         3305755.0         6961408.2         3.5           SUMP034         LHARP-46         212-16         1         3305755.0         6961408.2         3.5           SUMP035         LHARP-46         212-18         1         3305755.0         69614052.4         3.5           SUMP036         LHARP-46         212-18         1         3305775.0         6962514.6         3.0           SUMP037         LHARP-46         212-29         1         3306217.0         6961408.2         2.0           SUMP038         LHARP-46         212-33         1         3306217.0         6961418.3         Unknown           SUMP039         LHARP-46         212-33         1         3306377.0         6961393.1         3.0           SUMP040         LHARP-46         212-37         1         3306345.0         6961662.2         1.5           SUMP041         LHARP-46         212-38         1         3306345.0         6961662.2         1.5           SUMP043         LHARP-47         25-C         2         3308961.0         6957854.1  | SUMP031        |              | 212-12   | 1        | 3305728.0 | 6961273.4         | 3.0        |                      |
| SUMP033         LHAP-46         212-14         1         3305765.0         6961357.8         4.0           SUMP034         LHAAP-46         212-16         1         3305755.0         6961495.8         3.0           SUMP035         LHAAP-46         212-18         1         3305755.0         6961652.4         3.5           SUMP036         LHAAP-46         P122         1         3306799.0         6963213.1         Unknown           SUMP037         LHAAP-46         212-29         1         3306775.0         6962514.6         3.0           SUMP038         LHAAP-46         212-29         1         3306377.0         6961393.1         Unknown           SUMP039         LHAAP-46         212-33         1         3306377.0         6961393.1         3.0           SUMP040         LHAAP-46         212-35         1         3306377.0         6961395.7         3.0           SUMP041         LHAAP-46         212-35         1         3306366.0         6961535.7         3.0           SUMP043         LHAAP-46         212-37         1         3306345.0         6961662.2         1.5           SUMP043         LHAAP-47         25-C         2         330900.0         695784.1  | SUMP032        |              | 212-12   | 1        | 3305725.0 | 6961408.2         | 3.5        |                      |
| SUMP034         LHAAP-46         212-16         1         300755.0         6061495.8         3.0           SUMP035         LHAAP-46         212-18         1         3305755.0         6961495.8         3.0           SUMP036         LHAAP-46         P122         1         3306793.0         6961652.4         3.5           SUMP036         LHAAP-46         P122         1         3306775.0         6962514.6         3.0           SUMP038         LHAAP-46         212-32         1         3306377.0         6961282.8         2.0           SUMP039         LHAAP-46         212-33         1         3306377.0         6961418.3         Unknown           SUMP040         LHAAP-46         212-33         1         3306377.0         6961535.7         3.0           SUMP041         LHAAP-46         212-37         1         3306345.0         696162.2         1.5           SUMP042         LHAAP-46         212-38         1         3306197.0         6961662.2         1.5           SUMP043         LHAAP-47         25-C         2         330900.0         6957748.3         6.5         1           SUMP046         LHAAP-47         25-C         2         3309271.0         6957946.0<   | SUMP033        |              | 212-14   | 1        | 3305765.0 | 6961357.8         | 4.0        |                      |
| StumP035         LHAAP-46         212-16         1         3005753.0         6961652.4         3.5           SUMP036         LHAAP-46         P-122         1         3306799.0         6963213.1         Unknown           SUMP037         LHAAP-46         212-29         1         3306775.0         6961652.4         3.0           SUMP038         LHAAP-46         212-32         1         3306377.0         6961418.3         Unknown           SUMP039         LHAAP-46         212-33         1         3306377.0         6961418.3         Unknown           SUMP040         LHAAP-46         212-33         1         3306377.0         6961393.1         3.0           SUMP041         LHAAP-46         212-35         1         3306377.0         6961622.6         3.0           SUMP042         LHAAP-46         212-37         1         3306377.0         6961622.2         1.5           SUMP043         LHAAP-47         25-C         2         3308081.0         6961622.2         1.5           SUMP044         LHAAP-47         25-C         2         330900.0         6957854.1         4.0           SUMP045         LHAAP-47         25-C         2         Unknown Location         Unknown <td>SUMP034</td> <td></td> <td>212-14</td> <td>1</td> <td>3305755.0</td> <td>6961495.8</td> <td>3.0</td> <td></td>  | SUMP034        |              | 212-14   | 1        | 3305755.0 | 6961495.8         | 3.0        |                      |
| SUMP036         LHAAP-46         P-122         1         3306799.0         6963213.1         Uhknown           SUMP037         LHAAP-46         212-29         1         3306799.0         6963213.1         Uhknown           SUMP038         LHAAP-46         212-29         1         3306217.0         6961282.8         2.0           SUMP039         LHAAP-46         212-32         1         3306377.0         6961393.1         3.0           SUMP040         LHAAP-46         212-33         1         3306377.0         6961393.1         3.0           SUMP041         LHAAP-46         212-35         1         3306366.0         6961525.7         3.0           SUMP042         LHAAP-46         212-37         1         3306345.0         6961622.6         3.0           SUMP043         LHAAP-46         212-38         1         3306197.0         6961662.2         1.5           SUMP044         LHAAP-47         25-C         2         3309801.0         6957854.1         4.0           SUMP045         LHAAP-47         25-C         2         309271.0         6957946.0         1.5           SUMP046         LHAAP-47         25-D         2         3309726.0         6958318.9   | SUMP035        |              | 212-18   | 1        | 3305753.0 | 6961652.4         | 3.5        |                      |
| SUMP037         LHAAP-46         212-29         1         3305775.0         6962514.6         3.0           SUMP038         LHAAP-46         212-32         1         3306377.0         6962514.6         3.0           SUMP039         LHAAP-46         212-32         1         3306377.0         6961282.8         2.0           SUMP039         LHAAP-46         212-33         1         3306377.0         6961418.3         Unknown           SUMP040         LHAAP-46         212-33         1         3306377.0         6961393.1         3.0           SUMP041         LHAAP-46         212-35         1         3306345.0         6961626.6         3.0           SUMP042         LHAAP-46         212-38         1         330636197.0         6961662.2         1.5           SUMP043         LHAAP-47         25-C         2         3308961.0         6957854.1         4.0           SUMP045         LHAAP-47         25-C         2         3309271.0         6957946.0         1.5           SUMP046         LHAAP-47         25-D         2         3309759.0         6958136.9         Unknown           SUMP048         LHAAP-47         26-E         2         3309609.0         6958136.9   | SUMP036        | LHAAP-46     | P-122    | 1        | 3306799.0 | 6963213.1         | Unknown    |                      |
| SUMP038         LHAAP-46         212-32         1         3306217.0         6961282.8         2.0           SUMP039         LHAAP-46         212-32         1         3306217.0         6961282.8         2.0           SUMP039         LHAAP-46         212-33         1         3306377.0         6961282.8         2.0           SUMP040         LHAAP-46         212-33         1         3306377.0         6961393.1         3.0           SUMP041         LHAAP-46         212-37         1         3306345.0         6961622.6         3.0           SUMP043         LHAAP-46         212-37         1         3306345.0         6961662.2         1.5           SUMP043         LHAAP-46         212-38         1         3306197.0         6961662.2         1.5           SUMP044         LHAAP-47         25-C         2         330900.0         6957854.1         4.0           SUMP045         LHAAP-47         25-C         2         Unknown Location         Unknown           SUMP046         LHAAP-47         25-C         2         3309271.0         6957946.0         1.5           SUMP048         LHAAP-47         26-E         2         3309759.0         6958232.3         3.0   | SUMP037        | LHAAP-46     | 212-29   | 1        | 3305775.0 | 6962514.6         | 3.0        |                      |
| SUMP039         LHAAP-46         212-33         1         3306377.0         6961418.3         Unknown           SUMP040         LHAAP-46         212-33         1         3306377.0         6961393.1         3.0           SUMP041         LHAAP-46         212-35         1         3306366.0         6961535.7         3.0           SUMP042         LHAAP-46         212-37         1         3306345.0         696162.6         3.0           SUMP043         LHAAP-46         212-38         1         3306377.0         696162.2         1.5           SUMP044         LHAAP-46         212-37         1         3306345.0         696162.2         1.5           SUMP043         LHAAP-46         212-38         1         3306377.0         6961662.2         1.5           SUMP044         LHAAP-47         25-C         2         3308961.0         6957854.1         4.0           SUMP045         LHAAP-47         25-C         2         Unknown Location         Unknown           SUMP046         LHAAP-47         25-C         2         3309271.0         6957946.0         1.5           SUMP048         LHAAP-47         26-E         2         3309759.0         6958232.3         3.0   | SUMP038        | LHAAP-46     | 212-32   | 1        | 3306217.0 | 6961282.8         | 2.0        |                      |
| SUMP040         LHAAP-46         212-33         1         3306377.0         6961393.1         3.0           SUMP041         LHAAP-46         212-35         1         3306366.0         6961535.7         3.0           SUMP042         LHAAP-46         212-37         1         3306365.0         6961626.6         3.0           SUMP043         LHAAP-46         212-37         1         3306345.0         6961662.2         1.5           SUMP043         LHAAP-46         212-38         1         3306197.0         6961662.2         1.5           SUMP044         LHAAP-47         25-C         2         330900.0         6957854.1         4.0           SUMP045         LHAAP-47         25-C         2         330900.0         6957748.3         6.5         1           SUMP046         LHAAP-47         25-C         2         3309271.0         6957946.0         1.5           SUMP047         LHAAP-47         26-E         2         3309759.0         6958232.3         3.0           SUMP048         LHAAP-47         26-E         2         3309609.0         6958232.3         3.0           SUMP050         LHAAP-47         26-E         2         3309609.0         6958295.4   | SUMP039        | LHAAP-46     | 212-33   | 1        | 3306377.0 | 6961418.3         | Unknown    |                      |
| SUMP041         LHAAP-46         212-35         1         3306366.0         6961535.7         3.0           SUMP042         LHAAP-46         212-37         1         3306345.0         6961622.6         3.0           SUMP043         LHAAP-46         212-38         1         3306345.0         6961622.2         1.5           SUMP044         LHAAP-47         25-C         2         330900.0         6957854.1         4.0           SUMP045         LHAAP-47         25-C         2         330900.0         6957748.3         6.5         1           SUMP046         LHAAP-47         25-C         2         3309271.0         6957946.0         1.5           SUMP047         LHAAP-47         25-D         2         3309726.0         6958136.9         Unknown           SUMP048         LHAAP-47         26-E         2         3309759.0         6958232.3         3.0           SUMP050         LHAAP-47         26-E         2         3309609.0         6958381.8         4.0           SUMP051         LHAAP-47         26-E         2         3309609.0         6958295.4         6.0           SUMP052         LHAAP-47         26-E         2         3309647.0         6958295.4   | SUMP040        | LHAAP-46     | 212-33   | 1        | 3306377.0 | 6961393.1         | 3.0        |                      |
| SUMP042         LHAAP-46         212-37         1         3306345.0         696162.2         1.5           SUMP043         LHAAP-46         212-37         1         3306345.0         6961662.2         1.5           SUMP043         LHAAP-46         212-38         1         3306345.0         6961662.2         1.5           SUMP044         LHAAP-47         25-C         2         3308961.0         6957854.1         4.0           SUMP045         LHAAP-47         25-C         2         330900.0         6957748.3         6.5         1           SUMP046         LHAAP-47         25-C         2         Unknown Location         Unknown           SUMP047         LHAAP-47         25-D         2         3309726.0         6957946.0         1.5           SUMP048         LHAAP-47         26-E         2         3309759.0         6958232.3         3.0           SUMP050         LHAAP-47         26-E         2         3309609.0         6958381.8         4.0           SUMP051         LHAAP-47         26-E         2         3309647.0         6958295.4         6.0           SUMP052         LHAAP-47         28-G         2         330927.0         6958879.4         2.0   | SUMP041        | LHAAP-46     | 212-35   | 1        | 3306366.0 | 6961535.7         | 3.0        |                      |
| SUMP043         LHAAP-46         212-38         1         3306197.0         6961662.2         1.5           SUMP044         LHAAP-47         25-C         2         3308961.0         6957854.1         4.0           SUMP045         LHAAP-47         25-C         2         330900.0         6957748.3         6.5         1           SUMP046         LHAAP-47         25-C         2         3309271.0         6957946.0         1.5           SUMP047         LHAAP-47         25-D         2         3309726.0         6958136.9         Unknown           SUMP048         LHAAP-47         26-E         2         3309609.0         6958232.3         3.0           SUMP049         LHAAP-47         26-E         2         3309609.0         69588381.8         4.0           SUMP050         LHAAP-47         26-E         2         3309609.0         6958381.8         4.0           SUMP051         LHAAP-47         26-E         2         3309647.0         6958295.4         6.0           SUMP052         LHAAP-47         26-E         2         330927.0         6958579.4         2.0           SUMP053         LHAAP-47         28-G         2         330927.0         6958440.6   | SUMP042        | LHAAP-46     | 212-37   | 1        | 3306345.0 | 6961626.6         | 3.0        |                      |
| SUMP044         LHAAP-47         25-C         2         3308961.0         6957854.1         4.0           SUMP045         LHAAP-47         25-C         2         330900.0         6957854.1         4.0           SUMP046         LHAAP-47         25-C         2         330900.0         6957854.1         4.0           SUMP046         LHAAP-47         25-C         2         330900.0         6957946.0         1.5           SUMP047         LHAAP-47         25-D         2         330971.0         6957946.0         1.5           SUMP048         LHAAP-47         26-E         2         3309759.0         6958232.3         3.0           SUMP049         LHAAP-47         26-E         2         3309609.0         6958381.8         4.0           SUMP050         LHAAP-47         26-E         2         3309647.0         6958295.4         6.0           SUMP051         LHAAP-47         26-E         2         3309647.0         6958295.4         6.0           SUMP052         LHAAP-47         28-G         2         330927.0         6958579.4         2.0           SUMP053         LHAAP-47         29-D         2         3309903.0         6958742.0         5.0  | SUMP043        | LHAAP-46     | 212-38   | 1        | 3306197.0 | 6961662.2         | 1.5        |                      |
| SUMP045         LHAAP-47         25-C         2         330900.0         6957748.3         6.5         1           SUMP046         LHAAP-47         25-C         2         330900.0         6957748.3         6.5         1           SUMP046         LHAAP-47         25-C         2         Unknown Location         Unknown           SUMP047         LHAAP-47         25-D         2         330971.0         6957946.0         1.5           SUMP048         LHAAP-47         26-E         2         3309759.0         6958232.3         3.0           SUMP050         LHAAP-47         26-E         2         3309609.0         6958381.8         4.0           SUMP051         LHAAP-47         26-E         2         3309647.0         6958295.4         6.0           SUMP052         LHAAP-47         26-E         2         3309647.0         6958295.4         6.0           SUMP051         LHAAP-47         28-G         2         330927.0         6958579.4         2.0           SUMP053         LHAAP-47         29-D         2         330927.0         6958440.6         7.0           SUMP054         LHAAP-47         31-G         2         3309937.0         6958768.8   | SUMP044        | I HAAP-47    | 25-C     | 2        | 3308961.0 | 6957854.1         | 4.0        |                      |
| SUMP046         LHAAP-47         25-C         2         Unknown Location         Unknown           SUMP047         LHAAP-47         25-D         2         3309271.0         6957946.0         1.5           SUMP048         LHAAP-47         26-E         2         3309726.0         6958136.9         Unknown           SUMP049         LHAAP-47         26-E         2         3309759.0         6958232.3         3.0           SUMP050         LHAAP-47         26-E         2         3309609.0         6958381.8         4.0           SUMP051         LHAAP-47         26-E         2         3309647.0         6958295.4         6.0           SUMP052         LHAAP-47         26-E         2         3309647.0         6958295.4         6.0           SUMP052         LHAAP-47         28-G         2         3310425.0         6958579.4         2.0           SUMP053         LHAAP-47         29-D         2         330927.0         6958440.6         7.0           SUMP054         LHAAP-47         31-G         2         3309937.0         6958768.8         4.5   | SUMP045        | LHAAP-47     | 25-C     | 2        | 3309000.0 | 6957748.3         | 6.5        | 1                    |
| SUMP047         LHAAP-47         25-D         2         3309271.0         6957946.0         1.5           SUMP048         LHAAP-47         25-D         2         3309726.0         6958136.9         Unknown           SUMP049         LHAAP-47         26-E         2         3309759.0         6958232.3         3.0           SUMP050         LHAAP-47         26-E         2         3309609.0         6958381.8         4.0           SUMP051         LHAAP-47         26-E         2         3309647.0         6958295.4         6.0           SUMP052         LHAAP-47         28-G         2         3309227.0         6958579.4         2.0           SUMP053         LHAAP-47         29-D         2         3309227.0         6958440.6         7.0           SUMP054         LHAAP-47         31-G         2         3309937.0         6958768.8         4.5   | SUMP046        | I HAAP-47    | 25-C     | 2        | Unknown   | Location          | Unknown    |                      |
| SUMP048         LHAAP-47         26-E         2         3309726.0         6958136.9         Unknown           SUMP049         LHAAP-47         26-E         2         3309759.0         6958232.3         3.0           SUMP050         LHAAP-47         26-E         2         3309609.0         6958381.8         4.0           SUMP051         LHAAP-47         26-E         2         3309647.0         6958295.4         6.0           SUMP052         LHAAP-47         28-G         2         3309227.0         6958879.4         2.0           SUMP053         LHAAP-47         29-D         2         3309227.0         6958440.6         7.0           SUMP054         LHAAP-47         31-G         2         3309937.0         6958768.8         4.5   | SUMP047        | I HAAP-47    | 25-D     | 2        | 3309271.0 | 6957946.0         | 1.5        |                      |
| SUMP049         LHAAP-47         26-E         2         3309759.0         6958232.3         3.0           SUMP050         LHAAP-47         26-E         2         3309609.0         6958232.3         3.0           SUMP051         LHAAP-47         26-E         2         3309647.0         6958295.4         6.0           SUMP052         LHAAP-47         28-G         2         3310425.0         6958579.4         2.0           SUMP053         LHAAP-47         29-D         2         3309227.0         6958440.6         7.0           SUMP054         LHAAP-47         31-G         2         3309937.0         6958768.8         4.5   | SUMP048        | LHAAP-47     | 26-F     | 2        | 3309726.0 | 6958136.9         | Unknown    |                      |
| SUMP050         LHAAP-47         26-E         2         3309609.0         6958381.8         4.0           SUMP051         LHAAP-47         26-E         2         3309647.0         6958381.8         4.0           SUMP052         LHAAP-47         26-E         2         3309647.0         695839.4         6.0           SUMP052         LHAAP-47         28-G         2         3310425.0         6958579.4         2.0           SUMP053         LHAAP-47         29-D         2         3309227.0         6958440.6         7.0           SUMP054         LHAAP-47         31-G         2         3309903.0         6958742.0         5.0           SUMP055         LHAAP-47         31-G         2         3309937.0         6958768.8         4.5  | SUMP049        | LHAAP-47     | 26-E     | 2        | 3309759.0 | 6958232.3         | 3.0        |                      |
| SUMP051         LHAAP-47         26-E         2         3309647.0         6958295.4         6.0           SUMP052         LHAAP-47         28-G         2         3310425.0         6958579.4         2.0           SUMP053         LHAAP-47         29-D         2         3309227.0         6958440.6         7.0           SUMP054         LHAAP-47         31-G         2         3309937.0         6958768.8         4.5   | SUMP050        | LHAAP-47     | 26-E     | 2        | 3309609.0 | 6958381.8         | 4.0        |                      |
| SUMP052         LHAAP-47         28-G         2         3310425.0         6958579.4         2.0           SUMP053         LHAAP-47         29-D         2         3309227.0         6958440.6         7.0           SUMP054         LHAAP-47         31-G         2         3309903.0         6958742.0         5.0           SUMP055         LHAAP-47         31-G         2         3309937.0         6958768.8         4.5   | SUMP051        | LHAAP-47     | 26-E     | 2        | 3309647.0 | 6958295.4         | 6.0        |                      |
| SUMP053         LHAAP-47         29-D         2         3309227.0         6958440.6         7.0           SUMP054         LHAAP-47         31-G         2         3309903.0         6958742.0         5.0           SUMP055         LHAAP-47         31-G         2         3309937.0         6958768.8         4.5   | SUMP052        | LHAAP-47     | 28-G     | 2        | 3310425.0 | 6958579.4         | 2.0        |                      |
| SUMP054         LHAAP-47         31-G         2         3309903.0         6958742.0         5.0           SUMP055         LHAAP-47         31-G         2         3309937.0         6958768.8         4.5   | SUMP053        | LHAAP-47     | 29-D     | 2        | 3309227.0 | 6958440.6         | 7.0        |                      |
| SUMP055         LHAAP-47         31-G         2         3309937.0         6958768.8         4.5   | SUMP054        | LHAAP-47     | 31-G     | 2        | 3309903.0 | 6958742.0         | 5.0        |                      |
|   | SUMP055        | LHAAP-47     | 31-G     | 2        | 3309937.0 | 6958768.8         | 4.5        |                      |
| SUMP056 LHAAP-47 32-H 2 3310440.0 6958998.2 3.0   | SUMP056        | LHAAP-47     | 32-H     | 2        | 3310440.0 | 6958998.2         | 3.0        |                      |

#### Table 1-1 Sump and Waste Rack Sump Master List Longhorn Army Ammunition Plant Karnack, Texas

|         | Noarost Sito   | Building     | Sub-Aroa | Easting   | Northing   | Sump Depth | Commont <sup>a</sup> |
|---------|----------------|--------------|----------|-----------|------------|------------|----------------------|
|         |                | 22 C         | Oub-Alea | 2200911 0 | 6050025 1  | 6.0        | Comment              |
|         |                | 33-G         | 2        | 2209449.0 | 6059525.1  | 0.0        |                      |
| SUMP050 |                | 30-B         | 2        | 2209072.0 | 6050225.2  | 4.0        |                      |
| SUMP060 |                | 41-L<br>42 E | 2        | 2200252.0 | 6050201.9  | 4.0        |                      |
| SUMP061 |                | 42-L<br>42 L | 2        | 2210227.0 | 6050647.0  | 5.0        |                      |
| SUMP062 |                | 42-11        | 2        | 2209752.0 | 6050497.9  | 0.0        | 1                    |
| SUMP062 |                | 43-E         | 2        | 3306753.0 | 0939464.0  | 2.5        | 1                    |
| SUMPO63 |                | 43-E         | 2        | 3306907.0 | 6959461.0  | 2.3        | I                    |
| SUMP064 |                | 40-E         | 2        | 3309044.0 | 6959513.6  | 4.0        |                      |
| SUMPOS  | LHAAP-47       | 40-E         | 2        | 3309092.0 | 6959575.0  | 4.0        |                      |
| SUMP066 | LHAAP-47       | 45-E         | 2        | 3309082.0 | 6959699.1  | 4.0        |                      |
| SUMP067 | LHAAP-47       | 45-E         | 2        | 3309002.0 | 6959693.0  | 3.0        | 4                    |
| SUMPOR  |                | 40-A         | 2        | 3307741.0 | 6959101.2  | 5.5        | I                    |
| SUMP069 | LHAAP-47       | 46-B         | 2        | 3308258.0 | 6959223.1  | 5.5        |                      |
| SUMP070 | LHAAP-47       | 50-G         | 2        | 3309449.0 | 6960124.0  | 7.0        |                      |
| SUMP071 | LHAAP-47       | 54-F         | 2        | 3309133.0 | 6960412.1  | 6.0        |                      |
| SUMP072 | LHAAP-47       | 54-F         | 2        | 3309105.0 | 6960247.2  | 6.0        |                      |
| SUMP073 | LHAAP-47       | 54-G         | 2        | 3309438.0 | 6960478.6  | 2.5        |                      |
| SUMP074 | LHAAP-47       | 54-G         | 2        | 3309538.0 | 6960557.8  | 3.0        |                      |
| SUMP075 | LHAAP-47       | 54-G         | 2        | 3309576.0 | 6960472.4  | 3.5        |                      |
| SUMP076 | LHAAP-47       | 54-H         | 2        | 3309822.0 | 6960486.8  | 6.0        |                      |
| SUMP077 | LHAAP-47       | 54-H         | 2        | 3309871.0 | 6960612.8  | 6.0        |                      |
| SUMP078 | LHAAP-47       | 68-C         | 2        | 3307985.0 | 6960967.9  | 3.5        | 1                    |
| SUMP079 | LHAAP-47       | 68-C         | 2        | 3308004.0 | 6960965.9  | 3.5        | 1                    |
| SUMP080 | LHAAP-47       | 68-C         | 2        | 3307922.0 | 6960908.0  | 1.0        | 1                    |
| SUMP081 | LHAAP-47       | 68-F         | 2        | 3308837.0 | 6961204.3  | 9.0        |                      |
| SUMP082 | LHAAP-47       | 68-F         | 2        | 3308899.0 | 6961231.9  | 6.0        |                      |
| SUMP083 | LHAAP-47       | 68-F         | 2        | 3308795.0 | 6961493.3  | 8.5        |                      |
| SUMP084 | LHAAP-47       | 68-G         | 2        | 3309216.0 | 6961370.5  | 1.5        |                      |
| SUMP085 | LHAAP-47       | 68-G         | 2        | 3309118.0 | 6961472.3  | 3.5        |                      |
| SUMP086 | LHAAP-47       | 68-G         | 2        | 3309123.0 | 6961430.0  | 7.0        |                      |
| SUMP087 | LHAAP-47       | 68-G         | 2        | 3309180.0 | 6961664.8  | 2.5        |                      |
| SUMP088 | LHAAP-47       | 68-G         | 2        | 3309255.0 | 6961680.4  | 6.0        |                      |
| SUMP089 | LHAAP-47       | 68-G         | 2        | 3309275.0 | 6961633.3  | 6.0        |                      |
| SUMP090 | LHAAP-47       | 68-G         | 2        | 3309255.0 | 6961480.7  | 8.0        |                      |
| SUMP091 | LHAAP-47       | 75-l         | 2        | 3309375.0 | 6961997.0  | 5.0        |                      |
| SUMP092 | LHAAP-47       | 75-l         | 2        | 3309448.0 | 6961946.0  | 6.5        |                      |
| SUMP093 | LHAAP-47       | 75-l         | 2        | 3309581.0 | 6962071.9  | 5.5        |                      |
| SUMP094 | LHAAP-48       | 16-Y         | 6        | 3314201.0 | 6959077.1  | 2.0        | 2                    |
| SUMP095 | LHAAP-48       | 34-Y         | 6        | 3314773.0 | 6959043.2  | 5.5        | 2                    |
| SUMP096 | LHAAP-48       | 34-Y         | 6        | 3314695.0 | 6959072.0  | 1.5        | 2                    |
| SUMP097 | LHAAP-48       | 38-Y         | 6        | 3314745.0 | 6959194.6  | 4.0        | 2                    |
| SUMP098 | LHAAP-48       | 38-Y         | 6        | 3314675.0 | 6959214.7  | 2.0        | 2                    |
| SUMP099 | LHAAP-48       | 38-Y         | 6        | 3314687.0 | 6959291.8  | 2.0        | 2                    |
| SUMP100 | LHAAP-48       | 45-Y         | 6        | 3314684.0 | 6959424.4  | 1.5        | 2                    |
| SUMP101 | LHAAP-48       | 45-Y         | 6        | 3314769.0 | 6959424.6  | 4.0        | 2                    |
| SUMP102 | LHAAP-35C(53)  | 16-T         | 6        | 3315331.0 | 6957302.8  | 4.0        | 2                    |
| SUMP103 | LHAAP-35C(53)  | 16-T         | 6        | 3315376.0 | 6957244.9  | 4.0        | 2                    |
| SUMP104 | LHAAP-35C(53)  | 16-T         | 6        | 3315261.0 | 6957234.4  | 7.5        | 2                    |
| SUMP105 | LHAAP-35C(53)  | 16-T         | 6        | 3315334.0 | 6957178.6  | 4.0        | 2                    |
| SUMP106 | LHAAP-66       | 401          | 3        | TBD       | TBD        | Unknown    | 3                    |
| SUMP107 | LHAAP-46       | 403          | 1        | 3304220.0 | 6962625.3  | 2.0        | ~                    |
| SUMP108 | LHAAP-46       | 406          | 1        | 3304167.0 | 6962665.8  | 1.5        |                      |
| SUMP109 |                | 408          | 1        | 3304038.0 | 6962574 3  | 2.0        |                      |
| SUMP110 |                | 207          | 1        | 3305605.0 | 696092274  | 4.2        |                      |
| SUMP111 | L HΔΔP-35Δ(58) | 722-P        | 2        | 3305272.0 | 6960171 7  | 3.5        |                      |
| SUMP112 |                | 722-D        | 3        | 3305232.0 | 6960122.1  | 0.0<br>4 5 |                      |
|         |                | 7//          | 3<br>2   | 3304496.0 | 60600122.1 | 4.0        |                      |
| SUMPTIS | LINAF-33A(38)  | 144          | 3        | 3304400.0 | 0900042.2  | 4.0        |                      |

#### Table 1-1 Sump and Waste Rack Sump Master List Longhorn Army Ammunition Plant Karnack, Texas

| LOCATION CODE             | Nearest Site | Building | Sub-Area       | Easting   | Northing  | Sump Depth<br>(feet) | Comment <sup>a</sup> |
|---------------------------|--------------|----------|----------------|-----------|-----------|----------------------|----------------------|
| SUMP114                   | LHAAP-39     | 25-X     | 4              | 3316477.0 | 6953151.6 | 3.5                  |                      |
| SUMP115                   | LHAAP-18     | 33-X     | 4              | TBD       | TBD       | 7.0                  |                      |
| SUMP116                   | LHAAP-18     | 37-X     | 4              | 3316083.0 | 6953676.5 | 5.5                  |                      |
| SUMP117                   | LHAAP-58     | 744-A    | 3              | 3304290.0 | 6959900.9 | Unknown              |                      |
| SUMP118                   | LHAAP-29     | 813      | 5, Part 1 of 2 | 3304549.0 | 6953715.7 | 3.0                  |                      |
| SUMP119                   | LHAAP-59     | 725      | 3              | 3305443.0 | 6959996.6 | 5.0                  | 4                    |
| SUMP120                   | LHAAP-59     | 725      | 3              | 3305384.0 | 6959963.3 | 4.0                  | 4                    |
| SUMP121                   | LHAAP-47     | 32-H     | 2              | 3310365.0 | 6959021.9 | Unknown              |                      |
| SUMP122                   | LHAAP-04     | 401-C    | 3              | 3305919.0 | 6959108.4 | 4.0                  |                      |
| SUMP123                   | LHAAP-48     | 18-Y     | NA             | 3314190.0 | 6959128.2 | Unknown              | 2                    |
| SUMP800 (Sump124)         | LHAAP-53     | 23-T     | NA             | TBD       | TBD       | Unknown              | 2                    |
| Unnumbered Sump (Sump125) | LHAAP-58     | 723      | 3              | TBD       | TBD       | Unknown              |                      |
| LHAAP-36 Waste Rack Sumps |              |          |                |           |           |                      |                      |
| WRSUMP001                 | LHAAP-48     | 34-Y     | NA             | 3314758.0 | 6959018.5 | 4.0                  | 2                    |
| WRSUMP002                 | LHAAP-48     | 38-Y     | NA             | 3314644.0 | 6959229.7 | 4.0                  | 2                    |
| WRSUMP003                 | LHAAP-48     | 16-Y     | NA             | 3314290.0 | 6959161.5 | 4.0                  | 2                    |
| WRSUMP004                 | LHAAP-46     | P-1      | 1              | 3305644.0 | 6963265.8 | 4.0                  |                      |
| WRSUMP005                 | LHAAP-46     | P-117    | 1              | 3307018.0 | 6963384.6 | 4.0                  |                      |
| WRSUMP006                 | LHAAP-46     | P-118    | 1              | 3307324.0 | 6962430.8 | 4.0                  |                      |
| WRSUMP007                 | LHAAP-46     | P-122    | 1              | 3306818.0 | 6963325.2 | 4.0                  |                      |
| WRSUMP008                 | LHAAP-46     | B-8      | 1              | 3306214.0 | 6962694.8 | 4.0                  |                      |
| WRSUMP009                 | LHAAP-46     | S-113    | 1              | 3306197.0 | 6962456.4 | 4.0                  |                      |
| WRSUMP010                 | LHAAP-46     | P-12     | 1              | 3305783.0 | 6962467.3 | 4.0                  |                      |
| WRSUMP011                 | LHAAP-46     | B-13     | 1              | 3305777.0 | 6962727.1 | 4.0                  |                      |
| WRSUMP012                 | LHAAP-46     | P-113    | 1              | 3307198.0 | 6963322.7 | 4.0                  |                      |
| WRSUMP013                 | LHAAP-45     | 824      | 5, Part 2 of 2 | 3308486.0 | 6947986.5 | 4.0                  |                      |
| WRSUMP014                 | LHAAP-37     | 29-A     | 2              | 3308086.0 | 6958019.4 | 4.0                  |                      |
| WRSUMP015                 | LHAAP-46     | 212-14   | 1              | 3305793.0 | 6961425.5 | 4.0                  |                      |
| WRSUMP016                 | LHAAP-46     | 407      | 1              | 3304087.0 | 6962710.9 | 4.0                  |                      |
| WRSUMP017                 | LHAAP-47     | 68-G     | 2              | 3309119.0 | 6961379.5 | 4.0                  |                      |
| WRSUMP018                 | LHAAP-47     | 54-H     | 2              | 3309897.0 | 6960525.6 | 4.0                  |                      |
| WRSUMP019                 | LHAAP-46     | 212-20   | 1              | 3305781.0 | 6961746.7 | 4.0                  |                      |
| WRSUMP020                 | NA           | NA       | NA             | NA        | NA        | NA                   | 5                    |
| WRSUMP021                 | LHAAP-46     | P-11     | 1              | 3306316.0 | 6963080.5 | 4.0                  |                      |

Notes:

<sup>a</sup> Soil samples from sump locations were evaluated in this report unless stated otherwise.

NA not applicable

TBD to be determined

Comments:

1 No samples were collected at this location for this evaluation as described in Addendum 7 of the Work Plan (Shaw, 2006).

2 Soil samples from this location were included in the site evaluation report for LHAAP-48 and LHAAP-35C(53).

3 Sump location close to Sump084 such that soil samples collected at Sump084 characterize Sump106 also.

4 Soil samples from this location were included in the site evaluation report for LHAAP-59.

5 Sump was never used.

References:

Shaw Environmental, Inc. (Shaw), 2006, Final Addendum 7 Additional Investigation at LHAAP-35/36, Sumps and Waste Rack Sumps to Final Installation-Wide Work Plan, Longhorn Army Ammunition Plant, Karnack, Texas, September.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-1 Concentrations of Chemicals in Soil Samples Associated with Sump 001

| [SUMP] = SUMP001<br>LOCATION_CODE |                                       | 35SUMP001-SB01         | 35SUMP001-SB01        | 35SUMP001-SB02     | 35SUMP001-SB02      | LH-S01-01              | LH-S01-01                | LH-S01-01                | LH-S01-02                | LH-S01-02                | LH-S01-02                 | LHS-2-09                 | LH-WRS4-01                | LH-WRS4-01                | WRS04-SB01                   | WRS04-SB01                 |
|-----------------------------------|---------------------------------------|------------------------|-----------------------|--------------------|---------------------|------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|--------------------------|---------------------------|---------------------------|------------------------------|----------------------------|
| SAMPLE_NO                         |                                       | 35-SMP01-SB01-01       | 35-SMP01-SB01-02      | 35-SMP01-SB02-01   | 35-SMP01-SB02-02    | LH-S01-01_1            | LH-S01-01_2              | LH-S01-01_3<br>6/26/1993 | LH-S01-02_1<br>6/26/1993 | LH-S01-02_2<br>6/26/1993 | LH-S01-02_3<br>6/26/1993  | LHS-2-09<br>1/10/1995    | LH-WRS4-01_1<br>7/10/1993 | LH-WRS4-01_2<br>7/10/1993 | WRS04-SB01-01<br>9/25/2006   | 9/25/2006                  |
| DEPTH                             |                                       | 9///2008<br>0.5 - 1.Ft | 9///2000<br>6-6Ft     | 0-0.5 Ft           | 6-6Ft               | 0.5 - 1.5 Ft           | 5.7 - 6.5 Ft             | 7.9 - 8.9 Ft             | 0.5 - 1.5 Ft             | 5 - 5.8 Ft               | 14.4 - 15.3 Ft            | 0 - 0.5 Ft               | 0.5 - 1.5 Ft              | 3.5 - 4.3 Ft              | 0.5 -0.5 Ft                  | 4.5 - 4.5 Ft               |
| SAMPLE_PURPOSE                    |                                       | REG                    | REG                   | REG                | REG                 | REG                    | REG                      | REG                      | REG                      | REG                      | REG                       | REG                      | REG                       | REG                       | REG                          | REG                        |
| Test Group                        | Parameter (Units = mg/kg)             | Result DiL LQ VQ       | Result DIL LQ V       | Q Result DIL LQ VQ | Result DIL LQ VQ    | Result DIL LQ VQ       | Result DIL LQ VQ         | Result DIL LQ VQ         | Result DIL LO VQ         | Result DIL LQ VQ         | Result DIL LQ V           | Q Result DIL LQ VQ       | Result DIL LQ VQ          | Result Dil LQ VQ          | Result DIL LQ VQ             | Result DIL LQ VQ           |
| EXPLOSIVES                        | 1,3,5-Trinitrobenzene                 |                        |                       |                    |                     |                        |                          |                          |                          |                          |                           | 0.22 1 < U               |                           |                           |                              |                            |
| EXPLOSIVES                        | 2,4,6-Trinitrotoluene                 |                        |                       |                    |                     |                        |                          |                          |                          |                          |                           | 0.22 1 < U               |                           |                           |                              |                            |
| EXPLOSIVES                        | 2,4-Dinitrotoluene                    |                        |                       |                    |                     |                        |                          |                          |                          |                          |                           | 0.22 1 < U               | 0.33 1 < U                | 0.33 1 < U                |                              |                            |
| EXPLOSIVES                        | 2,6-Dimitrotoluene                    |                        |                       |                    |                     |                        |                          |                          |                          |                          |                           | 0.24 I C U               | 0.35 1 0                  | 0.53 1 0                  |                              |                            |
| EXPLOSIVES                        | 4-Anno-2,0-anno-600ene<br>HMX         |                        |                       |                    |                     |                        |                          |                          |                          |                          |                           | 2 1 < U                  |                           |                           |                              |                            |
| EXPLOSIVES                        | m-Nitrotoluene                        |                        |                       |                    |                     |                        |                          |                          |                          |                          |                           | 0.91 1 < U               |                           |                           |                              |                            |
| EXPLOSIVES                        | Nitrobenzene                          |                        |                       |                    |                     |                        |                          |                          |                          |                          |                           | 0.24 1 < U               |                           |                           |                              |                            |
| EXPLOSIVES                        | o-Nitrotoluene                        |                        |                       |                    |                     |                        |                          |                          |                          |                          |                           | 2.7 1 < U                |                           |                           |                              |                            |
| EXPLOSIVES                        | RDX                                   |                        |                       |                    |                     |                        |                          |                          |                          |                          |                           | 0.99 1 < U               |                           |                           |                              |                            |
| EXPLOSIVES                        | Tetryl                                |                        |                       |                    |                     |                        |                          | *****                    | <b>24102</b>             | co10 4                   | 42400 4                   | 0.68 1 < U               | 11200 1                   | 1 0209                    | 7500 1                       | 10200 1                    |
| METALS                            | Aluminum                              | 1                      | 5460 1                | 7060 1             | 6510 1<br>0114 137  | 17200 1                | 8970 1                   | 10000 1                  | 31400 T<br>3 t< ll       | 5210 1<br>3 1 < 11       | 12100 1<br>3 1 < L/       | 8430 T<br>17.8 1 < 11J   | 11200 i<br>3 1< U         | 3 1 < U                   | 0,109 1 U UJL                | 0.113 1 U UJL              |
| METALS                            | Anumony<br>Arsenic                    | 1.25 1                 | 0.752 1               | 2.59 1             | 0.832 1             | 3 1                    | 2.8 1                    | 1.1 1                    | 24 1                     | 1.5 1                    | 3.2 1                     | 26 1 J                   | 2.5 1                     | 3.2 1                     | 1.05 1 JL                    | 0.386 1 JL                 |
| METALS                            | Вагјит                                | 30.2 1                 | 26.2 1                | 71.5 1             | 29.9 t              | 63.6 t                 | 92.8 1                   | 123 1                    | 106 1                    | 69.9 1                   | 55.3 1                    | 183 1                    | 114 t                     | 368 1                     | 39.8 1                       | 21.3 1                     |
| METALS                            | Beryllium                             | 0.208 1 J J            | 0.475 1               | 0.545 1            | 0.891 t             | • • •                  | 4 4 4 11                 | + 12 11                  | 1 1 1 1                  | 1 10 11                  | 1 1 2 11                  | 18 1 C U                 | 1 1 < 11                  | 1 1< 11                   | 0.0943 1.4                   | 0.403 1J J<br>0.413 1U U   |
| METALS                            | Cadmium                               | 0.0387 1JJ<br>500 1    | 0.04/2 1 J J<br>716 1 | 0,496 1<br>3710 1  | 0.0948 1JJ<br>962 1 | 1 1 < U                | 857 1                    | 2110 1                   | 836 1                    | 810 1                    | 895 1                     | 1200 1                   | 894 1                     | 1160 1                    | 1310 1                       | 514 1                      |
| METALS                            | Chromium                              | 8.41 1                 | 7.16 1                | 31.6 1             | 20.3 1              | 14.4 1                 | 27.3 1                   | 15.8 1                   | 24.5 1                   | 7.3 1                    | 20.7 1                    | 27.5 1                   | 11.6 t                    | 10 1                      | 41.5 1                       | 10.7 1                     |
| METALS                            | Cobalt                                | 1.57 1                 | 6.71 1                | 3.88 1             | 7.88 1              | 5.1 1                  | 14.2 1                   | 12 1                     | 7.1 1                    | 6.7 1                    | 7 1                       | 3.6 1 < U                | 6.1 1<br>28 t             | 13.3 1                    | 1.75 1                       | 6.36 1<br>2.49 1           |
| METALS                            | Copper                                | 1.7 1<br>5710 t        | 3.48 1<br>8510 1      | 31.6 1             | 7.14 1              | 5.7 1                  | 9.3 1<br>27500 1         | 11.5 1<br>10500 1        | 6 1<br>18000 1           | 6.2 1<br>10700 1         | 17800 1                   | 10300 1                  | 14900 1                   | 14700 1                   | 52100 10                     | 10200 1                    |
| METALS                            | Lead                                  | 5.35 1                 | 4.67 1                | 53.5 5             | 5.76 1              | 9.9 1                  | 8 1                      | 13.3 1                   | 13.6 1                   | 5.8 1                    | 10.5 1                    | 46.2 1                   | 9.2 1                     | 13.4 1                    | 10.1 1                       | 5.09 1                     |
| METALS                            | Magnesium                             | 229 1                  | 973 t                 | 2080 1             | 1350 1              | 1080 1                 | 1380 1                   | 3010 1                   | 2140 1                   | 1200 t                   | 4870 1                    | 491 1                    | 973 1                     | 1640 1                    | 325 1 JH                     | 890 1 JH                   |
| METALS                            | Manganese                             | 48.8 1                 | 30.8 1                | 132 1              | 58.3 1              | 37.2 1                 | 89.9 1<br>∩1 1< U        | 242 1                    | 53 1<br>01 1< H          | 57.5 1                   | 234 1<br>01 1 < 11        | //.4 1<br>0.13 1 < U     | 26.1 1<br>0.1 1 < U       | 0.1 1< U                  | 97.7 1 J                     | 0.0111 1 J J               |
| METALS                            | Nickel                                | 2.27 1                 | 10.1 1                | 7.1 1              | 16.9 1              | ~                      |                          |                          |                          |                          |                           |                          |                           |                           | 3.18 1                       | 9.57 <b>1</b>              |
| METALS                            | Potassium                             | 221 1                  | 274 1                 | 174 1              | 307 1               | 649 1                  | 692 t                    | 913 t                    | 1480 1                   | 497 1                    | 1430 1                    | 356 1 < U                | 392 1                     | 449 1                     | 177 1                        | 336 1                      |
| METALS                            | Selenium                              | 0.145 1 J J            | 0.214 1 J J           | 0.289 1            | 0.117 1JJ           | 1 1< U                 | 1 1 < U                  | 1 1 < U                  | 1 1 < U                  | 1 1 < 1                  | 1 1 < 0                   | 0.4 1<br>18 1< 1F        | 1 1< U<br>1 1< U          | 1 1 < 0                   | 0.134 1J JL<br>1.72 1U U     | 0.226 10 UJL<br>1.65 11U U |
| METALS                            | Saver                                 | 91.1 1                 | 376 1                 | 53.1 1             | 528 1               |                        | 1 1 4 6                  | 1 1 0                    |                          | ,                        | , , , , ,                 |                          |                           |                           | 35 1                         | 254 1                      |
| METALS                            | Strontium                             |                        |                       |                    |                     | 21 1                   | 23.6 1                   | 55.3 1                   | 25.4 1                   | 20.1 1                   | 54.6 1                    | 17.8 1 < U               | 20.3 1                    | 35.7 1                    |                              | 10- <i>5</i> 0             |
| METALS                            | Thallium                              | 0.0423 1               | 0.061 1               | 0.028 1            | 0.0967 1            |                        |                          |                          |                          |                          |                           | 89 1 < U                 |                           |                           | 467 1                        | 0.0553 1<br>13.9 1         |
| METALS<br>METALS                  | Vanadium<br>Zinc                      | 15.6 1                 | 9.21 1                | 61.1 1<br>115 1    | 19.9 I<br>32.8 1    | 44.2 1                 | 44.5 1                   | 57.7 1                   | 38.2 1                   | 29.6 1                   | 89.1 1                    | 209 1                    | 20.5 1                    | 33.8 1                    | 13.3 1                       | 17.8 1                     |
| SEMIVOLATILES                     | 1,2,4-Trichlorobenzene                |                        | 70.0                  |                    |                     |                        | 0.33 1 < U               | 0.33 1< U                | 0.33 1< U                | 0.33 1 < U               | 0.33 1 < U                | 0.62 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.84 10 U U                  | 0.187 1UU                  |
| SEMIVOLATILES                     | 1,2-Dichlorobenzene                   |                        |                       |                    |                     |                        | 0.33 1 < U                | 0.62 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.84 10 U U                  | 0.187 100                  |
| SEMIVOLATILES                     | 1,3-Dichlorobenzene                   |                        |                       |                    |                     |                        | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1< U                | 0.33 I < U                | 0.62 1 < U               | 0.33 1 < U                | 0.33 1< U                 | 1.84 10 U U                  | -0.187 10 0                |
| SEMIVOLATILES                     | 2,4,5-Trichlorophenol                 |                        |                       |                    |                     |                        | 1.65 1 < U                | 3.1 1< U                 | 1.65 1 < U                | 1.65 t< U                 | 1.84 10 U U                  | 0.187 1UU                  |
| SEMIVOLATILES                     | 2,4,6-Trichlorophenol                 |                        |                       |                    |                     |                        | 0.33 1 < U               | 0.33 1 < 11              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.62 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.84 10 U                    | 0.187 1 U U                |
| SEMIVOLATILES                     | 2,4-Dichiorophenol                    |                        |                       |                    |                     |                        | 0.33 1 < U               | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 0               | 0.33 1 < U               | 0.33 1 < U                | 0.52 1 < U<br>0.62 1 < U | 0.33 1 < 0                | 0.33 1 < U                | 1.84 100 U                   | 0.187 1UU                  |
| SEMIVOLATILES                     | 2,4-Dinitrophenol                     |                        |                       |                    |                     |                        | 1.65 1 < U                | 3.1 1 < U                | 1.65 1 < U                | 1.65 1 < U                | 9.19 10 U U                  | 0.934 1UU                  |
| SEMIVOLATILES                     | 2,4-Dinitrotoluene                    |                        |                       |                    |                     | 0.33 1< U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.62 1 < U               |                           |                           | .1.84 10 U                   | 0.187 tuu                  |
| SEMIVOLATILES                     | 2,6-Dinitrotoluene                    |                        |                       |                    |                     | 0.33 1 < U             | 0.33 1 < U               | 0.33 1 < U               | 0.33 1< U<br>0.33 1< U   | 0.33 1< U<br>0.33 1< U   | 0.33 1 < U                | 0.62 1 < U<br>0.62 1 < U | -0.33 t< U                | 0.33 1< U                 | 1.84 100 0                   | 0.187 10 U                 |
| SEMIVOLATILES                     | 2-Chioronaphinalene<br>2-Chiorophenol |                        |                       |                    |                     | 0.33 1 < U             | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 t< U                | 0.33 1 < U                | 0.62 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.84 10 U                    | 0.187 IU U                 |
| SEMIVOLATILES                     | 2-Methylnaphthalene                   |                        |                       |                    |                     | 0.33 1< U              | 0.33 t< U                | 0.33 t < U               | 0.33 t < U               | 0.33 1 < U               | 0.33 t< U                 | 0.62 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.84 10 U                    | 0.187 1UU                  |
| SEMIVOLATILES                     | 2-Methylphenol                        | [                      |                       |                    |                     | 0.33 1 < U             | 0.33 t< U                | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.62 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.84 10UU<br>919 1011 11     | 0.187 TUU<br>0.934 111 U   |
| SEMIVOLATILES<br>SEMIVOLATILES    | 2-Nitroaniline<br>2-Nitrophenol       |                        |                       |                    |                     | 1.65 I < U             | 0.33 t< U                | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.62 1< ⊎                | 0.33 1 < U                | 0.33 1 < U                | 1.84 10 U U                  | 0.187 1UU                  |
| SEMIVOLATILES                     | 3,3'-Dichlorobenzidine                |                        |                       |                    |                     | 0.65 1 < U             | 0.65 t < U               | 0.65 1 < U                | 1.2 1 < U                | 0.65 1 < U                | 0.65 1 < U                | 3.67 10 U U                  | 0.373 1UU                  |
| SEMIVOLATILES                     | 3-Nitroaniline                        |                        |                       |                    |                     | 1.65 1 < U             | 1.65 t < U               | 1.65 1 < U                | 3.1 1 < U                | 1.65 1 < U                | 1.65 1 < U                | 9.19 10 U U                  | 0.934 1UU                  |
| SEMIVOLATILES                     | 4,6-Dinitro-2-methylphenol            |                        |                       |                    |                     | 1.65 1 < 0             | 1.65 1 < U                | 3.1 1< U<br>162 .1< ∐    | 1.65 1 < 0                | 0.33 1 < 1                | 184 10 U U                   | 0.934 10 0<br>0.187 10 0   |
| SEMIVOLATILES                     | 4-Chloro-3-methylphenol               |                        |                       |                    |                     | 0.65 t < U             | 0.65 1 < U               | 0.65 1 < U               | 0.65 t < U               | 0.65 1 < U               | 0.65 t< U                 | 0.62 1 < U               | 0.65 1 < U                | 0.65 1 < U                | 1.84 10 U                    | 0.187 1 U U                |
| SEMIVOLATILES                     | 4-Chloroaniline                       |                        |                       |                    |                     | 0.65 1 < U             | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U                | 0.62 1 < U               | 0.65 1 < U                | 0.65 1 < U                | 1.84 10 U                    | 0.187 1 U U                |
| SEMIVOLATILES                     | 4-Chlorophenyl phenyl ether           |                        |                       |                    |                     | 0.33 1 < U             | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.62 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.84 10UU<br>1.84 10UU       | 0.187 1UU<br>0.187 1HU     |
| SEMIVOLATILES                     | 4-Methylphenol<br>4-Nitroaniline      |                        |                       |                    |                     | ⊍.≾3 1< U<br>1.65 1< U | u.ss 1 < U<br>1.65 1 < ⊡ | 0.33 1 < U<br>1.65 1 < U | 0.33 1< 1J<br>1.65 1< 1J | 1.65 1 < 1               | 0.33 I < 0<br>1.65 1 < 12 | 0.02 I < 0<br>3.1 1 < 10 | 1.65 1 < U                | 1.65 1 < U                | 9.19 10 U U                  | 0.934 1U U                 |
| SEMIVOLATILES                     | 4-Nitrophenol                         |                        |                       |                    |                     | 1.65 1 < U             | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U                | 3.1 1 < U                | 1.65 1 < U                | 1.65 1 < U                | 9.19 10 U                    | 0.934 1UU                  |
| SEMIVOLATILES                     | Acenaphthene                          |                        |                       |                    |                     | 0.33 1 < U             | 0.33 1 < U               | 0.33 1 < U               | 0.33 t< U                | 0.33 1 < U               | 0.33 1 < U                | 0.62 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.84 10 U U                  | 0.187 1 U U                |
| SEMIVOLATILES                     | Acenaphthylene                        |                        |                       |                    |                     | 0.33 1 < U             | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.62 1 < U               | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>-0.33 1 < H | 1.84 10 U U<br>1.84 10 II II | 0.187 10 0<br>0.187 11 0   |
| SEMIVULATILES<br>SEMIVOLATILES    | Anthracene<br>Benzo(a)anthracene      |                        |                       |                    |                     | 0.33 1 < 1             | 0.33 1 < 1               | 0.33 1 < 1               | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U                | 0.62 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.84 10 U                    | 0.187 1 U U                |
| SEMIVOLATILES                     | Benzo(a)pyrene                        |                        |                       |                    |                     | 0.33 1 < U             | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 t< U                | 0.33 t< U                 | 0.62 1 < U               | 0.33 1< U                 | 0.33 t< U                 | 1.84 10 U U                  | 0.187 1UU                  |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas

Shaw Environmental, Inc.

Table 3-1 Concentrations of Chemicals in Soil Samples Associated with Sump 001

| [SUMP] ≠ SUMP001               |   | 2601 # 60001 0001       | 2001 INDAN4 CRA4     | 35SHM2001_SR02             | 3551100001-5802   | 134-501-01        | 1.H-S01-01               | 1.H-S01-01                 | LH-S01-02                | LH-S01-02                       | LH-S01-02                | LHS-2-09         | LH-WRS4-01          | LH-WRS4-01        | WRS04-SB01                    | WRS04-SB01                   |
|--------------------------------|---|-------------------------|----------------------|----------------------------|---|-------------------|--------------------------|----------------------------|--------------------------|---------------------------------|--------------------------|------------------|---------------------|-------------------|-------------------------------|------------------------------|
| SAMPLE NO                      |   | 35-SMP01-SB01-01        | 35-SMP01-SB01-02     | 35-SMP01-SB02-01           | 35-SMP01-SB02-02  | LH-S01-01_1       | LH-S01-01_2              | LH-S01-01_3                | LH-S01-02_1              | LH-S01-02_2                     | LH-S01-02_3              | LHS-2-09         | LH-WRS4-01_1        | LH-WRS4-01_2      | WRS04-SB01-01                 | WRS04-SB01-02                |
| SAMPLE_DATE                    |   | 9/7/2006                | 9/7/2006             | 9/7/2006                   | 9/7/2006  | 6/26/1993         | 6/26/1993                | 6/26/1993                  | 6/26/1993                | 6/26/1993                       | 6/26/1993                | 1/10/1995        | 7/10/1993           | 7/10/1993         | 9/25/2000                     | 9/25/2000<br>45-45Ft         |
| DEPTH                          |   | 0.5 - 1 Ft              | 6-6Ft                | 0-0.5 Ft                   | 6-6Ft   | 0.5 - 1.5 Ft      | 5.7 - 6.5 Ft             | 7.9 - 8.9 Ft               | 0.5 - 1.5 Ft             | 5-5.8 Ft                        | 14.4 - 15.3 Ft<br>REG    | 0-0.5 Ft<br>REG  | 0.5 - 1.5 Ft<br>REG | 3.5-4.3 PL<br>REG | REG                           | REG                          |
| SAMPLE_PURPOSE                 | Decompton (Linite - malke)                  | REG<br>Regult Dil LO VO | REG<br>Recutt DIL LO | KEG<br>VO Result DIL LO VO | REG<br>Result DII IO VO   | Result Dill IO VO | Result DIL LO VO         | Result DIL LO VQ           | Result DIL LQ VQ         | Result DIL LQ VQ                | Result DIL LQ VQ         | Result DIL LQ VQ | Result DIL LO VO    | Result DIL LQ VQ  | Result DIL LQ VQ              | Result DIL LQ VQ             |
| SEMIVOLATILES                  | Benzofb)Buoranthene                         | RESULT DIE LOS VOL      |                      | TE NOSOL DIL LQ TO         |   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1 < U               | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U U                   | 0.187 1 U U                  |
| SEMIVOLATILES                  | Benzo(ghi)perviene                          |                         |                      |                            |   | 0.33 1 < U        | 0.33 t< U                | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1 < U               | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U                     | 0.187 1UU                    |
| SEMIVOLATILES                  | Benzo(k)fluoranthene                        |                         |                      |                            |   | 0.33 1 < U        | 0.33 t< U                | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1 < U               | 0.62 1 < U       | 0.33 1 < 0          | 0.33 1 < U        | 1.84 100 0<br>9.19 10.11 11.1 | 0.107 10 0                   |
| SEMIVOLATILES                  | Benzoic Acid                                |                         |                      |                            |   | 1.65 1 < 0        | 1.65 1 < U               | 1.65 1 < U                 | 1.65 1 < U<br>0.65 1 < U | 1.65 1 < U                      | 0.65 1 < U               | 0.62 1 < U       | 0.65 1 < U          | 0.65 1 < U        | 1.84 10 U U                   | 0.187 1UU                    |
| SEMIVOLATILES                  | Benzył Alcohol<br>bio/2. Chlomothow/methane |                         |                      |                            |   | 0.03 I < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 t< U                | 0.62 1 < U       | 0.33 1 < U          | 0.33 1< U         | 1.84 10 U U                   | 0.187 1UU                    |
| SEMIVOLATILES                  | bis/2-Chloroethyllether                     |                         |                      |                            |   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1< U                | 0.62 1 < U       | 0.33 1 < U          | 0.33 1< U         | 1.84 10 U U                   | 0.187 1 U U                  |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether                 |                         |                      |                            |   | 0.33 1 < U        | 0.33 1< U                | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1< U                       | 0.33 1< U                | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U                     | 0.187 100                    |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthalate                  |                         |                      |                            |   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < 0                      | 0.33 1 < 0               | 0.62 1 < 0       | 0.33 1 < 0          | 0.33 1 < U        | 1.84 10U U                    | 0.187 IU U                   |
| SEMIVOLATILES                  | Butyl benzyl phthalate                      |                         |                      |                            |   | 0.33 1 < 0        | 0,33 14 0                | 0.33 1 < 1                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1 < U               | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U U                   | 0.187 1 U U                  |
| SEMIVOLATILES<br>SEMIVOLATILES | Chrysene<br>Dihenzola hlantbracene          |                         |                      |                            |   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1< U                | 0.62 1 < U       | 0.33 1 < U          | 0.33 1< U         | 1.84 10 U U                   | 0.187 1 U U                  |
| SEMIVOLATILES                  | Dibenzofuran                                |                         |                      |                            |   | 0.33 1< U         | 0.33 1< U                | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1 < U               | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U U                   | 0.187 1 U U                  |
| SEMIVOLATILES                  | Diethyl phthalate                           |                         |                      |                            |   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1 < U               | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < 0        | 1.84 100 U                    | 0.187 100                    |
| SEMIVOLATILES                  | Dimethyl phthalate                          |                         |                      |                            |   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < 0               | 1 <u>0.3</u> 3 1 < U<br>6.303 1 | 0.33 1 < U<br>0.33 1 < U | 0.62 1 < 0       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U U                   | 0.187 1UU                    |
| SEMIVOLATILES                  | di-n-Butyl phthafate                        |                         |                      |                            |   | 0.33 1 4 1        | 0.33 1 < U               | 0.325 1                    | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1 < U               | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U U                   | 0.187 1UU                    |
| SEMIVOLATILES<br>SEMIVOLATILES | Fluoranthene                                |                         |                      |                            |   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1< U                       | 0.33 1< U                | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U U                   | 0.187 1UU                    |
| SEMIVOLATILES                  | Fluorene                                    |                         |                      |                            |   | 0.33 t< U         | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1< U                | 0.33 1 < U                      | 0.33 1< U                | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U U                   | 0.187 1UU                    |
| SEMIVOLATILES                  | Hexachlorobenzene                           |                         |                      |                            |   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1 < U               | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < U        | 1.84 100 0                    | 0.187 100<br>0.187 100       |
| SEMIVOLATILES                  | Hexachlorobutadiene                         |                         |                      |                            |   | 0.33 1 < 0        | 0.33 1 < U<br>0.33 1 < H | 0.33 1 < 0                 | 0.33 1 4 1               | 0.33 1 4 1                      | 0.33 1 < 1               | 0.62 1 < 0       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U U                   | 0.187 1 U U                  |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene                   |                         |                      |                            |   | 0.33 1 < U        | 0.33 1.< U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1 < U               | 0.62 1 < U       | 0.33 1 < U          | 0.33 1< U         | 1.84 10 U U                   | 0.187 1UU                    |
| SEMIVOLATILES                  | Indeno(1,2,3-cd)pyrene                      |                         |                      |                            |   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 t< U                | 0.33 1< U                       | 0.33 1 < U               | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U U                   | 0.187 1UU                    |
| SEMIVOLATILES                  | Isophorone                                  |                         |                      |                            |   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1 < U               | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < 0        | 1.84 10-0 U                   | 0.187 1.0 0                  |
| SEMIVOLATILES                  | Naphthalene                                 |                         |                      |                            |   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < 0               | 0.33 1 < 0                      | 0.33 1< U<br>0.33 t< U   | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U U                   | 0.187 IUU                    |
| SEMIVOLATILES                  | Nitrobenzene                                |                         |                      |                            |   | 0.33 1 < 8        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1 < U               | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U U                   | 0.187 1UU                    |
| SEMIVOLATILES                  | n-Natrosodinhenvlamine                      |                         |                      |                            |   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1< U                | 0.62 1 < U       | 0.33 1< U           | 0.33 1< U         | 1.84 10 U U                   | 0.187 IU U                   |
| SEMIVOLATILES                  | Pentachlorophenoi                           |                         |                      |                            |   | 1.65 1< U         | 1.65 1 < U               | 1.65 1 < U                 | 1.65 1 < U               | 1.65 1 < U                      | 1.65 1 < U               | 3.1 1 < U        | 1.65 1 < U          | 1.65 1 < U        | 9.19 10 U U                   | 0.934 1UU                    |
| SEMIVOLATILES                  | Phenanthrene                                |                         |                      |                            |   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                      | 0.33 1 < 0               | 0.62 1 4 0       | 0.33 1 < 0          | 0.33 1 < U        | 1.84 10 U U                   | 0.187 1UU                    |
| SEMIVOLATILES                  | Phenol                                      |                         |                      |                            |   | 0.33 1 < 0        | 0.33 1 < 0               | 0.33 1 < 1                 | 0.33 1 < 0               | 0.33 1 < 0                      | 0.33 1 < U               | 0.62 1 < U       | 0.33 1 < U          | 0.33 1 < U        | 1.84 10 U U                   | 0.187 1 U U                  |
| VOLATILES                      | ryrene<br>1.1.1.2-Tetrachloroethane         |                         | 0.00467 1 U          |                            | 0.00472 1 U   | 0.00 1 0          |                          |                            |                          |                                 |                          | 0.019 1 < U      |                     |                   |                               | 0.00448 1 U U                |
| VOLATILES                      | 1,1,1-Tricteoroethane                       |                         | 0.00467 1 U          |                            | 0.00472 1 U   | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U                     | 0.005 1 < U              | 0.009 1 < U      | 0.0144 1            | 0.0127 1          |                               | 0.00448 1 U U                |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane                   |                         | 0.00467 1 U          |                            | 0.00472 1 U   | 0.005 1 < U       | 0.005 f < U              | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U                     | 0.005 1 < U              | 0.009 1 < U      | 0.005 1 < 0         | 0.005 1 < U       |                               | 0.004448 10 0                |
| VOLATILES                      | 1,1,2-Trichloroethane                       |                         | 0.00467 1 U          |                            | 0.00472 10  | 0.005 1 < 0       | 0.005 1< 0               | 0.005 1 < U<br>0.005 1 < U | 0.000 1 < 0              | 0.005 1 < 0                     | 0.005 1 < U              | 0.009 1 < U      | 0.005 t < U         | 0.005 1 < U       |                               | 0.00448 1UU                  |
| VOLATILES                      | 1,1-Dichlomethane                           |                         | 0.00467 1 U          | 03                         | 0.00472 10 03   | 0.005 1 < 0       | 0.005 1 < U              | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U                     | 0.005 1 < U              | 0.009 t < U      | 0.005 t< U          | 0.005 1 < U       |                               | 0.00448 1UU                  |
| VOLATILES                      | 1,1-Dichloropropene                         |                         | 0.00467 1 U          |                            | 0.00472 t U   |                   |                          |                            |                          |                                 |                          |                  |                     |                   |                               | 0.00448 1 U U                |
| VOLATILES                      | 1,2,3-Trichlorobenzene                      |                         | 0.00467 1 U          |                            | 0.00472 1 U   |                   |                          |                            |                          |                                 |                          |                  |                     |                   |                               | 0.00448 10 0                 |
| VOLATILES                      | 1,2,3-Trichloropropane                      |                         | 0.00467 1 U          |                            | 0.00472 1 U   | 0.12 to U         |                          |                            |                          |                                 |                          | 0.019 1 0        |                     |                   |                               | 0.00448 1 U U                |
| VOLATILES                      | 1,2,4-Trichlorobenzene                      |                         | 0.00467 10           |                            | 0.00472 1 U   | 0.35 1 0          |                          |                            |                          |                                 |                          |                  |                     |                   |                               | 0.00448 1UU                  |
| VOLATILES                      | 1.2-Dibromo-3-chloropropane                 |                         | 0.00467 1 U          |                            | 0.00472 1 U   |                   |                          |                            |                          |                                 |                          | 0.038 1 < U      |                     |                   |                               | 0.00448 1 U U                |
| VOLATILES                      | 1,2-Dibromoethane                           |                         | 0.00467 1 U          |                            | 0.00472 1 U   |                   |                          |                            |                          |                                 |                          | 0.038 1 < U      |                     |                   |                               | 0.00448 1 U U                |
| VOLATILES                      | 1,2-Dichlorobenzene                         |                         | 0.00467 1 U          |                            | 0.00472 1 U   | 0.33 1 < U        | 0.005 1 < 11             | 0.005 5 1                  | 0.005 1 4 13             | 6.005 1 c (I                    | AAA5 1 < 11              | 0.009 1< U       | 0.005 1< 1          | 0.005 t< U        |                               | 0.00448 10 0                 |
| VOLATILES                      | 1,2-Dichloroethane                          |                         | 0.00467 1.0          |                            | 0.00472 1 0   | 0.005 1< U        | 0.005 1 < 0              | 0.005 1 < 0                | 0.005 1 < U              | 0.005 1 < U                     | 0.005 1 < U              | 0.009 1 < U      | 0.005 1 < U         | 0.005 1 < U       |                               |                              |
| VOLATILES                      | 1,2-Dichloroprogane                         |                         | 0.00467 1U           |                            | 0.00472 1 U   | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U                     | 0.005 1 < U              | 0.009 1 < U      | 0.005 t < U         | 0.005 1 < U       |                               | 0.00448 1UU                  |
| VOLATILES                      | 1,2-Dimethylbenzene (o-Xylene)              |                         | 0.00467 1 U          |                            | 0.00472 1 U   |                   |                          |                            |                          |                                 |                          |                  |                     |                   |                               | 0.00448 1 U U                |
| VOLATILES                      | 1,3,5-Trimethylbenzene                      |                         | 0.00467 1 U          |                            | 0.00472 1 U   |                   |                          |                            |                          |                                 |                          |                  |                     |                   |                               | 0.00446 10 0                 |
| VOLATILES                      | 1,3-Dichlorobenzene                         |                         | 0.00467 1 U          |                            | 0.00472 1 U   | 0.33 1 < 0        |                          |                            |                          |                                 |                          |                  |                     |                   |                               | 0.00448 1 U U                |
| VOLATILES                      | 1,3-Dichloropropane                         |                         | 0.00467 1 U          |                            | 0.00472 1U  | 0.33 1< U         |                          |                            |                          |                                 |                          |                  |                     |                   |                               | 0.00448 1 U U                |
| VOLATILES                      | 2,2-Dichloropropane                         |                         | 0.00467 1 U          |                            | 0.00472 1 U   |                   |                          |                            |                          |                                 |                          |                  |                     |                   |                               | 0.00448 1 U U                |
| VOLATILES                      | 2,4,5-Trichlorophenol                       |                         |                      |                            |   | 1.65 1 < U        |                          |                            |                          |                                 |                          |                  |                     |                   |                               |                              |
| VOLATILES                      | 2,4,6-Trichlorophenol                       |                         |                      |                            |   | 0.33 1 < U        |                          |                            |                          |                                 |                          |                  |                     |                   |                               |                              |
| VOLATILES                      | 2,4-Dichlorophenol<br>2.4-Dimethylahenol    |                         |                      |                            |   | 0.33 1 < 11       |                          |                            |                          |                                 |                          |                  |                     |                   |                               |                              |
| VOLATILES                      | 2.4-Dinitrophenol                           |                         |                      |                            |   | 1.65 1 < U        |                          |                            |                          |                                 |                          |                  |                     |                   |                               |                              |
| VOLATILES                      | 2-Butanone                                  |                         | 0.00935 1 U          |                            | 0.00945 tU  | 0.05 1 < U        | 0.05 1 < U               | 0.05 t < U                 | 0.05 1 < U               | 0.05 1 < U                      | 0.05 1 < U               | 0.019 1 < U      | 0.05 1 < U          | 0.05 t < U        |                               | 0.00895 1 U U                |
| VOLATILES                      | 2-Chloroethyl vinyl ether                   |                         | 0.00935 1 U          |                            | 0.00945 1 U   | 0.01 1 < U        | 0.01 1 < U               | 0.01 t< V                  | 0.01 1 < U               | 0.01 1 < U                      | 0.01 1 < U               | 0.019 1 < U      | 0.01 1 < U          | 0.01 1 < U        |                               | 0.00895 TU U<br>0.00448 TH H |
| VOLATILES                      | 2-Chlorotoluene                             | ł                       | 0.00467 1 U          |                            | 0.00472 1 U   | 0.05 1.2 11       | 0.05 1 - 1               | 0.05 1 4 11                | 0.05 1 4 11              | 0-05 t< 1                       | 6.05 1 < 13              | 0.019 1 < U      | 0.05 1 < 1          | 0.05 1 < U        |                               | 0.00895 1U U                 |
| VOLATILES                      | 2-mexanone<br>2-Provensi                    |                         | 0.00932 1.0          |                            | 0.00040 1.0   | 0.00 1 0          | 1× U                     | V.UU (* U                  | 0.05 1 0                 | 0.00 1 0                        |                          | 0.94 1 < U       | ···· · ·            |                   |                               | •                            |
| VOLATILES                      | 4-Chlorotoluene                             |                         | 0.00467 1U           | -                          | 0.00472 1 U   |                   |                          |                            |                          |                                 |                          |                  |                     |                   |                               | 0.00448 1 U U                |
| VOLATILES                      | Acetone                                     |                         | 0.00935 1 U          | · ·                        | 0.00945 1 U   | 0.1 t< U          | 0.1 1< U                 | 0.1 1 < U                  | 01 1< U                  | 0.1 1 < U                       | 0.1 1 < U                | 0.38 1 < U       | 0.1 1 < U           | 0.1 1 < U         | . <sup>1</sup>                | 0.00895 1 U U                |
| VOLATILES                      | Acetonitrile                                | 1                       |                      |                            | 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - |                   |                          |                            |                          |                                 |                          | 0.19 1 < U       |                     |                   |                               |                              |

Table 3-1 Concentrations of Chemicals in Soil Samples Associated with Sump 001

| [SUMP] = SUMP001 |                             |                  |                  |                  |                  |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  |                  |
|------------------|-----------------------------|------------------|------------------|------------------|------------------|-----------------|--------------------------|------------------|-----------------|--------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION_CODE    |                             | 35SUMP001-SB01   | 35SUMP001-SB01   | 35SUMP001-SB02   | 35SUMP001-SB02   | LH-S01-01       | LH-S01-01                | LH-S01-01        | LH-S01-02       | LH-S01-02          | LH-S01-02        | LHS-2-09         | LH-WRS4-01       | LH-WRS4-01       | WRS04-SB01       | WRS04-SB01       |
| SAMPLE_NO        |                             | 35-SMP01-SB01-01 | 35-SMP01-SB01-02 | 35-SMP01-SB02-01 | 35-SMP01-SB02-02 | LH-S01-01_1     | LH-S01-01_2              | LH-S01-01_3      | LH-S01-02_1     | LH-S01-02_2        | LH-S01-02_3      | LHS-2-09         | LH-WRS4-01_1     | LH-WRS4-01_2     | WRS04-SB01-01    | WRS04-SB01-02    |
| SAMPLE_DATE      |                             | 9/7/2006         | 9/7/2006         | 9/7/2006         | 9/7/2006         | 6/26/1993       | 6/26/1993                | 6/26/1993        | 6/26/1993       | 6/26/1993          | 6/26/1993        | 1/10/1995        | 7/10/1993        | 7/10/1993        | 9/25/2006        | 9/25/2006        |
| Depth            |                             | 0.5 - 1 Ft       | 6-6Ft            | 0 - 0.5 Ft       | 6-6Ft            | 0.5 - 1.5 Ft    | 5.7 - 6.5 Ft             | 7.9 - 8.9 Ft     | 0.5 - 1.5 Ft    | 5 - 5.8 Ft         | 14.4 - 15.3 Ft   | 0 - 0.5 Ft       | 0.5 - 1.5 Ft     | 3.5 - 4.3 Ft     | 0.5 -0.5 Ft      | 4.5 - 4.5 Ft     |
| SAMPLE_PURPOSE   |                             | REG              | REG              | REG              | REG              | REG             | REG                      | REG              | REG             | REG                | REG              | REG              | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LQ V | Q Result DIL LQ VQ       | Result DIL LQ VQ | Result DIL LQ V | Q Result DIL LQ VQ | Result DIL LQ VQ |
| VOLATILES        | Acrylonitrile               |                  |                  |                  |                  |                 |                          |                  |                 |                    |                  | 0.19 1 < U       |                  |                  |                  |                  |
| VOLATILES        | Allyl chloride              |                  |                  |                  |                  |                 |                          |                  |                 |                    |                  | 0.019 1 < U      |                  |                  |                  |                  |
| VOLATILES        | Benzene                     |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U     | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U        | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1UU      |
| VOLATILES        | Bromobenzene                |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  | 0.00448 1UU      |
| VOLATILES        | Bromochloromethane          |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  | 0.00448 1 U U    |
| VOLATILES        | Bromodichloromethane        |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U     | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U        | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1UU      |
| VOLATILES        | Bromoform                   |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U     | 0.005 1< U               | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U        | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1UU      |
| VOLATILES        | Bromomethane                |                  | 0.00935 1 U UJ   |                  | 0.00945 1 U UJ   | 0.01 1 < U      | 0.01 i< U                | 0.01 1 < U       | 0.01 1 < U      | 0.01 1 < U         | 0.01 1< U        | 0.019 1 < U      | 0.01 1 < U       | 0.01 1 < U       |                  | 0.00895 1 U U    |
| VOLATILES        | Carbon disulfide            |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U     | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U        | 0.005 t< U       | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES        | Carbon tetrachloride        |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U     | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U        | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES        | Chlorobenzene               |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 t< U      | 0.005 1 < U              | 0.005 1< U       | 0.005 1 < U     | 0.005 1 < U        | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES        | Chloroethane                |                  | 0.00935 1 U      |                  | 0.00945 1 U      | 0.01 1 < U      | 0.01 1 < U               | 0.01 1 < U       | 0.01 1< U       | 0.01 1 < U         | 0.01 1< U        | 0.019 1 < U      | 0.01 1 < U       | 0.01 1 < U       |                  | 0.00895 1UU      |
| VOLATILES        | Chloroform                  |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U     | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U        | 0.005 t< U       | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES        | Chloromethane               |                  | 0.00935 1 U      |                  | 0.00945 1 U      | 0.01 1< U       | 0.01 1< U                | 0.01 1< U        | 0.01 1 < U      | 0.01 1 < U         | 0.01 1 < U       | 0.019 1 < U      | 0.01 1 < U       | 0.01 1 < 8       |                  | 0.00895 1 U U    |
| VOLATILES        | Chicoporene                 |                  |                  |                  |                  |                 |                          |                  |                 |                    |                  | 0.19 1 < U       |                  |                  |                  |                  |
| VOLATILES        | cis-1 2-Dichlomethene       |                  | 0.00467 1UU      |                  | 0.00472 1 U UJ   |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  | 0.00448 1UU      |
| VOLATILES        | cis-1.3-Dichloroprogene     |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U     | 0.005 1< U               | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U        | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES        | Nikomochoromethane          |                  | 0.00467 1.0      |                  | 0.00472 1.11     | 0.005 1 < 11    | 0.005 1 < U              | 0.005 1 < 1      | 0.005 1 < U     | 0.005 1 < U        | 0.005 1 < U      | 0.009 1 < U      | D.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES        | Dibomomethane               |                  | 0.00467 1.U      |                  | 0.00472 1 U      |                 |                          |                  |                 |                    |                  | 0.038 1 < U      |                  |                  |                  | 0.00448 1U U     |
| VOLATILES        | Dichlorodifluoromethane     |                  | 0.00935 1.11     |                  | 0.00945 1.11     |                 |                          |                  |                 |                    |                  | 0.038 1 < U      |                  |                  |                  | 0.00895 1UU      |
| VOLATILES        | Ethyl methacrylate          |                  |                  |                  |                  |                 |                          |                  |                 |                    |                  | 0.038 1 < U      |                  |                  |                  |                  |
| VOLATILES        | Ethythenzene                |                  | 0.00467 1.11     |                  | 0.00472 1.11     | 0.005 1< 13     | 0.005 1< U               | 0.005 t< U       | 0.005 1 < U     | 0.005 1< U         | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < 0      | 0.005 1< U       |                  | 0.00448 1UU      |
| VOLATILES        | Hexachkynhutadiene          |                  | 0.00467 1.0      |                  | 0.00472 1.U      |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  | 0.00448 1U U     |
| VOLATILES        | IODOMETHANE                 |                  |                  |                  |                  |                 |                          |                  |                 |                    |                  | 0.019 1 < U      |                  |                  |                  |                  |
| VOLATILES        | ISOBITTYL ALCOHOL           |                  |                  |                  |                  |                 |                          |                  |                 |                    |                  | 3.8 1 < U        |                  |                  |                  |                  |
| VOLATILES        | Isonmovibenzene             |                  | 000467 1.11      |                  | 0.00472 1.11     |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  | 0.00448 1.0 0    |
| VOLATILES        | m n-Xvienes                 |                  | 0.00467 1.U      |                  | 0.00472 1 U      |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  | 0.00448 1UU      |
| VOLATILES        | Methacrylonitile            |                  | 0.00707 7 0      |                  |                  |                 |                          |                  |                 |                    |                  | 0.038 1< 11      |                  |                  |                  |                  |
| VOLATILES        | Methyl isohutyl ketone      |                  | 0.00935 1.11     |                  | 0.00945 1.U      | 0.05 1 < 11     | 005 1 < 0                | 0.05 1 < 11      | 0.05 1 < 14     | 005 1 < 13         | 0.05 1 < 1       | 0.019 1 < U      | 0.05 1 < U       | 005 t< U         |                  | 0.00895 1UU      |
| VOLATILES        | METHYL METHACRYLATE         |                  |                  |                  |                  |                 |                          |                  |                 |                    |                  | 0.038 1 < U      |                  |                  |                  |                  |
| VOLATILES        | Methylene chloride          |                  | 0.00467 1.11     |                  | 0.00472 1 U      | 0.005 1 < 11    | 0.005 1 < 11             | 0.005 1 < 13     | 0015 1< U       | 0.005 1 < 11       | 0.005 1 < 1      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES        | Nanhthalene                 |                  | 0.00935 1.11     |                  | 0.00945 1.0      |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  | 0.00895 1.0 0    |
| VOLATILES        | n-RUTYLBENZENE              |                  | 0.00467 1.11     |                  | 0.00472 1.1      |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  | 0.00448 1.0      |
| VOLATILES        | n-PROPYLBENZENE             |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  | 0.00448 1UU      |
| VOLATILES        | Pentachioroethane           |                  |                  |                  |                  |                 |                          |                  |                 |                    |                  | 0.038 1 < U      |                  |                  |                  |                  |
| VOLATILES        | n-ISOPROPYI TOLUENE         |                  | 0.00467 1.11     |                  | 0.00472 1.11     |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  | 0.00448 111 11   |
| VOLATILES        | Propionitrile               |                  |                  |                  |                  |                 |                          |                  |                 |                    |                  | 0.094 1< 11      |                  |                  |                  |                  |
| VOLATILES        | sec-RUTYI BENZENE           |                  | 0.00467 1.9      |                  | 0.00472 1 U      |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  | D.00448 1UU      |
| VOLATILES        | Storepe                     |                  | 0.00467 1 1      |                  | 0.00472 1 U      | 0.005 1 < 11    | 0.005 t< U               | 0005 1 < U       | 0.005 t< ()     | 0.005 t< {}        | 0.005 1 < U      | 0.009 1 < U      | 0005 1< U        | 0.005 1 < 1      |                  | 0.00448 1 U U    |
| VOLATILES        | tert-BUTYLBENZENE           |                  | 0.00467 1.0      |                  | 0.00472 1 U      |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  | 0.00448 1 U U    |
| VOLATILES        | Tetrachomethene             |                  | 0.00467 111      |                  | 0.00472 1 1      | 0.005 1 < 11    | 0.005 1< 11              | 0.005 1 < 11     | 0005 1< U       | 0.005 1 < 11       | 0.005 1< 11      | 0.009 1< 13      | B005 1 < 11      | 0.005 t< ≹i      |                  | 0.00448 111 11   |
| VOLATILES        | Tolvene                     |                  | 0.00467 1 11     |                  | 0.00472 1 1      | 0.005 1 < 11    | 0.005 1 < 1              | 0.005 1 < 1      | 0.005 1 < 1     | 0.005 t < 11       | 0.005 1 < 0      | 0.009 1 < U      | 0.005 1 < U      | 0.005 t< 1       |                  | 0.00448 111 11   |
| VOLATILES        | trans-1 2-Dichlomethene     |                  | 0.00467 111 11   |                  | 0.00472 117 143  |                 |                          |                  |                 |                    |                  |                  |                  |                  |                  | 0.00448 1.11 1   |
| VOLATILES        | trans-1.3-Dichloropropene   |                  | 0.00467 tU       |                  | 0.00472 1 U      | 0.005 1 < 11    | 0.005 1 < 11             | 0.005 1 < 1/     | 0005 t< ⊎       | 0.005 1 < 1        | 0.005 1 < U      | 0.009 1 < 11     | 0.005 1 < U      | 0.005 1 < 1/     |                  | 0.00448 1 U U    |
| VOLATILES        | trans-1.4-Dichloro-2-hutene |                  |                  |                  |                  |                 |                          |                  |                 |                    |                  | 0.038 1 < 1      |                  |                  |                  |                  |
| VOLATILES        | Tricbloroethene             |                  | 00467 11         |                  | 0.00472 1 11     | 0.005 1 < 11    | 0.005 1 < 1              | 0.005 1 < 11     | 0-005 1 < 11    | 0.005 1 < 11       | 0.005 1 < H      | 0.009 1 < 11     | 0005 1 < H       | 0.005 1 < 11     |                  | 0.00448 1.13 13  |
| VOLATILES        | Trichioroiluoromethane      |                  | 0.00935 1 11     |                  | 0.00945 1 11     |                 | 2.000 , - U              |                  | 3.000 i 9 U     | 0.000              | 0.000            | 0.019 1 < 11     |                  | 0.000 F * U      |                  | 0.00895 111 1    |
| VOLATILES        | Vinvi acetate               |                  | 0.00935 111      |                  | 0.00945 1 1      | 005 1< H        | 0.05 1 < 1/              | 0.05 1 < 11      | 0.05 1 < 1      | 005 1< 0           | 0£05 1< U        | 0019 1 < H       | 0.05 1 < 1       | 0.05 1 < 11      |                  | 0.00895 111 1    |
| VOLATILES        | Vinvi chloride              | ł                | 0.00935 11       |                  | 0.00945 1 1      |                 | 001 1 4 1                | 0.00 1 4 0       |                 | 001 1< 1           | 0.01 1 < 1       | 0.019 1 < 11     | 0.01 1 < 1       | 0.00 1 4 0       |                  | 0.00895 111 11   |
| VOLATILES        | Yulanae Total               |                  | 0.00200 FU       |                  | 0.00070 10       | 0.01 1 0        | 0.01 IS U<br>0.015 tc ii | 1005 1 2 1       | 0.01 I U        | 0.01 1 2 1         | 0.01 1 0         | 0.010 1 < 0      | 0.01 IS U        | 0.05 1 < 1       |                  | 0.00000 10 0     |
|                  | Anones, rous                | L                |                  |                  |                  | 0.003 1 0       | 0.000 1 1 0              | U /1 L00.V       | 0.003 15 0      | 0.003 15 0         | 0.003 1 0        | 0.003 1 0        | 0.003 1 1 0      | 0.000 1 0        |                  |                  |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

 $= \left( \left( 1, 1, 1 \right) \right)$ 

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-2 Concentrations of Chemicals in Soil Samples Associated with Sump 002

| [SUMP] = SUMP002 |                             |                  |                  |                  |                  |                  |                     |                  |                  |                  |                  |                      |                  |                   |                   |                  |
|------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|---------------------|------------------|------------------|------------------|------------------|----------------------|------------------|-------------------|-------------------|------------------|
| LOCATION_CODE    |                             | 35SUMP002-SB01   | 35SUMP002-SB01   | 35SUMP002-SB02   | 35SUMP002-SB02   | 35SUMP003-SB01   | 35SUMP003-SE01      | 35SUMP003-SB01   | LH-S02-01        | LH-S02-01        | LH-S02-02        | LH-S02-02            | LH-\$03-01       | LH-S03-01         | LH-S03-02         | LH-S03-02        |
| SAMPLE_NO        |                             | 35-SMP02-S801-01 | 35-SMP02-SB01-02 | 35-SMP02-SB02-01 | 35-SMP02-SB02-02 | 35-SMP03-SB01-01 | 35-SMP03-SB01-01-QC | 35-SMP03-SE01-02 | LH-S02-01_1      | LH-S02-01_2      | LH-S02-02_1      | LH-S02-02_2          | LH-S03-01_1      | LH-903-01_2       | LH-S03-02_1       | LH-S03-02_2      |
| SAMPLE_DATE      |                             | 9/7/2006         | 9/7/2006         | 9/7/2006         | 9/7/2006         | 9/7/2006         | 9/7/2006            | 9/7/2006         | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993            | 7/10/1993        | 7/10/1993         | 7/10/1993         | 7/10/1993        |
| DEPTH            |                             | 0 - 0,5 Ft       | 6-6Ft            | 0 - 0.5 Ft       | 6-6Ft            | 0 - 0.5 Ft       | 0 - 0.5 Ft          | 6-6Ft            | 0.5 - 2.5 Ft     | 4-6 Ft           | 0.5 - 2.5 Ft     | 4 - 6 Ft             | 0 - 2 Ft         | 4-6 Ft            | 0-2Ft             | 4-6 Ft           |
| SAMPLE PURPOSE   |                             | REG              | REG              | REG              | REG              | REG              | FD                  | REG              | REG              | REG              | REG              | REG                  | REG              | REG               | REG               | REG              |
| Test Grown       | Parameter () inits = mo/kg) | Result DIL LO VO | Result Dil 10 VO | Result Dil 10 VO | Result DI I O VO | Result DII 10 VO | Result DIL LO VO    | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO     | Result DIL LO VO | Result Dil. LQ VQ | Result Dit. LQ VQ | Result DIL LO VO |
| EXPLOSIVES       | 2 A-Dizitrotokuene          |                  |                  |                  |                  |                  |                     |                  |                  |                  |                  |                      | 0.33 1 < 1       | 0.33 1 < 1/       | 0.33 1 < U        | 0.33 f < U       |
| EXPLOSIVES       | 2.6 Dinitratokuone          |                  |                  |                  |                  |                  | -                   |                  |                  |                  |                  |                      | 0.33 1 < 11      | 0.33 1 < U        | 0.33 1 < 1        | 033 1 < 11       |
| EAFLUAINES       | 2,0-0114100010416           | 40000 4          | 40000            |                  | 0700             | 47400            | 44500 4             | 0400 4           | 0450 4           | 254 4            | E4 8 4           | 49700 4              | 0030 4           | 0130 1            | 5020 4            | 44400 4          |
| METALO           | Auminan                     | 10000 1          |                  | 410 1            | 9/60 I           | 17400 1          | 0 400 A U UU        | 0100 1           | 54.4             | 3 4 4 1          | 3 4 4 1          | 3 4 4 1              | 3 4 4 1          | 3150 1            | 3 1 - 11          | 3 4 4 11         |
| METALS           | Antimony                    | 0.0632 1 J JL    | 0.111 10 001     | 0.109 1 U UUL    | 0.115 1 0 UJL    | 0.11 1 U UJL     | 0.102 1 U UJL       | 0.115 1 U UJL    | 5,1 1            | 3 1 < 0          | 3 1 < 0          | 3 1 < 0              | 3 1 < 0          | 3 1 < 0           | 3 1< 0            | 3 1 < 0          |
| METALS           | Arsenic                     | 1.74 1 JL        | 2.09 1 JL        | 2.21 1 JL        | 2.85 1 JL        | 1.72 1 JL        | 2.33 1 JL           | 1,19 1 JL        | 5.3 1            | 1.9 1            | 1./ 1            | 4./ 1                | 1.8 1            | 1.6 1             | 1.9/1             | 1.6 1            |
| METALS           | 5arium 🛛                    | 688 1            | 146 1            | 716 1            | 564 1            | 437 1            | 563 1               | 38.6 1           | 1960 1           | 1400 1           | 1750 1           | 1580 1               | 774 1            | 165 1             | 1620 1            | 304 1            |
| METALS           | Beryllium                   | 0.505 1          | 0.403 1JJ        | 0.277 1JJ        | 0.405 1JJ        | 0.499 1          | 0,519 1             | 0.374 1J J       |                  |                  |                  |                      |                  |                   |                   |                  |
| METALS           | Cadmium                     | 0.417 1          | 0.131 1JJ        | 0.433 1          | 0.317 1 J J      | 0.355 1JJ        | 0.442 1             | 0.0623 1 J J     | f 1< U           | 1 1< U           | 1 1< 0           | 1 f< U               | 1 1< U           | 1 1< 0            | 1 1< U            | 1 1< U           |
| METALS           | Calcium                     | 1360 1           | 414 1            | 352 1            | 477 1            | 1370 1           | 1240 1              | 571 t            | 895 t            | 1050 1           | 1020 1           | 787 1                | 2060 1           | 1580 1            | 558 1             | 483 1            |
| METALS           | Chromium                    | 15.5 1 JH        | 10 1 JH          | 15.2 1 JH        | 9.91 1 .01       | 15.8 1 JH        | 17.2 1 JH           | 11.7 1 JH        | 22.1 1           | 10.7 1           | 11.4 1           | 14.3 t               | 18.2 1           | 15.4 1            | 28.5 1            | 14.7 1           |
| METALS           | Cohalt                      | 4.96 1 JH        | 3.85 1 JH        | 1.34 t JH        | 3.86 1 JH        | 4.5 1 JH         | 4.92 1 JH           | 3.36 1 JH        | 7 1              | 6.4 t            | 6.3 1            | 5.7 1                | 9.3 1            | 8.3 1             | 3.3 1             | 4.5 1            |
| METALS           | Cobser                      | 313 1            | 372 t            | 274 4            | 303 1            | 551 1            | 7.57 1              | 4.45 1           | 74 1             | 47 1             | <u>د</u> ا       | 56 t                 | 37 1             | 28 1              | ta f              | 34 1             |
| MCTALC           | Copper                      | 04000 4          | 1100 4           | 40700 4          | 12200 1          | 40400 4          | 16200 4             | 1000 1           | 47000 1          | 42500 4          | 42400 4          | 40900 4              | 25200 4          | 20000 1           | 24400 1           | 17900 1          |
| METALO           | 404                         | 21200 1          | 14100 1          | 10/00 1          | 12300            | 10400 1          | 10300 1             | 12200 1          | 47250 1          | 13300 1          | 32100            | 70 1                 | 23500 1          | 20500 1           | 24100 1           | 00 1             |
| METALS           | Lead                        | 10,6 1 JL        | 6.57 1 JL        | 10.8 1 JL        | 5.95 1 JL        | 12.9 1 JL        | 20,5 1 30           | 5,25 1 JL        | 20.1 1           | 7.1 1            | 7.1 1            | 7.3 1                | 13 1             | 10.7 1            | 0.6 1             | 6.5 1            |
| METALS           | Magnesium                   | 815 1            | 971 1            | 185 1            | 1030 1           | 1020 1           | 786 1               | 991 1            | 558 1            | 717 1            | 452 1            | 676 f                | 1220 1           | 1200 1            | 265 1             | 955 1            |
| METALS           | Manganese                   | 232 1            | 39.9 1           | 108 1            | 32.1 1           | 112 1            | 164 1               | 31.3 1           | 242 1            | 79.1 1           | 141 I            | 106 1                | 226 1            | 120 1             | 54.9 1            | 28.9 1           |
| METALS           | Mercury                     | 0.0132 1J J      | 0.282 1 U        | 0.0307 1JJ       | 0.27 1U          | 0.0349 1JJ       | 0.0461 1JJ          | 0.0239 1J J      | 0.1 1 < U        | 0.1 1< U         | 0.1 1 < U        | 0.1 1< U             | 0.1 1 V          | 0.1 1 < U         | 0.1 1< 0          | 0.1 1 < U        |
| METALS           | Nickel                      | 8.05 1           | 10.1 1           | 2.95 1           | 8.6 1            | 7.55 1           | 8.25 t              | 9.35 1           |                  |                  |                  |                      |                  |                   |                   |                  |
| METALS           | Potassium                   | 396 1 JH         | 483 1 JH         | 172 t JH         | 492 1 JH         | 487 1 J          | 424 1 JH            | 447 1 JH         | 522 1            | 555 1            | 453 1            | 615 1                | 598 1            | 467 1             | 247 1             | 557 t            |
| METALS           | Selenium                    | 0301 1           | 0221 1 U         | 0.173 1 J J      | 0.229 1.14       | 0.203 1.J.J      | 0.295 1             | 0.23 1 U         | 1 1< 1           | 1 1< 1           | 1 1< 14          | 1 1< 0               | 1 1< U           | t 1< ⊎            | 1 1< 0            | 1 1< 0           |
| METALS           | Silver                      | 164 111          | 167 111          | 164 11           | 176 11           | 170 111          | 171 11              | 174 11           | 1 1 4 11         | 1 1 2 11         | 1 1 4 11         | 1 1 2 11             | 1 1 4 11         | 1 1 < 11          | 1 1 < 11          | 1 1 4 11         |
| METALO           | Silver                      | 677 4            | 1.01 1.0         | 128 41 1         | 457 4            | 1,12, 1 U        | 749 4               | 407 4            | 1 1 2 0          |                  |                  | 1 14 0               |                  | 1 1 2             | 1 1 0             | ,                |
| METALO           | Sociality                   | 91.7 1           | 120              | 12.0 1.0 0       | 151 1            | 100 1            | 74.0                | 137              |                  | 0000 A           | 7400 4           | <b>1</b> 00 <b>1</b> |                  |                   | 50.7 4            | 17.0 1           |
| METALS           | Stronbum                    |                  |                  |                  |                  |                  |                     |                  | 04.2 1           | 6300 1           | 7130 1           | 30.9 1               | 90.4 1           | 32.4 1            | <b>30.</b> 7 1    | 17.3 1           |
| METALS           | Thatium                     | 0.126 1          | 0.617 1          | 0.058/ 1         | 0.08/2 1         | 0.102 1          | 0.0915 1            | 0.0/72 1         |                  |                  |                  |                      |                  |                   |                   |                  |
| METALS           | Vanadium                    | 32 1             | 18.3 1           | 24.1 1           | 18.7 1           | 28.5 1           | 27.3 1              | 16,9 1           |                  |                  |                  |                      |                  |                   |                   |                  |
| METALS           | Zine                        | 20.1 1           | 26.3 t           | 31.8 f           | 22.5 1           | 32.6 1           | 45.7 1              | 24.4 1           | 101 1            | 21.1 1           | 15.8 1           | 23.6 1               | 48.6 1           | 34 1              | 35 1              | 22.7 1           |
| PERC             | Perchlorate                 | 0.01 1 U         | 0.01 1 U         | 0.0197 1         | 0.01 1 U         | 0.0209 1 J       | 0.0511 1 J          | 0.1 10 U UJ      |                  |                  |                  |                      |                  |                   |                   |                  |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene      |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U       | 0,33 1 < 0       | 0.33 1< U        | 0.33 1< U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1< U         | 0.33 1 < U       |
| SEMIVOLATILES    | 1,2-Dichlorobenzene         |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U           | 0.33 t< U        | 0.33 1 < U        | 0.33 1< U         | 0.33 1 < U       |
| SEMIVOLATILES    | 1,3-Dichlorobenzene         |                  |                  |                  |                  |                  |                     |                  | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           | 0,33 1 < U       | 0,33 1< U         | 0,33 1< U         | 0.33 1 < U       |
| SEMIVOLATILES    | 1.4-Dichlorobenzene         |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U            | 0,33 1 < U       | 0.33 1 < U        | 0.33 1< U         | 0.33 t< U        |
| SEMIVOLATILES    | 2.4.5-Trichlorophenol       |                  |                  |                  |                  |                  |                     |                  | 1.65 1 < U       | 1.65 1 < 1       | 1.65 1< U        | 1.65 1 < 0           | 1.65 1 < U       | 1.65 1 < Li       | 1.65 1 < 0        | 1.65 1 < til     |
| SEMILOLATILES    | 2 d 6 Trichlomphanol        |                  |                  |                  |                  |                  |                     |                  | 033 1 < 11       | 033 te li        |                  | 033 1 2 11           | 0.33 f c ti      | 033 1 4 11        | 033 1 < 11        | 033 1 c li       |
| SEMINOLATILEO    | 2,4,0-monocomenci           |                  |                  |                  |                  |                  |                     |                  | 0.00 1 4 1       | 0.00 1 4 0       | 0.32 1 4 11      | 0.00 1 4 0           | 0.22 1 4 11      | 0.32 1 4 11       | 0.00 (1 < 0       | 0.00 1 - 0       |
| SEMIVOLATILES    | 2,4-Dknkxopnenoi            |                  |                  |                  |                  |                  |                     |                  | 0.33 1 0         |                  |                  | 0.33 1 4 1           | 0.33 1 0         | 0.33 1 1          | 0,33 1 4 0        | 0.33 1 ~ 0       |
| SEMIVULATILES    | 2,4-Dimethylphanol          |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | Ų,33 1< U            | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0       |
| SEMIVOLATILES    | 2,4-Dinitrophenol           |                  |                  |                  |                  |                  |                     |                  | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 0       | 1.65 1 < U           | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < 0        | 1.65 1 < U       |
| SEMIVOLATILES    | 2,4-Dinitrotoluene          |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U           |                  |                   |                   |                  |
| SEMIVOLATILES    | 2,6-Dinitrototuene          |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U       | 0,33 t< U        | 0.33 1 < U       | 0.33 1 < U           |                  |                   |                   |                  |
| SEMIVOLATILES    | 2-Chloronaphthalene         |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U           | 0.33 1 < 10      | 0.33 1 < U        | 0.33 1 < U        | 0,33 1 < U       |
| SEMIVOLATILES    | 2-Chlorophenol              |                  |                  | •                |                  |                  |                     |                  | 0.33 1 < U           | 0,33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Methyinaphthalene         |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 t< -U       | 0.33 1< U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Methylohenol              |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1< U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 t< U         | 0.33 t< ⊍        |
| SEMIVOLATILES    | 2-Nitroaciline              |                  |                  |                  |                  |                  |                     |                  | 1.65 1 < U       | 165 1 < 11       | 165 1< U         | 1.65 1 < U           | 1.65 1 < U       | 1.65 1 < U        | 1.65 1< U         | 165 1< U         |
| SEMIVOLATILES    | 2-Nitrochanol               |                  |                  |                  |                  |                  |                     |                  | 0.33 t < U       | 0.33 1 < ti      | 0.33 1 < 11      | 033 1< U             | 0.33 1 < 10      | 0.33 1 < 11       | 0.33 1 < 11       | 033 1 < 11       |
| SEMUNIATIES      | 2 2' Disharahan sirina      |                  |                  |                  |                  |                  |                     |                  | 0.65 1 < 11      | 0.65 1 4 1       | 0.65 1 < 11      | 0.85 1 4 11          | 0.65 1 4 1       | 0.65 1 - 24       | 0.66 1 < 1        | 0.85 1 4 11      |
| CENTROLATILES    | 3,3 -DACHARDOBAZIGHE        |                  |                  |                  |                  |                  |                     |                  | 4.65 1 4         |                  |                  |                      | 1.05 1 ~ 0       | 186 4 4 11        | 4.65 4 4 11       |                  |
| SEMIVOLATILES    |                             |                  |                  |                  |                  |                  |                     |                  | 1.05 1 0         | 1.05 1 1 0       | 1.05 1 4 0       | 1.65 1 0             | 1.05 1 4         |                   | 1.05 1 0          | 1.05 1 4         |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol  |                  |                  |                  |                  |                  |                     |                  | 1.55 1 < U       | 1.05 1 < 0       | 1.65 1 < 0       | 1.05 1 < 0           | 1.65 1 < 0       | 1.55 1 < 0        | 1.65 1 < 0        | 1.65 1 < U       |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 < 0       | 0,33 1 < 0           | 0.33 1 < U       | D.33 1 < U        | 0.33 1 < 0        | 0,33 1< U        |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     |                  |                  |                  |                  |                  |                     |                  | 0.65 1 < U       | 0.65 1 < U       | 0.65 t< U        | 0.65 1 < U           | 0.65 1 < U       | 0.65 1 < U        | 0.65 1 < U        | 0.65 1 < U       |
| SEMIVOLATILES    | 4-Chloroaniline             |                  |                  |                  |                  |                  |                     |                  | 0.65 1 < U       | 0,65 1 < U       | 0,65 1 < U       | 0.65 1 < U           | 0.65 1 < U       | 0.65 1 < U        | 0,65 1 < U        | 0.65 1 <  U      |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U        | 0.33 t< U         | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Methylphenol              |                  |                  |                  |                  |                  |                     |                  | 0.33 t< U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1< U        |
| SEMIVOLATILES    | 4-Nitroaniline              |                  |                  |                  |                  |                  |                     |                  | 1.65 1 < U           | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U       |
| SEMIVOLATILES    | 4-Nitrophenol               |                  |                  |                  |                  |                  |                     |                  | 1.65 1.< U       | 1.65 1 < U       | 1.65 1< U        | 1.65 1< U            | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < U        | 1.65 1< U        |
| SEMIVOLATILES    | Acepaphinene                |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < E       | 033 1 < 1        | 033 1 < ‼        | 0.33 1 < 11          | 0.33 t< H        | 033 1< U          | 133. t< li        | 033 1 < ∐        |
| SEMENOLATILES    | Aconstrativiana             |                  |                  |                  | -                |                  |                     |                  | 0.23 1 - 11      | 0.33 4 - 11      | 0.22 1 2 1       | 0.33 1 4 11          | 0.00 1 0         | 0.32 1 0          | 0.23 1 4          | 0.33 1 4 11      |
| CLAVOLATILCO     | Accellance line line        |                  |                  |                  |                  |                  |                     |                  | 0.00 .1 ~ 0      | 0.33 1 0         | 0.00 1 0         |                      | 0.33 1 4 0       |                   |                   |                  |
| OCHING ATU CO    |                             |                  |                  |                  |                  | ·                |                     |                  | 0.33 1 4 0       | 0.33 1 0         | 0.33 14 0        | 0.35 1 4 0           | 0.35 1 4 0       | 0.55 14 0         | 0.33 14 0         | 0.33 1 4 0       |
| SEMIVOLATILES    | benzo(ajanthracene          |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0           | 0.33 1 < 0       | 0.33 1 < 0        | 0,33 7 < Q        | 0.33 1 < 0       |
| SEMIVOLATILES    | Benzo(a)pyrene              |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U           | 0.33 1 < U       | 0.33 f < U        | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(b)fluoranthene        |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1< U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(ghi)perylene          |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U       | 0.33 t< U        | 0.33 1 < U       | 0.33 t< U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U        | 0,33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES    | Benzoic Acid                |                  |                  |                  |                  |                  |                     |                  | 1.65 1 < U       | 1.65 t < 1       | 1.65 1 < U       | 1.65 1 < U           | 1.65 1 < 1.      | 1.65 1 < 1)       | 1.65 1 < U        | 1.65 1 < 11      |
| SEMIVOLATII ES   | Benzyl Alcohol              |                  |                  |                  |                  |                  |                     |                  | 065 1 < 11       | 065 1 < H        | 0.65 1 < 11      | 0.65 1 < 1           | 0.65 1 4 1       | 0.65 1 < 1        | 065 1< 1          | 0.65 1 < 11      |
| SEMIVOLATILES    | his/2.Chiomethawumathana    |                  |                  |                  |                  |                  |                     |                  | 033 1 - 4        | 033 1 - 1        | 033 1 - 1        | 033 12 1             | 033 1 4 1        | 033 12 11         | 033 1 - 11        | 033 1 - 1        |
| SELINALATINES    | No/2 Chloroothylic          |                  |                  |                  |                  |                  |                     |                  | 0.00 1 1         | 0.00 1 0         |                  | 0.00 1 1 1           | 0.00 1 1         | 0.00 1 0          | 0.00 1 0          | 0.00 ( ~ U       |
| CONTROLING AT TO | ussized increasing deliner  |                  |                  |                  |                  |                  |                     |                  | 0.00 15 0        | v.33 t < U       | 0.33 1 4 0       | 0.00 1 4 0           | 0.00 1 4 0       | 0.00 15 0         | 0.00 ( 1 1        | 0.00 (           |
| JEMIVOLATILES    | oss(2-Chicroisopropyi)ether |                  |                  |                  |                  |                  |                     |                  | U.33 T < U       | ₩.33 T < U       | 0.33 1 < U       | U.33 1 < U           | 0.33 1 < U       | U.33 T < U        | 0.33 1 < U        | U.33 1 < U       |
| OEMIVOLATILES    | pis(2-Emylnexy)phthalate    |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U       | 10.33 t< U       | 0.33 1 < U       | 0.33 1 < 0           | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | ∪.33 1 < Ü       |
| SEMIVOLATILES    | Butyl benzyl phthalate      |                  |                  |                  |                  |                  |                     |                  | 0.33 t< U        | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U           | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES    | Chrysene                    |                  |                  |                  |                  |                  |                     |                  | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U        | 0.33 t< U         | 0.33 1 < U       |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      |                  |                  |                  |                  |                  |                     |                  | 0.33 t< U        | 0.33 t< U        | 0.33 1 < U       | 0.33 1< U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1< U         | 0.33 1 < U       |
|                  |                             | -                |                  |                  |                  |                  |                     |                  |                  |                  |                  |                      |                  |                   |                   |                  |

Shaw Environmental, Inc.

÷

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-2 Concentrations of Chemicals in Soil Samples Associated with Sump 002

| [SUMP] = SUMP002 |  |                  |                  |                    |                   |                         |                     |                  |                       |                  |                   |                          |                  | 111 000 04       | 112 000 00        | 14 602 02         |
|------------------|--|------------------|------------------|--------------------|-------------------|-------------------------|---------------------|------------------|-----------------------|------------------|-------------------|--------------------------|------------------|------------------|-------------------|-------------------|
| LOCATION_CODE    |  | 35SUMP002-S801   | 35SUMP002-SB01   | 35SUMP002-SB02     | 35SUMP002-SB02    | 35SUMP003-SB01          | 35SUMP003-SB01      | 35SUMP003-SB01   | LH-S02-01             | LH-S02-01        | LH-S02-02         | 14 602 02 0              |                  | 10 503-01 2      | 19-200-02         | 18-503-02         |
| SAMPLE_NO        |  | 35-SMP02-SB01-01 | 35-SMP02-SB01-02 | 35-SMP02-SB02-01   | 35-SMP02-SB02-02  | 35-SMP03-SB01-01        | 35-SMP03-SB01-01-QC | 35-SMP03-SB01-02 | LH-S02-01_1           | LH-S02-01_2      | LH-S02-02_1       | LH-SU2-U2_2<br>e/Se/1002 | 2/10/1002        | 7/10/1003        | 7/10/1003         | 7/10/1993         |
| SAMPLE_DATE      |  | 9/7/2006         | 9/7/2006         | 9/7/2006           | 9/7/2006          | 9/7/2006                | 9///2006            | 9///2006         | 6/20/1993             | 6/20/1993        | 0/20/1993         | 0720/1850<br>A & Ct      | 0.254            | A.6 Et           | 0-2Ft             | 4-6 Ft            |
| Depth            |  | 0-0.5 Ft         | 6-6Ft            | 0-0.5Ft            | 6-6Ft             | 0-0,5 H                 | 0-0.5 Ft            | 0-0FL            | 0.5-2.5 PL            | PEC              | REG               | REG                      | REG              | REG              | REG               | REG               |
| SAMPLE_PURPOSE   |  | REG              | REG              | REG                |                   | REG<br>Result DIL 10 VO |                     | Rest Dill IO VO  |                       | Result Dit 10 VO | Result DII. 10 VO | Result DIL LQ VQ         | Result DIL LQ VQ | Result DIL LQ VQ | Result Dil. LQ VQ | Result Dil. LQ VQ |
| Test Group       | Parameter (Units = mg/kg)              | Kesuit Vil Lu Vu | Result dil Lu Vu | Kesuit del Lui Vui | Resolution Log Vo | RESOLUTE LO VO          | Neson Dic Los Vo    | NOSUL DIE ER PR  | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        |
| SEMEVOLATILES    | Labenzonuran<br>Distant shekadada      |                  |                  |                    |                   |                         |                     |                  | 0.33 1 < U            | 0,33 1 < U       | 0.33 1 < U        | 0.33 t< U                | 0.33 1< U        | 0.33 1 < U       | 0.33 1 < U        | 0,33 1 < U        |
| SEMIVOLATILES    | Dimethyl philaidae                     |                  |                  |                    |                   |                         |                     |                  | 0.33 1 < <del>U</del> | 0.33 1 < U       | 0.33 1< U         | 0.33 1< U                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U         | 0.33 1 < U        |
| SEMIVOLATILES    | dina Butyi prioraata                   |                  |                  |                    |                   |                         |                     |                  | 0.33 1< U             | 0.33 1< U        | 0.33 1< U         | 0.33 1 < U               | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U         | 0.33 1 < U        |
| SEMIVOLATILES    | di-n-Octvi phthalate                   |                  |                  |                    |                   |                         |                     |                  | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0,33 1< U        | 0.33 1 < U       | 0.33 1 < U        | 0.33 1< U         |
| SEMIVOLATILES    | Fluoranthene                           |                  |                  |                    |                   |                         |                     |                  | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1< U                | 0.33 1< U        | 0,33 1 < U       | 0.33 1< U         | 0.33 1 < U        |
| SEMIVOLATILES    | Fluorene                               |                  |                  |                    |                   |                         |                     |                  | 0.33 1 < U            | 0.33 t< U        | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0,33 1 < U        |
| SEMIVOLATILES    | Hexachlorobenzene                      |                  |                  |                    |                   |                         |                     |                  | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < 0        | 0.33 1 < 0        |
| SEMIVOLATILES    | Hexachlorobutadiene                    |                  |                  |                    |                   |                         |                     |                  | 0.33 1 < U            | 0,33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 4 1        |                   |
| SEMIVOLATILES    | Hexachlorocyclopentadiene              |                  |                  |                    |                   |                         |                     |                  | 0.33 1 < 0            | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 < 0               | 0.33 1 4 0       | 0.33 1 4 1       | 0.33 1 < 0        | 0.33 1 < 0        |
| SEMIVOLATILES    | Hexachloroethane                       |                  |                  |                    |                   |                         |                     |                  | 0.33 T < U            | 0.33 1 < 1       | 0.33 1 4 1        | 0.33 1 0                 | 0.33 1 4 11      | 0.33 1 < 0       | 0.33 1 < 1        | 0.33 1 < U        |
| SEMIVOLATILES    | Indenc(1,2,3-cd)pyrene                 |                  |                  |                    |                   |                         |                     |                  | 0.33 1 4 0            | 0,35 1 4 1       | 0.33 1 4 1        | 0.33 1 < 1               | 0.33 1 < 1       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        |
| SEMIVOLATILES    | Isopharone                             |                  |                  |                    |                   |                         |                     |                  | 033 1 < 1             | 0.33 1 < 11      | 0.33 1 < 1        | 0.33 t< L                | 0.33 t< U        | 0.33 1 < U       | 0.33 1 < U        | 0.33 1< U         |
| SEMIVOLATILES    | Naphinalene                            |                  |                  |                    |                   |                         |                     |                  | 0.33 1 < 1            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 t< U         |
| SEMIVOLATILES    | Nerobenzene<br>- Nitraa fin maandomine |                  |                  |                    |                   |                         |                     |                  | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0,33 1 < U       | 0.33 1 < U       | 0,33 1< U         | 0.33 1 < U        |
| SEMINOLATILES    | n.Nitosonaninpendamine                 |                  |                  |                    |                   |                         |                     |                  | 0.33 1 < U            | 0.33 1< U        | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1< U         |
| SEMIVOLATILES    | Pentachiomobenol                       |                  |                  |                    |                   |                         |                     |                  | 1.65 1 < U            | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < U               | 1.65 t< U        | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < U        |
| SEMIVOLATILES    | Phenanthrene                           |                  |                  |                    |                   |                         |                     |                  | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 1< U        | 0.33 1 < U       | 0.33 1 < 1/       | 0.33 1< U         |
| SEMIVOLATILES    | Phenol                                 |                  |                  |                    |                   |                         |                     |                  | 0.33 1< U             | 0.33 t< U        | 0.33 1 < U        | 0.33 i< U                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        |
| SEMIVOLATILES    | Pyrene                                 |                  |                  |                    |                   |                         |                     |                  | 0.33 t< U             | 0.33 1 < U       | €,33 1 < U        | 0.33 1 < U               | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        |
| VOLATILES        | 1,1,1-Trichloroethane                  |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0       | 0,005 1 < 0       |
| VOLATILES        | 1,1,2,2-Tetrachkroethane               |                  |                  |                    |                   |                         |                     |                  | 0,005 1 < U           | 0.005 1 < U      | 0.005 1 < 0       | 0.005 1 < 0              |                  |                  | 0.005 1 < 1       | 0.005 1 < 1       |
| VOLATILES        | 1,1,2-Trichloroethane                  |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < 0           |                  | 0,005 1 < 0       | 0.005 1 < 11             | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U       |
| VOLATILES        | 1,1-Dichloroethane                     |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < 1           | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U       |
| VOLATILES        | 1,1-Dichlomethene                      |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 t< U        |
| VOLAHLES         | 1.2-Dichologutate                      |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < Ü       | 0,005 1 < U              | 0.005 1 < U      | 0.005 1 < Ü      | 0.005 1 < U       | 0.005 1 < U       |
| VOLATILES        | 1.2-Dichloropropage                    | -                |                  |                    |                   |                         |                     |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U       | 0,005 1< ≀               | 0.005 1 < U      | 0,005 1 < U      | 0.005 t< U        | 0.005 1 < U       |
| VOLATILES        | 2-Butanone                             |                  |                  |                    |                   |                         |                     |                  | 0.05 1 < U            | 0.05 t< U        | 0.05 1 < U        | 0.05 1 < U               | 0.05 1< U        | 0.05 1 < U       | 0.05 1 < 0        | 0,05 1 < U        |
| VOLATILES        | 2-Chloroethyl vinyl ether              |                  |                  |                    |                   |                         |                     |                  | 0.01 t< U             | 0.01 t< U        | 0.01 t< U         | 0.01 1 < U               | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U        | 0,01 1 < U        |
| VOLATILES        | 2-Hexanone                             |                  |                  |                    |                   |                         |                     |                  | 0.05 1 < U            | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U               | 0,05 1 < U       | 0.05 1 < U       | 0.05 1 < 0        | 0.05 1 < 0        |
| VOLATILES        | Acetone                                |                  |                  |                    |                   |                         |                     |                  | 0.1 1 < U             | 0.1 1 < U        | 0.1 1 4 0         | 0.005 1 < 0              | 0.1 1 4          | 0.005 1 < 1      | 0.05 1 < 1        | 0.005 1 < 1       |
| VOLATILES        | Benzene                                |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < 0           | 0.005 1 < 0      | 0.005 1 < 0       | 0,005 1 < 1              | 0.005 1 < U      | 0,005 1 < 1      | 0.005 1 < U       | 0.005 1 < U       |
| VOLATILES        | Bromodichloromethane                   |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < 11          | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U       |
| VOLAHLES         | promozona<br>Decementatione            |                  |                  |                    |                   |                         |                     |                  | 0.01 1 < U            | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U               | 0.01 1< U        | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U        |
| VOLATILES        | Carbon diguilide                       |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U       |
| VOLATILES        | Carbon tetrachloride                   |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < U           | 0.005 1 < U      | 0.065 t< U        | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U       |
| VOLATILES        | Chiorobenzene                          |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U       |
| VOLATILES        | Chloroethane                           |                  |                  |                    |                   |                         |                     |                  | 0.01; 1 < U           | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U               | 0,01 1 < ∪       | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U        |
| VOLATILES        | Chioroform                             |                  |                  |                    |                   |                         |                     |                  | 0.005 t< U            | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0       | 0.005 1 < 0       |
| VOLATILES        | Chloromethane                          |                  |                  |                    |                   |                         |                     |                  | 0.01 1 < U            | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < 0               | 0.01 1 < 0       | 0.01 1 < 0       | 0.01 1 < 0        | 0.005 1 < 0       |
| VOLATILES        | cis-1,3-Dichloropropene                |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < 0           | 0.005 1 < 0      | 0.005 1 < 0       | 0.005 1 < 0              | 0.005 1 < 0      | 0.005 1 < 0      | 0,005 1 < 13      | 0.005 1 < 11      |
| VOLATILES        | Dibromochloromethane                   |                  |                  |                    |                   |                         |                     |                  | 0,005 1 < 0           | 0.005 1 4 9      | 0.005 1 < 0       | 0.005 1< U               | 0.005 1 < 0      | 0.005 1 < 1      | 0.005 1 < 1       | 0.005 1< U        |
| VOLATILES        | Ethylbenzene                           |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < 0           | 0.05 1 < 0       | 0.05 1 < 1        | 0.05 1 < U               | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U        |
| VOLATILES        | Methyl isobutyl ketone                 |                  |                  |                    |                   |                         |                     |                  | 0.05 1 < 1            | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U       | 0.005 1 < U       |
| VOLATILES        | Methylene chloride                     |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0,005 1 < U       |
| VOLATILES        | Tetrachloroethere                      |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U       | 0,005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U       |
| VOLATILES        | Toluene                                |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < U           | 0,005 1 < U      | 0.005 1 < U       | 0.005 t< U               | 0.005 t < U      | 0.005 1 < U      | 0.005 1< U        | 0.005 1 < U       |
| VOLATILES        | trans-1,3-Dichloropropene              |                  |                  |                    |                   |                         |                     |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U              | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U       |
| VOLATILES        | Trichloroethene                        | 1                |                  |                    |                   |                         |                     |                  | 0.005 1 < U           | 0.005 t< U       | 0.005 1 < U       | 0,005 1 < U              | 16.005 f< U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U       |
| VOLATILES        | Vinyl acetate                          | *                |                  |                    |                   |                         |                     |                  | 0.05 t< ⊍             | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U               | 0.05 t< U        | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U        |
| VOLATILES        | Vinyl chloride                         | ŧ                |                  |                    |                   |                         |                     |                  | 0.01 1 < U            | 0.01i 1 < U      | 0.01 1 < U        | 0.01 1 < U               | 0,01 1 < U       | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U        |
| VOLATILES        | Xylenes, Total                         | 1                |                  |                    |                   |                         |                     |                  | 0.005 1 < U           | 0,005 1 < U      | 0,005 1 < U       | 0.005 1 < U              | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U       | 0.005 1 < U       |

Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, YO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas

Page 2 of 2

Table 3-3 Concentrations of Chemicals in Soil Samples Associated with Sump 003

| (SUMP) = SUMP003               |  |                    |                      |                      |                      |                  |                     |                      |                  |                 |   |                     |                  |                  |                    |                         |
|--------------------------------|--|--------------------|----------------------|----------------------|----------------------|------------------|---------------------|----------------------|------------------|-----------------|---|---------------------|------------------|------------------|--------------------|-------------------------|
| LOCATION_CODE                  |  | 35SUMP002-SB01     | 35SUMP002-SB01       | 35SUMP002-SB02       | 35SUMP002-SB02       | 35SUMP003-SB01   | 35SUMP003-SB01      | 35SUMP003-SB01       | LH-S02-01        | LH-S02-01       | LH-S02-02                               | LH-S02-02           | LH-S03-01        | LH-\$03-01       | LH-\$03-02         | LH-S03-02               |
| SAMPLE_NO                      |  | 35-SMP02-SB01-01   | 35-SMP02-SB01-02     | 35-SMP02-SB02-01     | 35-SMP02-SB02-02     | 35-SMP03-SB01-01 | 35-SMP03-SB01-01-QC | 35-SMP03-SB01-02     | LH-S02-01_1      | LH-S02-01_2     | LH-S02-02_1                             | LH-S02-02_2         | LH-S03-01_1      | LH-503-01_2      | LH-S03-02_1        | LH-S03-02_2<br>7/10/002 |
| DEDTH                          |  | 9///2006           | 9///2000<br>6 - 6 Ft | 9/1/2006             | S///2000             | 9/1/2000         | 9//2006             | \$~6.Ft              | 0/20/1995        | 4.6Ft           | 0.5-25Ft                                | 6/20/1895<br>4_6.Ft | 0_2 Ft           | 4-6Ft            | 0-2Ft              | 4-6 Ft                  |
| SAMPLE PURPOSE                 |  | REG                | REG                  | REG                  | REG                  | REG              | FD                  | REG                  | REG              | REG             | REG                                     | REG                 | REG              | REG              | REG                | REG                     |
| Test Group                     | Parameter (Units = mg/kg)                  | Result DIL LQ VQ   | Result DIL LQ VQ     | Result DIL LQ VQ     | Result Dil LQ VQ     | Result DIL LQ VQ | Result DIL LQ VQ    | Result DIL LQ VQ     | Result DIL LQ VQ | Result DIL LQ V | Q Result DIL LQ VQ                      | Result DIL LQ VQ    | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ I | Result DIL LQ VQ        |
| EXPLOSIVES                     | 2,4-Dinitrotokiene                         |                    |                      |                      |                      |                  |                     |                      |                  | •               | • |                     | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U              |
| EXPLOSIVES                     | 2,6-Dinitrotoluene                         |                    |                      |                      |                      |                  |                     |                      |                  |                 |   |                     | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U              |
| METALS                         | Aluminum                                   | 13600 1            | 10000 1              | 4110 1               | 9780 1               | 17400 1          | 11500 1             | 8160 1               | 9450 1           | 36.1 1          | 54.6 1                                  | 13700 1             | 9930 1           | 9130 1           | 5030 1             | 14100 1                 |
| METALS                         | Antimony                                   | 0.0632 1 J JL      | . 0.111 1 U UJL      | 0,109 1 U UJL        | 0.115 1. U UJL       | 0.11 1 U U.I.    | . 0.102 1 U UJL     | 0.115 1 U UJL        | 5.1 1            | 31 < 1          | ) 31 < U                                | 31 < 0              | 31 < 0           | 31 < 0           | 31 < 0             | 31 < 0                  |
| METALS                         | Arsenic                                    | 1./4 1 JL          | . 2.09 1 JL          | 2.21 T JL            | 2.85 1 JL            | 1./2 1 JL        | 2.33 1 JL           | 1.19 1 JL            | 5.3 1            | 1.9 1           | 1./ 1                                   | 4./ 1               | 1.8 1<br>774 1   | 1.0 1            | 7.9 1              | 1.0 1                   |
| METALS                         | panum<br>Bardium                           | 000 1              | 145 1<br>0.402 4 J 1 | 710 1<br>10277 1 1 1 | 004 1<br>0.405 1 1 1 | 437 1            | 0510 1              | 38.0 1<br>0374 1 1 1 | 1900             | 1400 1          | 1730 1                                  | 1300 1              | 114 1            | 1001             | 1020               | 304 1                   |
| METALS                         | Cadmium                                    | 0.417 1            | 6131 1 J J           | 0.433 t              | 0.317 1 J J          | 0.355 1 J J      | 0.442 1             | 0.574 1 J J          | 11 < 1           | 11 < 1          | 114                                     | 11 < U              | 11 < U           | 11 < 1           | 11<0               | 11 < 1                  |
| METALS                         | Calcium                                    | 1360 1             | 414 1                | 352 1                | 477 1                | 1370 t           | 1240 1              | 571 1                | 895 1            | 1050 1          | 1020 1                                  | 787 1               | 2060 1           | 1580 1           | 558 1              | 483 1                   |
| METALS                         | Chromium                                   | 15,5 1 JH          | I 10 1 JH            | 15,2 1 JH            | 9.91 1 JH            | 15.8 1 JH        | 17.2 1 JH           | 11.7 1 JH            | 22.1 1           | 10.7 1          | 11.4 1                                  | 14.3 1              | 18.2 1           | 15.4 1           | 28.5 1             | 14.7 1                  |
| METALS                         | Cobalt                                     | 4.96 1 JH          | i 3.85 1 JH          | 1.34 1 JH            | 3,86 1 JH            | 4.5 1 JH         | 4.92 1 JH           | 3.36 1 JH            | 7 1              | 6.4 1           | 6.3 1                                   | 5.7 1               | 9.3 t            | 8.3 1            | 3.3 1              | 4.5 1                   |
| METALS                         | Copper                                     | 3.13 1             | 3.72 1               | 2.71 1               | 3.93 1               | 5.54 1           | 7.57 1              | 4.45 1               | 7.4 1            | 4.7 1           | 4 1                                     | 5.6 1               | 3.7 1            | 2.8 1            | 1.8 1              | 3.4 1                   |
| METALS                         | fron                                       | 21200 1            | 14t00 t              | 18700 1              | 12300 1              | 16400 1          | 16300 1             | 12200 1              | 47200 1          | 13500 1         | 12100 1                                 | 40800 1             | 25300 1          | 20900 1          | 24100 1            | 17800 1                 |
| METALS                         | Lead                                       | . 10.6 1 JL        | . 6.57 1 JL          | 10.8 1. Л.           | 5,95 1 JL            | 12.9 1 JL        | 20.5 1 JL           | 5.25 1 JL            | 20.1 1           | 7.1 1           | 7.1 1                                   | 7.3 1               | 13 1             | 10.7 1           | 6.8 f              | 6.5 1                   |
| METALS                         | Magnesium                                  | 815 1              | 971 1                | 186 1                | 1030 1               | 1020 1           | 786 1               | 991 1                | 558 1            | 717 1           | 452 1                                   | 676 1               | 1220 1           | 1200 1           | 265 1              | 955 1                   |
| METALS                         | Manganese                                  | 232 1              | 39.9 1               | 108 1                | 32.1 1               | 112 1            | 164 1               | 31.3 1               | 242 1            | /9.1 1          | 141 1                                   | 106 1               | 226 1            | 120 1            | 54.9 1             | 28.9 1                  |
| METALS                         | Morcury                                    | 0.0132 1 J J       | 0.282 1 0            | 0.030/ 1 J J         | 0.27 1 0             | 0.0349 1 J J     | U.0401 1 J J        | 0.0239 1 3 3         | U.1 1 < U        | 0.71 < 0        | 0.11 < 0                                | U.1 1 < U           | . U,1 T < U      | 0.1 1 < 0        | 0.1 1 < 0          | 0.1 7 4 0               |
| METALS                         | Pataceium                                  | 0.03 I<br>106 1 IL | 10.1 1<br>10.1 1     | 2.90 i<br>170 1 III  | 0,0 F<br>402 1 HJ    | 1.33 1           | 0.20 I<br>ADA 1 HJ  | 9.30 I<br>447 1 I⊫   | 522 4            | 555 1           | 453 1                                   | 615 1               | 509 1            | 467 4            | 247 4              | 557 1                   |
| METALS                         | Selenium                                   | 0301 1             | 6-221 1 II           | 0173 1               | 432 I JI             | 1,203 1 .E .I    | 124 1 34            | 0.23 f II            | 11 < 11          | 11 < 1          |   | 11 < 1              | 11 < 11          | 11<              | 1 1 < 1            | 11 < H                  |
| METALS                         | Silver                                     | 164 1 1            | 167 1 1              | 164 1 1              | 1.76 1 U             | 172 1 1          | 171 1 1             | 174 1 0              | 11 < 1           | 11 < 1          | 11 4                                    | 11 < 0              | 1 t < U          | 11 < 1           | 11 < U             | 11 < 1                  |
| METALS                         | Sodium                                     | 67.7 1             | 126 1                | 12.8 1 J J           | 157 1                | 108 1            | 74.8 1              | 197 1                |                  |                 | , , , ,                                 |                     |                  |                  |                    |                         |
| METALS                         | Strontium                                  |                    |                      |                      |                      |                  |                     |                      | 84.2 1           | 8360 1          | 7130 1                                  | 30.9 1              | 98.4 1           | 32.4 1           | 50.7 1             | 17.3 1                  |
| METALS                         | Thalium                                    | 0.126 1            | 0.617 1              | 0.0587 1             | 0,0872 1             | 0.102 1          | 0.0915 1            | 0.0772 1             |                  |                 |   |                     |                  |                  |                    |                         |
| METALS                         | Vanadium                                   | 32 1               | 18.3 t               | 24.1 1               | 18.7 1               | 28.5 1           | 27.3 1              | 16.9 1               |                  |                 |   |                     |                  |                  |                    |                         |
| METALS                         | Zinc                                       | 20.1 1             | 26,3 1               | 31.8 1               | 22.5 1               | 32.6 1           | 45.7 1              | 24.4 1               | 101 1            | 21.1 1          | 15.8 1                                  | 23.6 1              | 48.6 1           | 34 1             | 35 1               | 22.7 1                  |
| PERC                           | Perchlorate                                | 0.01 1 U           | 0.01 1 U             | 0.0197 1             | 0.01 1 U             | 0.0209 1 J       | 0.0511 1 J          | 0.1 10 U UJ          |                  |                 |   |                     |                  |                  |                    |                         |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene                     |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < 0       | 0.33 1 < U      | 0.33 1 < 0                              | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 f < U         | 0.33 1 < 0              |
| SEMBVOLA HLES<br>SEMBVOLA HLES | 1.2-LACINOTODERZERE                        |                    |                      |                      |                      |                  |                     |                      | 0.33 1 2 0       | 0.33 1 < 0      |   | 0.33 1 < U          | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0              |
| SEMIVOLATILES                  | 1 4-Dichlorobenzane                        |                    |                      |                      |                      |                  |                     |                      |                  | 0.33 1 < 1      | 0,33 t < 0                              | 0.33 1 < 1          | 0.33 1 < 11      | 0.33 1 < 11      | 0.33 1 < 1         |                         |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenol                      |                    |                      |                      |                      |                  |                     |                      | 1.65 t < U       | 1.65 1 < 1      | 1.65 1 < U                              | 1.65 1 < U          | 1.65 1 < 0       | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < 0              |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol                      |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < U       | 0.33 1 < L      | 0.33 1 < U                              | 0.33 1 < U          | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U         | 0.33 1 < U              |
| SEMIVOLATILES                  | 2,4-Dichlorophenol                         |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < U       | 0.33 1 < L      | 0.33 1 < U                              | 0.33 1 < U          | 0.33 1 < U       | 0.33 † < U       | 0,33 1 < U         | 0.33 1 < U              |
| SEMIVOLATILES                  | 2,4-Dimethylphenol                         |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < U       | 0.33 1 < Ł      | 0.33 1 < U                              | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U              |
| SEMIVOLATILES                  | 2,4-Dinitrophenal                          |                    |                      |                      |                      |                  |                     |                      | 1.65 1 < U       | 1.65 1 < 1      | I 1.65 1 ≺ U                            | 1.85 1 < U          | 1.65 t < U       | 1.65 f < U       | 1.65 1 < U         | 1.65 1 < U              |
| SEMIVOLATILES                  | 2,4-Dinitrotoluone                         |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U                              | 0.33 1 < U          |                  |                  |                    |                         |
| SEMIVOLATILES                  | 2,6-Dinitrotokene                          |                    |                      |                      |                      |                  |                     |                      | 0,33 1 < U       | 0.33 f < U      | 0.33 1 < U                              | 0.33 1 < U          |                  |                  |                    |                         |
| SEMIVOLATILES                  | 2-Unioronaphonal                           |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < U       | 0,33 1 < 0      | 0,33 1 < 0                              | 0.33 1 < 0          | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0              |
| SEMINOLATILES                  | 2-califoropationol<br>2-Mathylanahilana    |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < 0       | 0.33 1 < 0      | 0.33 1 4 0                              | 0.33 1 < 0          | 0.33 1 < 0       | 0.35 1 4 0       |                    |                         |
| SEMIVOLATILES                  | 2-Methylohenol                             |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < 17      | 0.33 1 < 0      | 0.33 1 < 1                              | 0.33 1 < 1          | 0.33 1 < 11      | 0.33 1 < 1       | 0.33 1 < 1         | 0.33 t < U              |
| SEMIVOLATILES                  | 2-Nitroaniline                             |                    |                      |                      |                      |                  |                     |                      | 1.65 1 < U       | 1.65 1 < U      | 1.65 1 < U                              | 1.65 1 < U          | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < U              |
| SEMIVOLATILES                  | 2-Nitrophenol                              |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U                              | 0.33 1 < U          | 0,33 1 < U       | 0.33 t < U       | 0.33 1 < U         | 0.33 1 < U              |
| SEMVOLATILES                   | 3,3'-Dichlorobenzidine                     |                    |                      |                      |                      |                  |                     |                      | 0,65 1 < U       | 0.65 1 < U      | 0.65 1 < U                              | 0.65 1 < U          | 0.65 t < ⊎       | 0.65 t < U       | 0.65 1 < U         | 0.65 1 < U              |
| SEMIVOLATILES                  | 3-Nitroaniline                             |                    |                      |                      |                      |                  |                     |                      | 1.65 1 < U       | 1.65 1 < U      | 1.65 1 < U                              | 1.65 1 < U          | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < U              |
| SEMIVOLATILES                  | 4.6-Dinitro-2-methylphenol                 |                    |                      |                      |                      |                  |                     |                      | 1.65 1 < U       | 1.65 1 < U      | 1.65 1 < U                              | 1.65 1 < U          | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < U              |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether                 |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U                              | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U              |
| SEMIVOLATILES                  | 4-Chloro-3-methysphenol                    |                    |                      |                      |                      |                  |                     |                      | 0.65 1 < U       | 0.65 1 < 0      | 0.65 1 < U                              | 0.65 1 < 0          | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U         | 0.65 1 < U              |
| SEMIVOLAHLES<br>SEMIVOLAHLES   | 4-Chlorophand shand after                  |                    |                      |                      |                      |                  |                     |                      | 0,65 1 < 0       | 0.65 1 < 0      | 0,65 1 < U                              | 0.65 1 < 0          | 0.65 1 < U       | 0.65 1 < 0       | 0.65 1 < 0         | 0.65 1 < 0              |
| SEMIVOLATILES                  | 4-Methylphanol                             |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < 1       | 0.33 1 < 0      | 0.33 1 < 1                              | 0.33 1 < 11         | 0.33 1 < 0       |                  | 0.33 1 < 0         | 0.33 1 < 0              |
| SEMIVOLATILES                  | 4-Nitroaniline                             |                    |                      |                      |                      |                  |                     |                      | 1.65 1 < U       | 1.65 1 < U      | 1.65 1 < 1                              | 1.65 1 < U          | 1.65 1 < U       | 1.65 1 < 0       | 1.65 1 < 1         | 1.65 1 < U              |
| SEMIVOLATILES                  | 4-Nitrophenol                              |                    |                      |                      |                      |                  |                     |                      | 1.65 1 < U       | 1.65 1 < U      | 1.65 1 < U                              | 1.65 1 < U          | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < U              |
| SEMIVOLATILES                  | Acenaphthene                               |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < U       | 0.33 t < U      | 0.33 1 < U                              | 0,33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U         | 0.33 1 < U              |
| SEMIVOLATILES                  | Acenaphthylene                             |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < U       | 0.33 1 < U      | 0.33 f < U                              | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U         | 0.33 1 < U              |
| SEMIVOLATILES                  | Anthracene                                 |                    |                      |                      |                      |                  |                     |                      | . 0.33 1 < U     | 0,33 1 < U      | 0.33 t < U                              | 0.33 1 < U          | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U         | 0.33 1 < U              |
| SEMIVOLATILES                  | Benzo(a)anthracene                         |                    |                      |                      |                      |                  |                     |                      | - 0.33 1 < U     | 0.33 t < U      | 0.33 t < U                              | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U              |
| SEMIVOLATILES                  | Benzo(a)pyrene                             |                    | · ·                  |                      |                      |                  |                     |                      | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U                              | 0.33 1 < U          | 0,33 1 < U       | 0,33 1 < U       | 0.33 1 < U         | 0.33 1 < U              |
| SEMIVOLATILES                  | Senzo(D)TUorannene                         |                    |                      | 1                    |                      |                  |                     |                      | 0.33 1. < U      | 0.33 1 < 0      | 0.33 1 < 0                              | 0.33 1 < 0          | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0         | 0.33 1 < U              |
| SEMIVOLATILES                  | Benzo(grupperynene<br>Benzo(k)fluerenthene |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < 0       | 0.33 1 < 0      | 0.33 1 < 0                              | 0.33 1 < 0          | 0,33 1 < 0       | 0.33 1 < U       | 0,33 1 < 0         | 0.33 1 < 0              |
| SEMIVOLATILES                  | Benzoic Acid                               |                    |                      |                      |                      |                  |                     |                      | 165 1 4 11       | 165 1 4 1       | 165 1 - 11                              | 165 1 4 1           | 165 1 4 11       | 165 1 4 11       | 1.55 1 4 11        | 165 1 4 11              |
| SEMIVOLATILES                  | Benzyl Alcohol                             | 1                  |                      |                      |                      |                  |                     |                      | 0.65 t < 1       | 0651 2 1        | 0.65 1 < 1                              | 0.65 1 < 11         | 0.65 1 < 1       | 0.65 1 < 11      | 0.65 1 < 11        | 0.65 1 < 1              |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane                 | 1                  |                      |                      |                      |                  |                     |                      | 0.33 1 < 1       | 0.33 1 < 1      | 0.33 1 < 1                              | 0.33 1 < 11         | 0.33 1 < 11      | 0.33 1 < 11      | 0.33 1 < 1         | 0.33 1 < 11             |
| SEMIVOLATILES                  | bis(2-Chloroethyf)ether                    |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < U       | 0.33 1 < 0      | 0.33 1 < 11                             | 0.33 1 < 11         | 0.33 1 < 10      | 0.33 1 < 1       | 0.33 1 < U         | 0.33 1 < 13             |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether                |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U                              | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U              |
| SEM/VOLATILES                  | bis(2-Ethythexyl)phthalate                 | 1                  |                      |                      |                      |                  |                     | -                    | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U                              | 0.33 t < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U         | 0.33 1 < U              |
| SEMEVOLATILES                  | Butyl benzyl phthalate                     |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < U       | 0.33 t < U      | 0.33 1 < U                              | 0,33 t < U          | 0,33 1 < U       | 0,33 1 < U       | 0.33 1 < U         | 0.33 1 < U              |
| SEMIVOLATILES                  | Chrysene                                   |                    |                      | . 1                  |                      | · . ·            |                     |                      | 0,33 1 < U       | 0.33 1 < U      | 0.33 1 < U                              | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U              |
| SEMIVOLATILES                  | Dibenzo(a,h)anthracene                     |                    |                      |                      |                      |                  |                     |                      | 0.33 1 < U       | 0.33 f < U      | 0.33 1 < U                              | 0,33 1 < U          | 0,33 1 < U       | 0,33 1 < U       | 0.33 1 < U         | 0.33 1 < U              |

Shaw Environmental, Inc.

## 00065913

/

Table 3-3 Concentrations of Chemicals in Soil Samples Associated with Sump 003

| [SUMP] ≃ SUMP003 |                            |  |                  |                  |                  |                  |                     |                  |                 |                             |                    |                     |                    |                  |                    |                            |
|------------------|----------------------------|--|------------------|------------------|------------------|------------------|---------------------|------------------|-----------------|-----------------------------|--------------------|---------------------|--------------------|------------------|--------------------|----------------------------|
| LOCATION _CODE   |                            | 35SUMP002-SB01   | 35SUMP002-SB01   | 35SUMP002-SB02   | 35SUMP002-SB02   | 35SUMP003-SB01   | 35SUMP003-SB01      | 35SUMP003-SB01   | LH-S02-01       | LH-S02-01                   | LH-S02-02          | LH-S02-02           | LH-S03-01          | LH-S03-01        | LH-\$03-02         | LH-S03-02                  |
| SAMPLE_NO        |                            | 35-SMP02-SB01-01   | 35-SMP02-SB01-02 | 35-SMP02-SB02-01 | 35-SMP02-SB02-02 | 35-SMP03-SB01-01 | 35-SMP03-SB01-01-QC | 35-SMP03-SB01-02 | LH-S02-01_1     | LH-S02-01_2                 | LH-S02-02_1        | LH-S02-02_2         | LH-S03-01_1        | LH-S03-01_2      | LH-S03-02_1        | LH-S03-02_2                |
| SAMPLE_DATE      |                            | 9/7/2006   | 9/7/2006         | 9/7/2006         | 9/7/2006         | 9/7/2006         | 9/7/2006            | 9/7/2006         | 6/26/1993       | 6/26/1993                   | 6/26/1993          | 6/26/1993           | 7/10/1993          | 7/10/1993        | 7/10/1993          | 7/10/1993                  |
| Depth            |                            | 0 - 0,5 Ft   | 6-6Ft            | 0-0.5 Ft         | 6-6FL            | 0 - 0.5 Ft       | 0 - 0.5 Ft          | 6-6Ft            | 0.5 - 2.5 Ft    | 4-6 Ft                      | 0.5 - 2.5 Ft       | 4 - 6 Ft            | 0-2Ft              | 4-6 Ft           | 0-2 Ft             | 4-6 Ft                     |
| SAMPLE_PURPOSE   |                            | REG  | REG              | REG              | REG              | REG              | FD                  | REG              | REG             | REG                         | REG                | REG                 | REG                | REG              | REG                | REG                        |
| Test Group       | Parameter (Units ≠ mg/kg)  | Result DIL LQ VQ   | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LQ VQ | Result DIL LQ VQ    | Result DIL LQ VQ | Result DIL LQ V | Q Result DIL LQ VO          | ) Result DIL LQ VQ | Result DIL LQ VO    | ) Result DIL LO VO | Result DIL LQ VC | i Result DIL LO VO | Result DIL LQ VQ           |
| SEMIVOLATILES    | Dibenzofuran               |  |                  |                  |                  |                  |                     |                  | 0.33 1 < U      | 0.33 1 < U                  | 0.33 1 < U         | 0.33 1 < U          | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U                 |
| SEMIVOLATILES    | Diethyl phthalate          |  |                  |                  |                  |                  |                     |                  | 0.33 1 < U      | 1 0.33 1 < U                | 0.33 1 < U         | 0.33 1 < U          | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U                 |
| SEMIVOLATILES    | Dimethyl phthalate         |  |                  |                  |                  |                  |                     |                  | 0.33 1 < U      | ) 0.33 1 < U                | 0.33 1 < U         | 0.33 1 < U          | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U                 |
| SEMIVOLATILES    | di-n-Butvi ohthalate       |  |                  |                  |                  |                  |                     |                  | 0,33 t < U      | J 0,33 1 < U                | 0.33 1 < U         | 0.33 1 < U          | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U                 |
| SEMIVOLATILES    | di-n-Octvi ohthalate       |  |                  |                  |                  |                  |                     |                  | 0.33 1 < U      | ↓ 0.33 1 < U                | 0.33 1 < U         | 0.33 1 < U          | 0,33 1 < U         | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U                 |
| SEMIVOLATILES    | Eborantheoe                | e de la companya de la |                  |                  |                  |                  |                     |                  | 0.33 1 < U      | 0.33 1 < 0                  | 0.33 1 < U         | 0.33 t < U          | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U                 |
| SEMIVOLATILES    | Fkiorene                   |  |                  |                  |                  |                  |                     |                  | 0.33 1 < U      | / 0,33 1 < U                | 0.33 1 < U         | 0.33 1 < 1          | 0.33 1 < U         | 0.33 t < U       | 0.33 1 < U         | 0.33 1 < U                 |
| SEMIVOLATILES    | Herschlashenzene           |  |                  |                  |                  |                  |                     |                  | 0.33 t < U      | J 0.33 t < U                | 0.33 1 < U         | 0.33 t < U          | 0.33 1 < U         | 0.33 1 < 13      | 0.33 1 < U         | 0.33 1 < U                 |
| SELAVOLATILES    | Havenharohitadiana         |  |                  |                  |                  |                  |                     |                  | 0.33 1 < U      | J 0.33 1 < U                | 0.33 1 < U         | 0.33 1 < U          | 0.33 1 < U         | 0.33 1 < 0       | 0.33 1 < U         | 0.33 t < U                 |
| SEMINOLATILES    | Hexachiomaniapontations    |  |                  |                  |                  |                  |                     |                  | 0.33 1 < 1      | 0.33 1 < U                  | 0.33 1 < U         | 0.33 1 < U          | 0.33 1 < U         | 0.33 1 < 1       | 0.33 1 < U         | 0.33 1 < U                 |
| CENTROLATILES    | Floxadine ocyclopernatione |  |                  |                  |                  |                  |                     |                  | 133 1 < 1       | 1 033 1 < 0                 | 0.33 1 < 1         | 0.33 1 < 1          | 033 1 < 0          | 0.33 1 < 11      | 0.33 1 < U         | 0.33 1 < U                 |
| SEMINOLATILES    |                            |  |                  |                  |                  |                  |                     |                  | 033 1 < 1       | / 033 1 < U                 | 033 1 < li         | 0.33 1 < 1          | 0.33 f < U         | 0.33 1 < 1       | 0.33 1 < U         | 0.33 1 < U                 |
| SEMIVOLAHLES     | Indeno(1,2,3-cd)pyrene     |  |                  |                  |                  |                  |                     |                  | 0.33 1 4 6      | , 0,30 5 4 0<br>1 033 5 4 1 | 0.33 1 - 11        | 633 1 < 1           |                    | 0.33 f < 11      | 033 1 c U          | 0.33 1 < 1                 |
| SEMIVOLATILES    | Isophorone                 |  |                  |                  |                  |                  |                     |                  | 0.00 1 4 0      | ) 0.33 1 < 0                |                    | 0.33 1 < 1          |                    | 033 1 < 11       | 033 1 4 1          | 0.00 1 4 0<br>0.113 1 c 13 |
| SEMIVOLATILES    | Naphinalene                |  |                  |                  |                  |                  |                     |                  | 0.00 1 4 0      | , 0.37 i - U                | 0.22 1 - 1         | 0.30 1 < 0          |                    | 0,30 1 4 0       |                    | 0.27 1 - 11                |
| SEMIVOLATILES    | Narobenzene                |  |                  |                  |                  |                  |                     |                  | 0.00 1 4 0      |                             |                    | 0.00 1 4 0          |                    | 0.00 1 4 0       | 0.33 1. < 0        | 0.00 1 4 0                 |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine |  |                  |                  |                  |                  |                     |                  |                 |                             |                    | 0.33 1 4 0          |                    | 0.33 1 4 3       |                    | 0.33 1 4 0                 |
| SEMIVOLATILES    | n-Nitosodiphenylamine      |  |                  |                  |                  |                  |                     |                  | 0.33 1 4 0      |                             |                    | 0.00 1 1 0          |                    | 405 4 - 14       |                    | 405 4 4 1                  |
| SEMIVOLATILES    | Pentachlorophenol          |  |                  |                  |                  |                  |                     |                  | 1,00 1 < U      | ) 1,60 L < U                |                    | 1.00 1 4 0          |                    | 1.00 1 1 0       |                    | 1.05 1 4 0                 |
| SEMIVOLATILES    | Phenanthrene               |  |                  |                  |                  |                  |                     |                  | 0.33 1 < 0      | 0.33 1 < 0                  |                    | 0,33 1 < 0          | 0.33 1 < 0         | 0.33 1 < 0       |                    |                            |
| SEMIVOLATILES    | Phenol                     |  |                  |                  |                  |                  |                     |                  | 0.33 1 < 0      | ) 0.33 1 < 0                | 0.33 1 < 0         | 0.33 1 < 0          | 0.33 1 < 0         | 0,33 1 4 0       | 0.33 1 4 0         | 0.35 1 4 0                 |
| SEMIVOLATILES    | Pyrene                     |  |                  |                  |                  |                  |                     |                  | 0,33 1 < 0      | 5 U,33 T < U                | 0,33 1 < 0         | 0.33 1 < 0          | 0.33 1 < 0         | 0,33 1 < 0       | 0,33 1 < 0         | 0,35 1 < 0                 |
| VOLATILES        | 1,1,1-Trichloroethane      |  |                  |                  |                  |                  |                     |                  | 0.005 1 < 0     | 0.005 1 < 0                 | 0.005 1 < 0        | 0.005 1 < 0         | 0.005 1 < 0        | 0.005 1 < 0      | 0.005 1 < 0        | 0.005 1 < 0                |
| VOLATILES        | 1,1,2,2-Tetrachloroethane  |  |                  |                  |                  |                  |                     |                  | 0.005 1 < 0     | 1 0.005 1 < 0               | 0.005 1 < 0        | 0.005 1 < 0         | 0,005 1 < 0        | 0.005 1 < 0      | 0.005 1 < 0        | 0.005 1 < 0                |
| VOLATILES        | 1,1,2-Trichloroethane      |  |                  |                  |                  |                  |                     |                  | 0.005 1 < 0     | 0.005 1 < U                 | 0,005 1 < 0        | 0.005 1 < 0         | 0.005 1 < 0        | 0.005 1 < 0      | 0.005 1 < 0        | 0.005 1 < 0                |
| VOLATILES        | 1,1-Dichioroethane         |  |                  |                  |                  |                  |                     |                  | 0.005 1 < 0     | ) 0.005 1 < U               | 0,005 1 < U        | 0.005 1 < 0         | 0.005 1 < 0        | 0.005 1 < 0      | 0.005 1 < 0        | 0.005 1 < 0                |
| VOLATILES        | 1,1-Dichloroethene         |  |                  |                  |                  |                  |                     |                  | 0,005 1 < U     | J 0.005 1 < U               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < 0        | 0.005 1 < 0      | 0.005 1 < 0        | 0.005 1 < 0                |
| VOLATILES        | 1,2-Dichioroethane         |  |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | 0.005 1 < 0                 | 0.005 1 < U        | 0.005 1 < 0         | 0.005 1 < 9        | 0.005 1 < 0      | 0.005 1 < 0        | 0.005 1 < 0                |
| VOLATILES        | 1,2-Dichloroethene         |  |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | 0.005 1 < 0                 | 0.005 1 < U        | $0.005 \ 1 \ < \ 0$ | 0.005 1 < 0        | 0.005 1 < 0      | 0.005 1 < U        | 0.005 1 < 0                |
| VOLATILES        | 1,2-Dichloropropane        |  |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | J 0.005 1 < L               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < 0        | 0.005 1 < 0      | 0,005 1 < 0        | 0.005 1 < 0                |
| VOLATILES        | 2-Butanone                 |  |                  |                  |                  |                  |                     |                  | 0,05 1 < U      | J 0,05 1 < U                | 0,05 1 < U         | 0.05 1 < U          | 0.05 1 < U         | 0.05 1 < 0       | 0.05 1 < 0         | 8.05 1 < U                 |
| VOLATILES        | 2-Chloroethyl vinyl ether  |  |                  |                  |                  |                  |                     |                  | 0.01 1 < U      | 0.01 1 < 0                  | 0.01 1 < U         | 0.01 1 < U          | 0.01 1 < 0         | 0.01 1 < 0       | 0.01 1 < 0         | 0.01 1 < 0                 |
| VOLATILES        | 2-Hexanone                 |  |                  |                  |                  |                  |                     |                  | 0.05 1 < U      | ) 0.05 1 < U                | 0.05 1 < 0         | 0.05 1 < U          | 0.05 1 < U         | 0.05 1 < 0       | 0.05 1 < U         | 0.05 1 < 0                 |
| VOLATILES        | Acetone                    |  |                  |                  |                  |                  |                     |                  | 0.1 1 < U       | ) 0.1 1 < U                 | 0.1 1 < U          | 0.1 1 < U           | 0,1 1 < U          | 0.1 1 < U        | 0.1 1 < 0          | 0.1 1 < U                  |
| VOLATILES        | Benzene                    |  |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | ) 0.005 1 < U               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U        | 0,005 1 < U      | .0.005 1 < U       | 0,005 1 < U                |
| VOLATILES        | Bromodichloromethane       |  |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | J 0.005 1 < L               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < 0        | 0.005 1 < U      | 0,005 1 < U        | 0.005 1 < U                |
| VOLATILES        | Bromotorm                  |  |                  |                  |                  |                  |                     |                  | 0,005 t < U     | J 0.005 1 < U               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U                |
| VOLATILES        | Bromomethane               |  |                  |                  |                  |                  |                     |                  | 0.0† 1 < U      | ) 0.01 1 < U                | 0.01 t < U         | 0,01 1 < U          | 0.01 1 < U         | 0.01 1 < U       | 0.01 1 < U         | 0.01 1 < U                 |
| VOLATILES        | Carbon disulfide           |  |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | J 0.005 1 < U               | 0.005 1 < U        | 0.005 1 < U         | 0,005 1 < U        | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U                |
| VOLATILES        | Carbon tetrachloride       |  |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | / 0.005 1 < U               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U      | 0,005 1 < U        | 0.005 1 < U                |
| VOLATILES        | Chlorobenzene              |  |                  |                  |                  |                  |                     |                  | 0,005 1 < U     | J 0.005 1 < U               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U      | 0.905 1 < U        | 0.005 1 < U                |
| VOLATILES        | Chloroethane               |  |                  |                  |                  |                  |                     |                  | 0.01 1 < U      | ) 0.01 1 < U                | 0.01 1 < U         | 0,01 1 < U          | 0.01 1 < U         | 0.01 1 < U       | 0.01 1 < U         | 0.01 1 < U                 |
| VOLATILES        | Chloroform                 |  |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | I 0.005 1 < U               | 0.005 1 < U        | 0.005 1 < U         | ⊧ 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U                |
| VOLATILES        | Chloromethane              |  |                  |                  |                  |                  |                     |                  | 0.01 1 < U      | J 0,01 1 < U                | 0.01 1 < U         | 0.01 1 < U          | 0.01 1 < U         | 0.01 1 < U       | 0.01 1 < U         | 0.01 1 < U                 |
| VOLATILES        | cis-1,3-Dichloropropene    |  |                  |                  |                  |                  |                     |                  | 0.005 t < U     | i 0.005 t < U               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U                |
| VOLATILES        | Dibromochloromethane       |  |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | ) 0.005 1 < U               | 0.005 t < U        | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < ป      | 0.005 1 < U        | 0.005 t < U                |
| VOLATILES        | Ethylbenzene               |  |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | i 0.005 t < U               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U        | 0.005 t < U                |
| VOLATILES        | Methyl isobutyl ketone     |  |                  |                  |                  |                  |                     |                  | 0.05 1 < U      | J 0.05 1 < U                | 0.05 1 < 0         | 0.05 1 < U          | 0.05 1 < U         | 0.05 1 < U       | 0.05 1 < U         | 0.05 1 < U                 |
| VOLATILES        | Methylene chloride         | ł  |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | ) 0.005 1 < U               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U      | 0,005 1 < U        | 0,005 1 < U                |
| VOLATILES        | Styrene                    | ļ  |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | J 0.005 1 < U               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U        | 0.005 t < U      | 0.005 1 < U        | 0.005 t < U                |
| VOLATILES        | Tetrachioroethene          |  |                  |                  |                  |                  |                     |                  | 0.005 t < U     | ) 0.005 1 < U               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U                |
| VOLATILES        | Toluene                    |  |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | J 0.005 1 < U               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U      | 0,005 1 < U        | 0.005 1 < U                |
| VOLATILES        | trans-1.3-Dichlomomoane    | <b>j</b> .   |                  |                  |                  |                  |                     |                  | 0.005 1 < U     | ) 0.005 t < L               | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U                |
| VOLATILES        | Trichhooethene             | 1  |                  |                  |                  |                  |                     |                  | 0.005 1 < 1     | 0.005 1 < 1                 | 0.005 1 < 1        | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < 0                |
| VOLATILES        | Vinvi acetate              | ł  |                  |                  |                  |                  |                     |                  | 0.05 t < 1      | 1 0.05 1 < 1                | 0.05 1 < 1         | 0.05 1 < 1          | 0.05 1 < 1         | 0.05 1 < U       | 0.05 1 < 1/        | 0.05 1 < 1                 |
| VOLATILES        | Vinvi chloride             | 1 ·  |                  |                  |                  |                  |                     |                  | 0.01 1 4        | J 0.01 t < 1                | 0.01 1 < 11        | 0.01 1 < 11         | 0.01 1 < 11        | 0.01 1 < 11      | 0.01 1 < 11        | 0.01 1 < 11                |
| VOLATILES        | Yulanae Total              |  |                  |                  |                  |                  |                     |                  | 0.005 1 c H     | . 0.005 t < 9               | 0.05 1 2 11        | 0.005 1 < 11        | 0.005 1 < 11       | 0.005 1 c II     | 0.005 1 < 1        | 0.005 1 < 11               |
| * OLIVIILLO      | ATIONOS, IVUA              | 1  |                  |                  |                  |                  |                     |                  | 0.000 1 4 0     |                             |                    | 0.000 1 7 0         |                    |                  |                    | -,                         |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

 $\left(\frac{1}{\frac{1}{1+$ 

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-4 Concentrations of Chemicals in Soil Samples Associated with Sump 004

| [SUMP] = SUMP004               |  |                                    |   |                            |                                    |                          |                          |                          | 111 000 00               | 111.005 Pd        | 111 005 04               | 111 007 00               |                          |
|--------------------------------|--|------------------------------------|---|----------------------------|------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------|--------------------------|--------------------------|--------------------------|
| LOCATION_CODE<br>SAMPLE NO     |  | 35SUMP004-SB01<br>35-SMP04-SB01-01 | 35SUMP004-SB01 35SU<br>35-SMP04-SB01-02 35-SM | MP005-SB01<br>1905-SB01-01 | 355UMP005-SB01<br>35-SMP05-SB01-02 | LH-S04-01<br>[H-S04-01_1 | LH-S04-01 2              | LH-S04-02                | LH-S04-02<br>LH-S04-02 2 | LH-S05-01 1       | LH-S05-01 2              | LH-S05-02<br>LH-S05-02 1 | LH-S05-02 2              |
| SAMPLE_DATE                    |  | 9/7/2006                           | 9/7/2006                                      | v7/2006                    | 9/7/2006                           | 7/9/1993                 | 7/9/1993                 | 7/9/1993                 | 7/9/1993                 | 7/9/1993          | 7/9/1993                 | 7/9/1993                 | 7/9/1993                 |
| DEPTH                          |  | 0-0.5 Ft                           | 6-6Ft (                                       | - 0.5 Ft                   | 0,5-5 Ft                           | 0-2Ft                    | 4 - 6 Ft                 | 0-2Ft                    | 4 - 6 Ft                 | 0-2 ft            | 3-5 Ft                   | 0-2 Ft                   | 3-5 Ft                   |
| SAMPLE_PURPOSE                 | 5 (c. // )> 1 )                            | REG                                | REG   | REG                        | REG                                | REG                      | REG                      | REG                      | REG                      | REG               | REG                      | REG                      | REG                      |
| FXPI OSIVES                    | 2.4-Dinitrotokuane                         | RESUL DIL LA VA                    | Kesun Un, Lu Vu Kesun                         |                            | Result Dir LQ VQ                   | 0.33 1 < U               | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               |
| EXPLOSIVES                     | 2,6-Dinitrotoluene                         |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               |
| METALS                         | Ataminum                                   | 15900 1                            | 8840 1 1100                                   | 01                         | 12400 1                            | 4240 1                   | 3160 1                   | 7060 1                   | 6770 1                   | 5060 1            | 19300 1                  | 10100 1                  | 4600 1                   |
| METALS                         | Antimony                                   | 0.117 1 U                          | 0.115 1 U 0.11                                | 210                        | 0.123 1 U                          | 31 < 0                   | 31 < U                   | 3.2 1                    | 31 < U                   | 4.2 1             | 31 < U                   | 3 1 < 0                  | 31 < 0                   |
| METALS                         | Arsenic<br>Barium                          | 64.4 1                             | 56.7 1 19                                     | 91                         | 52.4 1                             | 46.5 1 < U               | 57.6 1 < U               | 71.2 1 < U               | 76.3 1 < U               | 75.9 1 < U        | 78.3 1 < U               | 176 1 < U                | 43.7 1 < U               |
| METALS                         | Beryllium                                  | 0.378 1 J J                        | 0.339 1 J J 0.41                              | 21 J J                     | 0.381 1 J J                        |                          |                          |                          |                          |                   |                          |                          |                          |
| METALS                         | Cadmium                                    | 0.0528 1 J J                       | 0.0705 1 J J 0.1                              | 5 1 J J                    | 0.0482 1 J J                       | 1.4 f < U                | 1 t < U                  | 11 < U                   | 11 < U                   | 1 <b>1 &lt; U</b> | 11 < U                   | 11 < U                   | 11 < U                   |
| METALS                         | Calcium                                    | 1230 1                             | 781 1 185                                     | 01                         | 407 1                              | 622 1                    | 449 1                    | 1590 1                   | 1270 1                   | 452 1             | 997 1<br>40 1 - Il       | 1390 1                   | 410 1                    |
| METALS                         | Cobaž                                      | 0.865 1 J J                        | 9.17 1 13.<br>346 1 57                        | ⊳ ≆<br>7 1                 | 2.58 t                             | 41 1                     | 19 1                     | 32 1                     | 2.6 1                    | 5 1               | 51                       | 5.7 1                    | 1.4 1                    |
| METALS                         | Copper                                     | 6.63 1                             | 3.07 1 3.2                                    | 4 1                        | 3.44 1                             | 2.4 1                    | 1.7 1                    | 2.8 1                    | 4 1                      | 3.3 1             | 5.1 1                    | 4.6 1                    | 2 1                      |
| METALS                         | Iron                                       | 20500 f                            | 11300 1 1760                                  | 0-1                        | 15300 1                            | 11400 1                  | 5890 1                   | 14200 1                  | 16400 1                  | 104000 1          | 20200 1                  | 18100 1                  | 6990 1                   |
| METALS                         | Lead .                                     | 12.4 1                             | 5.7 1 9.2                                     | 5 1                        | 6.77 1                             | 8.6 1                    | 7.2 1                    | 32.9 1                   | 14.2 1                   | 11.9 1            | 8.1 1                    | 21.3 1                   | 7.8 1                    |
| METALS                         | Magnesium<br>Manganese                     | 24.3 1                             | //4 1 02<br>355 1 11                          | 5 7<br>6 1                 | 331 1                              | 140 T<br>206 1           | 141 1<br>89.6 1          | 330 T<br>121 T           | 334 1<br>77.7 1          | 89.1 1            | 909 1<br>167 1           | 133 1                    | 57.2 1                   |
| METALS                         | Mercury                                    | 0.0797 1 J J                       | 0.282 1 U 0.025                               | 31JJ                       | 0.032 1 J J                        | 0.1 1 < U                | 0,1 1 < U         | 0.1 1 < U                | 0.1 1 < U                | 0.1 1 < U                |
| METALS                         | Nickel                                     | 3.79 1                             | 7.77 1 7.3                                    | 1 1                        | 5.12 1                             |                          |                          |                          |                          |                   |                          |                          |                          |
| METALS                         | Potassium                                  | 437 1                              | 357 1 44                                      | D 1                        | 385 1                              | 187 1                    | 183 1                    | 292 1                    | 322 1                    | 213 1             | 1140 1                   | 583 1                    | 284 1                    |
| METALS                         | Selenaum<br>Sitver                         | 179 1                              | 174 1 11 16                                   | 71<br>91 H                 | 1.200 1                            | 11 < 0                   |                          | 11 < U                   | 11 < 8                   | 11 < 0            | 11 < 1                   | 11 < 0                   | 11 < 1                   |
| METALS                         | Sodium                                     | 21 1 J J                           | 113 1 23.                                     | 91                         | 64.1 1                             |                          | ••••                     |                          |                          |                   |                          |                          |                          |
| METALS                         | Strontium                                  |                                    |   |                            |                                    | 1 1 < U                  | 11 < 1                   | 11.8 1                   | 4.9 1                    | 1 i < U           | 4.4 1                    | 6.6 1                    | 11< U                    |
| METALS                         | Thatiem                                    | 0.045 1                            | 0.0732 1 0.052                                | 91                         | 0.0635 1                           |                          |                          |                          |                          |                   |                          |                          |                          |
| METALS                         | Vanadium<br>Zine                           | 13.2 1                             | 13.4 1 26.<br>20.5 1 2                        | 51                         | 25.3 1                             | 11.9 1                   | 11.4 1                   | 15.5 1                   | 17.3 1                   | 24.5 1            | 25.7 1                   | 51.5 1                   | 11.6 t                   |
| PERC                           | Perchlorate                                | 0.0227 1                           | 0.01 1 U 0:082                                | 1 1                        | 0.01 1 U                           |                          |                          |                          |                          |                   |                          |                          |                          |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene                     |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U        | . 0.33 1 < U             | 0,33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene                        |                                    |   |                            |                                    | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U        | 0.33 1 < U               | 0,33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | 1,3-Dichlorobenzene                        |                                    |   |                            |                                    | 0.33 1 < 1               | 0.33 1 < 0               | 0.33 1 < 1               | 0.33 1 < U               | 0,33 1 < U        | 0.33 t < U               | 0.33 1 < 0               | 0.33 1 < U               |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenol                      |                                    |   |                            |                                    | 1.65 1 < U               | 1.65 1 < U        | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U               |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol                      |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | 2,4-Dichlorophanol                         |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 t < U        | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | 2.4-Dinitrophenot                          |                                    |   |                            |                                    | 1.65 1 < U               | 1,65 1 < U        | 1.65 1 < U               | 1.65 1 < U               | 1,65 1 < U               |
| SEMIVOLATILES                  | 2-Chloronaphthalene                        |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | 2-Chlorophenol                             |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES<br>SEMIVOLATILES | 2-Methylinaphthalene<br>2-Methylinbenol    |                                    |   |                            |                                    | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U               | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 0               | 0.33 1 < U        | 0.33 1 < U<br>0.33 t < H | 0.33 1 < U               | 0.33 1 < U<br>0.33 1 < U |
| SEMIVOLATILES                  | 2-Nitroaniline                             |                                    |   |                            |                                    | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U               | 1.65 t < U               | 1.65 1 < 1        | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U               |
| SEMIVOLATILES                  | 2-Nitrophenol                              |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 빈               |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzidine                     |                                    |   |                            |                                    | 0.65 1 < U               | 0.55 1 < U        | 0.65 1 < U               | 0.65 1 < U               | 0.65 t < U               |
| SEMIVOLATILES                  | 3-Nin danime<br>4.6-Dinitzo-2-methylohanol |                                    |   |                            |                                    | 1.65 1 < U               | 1.65 t < U               | 1.65 1 < 1               | 1.65 1 < 1               | 1.65 1 < U        | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < 0               |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether                 |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 1               | 0.33 1 < U               | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol                    |                                    |   |                            |                                    | 0.65 1 < U               | 0.65 t < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U        | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               |
| SEMIVOLATILES                  | 4-Chloroaniline                            |                                    |   |                            |                                    | 0.55 1 < U               | 0.65 1 < U               | 0,65 1 < U               | 0.65 t < 1               | 0.65 1 < U        | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               |
| SEMIVOLATILES                  | 4-Methylohenol                             |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 0               |
| SEMIVOLATILES                  | 4-Nitroaniline                             |                                    |   |                            |                                    | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < ป               | 1.65 1 < U               | 1.65 1 < U        | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U               |
| SEMIVOLATILES                  | 4-Nitrophanol                              |                                    |   |                            |                                    | 1.65 1 < U               | 1.65 1 < U        | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U               |
| SEMIVOLATILES                  | Acenaphthene                               |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U        | 0.33 1 < 0               | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Anthracene                                 |                                    |   |                            |                                    | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < U               | 0,33 1 < U        | 0.33 1 < 10              | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Benzo(a)anthracene                         |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Benzo(a)pyrene                             |                                    |   | -                          |                                    | 0,33 1 < U               | 0.33 1 < U        | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES<br>SEMIVOLATILES | Benzo(b)fluoranthene<br>Renzo(abilineudene |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U        | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Benzo(grijperykane<br>Benzo(k)fluoranthene |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < 0        | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < 0               |
| SEMIVOLATILES                  | Benzoic Acid                               |                                    |   |                            |                                    | 1.65 1 < U               | 1.65 1 < U               | 1.65 t < U               | 1.65 1 < U               | 1.65 1 < U        | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U               |
| SEMIVOLATILES                  | Benzyl Alcohol                             |                                    |   | · .                        |                                    | 0.65 1 < U               | 0.65 1 < U        | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               |
| SEMIVOLATILES<br>SEMIVOLATILES | bis(2-Chloroethoxy)methane                 |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U               | 0,33 1 < U               |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether                |                                    |   | -                          |                                    | 0.33 1 < 11              | 0.33 1 < 1               | 0.33 1 < 11              | 0.33 1 < 1               | 0,33 1 < 1        | 0.33 1 < 11              | 0.33 1 < Li              | 0.33 1 < U               |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthalate                 |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U               |
| SEMIVOLATILES                  | Butyi benzyl phthalate                     |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U               |
| SEMIVOLATILES                  | Chrysena<br>Dibente/a bloothere            |                                    |   |                            |                                    | 0.33 1 < U               | 0.33 1 < U        | 0.33 t < U               | 0.33 1 < U               | 0.33 t < U               |
| SEMIVOLATILES<br>SEMIVOLATILES | Dibenzo(a,njanovacene<br>Dibenzofaran      |                                    |   |                            |                                    | ⊎.33 1 < U<br>0.33 t < H | 0.33 1 < U<br>0.33 1 < ⊔ | 0.33 1 < U               | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 0        | 0.33 1 < U               | 0.33 1 < U<br>033 1 < ∪  | 9.33 T < 9<br>033 t < ₽  |
| SEMIVOLATILES                  | Diethyl phthalate                          |                                    |   |                            |                                    | 0.33 1 < 1               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Dimethyl phthalate                         |                                    |   |                            |                                    | 0.33 t < U               | 0.33 1 < U        | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               |

Shaw Environmental, Inc.



Table 3-4 Concentrations of Chemicals in Soil Samples Associated with Sump 004

| [SUMP] = SUMP004 |                            |                  |                  |                  |                  |                  |                  |                 |             |             |                  |             |               |
|------------------|----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|-------------|-------------|------------------|-------------|---------------|
| LOCATION _CODE   |                            | 35SUMP004-SB01   | 35SUMP004-SB01   | 35SUMP005-SB01   | 35SUMP005-SB01   | LH-\$04-01       | LH-S04-01        | LH-\$04-02      | LH-S04-02   | LH-S05-01   | LH-S05-01        | LH-\$05-02  | LH-\$05-02    |
| SAMPLE_NO        |                            | 35-SMP04-SB01-01 | 35-SMP04-SB01-02 | 35-SMP05-SB01-01 | 35-SMP05-SB01-02 | LH-\$04-01_1     | LH-S04-01_2      | LH-S04-02_1     | LH-S04-02_2 | LH-S05-01_1 | LH-S05-01_2      | LH-S05-02_1 | LH-S05-02_2   |
| SAMPLE_DATE      |                            | 9/7/2006         | 9/7/2006         | 9/7/2006         | 9/7/2006         | 7/9/1993         | 7/9/1993         | 7/9/1993        | 7/9/1993    | 7/9/1993    | 7/9/1993         | 7/9/1993    | 7/9/1993      |
| Depth            |                            | 0 - 9.5 Ft       | 6-6Ft            | 0-0,5 Ft         | 0.5 - 5 Ft       | 0-2Ft            | 4-6Ft            | 0-2Ft           | 4-6H        | 0-2H        | 3-5H             | 0-270       | 3-371         |
| SAMPLE_PURPOSE   |                            | REG              | REG              | REG              | REG              | REG              | REG              | REG             | REG         | REG         | REG              | REG         |               |
| Test Group       | Parameter (Units = mg/kg)  | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | RESULT DIL LO VO | Resur DIL LO VO |             |             | ASSUNE DIE EQ VQ | A33 1 C H   |               |
| SEMIVOLATILES    | di-n-Butyi phthalate       |                  |                  | -                |                  | 0.33 1 < 0       | 0.33 1 < 0       |                 | 0,33 1 < 11 |             | 0.33 7 4 0       | 0.33 1 < 0  | 1 033 1 < U   |
| SEMIVOLAHLES     | di-n-Octyl primalate       |                  |                  |                  |                  | 0.33 1 < 11      | 0.33 1 < 11      | 0.30 I < U      | 0.33 1 < 11 | 0.33 t < 11 | 033 1 < 11       | 0.33 1 < 1  | 1 0.33 1 < U  |
| SEMINOLATILES    | Fluorance                  |                  |                  |                  |                  | 0.33 1 < 11      | 0.33 1 < 1       | 0.33 1 < U      | 0.33 1 < 1  | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < 1  | 0.33 1 < U    |
| SEMBVOLATILES    | Horachivahapzene           |                  |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < 1  | J 0.33 1 < U  |
| SEMMOLATILES     | Hexachlorobidadiene        |                  |                  |                  |                  | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U  | 0.33 t < U  | 0.33 1 < U       | 0.33 1 < L  | J 0.33 † < U  |
| SEMIVOLATILES    | Hexachiorocyclopentadiene  |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 f < U  | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | ) 0.33 t < U  |
| SEMIVOLATILES    | Hexachloroethane           |                  |                  |                  |                  | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U  | 0.33 t < U  | 0.33 t < U       | 0.33 1 < U  | / 0.33 1 < U  |
| SEMIVOLATILES    | Indepo(1.2.3-cd)pyrene     |                  |                  |                  |                  | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < 1)     | 0.33 f < U  | 0.33 t < U  | 0.33 i < U       | 0.33 1 < U  | ) 0.33 1 < U  |
| SEMIVOLATILES    | Isophorone                 |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U      | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U       | 0.33 t < U  | / 0.33 1 < U  |
| SEMIVOLATILES    | Naphthalene                |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 t < U  | 0.33 t < U  | 0.33 1 < U       | 0.33 1 < U  | / 0.33 1 < U  |
| SEMIVOLATILES    | Nitrobenzene               |                  |                  |                  |                  | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U      | 0.33 t < U  | 0.33 t < U  | 0.33 1 < U       | 0.33 1 < U  | / 0.33 1 < U  |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine |                  |                  |                  |                  | 0.33 1 < U       | 0.33 f < U       | 0.33 1 < U      | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | / 0.33 1 < U  |
| SEMIVOLATILES    | n-Nitrosodiphenylamine     |                  |                  |                  |                  | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U      | 0.33 1 < U  | 0.33 t < U  | 0.33 1 < U       | 0.33 1 < U  | / 0.33 1 < U  |
| SEMIVOLATILES    | Pentachlorophenol          |                  |                  |                  |                  | 1.65 1 < 방       | 1.65 1 < U       | 1.65 1 < U      | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U       | 1.65 1 < U  | / 1.65 1 < U  |
| SEMIVOLATILES    | Phenanthrene               |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < 빈       | 0.33 1 < U      | 0,33 1 < U  | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | / 0.33 1 < U  |
| SEMIVOLATILES    | Phenol                     |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < 원       | 0.33 1 < U      | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | / 0.33 1 < U  |
| SEMIVOLATILES    | Pyrene                     |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < 0  | 0.33 1 < 8    |
| VOLATILES        | 1,1,1-Trichkroethane       |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U | 0.005 1 < U | 0.005 1 < U      | 0.005 1 < 0 | / 0,005 1 < U |
| VOLATILES        | 1,1,2,2-Tetrachloroethane  |                  |                  |                  |                  | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U     | 0.005 1 < U | 0.005 1 < U | 0.005 1 < U      | 0.005 1 < 0 | 0.005 3 < U   |
| VOLATILES        | 1,1,2-Trichkroethane       |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U | 0.005 f < U | 0.005 1 < 0      | 0.005 1 < 0 | 0.005 1 < 0   |
| VOLATILES        | 1,1-Dichloroethane         |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < 0 | 0.005 1 < 0 | 0.005 1 < 0      | 0.005 1 < 1 | 0.005 1 < 0   |
| VOLATILES        | 1,1-Dichloroethene         |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0     | 0.005 1 < 0 | 0.005 1 < U | 0.005 1 < 0      | 0.005 1 < 0 | 0.005 1 < 0   |
| VOLATILES        | 1,2-Dichloroethane         |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < 0     | 0.005 1 < 0 | 0.005 1 < 0 | 0.005 1 < 0      | 0,005 1 < 0 |               |
| VOLATILES        | 1,2-Dichloroethene         |                  |                  |                  |                  | 0.005 1 < 0      | 0.005 1 < 0      | 0,005 1 < 0     | 0.005 1 < 0 | 0.005 1 < 0 | 0.005 1 < 0      | 0,005 1 < 1 |               |
| VOLATILES        | 1,2-Dichloropropane        |                  |                  |                  |                  | 0.005 1 < 0      | 0.005 1 < 0      | 0.000 1 4 0     | 0.005 1 < 0 | 0.005 1 < 0 |                  | 0.005 1 < 1 | 1 0.000 F < 0 |
| VOLATILES        | 2-Butanone                 | -                |                  |                  |                  |                  |                  |                 | 0.00 1 < 0  |             |                  |             |               |
| VOLATILES        | 2-Chicrobulyi veryi euler  |                  |                  |                  |                  | 0.01 1 < 0       |                  | 0.01 3 < 0      | 0.05 1 < 15 | 0.01 1 < 0  | 0.01 1 < 0       | 0.05 1 < 1  | 0051 < 1      |
| VOLATILES        | Acetono                    |                  |                  |                  |                  |                  | 0.00 1 4 0       | 011 < U         | 011 < 1     | 01 1 < 1    | 011 < 1          | 011 < 1     | J 0.1 1 < U   |
| VOLATILES        | Renzene                    |                  |                  |                  |                  | 0.005 1 < 1      | 0005 1 < U       | 0.005 1 < U     | 0.005 1 < U | 0.005 1 < U | 0.005 1 < 1      | 0.005 1 < L | J 0.005 1 < U |
| VOLATILES        | Bromorachioromethane       |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U | 0.005 1 < U | 0.005 1 < U      | 0.005 1 < L | J 0.005 1 < U |
| VOLATILES        | Bromotorm                  |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U | 0.005 1 < U | 0.005 1 < U      | 0,005 1 < L | J 0.005 1 < U |
| VOLATILES        | Bromomethane               |                  |                  |                  |                  | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U      | 0.01 1 < U  | 0.01 1 < U  | 0,01 1 < U       | 0.01 1 < U  | J 0.01 1 < U  |
| VOLATILES        | Carbon disulfide           |                  |                  |                  |                  | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U | 0.005 1 < U | 0.005 1 < U      | 0,005 1 < L | J 0.005 1 < U |
| VOLATILES        | Carbon tetrachioride       |                  |                  |                  |                  | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U     | 0.005 1 < U | 0.005 1 < U | 0.005 1 < U      | 0.005 1 < L | J 0.005 1 < U |
| VOLATILES        | Chlorobenzene              |                  |                  |                  |                  | 0,005 1 < U      | 0,005 1 < ⊍      | 0.005 t < U     | 0.005 1 < U | 0.005 1 < U | 0.005 t < U      | 0.005 1 < U | J 0.005 1 < U |
| VOLATILES        | Chlomethane                |                  |                  |                  |                  | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U      | 0,01 1 < U  | 0.01 1 < U  | 0.01 1 < U       | 0.01 1 < U  | J 0.01 1 < U  |
| VOLATILES        | Chloroform                 |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 f < U     | 0.005 1 < U | 0.005 1 < U | 0.005 1 < U      | 0.005 1 < U | / 0.005 1 < U |
| VOLATILES        | Chloromethane              |                  |                  |                  |                  | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U      | 0.01 1 < U  | 0.01 1 < U  | 0.01 1 < U       | 0.01 1 < L  | / 0,01 1 < U  |
| VOLATILËS        | cis-1,3-Dichloropropene    |                  |                  |                  |                  | 0.005 i < U      | 0.005 t < U      | 0.005 1 < U     | 0.005 1 < U | 0.005 f < U | 0.005 1 < U      | 0.005 1 < U | / 0,005 t < U |
| VOLATILES        | Dibromochloromethane       |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U | 0.005 t < U | 0.005 1 < 0      | 0.005 1 < L | / 0.005 1 < 0 |
| VOLATILES        | Ethylbenzene               |                  |                  |                  |                  | 0.005 f < U      | 0.005 1 < 1      | 0.005 1 < U     | 0.005 1 < U | 0.005 1 < U | 0.005 1 < 0      | 0.005 1 < 0 | / 0.005 1 < U |
| VOLATILES        | Methyl isobutyl ketone     |                  |                  |                  |                  | 0.05 1 < U       | 0.05 f < U       | 0.05 1 < U      | 0.05 1 < U  | 0.05 1 < U  | 0.05 1 < U       | 0.05 1 < U  | ) 0.05 1 < U  |
| VOLATILES        | Methylene chloride         |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U | 0.005 1 < U | 0.005 1 < U      | 0.005 1 < t | ) 0.005 1 < 0 |
| VOLATILES        | Styrene                    |                  |                  |                  |                  | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U     | 0.005 t < U | 0.005 1 < U | 0.005 1 < U      | 0.005 1 < 1 | F 0.005 1 < U |
| VOLATILES        | Tetrachicroethene          |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U | 0.005 1 < U | 0.005 1 < U      | 0.005 t < l | / U2005 1 < U |
| VOLATILES        | I chiebe                   |                  |                  |                  |                  | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < 0     | 9.005 1 < 0 | 0.000 1 < U | 0.005 1 < U      | 0.005 f < l | / U.UUD 1 < U |
| VOLATILES        | trans-1,3-Dichloropropene  |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0     | 0.005 1 < 0 | 0.005 1 < U | 0.005 1 < U      | 0.005 1 < 1 | i u,UUD i < U |
| VOLATILES        | Inchiorosthene             |                  |                  |                  |                  | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < U     |             | 0,000 1 < 0 | U > r cuuu       | 0.000 1 < 0 |               |
| VOLATILES        | VITYE 2CST212              |                  |                  |                  |                  | 0.00 1 < U       | U> 1 CU.U        | 0.00 1 < 0.     |             |             | 0.00 1 < 0       |             |               |
| VOLATILES        | vinyi chionae              |                  |                  |                  |                  | 0.01 1 < U       | 0.01 1 < 0       | 0.01 1 < 0      |             |             | 0.01 7 4 0       | 0.005 1     |               |
| VULATILES        | Aylenes, total             | 1                |                  |                  |                  | 0.000 1 < U      | 0.000 1 < U      | 0.003 1 < U     | 0,000 1 < 0 |             | 0.003 1 < 0      | 0.000 7 4 1 | / 0.005 1 K U |

Footnotes are shown on cover page to Tables Section.



Table 3-5 Concentrations of Chemicals in Soil Samples Associated with Sump 005

| (SUMP) = SUMP005         |   |                              |                              |                  | ATON # 10447 ADA |                 |   |                    |                   |                    | 111 505 64       | 111 005 00       | 111 005 00                |
|--------------------------|---|------------------------------|------------------------------|------------------|------------------|-----------------|---|--------------------|-------------------|--------------------|------------------|------------------|---------------------------|
| LOCATION_CODE            |   | 35SUMP004-SB01               | 35SUMP004-SB01               | 35SUMP005-S801   | 35SUMP005-SB01   | LH-S04-01       | LH-S04-01   | LH-S04-02          | LH-S04-02         | LH-S05-01          | LH-S05-01 2      | LH-S05-02        | LH-S05-02                 |
| SAMPLE_NU<br>SAMPLE DATE |   | 33-3MP04-3001-01<br>9/7/2006 | 33-3MP04-3001-02<br>9/7/2006 | 97/2006          | 9/7/2006         | 7/9/1093        | 211-304-01_2  | 7/9/1993           | 7/9/1993          | 7/9/1993           | 7/9/1993         | 7/9/1993         | 7/9/1993                  |
| DEPTH                    |   | 0 - 0.5 Ft                   | 6-6Ft                        | 0-0.5 Ft         | 0.5 - 5 Ft       | 0-2 Ft          | 4-6 Ft  | 0-2ft              | 4-6 Ft            | 0-2Ft              | 3-5Ft            | 0-2Ft            | 3-5Ft                     |
| SAMPLE_PURPOSE           |   | REG                          | REG                          | REG              | REG              | REG             | REG   | REG                | REG               | REG                | REG              | REG              | REG                       |
| Test Group               | Parameter (Units = mg/kg)                 | Result DIL LQ VQ             | Result Dit LO VO             | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ V | Q Result DIL LQ VQ  | Result Dil LQ VQ   | Result DIL LQ VC  | Result DIL LQ VQ   | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ          |
| EXPLOSIVES               | 2,4-Dinitrotoksene                        |                              |                              |                  |                  | 0,33 t < L      | J 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                |
| EXPLOSIVES               | 2,6-Dinitrotokene                         |                              |                              |                  |                  | 0.33 1 < L      | J 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U                |
| METALS                   | Atiminum                                  | 15900 1                      | 8840 1                       | 11000 1          | 12400 1          | 4240 1          | 3160 1  | 7050 1             | 6//U 1<br>3 1 ~ U | 5060 1             | 19300 1          |                  | 4600 1                    |
| METALS                   | Antimony                                  | 0.117 1 0                    | 1.110 1 U                    | 171 1            | 0.123 1 U        | 22 1 4 1        | ) 31 CU<br>121 CH   | 3.2 I<br>25 1 c II | 31 - U<br>181 - U | 4.2 i<br>19 1 c li | 121 51           | 16 1 < 1         | 11 < 1                    |
| METALS                   | Batium                                    | 64.4 t                       | 567 1                        | 199 1            | 52.4 1           | 465 1 < 1       | J 57.61 < U   | 71:2 1 < U         | 76.3 1 < U        | 75.9 1 < U         | 78.3 1 < U       | 176 1 < U        | 43.7 1 < U                |
| METALS                   | Beryllium                                 | 0.378 1 J J                  | 0.339 1 J J                  | 0.412 1 J J      | 0.381 t J J      |                 |   |                    |                   |                    |                  |                  |                           |
| METALS                   | Cadmium                                   | 0.0528 1 J J                 | 0.0705 1 J J                 | 0.15 1 J J       | 0.0482 1 J J     | 1.4 1 < L       | ) 11 <u< th=""><th>1 1 &lt; U</th><th>11&lt;-0</th><th>11 &lt; U</th><th>11 &lt; U</th><th>1 1 &lt; U</th><th>11 &lt; U</th></u<> | 1 1 < U            | 11<-0             | 11 < U             | 11 < U           | 1 1 < U          | 11 < U                    |
| METALS                   | Calcium                                   | 1230 1                       | 781 1                        | 1850 1           | 407 1            | 622 1           | <b>449</b> 1  | 1590 <b>1</b>      | 1270 1            | 462 1              | 997 1            | 1390 1           | 410 1                     |
| METALS                   | Chromium                                  | 33.4 1                       | 9.17 1                       | 13.6 1           | 13.1 1           | 12.5 t < l      | ) 9.7 1 < U   | 13.4 1 < U         | 13.6 1 < U        | 9.4 † < U          | 19 1 < U         | 13.3 1 < U       | 6.8 f < U                 |
| METALS                   | Cobalt                                    | 0.865 1 J J                  | 3.46 1                       | 5.27 1           | 2.58 t           | 4.1 1           | 1.9 1   | 3.2 1              | 2.6 1             | 5 1                | 5 1              | 5.7 1            | 1.4 1                     |
| METALS                   | Copper                                    | 6.63 1                       | 3.07 1                       | 3.24 1           | 3.44 1           | 2.4 1           | 1.7 1   | 2.8 1              | 4 1               | 3.3 1              | 5.1 1            | 4.6 1            | 2 1                       |
| METALS                   | iron<br>Lond                              | 20500 1                      | 11300 1                      | 1/600 1          | 15300 1          | 11400 1         | 5890 1<br>7 2 1   | 14200 1            | 10400 1           | 104000 1           | 20200 1          | 18100 1          | 0990 1<br>78 4            |
| METALO                   | Veracium                                  | 540 1                        | 5.3 T<br>774 T               | 628 1            | 730 1            | 0.0 i<br>140. f | 141 1   | 355 t              | 14.2 1            | 130 1              | 0.1 1            | 21.3 I<br>753 f  | 224 1                     |
| METALS                   | Mandanesa                                 | 243 1                        | 355 1                        | 116 1            | 331 1            | 206 1           | 896 1   | 121 1              | 77.7 1            | 89.1 1             | 167 1            | 133 1            | 57.2 t                    |
| METALS                   | Mercury                                   | 0.0797 1 J J                 | 0.282 1 U                    | 0.0253 1 J J     | 0.032 1 J J      | 0.1 t < l       | J 0.1 1 < U   | 0.1 1 < U          | 0.1 1 < U         | 0.1 1 < U          | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U                 |
| METALS                   | Nickel                                    | 3.79 t                       | 7.77 1                       | 7.31 1           | 5.12 1           |                 |   |                    |                   |                    |                  |                  |                           |
| METALS                   | Potassium                                 | 437 1                        | 357 1                        | 440 i            | 385 t            | 187 1           | 183 1   | 292 1              | 322 1             | 213 1              | 1140 1           | 583 f            | 284 1                     |
| METALS                   | Selenium                                  | 0.279 1                      | 0.23 1 U                     | 0.237 1          | 0.266 1          | 11 < L          | 1140  | 11 < U             | 11 < 1            | 11 < 0             | 1 1 < U          | 11 < U           | 11 < 1                    |
| METALS                   | Silver                                    | 1.79 1 U                     | 1.74 1 U                     | 1.69 1 U         | 1.84 1 U         | 11 < L          | J 11 < U  | 11 < U             | 11 < U            | 11 < U             | 11 < U           | 11 < 1           | 11<-1                     |
| METALS                   | Sodium                                    | 21 1 J J                     | 113 1                        | 23.9 1           | 64.1 t           |                 |   |                    |                   |                    |                  |                  |                           |
| METALS                   | Strontum                                  | 0.046 1                      | 0.0722 1                     | 0.0520 1         | 0.0625 1         | 11 < 0          |   | 11.8 1             | 4.9 1             | 11 < 0             | 4.4 1            | <b>D.O</b> 1     | 11 < 0                    |
| METALS                   | Vanadium                                  | 585 1                        | 134 1                        | 26.6 1           | 253 1            |                 |   |                    |                   |                    |                  |                  |                           |
| METALS                   | Zinc                                      | 13.2 1                       | 20.5 1                       | 26 1             | 15 t             | 11.9 t          | 11.4 i  | 15.5 1             | 17.3 1            | 24.5 1             | 25.7 1           | 51.5 1           | 11.6 1                    |
| PERC                     | Perchiorate                               | 0.0227 1                     | 0.01 1 U                     | 0.0821 1         | 0.01 1 U         |                 |   |                    |                   |                    |                  |                  |                           |
| SEMIVOLATILES            | 1,2,4-Trichlorobenzene                    |                              |                              |                  |                  | 0.33 f < L      | ) 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | 1,2-Dichlorobenzene                       |                              |                              |                  |                  | 0.33 1 < L      | J 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | 1,3-Dichlorabenzena                       |                              |                              |                  |                  | 0.33 1 < 0      | J 0.33 1 < U  | 0.33 1 < U         | · 0.33 1 < U      | 0.33 1 < U         | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | 1,4-Dichlorobenzene                       |                              |                              |                  |                  | 0.33 1 < L      | J 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | 2,4,5-Inchlorophenol                      |                              |                              |                  |                  | 1.65 1 < 1      | ) 1.65 1 < U  | 1.65 1 < U         | 1,65 1 < 0        | 1,65 1 < 0         | 1,65 1 < U       | 1,65 1 < 0       | 1.65 1 < 0                |
| SEMIVOLATILES            | 2,4,0- manu opnenu<br>2 4. Dichlorophonof |                              |                              |                  |                  | 1 - 1 - 66.0    | ) · 0.33   < 0<br>  033   < 11  | 0.33 1 < 0         | 0.33 1 < 0        | 0.33 1 < 1         | 0.33 1 < 0       | 0.33 1 < 11      | 0.33 1 < 0                |
| SEMIVOLATILES            | 2,4-Dimethylphenot                        |                              |                              |                  |                  | 0.33 1 < 1      | J 0.33 t < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | 2,4-Dinitrophenol                         |                              |                              |                  |                  | 1.65 1 < L      | J 1,65 † < U  | 1.65 t < Ŭ         | 1.65 1 < U        | 1.65 1 < U         | 1.65 1 < U       | 1,65 1 < U       | 1,65 1 < U                |
| SEMIVOLATILES            | 2-Chloronaphthalene                       |                              |                              |                  |                  | 0.33 1 < L      | J 0.33 t < U  | 0.33 1 < U         | 0.33 1 < U        | 0,33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | 2-Chlorophenol                            |                              |                              |                  |                  | 0.33 1 < L      | J 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U                |
| SEMIVOLATILES            | 2-Methylnaphthalene                       |                              |                              |                  |                  | 0.33 1 < L      | J 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | 2-Methylphenol                            |                              |                              |                  |                  | 0.33 1 < L      | . 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | 2-Nitrophenol                             |                              |                              |                  |                  | 1.00 1 < 6      | J 1.65 1 < U<br>I 0.33 t < U  | 1.00 1 < 0         | 1,00 1 < 0        | 1,00 1 < 0         | 1,65 1 < 0       | 1.05 1 < 0       | 1.63 1 < U<br>0.33 t < U  |
| SEMIVOLATILES            | 3.3-Dichlorobenzidine                     |                              |                              |                  |                  | 0.65 1 < 1      | J 0.65 1 < U  | 0.65 1 < U         | 0.65 1 < U        | 0.65 1 < U         | 0.65 1 < U       | 0.65 1 < 0       | 0.65 1 < U                |
| SEMIVOLATILES            | 3-Nitroaniline                            |                              |                              |                  |                  | 1.65 1 < L      | J 1.65 1 < U  | 1.65 1 < 1         | 1.65 1 < U        | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U                |
| SEMIVOLATILES            | 4,6-Dinitro-2-methylphenol                |                              |                              |                  |                  | 1.65 1 < L      | J 1.65 1 < U  | 1.65 1 < U         | 1.65 1 < U        | 1.65 t < U         | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U                |
| SEMIVOLATILES            | 4-Bromophenyl phenyl ether                |                              |                              |                  |                  | 0.33 1 < t      | J 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | 4-Chloro-3-methylphenol                   |                              |                              |                  |                  | 0.65 1 < 0      | J 0.65 1 < U  | 0.65 1 < U         | 0.65 t < U        | 0.65 t < U         | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U                |
| SEMEVOLATILES            | 4-Chloroaniline                           |                              |                              |                  |                  | 0.65 1 < L      | J 0.65 1 < U  | 0.65 1 < U         | 0.65 1 < U        | 0.65 1 < U         | 0.65 1 < U       | 0.65 1 < U       | 0.65 f < U                |
| SEMIVOLATILES            | 4-Chlorophenyl phenyl ether               |                              |                              |                  |                  | 0.33 1 < 0      | 9 0,33 1 < 19   | 0.33 1 < 0         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < 0       | 0,33 1 < U       | 0.33 1 < 0                |
| SEMAVOLATILES            | 4-Marypreno                               |                              |                              |                  |                  | 165 t < 1       | J 0.35 I ⊂ U<br>1 165 1 ⊂ U   | 185 1 < 1          | 165 1 < H         | 165 1 < 11         | 165 1 < 11       | 165 1 < 1        | 1.55 t < U                |
| SEMIVOLATILES            | 4-Nitrophenol                             |                              |                              |                  |                  | 1.65 1 < U      | J 1.65 1 < U  | 1.65 1 < U         | 1.65 1 < U        | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U                |
| SEMIVOLATILES            | Acenaphthene                              |                              |                              |                  |                  | 0.33 1 < 1      | J 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U                |
| SEMIVOLATILES            | Acenaphthylene                            |                              |                              |                  |                  | 0.33 1 < U      | J 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 t < U         | 0.33 t < U       | 0,33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | Anthracene                                |                              |                              |                  |                  | 0.33 1 < (      | J 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0:33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | Benzo(a)anthracene                        |                              |                              |                  |                  | 0.33 1 < U      | ) 0.33 1 < U  | 0.33 1 < U         | 0.33 t < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | Benzo(a)pyrene                            |                              |                              |                  |                  | 0.33 1 < 1      | ) 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                |
| SEMBVOLATILES            | Benzo(b)nuoranmene                        |                              |                              |                  |                  | 0.33 1 < 0      | ) 0.33 1 < 0  | 0.33 1 < 0         | 0.33 1 < 0        | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0                |
| SEMIVOLATILES            | Benzo/kiftuorontheme                      | 1                            |                              | -                |                  | 0.33 1 < 0      | J U,33 I < U<br>I 0.33 I < U  | 0.33 1 4 0         | 0.33 1 < 0        | 0.33 1 < 0         | 0.33 1 4 0       | 0.33 1 < 0       | 0.33 1 < 0                |
| SEMIVOLATILES            | Benzoic Acid                              |                              |                              |                  |                  | 1.65 1 < 0      | ) 1.65 1 < U  | 165 t < U          | 1.65 1 < U        | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U                |
| SEMIVOLATILES            | Benzyl Alcohol                            |                              |                              |                  |                  | 0.65 t < U      | J 0.65 1 < U  | 0.65 1 < U         | 0.65 1 < U        | 0.65 1 < U         | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U                |
| SEMIVOLATILES            | bis(2-Chloroethoxy)methane                |                              |                              |                  |                  | 0,33 1 < 1      | J 0.33 1 < U  | 0,33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | bis(2-Chloroethyl)ether                   |                              |                              | -                |                  | ∵. 0.33 t < U   | J 0.33 1 < U  | 0.33 t < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | .0.33 1 < U               |
| SEMIVOLATILES            | bis(2-Chloroisopropyl)ether               | · .                          |                              |                  |                  | 0.33 1 < U      | J 0.33 1 < U  | 0.33 1 < U         | 0,33 1 < U        | 0.33 1 < U         | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | bis(2-Ethylhexyl)phthalate                |                              |                              |                  |                  | 0.33 t < U      | J 0.33 1 < U  | 0.33 1 < U         | 0.33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | Butyl benzyl phthalate                    |                              |                              |                  |                  | 0.33 1 < U      | J 0.33 1 < U  | 0.33 1 < U         | 0.33 t < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES            | Dihenzola blanthracona                    | · ·                          |                              |                  |                  | 0.33 T < U      | J 12.33 1 < ∐<br>I D.99 4 - ''  | 0.33 1 < 0         | 0.33 1 < 0        | 0.33 7 < U         | U.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U<br>0.13 4 - 11 |
| SEMIVOLATIBES            | Dibenzoturan                              |                              |                              |                  |                  | 0.33 1 < 1      | ) 0,33,1 e ii   | 0,33 1 < H         | 0.33 1 2 17       | 0.33 1 2 11        | 0.33 1 2 11      | 0.33 1 2 11      | 0.33 1 < 1                |
| SEMIVOLATILES            | Dielhyi phthalate                         | -                            |                              |                  |                  | 0.33 1 < 1      | J 0.33 1 < H  | 0.33 1 < 1         | 0.33 1 < 1/       | 0.33 1 < 11        | 0.33 1 < 11      | 0.33 1 < 11      | 0.33 1 < U                |
|                          | ••  |                              |                              |                  |                  |                 |   | · · · ·            |                   | · · ·              | •                |                  | -                         |

Shaw Environmental, Inc.



Table 3-5 Concentrations of Chemicals in Soil Samples Associated with Sump 005

| [SUMP] ≈ SUMP005 |                            |                  |                  |                  |                  |                       |                  |                  |                  |                  |                  |                  |                  |
|------------------|----------------------------|------------------|------------------|------------------|------------------|-----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                            | 35SUMP004-SB01   | 35SUMP004-SB01   | 35SUMP005-SB01   | 35SUMP005-SB01   | LH-S04-01             | LH-S04-01        | LH-S04-02        | LH-S04-02        | LH-\$05-01       | LH-S05-01        | LH-S05-02        | LH-S05-02        |
| SAMPLE_NO        |                            | 35-SMP04-SB01-01 | 35-SMP04-SB01-02 | 35-SMP05-S801-01 | 35-SMP05-SB01-02 | LH-S04-01_1           | LH-S04-01_2      | LH-S04-02_1      | LH-\$04-02_2     | LH-S05-01_1      | LH-S05-01_2      | LH-S05-02_1      | LH-S05-02_2      |
| SAMPLE_DATE      |                            | 9/7/2006         | 9/7/2006         | 9/7/2006         | 9/7/2006         | 7/9/1993              | 7/9/1993         | 7/9/1993         | 7/9/1993         | 7/9/1993         | 7/9/1993         | 7/9/1993         | 7/9/1993         |
| Depth            |                            | 0 - 0.5 Ft       | 6-6Ft            | 0 - 0.5 Ft       | 0.5 - 5 Ft       | 0-2Ft                 | 4-6 Ft           | 0 - 2 Ft         | 4 - 6 Ft         | 0 - 2 Ft         | 3-5Ft            | 0-2 Ft           | 3-5Ft            |
| SAMPLE_PURPOSE   |                            | REG              | REG              | REG              | REG              | REG                   | REG              | REG              | REG              | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)  | Result DiL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VG      | Result DIL LQ VQ |
| SEMIVOLATILES    | Dimethyl phthalate         |                  |                  |                  |                  | 0.33 1 < U            | 0,33 1 < U       | 0.33 1 < U       |
| SEMVOLATILES     | di-n-Butyl phthalate       |                  |                  |                  |                  | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | di-n-Octyl phthalate       |                  |                  |                  |                  | 0.33 1 < U            | 0,33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Fluoranthene               |                  |                  |                  |                  | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | Fluorene                   |                  |                  |                  |                  | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES    | Hexachiorobenzene          |                  |                  |                  |                  | 0,33 1 < <del>1</del> | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 1       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Hexachlorobutadiene        |                  |                  |                  |                  | 0.33 1 < Ŭ            | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Hexachlorocyclopentadiene  |                  |                  |                  |                  | 0.33 1 < U            | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Hexachioroethane           |                  |                  |                  |                  | 0,33 1 < U            | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene     |                  |                  |                  |                  | 0.33 1 < U            | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Isophotoné                 |                  |                  |                  |                  | 0.33 1 < U            | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Naphthalene                |                  |                  |                  |                  | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0,33 1 < 0       |
| SEMIVOLATILES    | Nitrobenzene               |                  |                  |                  |                  | 0,33 1 < U            | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 < U       | 0,33 1 < 0       | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | n-Nitroso-di-n-propytamine |                  |                  |                  |                  | 0.33 t < U            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine     |                  |                  |                  |                  | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Pentachlorophenol          |                  |                  |                  |                  | 1.65 1 < U            | 1.65 1 < U       | 1.65 1 < 0       | 1.65 1 < 0       | 1.65 1 < 0       | 1.05 1 < 0       | 1.03 4 4 11      | 1.03 1 4 0       |
| SEMIVOLATILES    | Phenanthrene               |                  |                  |                  |                  | 0.33 1 < 0            | 0.33 1 < 0       | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 4 0       | 0,33 1 4 0       | 0.33 1 4 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Phenol                     |                  |                  |                  |                  | 0.33 1 < U            | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 4 0       | 0.33 i < U       | 0.33 1 < 0       |
| SEMIVOLATILES    | Pyrene                     |                  |                  |                  |                  | 0,33 1 < 0            | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 < 0       | 0.35 1 < 0       | 0.05 1 < 0       | 0.05 1 < 0       | 0.05 1 < 1       |
| VOLATILES        | 1,1,1-Trichloroethane      | :                |                  |                  |                  | 0.005 1 < 0           | 0,005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | 1,1,2,2-Tetrachloroethane  |                  |                  |                  |                  | 0.005 1 < 0           | 0,005 1 < 0      | 0.005 1 < 0      |                  | 0.005 1 < U      |                  | 0.005 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | 1,1,2-Trichloroethane      |                  |                  |                  |                  | 0,005 1 < 0           | 0.005 1 < 0      | 0,005 1 < 0      | 0.005 1 4 0      | 0.005 ( < 0      | 0.005 1 < 0      | 0,005 1 < 0      | 0.005 1 < 1      |
| VOLATILES        | 1,1-Dichloroethane         |                  |                  |                  |                  | 0.005 1 < U           | 0.005 1 < 0      | 0.005 1 < 0      |                  | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 1      | 0.005 1 < 0      |
| VOLATILES        | 1,1-Dichloroethene         |                  |                  |                  |                  | 0.005 1 < 0           | 0,005 1 < 0      | 0.000 1 < 0      |                  | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 1      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dictiorosthans         |                  |                  |                  |                  | 0.005 1 < 0           | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 7 < 0      | 0.005 1 < 0      | 0.005 1 < 11     | 0.005 1 < 0      |
| VOLATILES        | 1,2-Dichloroethene         |                  |                  |                  |                  | 0.005 1 < 0           | 0.005 1 < 11     | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 14     | 0.005 t < 1      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Oxtakoropropane        |                  |                  |                  |                  | 0.05 1 < 0            | 0.000 1 < 0      | 0.05 1 < 1       | 0.05 1 < 1       | 0.05 1 < 0       | 0.05 1 < 1       | 0.05 t < U       | 0.05 1 < U       |
| VOLATILES        | 2-Dutatione                |                  |                  |                  |                  | 0.03 1 < 0            | 0.01 1 < 1       | 0.01 1 < 11      | 0.05 1 < 0       | 0.01 1 < 1       | 0.0t t < U       | 0.01 1 < U       | 0.01 t < U       |
| VULATILES        | 2-Chioroethyi vinyi ether  |                  |                  |                  |                  | 0.01 1 < 0            | 0.01 1 < 0       | 0.05 1 < 10      | 0.05 1 < 1       | 0.05 1 < 0       | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U       |
| VOLATILES        |                            |                  |                  |                  |                  | 011 < 0               | 0.05 t < 0       | 01 t < 1         | 01 1 < 0         | 0.1 1 < 1        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        |
| VOLATILES        | Regions                    |                  |                  |                  |                  | 0.05 1 < 14           | 0.005 f < 11     | 0.005 1 < 1      | 0.005 1 < U      |
| VOLATILES        | Bromodichloromethano       |                  |                  |                  |                  | 0.005 1 < 0           | 0.005 1 < 1      | 0.005 1 < U      | 0.005 t < U      |
| VOLATEES         | Bromoform                  |                  |                  |                  |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATHES         | Bromomethane               |                  |                  |                  |                  | 001 1 < 0             | 001 t < U        | 001 1 < U        | 0.01 1 < 1       | 0.01 1 < U       |
| VOLATILES        | Carbon disultade           |                  |                  |                  |                  | 0.005 1 < 0           | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | Carbon tetrachloride       |                  |                  |                  |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 t < U      |
| VOLATILES        | Chlorobenzene              |                  |                  |                  |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | Chloroethane               |                  |                  |                  |                  | 0.01 1 < U            | 0.01 1 < U       | 0.01 1 < U       | 0,01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0,01 1 < U       |
| VOLATILES        | Chiereform                 |                  |                  |                  |                  | 0.005 t < U           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloromethane              |                  |                  |                  |                  | 0.01 1 < U            | 0.01 1 < U       | 0,01 1 < 원       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0,01 1 < U       | 0.01 1 < U       |
| VOLATILES        | cis-1.3-Dichloropropene    |                  |                  |                  |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromochloromethane       |                  |                  |                  |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Ethylbenzene               |                  |                  |                  |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < 냉      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Methyl isobutyl ketone     |                  |                  |                  |                  | 0.05 1 < 13           | 0.05 1 < U       |
| VOLATILES        | Methylene chloride         |                  |                  |                  |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 t < U      | 0,005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Styrene                    |                  |                  |                  |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | Tetrachloroethene          |                  |                  |                  |                  | 0,005 1 < U           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | Toluene                    |                  |                  |                  |                  | 0.005 1 < U           | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0,005 1. < U     | 0.005 1 < U      |
| VOLATILES        | trans-1,3-Dichloropropene  | l                |                  |                  |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Trichloroethene            |                  |                  |                  |                  | 0.005 1 < U           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Vînyi acetate              |                  |                  |                  |                  | 0.05 1 < U            | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U       | 0,05 1 < U       | 0.05 1 < U       |
| VOLATILES        | Vinyl chloride             |                  |                  |                  |                  | 0.01 1 < U            | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Xylenes, Total             |                  |                  |                  |                  | 0,005 1 < U           | 0,005 1 < U      | 0.005 1 < U      | 0.005 i < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.



Table 3-6 Concentrations of Chemicals in Soil Samples Associated with Sump 006

- ----

| [SUMP] ≈ SUMP006<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOPE |   | 35SUM<br>35-SMP<br>9/1<br>0 - | P007-SB01<br>07-SB01-01<br>1/2006<br>0.5 Ft<br>25:0 | 35SUA<br>35-SMI<br>9/<br>16           | MP007-SB01<br>P07-SB01-02<br>11/2006<br>D - 10 Ft<br>PEC | 35SU<br>35-SM<br>9<br>( | MP007-SB02<br>IP07-SB02-01<br>/11/2006<br>D - 0.5 Ft<br>REC | 35SU<br>35-SMP<br>9 | MP007-SB02<br>07-SB02-01-QC<br>/11/2006<br>1-0.5 Ft | 35SL<br>35-SA<br>9 | IMP007-S802<br>MP07-S802-0<br>9/11/2006<br>10 - 10 Ft<br>PEC | 2      | HOSB04<br>HOSB04(0-0.5)<br>12/6/2000<br>0 - 0.5 Ft<br>PEC | ו<br>אכ<br>1 | HOSB04<br>)SB04(3-5)<br>2/6/2000<br>3 - 5 Ft<br>PEC | HOSB0<br>12/6/<br>8-1 | 5804<br>4(8-10)<br>2000<br>0 Ft<br>5G | HOSB05<br>HOSB05(0-0<br>12/6/2090<br>0 - 0.5 Ft | 15) HO      | HOSB05<br>DSB05(3-5)<br>12/6/2000<br>3 - 5 Ft | HC<br>HOSBI<br>12/<br>3 | DSB05<br>05(3-5)QC<br>6/2000<br>- 5 Ft<br>5D | HC<br>HOSE<br>12/0<br>8 - | 0SB05<br>305(8-10)<br>6/2000<br>10 Ft<br>25/2 | UH-SC<br>UH-SC<br>7/9<br>0 | 505-01<br>16-01 QC<br>/1993<br>- 2 Ft<br>50 | L<br>Li          | .H-S06-01<br>I-S06-01_1<br>7/9/1993<br>0 - 2 Ft<br>PEC |        | LH-S06-/<br>LH-S06-0<br>7/9/199<br>4 - 6 F | -01<br>11_2<br>13<br>'t | LH-S0<br>LH-S0<br>7/9/1<br>10- | 06-01<br>6-01_3<br>1993<br>12 Ft |   |
|---|---|-------------------------------|---|---------------------------------------|--|-------------------------|---|---------------------|---|--------------------|--|--------|---|--------------|---|-----------------------|---------------------------------------|---|-------------|---|-------------------------|--|---------------------------|---|----------------------------|---|------------------|--|--------|--|-------------------------|--------------------------------|----------------------------------|---|
| Test Group  | Parameter (Units = mg/kg)                     | Result                        | reg<br>Dil LQ VQ                                    | Result                                | DIL LQ V   | Q Result                | DIL LQ V  | Q Result            | DIL LQ VO   | Result             | DIL LQ   | VQ Res | ult DIL LQ  | VQ Result    | DIL LQ VO   | או<br>D Result D      | LLQ VQ                                | Result DIL L                                    | Q VQ Result | DIL LQ VQ                                     | Result                  | FD<br>DIL LQ VQ                              | r<br>Result I             | REG<br>DIL LQ VO                              | 2 Result I                 | FU<br>DIL LQ V                              | Q Result         | DIL LQ   | VQ Res | sut DIL                                    | LQ VQ                   | Result Di                      | is<br>ILLQ_VO                    | 2 |
| EXPLOSIVES  | 2,4-Dinitrotoluene                            |                               |   | · · · · · · · · · · · · · · · · · · · |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < 1                                       | 0.33             | 1 <  | U 0.3  | 13 1                                       | < ป                     | 0.33 1                         | 1 < U                            | - |
| EXPLOSIVES  | 2,6-Dinitrotoluene                            | 7900                          |   | 21200                                 | 1  | 11300                   | •   | 12400               | 1   | 10600              |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < 1                                       | J 0.33           | 1 <  | U 0.3  | 13 1<br>100 1                              | < U                     | 0.33 1                         | 1 < U                            |   |
| METALS  | Auminum<br>Actimony                           | 0 105                         | т<br>1 Н  | 0 114                                 | 1  | 0.113                   | י<br>1 ט  | 0.112               | 1<br>1 U  | 0.113              | 1 13   |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 4340                       | 1<br>1 < 1                                  | 10500            | 1 <  | 144    | 00 1<br>≹ 1                                | < 11                    | 9640 1<br>3 1                  | 1 < 11                           |   |
| METALS  | Arsenic                                       | 6.13                          | t   | 2.4                                   | 1  | 2.42                    | 1   | 4.03                | 1   | 0.449              | 1  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 1.6                        | 1 < 1                                       | 4.7              | 1 <  | U 1.   | . <del>5</del> · 1                         | < U                     | 1 1                            | 1 < U                            |   |
| METALS  | Barium  | 34.2                          | 1   | 95.1                                  | 1  | 86.9                    | 1   | 81.5                | 1   | 42.2               | 1  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 27.5                       | 1 < 1                                       | J 51             | 1 <  | U 12   | 6 1  | < U                     | 175 1                          | i < U                            |   |
| METALS  | Beryllium                                     | 0.396                         | 1   | 0.789                                 | 1  | 0.542                   | 1   | 0.505               | 1   | 0.639              | 1  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   |                            |   |                  |  |        |  |                         |                                |                                  |   |
| METALS  | Cadmium                                       | 0.0835                        | 1 J J   | 0.117                                 | 1 J .  | J 0.325                 | 1 J J   | 0.357               | 1 J J   | 0.078              | 1 J  | 1      |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 1                          | 1 < 1                                       | J 1              | 1 <  | U 1    | 1  | < U                     | 1 1                            | i < U                            |   |
| METALS  | Chromium                                      | 23.8                          | 1 3   | 23.5                                  | 1  | 4300<br>161             | 1   | 19                  | 1 J   | 972<br>11 9        | 1  | 3      |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 420                        | 1<br>1 < 1                                  | 944<br>I 20.8    | 1 <  | 11.    | 10 I<br>12 1                               | < 11                    | 129 1                          | 1 < 11                           |   |
| METALS  | Cobatt  | 1.52                          | 1 J   | 8.63                                  | 1 .  | J 10.3                  | t J   | 5.46                | 1 J   | 9.82               | 1  | J      |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 1                          | 1 < 1                                       | J 5.1            | ť  | 9.     | .4 1                                       | •                       | 15.7 1                         | 1                                |   |
| METALS  | Copper  | 1.76                          | 1   | 7.34                                  | 1  | 5.11                    | 1   | 5.86                | 1 -   | 3.33               | 1  |        |   |              |   |                       |                                       |   |             |   |                         | -  |                           |   | 1.26                       | 1   | 4.4              | 1  | 5.     | 1 1  |                         | 6.7 1                          | i -                              |   |
| METALS  | Iron  | 40600                         | 10  | 20000                                 | 1  | 13000                   | 1   | 12700               | 1   | 7340               | 1  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 26000                      | 1   | 40700            | 1  | 149    | 00 1                                       |                         | 8670 1                         | i -                              |   |
| METALS  | Lead  | 5.28                          | 1 J   | 8.97                                  | 1,   | J 9.65                  | 1 3   | 25.6                | 1 J   | 4.9                | 1  | J      |   |              |   |                       |                                       | -   |             |   |                         |  |                           | · :   | 4.9                        | 1   | 10.2             | 1  | 8.     | 31   |                         | 5.2 1                          | 1                                |   |
| METALS  | Magnese                                       | 123                           | 1   | 125                                   | 1  | 491                     | 1   | 345                 | 1   | 72.6               | 1  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           | •   | 68.8                       | 1   | 429              | 1  | 26     | / I<br>i2 1                                |                         | 1560 1                         | 1                                |   |
| METALS  | Mercury                                       | 0.0261                        | 1 J J   | 0.276                                 | 1 U  | 0.0424                  | 1 J J   | 0.065               | 1 J J   | 0.296              | 1 U  |        |   |              |   | -                     |                                       |   |             |   |                         |  |                           |   | 0.1                        | 1 < 1                                       | J 0.1            | t <  | U 0.   | .1 1                                       | < U                     | 0.1 1                          | I < U                            |   |
| METALS  | Nickel  | 3.13                          | 1   | 11.8                                  | 1  | 7.15                    | 1   | 8.36                | 1   | 9.54               | 1  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   |                            |   |                  |  |        |  |                         |                                |                                  |   |
| METALS  | Potassium                                     | 242                           | 1   | 651                                   | 1  | 477                     | 1   | 502                 | 1   | 405                | 1  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 133                        | 1   | 350              | 1  | 61     | 2 1  |                         | 762 1                          | <b>i</b>                         |   |
| METALS  | Selentum                                      | 0.445                         | 1 11  | 0.224                                 | 1 J .  | 1 0.230                 | 7<br>1 11   | 0.201               | 1<br>1 11   | 0.225              | 1 1  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 1                          | 1 < 1                                       | ) <b>1</b>       | 1 <  | 0 1    | 1  | < U                     | 1 1                            | ; < U                            |   |
| METALS  | Sodium  | 25.8                          | 1   | 312                                   | 1  | 36.7                    | 1   | 41.3                | 1   | 480                | 1  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | •                          |   | , .              | , `  |        |  | • •                     | , ,                            | 0                                |   |
| METALS  | Strontium                                     |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 1                          | 1 < 1                                       | J 1              | 1 <  | U 3.4  | 4 i  |                         | 27.8 1                         | r                                | • |
| METALS  | Thallium                                      | 0.0462                        | 1   | 0.112                                 | 1  | 0.072                   | 1   | 0.0753              | 1   | 0.0723             | 1  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   |                            |   |                  |  |        |  |                         |                                |                                  |   |
| METALS  | Vanadium                                      | 44.8                          | 1   | 30                                    | 1  | 28.1                    | 1   | 26                  | 1   | 14.4               | 1  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 45                         |   |                  |  |        |  |                         |                                |                                  |   |
| RANGE ORGANICS  | Zmc<br>Carbon Range C12-C28 °                 | 52.9                          | 1<br>1 1  | 36.2<br>57.9                          | เ<br>1 ย   | 49.0                    | +<br>-1 H   | 56.2                | 1 U   | 19.3               | 1.   | R      |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 15                         | 1   | 33               | 1  | 22     | .4 1                                       |                         | 30.6 1                         | 1                                |   |
| RANGE_ORGANICS  | Carbon Range C28-C35 °                        | 52.9                          | 1 U   | 57.9                                  | 1 U  | 56.6                    | 1 U   | 56.2                | 1 10  | 58.3               | 1 0  | 5      |   |              |   |                       |                                       |   |             |   |                         |  |                           |   |                            |   |                  |  |        |  |                         | -                              |                                  |   |
| RANGE_ORGANICS  | Carbon Range C6-C12*                          | 52.9                          | 1 U   | 57.9                                  | 1 U  | 56.6                    | 1 U   | 56.2                | 1 U   | 58.3               | 1 1/   |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   |                            |   |                  |  |        |  |                         |                                |                                  |   |
| SEMIVOLATILES   | 1,2,4-Trichlorobenzene                        |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < 1                                       | 0.33             | 1 <  | U 0.3  | J3 1                                       | < U                     | 0.33 1                         | I < U                            |   |
| SEMIVOLATILES   | 1,2-Dichlorobenzene                           |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < 1                                       | 0.33             | 1 <  | U 0.3  | 3 1  | < U                     | 0.33 1                         | i < U                            |   |
| SEMIVOLATILES   | 1,3-Dichlorobenzene<br>1 & Dichlorobenzene    |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.53                       | 1 < 1                                       | 0.33             | 1 <  | U 0.3  | ्र ।<br>२२ १                               | < U<br>< 11             | 0.33 1                         | . < U<br>1 < U                   |   |
| SEMIVOLATILES   | 2,4,5-Trichlorophenol                         |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 1.65                       | 1 < 1                                       | J 1.65           | 1 <  | U 1.6  | 35 1                                       | < U                     | 1.65 1                         | 1 < U                            |   |
| SEMIVOLATILES   | 2,4,6-Trichlorophenol                         |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < i                                       | 0.33             | 1 <  | U 0.3  | J3 1                                       | < U                     | 0.33 1                         | 1 < U                            |   |
| SEMIVOLATILES   | 2,4-Dichlorophenol                            |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < i                                       | 0.33             | t <  | U 0.3  | <i>រ</i> 3 1                               | < U                     | 0.33 1                         | 1 < 0                            |   |
| SEMIVOLATILES   | 2,4-Dimethylphenol                            |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < 1                                       | 0.33             | 1 <  | U 0.3  | ,31<br>                                    | < U                     | 0.33 1                         | / < ប                            |   |
| SEMIVOLATILES<br>SEMIVOLATILES  | 2,4-Distropreno:<br>2-Chloronanhthalene       |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 1.05<br>0.33               | 1 < 1                                       | ) 1.05<br>  6.33 | 1 <  | U 1.6  | .5.1<br>13.1                               | < 1)                    | 1.55 1                         | 1 U                              |   |
| SEMIVOLATILES   | 2-Chlorophenol                                |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < 1                                       | 0.33             | 1 <  | U 0.3  | 33 1                                       | < 1                     | 0.33 1                         | 1 < U                            |   |
| SEMIVOLATILES   | 2-Methylnaphthalene                           | }                             |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < L                                       | 0.33             | 1 <  | U 0.3  | J3 1                                       | < U                     | 0.33 1                         | i < U                            |   |
| SEMIVOLATILES   | 2-Methylphenol                                |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < (                                       | 0.33             | 1 <  | U 0.3  | <b>B</b> 1                                 | < U                     | 0.33 1                         | i < U                            |   |
| SEMIVOLATILES<br>SEMIVOLATILES  | 2-Nitroaniline<br>2 Nitroahonol               |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           | -   | 1.65                       | 1 < l                                       | 1.65             | 1 <  | U 1.6  | .51  | < 0                     | 1.65 1                         | ្ < ប<br>•                       |   |
| SEMIVOLATILES   | 3.3'-Dichlombenzidine                         |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       | -   |             |   |                         |  |                           |   | 0.33                       | 1 < L<br>1 < L                              | 0.33             | 1 <  | U U.3  | .J 1<br>85 1                               | < U<br>< II             | 0.53 1                         | . < U<br>t < H                   |   |
| SEMIVOLATILES   | 3-Nitroaniline                                |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 1.65                       | 1 < 1                                       | 1.65             | 1 <  | U 1.6  | i5 1                                       | < U                     | 1.65 1                         | I < U                            |   |
| SEMIVOLATILES   | 4,6-Dinitro-2-methylphenol                    |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         | · · .  |                           | · . ·   | 1.65                       | 1 < L                                       | J 1.65           | 1 <  | U 1.6  | <i>i</i> 5 1                               | < U                     | 1.65 1                         | i < U                            |   |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether                    |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < L                                       | 0.33             | 1 <  | U 0.3  | 13 1                                       | < U                     | 0.33 1                         | i < U                            |   |
| SEMIVOLATILES   | 4-Chloro-3-methylphenol<br>A-Chloro-anitine   | 1                             |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.65                       | 1 < L                                       | 0.65             | 1 <  | U 0.6  | 5 1  | < U                     | 0.65 1                         | · < U                            |   |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether                   |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       | -   |             |   |                         |  |                           |   | 0.05                       | 1 < 1                                       | 0.65             | 1 <  | U 0.0  | 3 1  | < 11                    | 0.05 1                         | ( < 1)                           |   |
| SEMIVOLATILES   | 4-Methylphenol                                |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < 1                                       | 0.33             | 1 <  | U 0.3  | 13 1                                       | < U                     | 0.33 1                         | i < Ŭ                            |   |
| SEMIVOLATILES   | 4-Nitroaniline                                |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  | -                         |   | 1.65                       | 1 < t                                       | 1.65             | 1 <  | U 1.6  | 5 1  | < U                     | 1.65 1                         | i < U                            |   |
| SEMIVOLATILES   | 4-Nitrophenol                                 |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       | -   |             |   |                         |  |                           |   | 1.65                       | 1 < 1                                       | 1.65             | 1 <  | U 1.6  | .5 1                                       | < U                     | 1.65 1                         | - < U                            |   |
| SEMIVOLATILES   | Acenaphinene                                  |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < L                                       | 0.33             | 1 <  | U 0.3  | 3 1  | < U                     | 0.33 1                         | · < U                            |   |
| SEMIVOLATILES   | Anthracene                                    |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < 1                                       | 0.33             | 1 <  | 0 0.3  | 3<br>13                                    | < U                     | 0.33 1                         | U - 1                            |   |
| SEMIVOLATILES   | Benzo(a)anthracene                            |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  | · · ·                     |   | 0.33                       | 1 < 1                                       | 0.33             | 1 <  | U 0.3  |  | < Ŭ                     | 0.33 1                         | i < U                            |   |
| SEMIVOLATILES   | Benzo(a)pyrene                                | 1                             |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           | · .   | 0.33                       | 1 < 1                                       | 0.33             | 1 <  | U 0.3  | <b>з</b> 1                                 | < U                     | 0.33 1                         | i < U                            |   |
| SEMIVOLATILES   | Benzo(b)fluoranthene                          | 1                             |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       | -                                     |   | · ·         |   |                         |  |                           |   | 0.33                       | 1 < L                                       | 0.33             | 1 <  | U 0.3  | 3 1  | < U                     | 0.33 1                         | i < U                            |   |
| SEMIVOLAHLES  | penzo(ghi)perylene<br>Banzo(k)fivorarthene    | 1                             |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < L                                       | 0.33             | 1 <  | U 0.3  | 3 1  | < U                     | 0.33 1                         | < U                              |   |
| SEMIVOLATILES   | Benzoic Acid                                  | 1                             |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   | · .         |   |                         |  |                           |   | 1.65                       | 1 < L                                       | 0.33             | 1 <<br>1 <   | U U.3  | ວ 1<br>15 1                                | < U<br>< 11             | 0.33 1                         | U                                |   |
| SEMIVOLATILES   | Benzył Alcohoł                                | 1                             |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.65                       | 1 < L                                       | 0.65             | 1 <  | U 0.6  | i5 1                                       | < บ                     | 0.65 1                         | 1 < U                            |   |
| SEMIVOLATILES   | bis(2-Chloroethoxy)methane                    |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < 1                                       | 0.33             | 1 <  | U 0.3  | <b>J</b> 3 1                               | < U                     | 0.33 1                         | i < U                            |   |
| SEMIVOLATILES   | bis(2-Chloroethyl)ether                       | 1                             |   |                                       |  |                         |   |                     |   |                    |  |        |   |              | -   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < U                                       | 0.33             | 1 <  | U 0.3  | 3 1  | < U                     | 0.33 1                         | ( < ₽                            |   |
| SEMIVOLATILES   | bis(2-Chloroisopropyl)ether                   |                               |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       | 1 < 1                                       | 0.33             | 1 <  | U 0.3  | 3 1  | < U                     | 0.33 1                         | < U                              |   |
| SEMIVOLATILES   | ostz-connexpprotate<br>Butyl benzyl ohtostate |                               |   |                                       |  |                         |   |                     |   |                    | -  |        |   |              |   |                       |                                       |   |             |   |                         |  | :                         |   | 0.33                       | 1 < U<br>1 - 1                              | 0.33             | 1 <  | U 0.3  | 3 I  | < U<br>2 U              | 0.33 1                         | . < U                            |   |
|   | Corti workey burnense                         | 1                             |   |                                       |  |                         |   |                     |   |                    |  |        |   |              |   |                       |                                       |   |             |   |                         |  |                           |   | 0.33                       |   | 0.33             |  | 0 0.3  | J I  | ~ 0                     | 0.00 1                         | · U                              |   |

Shaw Environmental, Inc.

 Table 3-6

 Concentrations of Chemicals in Soil Samples Associated with Sump 006

| [SUMP] = SUMP006<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE |                                 | 355UMP007-SB01<br>35-SMP07-SB01-01<br>9/11/2006 | 35SUMP007-SB01<br>35-SMP07-SB01-02<br>9/11/2006 | 35SUMP007-SB02<br>35-SMP07-SB02-01<br>9/11/2006 | 355UMP007-SB02<br>35-SMP07-SB02-01-QC<br>9/11/2006 | 35SUMP007-SB02<br>35-SMP07-SB02-02<br>9/11/2006<br>10 - 10 Ft | HOSB04<br>HOSB04(0-0.5)<br>12/6/2000<br>0-0.5 Ft | HOSB04<br>HOSB04(3-5)<br>12/6/2000<br>3 - 5 Et | HOSB04<br>HOSB04(8-10)<br>12/6/2009<br>8 - 10 Ft | HOSB05<br>HOSB05(0-0.5<br>12/6/2000<br>0 - 0.5 Ft | HOSB05<br>5) HOSB05(3-5<br>12/6/2060<br>3 - 5 Ft | HOSB05<br>) HOSB05(3-5)QC<br>12/6/2000<br>3 - 5 Ft | HOSB05<br>HOSB05(8-10)<br>12/6/2000<br>8 - 10 Ft | LH-S06-01<br>LH-S06-01 QC<br>7/9/1993<br>0 - 2 Ft | LH-S06-01<br>LH-S06-01_1<br>7/9/1993<br>0 - 2 Ft | LH-S06-01<br>LH-S06-01_2<br>7/9/1993<br>4 - 6 Ft | LH-S06-01<br>LH-S06-01_3<br>7/9/1993<br>10 - 12 Ft |
|--|---------------------------------|---|---|---|--|---|--|--|--|---|--|--|--|---|--|--|--|
|  |                                 | U-0.5 FL<br>REG                                 | REG   | REG   | FD   | REG   | REG  | REG  | REG  | REG   | REG  | FD   | REG  | FD  | REG  | REG  | REG  |
| Test Group   | Parameter (Units = mo/kg)       | Result DIL LQ VQ                                | Result DIL LQ VQ                                | Result DIL LQ VO                                | Result DIL LQ VQ                                   | Result DIL LQ VQ  | Result DIL LQ V                                  | Q Result DIL LQ                                | VQ Result DIL LQ                                 | VQ Result DiL LO                                  | Q VQ Result DIL L                                | Q VQ Result DIL LQ \                               | Q Result DIL LQ                                  | VQ Result DIL LQ V                                | Q Result Dil. LQ V                               | /Q Result DIL LQ VQ                              | Result DIL LQ VQ                                   |
| SEMIVOLATILES  | Chrysene                        | 1   |   |   |  |   |  |  |  |   |  |  |  | 0.33 · 1 < L                                      | 0.33 1 <   | U 0.33 1 < U                                     | 0.33 1 < 0   |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene          |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < 0  | 0.33 1 4   |  |  |
| SEMIVOLATILES  | Dibenzofuran                    |   |   |   |  |   |  |  |  |   |  |  |  | 033 1 < 1   | 1 033 1 <  | U 0.33 t < U                                     | 0.33 1 < U   |
| SEMIVOLATILES  | Diethyl phthalate               |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < 1  | 0.33 1 <   | U 0.33 1 < U                                     | 0.33 t < U   |
| SEMIVOLATILES  | Dimethyl phthalate              |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < 1  | 0.33 1 <   | U 0.33 1 < U                                     | 0.33 1 < U   |
| SEMIVOLATILES  | di-n-Butyl phthalate            | 1   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < 1  | 0.33 1 <   | U 0.33 1 < U                                     | 0.33 1 < U   |
| SEMIVOLATILES  | di-n-Octyl phihalate            |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < L  | ) 0.33 1 <                                       | U 0.33 1 < U                                     | 0.33 1 < U   |
| SEMIVOLATILES<br>SEMIVOLATILES                                 | Fluorene                        |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < L  | j 0.33 t <                                       | U 0.33 1 < U                                     | 0.33 1 < U   |
| SEMIVOLATILES  | Hexachkenbenzene                |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < L  | J 0.33 1 <                                       | U 0.33 1 < U                                     | 0.33 1 < U   |
| SEMIVOLATILES  | Hexachkorobutadiene             |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < L  | J 0.33 1 <                                       | 0 0.33 1 < 0                                     | 0.33 1 < 0   |
| SEMIVOLATILES  | Hexachlorocyclopentadiene       |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < 0  | ) 0.33 1 <                                       | 0 0.33 1 < 0                                     | 0.33 1 4 0   |
| SEMIVOLATILES  | Hexachloroethane                |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < 1  | 0.33 1 <   | U 0.33 1 < U                                     | 0.33 1 < 1   |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene          |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < 1  | 1 0.33 1 <                                       | U 0.33 1 < U                                     | 0.33 1 < U   |
| SEMIVOLATILES  | Isophorone                      |   |   |   |  |   |  |  |  | -   |  |  |  | 0.33 1 < 1  | J 0.33 1 <                                       | U 0.33 1 < U                                     | 0.33 1 < U   |
| SEMIVOLATILES  | Naphthalene                     |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < 1  | ) 0.33 1 <                                       | ∪ 0.33 1 < ป                                     | 0.33 1 < U   |
| SEMIVOLATILES  | Nitrobenzene                    |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < 1  | J 0.33 1 <                                       | ป 0.33 1 < ป                                     | 0.33 1 < U   |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine      |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < L  | J 0.33 1 <                                       | U 0.33 1 < U                                     | 0.33 1 < U   |
| SEMIVOLATILES  | Pentachloronbenol               |   |   |   |  |   |  |  |  |   |  |  |  | 1.65 1 < U  | J 1.65 1 <                                       | U 1.65 1 < U                                     | 1.65 1 < U   |
| SEMIVOLATILES  | Phenanthrene                    |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < L  | J 0.33 1 <                                       | U 0.33 1 < U                                     | 0.33 1 < U   |
| SEMIVOLATILES  | Phenol                          |   |   |   |  |   |  |  |  |   |  |  |  | 0.33 1 < 0  | ) 0.33 1 <                                       | 0 0.33 1 < 0                                     | 0.33 1 < 0   |
| SEMIVOLATILES  | Pyrene                          |   |   |   |  |   |  |  |  |   |  | ( U 190 1 )  | 1 60 1 4   | 0.33 1 < 0  | 0.33 1 5   | 0 0.55 1 4 0                                     |  |
| TPH  | Hydrocarbons as Diesel Fuel     |   |   |   |  |   | 58.6 1 < 0                                       | 59.9 1 <                                       | 0 60 1 <   | 0 5/./ 1  |  |  | 1 00 0   | u   |  |  |  |
| TPH  | Hydrocarbons as Gasoline        |   |   |   |  |   | 58.6 1 < 0                                       | ) 59.9 1 <                                     | U 60 U <   | 0 57.7 1  | CU 03 1 -  | <ul> <li>11 639 1 &lt;</li> </ul>                  | U 60 1 <   | 8   |  |  |  |
| TPH  | TOTAL HYDROCARBONS              |   |   |   |  |   | 58.0 i < i                                       | 3 29.9 1 5                                     | 0 00 1 4   | 0 51.7 1  |  |  |  | 0.005 1 < 0                                       | J 0.005 t <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  | 1,1,1-Trichloroethane           |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 t < 0                                       | J 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  | 1,1,2,2-1 etrachioroethane      | 1   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 < 0                                       | J 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLANLES   | 1,1,2+11Chloroethane            |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 < 0                                       | J 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  | 1.1-Dichloroetbene              |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 < 6                                       | J 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  | 1,2-Dichloroethane              |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 t < 1                                       | J 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  |                                 |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 < 1                                       | 0.005 1 <  | 0 0.005 1 4 0                                    | 0.005 1 < 1  |
| VOLATILES  | 1,2-Dichloropropane             |   |   |   |  |   |  |  |  |   |  |  |  | 0.000 1 1 1                                       | 3 0.005 1 <                                      | 11 0.05 1 < 11                                   | 0.05 1 < U   |
| VOLATILES  | 2-Butanone                      |   |   |   |  |   |  |  |  |   |  |  |  | 0.01 1 <  | J 0.01 1 <                                       | U 0.01 1 < U                                     | 0.01 1 < U   |
| VOLATILES  | 2-Chloroethyl vinyl ether       | 1   |   |   |  |   |  |  |  |   |  |  |  | 0.05 1 < 1  | U 0.05 1 <                                       | U 0.05 1 < U                                     | 0.05 1 < 빈   |
| VOLATILES  | 2-Hexanone                      |   |   |   |  |   |  |  |  | -   |  |  |  | 0.1 1 < 1   | U 0.1 1 <  | U 0.1 1 < U                                      | 0.1 1 < U  |
| VOLATILES  | Renzene                         |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 <   | U 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  | Bromodichloromethane            |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 < 1                                       | U 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  | Bromotorm                       |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 < 1                                       | U 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  | Bromomethane                    |   |   |   |  |   |  |  |  |   |  |  |  | 0.001 1 <   |  | U U.U.I 1 < U                                    |  |
| VOLATILES  | Carbon disulfide                |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 <   |  | 1 0.005 1 < 0                                    | 0.005 1 < U  |
| VOLATILES  | Carbon tetrachloride            |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 <   | 0 0.005 1 <                                      | 11 0.005 1 < U                                   | 0.005 1 < U  |
| VOLATILES  | Chlorobenzene                   |   |   |   |  |   |  |  |  |   |  |  |  | 0.01 1 <  | U 0.01 1 <                                       | U 0.01 1 < U                                     | 0.01 1 < U   |
| VOLATILES  | Chloroethane                    |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 <   | U 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  | Chloromathana                   |   |   |   |  |   |  |  |  |   |  |  |  | 0.01 1 <  | U 0.01 1 <                                       | U 0.01 1 < U                                     | 0.01 1 < U   |
| VOLATILES  | cis.1 3.Dichtomaranene          |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 <   | U 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  | Dibromochloromethane            |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 <   | U 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  | Ethylbenzene                    |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 <   | U 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  | Methyl isobutyl ketone          |   |   |   |  |   |  |  |  |   |  |  |  | 0.05 1 <  | 0 0.05 1 <                                       | 0 0.05 1 < 0                                     | 0.05 1 < U   |
| VOLATILES  | Methylene chloride              |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 <   | 0 0.005 1 <                                      | U 0.005 1 < U                                    |  |
| VOLATILES  | Styrene                         |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 <   |  | 11 0 005 1 < 0                                   | 0.005 t < U  |
| VOLATILES  | Tetrachioroethene               |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 <   | 0 0.005 1 <                                      | 0 0.005 1 < 11                                   | 0.005 1 < U  |
| VOLATILES  | Toluene                         | 1   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 <   | U 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  | trans-1,3-Dichloropropene       |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 <   | U 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
| VOLATILES  | Inchioroethene                  |   |   |   |  |   |  |  |  |   |  |  |  | 0.05 1 <  | U 0.05 1 <                                       | U 0.05 1 < U                                     | 0.05 1 < U   |
|  | vsiyi acetate<br>Vinyi oblorida |   |   |   |  |   |  |  |  |   |  |  |  | 0.01 1 <  | U 0.01 1 <                                       | U 0.01 1 < U                                     | 0.01 1 < U   |
|  | YNIN CISURIUC<br>Xvlenes Total  |   |   |   |  |   |  |  |  |   |  |  |  | 0.005 1 <   | U 0.005 1 <                                      | U 0.005 1 < U                                    | 0.005 1 < U  |
|  | sylvino) roma                   |   |   |   |  |   | · .  |  |  |   | · · ·  |  |  |   |  |  |  |

Shaw Environmental, Inc.

مير

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

#### Table 3-6 Concentrations of Chemicals in Soil Samples Associated with Sump 006

| SUMP] = SUMP006 |                             |        |         |       |            |          |        |           |         |                |       |      |        |         |     |       |          |         |     |            |          |                       |              |            |         |      |        |          |              |        |
|-----------------|-----------------------------|--------|---------|-------|------------|----------|--------|-----------|---------|----------------|-------|------|--------|---------|-----|-------|----------|---------|-----|------------|----------|-----------------------|--------------|------------|---------|------|--------|----------|--------------|--------|
| OCATION CODE    |                             | L      | 1-506-4 | 02    |            | 1.11-    | S06-02 |           |         | LH-SOE         | -02   |      | L      | 1-S07-0 | 1   |       | LH-S     | 07-01   |     | LH         | 1-\$07-0 | t                     |              | LH-        | \$07-02 |      | L      | H-S07-0  | 2            |        |
| SAMPLE NO       |                             | 11     | 506.0   | 7 1   |            | LH-S     | 06-02  | 2         | r       | H.SOG          | 02.3  |      | 18     | \$07.01 |     |       | 111-50   | 17_01 2 |     | 18.        | 507.01   | 3                     |              | ILS        | 07.02   | •    | 18     | \$07.02  | -<br>,       |        |
|                 |                             | 7      | /0/100  | <br>1 |            | 76       | 14003  | -         |         | 7/0//10        | 03    |      | 6      | 25/1001 |     |       | 6/26     | 14003   |     | 67         | 26/100   |                       |              | 60         | 6/1002  |      |        | 05/400   | <del>*</del> |        |
|                 |                             |        |         |       |            | 2        | 5 54   |           |         | 110110         | 55    |      |        | E 965   |     |       | 0/20     | 45.54   |     |            | 201123   | •                     |              | 42         | 271333  |      |        | 12.01155 | 3            |        |
|                 |                             |        | 0-2F    |       |            | 3        | -371   |           |         | 10 - 12<br>DEC |       |      | υ.     | 0-2,0F  |     |       | 23-      | 4.311   |     | 5          | 000      |                       |              |            | - 2 11  |      |        | 2-4-1    |              |        |
| SAMPLE_PURPUSE  |                             |        | REG     |       |            |          | REG    |           |         | REG            | ;<br> |      |        | REG     |     |       |          | EG      |     | <b>.</b> . | REG      |                       |              | ·          | (EG     |      |        | REG      |              |        |
| lest Group      | Parameter (Units = mg/kg)   | Result | DAL     | LQ    | QH         | COSUN    | DILL   | QVC       | ) Resul | L DIL          | LQ    | VQ   | Result |         | QV  | 10    | Result t | AL LO   | YQ  | Result     | DIL      | LQ V                  | QR           | esult      | DILLO   | a va | Result | DIL      | LQ           | 0      |
| EXPLOSIVES      | 2,4-Dinitrotoluene          | 0.33   | 1       | <     | 0 (        | 0.33     | 1      | < U       | 0,33    | 1              | <     | U    | 0.33   | t       | < 1 | U     | 0.33     | 1 <     | U   | 0,33       | 1        | < 1                   | 1 O          | ),33       | 1 <     | 4 U  | 0.33   | 1        | <            | U      |
| explosives      | 2,6-Dinitrotokuene          | 0.33   | 1       | <     | 0 0        | 0.33     | 1      | < Ų       | 0.33    | 1              | <     | U    | 0.33   | 1       | < 1 | U     | 0,33     | 1 <     | U   | 0.33       | 1        | < 1                   | 1 0          | .33        | 1 <     | 2 10 | 0,33   | 1        | <            | U      |
| AETALS          | Aluminum                    | 13400  | 1       |       | Ş          | 9660     | 1      |           | 11400   | 1              |       |      | 13500  | 1       |     | :     | 27900    | 1       |     | 24500      | 1        |                       | 8            | 190        | 1       |      | 8240   | 1        |              |        |
| WETALS          | Antimony                    | 3      | 1       | <     | U          | 3        | 1      | < U       | 3       | 1              | <     | U    | 3      | 1       | < 1 | ប     | 3        | 1 <     | U   | 5.04       | 1        |                       |              | 3          | 1 <     | : 10 | 3      | 1        | <            | IJ     |
| AFTAIS          | Arsenic                     | 19     | 1       | c     |            | 14       | 1      | ۔<br>د ۱۱ | 1       | ŕ              | ~     |      | 54     | •       |     |       | 32       | 1       | •   | 31         | 1        |                       | 1            | 47         | 1       |      | 51     | ,<br>I   |              | -      |
| AETAL C         | Parium                      | 04.2   | ÷       |       |            | 404      | ÷.,    |           | +00     | - 1            | 2     | ň    | 0.7    | :       |     |       | 242      |         |     | 444        | 2        |                       |              | 4.9        |         |      | 20.4   |          |              |        |
|                 | Dendi                       | 01.5   | '       | •     | 0          | 101      |        | ` U       | 130     | '              | `     | U    | 01.7   | r       |     |       | 242      | •       |     | 114        | '        |                       |              | <b>H.Z</b> | •       |      | 30.4   |          |              |        |
| WETALS          | Beryinum                    | Ι.     |         |       | -          |          |        |           |         |                |       |      |        |         |     |       | _        |         |     |            |          |                       |              | _          |         |      |        |          |              |        |
| WETALS          | Cadmium                     | 1      | 1       | <     | 5          | 1        | 1      | < U       | - 1     | 1              | <     | U    | 2.34   | 1       |     |       | 1        | 1 <     | U   | 1.57       | 1        |                       | 2            | 177        | 1       |      | 1.43   | 1        |              |        |
| METALS          | Calcium                     | 2030   | 1       |       | 1          | 812      | 1      |           | 1920    | 1              |       |      | 1970   | 1       |     |       | 940      | 1       |     | 1260       | 1        |                       |              | 557        | 1       |      | 435    | 1        |              |        |
| METALS          | Chromium                    | 19.8   | 1       | <     | J -        | 12.4     | 1      | < U       | 15.2    | 1              | <     | U    | 16.2   | 1       |     |       | 22       | 1       |     | 18.8       | 1        |                       |              | 22         | 1       |      | 24.5   | 1        |              |        |
| METALS          | Cobalt                      | 8      | 1       |       |            | 9        | 1      |           | 71.3    | 1              |       |      | 3.69   | t       |     |       | 8.61     | 1       |     | 12.6       | 1        |                       | 2            | .26        | 1       |      | 1.74   | 1        |              |        |
| METALS          | Copper                      | 3.8    | 1       |       |            | 3.7      | 1      |           | 8.1     | 1              |       |      | 7.45   | 1       |     |       | 9.31     | 1       |     | 6.75       | t        |                       | 6            | .54        | 1       |      | 5.66   | 1        |              |        |
| AFTALS          | Imp                         | 20600  | 1       |       | 1          | 1600     |        |           | 11000   |                |       |      | 34400  | 4       |     |       | 23200    | 4       |     | 20600      | 4        |                       |              | 1200       |         |      | 27300  |          |              |        |
|                 | Load                        | 0.0    |         |       |            | 0.0      | :      |           | F 1000  |                |       |      | 40     |         |     |       | 20200    |         |     | 20000      | 5        |                       | -            |            | :       |      | 21000  | :        |              |        |
|                 | Lead                        | 9.0    | :       |       |            | 9.6      |        |           | 5       |                |       |      | 4.Z    | 1       |     |       | 0.9      | 1       |     | 0          | 1        |                       |              | 5          | 1       |      | 3      | 1        |              |        |
| METALS          | Magnesium                   | 958    | 1       |       |            | /14      | 1      |           | 2910    | 1              |       |      | 668    | . 1     |     |       | 16/0     | 1       |     | 14/0       | 1        |                       | -            | 247        | 1       |      | 261    | 1        |              |        |
| METALS          | Manganese                   | 202    | \$      |       | :          | 312      | 1      |           | 1470    | 1              |       |      | 206    | .1      |     |       | 486      | 1       |     | 434        | 1        |                       |              | 81         | 1       |      | 43.4   | 1        |              |        |
| <b>METALS</b>   | Mercury                     | 0.t    | 1       | <     | Ľ          | 0.1      | 1      | < U       | 0.1     | 1              | <     | U    | 0.1    | 1       | < 1 | U     | 0.1      | 1 <     | υ   | 0.1        | 1        | < 1                   | Ji           | D.1        | 1 <     | : U  | 0.1    | 1        | <            | U      |
| METALS          | Nicket                      |        |         |       |            |          |        |           |         |                |       |      |        |         |     |       |          |         |     |            |          |                       |              |            |         |      |        |          |              |        |
| <b>WETALS</b>   | Potassium                   | 564    | 1       |       | ;          | 382      | 1      |           | 1100    | 1              |       |      | 672    | 1       |     |       | 1310     | 1       |     | 1330       | 1        |                       | 3            | 302        | 1       |      | 315    | 1        |              |        |
| METALS          | Selenium                    | 1      | t       | <     | J          | 1        | 1      | < 11      | 1       | ť              | <     | Ł    | 1      | 1       | < 1 | U     | 1        | 1 <     | B   | 1          | 1        | < 1                   | ۔<br>ر       | 1          | 1 <     | : 11 | 1      | 1        | <            | U      |
| AFTALS          | Silver                      |        |         | <     | Ŧ          | †        | 1      | с н       |         |                | 2     | Ū    |        |         | 2   |       |          | 4       | п   | 103        | i        |                       | -            |            |         | . 11 |        | ÷        | è            | ñ      |
| ACTAL O         | Sadium                      |        | •       |       | -          | •        | • •    |           | r       |                | -     |      | •      | '       |     | 5     | '        |         | 0   | 1.05       | •        |                       |              | •          | , (     |      |        | •        | -            | J      |
| MCTALS          | Sodinit                     |        |         |       |            |          |        |           |         |                |       |      |        |         |     |       |          | -       |     |            |          |                       | _            |            |         |      |        |          |              |        |
| ALIALS          | Strontum                    | 14     | 1       |       |            | 9.9      | 1      |           | 39.9    | 1              |       |      | 18.9   | 1       |     |       | 20.8     | 1       |     | 17.1       | 1        |                       | 7            | .61        | 1       |      | 5.71   | 1        |              |        |
| <b>RETALS</b>   | Thallium                    |        |         |       |            |          |        |           |         |                |       |      |        |         |     |       |          |         |     |            |          |                       |              |            |         |      |        |          |              |        |
| <b>AETALS</b>   | Vanadium                    |        |         |       |            |          |        |           |         |                |       |      |        |         |     |       |          |         |     |            |          |                       |              |            |         |      |        |          |              |        |
| AETALS          | Zinc                        | 23.9   | 1       |       |            | 15.4     | 1      |           | 45.3    | 1              |       |      | 24.9   | 1       |     |       | 35.7     | 1       |     | 31.7       | 1        |                       | 1            | 9.8        | 1       |      | 10.7   | 1        |              |        |
| RANGE_ORGANICS  | Carbon Range C12-C28        |        |         |       |            |          |        |           |         |                |       |      |        |         |     |       |          |         |     |            |          |                       |              |            |         |      |        |          |              |        |
| RANGE ORGANICS  | Carbon Rance C28-C35        |        |         |       |            |          |        |           |         |                |       |      |        |         |     |       |          |         |     |            |          |                       |              |            |         |      |        |          |              |        |
| RANGE ORGANICS  | Carbon Ranoa C&C12          |        |         |       |            |          |        |           |         |                |       |      |        |         |     |       |          |         |     |            |          |                       |              |            |         |      |        |          |              |        |
|                 | 124 Triphorphonzono         |        |         |       |            |          |        |           | 0.22    |                |       | ••   | 0.00   |         |     |       | 0.00     |         |     | 0.00       |          |                       |              |            |         |      | D 22   |          | <u>.</u>     |        |
| CHINOL ATLES    |                             | 0.00   |         |       |            | 0.33     |        |           | 0.33    |                | •     |      | 0.33   |         |     |       | 0.33     | 1 4     |     | 0.33       | 1        | < 1                   |              | .33        | 1 <     |      | 0.33   | 1        | ٩            |        |
| SEMIVOLATILES   | 1,2-Dichloropenzene         | 0.33   | 1       | <     |            | 0.33     | 1 1    | ¢ U       | 0.33    | 1              | <     | U    | 0.33   | 1       | < ( | U     | 0.33     | 1 <     | U   | 0.33       | 1        | < 1                   | 3 0          | .33        | 1 <     | ິບ   | 0.33   | 1        | <            | υ      |
| SEMIVOLATILES   | 1,3-Dichlorobenzene         | 0.33   | 1       | <     | 1 (        | 0.33     | 1 .    | < ម       | 0.33    | 1              | <     | U    | 0,33   | 1       | < 1 | U     | 0.33     | 1 <     | U   | 0.33       | 1        | < 1                   | ) 0          | .33        | 1 <     | U    | 0.33   | 1        | <            | U      |
| SEMIVOLATILES   | 1,4-Dichlorobenzene         | 0,33   | 1       | <     | J          | 0.33     | 1 .    | < 1)      | 0.33    | 1              | <     | U    | 0.33   | t       | < 1 | U     | 0.33     | 1 <     | U   | 0.33       | t        | < 1                   | ) 0          | .33        | 1 <     | : U  | 0.33   | 1        | <            | υ      |
| SEMIVOLATILES   | 2,4,5-Trichlorophenol       | 1.65   | 1       | <     | J          | 1.65     | 1 .    | < 17      | 1.65    | 1              | <     | U    | 1.65   | 1       | < ( | U     | 1.65     | 1 <     | U   | 1.65       | 1        | < 1                   | J 1          | .65        | 1 <     | U U  | 1.65   | 1        | <.           | U      |
| SEMIVOLATILES   | 2,4,6-Trichlorophenol       | 0.33   | t       | < 1   | J (        | 0.33     | 1 .    | < U       | 0.33    | 1              | <     | U    | 0.33   | 1       | < 1 | ย     | 0.33     | 1 <     | U   | 0.33       | 1        | < 1                   | , 0          | .33        | 1 <     | . U  | 0.33   | 1        | <            | IJ     |
| SEMIVOLATILES   | 2.4-Dichlorophenal          | 0.33   | t       | < 1   |            | 0.33     | 1 .    | < U       | 0.33    | 1              | <     |      | 0.33   | 1       | < 1 |       | 0.33     | 1 <     | ŭ   | 033        | 1        | < 1                   | , n          | 33         | 1 <     | . U  | 0.33   | 1        | <            | ų.     |
| EMILION ATHES   | 2 4 Dimethylphenol          | 0.33   | ÷       |       |            | 0.32     | ÷      |           | 5,22    | ÷              | 2     | Ď    | 0.22   | ÷       |     |       | 0.00     |         | ň   | 0.22       | ÷        |                       |              | 22         |         | ŭ    | 0.22   |          |              | ŭ      |
|                 |                             | 4.05   | 1       |       |            | 4.00     | 1      |           | 4.05    |                |       |      | 0.05   |         |     |       | 0.35     |         |     | 0.33       |          |                       |              |            |         |      | 0,33   | -        | `            |        |
| ENVOLATILES     | 2,4-1,7111000000            | 1.00   | 1       | <     |            | 1.00     |        | < U       | 1.65    | 1              | <     | U    | 1,65   | 1       | < ( | U     | 1.05     | 1 <     | U   | 1.65       | 1        | < 1                   | J 1          | .65        | 1 <     | U    | 1.65   | 1        | <            | U      |
| SEMIVOLATILES   | 2-Chloronaphthalene         | 0.33   | 1       | < 1   | 9 (        | 0.33     | 1 '    | < 0       | 0.33    | 1              | ~     | U    | 0.33   | 1       | < ( | U     | 0.33     | 1 <     | U   | 0.33       | 1        | < 1                   | } 0          | .33        | 1 <     | U    | 0.33   | 1        | <            | U      |
| SEMIVOLATILES   | 2-Chlorophenol              | 0.33   | 1       | <     | ) (        | 0.33     | 1 .    | c U       | 0.33    | 1              | <     | U    | 0.33   | 1       | < 1 | U     | 0.33     | 1 <     | U   | 0.33       | †·       | < 1                   | 1 0          | .33        | 1 <     | U I  | 0.33   | 1        | <            | U      |
| SEMIVOLATILES   | 2-Methylinaphthalene        | 0.33   | 1       | < 1   | ) (        | 0.33     | 1      | c U       | 0.33    | 1              | <     | U    | 0.33   | 1       | < ເ | Ų     | 0.33     | 1 <     | U   | 0.33       | 1        | < 1                   | J 0          | .33        | 1 <     | U    | 0.33   | 1        | <            | U      |
| SEMIVOLATILES   | 2-Methylphenol              | 0.33   | 1       | <     | J (        | 0.33     | 1 .    | < U       | 0.33    | 1              | <     | ۰U   | 0.33   | 1       | < 1 | U     | 0.33     | 1 <     | U   | 0.33       | 1        | < (                   | J O          | .33        | 1 <     | U    | 0.33   | 1        | <            | U      |
| SEMIVOLATILES   | 2-Nitroanitine              | 1.65   | t       | < 1   | J          | 1.65     | 1 .    | < U       | 1.65    | 1              | <     | U    | 1.65   | 1       | < 1 | U     | 1.65     | 1 <     | U   | 1.65       | 1        | < 1                   | 1            | .65        | 1 <     | t t  | 1.65   | 1        | <            | U      |
| EMVOLATILES     | 2-Nitrophenel               | 0.33   | 1       | <     | 1          | 0.33     | 1 .    | < 11      | 0 33    | 1              | <     | ti   | 0.33   | 1       | < 1 | 15    | 0.33     | 1 <     | Đ   | 6.33       | 1        | < 1                   | 1 0          | 33         | 1 <     | . Ht | 0.33   | 1        | <            | Ū.     |
| SEMBLY OF ATHES | 3 3' Dichlorohanziviine     | 0.65   | 4       | -     |            | 0.65     | · .    | - H       | 0.65    |                | ~     | 11   | 0.65   |         | - 1 | -     | 0.65     |         | ň   | 0.65       |          |                       |              | 65         |         |      | 0.65   |          |              | ň      |
|                 | 2 Nikosnikus                | 4.65   | 4       | 2     |            | 4.05     |        |           | 4.05    |                | 2     |      | 4.05   | :       |     |       | 4.05     |         |     | 0.03       | 1        |                       |              | .03        |         |      | 0.05   | 1        | 2            |        |
|                 |                             | 1.05   |         | •     |            | 1.05     | ! '    |           | 1.00    | 1              | •     | U    | 1.05   | 1       | < 1 | U     | 1.05     | 1 <     | U   | 1.05       | 1        | < 1                   | 1            | .00        | 1 <     | u    | 1.05   | 1        | <            | U      |
| SEMIVOLATILES   | 4,6-Dinitro-2-methylphenol  | 1.65   | 1       | <     | 3 1        | 1.65     | 1 .    | < U       | 1.65    | 1              | <     | U    | 1.65   | 1       | < 1 | U     | 1.65     | 1 <     | U   | 1.65       | 1        | < 1                   | Jt           | .65        | 1 <     | U    | 1.65   | 1        | <            | U      |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether  | 0,33   | 1       | < 1   | ) (        | 0.33     | 1 .    | < U       | 0.33    | 1              | <     | U    | 0.33   | . 1     | < ( | U     | 0.33     | 1 <     | U   | 0.33       | 1        | < ເ                   | } 0          | .33        | 1 <     | : U  | 0.33   | 1        | <            | U      |
| SEMIVOLATILES   | 4-Chloro-3-methylphenol     | 0.65   | 1       | < 1   | J (        | 0.65     | 1 .    | < 1       | 0.65    | 1              | <     | U    | 0.65   | 1       | < L | U     | 0.65     | 1 <     | U   | 0.65       | 1        | < l                   | JO           | .65        | 1 <     | U :  | 0.65   | 1        | <            | U      |
| EMIVOLATILES    | 4-Chloroaniline             | 0.65   | 1       | <     | ) (        | 0.65     | 1 .    | < U       | 0.65    | 1              | <     | U    | 0.65   | 1       | < i | U     | 0.65     | 1 <     | ប   | 0.65       | 1        | < 1                   | J 0          | .65        | 1 <     | U    | 0.65   | 1        | <            | U      |
| EMIVOLATILES    | 4-Chlorophenyi phenyi ether | 0.33   | 1       | < 1   | 3 (        | 0.33     | 1 .    | < U       | 0.33    | 1              | <     | U    | 0.33   | 1       | < 1 | U     | 0.33     | 1 <     | ប   | 0.33       | 1        | < t                   | j û          | .33        | 1 <     | ีย   | 0.33   | 1        | <            | U      |
| SEMIVOLATILES   | 4-Methylphenol              | 0.33   | 1       | < 1   | J (        | 0.33     | ł.     | c 11      | 0.33    | 1              | <     | U    | 033    | 1       | < 1 | LI LI | 0.33     | 1 <     | 11  | 0.33       | 1        | e 1                   | 1 6          | 33         | 1 2     | 11   | 0.33   | 1        | ~            | EF.    |
| SEMINOLATILES   | A-Nitroznikne               | 1.65   | ÷       | -     | í          | 1 65     | ÷.     | . 11      | 165     | 4              |       | ň    | 1.65   |         | - 1 | n v   | 4 65     |         |     | 1 65       | ;        |                       |              | 55         |         |      | 1.65   | ;        | 2            | ň.     |
|                 |                             | 1.00   |         |       |            | 1.00     |        |           | 1,05    |                | `     |      | 1.00   |         |     |       | 1.03     |         |     | 1.03       |          | ۰ I                   |              | .05        |         |      | 1,00   |          | •            |        |
| SEMIVOLATILES   | 4-Micophenoi                | 1.00   | 1       | < ]   |            | C0.1     | 1      | . 1       | 1.65    | 1              | <     | U    | 1.03   | 1       | < ι | U     | 1.65     | 1 <     | U   | 1.65       | 1        | < t                   | 1            | .65        | 1 <     | U    | 1,65   | 1        | <            | U      |
| SEMIVOLATILES   | Acenaphthene                | 0.33   | 1       | < 1   | ) (        | 0.33     | 1 1    | < U       | 0.33    | 1              | <     | U    | 0.33   | 1       | < l | U     | 0.33     | 1 <     | U   | 0.33       | t        | < (                   | ; 0          | .33        | 1 <     | U    | 0.33   | 1        | <            | U      |
| EMIVOLATILES    | Acenaphthylene              | 0.33   | 1       | < 1   | ) (        | 0.33     | 1      | ່ປ        | 0.33    | 1              | <     | U    | 0.33   | 1       | < 1 | U     | 0.33     | 1 <     | U   | 0.33       | 1        | < i                   | 1 0          | .33        | 1 <     | υ    | 0.33   | 1        | <            | U      |
| EMIVOLATILES    | Anthracene                  | 0.33   | 1       | < 1   | , (        | 0.33     | 1      | ن ا       | 0,33    | 1              | <     | U    | 0.33   | 1       | < { | U     | 0.33     | 1 <     | U   | 0.33       | .1       | < (                   | ¢ 0          | .33        | 1 <     | U    | 0.33   | 1        | <            | U      |
| EMIVOLATILES    | Benzo(a)anthracene          | 0.33   | 1       | < 1   | ) (        | 0.33     | 1 .    | ្ប        | 0,33    | 1              | <     | U    | 0.33   | 1       | < 1 | U     | 0.33     | 1 <     | U   | 0.33       | t        | < 1                   | ) 0          | .33        | 1 <     | U    | 0.33   | 1        | <            | υ      |
| EMINOLATILES    | Benzolalovrene              | 0.33   | 1       | < 1   |            | 33       | 1 .    | c 11      | N 33    | 1              | e     | 11   | 0 33   | 1       | e 1 | -     | 633      | 1 .     |     | 0.33       | ÷        | <ul> <li>i</li> </ul> |              | 99         | · .     |      | 0.33   |          | 2            | ii.    |
| EMINON ATH ES   | Banzalathurzathana          | 0.93   | ÷       | ~ 1   |            | 1 22     |        |           | 0.00    |                | 5     | ir i | 0.22   | ÷       |     |       | 0.00     |         | ň   | 0.00       | :        | 2                     |              |            |         |      | 0.22   |          |              | ŭ      |
|                 | Denzo(b)ndoranazene         | 0.35   |         |       |            |          |        |           | 0.33    |                | •     |      | 0.33   | 1       | < L |       | 0,33     | • •     | U   | 0.33       | 1        | < ι                   |              | .33        | 1 <     | U    | 0.33   | 1        | ٢.           |        |
| INIVOLATILES    | Denzo(gni)peryiene          | 0.33   | 1       | < 1   | , (        | 1.31<br> | 1 4    | U U       | 0.33    | 1              | <     | U    | 0.33   | 1       | < ( | U     | 0.33     | 1 <     | U   | 0.33       | 1        | < ເ                   | 0            | .33        | 1 <     | U    | 0.33   | 1        | <            | U      |
| SEMIVOLATILES   | Benzo(k)fluoranthene        | 0.33   | 1       | < 1   |            | 1.33     | 1      | < U       | 0.33    | 1              | <     | U    | 0.33   | 1       | < ເ | U     | 0.33     | 1 <     | U   | 0.33       | 1        | < L                   | 0 1          | .33        | 1 <     | U    | 0.33   | 1        | <            | U      |
| SEMIVOLATILES   | Benzoic Acid                | 1.65   | 1       | < 1   | J          | 1.65     | 1 •    | < U       | 1.65    | 1              | <     | U    | 1.65   | 1       | < L | U     | 1.65     | 1 <     | U   | 1.65       | 1        | < t                   | 1 1          | .65        | 1 <     | ų    | 1.65   | 1 -      | <            | U      |
| EMIVOLATILES    | Benzyl Alcohoł              | 0.65   | 1       | < 1   |            | 0.65     | 1 .    | c U       | 0.65    | 1              | <     | U    | 0.65   | 1       | < 6 | U     | 0.65     | 1 <     | U   | 0,65       | 1        | < 1                   | 1 0          | .65        | 1 <     | U    | 0,65   | 1        | <            | U      |
| EMIVOLATILES    | bis(2-Chloroethoxy)methans  | 0.33   | 1       | < 1   | J          | 0.33     | 1 .    | . U       | 0.33    | 1              | <     | U    | 0.33   | 1       | < 1 | u     | 0.33     | 1 <     | IJ  | 0.33       | t        | < 1                   | 1 0          | .33        | 1 -     | u    | 0.33   | 1        | <            | v      |
| EMIVOLATILES    | bis/2-Chlorpethy9ether      | 0.33   | 1       | < 1   | , ,        | 0.33     | 1 .    | c 11      | 6 33    | 4              | <     | ŧ    | 0.33   | 1       | < 1 | 1     | 0.33     | 1 -     | ii. | 0.33       | 1        | < 1                   |              | 33         | 4       | n.   | 0.32   | 1        | <            | Đ.     |
| EMINOLATILES    | his/2-Chlornisoproputation  | 0.33   |         | 2     |            | 1 99     | ;      | - 11      | 0.33    | :              | 2     | ñ    | 0.22   |         |     |       | 0.32     |         |     | 0.00       | 1        |                       | , U          |            |         |      | 0.00   | 2        | _            | й<br>Н |
|                 | bio/2 Ethylany and the late | 0.00   | 1       | 2     | , (<br>, - |          | 2      |           | 0.00    |                |       |      | 0.33   |         |     |       | 0,33     | . <     | 0   | 0.33       | 1        | <u> </u>              | . 0          | .33        | 1 <     | U    | 0.33   | 1        | *            | 0      |
| CMINUCATILES    | uisiz-cuixinexkilburgiana   | 0.33   | 1       | < 1   | . (        | 53,5     | 1 4    | U U       | 0.33    | 1              | <     | U    | 0.33   | 1       | < L | u.    | U.33     | I <     | U   | 0.33       | 1        | < i                   | <b>7 C</b> . | .33        | 1 <     | U    | 0.33   | 1        | <            | U      |
| CMIVULATILES    | Butyl benzyl phthalate      | 0.33   | 1       | < 1   | ) (        | 1,33     | 1 •    | ¢υ        | 0.33    | 1              | <     | U    | 0.33   | 1       | < t | U I   | 0.33     | 1 <     | U   | 0.33       | 1        | < 1                   | 0            | .33        | 1 <     | U    | 0.33   | 1        | <            | U      |
| EMIVOLATILES    | Chrysene                    | 0.33   | 1       | < 1   | ) (        | 0.33     | 1 •    | < U       | 0.33    | 1              | <     | U    | 0.33   | 1       | < ι | U ·   | 0.33     | 1 <     | U   | 0.33       | 1        | < ا                   | 0            | .33        | 1 <     | U    | 0.33   | 1        | <            | U      |
| EMIVOLATILES    | Dibenzo(a,h)anthracene      | 0.33   | 1       | < 1   | ) (        | 0.33     | 1 .    | εU        | 0.33    | 1              | <     | U    | 0.33   | 1       | < 1 | J I   | 0.33     | 1 <     | U   | 0.33       | 1        | < ι                   | 0            | .33        | 1 <     | ป    | 0.33   | 1        | <            | U      |
| EMIVOLATILES    | Dibenzofuran                | 0.33   | 1       | < 1   | J          | 0.33     | 1 -    | ÷ υ       | 0.33    | - 1            | <     | U    | 0.33   | 1       | < 1 | J     | 0.33     | 1. <    | U   | 0.33       | 1        | < 1                   | 1 0          | .33        | 1 <     | U    | 0.33   | -1       | <            | υ      |
|                 | •                           |        |         |       | -          |          |        | _         |         | -              |       |      | 1.00   | -       |     |       | -        |         | -   |            | ~        |                       |              | -          |         | -    |        | -        |              | -      |



| 11+<br>11+-<br>7.<br>9 | I-S07-0<br>S07-0<br>/9/199<br> - 11 ]<br>REG | 02<br>12_3<br>13<br>Ft |         |
|------------------------|--|------------------------|---------|
| Result                 | DIL  | LQ                     | VQ      |
| 0,33                   | 1  | ۲<br>۲                 | U       |
| 0.33<br>9420           | 1  | •                      | U       |
| 3                      | 1  | <                      | U       |
| 1                      | 1  | <                      | U       |
| 290                    | 1  | <                      | IJ      |
| 4                      |  |                        |         |
| 1570                   | ÷  | ·                      | U       |
| 10.5                   | 1  | ۲                      | U       |
| 38.4                   | 1  |                        |         |
| 4.9                    | 1  |                        |         |
| 8980<br>10.0           | 1  |                        |         |
| 1960                   | ł  |                        |         |
| 1310                   | 1  |                        |         |
| 0.1                    | 1  | <                      | U       |
|                        |  |                        |         |
| 658                    | 1  |                        |         |
| 1.1                    | i  | `                      | •       |
|                        |  |                        |         |
| 31.1                   | 1  |                        |         |
|                        |  |                        |         |
| 21.5                   | 1  |                        |         |
|                        |  |                        |         |
|                        |  |                        |         |
| 0.33                   | 4  |                        |         |
| 0.33                   | 1  | ł                      | U       |
| 0.33                   | 1  | <                      | ប       |
| 0.33                   | 1  | <                      | U       |
| 1.65                   | 1  | <                      | U       |
| 0,33                   | 1  | د<br>د                 | U<br>II |
| 0.33                   | Ť  | <                      | U       |
| 1.65                   | 1  | <                      | U       |
| 0.33                   | 1  | <                      | U       |
| 0.33                   | 1  | <                      | U       |
| 0.33                   | 1  | Ì                      | υ<br>ε  |
| 1.65                   | 1  | <                      | ບ       |
| 0.33                   | 1  | <                      | U       |
| 0.65                   | 1  | ۲                      | U       |
| 1.55                   | 1  | ÷                      | U<br>II |
| 0.33                   | 1  | <                      | Ŭ       |
| 0.65                   | 1  | <                      | U       |
| 0.65                   | 1  | <                      | U       |
| 0.33                   | 1  | ~                      | U       |
| 1.65                   | 1  | Ż                      | U       |
| 1.65                   | 1  | <                      | U       |
| 0.33                   | t  | <                      | U       |
| 0.33                   | 1  | ۲                      | 0       |
| 0.33                   | 1<br>1                                       | č                      | 0       |
| 0.33                   | 1  | ۲                      | ŭ       |
| 0.33                   | 1  | <                      | U       |
| 0.33                   | 1  | ۲                      | U       |
| 0.33                   | 1  | ۲<br>۲                 | U       |
| 0.65                   | 1  | č                      | U       |
| 0.33                   | 1  | <                      | บ       |
| 0.33                   | 1  | <                      | U       |
| 0.33                   | 1  | <                      | U       |
| 0.33                   | 1  | ۲<br>۲                 | 0       |
| 0.33                   | 3<br>1                                       | <<br><                 | U       |
| 0.33                   | 1  | <                      | Ũ       |
| 0.33                   | 1  | <                      | U       |

#### Table 3-6

Concentrations of Chemicals in Soil Samples Associated with Sump 006

| [SUMP] = SUMP006 |                             |   |                 |                     |                  |                  |                 |                  | _                |
|------------------|-----------------------------|---|-----------------|---------------------|------------------|------------------|-----------------|------------------|------------------|
| LOCATION _CODE   |                             | LH-S06-02                               | LH-\$06-02      | LH-S06-02           | LH-S07-01        | LH-S07-01        | LH-S07-01       | LH-S07-02        | LH-S07-02        |
| SAMPLE_NO        |                             | LH-S06-02_1                             | LH-S06-02_2     | LH-S06-02_3         | LH-507-01_1      | LH-S07-01_2      | LH-S07-01_3     | LH-S07-02_1      | LH-\$07-02_2     |
| SAMPLE_DATE      |                             | 7/9/1993                                | 7/9/1993        | 7/9/1993            | 6/25/1993        | 6/25/1993        | 6/25/1993       | 6/25/1993        | 6/25/1993        |
| DEPTH            |                             | 0 - 2 Ft                                | 3-5Ft           | 10 - 12 Ft          | 0.5 - 2.5 Ft     | 2.5 - 4.5 Ft     | 9 - 11 Ft       | 0-2+t            | 2-4 H            |
| SAMPLE_PURPOSE   |                             | REG                                     | REG             | REG                 | REG              | REG              | REG             | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ                        | Result DIL LQ V | VQ Result DIL LQ VC | Result DIL LQ VQ | Result UIL LQ VQ | Kesur Dil Lu VQ | Resure Dil LQ VQ | Result DIL LU VU |
| SEMIVOLATILES    | Diethyl phthalate           | 0.33 1 < 0                              | 0.33 1 <        | 0 0.33 1 < 0        | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0      | 0.33 1 4 0       | 0.33 1 4 0       |
| SEMIVOLATILES    | Unnethyl phthalate          | 0.33 1 < 0                              | 0.33 1 <        | 0 0.33 1 < 0        |                  | 0.33 1 4 0       | 0.33 7 4 0      | 0,33 1 < 0       | 0.33 1 4 0       |
| SEMIVOLAHLES     | di-n-Butyt primalate        |   | 0.33 1 4        |                     |                  | 0.33 1 < 11      | 0.33 1 4 11     | 0.30 1 4 0       | 0.33 1 c li      |
| SEMINOLATILES    | Ekromethana                 |   | 0.33 1 4        | 0 0.33 1 < 0        | 0.33 1 4 0       | 033 t < 1        | 0.33 1 < 0      | 0.33 1 < U       | 0.33 1 < 0       |
|                  |                             |   | 0.33 1 4        | 11 033 1 < 11       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Horachimhenzene             | 0.33 1 < 11                             | 0.33 1 <        | 11 033 1 < 11       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 t < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorobutadiene         | 0.33 1 < U                              | 0.33 1 <        | U 0.33 1 < U        | 0.33 1 < U       | 0.33 t < U       | 0.33 t < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachiorocyclopentadiene   | 0.33 1 < U                              | 0.33 1 <        | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachloroethane            | 0.33 1 < U                              | 0.33 1 <        | ีป 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene      | 0,33 1 < U                              | 0.33 1 <        | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0,33 1 < ⊍       |
| SEMIVOLATILES    | Isophorone                  | 0.33 1 < U                              | 0.33 1 <        | ย.0.33 1 < ย        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Naphthalene                 | 0.33 1 < U                              | 0.33 1 <        | U 0.33 1 < U        | 0.33 1 < ⊍       | 0.33 1 < U       | 0,33 1 < U      | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES    | Nitrobenzene                | 0.33 1 < U                              | 0.33 1 <        | U 0.33 1 < U        | 0,33 1 < じ       | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0,33 t < U       |
| SEMIVOLATILES    | n-Nétroso-di-n-propylamine  | 0,33 1 < U                              | 0.33 1 <        | U 0.33 1 < U        | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < 1       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      | 0.33 1 < U                              | 0.33 1 <        | U 0.33 1 < U        | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Pentachlorophenol           | 1.65 1 < U                              | 1.65 1 <        | U 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U       | 1,65 1 < U      | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | Phenanthrene                | 0.33 1 < U                              | 0.33 1 <        | U 0,33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0,33 1 < 0       |
| SEMIVOLATILES    | Phenol                      | 0.33 1 < U                              | 0.33 1 <        | U 0.33 1 < U        | 0.33 1 < 0       | 0.33 1 < 0       | 0,33 1 < U      | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES    | Рутеле                      | 0.33 1 < 0                              | 0.33 1 <        | 0 0.33 1 < 0        | 0,33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0      | 0.33 1 < 0       | 0.33 1 < 0       |
| TPH              | Hydrocarbons as Diesel Fuel |   |                 |                     |                  |                  |                 |                  |                  |
| 1PH              | Hydrocarbons as Gasoline    |   |                 |                     |                  |                  |                 |                  |                  |
| IPH<br>VOLATILES | 1 t 1 Techlomothana         | 0.005 1 4 11                            | 0.005 t <       | 11 0.005 1 c 11     | 0.005 t < 11     | 0005 1 < ∄       | 0.005 1 < 11    | 0005 1 < U       | 0.005 1 < 1      |
|                  | 1, 1, 1-110-100-0000 (arres | 1 0.005 1 < 11                          | 0.005 1 <       | 1 0.005 1 < 1       | 0.005 1 < 0      | 0.005 1 < 1      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1 1 2 Trichingethane        | 0.005 1 < 1                             | 0.005 1 <       | 1 0.005 1 < 1       | 0.005 1 < U      | 0.005 1 < 1      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1. 1-Dichloroethane         | 0.005 1 < U                             | 0.005 1 <       | U 0.005 1 < U       | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U     | 0.005 t < U      | 0.005 t < U      |
| VOLATILES        | 1.1-Dichloroethene          | 0,005 1 < U                             | 0.005 t <       | U 0.005 t < U       | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichloroethane          | 0.005 1 < U                             | 0.005 1 <       | U 0.005 t < U       | 0,005 1 < U      | 0.005 t < U      | 0.005 t < U     | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichloroethene          | 0.005 t < U                             | 0.005 1 <       | U 0.005 1 < U       | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | 1,2-Dichloropropane         | 0.005 1 < U                             | 0.005 1 <       | U 0,005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 2-Butanone                  | 0.05 1 < U                              | 0.05 1 <        | U 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U      | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | 2-Chloroethyl vinyl ether   | 0.01 1 < U                              | 0.01 1 <        | U 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U      | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | 2-Hexanone                  | 0.05 1 < U                              | 0.05 1 <        | U 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 f < U      | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | Acetone                     | 0,1 1 < U                               | 0.1 1 <         | U 0.1 1 < U         | 0.1 1 < 0        | 0.1 1 < U        | 0.1 1 < U       | 0.1 1 < 0        | 0.1 1 < 0        |
| VOLATILES        | Benzene                     | 0.005 1 < 0                             | 0.005 1 <       | 0 0.005 1 < 0       | 0,005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0     | 0.005 1 < 0      |                  |
| VOLATILES        | Bromodichioromethane        | 0.005 1 < 0                             | 0.005 7 <       |                     | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 4 1     | 0.005 1 < 0      | 0.005 1 4 0      |
| VOLATILES        | Bromotorm                   |   | 0.005 1 1       |                     | 0.003 3 < 0      |                  |                 | 0.001 1 < 11     | 0.000 1 C U      |
| VOLATILES        | Carbon disulfida            | 0.005 1 < 0                             | 0.06 1 <        | U 0.01 1 < U        | 0.065 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILÉS        | Carbon tetrachinide         | 0.005 1 < U                             | 0.005 1 <       | U 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chlorobenzene               | 0.005 1 < U                             | 0.005 t <       | U 0.005 1 < U       | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloroethane                | 0,01 1 < U                              | 0.01 1 <        | U 0.01 1 < U        | 0,01 1 < 8       | 0.01 1 < U       | 0.01 1 < U      | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Chloroform                  | 0.005 1 < U                             | 0.005 1 <       | U 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloromethane               | 0.01 1 < U                              | 0.01 t <        | U 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U      | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | cis-1,3-Dichloropropene     | 0,005 1 < U                             | 0.005 1 <       | U 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromochloromethane        | 0.005 1 < U                             | 0.005 1 <       | U 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0,005 1 < U      |
| VOLATILES        | Ethylbenzene                | 0,005 1 < U                             | 0.005 1 <       | U 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Methyl isobutyl ketone      | 0.05 1 < U                              | 0.05 t <        | U 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U      | 0.05 1 < 0       | 0.05 1 < U       |
| VOLATILES        | Methylene chloride          | 0.005 1 < U                             | 0.005 1 <       | U 0.005 1 < U       | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | Styrene                     | 0.005 1 < 0                             | 0.005 1 <       | U 0.005 1 < U       | 0.005 t < U      | 0.005 1 < ⊎      | 0.005 1 < 0     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Tetrachloroethene           | 0.005 1 < U                             | 0,005 1 <       | U 0.005 1 < U       | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | D,005 1 < U      |
| VOLATILES        | Toluene                     | 0.005 1 < 0                             | 0.005 1 <       | U 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U     | 0.005 t < U      | 0.005 7 < 0      |
| VOLATILES        | trans-1,3-Dichloropropene   | 0.005 1 < 0                             | 0,005 1 <       | U 0.005 1 < U       | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0     | 0.005 1 < U      | 0.005 1 < 0      |
| VULATILES        | Inchioroethene              | 0.005 1 < 0                             | 0,005 1 <       | U 0.005 T < U       | 0.005 1 < 0      | 0.005 1 < U      | 0.00 1 < U      |                  | 0.000 1 4 0      |
| VULATILES        | VENYI ACGETER               |   | 0.00 3 <        |                     | 0.00 1 K U       |                  | 0.00 1 < 0      |                  |                  |
| VULAHLES         |                             |   | 0.005 4 4       |                     | 0.005 4 2 12     |                  | 0.01 1 1 0      |                  | 0.005 1 2 11     |
| VULAHLES         | Ayret165, 10(at             | 1 | 0.000 1 <       | 0 0.000 ( C U       | 0.000 1 4 0      | 0.000 I < 0      | 0,000 1 4 0     | 0.003 1 1 0      |                  |

Footnotes are shown on cover page to Tables Section.



| Li<br>LH-<br>7<br>9 | H-S07-0<br>(507-0<br>(9/199<br>) - 11 | 02<br>2_3<br>13<br>Ft |         |
|---------------------|---------------------------------------|-----------------------|---------|
|                     | REG                                   |                       |         |
| Result              | DIL                                   | LQ                    | VQ      |
| 0.33                | 1                                     | <                     | U       |
| 0.33                | 1                                     | <                     | U       |
| 0.33                | 1                                     | <                     | U       |
| 0.33                | 1                                     | ۲                     | 0       |
| 0.33                | 1<br>1                                | Ĵ                     | U<br>11 |
| 0.00                |                                       | ì                     | 11      |
| 0.33                | 1                                     | ç                     | н       |
| 0.33                | 1                                     | <                     | Ũ       |
| 0.33                | 1                                     | <                     | Ū       |
| 0.33                | 1                                     | <                     | U       |
| 0.33                | 1                                     | <                     | U       |
| 0.33                | t                                     | <                     | U       |
| 0.33                | 1                                     | ۲                     | U       |
| 0.33                | 1                                     | <                     | U       |
| 0.33                | 1                                     | <                     | U       |
| 1.65                | 1                                     | <                     | U       |
| 0.33                | 1                                     | <                     | U       |
| 0.33                | 1                                     | <                     | U       |
| 0.33                | 1                                     | <                     | U       |
|                     |                                       |                       |         |
| 0.005               | 1                                     | <                     | U       |
| 0.005               | 1                                     | <                     | U       |
| 0.005               | 1                                     | <                     | Ų       |
| 0.005               | 1                                     | <                     | U       |
| 0.005               | 1                                     | <                     | U       |
| 0.005               | 1                                     | <                     | U       |
| 0.005               | 1                                     | <                     | U       |
| 0.005               | 1                                     | <                     | U       |
| 0.05                | 1                                     | <                     | U       |
| 0.01                | 1                                     | <                     | 0       |
| 0.05                | 1                                     | <                     | ย       |
| 0,1                 | 1                                     | <                     | υ       |
| 0,005               | 1                                     | ٢.                    | U       |
| 0.005               | 1                                     |                       | U       |
| 0.005               | -                                     | 2                     | ы       |
| 0.015               | 4                                     | Ì                     | 11      |
| 0.005               |                                       | è                     | й       |
| 0.005               |                                       | <                     | Ū       |
| 0.01                | 1                                     | <                     | Ū       |
| 0.005               | 1                                     | <                     | U       |
| 0.01                | 1                                     | <                     | U       |
| 0.005               | 1                                     | <                     | U       |
| 0.005               | 1                                     | <                     | U       |
| 0.005               | t                                     | <                     | U       |
| 0.05                | 1                                     | <                     | IJ      |
| 0.005               | 1                                     | <                     | U       |
| 0.005               | 1                                     | ۲                     | U       |
| 0.005               | 1                                     | <                     | U       |
| 0.005               | 1                                     | ٢                     | U       |
| 0.005               | 1                                     | <                     | U       |
| 0.005               | 1                                     | <                     | U       |
| 0.05                | 1                                     | <                     | U       |
| 0.01                | 1                                     | <                     | U U     |
| 0.005               | 1                                     | <                     | U       |

Table 3-7 Concentrations of Chemicals in Soil Samples Associated with Sump 007

| (SUMP) ≈ SUMP007<br>LOCATION _CODE<br>SAMPLE_NO |  | 35SUMP00<br>35-SMP07- | 07-SB01<br>SB01-01 | 35SUM<br>35-SMP | P007-SB01<br>107-SB01-02 | 35SUM<br>35-SM | #P007-SB02<br>207-SB02-01 | 35SU<br>35-SMP( | MP007-SB02<br>17-SB02-01-QC | 35SU<br>35-SM   | MP007-SB02<br>IP07-SB02-02 | HOSB04(0-    | <b>1</b><br>0,5} | HOSB04<br>HOSB04(3-5) | HOSB04<br>HOSB04(8-10) | HOSB05<br>HOSB05(0-0,5) | HOSB05<br>HOSB05(3-5) | HOSB05<br>HOSB05(3-5)QC | HOSB05<br>HOSB05(8-10) | LH-S064<br>LH-S06-01 | 01<br>I QC   | LH-50               | 06-01<br>5-01_1       | LH-50            | )6-01<br>6-01_2                           |
|---|--|-----------------------|--------------------|-----------------|--------------------------|----------------|---------------------------|-----------------|-----------------------------|-----------------|----------------------------|--------------|------------------|-----------------------|------------------------|-------------------------|-----------------------|-------------------------|------------------------|----------------------|--------------|---------------------|-----------------------|------------------|---|
| SAMPLE_DATE                                     |  | 9/11/2                | 006                | 9/1             | 1/2006                   | 9/             | 11/2006<br>- 0.5 Et       | 9               | 11/2006                     | 9               | /11/2006                   | 12/6/200     | 0<br>*           | 12/6/2000<br>3 - 5 Ft | 12/6/2000<br>8 - 10 Ft | 12/6/2000<br>0 - 0 5 Ft | 12/6/2000<br>3 - 5 Fl | 12/6/2000<br>3 - 5 Ft   | 12/6/2000<br>8 - 10 Ft | 7/9/199<br>0 - 2 F   | 13<br>1      | 7/9/1               | 1993<br>2 Ft          | 7/9/1<br>4 - 1   | .993<br>6 Ft                              |
| SAMPLE_PURPOSE                                  |  | REC                   | 3                  |                 | RÉG                      |                | REG                       |                 | FD                          |                 | REG                        | REG          |                  | REG                   | REG                    | REG                     | REG                   | FD                      | REG                    | FD                   |              | RE                  | G                     | RE               | G   |
| Test Group                                      | Parameter (Units = mg/kg)                                | Result D              | IL LQ VQ           | Result          | DIL LO VQ                | Result         | DIL LO VO                 | Result          | DIL LO, V                   | Q Result        | DIL LQ V                   | Q Result DIL | LQ VQ Re         | uit DIL LQ VQ         | Result DIL LQ          | VQ Result DiL LQ VQ     | Q Result DilL LO VO   | Result DiL LQ V         | Q Result DIL LO VQ     | Result DIL<br>0.33 1 | LQ VQ F      | Cesult Di<br>0.33 f | IL LO VO.             | Result D         |   |
| EXPLOSIVES                                      | 2,6-Dinitrototuene                                       |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < 1)         | 0.33 1              | U                     | 0.33             | i < Ū                                     |
| METALS<br>METALS                                | Aluminum   | 7800                  | 1<br>1 81          | 21300           | 1<br>1 H                 | 11300<br>0.113 | 1<br>1 11                 | 12400           | 1<br>1                      | 10600<br>0.113  | 1<br>1                     |              |                  |                       |                        |                         |                       |                         |                        | 4340 f<br>3 1        | 1<br>< U     | 0500 1<br>3 1       | <br>  < 1)            | 14400 3          | ।<br>1 < 1                                |
| METALS  | Arsenic  | 6,13                  | 1                  | 2.4             | 1                        | 2.42           | 1                         | 4.03            | 1                           | 0.449           | 1                          |              |                  |                       |                        |                         |                       |                         |                        | 1.6 1                | < U          | 4.7 1               | l < U                 | 1.5              | i < U                                     |
| METALS  | Barium<br>Bestellium                                     | 34.2                  | 1                  | 95.1<br>0.789   | 1                        | 86.9<br>0.542  | 1                         | 81.5<br>0.505   | 1                           | 42.2            | 1                          |              |                  |                       |                        |                         |                       |                         |                        | 27.5 1               | < U          | 51 1                | I < U                 | 126 1            | < 11                                      |
| METALS  | Cadmium  | 0.0835                | 1 J J              | 0.117           | 1 J J                    | 0.325          | t J J                     | 0.357           | :<br>: ] ]                  | 0.078           | 1 J                        | 1            |                  |                       |                        |                         |                       |                         |                        | 1 1                  | < U          | 1 1                 | । < U                 | 1 1              | េ < ២                                     |
| METALS  | Calcium  | 732                   | 1 J<br>1           | 865<br>23.5     | 1 J<br>4                 | 4300           | 1 J                       | 7780<br>19      | 1 J                         | 972             | t<br>1                     | 1            |                  |                       |                        |                         |                       |                         |                        | 425 1<br>124 1       | < U 3        | 944 1<br>20.8 1     | <br>  <  }            | 1130 1<br>13.2 1 | t < U                                     |
| METALS  | Cobalt   | 1.52                  | t J                | 8.63            | i J                      | 10.3           | i J                       | 5.46            | 1 .                         | 9.82            | 1                          | 1            |                  |                       |                        |                         |                       |                         |                        | 1 1                  | < U          | 5.1 1               |                       | 9.4              | 1   |
| METALS  | Copper   | 1.76                  | 1                  | 7.34            | 1                        | 5.11           | 1                         | 5.86            | 1                           | 3.33            | 1                          |              |                  |                       |                        |                         |                       |                         |                        | 1.26 1               |              | 4.4 1<br>10700 1    |                       | 5.1 1<br>14900 1 | 1<br>1                                    |
| METALS  | Lead   | 40000<br>5,28         | 10<br>1 J          | 8.97            | ւ<br>1 J                 | 9.65           | i<br>t J                  | 25.6            | 1 1                         | /340            | 1                          | J            |                  |                       |                        |                         |                       |                         |                        | 4.9 1                | -            | 10.2 1              | I                     | 8,9              | 1   |
| METALS  | Magnesium  | 429                   | 1                  | 1630            | 1                        | 677            | 1                         | 832             | 1                           | 1450            | 1                          |              |                  |                       |                        |                         |                       |                         |                        | 152 1                |              | 429 1               | 1                     | 897 1            | 1<br>4                                    |
| METALS  | Manganese<br>Mercury                                     | 123<br>0.0261         | 1<br>1 J J         | 125<br>0.276    | 1<br>1 U                 | 491<br>0.0424  | 1<br>1 J J                | 345<br>0.065    | 1<br>1 J J                  | 72.6<br>I 0.296 | ា<br>1 ម                   |              |                  |                       |                        |                         |                       |                         |                        | 0.1 1                | < U          | 209 1               | ,<br>, < ∪            | 262<br>0.1       | 1 < 8                                     |
| METALS  | Nickel   | 3.13                  | 1                  | 11.8            | 1                        | 7.15           | 1                         | 8.36            | 1                           | 9.54            | 1                          |              |                  |                       |                        |                         |                       |                         |                        |                      |              |                     |                       |                  |   |
| METALS<br>METALS                                | Potassium<br>Selenium                                    | 242<br>0.445          | 1<br>1             | 651<br>0.224    | 1<br>1 3 J               | 477<br>0.236   | 1                         | 502<br>0.261    | 1.                          | 405             | 1<br>1 U                   |              |                  |                       |                        |                         | •                     |                         |                        | 133 1<br>1 1         | < U          | 350 1<br>1 1        | <br>  < U             | 612<br>1         | 1 < U                                     |
| METALS  | Silver   | 1.58                  | 1 U                | 1.59            | 1 U                      | 1.63           | 1 U                       | 1.73            | 1 U                         | 1.79            | 1 ឋ                        |              |                  |                       |                        |                         |                       |                         |                        | 1 1                  | < U          | 1 1                 | I < Ų                 | 1 1              | ែ < ប                                     |
| METALS  | Sodium   | 25.8                  | 1                  | 312             | 1                        | 36.7           | 1                         | 41.3            | 1                           | 480             | 1                          |              |                  |                       |                        |                         |                       |                         |                        | 1 1                  | < 11         | 1 1                 | . < .                 | 34 1             | +   |
| METALS  | Thallium   | 0.0462                | 1                  | 0.112           | 4                        | 0.072          | 1                         | 0.0753          | 1                           | 0,0723          | 1                          |              |                  |                       |                        |                         |                       |                         |                        |                      | •            |                     |                       |                  |   |
| METALS  | Vanadium,  | 44.8                  | 1                  | 30<br>38 2      | 1                        | 28.1           | 1                         | 26              | 1                           | 14.4            | 1                          |              |                  |                       |                        |                         |                       |                         |                        | 15 1                 |              | 33 1                |                       | 224              | 1   |
| RANGE_ORGANICS                                  | Carbon Range C12-C28                                     | 52.9                  | 1<br>1 U           | 57,9            | 1 U                      | 56,6           | 1 U                       | 56.2            | 1 1                         | 40.6            | t J                        | В            |                  |                       |                        |                         |                       |                         |                        | 10 1                 |              |                     |                       |                  |   |
| RANGE_ORGANICS                                  | Carbon Range C28-C35                                     | 52.9                  | 1 U                | 57.9            | 1 U                      | 56.6           | 1 U                       | 56.2            | 1 U                         | 58.3            | 1 U                        |              |                  |                       |                        |                         |                       |                         |                        |                      |              |                     |                       |                  |   |
| SEMIVOLATILES                                   | 1,2,4-Trichlorobenzene                                   | 52.9                  | 1 0                | 57.9            | 1 0                      | 30.6           | 1 0                       | <b>30.2</b>     | 1 0                         | 20,3            | 1 0                        |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < U (        | 0.33 1              | i < U                 | 0.33             | t < U                                     |
| SEMIVOLATILES                                   | 1,2-Dichlorobenzene                                      |                       |                    |                 |                          |                |                           |                 |                             |                 | -                          |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < U          | 0.33 1              | 1 < U                 | 0.33             | i < U                                     |
| SEMIVOLATILES                                   | 1,3-Dichlorobenzene                                      |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < U          | 0.33 1              | 1 < U                 | 0.33             | t < U                                     |
| SEMIVOLATILES                                   | 2,4,5-Trichlorophenol                                    |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 1.65 1               | < U          | 1.65 1              | I < U                 | 1.65             | 1 < U                                     |
| SEMIVOLATILES                                   | 2,4,6- inchiorophenol<br>2,4-Dichlorophenol              | -                     |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0,33 1               | < U          | 0.33 1              | 1 < U                 | 0.33             | t < U                                     |
| SEMIVOLATILES                                   | 2,4-Dimethylphenol                                       |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < U (        | 0.33 1              | 1 < U                 | 0.33             | 1 < U                                     |
| SEMIVOLATILES                                   | 2,4-Dinitrophenol<br>2-Chloronachthalene                 |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 1.65 1<br>0.33 1     | < U<br>< U   | 1.65 1<br>0.33 1    | < U<br>  < U          | 1.65 1<br>0.33 1 | : < U<br>1 < U                            |
| SEMIVOLATILES                                   | 2-Chlorophenol   |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < U .        | 0.33 1              | 1 < U                 | 0.33             | i < U                                     |
| SEMIVOLATILES                                   | 2-Methylnaphthalene<br>2-Methylobenol                    |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < U  <br>< U | 0.33 1<br>0.33 1    | 1 < U<br>1 < U        | 0.33             | . < U<br>1 < U                            |
| SEMIVOLATILES                                   | 2-Nitroaniline   |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 1.65 1               | < U          | 1.65 1              | I < U                 | 1.65             | ( < U                                     |
| SEMIVOLATILES<br>SEMIVOLATILES                  | 2-Nitrophenol<br>3 3'-Dictularabenzidine                 |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < U<br>< U   | 0.33 1<br>0.65 1    | 1 < U<br>1 < U        | 0.33 1           | ្ < U<br>1 < ម                            |
| SEMIVOLATILES                                   | 3-Nitroaniline   |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 1.65 1               | < U          | 1.65 1              | t < U                 | 1.65             | ( < U                                     |
| SEMIVOLATILES                                   | 4,6-Dinitro-2-methylphenol<br>4-Bromonhamvi phenvi ether |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 1.65 1<br>0.33 1     | < U<br>< U   | 1.65 1<br>0.33 1    | 1 < U<br>1 < U        | 1.65             | ; < U<br>1 < 1                            |
| SEMIVOLATILES                                   | 4-Chloro-3-methylphenol                                  |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  | 5                     |                        |                         |                       |                         |                        | 0.65 1               | < U          | 0.65 1              | 1 < U                 | 0.65             | I < U                                     |
| SEMIVOLATILES<br>SEMIVOLATILES                  | 4-Chloroaniline  |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.65 1               | < U<br>< 11  | 0.65 1<br>0.33 1    | 1 < U<br>1 < U        | 0.65             | ) < U<br>f < 11                           |
| SEMIVOLATILES                                   | 4-Methysphenol   |                       |                    |                 |                          | -              |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < U          | 0.33 1              | i < U                 | 0.33             | I < U                                     |
| SEMIVOLATILES                                   | 4-Nitroanjine  |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 1.65 1               | < U<br>- 11  | 1.65 1              | 1 < U                 | 1.65             | ; < U                                     |
| SEMIVOLATILES                                   | Acenaphthene   |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < U          | 0.33 1              | I < U                 | 0.33             | t < U                                     |
| SEMIVOLATILES                                   | Acenaphihylene   |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        | · .                     |                       |                         |                        | 0.33 .1              | < U          | 0.33 1              | 1 < U                 | 0.33             | i < U                                     |
| SEMIVOLATILES                                   | Antiviacene<br>Benzo(a)anthracene                        |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < U          | 0.33 1              | , - U                 | 0.33             | 1 < U                                     |
| SEMIVOLATILES                                   | Benzo(a)pyrene   |                       |                    |                 |                          |                |                           | -               | · .                         |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0,33 1               | < U          | 0.33 1              | 1 < U                 | 0.33             | i < U                                     |
| SEMIVOLATILES                                   | Benzo(b)thoranthene<br>Benzo(ghi)petylene                |                       |                    |                 |                          |                |                           |                 |                             |                 |                            | •            |                  |                       | -                      |                         |                       |                         |                        | 0.33 1               | < U          | 0.33 1<br>0.33 1    | 1 < U<br>1 < U        | 0.33             | ; < ∪<br>1 < ∪                            |
| SEMIVOLATILES                                   | Benzo(k)fluoranthene                                     |                       |                    |                 |                          |                |                           |                 |                             |                 | -                          |              |                  | · .                   |                        |                         |                       |                         |                        | 0.33 1               | < U .        | 0.33 1              | I < U                 | 0.33             | < U                                       |
| SEMIVOLATILËS<br>SEMIVOLATILËS                  | Benzoic Acid<br>Benzyi Alcohol                           |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         | •                      | 1.65 1<br>0.65 1     | < U<br>< U   | 1.65 1<br>0.65 1    | 1 < U<br>1 < U        | 1.65<br>0.65     | <ul> <li></li> <li></li> <li>U</li> </ul> |
| SEMIVOLATILES                                   | bis(2-Chloroethoxy)methane                               |                       |                    |                 |                          |                |                           |                 |                             |                 |                            | · . ·        | -                | 1.1                   |                        |                         |                       |                         |                        | 0.33 1               | < U          | 0.33 1              | I < Ū                 | 0.33             | i < U                                     |
| SEMIVOLATILES<br>SEMIVOLATILES                  | bis(2-Chloroethyl)ether<br>bis(2-Chloroisopronyllether   |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1<br>0.33 1     | < U<br>< H   | 0,33 1<br>0.33 1    | 1 < U<br>1 < H        | 0.33             | ; < U<br>1 < 11                           |
| SEMIVOLATILES                                   | bis(2-Ethylhexyl)phthalate                               |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < U          | 0.33 1              | i < U                 | 0.33             | I < U                                     |
| SEMIVOLATILES                                   | Butyl benzyl phthalate                                   |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < U          | 0.33 1              | 1 < U<br>1 <i>c</i> # | 0.33             | / < U                                     |
| SEMIVOLATILES                                   | Dibenzo(a,h)anthracene                                   |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       |                        |                         |                       |                         |                        | 0.33 1               | < U          | 0.33 1<br>0.33 1    | , . U                 | 0.33             | 1 < U                                     |
| SEMIVOLATILES                                   | Dibenzofuran   |                       |                    |                 |                          |                |                           |                 |                             |                 |                            |              |                  |                       | *                      |                         |                       |                         |                        | 0.33 1               | < U -        | 0.33 1              | I < U                 | 0.33             | I < U                                     |
| SEMINOLAHILES                                   | Cricitiyi primarate                                      |                       |                    |                 |                          |                |                           |                 |                             |                 |                            | 1            |                  |                       |                        |                         |                       |                         |                        | 0.55                 | ~ U          | പാറി                |                       | 0.55             |   |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Anny Ammunition Plant, Kamack, Texas

Shaw Environmental, Inc.

Table 3-7 Concentrations of Chemicals in Soil Samples Associated with Sump 007

| Bistry Condition         Bistry Condition<   | [SUMP] = SUMP007 |  |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  |                       |                        |                          |
|--|------------------|--|--------------------|-----------------------|------------------|---------------------|------------------|-------------------|-------------------|--------------------|----------------------|-----------------|---------------|--|-----------------------|------------------------|--------------------------|
| Dist         Description         Descripinition         Description         <  | LOCATION _CODE   |  | 35SUMP007-SB01     | 35SUMP007-SB01        | 35SUMP007-SB02   | 35SUMP007-SB02      | 35SUMP007-SB02   | HOSB04            | HOSB04            | HOSB04             | HOSB05               | HOSB05          | HOSB05        | HOSB05                                 | LH-S06-01             | LH-\$06-01             | LH-S06-01                |
| Description       No.  | SAMPLE_NO        |  | 35-SMP07-SB01-01   | 35-SMP07-SB01-02      | 35-SMP07-SB02-01 | 35-SMP07-S502-01-QC | 35-SMP07-SB02-02 | HOSE04(0-0.5)     | HOSB04(3-5)       | HOSB04(8-10)       | HOSB05(0-0.5)        | HOSB05(3-5)     | HOSB05(3-5)QC | HOSB05(8-10)                           | LH-S06-01 QC          | LH-S06-01_1            | LH-S06-01_2              |
| Distant         Distant <t< th=""><th>SAMPLE_DATE</th><th></th><th>9/11/2006</th><th>9/11/2006</th><th>9/11/2006</th><th>9/11/2006</th><th>9/11/2006</th><th>12/6/2000</th><th>12/6/2000</th><th>12/6/2000</th><th>12/6/2000</th><th>12/6/2000</th><th>12/6/2000</th><th>12/6/2000</th><th>7/9/1993</th><th>7/9/1993</th><th>7/9/1993</th></t<>  | SAMPLE_DATE      |  | 9/11/2006          | 9/11/2006             | 9/11/2006        | 9/11/2006           | 9/11/2006        | 12/6/2000         | 12/6/2000         | 12/6/2000          | 12/6/2000            | 12/6/2000       | 12/6/2000     | 12/6/2000                              | 7/9/1993              | 7/9/1993               | 7/9/1993                 |
| Number         Partial 10 10         Not 10 10         <   | DEPTH            |  | 0-0.5 Ft           | 10 - 10 Ft            | 0 - 0.5 Ft       | 0-0.5 Ft            | 10-10 Ft         | 0-0.5 Ft          | 3-5Ft             | 8 - 10 Ft          | 0-0.5 Ft             | 3-5 H           | 3-5H          | 8-10 %                                 | 0-2Ft                 | 0-2H                   | 4-6H                     |
| Description         Description <tttr></tttr>  | SAMPLE_PURPOSE   |  | REG                | REG<br>Danut Di LO VO | REG              | FU<br>Fu            | REG              | NEG               | KEG               | REG                | REG                  | REG             |               | KEG<br>Baswith Dit 1/0 1/0             | FU<br>Result DILLO VO | REG<br>Beauth DR LO VO | REG<br>Regult Bill LO MO |
| Set 0.4 (a)  | CLANUCH ATTLES   | Parameter (Onus = mg/kg)               | Result Die Lor vol | Result DIL LQ VQ      | Result Dat CQ VQ | RESUR DIL LU VU     | Result DIL Ly Vy | Result par for an | Result DIE LOC VC | A Result DIL LA VA | Result DIE EGE VOE R | BSOIL (AL LQ VQ |               | NUSUN DIL LU VU                        | 0.33 1 < 1            | 033 1 < 11             | 033 1 < H                |
| colubita         colubita <th>SEMIVOLATILES</th> <th>di.n.Butvi ohthalate</th> <th></th> <th>0.33 1 &lt; 17</th> <th>0.33 1 &lt; U</th> <th>0.33 1 &lt; U</th>   | SEMIVOLATILES    | di.n.Butvi ohthalate                   |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < 17           | 0.33 1 < U             | 0.33 1 < U               |
| anderio  | SEMIVOLATILES    | din Octvi phthatate                    | 1                  |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < U            | 0.33 1 < U             | 0.33 1 < U               |
| Sinternal  | SEMIVOLATILES    | Fluoratibene                           |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < U            | 0.33 1 < U             | 0.33 1 < U               |
| Bit Montone         Bit Montone<   | SEMIVOLATILES    | Fluorene                               |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < U            | 0.33 1 < U             | 0.33 1 < U               |
| Biological discription         Biological discription        Biological dis  | SEMIVOLATILES    | Hexachiorobenzene                      |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < U            | 0.33 1 < U             | 0.33 1 < U               |
| State  | SEMIVOLATILES    | Hexachiorobutadiene                    |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0,33 1 < U            | 0.33 1 < U             | 0.33 1 < U               |
| BRIACH         BRIACH        BRIACH <td< th=""><th>SEMIVOLATILES</th><th>Hexachiorocyclopentadiene</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>0.33 1 &lt; U</th><th>0.33 1 &lt; U</th><th>0,33 1 &lt; U</th></td<>   | SEMIVOLATILES    | Hexachiorocyclopentadiene              |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < U            | 0.33 1 < U             | 0,33 1 < U               |
| BAUCIADON  | SEMIVOLATILES    | Hexachioroethane                       |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < U            | 0,33 1 < U             | 0.33 1 < U               |
|  | SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene                 |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < U            | 0.33 1 < U             | 0.33 1 < U               |
| BINCALLINGBINACOUNCS<  | SEMIVOLATILES    | Isophorone                             |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < U            | 0.33 1 < U             | 0.33 1 < U               |
| Barlow and one outpoint       Barlow and one outpoint <th>SEMIVOLATILES</th> <th>Naphthalens</th> <th></th> <th>0.33 1 &lt; U</th> <th>0.33 1 &lt; U</th> <th>0.33 1 &lt; U</th>   | SEMIVOLATILES    | Naphthalens                            |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < U            | 0.33 1 < U             | 0.33 1 < U               |
| BMOLENTIME         Induce dependent         I      <   | SEMIVOLATILES    | Nitrobenzene                           |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < U            | 0.33 1 < U             | 0.33 1 < U               |
| Solver Alley         Sol   | SEMIVOLATILES    | n-Nitroso-di-n-propylamine             |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < U            | 0.33 1 < U             | 0.33 1 < U               |
| Semicontest       Maine mark         Semicontest       Maine mark   | SEMIVOLATILES    | n-Nitrosodiphenylamine                 |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < U            | 0.33 1 < 0             | 0.33 1 < 0               |
| Solver, Marie       Preside       Preside<   | SEMIVOLATILES    | Pentachlorophenol                      |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 1.65 1 < 0            | 1.65 1 < 0             | 1.05 1 4 0               |
| Simplifying in a standard and standard | SEMEVOLATILES    | Phenanchrene<br>Othereni               |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 4 1            | 0.33 1 4 0             | 0.33 1 4 1               |
| With Normal Building       With Normal Building <th< th=""><th>SEMMOLATILES</th><th>Preno</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>0.33 1 &lt; U</th><th>0.33 1 &lt; 0</th><th>0.33 1 4 1</th></th<>  | SEMMOLATILES     | Preno                                  |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.33 1 < U            | 0.33 1 < 0             | 0.33 1 4 1               |
| minima  | TPH              | r yuans<br>Hydrocarbone as Niasal Fuel |                    |                       |                  |                     |                  | 586 t < íi        | 599 1 < il        | l 60 1 < B         | 577 1 < I            | 53 f < 1∔       | 639 1 < U     | 60 1 < U                               | 0.00 1 4 0            | 0.00 1 4 0             | 0,00                     |
| TMARE       11,118/000000000000000000000000000000000   | трн              | Hydrocarbons as Gasolina               |                    |                       |                  |                     |                  | 58.6 1 < U        | 59.9 1 < U        | . 50 1 < U         | 57.7 1 < U           | 53 1 < U        | 63.9 1 < U    | 60 1 < U                               |                       |                        |                          |
| NUMRS11.27 his/forma0.1   | ТРН              | TOTAL HYDROCARBONS                     |                    |                       |                  |                     |                  | 58.6 t < ⊔        | 59.9 1 < U        | 1 60 1 < U         | 57.7 1 < U           | 53 1 < U        | 63.9 1 < U    | 60 1 < U                               |                       |                        |                          |
| VALATES11.3.7.8.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0  | VOLATILES        | 1.1.1-Trichloroethane                  |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0.005 1 < U              |
| VIANESLiGanoshaConstantConstan   | VOLATILES        | 1,1,2,2-Tetrachloroethane              |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0,005 1 < U              |
| VLULESVLOSANDAR <t< th=""><th>VOLATILES</th><th>1,1,2-Trichloroethane</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>0.005 1 &lt; U</th><th>0.005 1 &lt; U</th><th>0.005 1 &lt; U</th></t<>  | VOLATILES        | 1,1,2-Trichloroethane                  |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0.005 1 < U              |
| VALMES1:5 GlassombaSingle <t< th=""><th>VOLATILES</th><th>1,1-Dichloroethane</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>0,005 1 &lt; U</th><th>0.005 1 &lt; U</th><th>0.005 1 &lt; U</th></t<>  | VOLATILES        | 1,1-Dichloroethane                     |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0,005 1 < U           | 0.005 1 < U            | 0.005 1 < U              |
| VA.MLE1.204senationa00<  | VOLATILES        | 1,1-Dichloroethene                     |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0,005 1 < U           | 0.005 1 ≷ U            | 0.005 1 < U              |
| VILVITES1.20 bitsong/m0005100005000 </th <th>VOLATILES</th> <th>1,2-Dichloroethane</th> <th></th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th>  | VOLATILES        | 1,2-Dichloroethane                     |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0.005 1 < U              |
| UCULIES       3.50000       0.60       0.7       0.600       0.600       0.600       0.600       0.600       0.600       0.600       0.600       0.600       0.600       0.600       0.600       0.600       0.600       0.600       0.600       0.600       0.600       0.600       0.600   | VOLATILES        | 1,2-Dichloroethene                     |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 t < U            | 0.005 1 < U              |
| ULLINE         Sintender         0.00         1         0         0.00           | VOLATILES        | 1,2-Dichloropropane                    |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0.005 1 < U              |
| Viol. 1000         Viol. 10000         Viol. 10000         Viol.  | VOLATILES        | 2-Butanone                             |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  |                       |                        |                          |
| Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>Notanita<br>   | VOLATILES        | 2-Unknoethyl vinyl ether               |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  |                       | 0.01 1 < 0             | 0.01 1 < 0               |
| VDLATLESBoundsmeanBoundsIVUU.005IVU.005<   | VOLATILES        |  |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 01 1 < 11             |                        |                          |
| VOLATLES         Brownodeknoomehane         0.000 f         V         V         V. V </th <th>VOLATILES</th> <th>Benzene</th> <th>ł</th> <th></th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; LI</th>  | VOLATILES        | Benzene                                | ł                  |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0.005 1 < LI             |
| VOLATLESBonnomConstant<  | VOLATILES        | Bromodichloromethane                   |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0.005 1 < U              |
| VOLATLES       Genomeshane       0.01       1       0       0.01       1       0       0.01       1       0       0.01       1       0       0.01       1       0       0.01       1       0       0       1       0       0.01       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0 <th>VOLATILES</th> <th>Bromoform</th> <th></th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th>  | VOLATILES        | Bromoform                              |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0.005 1 < U              |
| VOLATLESCarbon damilésCarbon damilésCarbon damilésCarbon damilésCU0.005ICU0.005 <th>VOLATILES</th> <th>Bromomethane</th> <th></th> <th>0.01 1 &lt; U</th> <th>0.01 1 &lt; U</th> <th>0.01 1 &lt; U</th>  | VOLATILES        | Bromomethane                           |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.01 1 < U            | 0.01 1 < U             | 0.01 1 < U               |
| VOLATLES       Carlon thraching       0.000       1       0       0.000       1       0       0.000       1       0       0.000       1       0       0.000       1       0       0.000       1       0       0.000       1       0       0.000       1       0       0.000       1       0       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       0       0       1       1       0       0       1       1       0       0       1       1       0       0       1       1       0       0       1       1       0       0       1<   | VOLATILES        | Carbon disulfide                       |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0.005 1 < U              |
| VOLATLESChisrobene0.001<   | VOLATILES        | Carbon tetrachloride                   |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0.005 1 < U              |
| VOLATLES       Chicorethane       0.01       1       V       0.00       1       V       0.00 <td< th=""><th>VOLATILES</th><th>Chlorobenzene</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>0.005 1 &lt; U</th><th>0.005 1 &lt; U</th><th>0.005 1 &lt; U</th></td<>  | VOLATILES        | Chlorobenzene                          |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0.005 1 < U              |
| VOLATLES       Chardorm       0.01       1       V       0.00       1 </th <th>VOLATILES</th> <th>Chloroethane</th> <th></th> <th>0.01 1 &lt; U</th> <th>0.01 1 &lt; U</th> <th>0.01 1 &lt; U</th>  | VOLATILES        | Chloroethane                           |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.01 1 < U            | 0.01 1 < U             | 0.01 1 < U               |
| VOLATILES       Charonethane       0.01       1       V       0.01       1       V       0.00       1       V       0.005       1       V   | VOLATILES        | Chloroform                             |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0,005 1 < U           | 0.005 1 < U            | 0.005 1 < U              |
| VULATILES       Gs-13-SUMARRAPROPONANC       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005       1       <       0       0.005 <th>VOLATILES</th> <th>Chloromethane</th> <th></th> <th>0.01 1 &lt; U</th> <th>0.01 1 &lt; U</th> <th>0.01 1 &lt; U</th>  | VOLATILES        | Chloromethane                          |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.01 1 < U            | 0.01 1 < U             | 0.01 1 < U               |
| VOLATILES       Database       0.000       1       0 </th <th>VOLATILES</th> <th>cis-1,3-Dichloropropene</th> <th></th> <th>0,005 1 &lt; 0</th> <th>0.005 1 &lt; U</th> <th>0,005 1 &lt; U</th>  | VOLATILES        | cis-1,3-Dichloropropene                |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0,005 1 < 0           | 0.005 1 < U            | 0,005 1 < U              |
| VOLATILES       Early leader       0.00       1       0       0.00 <t< th=""><th>VULATILES</th><th>Ethomocniotomeinane</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>0.005 1 &lt; 0</th></t<>   | VULATILES        | Ethomocniotomeinane                    |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  |                       |                        | 0.005 1 < 0              |
| Notation       Notation <th< th=""><th>VOLATILES</th><th>Eurysoenzene<br/>Methyd ischutut katone</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>0.003 1 &lt; 0</th><th>0.005 1 &lt; 0</th></th<>   | VOLATILES        | Eurysoenzene<br>Methyd ischutut katone |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  |                       | 0.003 1 < 0            | 0.005 1 < 0              |
| Note         Note <th< th=""><th>VOLATILES</th><th>Methylene chloride</th><th>1</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>0.005 1 &lt; 1</th><th>0.005 1 &lt; 1</th><th>0.005 1 &lt; 1</th></th<>   | VOLATILES        | Methylene chloride                     | 1                  |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < 1           | 0.005 1 < 1            | 0.005 1 < 1              |
| VOLATILES       Tetachiorcethene         0.005       1       0       0.005   | VOLATILES        | Styrene                                | 1                  |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < 1           | 0.005 1 < 1            | 0.005 1 < 1              |
| VOLATILES       Toluen         VOLATILES       tas-1,3-Dichloropropene         0.005       1       0   | VOLATILES        | Tetrachiorcethene                      | }                  |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0.005 1 < U              |
| VOLATILES       trans-1,3-Dichloropropene         VOLATILES       Trichbrorebnene         VOLATILES       Trichbrorebnene         VOLATILES       Viryl acetate         VOLATILES       Viryl acetate         VOLATILES       Viryl choride         VOLATILES       Vir  | VOLATILES        | Toluene                                |                    |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 t < U           | 0.005 1 < U            | 0.005 1 < U              |
| VOLATILES       Trichkoreehene       0.005       1        U       0.01       1        U       0.005       1   | VOLATILES        | trans-1,3-Dichloropropene              | 1                  |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0.005 t < U              |
| VOLATILES         Viryl acetate         0.05         1         V         0.01         1          U         0.001         1          U         0.005         1          U         0.005 <th1< th="">         U         <th1< th=""></th1<></th1<>   | VOLATILES        | Trichloroethene                        |                    |                       |                  |                     |                  |                   |                   |                    | -                    |                 |               |  | 0.005 1 < U           | 0.005 1 < U            | 0.005 1 < U              |
| VOLATILES         Vinyl chloride         0.01         t         U         0.005         t   | VOLATILES        | Vinyl acetate                          | 1                  |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.05 1 < U            | 0.05 1 < U             | 0.05 t < U               |
| VOLATILES         Xytenes, Total           0.005 1 < U         0.005 1 < U   | VOLATILES        | Vinyl chloride                         | t                  |                       |                  |                     |                  |                   |                   |                    |                      |                 |               |  | 0.01 t < U            | 0.01 1 < U             | 0.01 1 < U               |
|  | VOLATILES        | Xylenes, Total                         | 1                  |                       |                  |                     |                  |                   |                   |                    |                      |                 |               | ······································ | 0.005 1 < U           | 0.005 1 < U            | 0.005 t < U              |
Table 3-7 Concentrations of Chemicals in Soil Samples Associated with Sump 007

| SUMP] = SUMP007                |  |                 |                 |                  |            |            |        | 000 00  |          | • • • •      |                   |        |           | 507.04              |          | 111         | 507.04  |             | 11 60   | 7.01  | 18       | 1.507.02        | 112   | 507-02     |                  | 11.507.02 | ,              |
|--------------------------------|--|-----------------|-----------------|------------------|------------|------------|--------|---------|----------|--------------|-------------------|--------|-----------|---------------------|----------|-------------|---------|-------------|---------|-------|----------|-----------------|-------|------------|------------------|-----------|----------------|
| LOCATION _CODE                 |  | LH-SU<br>LH-SOF | 06-01<br>6-01 3 |                  | LH-S06-0   | 72<br>71   | 11     | -506-02 |          | LH-S         | 505-02<br>06-02 3 |        | UN<br>UNS | -SU7-01<br>307-01 1 |          | UH-S        | 07-01 2 |             | LH-S07- | -01_3 | 114      | S07-02_1        | LH-S  | 507-02_2   | Ľ                | H-S07-02  | 3              |
| SAMPLE DATE                    |  | 7/9/1           | 1993            |                  | 7/9/199    | 3          | 7      | 9/1993  |          | 7/9          | /1993             |        | 6/2       | 5/1993              |          | 6/2         | 5/1993  |             | 6/25/1  | 993   | 6/       | 25/1993         | 6/2   | 5/1993     |                  | 7/9/1993  |                |
| DEPTH                          |  | 10 - 1          | 12 Ft           |                  | 0-2F       |            | 3      | -5Ft    |          | 10           | 12 Ft             |        | 0.5       | -2.5 Ft             |          | 2.5         | -4.5 Ft |             | 9 - 11  | Ft    | (        | ) - 2 Ft        | 2     | - 4 Ft     |                  | 9 - 11 Ft |                |
| SAMPLE_PURPOSE                 |  | RE              | G               |                  | REG        |            |        | REG     |          | F            | 2EG               |        | _         | REG                 |          | F           | REG     |             | REG     | G     |          | REG             |       | REG        |                  | REG       | 0.10           |
| Test Group                     | Parameter (Units = mg/kg)                | Result D        | IL LQ V         | Q Rest           | It DIL     | LQ VQ      | Result | DILLQ   | VQF      | Cesuit (     | DILLQ             | VQ     | Result    | DILLQ               | VQ 1     | Result      |         | <u>va i</u> | A 33 1  |       | 0.33     |                 | 0.33  |            | 0.33             | 1         | <u>&lt; 11</u> |
| EXPLOSIVES<br>EXPLOSIVES       | 2.6-Dinitratoluene                       | 0,33 1          | 1 < 1           | 0.33             | , ,<br>, , | < 1        | 0.33   | 1 <     | U        | 0.33         | 1 <               | U      | 0.33      | 1 <                 | U        | 0.33        | 1 <     | Ŭ           | 0.33 1  | < U   | 0.33     | 1 < 0           | 0.33  | 1 < 1      | 0.33             | 1         | < U            |
| METALS                         | Akaninum                                 | 9840 1          | 1               | 1340             |            |            | 9660   | 1       | Ŭ 1      | 1400         | 1                 | -      | 13500     | 1                   | - :      | 27900       | 1       | ;           | 24500 1 |       | 8190     | 1               | 8240  | 1          | 9420             | 1         |                |
| METALS                         | Antimony                                 | 3 1             | 1 < 1           | U 3              | 1          | < U        | 3      | 1 <     | U        | 3            | 1 <               | U      | 3         | 1 <                 | U        | 3           | 1 <     | U           | 5.04 1  |       | 3        | 1 < U           | 3     | 1 < 1      | 3                | t         | < U            |
| METALS                         | Arsenic                                  | 1 1             | 1 < 1           | U 1.9            | 1          | < U        | 1.4    | 1 <     | U        | 1            | 1 <               | V      | 5.4       | 1                   |          | 3.2         | 1       |             | 3.1 1   |       | 14.7     | 1               | 5.1   | 1          | 1                | 1         | < 8            |
| METALS                         | Barium                                   | 175 1           | 1 < 1           | U 81.3           | 1          | < U        | 101    | 1 <     | U        | 190          | 1 <               | U      | 61.7      | 1                   |          | 242         | 1       |             | 114 1   |       | 34.2     | 1               | 30.4  | 1          | 290              | 1         | < 0            |
| METALS                         | Beryllium                                |                 |                 | . 4              | 1          | e 11       | 4      | 1 6     |          | 1            | 1 2               | łł     | 234       | 1                   |          |             | 1 <     | U           | 157 1   |       | 2.77     | 1               | 1.43  | 1          | 1                | 1         | < U            |
| METALS                         | Calciann                                 | 1750 1          | 1 ~ ·           | 203              | 5 1        | •••        | 812    | 1       | U        | 1920         | 1                 | Ŭ      | 1970      | f                   |          | 940         | 1       | •           | 1260 1  |       | 657      | 1               | 435   | 1          | 1570             | 1         | •              |
| METALS                         | Chromium                                 | 12.9 1          | 1 < 1           | U 19.8           | 1          | < U        | 12.4   | 1 <     | U        | 15.2         | 1 <               | U      | 16.2      | 1                   |          | 22          | 1       |             | 18.8 1  |       | 22       | 1               | 24.5  | 1          | 10.5             | 1         | < U            |
| METALS                         | Cobalt                                   | 15.7 1          | 1               | 8                | 1          |            | 9      | 1       |          | 71.3         | 1                 |        | 3.69      | 1                   |          | 8.61        | 1       |             | 12.6 1  |       | 2.26     | 1               | 1.74  | 1          | 38.4             | 1         |                |
| METALS                         | Copper                                   | 6.7             | 1               | 3.8              | 1          |            | 3.7    | 1       |          | 8.1          | 1                 |        | 7.45      | 1                   | -        | 9.31        | 1       |             | 6.75 1  |       | 6.54     | 1               | 5.66  | 1          | 4,9              | 1         |                |
| METALS                         | Iron                                     | 8670            | 1               | 2060             | 01         |            | 11600  | 1       | 1        | 11900        | 1                 |        | 34400     | 1                   |          | 23200       | 1       | :           | 20600 1 |       | 41200    | 1               | 2/300 | 1          | 8980             | 1         |                |
| METALS                         | Lead                                     | 5.2 1           | 1               | 9.6              | 1          |            | 9.8    | 1       |          | 5<br>2010    | 4                 |        | 4.2       | 1                   |          | 0.9<br>1670 | 1       |             | 0 1     |       | 5<br>247 | 1               | 261   | 1          | 1960             | 1         |                |
| METALS                         | Magnesium                                | 2000<br>1560 1  | 1               | 202              | · 1        |            | 312    | 1       |          | 1470         | 1                 | -      | 206       | 1                   |          | 486         | 1       |             | 434 1   |       | 81       | 1               | 43.4  | 1          | 1310             | 1         |                |
| METALS                         | Marcurv                                  | 0.1 1           | 1 < 1           | U 0.1            | <br>1      | < U        | 0.1    | 1 <     | U        | 0.1          | 1 <               | U      | 0.1       | 1 <                 | U        | 0.1         | 1 <     | U           | 0.1 1   | < U   | 0.1      | 1 < 0           | 0.1   | 1 <        | 0.1              | 1         | < U            |
| METALS                         | Nickel                                   |                 |                 |                  |            |            |        |         |          |              |                   |        |           |                     |          |             |         |             |         |       |          |                 |       |            |                  |           |                |
| METALS                         | Potassium                                | 762 1           | 1               | 564              | : 1        |            | 382    | 1       |          | 1100         | 1                 |        | 672       | 1                   |          | 1310        | 1       |             | 1330 1  |       | 302      | 1               | 315   | 1          | 658              | 1         |                |
| METALS                         | Selenium                                 | 1 1             | 1 <             | Uİ               | 1          | < U        | 1      | 1 <     | U        | 1            | 1 <               | U      | 1         | 1 <                 | U        | 1           | 1 <     | U           | 1 1     | < U   | 1        | 1 < U           | 1     | t <        | 1                | 1         | < U            |
| METALS                         | Silver                                   | 1 1             | 1 <             | Uł               | t          | < U        | 1      | 1 <     | U        | 1            | 1 <               | U      | 1         | 1 <                 | U        | 1           | 1 <     | U           | 1.03 1  |       | 1        | 1 < U           | 1     | 1 <        | 1.1              | 1         |                |
| METALS                         | Sodium                                   | 77.0            |                 |                  |            |            |        |         |          | 20.0         | 4                 |        | 10.0      | 1                   |          | 20.8        | 4       |             | 171 1   |       | 7.61     | 4               | 571   | t          | 31.1             | 1         |                |
| METALS                         | Stohlum                                  | 21.8            | 1               | 14               | 1          |            | 9.9    | •       |          | 39.9         | •                 |        | 10,9      | 1                   |          | 20.6        | ,       |             | W.1 1   |       | 1.41     | '               | 0.71  | •          | •1.1             | •         |                |
| METALS                         | Vapadium                                 |                 |                 |                  |            |            |        |         |          |              |                   |        |           |                     |          |             |         |             |         |       |          |                 |       |            |                  |           |                |
| METALS                         | Zinc                                     | 30.6            | 1               | 23.9             | 3 1        |            | 15.4   | 1       |          | 45.3         | 1                 |        | 24.9      | 1                   |          | 35.7        | 1       |             | 31.7 1  |       | 19.8     | 1               | 10.7  | 1          | 21,5             | 1         |                |
| RANGE_ORGANICS                 | Carbon Range C12-C28                     |                 |                 |                  |            |            |        |         |          |              |                   |        |           |                     |          |             |         |             |         |       |          |                 |       |            |                  |           |                |
| RANGE_ORGANICS                 | Carbon Range C28-C35                     |                 |                 |                  |            |            |        |         |          |              |                   |        |           |                     |          |             |         |             |         |       |          |                 |       |            |                  |           |                |
| RANGE_ORGANICS                 | Carbon Range C6-C12                      |                 |                 |                  |            |            | 0.00   |         |          |              |                   |        | 0.00      |                     |          | 0.39        |         |             | 0.22 1  | - II  | 0 33     |                 | 0 33  | 1 -        | 0.33             | 1         | e 11           |
| SEMIVOLATILES<br>SEMIVOLATILES | 1,2,4-1richlorobenzene                   | 0,33            | 1 <             | U U.34<br>N 031  | 8 1<br>7 1 | < 11       | 0.33   | 1 <     | U<br>H   | 0.33         | 1 <               | 0      | 0.33      | 1 <                 | U<br>()  | 0.33        | 1 <     | u           | 0.33 1  | < U   | 0.33     | 1 < 0           | 0.33  | 1 <        | 0.33             | 1         | < 1            |
| SEMIVOLATILES<br>SEMIVOLATILES | 1 3-Dichlorobenzene                      | 0.33            | 1 <             | U 0.3            | 3 1        | < U        | 0.33   | 1 <     | Ŭ        | 0.33         | 1 <               | Ŭ      | 0.33      | 1 <                 | ŭ        | 0.33        | 1 <     | Ŭ           | 0.33 1  | < U   | 0.33     | 1 < U           | 0.33  | 1 <        | 0.33             | 1         | < U            |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene                      | 0.33            | 1 <             | U 0.3            | 3 1        | < U        | 0.33   | 1 <     | U        | 0.33         | 1 <               | U      | 0.33      | 1 <                 | U        | 0.33        | 1 <     | U           | 0.33 1  | < U   | 0.33     | 1 < U           | 0.33  | 1 <        | 0.33             | 1         | ت >            |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenol                    | 1.65            | 1 <             | U 1.6            | 51         | < U        | 1.65   | 1 <     | U        | 1.65         | t <               | U      | 1.65      | 1 <                 | U        | 1.65        | t <     | U           | 1.65 1  | < U   | 1.65     | 1 < ⊍           | 1.65  | 1 <        | 1,65             | 1         | < U            |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol                    | 0.33            | 1 <             | U 0.3            | 3 t        | < U        | 0.33   | 1 <     | U        | 0,33         | 1 <               | U      | 0.33      | 1 <                 | U        | 0.33        | 1 <     | U           | 0.33 1  | < U   | 0.33     | 1 < U           | 0.33  | 1 <        | 0,33             | 1         | < 11           |
| SEMIVOLATILES                  | 2,4-Dichlorophenol                       | 0,33            | 1 <             | U 0.3            | 3 1        | < U        | 0,33   | 1 <     | U        | 0.33         | 1 <               | U      | 0.33      | 1 <                 | U        | 0.33        | 1 <     | U           | 0.33 1  | < 8   | 0.33     | 1 < 0           | 0.33  | 1 <        | 0,33             | 1         | < U<br>- U     |
| SEMIVOLATILES                  | 2,4-Dimetryiphenol                       | 0,33            | 1 <             | U 0,33<br>U 1,61 | 31<br>54   | < 11       | 0.33   | 1 <     | U        | 1.65         | 1 <               | 0      | 1.65      | 1 <                 | 0-<br>11 | 0.33        | 1 <     | 11          | 1.65 1  | < 11  | 1.65     | 1 < 1           | 1.65  | 1 <        | 1.65             | ť         | < 11           |
| SEMIVOLATILES                  | 2,4-Dirau ophenol<br>2,Chloronanbthalene | 0.33            | 1 <             | 0 0.3            | 31         | < U        | 0.33   | 1 <     | U        | 0.33         | 1 <               | Ű      | 0.33      | 1 <                 | ย        | 0.33        | 1 <     | Ű           | 0,33 1  | < U   | 0.33     | 1 < U           | 0.33  | 1 <        | 0.33             | 1         | < U            |
| SEMIVOLATILES                  | 2-Chlorophenol                           | 0.33            | 1 < I           | U 0,3            | 3 f        | < U        | 0.33   | 1 <     | U        | 0.33         | 1 <               | IJ     | 0,33      | 1 <                 | υ        | 0.33        | 1 <     | U           | 0,33 1  | < U   | 0.33     | 1 < U           | 0.33  | 1 <        | 0.33             | 1         | < U            |
| SEMIVOLATILES                  | 2-Methylpaphthalene                      | 0.33            | 1 <             | U 0.3            | 31         | < U        | 0.33   | 1 <     | U        | 0.33         | 1 <               | υ      | 0.33      | 1 <                 | ບ        | 0.33        | 1 <     | ប           | 0.33 1  | < U   | 0.33     | 1 < 1           | 0.33  | 1 <        | 0.33             | 1         | < U            |
| SEMIVOLATILES                  | 2-Methyliphenol                          | 0.33            | 1 <             | U 0.3            | 31         | < U        | 0.33   | t <     | U        | 0,33         | 1 <               | U      | 0.33      | 1 <                 | U        | 0.33        | 1 <     | U           | 0.33 1  | < U   | 0.33     | 1 < U           | 0.33  | 1 <        | 0.33             | 1         | < 0            |
| SEMIVOLATILES                  | 2-Nitroaniline                           | 1.65            | 1 <             | U 1.64           | 5 1        | < U        | 1.65   | 1 <     | U        | 1.65         | 1 <               | U      | 1.65      | 1 <                 | ປ<br>    | 1.65        | 1 <     | U           | 1.65 1  | < 0   | 1.65     | 1 < 0           | 1.65  | 1 <        | 1.65             | 1         | < U            |
| SEMIVOLATILES                  | 2-Nitrophenol                            | 0.33            | 1 <             | ບ ນ.3.<br>ມ ຄະ   | 5 1<br>5 4 | < U<br>< D | 0.33   | 1 4     | 0        | 0,53         | 1 4               | е<br>П | 0.33      | 1 4                 | 0        | 0.55        | 1 6     | 11          | 0.53 1  | < 11  | 0.55     | 1 < 11          | 0.55  | 1 <        | 065              | , 1       | < U            |
| SEMIVOLATILES                  | 3-Nitrozoláne                            | 165             | 1 <             | ບ 1.6            | 5 1        | < 11       | 1.65   | 1 <     | Ŭ        | 1.65         | 1 <               | U      | 1.65      | t <                 | Ŭ        | 1.65        | 1 <     | Ū           | 1,65 1  | < 1   | 1.65     | 1 < 0           | 1.65  | 1 <        | 1.65             | - 1       | < U            |
| SEMIVOLATILES                  | 4.6-Dinitro-2-methylphenol               | 1.65            | 1 <             | U 1.6            | 5 1        | < U        | 1.65   | 1 <     | U        | 1.65         | 1 <               | U      | 1.65      | 1 <                 | U        | 1.65        | 1 <     | U           | 1.65 1  | < U   | 1.65     | 1 < U           | 1.65  | 1 <        | 1.65             | 1         | < U            |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether               | 0.33            | 1 <             | U 0.3            | 3 1        | < U        | 0.33   | 1 <     | U        | 0.33         | 1 <               | U      | 0,33      | 1 <                 | U        | 0.33        | 1 <     | U           | 0.33 1  | < 1)  | 0.33     | 1 < U           | 0.33  | 1 <        | 0.33             | 1         | < ປ            |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol                  | 0.65            | 1 <             | U 0.6            | 51         | < U        | 0.65   | 1 <     | U        | 0.65         | 1 <               | U      | 0.65      | 1 <                 | U        | 0.65        | 1 <     | U           | 0.65 1  | < U   | 0.65     | 1 < U           | 0.65  | 1 <        | 0.65             | 1         | < U            |
| SEMIVOLATILES                  | 4-Chloroaniline                          | 0.65            | 1 <             | U 0.6            | 5 1        | < U        | 0.65   | 1 <     | U        | 0.65         | 1 <               | U      | 0,65      | 1 <                 | 0        | 0.65        | 1 <     | U           | 0.65 1  | < U   | 0.65     | 1 < 0           | 0.65  | 1 <        | t 0.65           | 1         | < 0            |
| SEMIVOLATILES                  | 4-Chlorophenyl phenyl ether              | 0.33            | 1 <             | U U3             | 31<br>91   | < U        | 0.33   | 1 <     | 10<br>11 | 0.33         | 1 4               | 0      | 0,33      | 1 <                 | ы<br>Н   | 0.33        | 1 4     | 0           | 0.33 1  | < U   | 0.33     | 1 < 1           | 0.33  | 1 <        | 0.33             | 1         | < 11           |
| SEMEVOLATILES                  | 4-Madiyipkenol<br>4-Nitroaniline         | 1.65            | 1 <             | U 1.6            | 5 1        | < U        | 1.65   | 1 <     | บ        | 1.65         | 1 <               | Ŭ      | 1.65      | 1 <                 | Ŭ        | 1.65        | 1 <     | Ŭ           | 1.65 1  | < U   | 1,65     | 1 < U           | 1.65  | 1 <        | J 1.65           | 1         | < U            |
| SEMIVOLATILES                  | 4-Nitrophenol                            | 1.65            | 1 <             | U 1.6            | 51         | < U        | 1.65   | 1 <     | U        | 1.65         | 1 <               | U      | 1.65      | 1 <                 | U        | 1,65        | f <     | U           | 1.65 1  | < U   | 1,65     | 1 < U           | 1.65  | 1 <        | 1,65             | 1         | < U            |
| SEMIVOLATILES                  | Acenaphthene                             | 0.33            | 1 <             | U 0.3            | 31         | < U        | 0.33   | 1 <     | U        | 0.33         | 1 <               | IJ     | 0.33      | 1 <                 | υ        | 0,33        | 1 <     | U           | 0.33 1  | < U   | 0.33     | 1 < U           | 0.33  | 1 <        | 0.33             | 1         | < U            |
| SEMIVOLATILES                  | Aconaphthylene                           | 0.33            | 1 <             | U 0.3            | 3 t        | < U        | 0.33   | 1 <     | U        | 0.33         | t <               | U      | 0.33      | 1 <                 | U        | 0.33        | 1 <     | U           | 0.33 1  | < U   | 0.33     | 1 < U           | 0.33  | 1 <        | 0.33             | 1         | < U >          |
| SEMIVOLATILES                  | Anthracene                               | 0.33            | 1 <             | U 0.3            | 31         | < U        | 0.33   | 1 <     | U        | 0.33         | 1 <               | U      | 0.33      | 1 <                 | U        | 0.33        | 1 <     | U           | 0.33 1  | < U   | 0.33     | 1 < 0           | 0.33  | 1 <        | 0,33             | 1         | < ()           |
| SEMIVOLATILES                  | Benzo(a)anthracene                       | 0.33            | 1 <             | 0.3              | 31         | < 1)       | 0.33   | 1 <     | U<br>U   | 0.33         | 1 <               | U      | 0.33      | 1 <                 | 0        | 0.33        | 1 <     | U<br>U      | 0.33 1  | < U   | 0.33     | 1 4 1           | 0.33  | 1 4        | ) 0,33<br>  0,33 | •         | < 11           |
|                                | Benzo(b)fblocastions                     | 0.33            | 1 -             | 0 0.3<br>11 11 1 | २ ।<br>२ । | < 11       | 0.33   | 1 4     | о<br>11  | 0.33         | 1 <               | 11     | 0.33      | 1 C                 | U U      | 0.33        | 1 4     | ů.          | 0.33 1  | 11 >  | 0.33     | 1 < 1           | 0.33  | 1 <        | 1 0.33           | 1         | < U            |
| SEMIVOLATILES                  | Benzolohilberviene                       | 0.33            | 1 <             | U 0.3            | 3 1        | < 10       | 0.33   | 1 <     | Ŭ        | 0.33         | 1 <               | ย      | 0.33      | 1 <                 | Ŭ        | 0.33        | 1 <     | Ŭ           | 0.33 1  | < U   | 0.33     | 1 < 0           | 0.33  | 1 <        | 0.33             | - 1       | < U            |
| SEMIVOLATILES                  | Benzo(k)fivoranthene                     | 0.33            | 1 <             | U 0.3            | 3 1        | < 1        | 0.33   | 1 <     | U        | 0.33         | 1 <               | ប      | 0.33      | 1 <                 | U        | 0.33        | 1 <     | U           | 0.33 1  | V >   | 0,33     | 1 < ⊍           | 0.33  | t <        | 0.33             | t         | < U            |
| SEMIVOLATILES                  | Benzoic Acid                             | 1.65            | 1 <             | U 1.6            | 51         | < 11       | 1.65   | 1 <     | U        | 1.65         | 1 <               | U      | 1.65      | 1 <                 | U        | 1.65        | 1 <     | U           | 1.65 1  | < ⊍   | 1,65     | 1 < U           | 1.65  | 1 <        | 1.65             | 1         | < U            |
| SEMIVOLATILES                  | Benzył Alcohol                           | 0.65            | 1 <             | U 0.6            | 51         | < U        | 0.65   | 1 <     | U        | 0.65         | 1 <               | U      | 0.65      | 1 <                 | U        | 0.65        | 1 <     | U           | 0.65 1  | < U   | 0.65     | 1 < U           | 0.65  | 1 <        | 0.65             | 1         | < U            |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane               | 0.33            | 1 <             | U 0.3            | 3 1        | < U        | 0.33   | 1 <     | U        | 0.33         | 1 <               | U      | 0.33      | 1 <                 | ប        | 0.33        | 1.<     | U           | 0.33 1  | < U   | 0.33     | 1 < U           | 0.33  | 1 <        | 0.33             | 1         | < U            |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether                  | 0.33            | 1 <             | U 0.3            | 3 1<br>2 4 | < U        | 0.33   | 1 <     | U<br>,,  | 0,33         | 1 <               | 0      | 0.33      | 1 <                 | U<br>N   | 0.33        | 1 <     | U<br>II     | 0,33 1  | < 1   | 0.33     | 1 < 0           | 0.33  | 1 <        | 86.0 i           | 1<br>4    | < U<br>< N     |
| SEMIVOLATILES                  | bis(2-Chioroisopropyi)ether              | 0.33            | 1 <<br>1 -      | U U,3<br>11 A*   | 5 T<br>3 4 | < U<br>< U | 0.33   | 1 -     | 0        | 0,33<br>0,33 | 1 4               | U<br>H | 0.33      | 1 -                 | บ<br>ม   | 0.33        | 1 4     | U<br>U      | 0.33 1  | < 11  | 0.33     | 1 × U<br>1 × II | 0.33  | , `<br>t < | , 0.33<br>  0.33 | 1.        | < 11           |
| SEMIVOLATILES                  | Butyl benzyl ohthalate                   | 0.33            | , `<br>t <      | U 0.3            | 3 1        | < 11       | 0.33   | 1 <     | U        | 0.33         | 1 <               | U      | 0.33      | 1 <                 | υ        | 0.33        | 1 <     | บั          | 0.33 1  | < U   | 0.33     | 1 < U           | 0,33  | 1 <        | 0.33             | 1         | < Ŭ            |
| SEMIVOLATILES                  | Chrysene                                 | 0.33            | 1 <             | บ 0.3            | 3 1        | < U        | 0.33   | 1 <     | U        | 0.33         | 1 <               | 5      | 0.33      | 1 <                 | U        | 0.33        | 5 <     | บ           | 0.33 1  | < 0   | 0,33     | 1 < U           | 0.33  | 1 <        | 0.33             | i         | < U            |
| SEMIVOLATILES                  | Dibenzo(a,h)anthracene                   | 0.33            | 1 <             | U 0.3            | 31         | < U        | 0.33   | 1 <     | U        | 0.33         | 1 <               | U      | 0.33      | 1 <                 | U        | 0.33        | 1 <     | U           | 0.33 1  | < U   | 0.33     | 1 < U           | 0.33  | 1 <        | / 0.33           | 1         | < U            |
| SEMIVOLATILES                  | Dibenzofuran                             | 0.33            | 1 <             | U 0.3            | 31         | < U        | 0,33   | 1 <     | U        | 0.33         | 1 <               | U      | 0.33      | 1 <                 | IJ       | 0.33        | 1 <     | υ           | 0.33 f  | < U   | 0.33     | 1 < U           | 0.33  | 1 <        | 0.33             | 1         | < U            |
| SEMIVOLATILES                  | Diethyl phthalate                        | 0.33            | 1 <             | U 0.3            | 31         | < U        | 0.33   | t <     | Û,       | 0.33         | 1 <               | U      | 0.33      | 1 <                 | U        | 0.33        | 1 <     | U           | 0.33 1  | < U   | 0.33     | ·1 < U          | 0.33  | 1 <        | 0.33             | 1         | < U            |



## Table 3-7 Concentrations of Chemicals in Soil Samples Associated with Sump 007

| [SUMP] = SUMP007 |   |          | -       |         |        |          |          |          |          |       |            |       |        |          |       |        |            |       |       |          |       |           |          |           |       |         |               |          |
|------------------|---|----------|---------|---------|--------|----------|----------|----------|----------|-------|------------|-------|--------|----------|-------|--------|------------|-------|-------|----------|-------|-----------|----------|-----------|-------|---------|---------------|----------|
| LOCATION_CODE    |   | UH       | S05-01  |         | LH     | -\$06-02 |          | LH-S06-0 | 2        | L     | H-S06-02   |       | 11     | 1-507-01 |       | L      | 1-507-01   |       | LH    | -\$07-01 | ե     | -S07-02   | i        | JH-S07-02 | 2     | UP      | 1-\$07-02     |          |
| SAMPLE NO        |   | LH-9     | 06-01 3 |         | LH-    | S06-02 1 |          | H-S06-02 | 2        | UH    | I-S06-02 3 | 1     | LH     | S07-01_1 |       | Ш      | -\$07-01_2 | 2     | LH-S  | 07-01_3  | LH    | \$07-02_1 | U        | 1-S07-02_ | 2     | LH      | S07-02_3      | 3        |
| SAMPLE DATE      |   | 7/9      |         |         | 7/     | /9/1993  |          | 7/9/1993 | -        |       | 7/9/1993   |       | 6      | 25/1993  |       | 6      | /25/1993   |       | 60    | 5/1993   | 6/    | 25/1993   |          | 6/25/1993 |       | 7       | /9/1993       |          |
| DEPTH            |   | 10.      | - 12 Ft |         |        | 3.2Ft    |          | 3.56     |          | 1     | 10 . 12 51 |       | 0      | 5.25Ft   |       | 2      | 5.45Ft     |       | 8     | - 11 Ft  |       | 1-2 Ft    |          | 2-4Ft     |       | g       | - 11 Ft       |          |
|                  |   |          | DEC     |         |        | PEC      |          | PEG      |          |       | PEC        |       | •.     | REG      |       | _      | REG        |       | -     | REG      |       | REG       |          | REG       |       | -       | REG           |          |
| Test Crown       | Decementar () lotte = maka)   | Dom H I  |         | 20      | Desult |          | VO Part  | - DI     | 0. 10    | Donul |            | 0 1/0 | Detuit |          | n vo  | Docult | Dil 10     |       | Domit | 01 10 10 | Dom   | NI 10 14  |          |           | 0 10  | Parut   |               | n vn     |
| Test Group       | Parameter (Onics + mg/kg)   | Nesual I | UIL LQ  |         | RUSSIN |          | VIL NESU |          | LUC VU   | RESOR | DIL LG     | 2 94  | A SOL  |          | 2 102 | 110501 |            | ~ ••• | 0.33  |          | 0.32  | 1 - 1     | 2 100000 | UIL 1     |       | 1/03011 | 4 4           |          |
| SEMIVULATILES    | Dimetry prinalate   | 0.35     | 1 4     | 0       | 0.33   | 1 4      | 0 0.55   | 1        | < 0      | 0.33  | 1.5        |       | 0.55   |          |       | 0.55   |            |       | 0.55  | 1        | 0.33  | 1 - 0     | 0.33     |           |       | 0.33    |               |          |
| SEMIVOLATILES    | di-n-Butyl phthalate  | 0.33     | 1 <     | บ       | 0.33   | 1 <      | 0 0.33   | 1        | < 0      | 0.33  | 1 <        | U     | 0.33   | 1 <      | 0     | 0.33   | 1 <        |       | 0.33  | 1 < 0    | 0.33  | 1 < 0     | 0.33     |           | < 0   | 0.33    | 1 <           |          |
| SEMIVOLATILES    | di-n-Octyl phthalate  | 0.33     | 1 <     | U       | 0.33   | 1 <      | 0 0.33   | 1        | < 1      | 0.33  | 1 <        | U     | 0,33   | 1 <      | U     | 0.33   | 1 <        | U     | 0.33  | 1 < 0    | 0.33  | 1 < 0     | 0.33     | 1.        | < U   | 0.33    | 1 <           | U U      |
| SEMIVOLATILES    | Fluoranthene  | 0.33     | 1 <     | ย       | 0.33   | 1 <      | U 0.33   | 1        | < U      | 0.33  | 1 <        | U     | 0.33   | 1 <      | U     | 0.33   | 1 <        | U     | 0.33  | 1 < 0    | 0.33  | 1 < 0     | 0.33     | 1.        | < ()  | 0.33    | 1 <           | . 0      |
| SEMIVOLATILES    | Fluorene  | 0.33     | 1 <     | U       | 0.33   | 1 <      | U 0.33   | 1        | < U      | 0.33  | 1 <        | U     | 0.33   | 1 <      | U     | 0.33   | 1 <        | U     | 0.33  | t < 0    | 0.33  | 1 < U     | 0.33     | 1 •       | < ()  | 0.33    | 1 <           | : U      |
| SEMIVOLATILES    | Hexachiorobenzene   | 0.33     | 1 <     | U       | 0.33   | 1 <      | U 0,33   | 1        | < ប      | 0.33  | 1 <        | U     | 0.33   | 1 <      | U     | 0.33   | 1 <        | U     | 0.33  | 1 < U    | 0.33  | 1 < 0     | 0.33     | 1.        | < U   | 0.33    | 1 <           | . U      |
| SEMIVOLATILES    | Hexachlorobutadiene   | 0,33     | 1 <     | U       | 0.33   | 1 <      | U 0.33   | 1        | < U      | 0.33  | 1 <        | U     | 0.33   | 1 <      | U     | 0.33   | i <        | U     | 0.33  | 1 < U    | 0.33  | 1 < U     | 0.33     | 1 .       | < 11  | 0.33    | 1 <           | : U      |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   | 0.33     | 1 <     | U       | 0,33   | 1 <      | U 0,33   | t        | < U      | 0.33  | 1 <        | U     | 0.33   | 1 <      | U     | 0,33   | 1 <        | U     | 0.33  | 1 < U    | 0.33  | t < U     | 0.33     | 1 -       | < U   | 0.33    | 1 <           | 4 U      |
| SEMIVOLATILES    | Hexachloroethane  | 0.33     | 1 <     | U       | 0.33   | 1 <      | U 0,33   | 1        | < 1J     | 0.33  | 1 <        | U     | 0.33   | 1 <      | U     | 0.33   | 1 <        | U     | 0.33  | 1 < U    | 0.33  | 1 < 0     | 0.33     | 1 .       | < 13  | 0.33    | 1 <           | : U      |
| SEMIVOLATILES    | Indeno(1,2,3-cd)cyrene  | 0.33     | 1 <     | U       | 0.33   | 1 <      | U 0.33   | 1        | < U      | 0.33  | 1 <        | U     | 0.33   | t <      | U     | 0,33   | 1 <        | U     | 0.33  | 1 < U    | 0,33  | 1 < 0     | 0.33     | 1         | < U   | 0.33    | 1 <           | : U      |
| SEMIVOLATILES    | Isophorphe  | 0.33     | t <     | ŧ       | 0.33   | 1 <      | U 0.33   | t        | < U      | 0.33  | 1 <        | U     | 0.33   | 1 <      | U     | 0.33   | 1 <        | U     | 0.33  | 1 < U    | 0.33  | 1 < 1     | 0.33     | t ·       | < U   | 0.33    | 1 <           | < U      |
| SEMIVOLATILES    | Nabhhalene  | 0.39     | 1 <     | 11      | 0.33   | 1 <      | 11 0.33  | 1        | < U      | 0.33  | 1 <        | . 12  | 0.33   | 1 <      | U     | 0.33   | 1 <        | U     | 0.33  | 1 < U    | 0.33  | 1 < 0     | 0.33     | t.        | < 11  | 0.33    | 1 <           | : 11     |
| SEMIVOLATILES    | Nimberzene  | 0.33     | 1 c     | -       | 0 33   | 1 4      | 11 0.33  | 1        | < 11     | 0.33  | 1 <        | . 11  | 0.33   | t <      |       | 0.33   | 1 <        | Ū.    | 0.33  | 1 < 11   | 0.33  | 1 < 1     | 0.33     | 1 /       | < .11 | 0.33    | 1 <           | : 11     |
| SCANOLATILES     | n Nitrore di a pranutamino  | 0.00     |         | 11      | 0.33   |          | 11 0.00  |          | ~ 11     | 0.00  |            |       | 0.00   |          |       | 0.33   |            | ŭ     | 0.33  | 1 2 1    | 0.00  | 1 4 1     | 0.33     |           | < 11  | 0.00    | 1 2           | - 11     |
| SEMINOLATILES    | - Mitana di Antoni de Santa de S | 0.00     |         |         | 0.20   |          | 0 0.33   |          | ~ 11     | 0.35  |            |       | 0.00   |          |       | 0.33   |            |       | 0.33  | 1 4 1    | 0.12  | 1 - 1     | 0.00     |           | - 11  | 0,00    | 12            |          |
| SEMIVOLATILES    | ti-ruuosoupeenyaatane   | 0.00     |         |         | 0.33   |          | 0 0.33   |          |          | 0.35  |            |       | 0.33   |          |       | 4.05   |            |       | 4.65  |          | 4.05  | 1 1 1     | 0.05     |           | ~ 11  | 4 65    |               |          |
| SEMEVOLATILES    | Pantachiorophenoi   | 1.00     | 1 4     |         | 1.05   | 1 4      | 0 1.00   | 1        |          | 1.00  | 1 1        |       | 1.05   | 1        |       | 1.00   |            |       | 1.05  | 1 4 0    | 1,00  |           | 1.03     |           |       | 0.00    |               |          |
| SEMEVOLATILES    | Phenantirrene   | 0.33     | 1 <     | 0       | 0.33   | 1 <      | 0 0.33   | 1        | < 0      | 0.33  | 1 <        |       | 0.33   | 1 <      |       | 0,33   | 1 4        |       | 0.33  | 1 < 0    | 0,33  | 1 < 0     | 0.33     |           | < 0-  | 0.33    | 1 4           |          |
| SEMIVOLATILES    | Phenor  | 0.33     | 1 <     | U       | 0.33   | 1 <      | 0. 0.33  | 1        | < U      | 0.33  | 1 <        |       | 0.33   | 1 4      |       | 0,33   | 1 4        |       | 0.33  | 1 < 0    | 0,33  | 1 < 0     | 0.33     |           | < 0   | 0.33    | 1 4           |          |
| SEMIVOLATILES    | Pyrene  | 0.33     | 1 <     | U       | 0.33   | 1 <      | 0 0.33   | 1        | < 0      | 0.33  | 1 <        | U     | 0.33   | 1 <      | U     | 0,33   | 1 <        | U     | 0,33  | 1 < 0    | 0.33  | 1 < 0     | 0.33     | 1 .       | < .U  | 0.33    | 1 <           | U        |
| IPH              | Hydrocarbons as Diesel Fuel   |          |         |         |        |          |          |          |          |       |            |       |        |          |       |        |            |       |       |          |       |           |          |           |       |         |               |          |
| трн              | Hydrocarbons as Gasoline  |          |         |         |        |          |          |          |          |       |            |       |        |          |       |        |            |       |       |          |       |           |          |           |       |         |               |          |
| TPH              | TOTAL HYDROCARBONS  |          |         |         |        |          |          |          |          |       |            |       |        |          |       |        |            |       |       |          |       |           |          |           |       |         |               |          |
| VOLATILES        | 1,1,1-Trichloroethane   | 0.005    | 1 <     | U       | 0.005  | 1 <      | U 0.00   | 5 1      | < U      | 0.005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0,005 | 1 < 0    | 0.005 | 1 < 0     | 0.005    | 1 •       | < 0   | 0.005   | 1 <           | . U      |
| VOLATILES        | 1,1,2,2-Tetrachkoroethane   | 0.005    | 1 <     | U       | 0.005  | 1 <      | U 0.00   | i f      | < U      | 0.005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0.005 | 1 < U    | 0.005 | 1 < 0     | 0.005    | t •       | < U   | 0.005   | 1 <           | . U      |
| VOLATILES        | 1,1,2-Trichloroethane   | 0.005    | 1 <     | U       | 0.005  | 1 <      | U 0.00   | i 1      | < ()     | 0.005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0.005 | 1 < U    | 0.005 | 1 < 0     | 0.005    | 1 •       | < U   | 0.005   | 1 <           | : U      |
| VOLATILES        | 1,1-Dichloroethane  | 0.005    | 1 <     | U       | 0.005  | 1 <      | U 0.00   | ; 1      | < U      | 0.005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0.005 | 1 < U    | 0.005 | t < U     | 0.005    | 1 •       | < U   | 0.005   | 1 <           | U        |
| VOLATILES        | 1,1-Dichloroethene  | 0.005    | 1 <     | U       | 0,005  | 1 <      | U 0,00   | i 1      | < ()     | 0,005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0.005 | 1 < 1    | 0.005 | t < U     | 0.005    | 1 •       | < U   | 0.005   | 1 <           | ្រ       |
| VOLATILES        | 1,2-Dichloroethane  | 0.005    | 1 <     | U       | 0,005  | 1 <      | U 0,00   | i 1      | U >      | 0.005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0.005 | 1 < 8    | 0.005 | 1 < U     | 0.005    | 1.        | < U   | 0.005   | 1 <           | : U      |
| VOLATILES        | 1,2-Dichloroethene  | 0.005    | 1 <     | U       | 0.005  | 1 <      | U 0.00   | i 1      | < U      | 0.005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | Ų     | 0.005 | 1 < U    | 0.005 | 1 < 1     | 0.005    | 1 ·       | < U   | 0.005   | 1 <           | : U      |
| VOLATILES        | 1,2-Dichloropropane   | 0.005    | 1 <     | U       | 0.005  | 1 <      | U 0.00   | i 1      | < U      | 0.005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0.005 | 1 < U    | 0,005 | 1 < U     | 0.005    | 1 -       | < U   | 0.005   | 1 <           | : U      |
| VOLATILES        | 2-Butanone  | 0.05     | 1 <     | U       | 0.05   | 1 <      | U 0.05   | 1        | < U      | 0.05  | 1 <        | U     | 0.05   | 1 <      | U     | 0,05   | 1 <        | U     | 0.05  | 1 < U    | 0.05  | 1 < U     | 0.05     | 1 -       | < 1)  | 0.05    | 1 <           | : U      |
| VOLATILES        | 2-Chloroethyl vinyl ether   | 0,01     | 1 <     | U       | 0.01   | 1 <      | U 0.01   | 1        | < U      | 0.01  | 1 <        | U     | 0,01   | t <      | U     | 0.01   | 1 <        | U     | 0.01  | 1 < 1    | 0.01  | 1 < U     | 0.01     | 1 1       | < U   | 0.01    | 1 <           | : U      |
| VOLATILES        | 2-Hexanone  | 0.05     | 1 <     | U       | 0.05   | 1 <      | U 0.05   | 1        | < U      | 0.05  | 1 <        | U     | 0.05   | 1 <      | U     | 0.05   | 1 <        | U     | 0.05  | 1 < U    | 0.05  | 1 < 1     | 0.05     | 1 1       | ป >   | 0.05    | 1 <           | : U      |
| VOLATILES        | Acetone   | 0.1      | 1 <     | U       | 0.1    | 1 <      | U 0.1    | t        | < U      | 0.1   | 1 <        | U     | D.1    | 1 <      | U     | 0.1    | 1 <        | U     | 0.1   | 1 < 13   | 0.1   | 1 < 0     | 0.1      | 1 .       | < ย   | 0.1     | 1 <           | : U      |
| VOLATILES        | Benzene   | 0.005    | 1 <     | U       | 0.005  | 1 <      | U 0.00   | i 1      | < U      | 0.005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0.005 | 1 < U    | 0.005 | 1 < 0     | 0.005    | 1 .       | < U   | 0.005   | 1 <           | : U      |
| VOLATILES        | Bromodichioromethane  | 0.005    | 1 <     | U       | 0.005  | 1 <      | U 0.00   | i 1      | < U      | 0.005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0.005 | 1 < 0    | 0.005 | 1 < 0     | 0.005    | 1 .       | < U   | 0.005   | 1 <           | : U      |
| VOLATILES        | Bromoform   | 0.005    | 1 . <   | U       | 0.005  | 1 <      | U 0.00   | 5 1      | < U      | 0.005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0,005 | 1 < U    | 0.005 | 1 < 0     | 0.005    | 1 .       | < U   | 0.005   | 1 <           | : U      |
| VOLATILES        | Bromomethane  | 0.01     | 1 <     | U       | 0.01   | 1 <      | U 0.01   | 1        | < U      | 0.01  | 1 <        | U     | 0.01   | t <      | U     | 0.01   | 1 <        | U     | 0.01  | 1 < U    | 0.01  | 1 < 0     | 0.01     | 1 .       | < U   | 0.01    | 1 <           | េម       |
| VOLATILES        | Carbon disulfide  | 0,005    | 1 <     | U       | 0.005  | 1 <      | U 0.00   | 5. t     | < 11 >   | 0.005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0.005 | 1 < U    | 0.005 | 1 < 0     | 0.005    | 1         | < U   | 0.005   | 1 <           | : U      |
| VOLATILES        | Carbon tetrachloride  | 0.005    | 1 <     | U       | 0.005  | 1 <      | U 0.00   | i 1      | < U      | 0.005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0.005 | 1 < 1    | 0.005 | 1 < 0     | 0.005    | 1.        | < U   | 0.005   | 1 <           | ε U      |
| VOLATILES        | Chlorobenzene   | 0.005    | 1 <     | U       | 0.005  | 1 <      | U 0.00   | ; 1      | < U      | 0.005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0.005 | 1 < 13   | 0.005 | 1 < 1     | 0.005    | f ·       | < U   | 0.005   | 1 <           | : U      |
| VOLATILES        | Chloroethans  | 0.01     | t <     | U       | 0.01   | 1 <      | U 0.01   | 1        | < U      | 0.01  | 1 <        | U     | 0.01   | 1 <      | U     | 0.01   | 1 <        | U     | 0.01  | 1 < 1    | 0.01  | 1 < 1     | 0.01     | 1 .       | < U   | 0.01    | 1 <           | : U      |
| VOLATILES        | Chloroform  | 0.005    | 1 <     | U       | 0.005  | 1 <      | U 0.00   | ; 1      | < U      | 0.005 | 1 <        | Ū     | 0.005  | 1 <      | U     | 0.005  | 1 <        | Ū     | 0.005 | t. < U   | 0.005 | 1 < 1     | 0.005    | 1 -       | < U   | 0.005   | 1 <           | : 0      |
| VOLATILES        | Chiommethane  | DOt      | t <     | N.      | 0.01   | 1 <      | 1 0.01   | 1        | < 11     | 0.01  | 1 <        | H     | 0.01   | 1 <      | . 0   | 0.01   | 1 <        | Ū     | 0.01  | 1 < 1    | 0.01  | 1 < 1     | 0.01     | 1 -       | < H   | 0.01    | 1 <           | : U      |
| VOLATILES        | cis-13-Dichloromonene   | 0.005    | 1 <     |         | 0.005  | † <      | 1 0.00   | : 1      | < H      | 0.005 | . 1 <      |       | 0.005  | f <      | . 11  | 0.005  | 1 <        |       | 0.005 | 1 < 11   | 0.005 | 1 < 1     | 0.005    | 1         | < 11  | 0.005   | 1 <           |          |
| VOLATILES        | Dibromochloromethane  | 0.005    | 1 <     | H       | 0.005  | 1 4      | 11 0.00  |          | <u>-</u> | 0.005 | 1 4        |       | 0.005  | 1 <      | 11    | 0.005  | ,<br>† c   |       | 0.005 | 1 < 11   | 0.005 | 1 < 1     | 0.005    |           | < 11  | 0.005   | 1 4           | . 0      |
| VOLATILES        | Elizabentene  | 0.005    |         | u .     | 0.005  | 1 2      | 1 0.00   |          | < 11     | 0.005 |            |       | 0.005  | 1 6      | . II  | 0.005  |            | ü     | 0.005 | 1 2 11   | 0.005 | 1 4 1     | 0.005    |           | < 11  | 0.005   | 1 4           |          |
| VOLATILES        | Mathul isobutul katono  | 0.05     | 1 2     | н       | 0.05   | 1 2      | 11 0.00  | · ·      | < 11     | 200.0 |            |       | 2000   |          |       | 0.000  |            | - n   | 0.05  | 1 - 1    | 0.005 | 1 4 1     | 0.000    |           | ~ 11  | 0.05    | 1 2           | с й      |
| VOLATILES        | Hothylene abtride   | 0.005    |         |         | 0.005  |          | 1 0.00   | : 1      |          | 0.005 |            |       | 200.0  |          |       | 0.005  |            |       | 0.005 | 1 - 1    | 0.005 | 1 4 1     | 0.005    |           | ~ 11  | 0.005   | 1.2           |          |
| WAN ATHES        | Shrana  | 0.005    |         | 11      | 3005   |          | 1 0.00   |          | - 11     | 0.000 | 1 -        |       | 0,003  | 1 -      |       | 0.003  |            |       | 0.005 | 1 - 11   | 0.003 | 4 2 11    | 0.000    | 4         | ~ 11  | 300.0   |               | , II     |
| VOLATILES        | ografie<br>Teterskiersterse   | 0.005    |         | U<br>11 | 0.005  |          | 0 0.00   |          |          | 0,000 | 1 <        |       | 0.005  |          |       | 0.005  |            |       | 0.005 | 1 < 0    | 0.005 |           | 0.005    |           | - 11  | 0.005   | 1 4           |          |
| VOLATILES        | 1934calof06i0809  | 0.005    |         |         | 0.005  |          | 0 0,00   |          |          | 0.005 | 1 <        |       | 0.005  | 1 <      |       | 0.005  | 1 4        |       | 0.005 | 1 < 0    | 0.005 |           | 0.005    |           |       | 0.005   | 1 <           |          |
| VOLATILES        |   | 0.005    |         | U<br>H  | 0.000  |          | 0 0,00   |          |          | 0.005 |            |       | 0.005  |          |       | 0.005  |            |       | 0.005 | 1 4 0    | 0.000 |           | 0.005    |           | - 0   | 0.005   |               |          |
| VOLATILES        | rans-1,3-Ulchioropropene  | 0.005    | 1 <     | U<br>   | 0.005  | 1 <      | 0 0,00   |          | < 0      | 0.005 | 1 4        |       | 0.005  | 1 <      |       | 0.005  | 1 4        |       | 0.005 | 1 < 0    | 0.005 | 1 < 0     | 0.005    |           | - 0   | 0.005   | 1 <           |          |
| VOLATILES        | Inchoroethene   | 0.005    | 1 <     | U       | 0,005  | 1 <      | 0 0.00   | 1        | < U      | 0,005 | 1 <        | U     | 0.005  | т <      | 0     | 0.005  | 1 <        | 0     | 0.005 | 1 < 0    | 0.005 | 1 < 0     | 0.005    | 1 ·       | < 0   | 0.005   | 1 <           | U        |
| VOLATILES        | vinyi acetate   | 0.05     | 1 <     | U       | 0.05   | 1 <      | U 0,05   | 1        | < 10     | 0,05  | 1 <        | U     | 0.05   | 1 <      | U     | 0.05   | 1 <        | U     | 0.05  | 1 < 0    | 0.05  | 1 < 0     | 0.05     | 1 .       | < 0   | 0.05    | 1 <           |          |
| VULATILES        | vanyi chionde   | 0.01     | 1 <     | Ŭ       | 0.01   | 1 <      | U 0.01   | 1        | < 1)     | 0.01  | 1 <        | U     | 0.01   | 1 <      | U     | 0.01   | 1 <        | U     | 0.01  | 1 < 0    | 0.01  | 1 < 0     | 0.01     | 1 .       | < 0   | 0.01    | 1 <           | . U      |
| VULATILES        | Xylenes, Total  | 0.005    | 1 <     | U       | 0.005  | 1 <      | U 0.00   | 1        | < 1)     | 0,005 | 1 <        | U     | 0.005  | 1 <      | U     | 0.005  | 1 <        | U     | 0.005 | 1 < U    | 0.005 | 1 < U     | 0,005    | 1 .       | < U   | 0.005   | <u>1 &lt;</u> | <u> </u> |

Footnotes are shown on cover page to Tables Section.



Š.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-8 Concentrations of Chemicals in Soil Samples Associated with Sump 008

| [SUMP] = SUMP008               |   | 3651 IM | 2008-5801          | 3451 # | MPDA9_SRA1  |              | 1H-S08-01  |             | LH           | -508-01    |         | 1.H-S08     | -02             |               | LH-S08-02    |             | LF                | 1-S09-01      |         | UHS            | S09-01          |                | LH-\$09-0       | 1           | u      | H-S09-01      |        | LH-SO           | 9-02        | U              | 1-509-02  |         | เห-            | S09-02        |                 | LHS-2-05                |         |
|--------------------------------|---|---------|--------------------|--------|-------------|--------------|------------|-------------|--------------|------------|---------|-------------|-----------------|---------------|--------------|-------------|-------------------|---------------|---------|----------------|-----------------|----------------|-----------------|-------------|--------|---------------|--------|-----------------|-------------|----------------|-----------|---------|----------------|---------------|-----------------|-------------------------|---------|
| SAMPLE_NO                      |   | 35-SMP  | 08-SB01-02         | 35-SM  | P09-SB01-02 | L            | H-S08-01_1 |             | UH-          | 508-01_2   |         | LH-S08-     | 02_1            | t             | H-S08-02_    | 2           | LHK               | 509-01 QC     |         | LH-S           | 09-01_1         | 1              | LH-S09-01       | _2          | UH     | -\$09-01_3    |        | LH-\$09-        | -02_1       | 1H             | \$09-02_2 |         | LH-S           | 09-02_3       |                 | LHS-2-05                |         |
| SAMPLE_DATE                    |   | 9/      | 8/2006             | 9/     | /11/2006    |              | 7/12/1993  |             | 71           | 2/1993     |         | 7/12/19     | <del>)</del> 93 |               | 7/12/1993    |             | 6/                | 26/1993       |         | 6/2            | 6/1993          |                | 6/26/199        | 3           | 6      | /26/1993      |        | 6/26/1          | 993<br>5 Et | 6              | 26/1993   |         | 6/2<br>7 -     | 1993<br>75 Ft |                 | 1/10/1995<br>0 - 0 5 Ft |         |
| DEPTH                          |   | 6       | -6Ft               |        | 8-8Ft       |              | 0-2Ft      |             | 4            | -6Ft       |         | 0-21<br>PEC | Ft              |               | 4-6Ht<br>REG |             | 0.9               | 5-1.5 M<br>FD |         | 0.5-<br>F      | - 1.5 FE<br>REG |                | 5-5.9 Fi<br>REG | I           | 0.     | REG           |        | 0.5 - f.<br>RE( | G           | -              | REG       |         | , ,            | REG           |                 | REG                     |         |
| SAMPLE_PURPUSE                 | Parameter (Units = mo/ko)                             | Result  | REG<br>DIL LOI VOI | Result | DIL LQ V    | O Result     | DELLO      | ) VQ        | Result       | DILLQ      | VQ Resu | nt DiL      | ίο να           | Result        | DILL         | o vo        | Result            | DIL LQ        | VQ F    | Result (       | DIL LQ V        | /Q Resul       | tt DIL I        | LQ VQ       | Result | DIL LQ        | VQ Res | sult DIL        | LQ VQ       | Result         | DIL LQ    | VQ P    | Result         | HE LQ V       | Result          | DIL LO                  | ι VQ    |
| EXPLOSIVES                     | 1,3,5-Trinitrobenzene                                 | 0.283   | 1 U                | 0.245  | 1 U         |              | -          |             |              | ••••       |         |             |                 |               |              |             |                   |               |         |                |                 |                |                 |             |        |               |        |                 |             |                |           |         |                |               | 0.23            | 1 <                     | U       |
| EXPLOSIVES                     | 1,3-Dinitrobenzene                                    | 0.283   | 1 10               | 0.245  | 1 U         |              |            |             |              |            |         |             |                 |               |              |             |                   |               |         |                |                 |                |                 |             |        |               |        |                 |             |                |           |         |                |               | 0.23            | 1 <                     | U<br>11 |
| EXPLOSIVES                     | 2,4,6-Trinitrotoluene                                 | 0.283   | 1 0                | 0.245  | 1 1         | 0.93         |            | Ħ           | 0 33         | 1 2        | 11 035  | <b>a</b> 1  | < 11            | A 33          | 1 4          | : 11        | 1 111             | 1 <           | 0       | 1.176          | 1 <             | U 1.266        | 61              | < U         | 1,176  | 1 <           | U 1.1  | 49 1            | < 13        | 1.351          | 1 <       | U 1     | 1.163          | 1 < U         | 0.23            | 1 <                     | Ŭ       |
| EXPLOSIVES<br>EXPLOSIVES       | 2,4-Danitrotoluene<br>2.6-Dinitrotoluene              | 0.283   | 1 13               | 0.255  | 1 10        | 0.33         | 1 <        | U           | 0.33         | 1 <        | U 0.33  | 3 1         | < U             | 0.33          | 1 <          | : บ         | 1.111             | 1 <           | Ŭ       | 1.176          | 1 <             | U 1.266        | 61              | < U         | 1.176  | 1 <           | U 1.1  | 49 1            | < U         | 1.351          | 1 <       | U       | 1.163          | 1 < U         | 0.25            | 1 <                     | ម       |
| EXPLOSIVES                     | 2-Amino-4,6-dinitrotoluene                            | 0.294   | 1 U                | 0.255  | 1 U         |              |            | •           |              | -          |         | -           |                 |               |              |             |                   |               |         |                |                 |                |                 |             |        |               |        |                 |             |                |           |         |                |               |                 |                         |         |
| EXPLOSIVES                     | 4-Amino-2,6-dinitrotoluene                            | 0.294   | 1 U                | 0.255  | 1 U         |              |            |             |              |            |         |             |                 |               |              |             |                   |               |         |                |                 |                |                 |             |        |               |        |                 |             |                |           |         |                |               | 0.47            | 1 <                     | U<br>   |
| EXPLOSIVES                     | HMX   | 2.49    | 1 U                | 2.16   | 1 U         |              |            |             |              |            |         |             |                 |               |              |             |                   |               |         |                |                 | -              |                 |             |        |               | •      |                 | -           |                |           | •       |                |               | 0.94            | . I 1                   | U U     |
| EXPLOSIVES                     | m-Nitrotoluene  | 0.283   | 1 1                | 0.245  | 1 U<br>4 II |              |            |             |              |            |         |             |                 |               |              |             |                   |               |         |                |                 |                |                 |             |        |               |        |                 |             |                |           |         |                |               | 0.25            | 1 <                     | Ū       |
| EXPLOSIVES                     | o-Natrotoluene  | 0.283   | 1 0                | 0.245  | 1 0         |              |            |             |              |            |         |             |                 |               |              |             |                   |               |         |                |                 |                |                 |             |        |               |        |                 |             |                |           |         |                |               | 0.94            | 1 <                     | U       |
| EXPLOSIVES                     | p-Nitrotoluene  | 0.283   | 1 U                | 0.245  | 1 U         |              |            |             |              |            |         |             |                 |               |              |             |                   |               |         |                |                 |                |                 |             |        |               |        |                 |             |                |           |         |                |               | 2.8             | 1 <                     | U       |
| EXPLOSIVES                     | RDX   | 1.13    | 1 U                | 0.98   | 1 U         |              |            |             |              |            |         |             |                 |               |              |             |                   |               |         |                |                 |                |                 |             |        |               |        |                 |             |                |           |         |                |               | 1               | 1 <                     | U       |
| EXPLOSIVES                     | Tetryt  | 0.735   | 1 U                | 0.637  | 1 U         |              |            |             |              |            |         |             |                 | 0000          |              |             | 10500             |               |         | 6020           | 4               | 0960           |                 |             | 8050   | 1             | 104    | 1 001           |             | 19800          | 1         |         | 6320           | 1             | 5140            | t -                     | U       |
| METALS                         | Aluminum  | 8220    | 1 11 111           | 12300  | 1           | 6100         | 1          | н           | 11800        | 1          | 11 3    | ย เ<br>1    | < 11            | 3000          | 1 4          | 11          | 5.02              | 1             | E       | 5.2            | 1 <             | U 5.74         | 1               | < บ         | 6.12   | '<br>1 <      | U 9.   | 22 1            | < 1J        | 6.34           | 1 <       | U       | 5              | 1 < U         | 10.2            | 1 <                     | UJ      |
| METALS                         | Anomiciny   | 3.46    | 1 0 0J             | 0.49   | 1           | 2            | 1          | v           | 1.7          | 1          | 9.2     | ! 1         | • •             | 2.4           | 1            | , î         | 6.66              | 1             | -       | 3.74           | 1               | 3.24           | 1               | -           | 2.57   | 1             | 0.6    | 97 1            | E           | 2.19           | 1         |         | 0.5            | 1 < U         | 5.7             | 1                       | J       |
| METALS                         | Barium  | 39      | 1                  | 25.3   | 1           | 66.3         | 1          |             | 77.5         | 1          | 53.4    | 41          |                 | 57.9          | 1            |             | 131               | 1 <           | Ų       | 100            | 1 <             | U 27.8         | 1               | < U         | 272    | 1 <           | U 68   | 12 1            | < บ         | 104            | 1 <       | U       | 45.8           | 1 < U         | 60              | 1                       |         |
| METALS                         | Berytlium   | 0.517   | 1                  | 0.793  | 1           |              |            |             |              |            |         |             |                 |               |              |             |                   |               |         |                |                 | 4.50           |                 |             |        |               |        |                 |             | 6.00           |           |         | 4.95           |               |                 | • •                     |         |
| METALS                         | Cadmium   | 0.0624  | 1 3 3              | 0.0789 | 1 3         | J 1          | 1 <        | U           | 1            | 1 <        | U 1     | 1           | < U             | 1             | 1 <          | υ           | 7.18              | 1             |         | 4.16           | 1               | 4.59           | 1               |             | 4.5    | 1             | 13     | 49 1<br>80 1    |             | 0.02<br>3170   | 1         |         | 1050           | 1 0           | 578             |                         | U       |
| METALS                         | Calcium   | 428     | 1<br>1 II          | 1340   | 1           | J 1510<br>07 | 1          |             | 2130         | 1<br>1     | 183     | r<br>Ri     |                 | 14.8          | 1            |             | 27.7              | 1             |         | 12.2           | 1               | 10.1           | 1               |             | 10.8   | 1             | 10     | .8 1            |             | 16.3           | 1         |         | 7.3            | 1             | 14.9            | 1                       |         |
| METALS                         | Cobait  | 7.53    | 1 JH               | 10.1   | 1 .         | J 5          | 1          |             | 9.5          | 1          | 4.1     | 1           |                 | 8.8           | 1            |             | 8.24              | 1             |         | 3.09           | 1               | 8.15           | 5 1             |             | 8.14   | 1             | 4.     | 56 1            |             | 8.08           | 1         |         | 9.18           | 1             | 3.1             | 1                       |         |
| METALS                         | Copper  | 4.36    | 1                  | 3.8    | 1           | 2.4          | 1          |             | 5.5          | 1          | 2.3     | 1           |                 | 3.9           | 1            |             | 6.84              | 1 <           | U       | 4.89           | 1 <             | U 8.29         | 1               | < U         | 9.73   | 1 <           | U 7.   | 84 1            | < U         | 8.94           | 1 <       | U       | 4.38           | 1 < U         | 5.5             | 1                       |         |
| METALS                         | Cyanide, Total  | ł       |                    |        |             |              |            |             |              |            |         |             |                 |               |              |             |                   |               |         | 40000          |                 | 4000           |                 |             | 47200  |               | 01     |                 |             | 22200          | 4         |         | 6290           | 1             | 17100           |                         |         |
| METALS                         | iron  | 9850    | 1                  | 12600  | 1           | 11700        | 1          |             | 18200        | 1          | 2250    | 1 00        |                 | 21200         | 1            |             | 22500             | 1<br>†        |         | 18200          | 1               | 1900<br>F 19.5 | 60 1<br>; 1     |             | 17300  | 1             | 92     | 15 1            | E           | 27.9           | 1         |         | 10.6           | י<br>1 ד      | 18.3            | 1                       |         |
| METALS                         | Lead<br>Mannesium                                     | 912     | 1 JL<br>1          | 2170   | f i         | J 7.3<br>404 | 1          |             | 1010         | t          | 264     | 1 1         |                 | 858           | 1            |             | 1060              | 1             |         | 753            | 1               | 1530           | , .<br>) 1      |             | 943    | 1             | 49     | 1 1             |             | 1510 -         | 1         |         | 1100           | 1             | 224             | 1                       |         |
| METALS                         | Manganese   | 23.6    | 1                  | 21.9   | 1           | 189          | 1          |             | 71.1         | 1          | 196     | 5 1         |                 | 107           | 1            |             | 652               | 1             |         | 130            | 1               | 91.4           | l 1             |             | 66.2   | 1             | 67     | .3 1            |             | 138            | 1         |         | 12.6           | 1             | 89.4            | 1                       |         |
| METALS                         | Mercury   | 0.0147  | 1 J J              | 0.276  | 1 U         | 0.1          | 1 <        | U           | 0.1          | 1 <        | U 0.1   | 1           | < U             | 0.1           | 1 •          | : U         | 0.12 <del>9</del> | 1             | i       | 0.053          | 1 <             | U 0.050        | 61              | < U         | 0.053  | 1 <           | U 0.0  | 52 1            | < U         | 0.057          | 1 <       | U       | 0.05           | 1 < U         | 0.1             | 1 <                     | U       |
| METALS                         | Nickel  | 10.4    | 1                  | 16.7   | 1           | 0.50         |            |             | 505          |            | 0.44    |             |                 | 253           |              |             | 420               |               |         | 222            | 4               | 324            | •               |             | 300    | 1             | . 6    | 19 1            |             | 1370           | 1         |         | 287            | 1             | 203             | 1 <                     | . u     |
| METALS                         | Potassium   | 426     | 1 JH               | 509    | 1           | 253          | 1          | - 11        | 505          | ז<br>1 ג   | 210     | 5 1<br>1    | < 11            | 303           | 1            | 11          | 420               | ו<br>1 <      | н       | 0.57           | 1 <             | U 0.574        | 4 1             | < U         | 0.612  | 1 <           | U 0.9  | 22 1            | < U         | 0.634          | 1 <       | U       | 0.5            | 1 < l         | J 0.43          | 1                       | Ŷ       |
| METALS                         | Silver  | 1.8     | 1 U                | 1.71   | tU          | 1            | 1 <        | . U         | 1            | 1 <        | U 1     | 1           | < U             | 1             | 1 .          | ¢ Ū         | 0.09              | 1             | •       | 0.026          | 1 <             | U 0.02         | 9 1             | < U         | 0.031  | 1 <           | U 0.0  | 46 1            | < U         | 0.032          | 1 <       | U       | 0.025          | 1 < U         | / t             | 1 <                     | U       |
| METALS                         | Sodium  | 188     | 1                  | 550    | 1           |              |            |             |              |            |         |             |                 |               |              |             |                   |               |         |                |                 |                |                 |             |        |               |        |                 |             |                |           |         |                |               |                 |                         |         |
| METALS                         | Strontium   | 1       |                    |        |             | 10.3         | 1          |             | 20.4         | 1          | 5.6     | i 1         |                 | 14.4          | 1            |             | 14                | 1 <           | U       | 8.87           | 1 <             | U 22.5         | i 1             | < 0         | 57.1   | 1 <           | U 10   | ),9 1           | < U         | 42.5           | 1 <       | U       | 20.9           | 1 < U         | 10.2            | 1 <                     | U       |
| METALS                         | Thallium  | 0.0735  | 1                  | 0.0731 | 1           |              |            |             |              |            |         |             |                 |               |              |             |                   |               |         |                |                 |                |                 |             |        |               |        |                 |             |                |           |         |                |               | 50.0            |                         | 0       |
| METALS                         | Zinc  | 34.5    | 1                  | 316    | ו<br>1      | 16 1         | 1          |             | 25.7         | 1          | 22.3    | 3 1         |                 | 21.9          | . 1          |             | 44.5              | 1             |         | 32.1           | 1               | 49.6           | i 1             |             | 21.7   | 1             | 20     | ).9 1           |             | 39.8           | 1         |         | 16.8           | 1             | 21.6            | t                       |         |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene                                | 1       | •                  | ••     | •           | 0.33         | 1 <        | U           | 0.33         | 1 <        | U 0.3   | 3 1         | < U             | 0.33          | 1 -          | c U         | 1.111             | 1 <           | U       | 1.176          | 1 <             | U 1.26         | 61              | < U         | 1.176  | 1 <           | U 1.1  | 49 1            | < U         | 1.351          | 1 <       | U       | 1.163          | 1 < U         | / 0.44          | 1 <                     | U       |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene                                   | ŀ       |                    |        |             | 0.33         | 1 <        | U           | 0.33         | 1 <        | U 0.3   | 31          | < U             | 0.33          | 1 •          | < U         | 1,111             | 1 <           | U       | 1.176          | 1 <             | U 1.26         | 6 1             | < U         | 1.176  | 1 <           | U 1.1  | 49 1            | < U         | 1.351          | 1 <       | U       | 1.163          | 1 < U         | 0.44            | 1 <                     | U       |
| SEMIVOLATILES                  | 1,3-Dichlorobenzene                                   | 1       |                    |        |             | 0.33         | 1 <        | U           | 0.33         | 1 <        | U 0.3   | 3 1         | < U             | 0.33          | 1 .          |             | 1.111             | 1 <           | U       | 1.176          | 1 <             | U 1.26         | 61              | < U         | 1.176  | 1 <           | U 1.1  | 49 1            | < U         | 1.351          | 1 <       | U<br>11 | 1.103          | 1 < 0         | 0.44            | · 1 <                   | . н     |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene                                   |         |                    |        |             | 0.33         | 1 <        | . U         | 0.33         | 1 <        | U 0.3   | 31<br>55    | < U<br>< II     | 0.33          | 1 4          | ς Η         | 1 111             | 1 <           | 1       | 1.176          | 1 <             | U 1.26         | 6 1             | < 11        | 1.176  | 1 <           | U 1.1  | 49 1            | < U         | 1.351          | 1 <       | U ·     | 1.163          | 1 < 1         | 1 2.2           | 1 <                     | . Ŭ     |
| SEMIVOLATILES                  | 2.4.6-Trichlorophenol                                 |         |                    |        |             | 0.33         | 1 <        | U U         | 0.33         | 1 <        | U 0.3   | 3 i         | < Ŭ             | 0.33          | 1.           | ίŪ          | 1,111             | 1 <           | U       | 1.176          | 1 <             | U 1.26         | 6 1             | < U         | 1.176  | 1 <           | U 1.1  | 49 1            | < U         | 1.351          | 1 <       | U       | 1.163          | 1 < U         | 0.44            | 1 <                     | ម       |
| SEMIVOLATILES                  | 2,4-Dichlorophenol                                    |         |                    |        |             | 0.33         | 1 <        | U           | 0.33         | 1 <        | U 0.3   | 31          | < U             | 0.33          | 1 •          | < U         | 1.111             | 1 <           | ប       | 1.176          | 1 <             | U 1.26         | 61              | < U         | 1.176  | <b>↑ &lt;</b> | U 1.1  | 49 1            | < U         | 1.351          | 1 <       | ប       | 1.163          | 1 < U         | 0.44            | 1 <                     | U       |
| SEMIVOLATILES                  | 2,4-Dimethylphenol                                    |         |                    |        |             | 0.33         | 1 <        | U           | 0.33         | 1 <        | U 0.3   | 3 1         | < U             | 0.33          | 1 •          | < U         | 0.556             | 1 <           | U       | 0.588          | 1 <             | U 0.63         | 3 1             | < U         | 0.588  | 1 <           | U 0.9  | 575 <b>1</b>    | < U         | 0.676          | 1 <       | ບ<br>   | 0.581          | 1 < 0         | ) 0.44<br>I 2.2 | 1 <                     | . U     |
| SEMIVOLATILES                  | 2,4-Dinitrophenol                                     |         |                    |        |             | 1.65         | 1 <        | U           | 1.65         | 1 <        | U 1.6   | 5 1         | < U             | 1.65          | 1 .          | C U         | 11.111            | 1 <           | Ð       | 11./65         | 1 4             | U 12.05        | 76 I            | < 0         | 11.700 |               | 0 H.   | 494             | • •         | 13.314         | , `       |         | (1.020         | 1 2 0         | 0.44            | 1 <                     |         |
| SEMIVOLATILES                  | 2,4-Directologne                                      | 1       |                    |        |             |              |            |             |              |            |         |             |                 |               |              |             |                   |               |         |                |                 |                |                 |             |        |               |        |                 |             |                |           |         |                |               | 0.44            | 1 <                     | U.      |
| SEMIVOLATILES                  | 2-Chloronaphthalene                                   |         |                    |        |             | 0.33         | 1 <        | . U         | 0.33         | 1 <        | U 0.3   | 3 1         | < U             | 0.33          | 1.           | < U         | 0.333             | 1 <           | U       | 0.353          | 1 <             | U 0.38         | 3 1             | < U         | 0.353  | 1 <           | U 0.3  | 945 1           | < ປ         | 0.405          | 1 <       | U       | 0.349          | 1 < 0         | i 0.44          | 1 <                     | U       |
| SEMIVOLATILES                  | 2-Chlorophenol  |         |                    |        |             | 0.33         | 1 <        | : U         | 0.33         | 1 <        | U 0.3   | 3 1         | < U             | 0.33          | 1 •          | < U         | 0.556             | 1 <           | U       | 0.588          | 1 <             | U 0.63         | 31              | < U         | 0.588  | 1 <           | U 0.4  | 575 1           | < U         | 0.676          | 1 <       | U       | 0.581          | 1 < U         | 0.44            | 1 <                     | . U     |
| SEMIVOLATILES                  | 2-Methylnaphthalene                                   |         |                    |        |             | 0.33         | 1 <        | U           | 0.33         | 1 <        | U 0.3   | 3 1         | < 1             | 0.33          | 1 •          | (U)         | 0.333             | 1 <           | U       | 0.353          | 1 <             | U 0.38         | \$1<br>3 f      | < U         | 0.353  | 1 <           | U 0.3  | 945 1<br>576 1  | < U         | 0.405          | 1 4       | ม<br>ม  | 0.549          | 1 < 0         | 0.44            | 1 <                     | . н     |
| SEMIVOLATILES                  | 2-Methylphenol<br>2 Nitrophilipp                      |         |                    |        |             | 1.65         | 1 4        | : U         | 1.55         | 1 4        | 0 0.3   | 5 1<br>5 1  | < 11            | 0.33          | 1            | C EI        | 3 333             | 1 <           |         | 3.529          | 1 ×<br>† <      | U. 3.79        | 31<br>71        | < U         | 3.529  | 1 <           | U 3.4  | 148 1           | < U         | 4.054          | 1 <       | Ŭ       | 3.488          | 1 < 1         | J 2.2           | 1 <                     | Ū       |
| SEMIVOLATILES                  | 2-Nitrophenol   |         |                    |        |             | 0.33         | 1 <        | . U         | 0.33         | 1 <        | U 0.3   | 3 1         | < Ŭ             | 0.33          | 1 .          | < U         | 1.111             | 1 <           | U       | 1.176          | 1 <             | U 1.26         | 61              | < U         | 1.176  | 1 <           | U 1.1  | 49 1            | < U         | 1.351          | 1 <       | U       | 1.163          | 1 < 1         | J 0.44          | 1 <                     | U.      |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzidine                                |         |                    |        |             | 0.65         | 1 <        | U           | 0.65         | 1 <        | U 0.6   | 51          | < U             | 0.65          | 1.           | < U.        | 0.556             | 1 <           | U       | 0.588          | 1 <             | U 0.63         | 31              | < U         | 0.588  | 1 <           | U 0.5  | 575 1           | < U         | 0.676          | 1 <       | U       | 0.581          | 1 < 1         | 1 0.88          | 1 <                     | U       |
| SEMIVOLATILES                  | 3-Nitroaniline  |         |                    |        |             | 1.65         | 1 <        | ิย          | 1.65         | 1 <        | U 1.6   | 5 1         | < U             | 1.65          | 1 •          | < U         | 3.333             | 1 <           | U       | 3.529          | 1 <             | U 3.79         | 71              | < U         | 3.529  | 1 <           | U 3.4  | 148 1           | < U         | 4.054          | 1 <       | U       | 3.488          | 1 < 0         | 22              | 1 <                     |         |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol                            | 1       |                    |        |             | 1.65         | 1 <        | : U         | 1.65         | 1 <        | U 1.6   | 5 1         | < U             | 1.65          | 1            | < U<br>/ II | 5.556             | 1 <           | U       | 5.882<br>1 174 | 1 <             | U 6.32         | 91<br>64        | < U         | 5.882  | 1 <           | U 5.7  | 14/ 1<br>140 1  | < U<br>< II | 0.757<br>1.351 | 1 <       | U 1     | 0.014<br>1.163 | 1 < 1         | 2.2             | 1 <                     | . U     |
| SEMIVOLATILES<br>SEMIVOLATILES | 4-bromophenyl phenyl ether<br>A-Chloro-3-methylohonol | 1.      |                    |        |             | 0.33         | · · · ·    | - U<br>: 11 | 0.33         | ، د<br>۱ د | U U.3   | 5 1<br>5 1  | < 11<br>< 11    | 0.33<br>1) 65 | 1 1          | - U<br>< U  | 0,556             | 1. <          | U       | 0.588          | 1 <             | U 0.63         | 91              | < 11        | 0,588  | 1 <           | U 0.4  | 575 1           | < U         | 0.676          | 1 <       | Ŭ       | 0.581          | 1 < 1         | J 0.44          | 1 <                     | บ       |
| SEMIVOLATILES                  | 4-Chloroaniline                                       |         |                    |        |             | 0.05         | 1 <        | : U         | 0.65         | 1 <        | U 0.6   | 5 1         | < 1J            | 0.65          | 1            | < Ū         | 3.333             | 1 <           | Ŭ       | 3.529          | 1 <             | U 3.79         | 7 1             | < Ŭ         | 3.529  | 1 <           | U 3.4  | 148 1           | < 0         | 4.054          | 1 <       | U       | 3.488          | 1 < 1         | 0.44            | 1 <                     | U       |
| SEMIVOLATILES                  | 4-Chlorophenyl phenyl ether                           |         |                    |        |             | 0.33         | 1 <        | : U         | 0.33         | 1 <        | U 0.3   | 3 1         | < U             | 0.33          | 1 •          | < U         | 1.111             | 1 <           | U       | 1.176          | 1 <             | U 1.26         | 61              | u >         | 1.176  | 1 <           | U 1.1  | 149 1           | < ⊍         | 1.351          | 1 <       | U       | 1.163          | 1 < l         | 0.44            | 1 <                     | U       |
| SEMIVOLATILES                  | 4-Methylphenol  | 1       |                    |        |             | 0.33         | 1 <        | ម           | 0.33         | 1 <        | U 0.3   | 31          | < U             | 0.33          | 1 •          | ¥ل ک        | 0.555             | 1 <           | U       | 0.588          | 1 <             | U 0.63         | 3 1             | < U         | 0.588  | 1 <           | U 0.9  | 575 1           | < U         | 0.676          | 1 <       | U       | 0.581          | 1 < 1         | 0.44            | 1 <                     | . U     |
| SEMIVOLATILES                  | 4-Nitroaniline  | 1       |                    |        |             | 1.65         | 1 <        | : U         | 1.65         | 1 <        | U 1.6   | 5 1         | < U             | 1.65          | 1 •          | < U         | 5.556             | 1 <           | ប<br>H  | 5.882          | 1 <             | U 6.32         | ¥1<br>0.+       | < U<br>2 II | 5.882  | 1 <           | U 5.7  | 14/ 1<br>1/27 1 | < U<br>< D  | 0./5/<br>6 757 | 1 <       | 0<br>11 | 3.014<br>5.814 | 1 < U         | 22              | 1 <                     | : 11    |
| SEMIVOLATILES                  | 4-Nitrophenol<br>Aconaphthese                         |         |                    |        |             | 1.65         | 1 <        | U -         | 7.65<br>A 22 | 1 <<br>t = | U 1.6   | 0 1<br>3 1  | < U<br>< H      | 1.155<br>กระ  | 1 .          | < 11        | 0.333<br>0.333    | 1 <           | 0<br>11 | 0.353          | 1 <             | U 0.32         | т.<br>}1        | < 11        | 0.353  | 1 <           | U 0.1  | 345 1           | < U         | 0.405          | 1 <       | บั      | 0.349          | 1 < 1         | J 0.44          | 1 <                     | ្មប     |
| SEMIVOLATILES                  | Acenaphthylene  |         |                    |        |             | 0.33         | 1 <        | : U         | 0.33         | 1 <        | U 0.3   | 3 1         | < U             | 0.33          | 1            | < U         | 0.556             | 1 <           | Ű       | 0.588          | 1 <             | U 0.63         | 3 t             | < Ŭ         | 0.588  | 1 <           | U 0.9  | i75 1           | < U         | 0.676          | 1 <       | U       | 0.581          | 1 < 1         | J 0.44          | 1 <                     | υ       |
| SEMIVOLATILES                  | Anthracene  | 1       |                    |        |             | 0.33         | 1 <        | U U         | 0.33         | 1 <        | U 0.3   | 3 1         | < U             | 0.33          | 1 •          | tł ک        | 0.556             | 1 <           | U       | 0.588          | 1 <             | U 0.63         | 31              | < U .       | 0.588  | 1 <           | U 0.9  | 575 1           | < U         | 0.676          | 1 <       | U       | 0.581          | 1 < 1         | 0.44            | 1 <                     | U       |

Q N

Data Evatuation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-8 Concentrations of Chemicals in Soil Samples Associated with Sump 008

| [SUMP] = SUMP008<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_DUDDOCT |  | 35SUMP008-SB01<br>35-SMP08-SB01-02<br>9/8/2006<br>6 - 6 Ft | 35SUMP009-SB01<br>35-SMP09-SB01-02<br>9/11/2006<br>8-8 Ft | 1)<br>1)<br>7) | H-S08-01<br>-S08-01_1<br>/12/1993<br>0-2 Ft<br>PEC | 1         | LH-S08-01<br>H-S08-01_2<br>7/12/1993<br>4 - 6 Ft<br>REC | 2          | LH<br>LH+<br>7/<br>( | -\$08-02<br>\$08-02_1<br>12/1993<br>)- 2 Ft<br>PEC |       | LH-S08<br>LH-S08<br>7/12/1<br>4 - 6 | 8-02<br>-02_2<br>993<br>Ft | L<br>LH<br>( | .H-S09-01<br>-S09-01 QC<br>6/26/1993<br>).5 - 1.5 Ft<br>FD | :      | LH-<br>LH-S<br>6/2<br>0.5 | -\$09-01<br>\$09-01_1<br>:6/1993<br>- 1.5 Ft<br>RFG |         | LH-S09-0<br>LH-S09-0<br>6/26/199<br>5 - 5.5 F | 0†<br>1_2<br>}3<br>F1 | LH<br>LH<br>6  | H-S09-01<br>-S09-01_3<br>/26/1993<br>5 - 7.5 Ft<br>REG |       | LH-S0<br>LH-S09<br>6/26/1<br>0.5 - 1<br>RF | 19-02<br>1-02_1<br>1993<br>1.5 Ft | t<br>Li | H-S09-02<br>1-S09-02_2<br>6/26/1993<br>5 - 5.6 Ft<br>RFG | <u>.</u> | UH-<br>UH-S<br>6/2<br>7- | 509-02<br>609-02_3<br>6/1993<br>7.5 FL<br>REG |                 | LHS-2-05<br>LHS-2-05<br>1/10/1995<br>0-0.5 Ft<br>REG |           |
|--|--|--|---|----------------|--|-----------|---|------------|----------------------|--|-------|-------------------------------------|----------------------------|--------------|--|--------|---------------------------|---|---------|---|-----------------------|----------------|--|-------|--|-----------------------------------|---------|--|----------|--------------------------|---|-----------------|--|-----------|
| Test Group   | Parameter (Units = mo/kg)                              | Result DIL LQ VQ   | Result Dil LQ VQ  | Result         | DIL LQ   | VQ Result | DILLO   | o vo       | Result               | DIL LQ   | VQ Re | suit Dill                           | . LQ VQ                    | Result       | DILLQ  | vQ     | Result                    | DILLQ   | VQ Resu | t DIL   | LQ VQ                 | Result         | DIL LQ   | VQ Re | suft Dill                                  | L LQ VO                           | Result  | DILLQ  | VQ.      | Result I                 | DILLQ   | VQ Resul        | t DIL LO   | ) vq      |
| SEMIVOLATILES  | Benzo(a)anthracene                                     | 1  |   | 0.33           | 1 <  | U 0.33    | 1 <   | : U        | 0.33                 | 1 <  | U 0.  | 33 t                                | < U                        | 0.333        | 1 <  | U      | 0.353                     | 1 <   | U 0.3   | 1   | < U                   | 0.353          | 1 <  | U 0.3 | 45 1                                       | < U                               | 0.405   | 1 <  | U        | 0.349                    | 1 <   | U 0.44          | 1 <  | U         |
| SEMIVOLATILES  | Benzo(a)pyrene   |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | : U        | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 0.556        | 1 <  | U      | 0.588                     | 1 <   | U 0.63  | 3 1   | < 1                   | 0.588          | 1 <  | U 0.5 | 75 1                                       | < U                               | 0.676   | 1 <  | 0        | 0.581                    | 1 <   | U 0.44          | 1 <  | U<br>• 11 |
| SEMIVOLATILES  | Benzo(b)ñuoranthene<br>Benzo(chilocranthene            |  |   | 0.33           | 1 <  | 0 0.33    | 1 <   | - 1)       | 0.33                 | 1 <  | U U.  | 33 T<br>33 T                        | < U                        | 1.111        | 1 4  | 0      | 1.1/0                     | 1 <   | U 1.20  | 5 i<br>2 i                                    | < U                   | 2,353          | 1 <  | U 1.1 | 49 I<br>49 I                               | < 11                              | 2 703   | 1 <  | u<br>u   | 2.326                    | 1 <   | 0 0.44          | 1 <  | . H       |
| SEMIVOLATILES  | Benzo(k)fluoranthene                                   |  |   | 0.33           | , `<br>† <   | U 0.33    | 1 <   | ະບ         | 0.33                 | 1 <  | U 0.  | 33 1                                | < 0                        | 1.111        | 1 <  | Ŭ      | 1.176                     | 1 <   | U 1.26  | 51  | < 0                   | 1.176          | 1 <  | U 1.1 | 49 1                                       | < U                               | 1.351   | 1 <  | Ŭ        | 1.163                    | 1 <   | U 0.44          | 1 <  | : U       |
| SEMIVOLATILES  | Benzok: Acid   |  |   | 1.65           | 1 <  | U 1.65    | 1 <   | : 10       | 1.65                 | 1 <  | U 1.  | 65 1                                | < U                        |              |  |        |                           |   |         |   |                       |                |  |       |  |                                   |         |  |          |                          |   | 2.2             | 1 <  | U U       |
| SEMIVOLATILES  | Benzyl Alcohol   |  |   | 0.65           | 1 <  | Ų 0.65    | 1 <   | : 11       | 0.65                 | 1 <  | U 0.  | 65 1                                | < U                        |              |  |        |                           |   |         |   |                       |                |  |       |  |                                   |         |  |          |                          |   | 0.44            | 1 <  | . U       |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane                             | Ì  |   | 0.33           | 1 <  | U 0.33    | 1 <   | : U        | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 0.556        | 1 <  | U      | 0.588                     | 1 <   | U 0.63  | 31  | < U                   | 0.588          | 1 <  | U 0.5 | 75 1                                       | < ()                              | 0.676   | 1 <  | 0        | 0.581                    | 1 <   | U 0.44          | 1 <  | U<br>v u  |
| SEMIVOLATILES<br>SEMINOLATILES   | bis[2-Chloroethyl]ether<br>bis(2-Chloroiscorrowthether |  |   | 0.33           | 1 <  | 0 0.33    | 1 <   | . 1)       | 0.33                 | 1 <  | U U.  | 33 1<br>33 1                        | < 11                       | 0.500        | 1 <  | U<br>U | 0.500                     | 1 <   | U 1.26  | 5 I   | < U                   | 1.176          | 1 <  | U 1.1 | 49 t                                       | < U                               | 1.351   | 1 <  | ÷U       | 1.163                    | 1 <   | U 0.44          | 1 <  | : 0       |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate                             |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | : 10       | 0.33                 | 1 <  | U 0.  | 33 1                                | < Ŭ                        | 0.556        | 1 <  | Ū      | 0.588                     | 1 <   | U 0.63  | 3 1   | < Ū                   | 0.588          | 1 <  | U 0.5 | 75 1                                       | < U                               | 0.676   | 1 <  | Ū        | 0.581                    | 1 <   | U 0.44          | 1 <  | U         |
| SEMIVOLATILES  | Butyl benzyl phthalate                                 |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | ម          | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 0.556        | 1 <  | ប      | 0.588                     | 1 <   | U 0.63  | 31  | < U                   | 0.588          | 1 <  | U 0.5 | 75 1                                       | . < U                             | 0.676   | 1 <  | U        | 0.581                    | 1 <   | U 0.44          | 1 <  | U         |
| SEMIVOLATILES  | Carbazole  | 1  |   |                |  |           |   |            |                      |  |       |                                     |                            | 1,111        | 1 <  | U      | 1.176                     | 1 <   | U 1.26  | 61  | < U                   | 1.176          | 1 <  | U 1.1 | 49 1                                       | < U                               | 1.351   | 1 <  | ប        | 1.163                    | 1 <   | U<br>U          |  |           |
| SEMIVOLATILES  | Chrysene<br>Diboopola blootbrocepo                     |  |   | 0.33           | 1 <<br>1 <   | 0 0.33    | 1 <   |            | 0.33                 | 1 <  | U U   | JJ 1<br>33 1                        | < U                        | 5.555        | 1 <  | 0      | 5.662<br>2 353            | 1 <   | 1 253   | 9 1<br>7 1                                    | < U                   | 5.66Z<br>2.353 | 1 <  | U 5./ | 4/ 1<br>99 1                               | < U                               | 2 703   | 1 <  | 11       | 2.326                    | 1 <   | U 0.44          | 1 <  | ευ.       |
| SEMIVOLATILES  | Dibenzoluran   |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | : U        | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 1,111        | 1 <  | ŭ      | 1.176                     | 1 <   | U 1.26  | 6 1   | < U                   | 1.176          | 1 <  | U 1.1 | <b>49</b> 1                                | < U                               | 1.351   | 1 <  | U        | 1.163                    | 1 <   | U 0.44          | 1 <  | U         |
| SEMIVOLATILES  | Diethyl phthalate                                      |  |   | 0.33           | 1 <  | U 0.33    | t <   | u u        | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 0.556        | 1 <  | υ      | 0.588                     | 1 <   | U 0.19  | 1   |                       | 0.212          | 1  | 0.5   | 75 1                                       | < U                               | 0.676   | 1 <  | U        | 0.581                    | 1 <   | U 0.44          | 1 <  | U         |
| SEMIVOLATILES  | Dimethyl phthalate                                     |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | : U        | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 0.556        | 1 <  | บ      | 0.588                     | 1 <   | U 0.63  | 31  | < U                   | 0.588          | 1 <  | U 0.5 | 75 1                                       | < U                               | 0.676   | 1 <  | U        | 0.581                    | 1 <   | U 0.44          | 1 <  | : U       |
| SEMIVOLATILES  | di-n-Butyl phthalate                                   |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | ε U·       | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 4.211        | 1  |        | 6.788                     | 1   | 5.68    | 41  | ~ 11                  | 5.894          | 1  | 3.2   | 187 1<br>175 1                             | <ul> <li>I</li> </ul>             | 4.351   | 1  | н        | 4.628                    | 1   | 0.44            | 1 <  | . U       |
| SEMIVOLATILES  | di-n-Octyl phthalate<br>Europoithono                   |  |   | 0.33           | 1 <  | 0 0.33    | 1 <   |            | 0.33                 | 1 <  | 11 0  | 35 1<br>33 1                        | < U<br>< II                | 0.555        | 1 <  | 11     | 0.568                     | 1 <   | U 0.63  | 31  | < U<br>< U            | 0.568          | 1 <  | 0 0.5 | 75 1                                       | < U<br>< U                        | 0.676   | 1 <  | 1        | 0.581                    | 1 <   | U 0.44          | 1 <  | : U       |
| SEMIVOLATILES  | Fluorene   |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | : U        | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 0.556        | 1 <  | บั     | 0.588                     | 1 <   | U 0.63  | 3 1   | < U                   | 0.588          | 1 <  | U 0.5 | 75 1                                       | < Ŭ                               | 0.676   | 1 <  | Ŭ        | 0.581                    | 1 <   | U 0.44          | 1 <  | : 0       |
| SEMIVOLATILES  | Hexachiorobenzene                                      |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | ۲U ک       | 0.33                 | 1 <  | ປ 0.  | 33 1                                | < U                        | 1,111        | 1 <  | U      | 1.176                     | 1 <   | U 1.26  | 61  | < U                   | 1.176          | 1 <  | U 1.1 | 49 1                                       | < U                               | 1.351   | 1 <  | U        | 1.163                    | 1 <   | U 0.44          | 1 <  | U U       |
| SEMIVOLATILES  | Hexachlorobutadiene                                    |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | ម          | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 3.333        | 1 <  | ប      | 3.529                     | 1 <   | U 3.79  | 7 1   | < U                   | 3.529          | 1 <  | U 3.4 | 48 1                                       | < U                               | 4.054   | 1 <  | U        | 3.488                    | 1 <   | U 0.44          | 1 <  | U         |
| SEMIVOLATILES  | Hexachlorocyclopentadiene                              | -  |   | 0.33           | 1 <  | U 0.33    | 1 <   | U x        | 0.33                 | 1 <  | U 0.  | 33 1<br>99 1                        | < U                        | 3.333        | 1 <  | 0      | 3.529                     | 1 <   | U 3.79  | ( 1<br>5 1                                    | < U                   | 3.529          | 1 <  | U 3.4 | 46 1<br>40 1                               | < U                               | 4.054   | 1 <  | U<br>11  | 3.468                    | 1 <<br>1 <                                    | 0 0.44          | 1 <  | ្រា       |
| SEMIVOLATILES  | Indeno(1,2,3-cd)ovrene                                 |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | . U        | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 1.111        | 1 <  | Ű      | 1.176                     | 1 <   | U 1.26  | 6 1   | < U                   | 1.176          | t <  | U 1.1 | 49 1                                       | < 1                               | 1.351   | 1 <  | Ŭ        | 1.163                    | 1 <   | U 0.44          | 1 <  | : Ū       |
| SEMIVOLATILES  | Isophorone   |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | u د        | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 0.556        | 1 <  | U      | 0.588                     | t <   | U 0.63  | 31  | < U                   | 0.588          | 1 <  | U 0.9 | 75 1                                       | < U                               | 0.676   | 1 <  | U        | 0.581                    | 1 <   | U 0.44          | 1 <  | U U       |
| SEMIVOLATILES  | Naphthalene  |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | ٤U         | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 0.333        | 1 <  | บ      | 0.353                     | 1 <   | U 0.38  | 1   | < U                   | 0.353          | 1 <  | U 0.3 | 45 1                                       | < U                               | 0.405   | 1 <  | U        | 0.349                    | 1 <   | U 0.44          | 1 <  | U         |
| SEMIVOLATILES  | Nitrobenzene   |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | U :        | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 0.555        | 1 <  | U      | 0.588                     | 1 <   | U 0.63  | 31  | < U                   | 0.588          | 1 <  | U 0.5 | 75 1                                       | < ()                              | 0.676   | 1 <  | U        | 0.581                    | 1 <   | U 0.44          | 1 <  | . n       |
| SEMIVOLATILES<br>SEMIVOLATILES   | n-Nitroso-di-n-propylamine                             |  |   | 0.33           | ז ג<br>1 ג   | 0 0.33    | 1 <   | с U<br>с н | 0.33                 | 1 <  | U 0.  | 33 1<br>33 1                        | ں ×<br>۱۱ ×                | 1.111        | 1 <  | 11     | 0.588                     | 1 <   | U 1.20  | рі<br>З 1                                     | < U                   | 0.588          | 1 <  | U 0.5 | 49 I<br>75 1                               | < U                               | 0.676   | 1 <  | ย        | 0.581                    | 1 <   | U 0.44          | 1 <  | : 0       |
| SEMIVOLATILES  | Pentachiorophenol                                      |  |   | 1.65           | 1 <  | U 1.65    | 1 <   | ະບ         | 1.65                 | 1 <  | U 1.  | 65 1                                | < 0                        | 5.556        | 1 <  | Ŭ      | 5.882                     | 1 <   | U 6.32  | 91  | < U                   | 5.882          | 1 <  | U 5.7 | 47 1                                       | < 0                               | 6.757   | 1 <  | Ŭ        | 5.814                    | 1 <   | U 2.2           | 1 <  | υ.        |
| SEMIVOLATILES  | Phenanthrene   | [  |   | 0.33           | 1 <  | U 0.33    | 1 <   | ί U        | 0.33                 | 1 <  | U 0.  | 33 1                                | < U                        | 0.556        | 1 <  | U      | 0.588                     | 1 <   | U 0.63  | 31  | < U                   | 0.588          | 1 <  | U 0.5 | 75 1                                       | < U                               | 0.676   | 1 <  | U        | 0.581                    | 1 <   | U 0.44          | 1 <  | , U       |
| SEMIVOLATILES  | Phenol   |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | C U        | 0.33                 | 1 <  | U 0,  | 33 1                                | < U                        | 0.556        | 1 <  | U      | 0.588                     | 1 <   | U 0.63  | 3 1   | < U                   | 0.588          | 1 <  | U 0.6 | 75 1                                       | < 1                               | 0.676   | 1 <  | U        | 0.581                    | 1 <   | U 0.44          | 1 <  | U<br>     |
| SEMIVOLATILES  | Pyrene<br>1.1.1.2 Tetrachlomethane                     |  |   | 0.33           | 1 <  | U 0.33    | 1 <   | U          | Q.33                 | 1 <  | 0 U.  | 33 1                                | < 0                        | 0.556        | 1 <  | 0      | 0.588                     | 1 <   | U 0.63  | 3 1   | < U                   | 0.588          | 1 4  | 0 0.3 | 1 610                                      | < 0                               | Ų.670   | 1 4  | U        | 0.301                    |   | 0 0.44          | 1 T <  | : D       |
| VOLATILES  | 1,1,1,1-Trichloroethane                                |  |   | 0.005          | 1 <  | U 0.005   | 1 <   | : U        | 0.005                | 1 <  | U 0.0 | 105 1                               | < U                        | 0.006        | 1 <  | U      | 0.006                     | 1 <   | U 0.00  | 61  | < U                   | 0.006          | 1 <  | U 0.0 | 05 1                                       | < U                               | 0.006   | 1 <  | U        | 0.006                    | 1 <   | U 0.007         | ,<br>, , , ,   | ÷ Ū       |
| VOLATILES  | 1,1,2,2-Tetrachloroethane                              |  |   | 0.005          | 1 <  | U 0.005   | 1 <   | ÷U         | 0.005                | 1 <  | U 0.0 | 105 t                               | < U                        | 0.006        | 1 <  | U      | 0.006                     | 1 <   | U 0.00  | 61  | < U                   | 0.006          | 1 <  | U 0.0 | 106 1                                      | < U                               | 0.006   | 1 <  | U        | 0.006                    | 1 <   | U 0.007         | ' 1 <  | U         |
| VOLATILES  | 1,1,2-Trichloroethane                                  |  |   | 0.005          | 1 <  | U 0.005   | 1 <   | U i        | 0.005                | 1 <  | U 0.0 | 005 1                               | < U                        | 0.006        | 1 <  | U      | 0.006                     | 1 <   | U 0.00  | 6 1   | < U                   | 0.006          | 1 <  | U 0.0 | 06 1                                       | < 1                               | 0.006   | 1 <  | U        | 0.006                    | 1 <   | U 0.007         |  | 9<br>     |
| VOLATILES  | 1,1-Dichloroethane                                     |  |   | 0.005          | 1 <  | 0 0.005   |   |            | 0.005                | 1 <  | 0 0.0 | JUS T<br>105 t                      | < ()                       | 0.005        | 1 <  | U<br>H | 0.005                     | 1 <   | 11 0.00 | 51<br>51                                      | < U                   | 0.005          | 1 <  | 0 0.0 | 106 1<br>106 1                             | < 11                              | 0.006   | 1 4  | U        | 0.006                    | 1 <   | U 0.007         | ' I <  | . U       |
| VOLATILES  | 1,1-Dichloropropene                                    | ł  |   | 0.000          |  | 0 0.005   |   |            | 0.000                |  | 0 0.  | ,<br>,                              |                            | 0.000        |  | v      | 0.000                     |   | 0 0.00  | •••   |                       | 0.000          |  | 0 0.1 | .00 7                                      |                                   | 0.000   | •  | v        | 0.000                    | •   | 0 0.00          | •  | Ť         |
| VOLATILES  | 1,2,3-Trichlorobenzene                                 |  |   |                |  |           |   |            |                      |  |       |                                     |                            |              |  |        |                           |   |         |   |                       |                |  |       |  |                                   |         |  |          |                          |   |                 |  |           |
| VOLATILES  | 1,2,3-Trichloropropane                                 | 1  |   |                |  |           |   |            |                      |  |       |                                     |                            |              |  |        |                           |   |         |   |                       |                |  |       |  |                                   |         |  |          |                          |   | 0.013           | 1 1 <  | U         |
| VOLATILES  | 1,2,4-Trichlorobenzene                                 |  |   |                |  |           |   |            |                      |  |       |                                     |                            |              |  |        |                           |   |         |   |                       |                |  |       |  |                                   |         |  |          |                          |   |                 |  |           |
| VOLATILES  | 1.2-Dibromo-3-chloropropage                            | -  |   |                |  |           |   |            |                      |  |       |                                     |                            |              |  |        |                           |   |         |   |                       |                |  |       |  |                                   |         |  |          |                          |   | 0.027           | ' † <  | : U       |
| VOLATILES  | 1,2-Dibromoethane                                      | ]  |   |                |  |           |   |            |                      |  |       |                                     |                            |              |  |        |                           |   |         |   |                       |                |  |       |  |                                   |         |  |          |                          |   | 0.027           | ' 1 <  | : U       |
| VOLATILES  | 1,2-Dichlorobenzene                                    |  |   |                |  |           |   |            |                      |  |       |                                     |                            |              |  |        |                           |   |         |   |                       |                |  |       |  |                                   |         |  |          |                          |   |                 |  |           |
| VOLATILES  | 1,2-Dichloroethane                                     |  |   | 0.005          | 1 <  | U 0.005   | 1 <   | : U        | 0.005                | 1 <  | U 0.0 | 105 1                               | < U                        | 0.006        | 1 <  | U      | 0.005                     | 1 <   | U 0.00  | 61  | < 11                  | 0.006          | 1 <  | U 0.0 | 106 1                                      | < U                               | 0.005   | 1 <  | U        | 0.006                    | 1 <   | U 0.007         | ' 1 <  | 9<br>- 11 |
| VOLATILES  | 1,2-Dichorononane                                      |  |   | 0.005          | 1 <  | 0 0.005   | 1 4   | . U        | 0.005                | 1 <  | 0 0.0 | 105 F                               | < 13                       | 0.006        | 1 <  | U<br>U | 0.005                     | 1 <   | 1 0.00  | 6 1   | < U                   | 0.006          | 1 <  | 0 0.  | NG 1                                       | < ປ                               | 0.000   | 1 <  | Ű        | 0.000                    | 1 <   | U 0.007         | ' 1 <  | : U       |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylene)                         |  |   | 0.000          | •  | • ••••    | •   | Ŷ          | 2.002                |  |       |                                     | -                          |              | •  | -      |                           | •   |         |   |                       |                |  |       |  | -                                 |         |  |          |                          |   | • • • • • •     |  |           |
| VOLATILES  | 1,3,5-Trimethylbenzene                                 |  |   |                |  |           |   |            |                      |  |       |                                     |                            |              |  |        |                           |   |         |   |                       |                |  |       |  |                                   |         |  |          |                          |   |                 |  |           |
| VOLATILES  | 1,3-Dichlorobenzene                                    |  |   |                |  |           |   |            |                      |  |       |                                     |                            |              |  |        |                           |   |         |   |                       |                |  | -     |  |                                   |         |  |          |                          |   |                 |  |           |
| VOLATILES<br>VOLATILES   | 1,3-Dichloropropane                                    |  |   |                |  |           |   |            |                      |  |       |                                     |                            |              |  |        |                           |   |         |   |                       |                |  |       |  |                                   |         |  |          |                          |   |                 |  |           |
| VOLATILES  | 2.2-Dichloropropane                                    |  |   |                |  |           |   |            |                      |  |       |                                     |                            |              |  |        |                           |   |         |   |                       |                |  |       |  |                                   |         |  |          |                          |   |                 |  |           |
| VOLATILES  | 2-Butanone   |  |   | 0.05           | 1 <  | U 0.05    | 1 <   | : U        | 0.05                 | 1 <  | U 0.  | 05 1                                | < U                        | 0.11         | 1 <  | U      | 0.11                      | 1 <   | U 0.12  | 1   | < U                   | 0.12           | 1 <  | U 0.  | 12 1                                       | < U                               | 0.13    | 1 <  | U        | 0.12                     | 1 <   | U 0.013         | 1 <b>1</b> <   | : U       |
| VOLATILES  | 2-Chloroethyl vinyl ether                              |  |   | 0.01           | 1 <  | U 0.01    | 1 <   | : U        | 0.01                 | 1 <  | U 0.  | 01 1                                | < U                        |              |  |        |                           |   |         |   |                       |                |  |       |  |                                   |         |  |          |                          |   | 0.013           | ¦ 1 <  | U         |
| VOLATILES  | 2-Chlorotoluene  | 1  |   |                |  | 11 0.0-   |   |            | 0.00                 |  |       | <u>م</u> .                          |                            |              |  |        | 0.075                     |   |         |   | <i>.</i>              | 0.070          |  |       | 150  |                                   | 0.004   |  |          | 0.019                    |   | 11 0.04         |  |           |
| VOLATILES<br>VOLATILES   | 2-Hexanone<br>2-Propend                                |  |   | 0.05           | 1 <  | U 0.05    | 1 <   | U I        | 0.05                 | 1 <  | U 0.  | vo 1                                | < U                        | 0.055        | 1 <  | U      | 9.055                     | 1 <   | U 0.06  | 2 1   | < U                   | 0.059          | 1 <  | U U.  | 1 50                                       | < U                               | 0.064   | 1 <  | U        | 0.058                    | 1 <   | U 0.013<br>A 67 | • 1 <<br>1 e   | с и       |
| VOLATILES  | 4-Chlorotoluene  |  |   |                |  |           |   |            |                      |  |       |                                     |                            |              |  |        | -                         |   |         |   |                       |                |  |       |  |                                   |         |  |          |                          |   | 0.01            |  |           |
| VOLATILES  | Acetone  |  |   | 0.1            | 1 <  | U 0.1     | 1 <   | : U        | 0.1                  | 1 <  | υ 0   | 1 1                                 | < U                        | 0.11         | 1 <  | U      | 0.11                      | 1. <  | U 0.12  | 1   | < U                   | 0.12           | 1 <  | U 0.  | 12 1                                       | < U                               | 0.13    | 1 <  | U        | 0.12                     | 1 <   | U 0.13          | 1 <  | . U       |
| VOLATILES  | Acetonitrile   | · ·  |   |                |  |           |   |            |                      |  |       |                                     |                            |              | -  |        |                           |   |         |   |                       |                | -  |       |  |                                   |         |  |          |                          |   | 0.13            | 1 <  | U         |
| VOLATILES  | Acrylonitrile  |  |   | -              | -  |           |   |            |                      |  |       |                                     |                            |              |  |        |                           |   |         |   | · ·                   |                | -  |       |  | ÷                                 |         |  |          |                          |   | 0.13            | 1 <  | U<br>     |
| VULAHLES   | ANY CUIONGE  | I .  |   |                |  |           |   |            |                      |  |       |                                     |                            |              |  |        |                           |   |         | -   | -                     |                |  |       |  |                                   |         |  |          |                          |   | 0.012           | , i <  | v         |

Shaw Environmental, Inc.

Table 3-8 Concentrations of Chemicals in Soil Samples Associated with Sump 008

| (SUMP) = SUMP008 |                                  |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 |                       |
|------------------|----------------------------------|------------------|------------------|----------------------|-----------------|------------------|--------------------|----------------------------|--------------------|----------------------------------|---------------------|------------------|-----------------|-----------------------|
| LOCATION _CODE   |                                  | 35SUMP008-SB01   | 35SUMP009-SB01   | LH-S08-01            | LH-S08-01       | LH-\$08-02       | LH-S08-02          | LH-S09-01                  | LH-\$09-01         | LH-S09-01 LH-S09-01              | LH-S09-02           | LH-S09-02        | LH-S09-02       | LHS-2-05              |
| SAMPLE_NO        |                                  | 35-SMP08-SB01-02 | 35-SMP09-SB01-02 | LH-S08-01_1          | LH-S08-01_2     | LH-S08-02_1      | LH-S08-02_2        | LH-S09-01 QC               | LH-\$09-01_1       | LH-S09-01_2 LH-S09-01_3          | LH-S09-02_1         | LH-S09-02_2      | LH-S09-02_3     | LHS-2-05              |
| SAMPLE_DATE      |                                  | 9/8/2006         | 9/11/2006        | 7/12/1993            | 7/12/1993       | 7/12/1993        | 7/12/1993          | 6/26/1993                  | 6/26/1993          | 6/25/1993 6/26/1993              | 5/26/1993           | 6/26/1993        | 6/26/1993       | 1/10/1995             |
| Depth            |                                  | 6-6Ft            | 8-8Ft            | 0-2Ft                | 4-6Ft           | 0-2Ft            | 4-6Ft              | 0.5 - 1.5 Ft               | 0.5 - 1.5 Ft       | 5-5.5H 6.5-7.5H                  | 0.5-1.5 Ft          | 5-5.6 H          | /-/.5+1         | 0-0.5 H               |
| SAMPLE_PURPOSE   |                                  | REG              | REG              | REG                  | REG             | REG              | REG                | FU<br>FU                   | REG                | REG REG                          | KEG                 | REG              | NEG             |                       |
| Test Group       | Parameter (Units = mg/kg)        | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO V      | 2 Result DIL LQ | VQ Result DIL LQ | VQ Result DIL LQ V | Q Result DIL LQ            | VQ Result UIL LQ V | Q RESULT DIL LO VO RESULT DIL LO | VQ RESULT DIL LQ VQ | RESULT DIL LO VO | RESULT DIL LU V | A RESULE DIL LUI VU   |
| VOLATILES        | Benzene                          |                  |                  | 0.005 1 < 0          | 0.005 1 <       | 0 0.005 1 <      | U 0.005 1 < L      | ) 0.005 1 <                | 0 0.000 1 < 0      |                                  | 0 0.000 1 4 0       | 0.000 1 4 0      | 0.000 1 1 1     | 0.007 1 0             |
| VOLATILES        | Bromobenzene                     |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 |                       |
| VOLATILES        | Bromochloromethane               |                  |                  | ·                    |                 |                  |                    |                            |                    |                                  |                     | 0.000 4 4 11     | 0.000 1 - 11    | 1 0.007 + < 11        |
| VOLATILES        | Bromodichloromethane             |                  |                  | 0.005 1 < 0          | 0.005 1 <       | U 0.005 1 <      |                    |                            |                    |                                  | 1 0.002 1 4 31      |                  | 0.005 1 < U     |                       |
| VOLATILES        | Bromotorm                        | 1                |                  | 0.005 1 < 0          |                 |                  |                    |                            |                    |                                  | 1 0.005 1 < 11      | 0.000 + < 0      | 0.000 1 < 0     |                       |
| VOLATILES        | Bromomethane                     |                  |                  | 0.01 1 < 0           |                 |                  |                    |                            |                    |                                  | 1 0.000 1 < 0       | 0.000 1 < 11     | 0.005 1 < 0     |                       |
| VOLATILES        | Carbon disunde                   |                  |                  | 0.005 1 < 0          | 0.005 1 <       | 0 0.005 1 4      |                    |                            |                    |                                  | U 0.000 1 < U       | 0.000 1 < 0      | 0.006 1 < 0     |                       |
| VOLATILES        | Carbon tetractionide             |                  |                  | 0.005 1 < 0          |                 | U 0.005 1 <      |                    |                            |                    |                                  | 0 0.000 1 < 0       | 0.000 1 < 0      | 0.005 1 < 0     | 1 0.007 1 < U         |
| VOLAHLES         | Chlorobenzene                    |                  |                  |                      |                 |                  |                    |                            |                    |                                  | 1 0.005 1 2 31      | 0.006 t < U      | 0.006 1 < 1     |                       |
| VULATILES        | Chloroethape                     |                  |                  |                      |                 |                  |                    |                            |                    |                                  | H 0006 1 C U        | 0.005 1 < U      | 0.005 1 < 1     |                       |
| VOLATILES        | Chlorosoft                       | 1                |                  |                      |                 |                  |                    |                            |                    |                                  | 1 0.006 1 < 0       | 0.006 1 < 11     | 0.006 1 < 1     | 0.007 1 < 1           |
| VOLATILES        | Chlorenage                       | 1                |                  |                      | 0.01            | 0 0.01 1 1       | 0 0.04 1 1 1       |                            |                    |                                  |                     | 2.000            | 0.000 1 - 0     | 0.013 1 < 1           |
| VOLATILES        | choropiene                       | 1                |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 | V.10 I · 0            |
| VOLATILES        | cis-1,2-Dictioroeulene           |                  |                  | 0.005 1 4 1          | 0.005 1 /       | N 0.005 1 c      | 11 0.005 1 2 1     | 1 0.006 1 2                | H 0.006 1 4 3      | 1 0.006 1 c 11 0.006 1 c         | 11 0.005 1 < 11     | 0.006 1 < H      | 0.006 1 < 1     | t 0.007 1 < €ľ        |
| VOLATILES        | CIS-1, 3-DICINOTOPTOPENE         |                  |                  | 0.005 1 < 0          |                 | 1 0.005 1 <      |                    | 3 0.000 1 <<br>∔ 0.005 1 < |                    | 1 0.006 1 < 11 0.006 1 <         | 11 0.006 1 < 11     | 0.006 1 < 11     | 0.006 1 < 8     | 1 0.007 1 < 1         |
| VOLATILES        | Dibromemethose                   |                  |                  | 0.000 1 - 0          | 0.000 1 1       | 0 0.005 1 1      | 0 0.003 1 - 0      | 0.000 1 1                  | 0 0.000 1 4 0      |                                  | 0 0.500 1 0 0       | 0.000            |                 | 0.027 1 < 1           |
| VOLATILES        | Disblogadifuonamethana           |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 | 0.027 1 < 1           |
| VOLATILES        | Ethyl mothecodote                |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 | 0.027 1 < U           |
| VOLATILES        | Ebyrinculau ylau<br>Ethylhonzono |                  |                  | 0.005 1 4 1          | 0.005 1 4       | 11 0.005 1 <     | 21 0.005 1 < F     | + 0.006 1 <                | 1 0.006 1 < 1      | 1 0006 1 < 11 0006 1 <           | 0.006 1 < 0         | 0.006 1 ≤ U      | 0.006 1 < 13    | 1 0.007 1 < U         |
| VOLATILES        | Herachlombutatione               |                  |                  | 0.003 1 4 0          | 0.000 1 1       | 0 0.000 1 4      | 0 0.000 1 4 0      | 0.000                      | 0 0.000 1 0 0      |                                  | 0 1.000 / 0         |                  |                 |                       |
| VOLATILES        | IODOMETHANE                      |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 | 0.013 1 < U           |
| VOLATHES         | ISOBLITYL ALCOHOL                |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 | 2.7 1 < U             |
| VOLATILES        | Isoprovibenzene                  |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 |                       |
| VOLATILES        | m n-Xvienes                      |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 |                       |
| VOLATILES        | Methacrylonitile                 |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 | 0.027 1 < U           |
| VOLATILES        | Methyl isobutyl ketone           |                  |                  | 0.05 1 < L           | 0.05 1 <        | U 0.05 1 <       | ป 0.05 1 < เ       | J 0.055 1 <                | U 0.055 1 < L      | J 0.062 1 < U 0.059 1 <          | U 0.058 1 < U       | 0.064 1 < U      | 0.058 1 < U     | J 0.013 1 < U         |
| VOLATILES        | METHYL METHACRYLATE              | · ·              |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 | 0.027 1 < U           |
| VOLATILES        | Methylene chloride               |                  |                  | 0.005 1 < L          | 0.005 1 <       | U 0.005 t <      | U 0.005 1 < L      | J 0.006 1 <                | U 0.006 1 < L      | J 0.006 1 < U 0.006 1 <          | U 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U     | ) 0.007 1 < U         |
| VOLATILES        | Naphthalene                      |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 |                       |
| VOLATILES        | n-BUTYLBENZENE                   |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 |                       |
| VOLATILES        | n-PROPYLBENZENE                  |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 |                       |
| VOLATILES        | Pentachioroethane                |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 | 0.027 1 < U           |
| VOLATILES        | p-ISOPROPYLTOLUENE               |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 |                       |
| VOLATILES        | Propionitrile                    |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 | 0.067 1 < U           |
| VOLATILES        | sec-BUTYLBENZENE                 |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 |                       |
| VOLATILES        | Styrene                          |                  |                  | 0.005 1 < L          | 0.005 1 <       | U 0.005 t <      | U 0.005 1 < U      | J 0.006 1 <                | U 0.006 1 < U      | J 0.006 1 < U 0.006 1 <          | U 0…006 1 < U       | 0.006 1 < U      | 0.006 1 < U     | / 0.007 1 < U         |
| VOLATILES        | tert-BUTYLBENZENE                |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 |                       |
| VOLATILES        | Tetrachloroethene                |                  |                  | 0.005 1 < L          | 0.005 1 <       | U 0.005 1 <      | U 0.005 1 < U      | J 0.006 1 <                | U 0.006 1 < U      | ) 0.006 1 < U 0.006 1 <          | U 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U     | / 0.007 1 < U         |
| VOLATILES        | Toluene                          |                  |                  | 0.005 1 < 0          | / 0.005 1 <     | U 0.005 1 <      | U 0.005 1 < U      | J 0.006 1 <                | U 0.006 1 < U      | J 0.006 1 < U 0.006 1 <          | U 0.006 1 < U       | 0.006 1 < U      | 0.606 1 < U     | / 0.007 1 < U         |
| VOLATILE\$       | trans-1,2-Dichloroethene         |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 |                       |
| VOLATILE\$       | trans-1,3-Dichloropropene        |                  |                  | 0.005 1 < U          | 0.005 1 <       | U 0.005 1 <      | U 0.005 1 < U      | J 0.006 <b>1 &lt;</b>      | U 0.006 1 < U      | J 0.006 1 < U 0.005 1 <          | U 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U     | / 0.007 1 < U         |
| VOLATILES        | trans-1,4-Dichloro-2-butene      |                  |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 | 0.027 1 < U           |
| VOLATILES        | Trichloroethene                  | 1                |                  | 0.005 1 < L          | 0.005 1 <       | U 0.005 1 <      | U 0.005 1 < U      | ) 0.006 1 <                | U 0.006 1 < U      | U 0.006 1 < U 0.006 1 <          | U 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < 0     | 0.007 1 < U           |
| VOLATILES        | Trichlorofluoromethane           | 1                |                  |                      |                 |                  |                    |                            |                    |                                  |                     |                  |                 | 0.013 1 < U           |
| VOLATILES        | Vinyl acetate                    |                  |                  | 0.05 <b>1 &lt;</b> l | 0.05 1 <        | U 0.05 1 <       | U 0.05 1 < L       | 3                          |                    |                                  |                     |                  |                 | 0.013 1 < U           |
| VOLATILES        | Vinyl chloride                   | 1                |                  | 0.01 <b>1 &lt;</b> L | ) 0.01 1 <      | U 0.01 1 <       | U 0.01 1 < U       | J 0.006 1 <                | U 0.006 1 < U      | J 0.006 1 < U 0.006 1 <          | U 0.006 1 < U       | 0.006 t < U      | 0.005 1 < 1     | 0.013 1 < U           |
| VOLATILES        | Xylenes, Total                   |                  |                  | 0.005 1 < L          | } 0.005 1 <     | U 0.005 1 <      | U 0.005 1 < U      | J 0.006 1 <                | U 0.006 1 < t      | J 0.006 1 < U 0.006 1 <          | U 0.006 1 < U       | 0.005 1 < U      | 0.005 1 < L     | <u>0.007 1 &lt; U</u> |

Shaw Environmental, Inc.

Į.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-8

## Concentrations of Chemicals in Soil Samples Associated with Sump 008

| [SUMP] = SUMP008<br>LOCATION _CODE<br>SAMPLE_NO |   | t<br>LH | h-wr:<br> -wrs | S-5<br>-5_1 |          | L<br>LF | H-WRS   | 5-5<br>5_2 |        | WRSL<br>WRSM | Impoo<br>IPoos- | )5-SB(<br>SB01- | 01<br>-01 | WRSI<br>WRSI | JMP00<br>IP005- | 5-SBO<br>SBD1- | )1<br>02 | WRSU<br>WRSM   | MP00<br>P005-1 | 5-SBC<br>SB02- | )2<br> 02 | WRSU<br>WRSMP0 | MP00:<br>05-SB | 5-SB02<br>02-02- | 2<br>-QC |
|---|---|---------|----------------|-------------|----------|---------|---------|------------|--------|--------------|-----------------|-----------------|-----------|--------------|-----------------|----------------|----------|----------------|----------------|----------------|-----------|----------------|----------------|------------------|----------|
| SAMPLE_DATE                                     |   | 7       | /12/19         | 93          |          | . 7     | 7/12/19 | 93<br>5-   |        | 9            | 122/20          | 06              |           | 5            | 22/20           | 06<br>*        |          | 9              | 22/20          | 96             |           | 9              | 22/20          | )6               |          |
| DEPTH   |   |         | 0-21           | t           |          |         | 3-4.5   | Ft         |        | -            | ې د.<br>PEC     | H               |           |              | BEG             | T.             |          |                | RFG            | τ              |           |                | 5-3F<br>FD     | Ľ                |          |
| SAMPLE_PURPUSE                                  | Parameter () (pits = mo/ko)               | Result  | DIL            | LQ          | VQ       | Result  | DIL     | LQ         | VQ     | Result       | DIL             | LQ              | VQ        | Result       | DAL             | LQ             | ¥Q       | Result         | Dil            | LQ             | ٧Q        | Result         | DIL            | LQ               | VQ       |
| EXPLOSIVES                                      | 1,3,5-Trinitrobenzene                     | 1       |                |             |          |         |         |            |        | 0.242        | 1               | U               | U         | 0.238        | 1               | U              | U        | 0.245          | 1              | U              | U         | 0.242          | 1              | U                | U        |
| EXPLOSIVES                                      | 1,3-Dinitrobenzene                        |         |                |             |          |         |         |            |        | 0.242        | 1               | U               | U         | 0.238        | 1               | U              | U        | 0.245          | 1              | U              | U         | 0.242          | 1              | U                | U        |
| EXPLOSIVES                                      | 2,4,6-Trinitrotoluene                     | ]       |                |             |          |         |         |            |        | 0.242        | 1               | U               | U         | 0.238        | 1               | U              | U        | 0.245          | 1              | ម              | U         | 0.242          | 1              | U                | U        |
| EXPLOSIVES                                      | 2,4-Dinitrotoluene                        | 0.33    | 1              | <           | U        | 0.33    | 1       | <          | U      | 0.242        | 1               | U               | U         | 0.238        | 1               | U              | U        | 0.245          | 1              | ย              | U         | 0.242          | 1              | U                | U        |
| EXPLOSIVE\$                                     | 2,6-Dinitrotoluene                        | 0.33    | 1              | <           | U        | 0.33    | 1       | <          | U      | 0.251        | 1               | UU UU           | U         | 0.248        | 1               | U              | U        | 0.255          | 1              | 0              | 0         | 0.251          | 1              | U.               | 0        |
| EXPLOSIVES                                      | 2-Amino-4,6-dinitrotoluene                |         |                |             |          |         |         |            |        | 0.251        | 1               | U               | 0         | 0.248        | 1               | บ<br>ม         |          | 0.255          | 1              | U<br>N         | 1         | 0.251          | 1              | U<br>H           | 11       |
| EXPLOSIVES                                      | 4-Amino-2,6-amirotoluene                  |         |                |             |          |         |         |            |        | 2 13         | 1               | U<br>H          | 11        | 21           | 1               | U<br>H         | 11       | 2 16           | 4              | 11             |           | 213            | 1              | ы<br>Н           | u U      |
| EXPLOSIVES<br>EXPLOSIVES                        | m.Nitrotolisene                           |         |                |             |          |         |         |            |        | 0 242        | 1               | Ū               | บ         | 0.238        | 1               | บ              | Ŭ        | 0.245          | 1              | Ŭ              | Ŭ         | 0.242          | 1              | Ū                | Ū        |
| EXPLOSIVES                                      | Nitrobenzene                              | 1       |                |             |          |         |         |            |        | 0.251        | 1               | U               | Ű         | 0.248        | 1               | U              | U        | 0.255          | 1              | U              | U         | 0.251          | 1              | U                | U        |
| EXPLOSIVES                                      | o-Nitrotoluene                            |         |                |             |          |         |         |            |        | 0.242        | 1               | U               | U         | 0.238        | 1               | U              | U        | 0.245          | 1              | U              | ឋ         | 0.242          | 1              | U                | U        |
| <b>EXPLOSIVES</b>                               | p-Nitrotoluene                            | ļ       |                |             |          |         |         |            |        | 0.242        | 1               | U               | U         | 0.238        | 1               | U              | U        | 0.245          | 1              | U              | U         | 0.242          | 1              | υ                | U        |
| EXPLOSIVES                                      | RDX                                       | ł       |                |             |          |         |         |            |        | 0.966        | 1               | U               | U         | 0.952        | 1               | U              | U        | 0.98           | 1              | U              | U         | 0.966          | 1              | U                | U        |
| EXPLOSIVES                                      | Teayl                                     |         |                |             |          |         |         |            |        | 0.628        | 1               | บ               | U         | 0.619        | 1               | U              | U        | 0.637          | 1              | U              | U         | 0.628          | 1              | U                | U        |
| METALS  | Aluminum                                  | 10800   | 1              |             |          | 4270    | 1       |            |        | 9100         | 1               |                 |           | 18800        | 1               |                |          | 20900          | 1              |                | 18        | 10000          | 1              | ,,               | 21.02    |
| METALS  | Anterio                                   | 3       | 1              | ٢           | U        | 3       | 1       | ۲          | U      | 4.26         | 1               | U               | UJL       | 1 33         | 1               | U              | UJL.     | 1 77           | 1              | 3              | JL        | 173            | 1              | U                | OOL      |
| METALS  | Arsenic                                   | 117     | ÷              |             |          | 436     |         |            |        | 129          | 1               |                 | JH        | 51.4         | 1               |                | JH       | 65.6           | 1              |                | JH        | 61.9           | 1              |                  | JH       |
| METALS  | Berdlium                                  | 1       | •              |             |          | 10.0    | •       |            |        | 0.56         | 1               |                 |           | 0.939        | 1               |                |          | 1.09           | 1              |                |           | 0.849          | 1              |                  |          |
| METALS  | Cadmium                                   | 1       | 1              | <           | U        | 1       | 1       | ~          | U      | 0.151        | 1               | ł               | J         | 0.0758       | 1               | J              | J        | 0.0727         | 1              | J              | J         | 0.0985         | 1              | J                | J.       |
| METALS  | Calcium                                   | 2100    | 1              |             |          | 1120    | 1       |            |        | 1510         | 1               |                 |           | 940          | 1               |                |          | 610            | 1              |                |           | 662            | 1              |                  |          |
| METALS  | Chromium                                  | 20.3    | 1              |             |          | 8.3     | 1       |            |        | 14.1         | 1               |                 | JH        | 16.9         | 1               |                | JH       | 24.1           | 1              |                | JH        | 16.5           | 1              |                  | JН       |
| METALS  | Cobalt                                    | 9.2     | 1              |             |          | 3.8     | 1       |            |        | 4.22         | 1               |                 |           | 7.33         | 1               |                |          | 9.06           | 1              |                |           | 7.54           | 1              |                  |          |
| METALS  | Copper                                    | 3.6     | 1              |             |          | 2.1     | 1       |            |        | 2.27         | 1               |                 |           | 5.02         | 1               |                |          | 6.8            | 1              |                |           | 5.52           | 1              |                  |          |
| METALS  | Cyanide, Total                            | 0.5     | 1              | <           | U        | 44000   |         |            |        | 00700        |                 |                 |           | 10200        | 4               |                |          | 24600          | +              |                |           | 18500          | •              |                  | 1        |
| METALS  | Iron<br>Lood                              | 25100   | 4              |             |          | 61      | ÷       |            |        | 20/00        | +               |                 | 3         | 11 5         | 1               |                | 3        | 11 9           | 1              |                |           | 10.00          | ÷              |                  |          |
| METALS  | Mannesium                                 | 694     | 1              |             |          | 334     | 1       |            |        | 550          | 1               |                 |           | 1550         | 1               |                |          | 1500           | 1              |                |           | 1180           | 1              |                  |          |
| METALS  | Manganese                                 | 676     | 1              |             |          | 106     | 1       |            |        | 129          | 1               |                 | J         | 27.7         | 1               |                | J        | 59.2           | 1              |                | J         | 63.1           | 1              |                  | J        |
| METALS  | Mercury                                   | 0.1     | 1              | <           | U        | 0.t     | 1       | <          | U      | 0.0147       | 1               | J               | J         | 0.297        | 1               | U              | U        | 0.0629         | 1              | J              | J         | 0.0417         | 1              | J                | J        |
| METALS  | Nickel                                    |         |                |             |          |         |         |            |        | 4.76         | 1               |                 | JH        | 10.1         | 1               |                | JΗ       | 11.7           | 1              |                | JH        | 8.94           | 1              |                  | ĴΗ       |
| METALS  | Potassium                                 | 459     | 1              |             |          | 250     | 1       |            |        | 262          | 1               |                 | ſΗ        | 467          | 1               |                | JH       | 522            | 1              |                | JH        | 401            | 1              |                  | JΗ       |
| METALS  | Selenium                                  | 1       | 1              | <           | U        | 1       | 1       | <          | U      | 0.293        | 1               |                 |           | 0.148        | 1               | J              | J        | 0.247          | 1              | 1              | 1         | 0.262          | 1              |                  |          |
| METALS  | Säver                                     | 1       | 1              | <           | U        | 1       | 1       | <          | U      | 1.68         | 1               | U               | 0         | 1.87         | 1               | U              | U        | 1.82           | 1              | 0              | Û         | 7.92           | 1              | U                | U        |
| METALS  | Stanfum                                   | 17.4    | •              |             |          | 6.2     | 1       |            |        | 42.3         | ,               |                 |           | 520          | •               |                |          | 243            | •              |                |           | 212            |                |                  |          |
| METALS  | Thallium                                  | 17.4    | •              |             |          | 9.2     | 1       |            |        | 0.0584       | 1               |                 |           | 0.114        | 1               |                |          | 0.107          | 1              |                |           | 0.105          | 1              |                  |          |
| METALS  | Vanadium                                  |         |                |             |          |         |         |            |        | 31.7         | 1               |                 | JН        | 29.7         | 1               |                | JH       | 41             | 1              |                | JH        | 28.9           | 1              |                  | ĴΗ       |
| METALS  | Zinc                                      | 26.1    | 1              |             |          | 13.3    | 1       |            |        | 18.3         | 1               |                 | JH        | 26.6         | 1               |                | JΗ       | 31.8           | 1              |                | JH        | 23.5           | 1              |                  | ĴН       |
| SEMIVOLATILES                                   | 1,2,4-Trichlorobenzene                    | 0.33    | 1              | <           | บ        | 0.33    | t       | <          | U      | 0.922        | 5               | U               | U         | 0.201        | 1               | U              | υ        | 0.207          | 1              | U              | U         | 0.204          | 1              | U                | U        |
| SEMIVOLATILES                                   | 1,2-Dichlorobenzene                       | 0.33    | 1              | <           | U        | 0.33    | 1       | ۲          | Ð      | 30           | 5               |                 |           | 0.247        | 1               |                |          | 0.207          | 1              | U              | U         | 0.204          | 1              | U                | U        |
| SEMIVOLATILES                                   | 1,3-Dichlorobenzene                       | 0.33    | 1              | <           | U        | 0.33    | 1       | <          | U      | 0.922        | 5               | U               | U         | 0.201        | 1               | IJ             | U        | 0.207          | 1              | U              | U         | 0.204          | 1              | U                | U        |
| SEMIVOLATILES                                   | 1,4-Dichlorobenzene                       | 0.33    | 1              | <b>`</b>    | 0        | 0.33    | 1       | ~          | U      | 0.922        | 5               | 0               | U         | 0.201        | 1               | 0              | U<br>H   | 0.207          | 1              | 0<br>11        | 0         | 0.204          | 1              | U<br>H           | U<br>U   |
| SEMIVOLATILES                                   | 2,4,5-1 nchlorophenol                     | 1.65    | 1              | ~           | 0        | 3.05    | 1<br>1  | ÷          |        | 0.922        | 5               | 0               | 1         | 0.201        | 1               | U<br>II        | U<br>H   | 0.207          | 1              | 8              | 11        | 0.204          | 1              | 11               | 1        |
| SEMIVOLATILES                                   | 2,4,0-11Kalidophenx<br>2 & Dichloronhenol | 0.33    | 1              | Ì           | 11       | 0.33    | ;       | ç          | U.     | 0.922        | 5               | บ               | UF        | 0.201        | 1               | ŭ              | ŭ        | 0.207          | 1              | U              | ŭ         | 0.204          | ;              | Ű                | Ŭ        |
| SEMIVOLATILES                                   | 2.4-Dimethylphenol                        | 0.33    | 1              | <           | Ŭ        | 0.33    | 1       | ۲.         | Ŭ      | 0.922        | 5               | Ū               | U         | 0.201        | 1               | Ū              | Ŭ        | 0.207          | 1              | Ū              | Ū         | 0.204          | 1              | U                | U        |
| SEMIVOLATILES                                   | 2,4-Dinitrophenol                         | 1.65    | 1              | <           | U        | 1.65    | 1       | <          | U      | 4.61         | 5               | Ų               | U         | 1.01         | 1               | U              | U        | 1,03           | 1              | U              | U         | 1.02           | 1              | U                | U        |
| SEMIVOLATILES                                   | 2,4-Dinitrotokene                         | ]       |                |             |          |         |         |            |        | 0.922        | 5               | Ų               | U         | 0.201        | 1               | U              | U        | 0.207          | 1              | U              | U         | 0.204          | 1              | U                | U        |
| SEMIVOLATILES                                   | 2,6-Dinitrotolsene                        |         |                |             |          |         |         |            |        | 0.922        | 5               | U               | U         | 0.201        | 1               | U              | U        | 0.207          | 1              | Ų              | U         | 0.204          | 1              | U                | U        |
| SEMIVOLATILES                                   | 2-Chloronaphthatene                       | 0.33    | 1              | <           | U        | 0.33    | 1       | <          | U      | 0.922        | 5               | U               | U         | 0.201        | 1               | U              | U        | 0.207          | 1              | Ų              | U         | 0.204          | 1              | U                | U        |
| SEMIVOLATILES                                   | 2-Chlorophenol                            | 0.33    | 1              | <           | U        | 0.33    | 1       | ۲          | U      | 0.922        | 5               | U               | U         | 0.201        | 1               | U              | U        | 0.207          | 1              | U              | U         | 0.204          | 1              | 0                | U        |
| SEMIVOLATILES                                   | 2-Methylnaphthalene                       | 0.33    | 1              | <           | U        | 0.33    | 1       | <          | U      | 0.922        | 5               | U               | U         | 0.201        | 1               | 0              | 0        | 0.207          | 1              | U              | 0         | 0.204          | 1              | 0                | 0        |
| SEMIVULATILES                                   | 2-Methysphenki<br>2 Mitroppiling          | 0.55    | ;              | Ż           | 0        | 0.33    | -       | Ì          | 11     | 0.322        | 5               | И               | 0         | 1.01         | - 1-<br>- 1     |                |          | 1.03           | ÷              | H I            | 11        | 1.02           | 1              | u<br>U           | N N      |
| SEMIVOLATILES                                   | 2-Nitronhepol                             | 0.33    | i              | è           | 11       | 0.33    | 1       | č          | 1      | 0.922        | 5               | ŭ               | ŭ         | 0.201        | 1               | U              | U        | 0.207          | 1              | Ŭ              | บ         | 0.204          | 1              | ŭ                | Ū        |
| SEMIVOLATILES                                   | 3.3'-Dichlorobenzidine                    | 0.65    | 1              | <           | Ŭ        | 0.65    | 1       | <          | Ū      | 1.84         | 5               | Ū               | Ū         | 0.402        | 1               | U              | Ū        | 0.414          | 1              | U              | Ū         | 0.407          | 1              | U                | U        |
| SEMIVOLATILES                                   | 3-Nitroanăine                             | 1.65    | 1              | <           | Ū        | 1.65    | 1       | <          | U      | 4.61         | 5               | U               | U         | 1.01         | 1               | U              | U        | 1.03           | 1              | U              | U         | 1.02           | 1              | U                | Ų        |
| SEMIVOLATILES                                   | 4,6-Dinitro-2-methylphenol                | 1.65    | 1              | <           | U        | 1.65    | 1       | <          | U      | 4.61         | 5               | U               | U         | 1.01         | 1               | ប              | U        | 1.03           | 1              | U              | U         | 1.02           | 1              | U                | U        |
| SEMIVOLATILES                                   | 4-Bromophenyl phenyl ether                | 0.33    | 1              | <           | U        | 0.33    | 1       | <          | U      | 0.922        | 5               | U               | U         | 0.201        | 1               | U              | U        | 0.207          | 1              | U              | U         | 0.204          | t              | U                | U        |
| SEMIVOLATILES                                   | 4-Chloro-3-methylphenol                   | 0.65    | 1              | <           | U        | 0.65    | 1       | <          | υ      | 0.922        | 5               | U               | U         | 0.201        | 1               | U              | υ        | 0.207          | 1              | U              | U         | 0.204          | ŧ              | U                | U        |
| SEMIVOLATILES                                   | 4-Chloroaniline                           | 0.65    | 1              | <           | U        | 0.65    | 1 -     | <          | U      | 0.922        | 5               | U               | U         | 0.201        | 1               | U              | Ð        | 0.207          | 1              | U              | U         | 0.204          | 1              | U                | 0        |
| SEMIVOLATILES                                   | 4-Chlorophenyl phenyl ether               | 0.33    | 1              | ×           | U<br>1   | 0.33    | 1       | <          | U<br>I | 0.922        | 5               | 0               | U<br>JI   | 0.201        | 1               | U              | U<br>H   | 0.207<br>0.207 | 1              | U<br>LI        | U<br>H    | 0.204          | 1              | U<br>II          | 0        |
| SEMIVOLATILES                                   | 4-Metropolica                             | 0.33    | 1              | \$          | 1)<br>11 | 0.33    | 1       | ~          | 11     | 0.922        | د<br>۲          | 0               | 0         | 1.01         | 1               | U<br>H         | р<br>Н   | 10.207         | 1              | 0              | 0<br> 1   | 1.02           | t              | U<br>L           | 0        |
| SEMINULATILES                                   | 4-Näroobenot                              | 1.00    | 1              | Ì           | n        | 1 64    | 1       | è          | Ð      | 4.61         | 5               | 1               | 11        | 1 01         | 1               | U U            | н        | 1.03           | 1              | U              | U         | 1.02           | 1              | U                | Ű        |
| SEMIVOLATILES                                   | Acenzolthene                              | 0.33    | 1              | ~           | U        | 0.33    | 1       | <          | U      | 0,922        | 5               | Ŭ               | U         | 0.201        | 1               | Ŭ              | Ű        | 0.207          | 1              | Ŭ              | Ŭ         | 0.204          | ť              | Ű                | Ű        |
| SEMIVOLATILES                                   | Acenaphthylene                            | 0.33    | 1              | <           | U        | 0.33    | 1       | <          | U      | 0.922        | 5               | U               | U         | 0.201        | 1               | U              | U        | 0.207          | 1              | U              | U         | 0.204          | 1              | U                | U        |
| SEMIVOLATILES                                   | Anthracene                                | 0.33    | 1              | <           | U        | 0.33    | 1       | <          | U      | 0.922        | 5               | U               | U         | 0.201        | 1               | U              | U        | 0.207          | 1              | U              | U         | 0.204          | 1              | U                | ប        |
|   |   |         |                |             |          |         |         |            |        |              |                 |                 |           |              |                 |                |          |                |                |                |           |                |                |                  |          |



 Table 3-8

 Concentrations of Chemicals in Soil Samples Associated with Sump 008

| [SUMP] = SUMP008               |   |        |      |           |         |        |       |           |         |        |        |             |         |         |        |         |         |                 |        |             |         |                   |                    |         |         |
|--------------------------------|---|--------|------|-----------|---------|--------|-------|-----------|---------|--------|--------|-------------|---------|---------|--------|---------|---------|-----------------|--------|-------------|---------|-------------------|--------------------|---------|---------|
| LOCATION _CODE                 |   | L      | H-WR | S-5       |         | L      | HWR   | S-5       |         | WRSU   | IMPOO  | 15-SBI      | 01      | WRS     | IMPOO  | 5-\$B   | 71      | WRSL            | IMP00  | 5-SBC       | 2       | WRSU              | MPOOS              | -SB0    | 2       |
| SAMPLE_NO                      |   | u      | +WR5 | -5_1      |         | u.     | I-WRS | ÷5_2      |         | WRSM   | P005-  | SB01-<br>ne | -01     | WRSN    | P005-  | SBO1    | -02     | WRSM            | P005-3 | 5802-<br>ne | 02      | WRSMPO            | 25-SBI             | JZ-02-  | QC      |
| SAMPLE_DATE                    |   |        | 6.7  | 993<br>Fe |         |        | 3.45  | f93<br>F1 |         | 9      | 5. 5   | Ft Ft       |         |         | 5.55   | υο<br>≩ |         | 9               | 5.5F   | 070<br>}    |         | 90                | 22/200<br>5 - 5 Ft |         |         |
| SAMPLE PURPOSE                 |   |        | REC  | r.<br>}   |         |        | REG   | τι        |         | -      | REG    |             |         |         | REG    |         |         |                 | REG    | •           |         | ``                | FD                 |         |         |
| Test Group                     | Parameter (Units ≈ mg/kg)                   | Result | DIL  | LQ        | VQ      | Result | DIL   | LQ        | VQ      | Result | DIL    | LQ          | VQ      | Result  | DIL    | LQ      | VQ      | Result          | DIL    | LQ          | VQ      | Result            | DIŁ                | LQ      | VQ      |
| SEMIVOLATILES                  | Benzo(a)anthracene                          | 0.33   | t    | <         | Û       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | U       | 0.201   | 1      | Û       | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | Ų       | U       |
| SEMIVOLATILES                  | Benzo(a)pyrene                              | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | U           | IJ      | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | Benzo(b)fluorantheae                        | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | ម<br>   | U       |
| SEMIVOLATILES                  | Benzó(gki)perylene                          | 0.33   | 1    | \$        | U       | 0.33   | 1     | ~         | บ<br>ม  | 0.922  | 5<br>¢ | U           | 0       | 0.201   | 1      | 0       | 0       | 0.207           | 1      |             | ម       | 0.204             | 1                  | U<br>LT | 0       |
| SEMIVULATILES<br>SEMINULATILES | Benzoic Acid                                | 1.55   | 1    | È         | н       | 1.65   | 1     | è         | U<br>ti | 4.61   | ວ<br>5 | U<br>IF     | ELL.    | 1.01    | 1      | н       | ш       | 1.03            | Ť      | н           | 111     | 1 02              | 1                  | 1       | iu i    |
| SEMIVOLATILES                  | Benzył Alcohol                              | 0.65   | 1    | č         | Ŭ       | 0.65   | 1     | ~         | ŭ       | 0.922  | 5      | Ŭ           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | Ŭ           | Ų       | 0.204             | 1                  | U       | 0       |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane                  | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | Ū           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether                     | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | U       | 0.201   | 1      | U       | Ð       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether                 | 0.33   | 1    | <         | U       | 0.33   | 1     | ۲         | U       | 0.922  | 5      | U           | ម       | 0.201   | 1      | U       | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthalate                  | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | Butyl benzyl phthalate                      | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | บ       | 0.201   | 1      | U       | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | Carbazole                                   | 0.22   |      |           |         | 0.22   |       |           | •1      | 0.027  | E      | II          |         | 0 201   | +      | 11      | 21      | 0 207           | 4      |             | н       | 0.204             | 4                  |         |         |
| SEMIVOLATILES                  | Cleysene<br>Dihenzo(a h)anthracene          | 0.33   | 1    | Ì         | 11      | 0.35   | 1     | è         | ы       | 0.922  | 5<br>5 | Н           | 11      | 0.201   | ť      | 11      | n H     | 0.207           | 1      | 11          | U U     | 0.204             | 1                  | U<br>U  | U U     |
| SEMIVOLATILES                  | Dibenzofuran                                | 0.33   | 1    | <         | Ŭ       | 0.33   | 1     | <         | ŭ       | 0.922  | 5      | Ũ           | Ŭ       | 0.201   | 1      | Ŭ       | Ŭ       | 0.207           | 1      | Ŭ           | Ū       | 0.204             | 1                  | Ū       | Ŭ       |
| SEMIVOLATILES                  | Diethyl phthalate                           | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | Ų           | U       | 0.201   | 1      | Ų       | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | Dimethyl phthalate                          | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | ម           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | di-n-Butyl phthalate                        | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U.      | 0.922  | 5      | U           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | ម           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | di-n-Octyl phthalate                        | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | IJ          | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | Fluoranthene                                | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | บ           | U       | 0.201   | 1      | บ<br>   | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | Huorene                                     | 0.33   | 1    | Ś         | U       | 0.33   | 1     | Ś         | 0       | 0.922  | 5      | U<br>11     | 0       | 0.201   | 1      | 0       | В       | 0.207           | 1      | U<br>H      | U       | 0.204             | 1                  | 0       | U       |
| SEMIVOLATILES                  | Hexachlorobutadiene                         | 0.33   | 1    | È         | U<br>11 | 0.33   | 1     | è         | U<br>FT | 0.922  | 5<br>5 | 11          | n       | 0.201   | 1      |         | ы       | 0.207           | 1      | 11          | U<br>II | 0.204             | 1                  | 0       | U<br>II |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene                   | 0.33   | 1    | ~         | Ŭ       | 0.33   | 1     | ~         | Ŭ       | 0.922  | 5      | บ           | ម       | 0.201   | 1      | U       | U       | 0.207           | 1      | U           | Ŭ       | 0.204             | 1                  | Ŭ       | Ŭ       |
| SEMIVOLATILES                  | Hexachloroethane                            | 0.33   | 1    | <         | Ū       | 0.33   | 1     | <         | Ū       | 0.606  | 5      | J           | J       | 0.201   | 1      | U       | Ū       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | Indeno(1,2,3-cd)pyrene                      | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | Isophorone                                  | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | Naphthalene                                 | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | Nitrobenzene                                | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine                  | 0.33   | 1    | Ś         | 0       | 0.33   | 1     | \$        | U       | 0.922  | 5      | 0           | U<br>11 | 0.201   | 1      | U<br>11 | 0       | 0.207           | 1      | 11          | 0       | 0.204             | 1                  | 0       | U       |
| SEMIVOLATILES                  | n-nitrosotipnenyiamine<br>Pentachioranhanai | 1.55   | 1    | è         | U<br>U  | 1.65   | 1     | ž         | 11      | 4.61   | 5      | 11          |         | 1.01    | 1      | 0<br>11 | 11      | 1.03            | 1      | ы           | 1       | 1.02              | -                  | 0       | 11      |
| SEMIVOLATILES                  | Phenanthrene                                | 0.33   | 1    | <         | U       | 0.33   | 1     | ~         | ŭ       | 0.922  | s      | U           | Ŭ       | 0.201   | 1      | U       | ŭ       | 0.207           | 1      | Ü           | Ŭ       | 0.204             | 1                  | Ŭ       | Ŭ       |
| SEMIVOLATILES                  | Phenol                                      | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| SEMIVOLATILES                  | Ругеле                                      | 0.33   | 1    | <         | U       | 0.33   | 1     | <         | U       | 0.922  | 5      | U           | U       | 0.201   | 1      | U       | U       | 0.207           | 1      | U           | U       | 0.204             | 1                  | U       | U       |
| VOLATILES                      | 1,1,1,2-Tetrachloroethane                   |        |      |           |         |        |       |           |         |        |        |             |         | 0.0055  | 1      | U       | U       | 0.0058          | 1      | U           | U       | 0.00591           | 1                  | ບ       | U       |
| VOLATILES                      | 1,1,1-Trichloroethane                       | 0.005  | 1    | <         | U       | 0.005  | 1     | <         | U       |        |        |             |         | 0.0055  | 1      | U       | U       | 0.0058          | 1      | U           | U       | 0.00591           | 1                  | U       | U       |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane                   | 0.005  | 1    | <         | U       | 0.005  | 1     | <         | U       |        |        |             |         | 0.0055  | 1      | U       | U       | 0.0058          | 1      | U           | 0       | 0.00591           | 1                  | U       | U       |
| VOLANLES                       | 1,1,2-Inchioroethane                        | 0.005  | 1    | ÷         | U<br>H  | 0.005  | 1     | Ż         | 0       |        |        |             |         | 0.0055  | 1      | 0       | 0       | 0.0058          | 1      | U<br>11     | 0       | 0.00591           | 1                  |         | 0       |
| VOLATILES                      | 1 1-Dichloroethene                          | 0.005  | 1    | ì         | 11      | 0.005  | 4     | Ì         | E E     |        |        |             |         | 0.0035  | 1      | 11      | 11      | 0.0056          | +      | 1           | U<br>U  | 0.00591           | 1                  | 1       | 0       |
| VOLATILES                      | 1.1-Dichloropropene                         | 0.000  | •    |           | -       | 0.000  | •     |           | •       |        |        |             |         | 0.0055  | 1      | U       | Ū       | 0.0058          | 1      | Ŭ           | Ū       | 0.00591           | 1                  | Ŭ       | Ū       |
| VOLATILES                      | 1,2,3-Trichlorobenzene                      |        |      |           |         |        |       |           |         |        |        |             |         | 0.0055  | 1      | IJ      | U       | 0.0058          | 1      | U           | U       | 0.00591           | 1                  | U       | U       |
| VOLATILES                      | 1,2,3-Trichloropropane                      |        |      |           |         |        |       |           |         |        |        |             |         | 0.0055  | 1      | ប       | Ų       | 0.0058          | 1      | U           | ป       | 0.00591           | 1                  | IJ      | U       |
| VOLATILES                      | 1,2,4-Trichlorobenzene                      |        |      |           |         |        |       |           |         |        |        |             |         | 0.0055  | 1      | U       | U       | 0.0058          | 1      | U           | U       | 0.00591           | 1                  | U       | U       |
| VOLATILES                      | 1,2,4-Trimethylbenzene                      |        |      |           |         |        |       |           |         |        |        |             |         | 0.0055  | 1      | U       | U       | 0.0058          | 1      | U           | U       | 0,00591           | 1                  | U       | U       |
| VOLATILES                      | 1,2-Dibromo-3-chloropropane                 |        |      |           |         |        |       |           |         |        |        |             |         | 0.0055  | 1      | U       | 0       | 0.0058          | 1      | U           | U       | 0.00591           | 1                  | U       | Ų       |
| VOLATILES                      | 1,2-Dibromoethane                           |        |      |           |         |        |       |           |         |        |        |             |         | 0.0055  | 1      | 0       | 0       | 0.0058          | 1      | 0           | U<br>11 | 0.00591           | 1                  | U       | 0       |
| VOLATILES                      | 1 2-Dichloroethape                          | 0.005  | 1    | <         | ы       | 0.005  | 1     | <         | U       |        |        |             |         | 0.00055 | 1      | 11      | U U     | 0.0058          | 1      | н           | Ű       | 0.00591           | i                  | ŭ       | ŭ       |
| VOLATILES                      | 1.2-Dichloroethene                          | 0.005  | 1    | <         | Ŭ       | 0.005  | 1     | <         | Ŭ       |        |        |             |         | 0.0000  |        | č       | •       |                 | •      | č           | Ť       |                   |                    | •       | ·       |
| VOLATILES                      | 1,2-Dichloropropane                         | 0.005  | 1    | <         | U ·     | 0.005  | 1     | <         | U       |        |        |             |         | 0.0055  | 1      | ឋ       | U       | 0.0058          | 1      | U           | U       | 0.00591           | 1                  | U       | U       |
| VOLATILES                      | 1,2-Dimethylbenzene (o-Xylene)              |        |      |           |         |        |       |           |         |        |        |             |         | 0.0055  | 1      | U       | U       | 0.0058          | 1      | U           | U       | 0.00591           | 1                  | U       | U       |
| VOLATILES                      | 1,3,5-Trimethylbenzene                      |        |      |           |         |        |       |           |         |        |        |             |         | 0.0055  | 1      | U       | U       | 0.0058          | 1      | U           | U       | 0.00591           | 1                  | U       | U       |
| VOLATILES                      | 1,3-Dichlorobenzene                         |        |      |           |         |        |       |           |         |        |        |             |         | 0.0055  | 1      | U       | U       | 0.0058          | 1      | U           | U       | 0.00591           | 1                  | U       | U       |
| VOLATILES                      | 1,3-Dichloropropane                         |        |      |           |         |        |       |           |         |        |        |             |         | 0.0055  | 1      | U       | U       | 0.0058          | 1      | U           | U       | 0.00591           | 1                  | U       | U       |
| VULANLES                       | 1,4-Dichloropenzene                         |        |      |           |         |        |       |           |         |        |        |             |         | 0.0055  | 1      | บ       | U<br>H  | 0.0058          | 1      | 0           | U       | 0.00591           | 1                  | U<br>U  | U<br>El |
| VOLATILES                      | 2. Rutanone                                 | 0.05   | 1    | e         | 11      | 0.05   | 1     | ć         | Ħ       |        |        |             |         | 0.0000  | 1<br>1 | U<br>II | U<br>LI | 000000<br>11100 | 1      | 11          | 0       | 0.00091<br>0.0112 | 1                  | 0       | U U     |
| VOLATILES                      | 2-Chloroethyl vinyl ether                   | 0.01   | 1    | k         | U       | 0.01   | 1     | <<br><    | Ű       |        |        |             |         | 0.011   | 1      | U       | U       | 0.0116          | 1      | U           | U       | 0.0118            | 1                  | U       | Ŭ       |
| VOLATILES                      | 2-Chlorotoluene                             |        | ,    |           | 5       |        | •     |           |         |        |        |             |         | 0.0055  | 1      | U       | Ų       | 0.0058          | 1      | U           | U       | 0.00591           | 1                  | Ŭ       | Ũ       |
| VOLATILES                      | 2-Hexanone                                  | 0.05   | t    | <         | U       | 0.05   | 1     | ۲         | U       |        |        |             |         | 0.011   | 1      | U       | U       | 0.0116          | 1      | υ           | U       | 0.0118            | 1                  | U       | U       |
| VOLATILES                      | 2-Propenal                                  |        |      |           |         |        |       |           |         |        |        |             |         |         |        |         |         |                 |        |             |         |                   |                    |         |         |
| VOLATILES                      | 4-Chlorotoluene                             |        |      |           |         |        |       |           |         |        |        |             |         | 0.0055  | 1      | U       | U       | 0.0058          | 1      | υ           | U       | 0.00591           | t                  | U       | U       |
| VOLATILES                      | Acetone                                     | 0.1    | 1    | <         | บ       | 0.1    | 1     | <         | U       |        |        |             |         | 0.011   | 4      | U       | U       | 0.0116          | 1      | U           | U       | 0.0118            | 1                  | U       | U       |
| VOLATILES                      | Acetonitrile                                |        |      |           |         |        |       |           |         |        |        |             |         |         |        |         |         |                 |        |             |         |                   | -                  |         |         |
| VULAHLES                       | Au yongle<br>Ally chloride                  | -      |      |           |         |        |       |           |         |        |        |             |         |         |        |         |         |                 |        |             |         | •                 |                    |         |         |
| NULTINEEO                      | a stat GliffatuiG                           |        |      |           |         |        |       |           |         |        |        |             |         |         |        |         |         |                 |        |             |         |                   |                    |         |         |



Table 3-8 Concentrations of Chemicals in Soil Samples Associated with Sump 008

| [SUMP] = SUMP008 |                             |        |        |      |    |        |         |     |    |        |         |       |     |        |        |       |     |        |        |        |    |         |       |       |      |
|------------------|-----------------------------|--------|--------|------|----|--------|---------|-----|----|--------|---------|-------|-----|--------|--------|-------|-----|--------|--------|--------|----|---------|-------|-------|------|
| LOCATION _CODE   |                             | L      | H-WR   | S-5  |    | Ľ      | H-WR    | S-5 |    | WRS    | UMPOO   | )5-SB | 01  | WRS    | jnipok | 15-SB | 01  | WRSU   | IMP00  | 5-\$B( | 02 | WRSU    | MP00  | 5-SB0 | 12   |
| SAMPLE_NO        |                             | LH     | -WRS   | -5_1 |    | UH     | IWRS    | 5_2 |    | WRSW   | (P005-  | SB01  | -01 | WRSM   | P005-  | SBO1  | -02 | WRSM   | P005-3 | SB02   | 02 | WRSMPO  | 05-SE | 02-02 | OC : |
| SAMPLE_DATE      |                             | 7      | /12/19 | 93   |    | 7      | 712/19  | 93  |    | 1      | 3/22/20 | 006   |     | S      | 22/20  | 06    |     | 9,     | 22/20  | 06     |    | 9,      | 22/20 | 06    |      |
| DEPTH            |                             | -      | 0-21   | Ft   |    | :      | 3 - 4.5 | Ft  |    |        | 55      | Ft    |     |        | 5-51   | ł     |     |        | 5-5F   | t      |    | :       | 5-5F  | t     |      |
| SAMPLE_PURPOSE   |                             |        | REG    | ;    |    |        | REG     |     |    |        | REG     | ;     |     |        | REG    | i     |     |        | REG    |        |    |         | FD    |       |      |
| Test Group       | Parameter (Units = mg/kg)   | Result | dil    | ٤Q   | ٧Q | Result | DIL     | LQ  | VQ | Result | DIL     | LQ    | VQ  | Result | DIL    | LQ    | VQ  | Result | ÐIL    | LQ     | VQ | Result  | DIL   | LQ    | VQ   |
| VOLATILES        | Benzene                     | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  |        |         |       |     | 0.0055 | -1     | U     | IJ  | 0.0058 | 1      | U      | Ð  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Bromobenzene                |        |        |      |    |        |         |     |    |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Bromochloromethane          |        |        |      |    |        |         | `   | -  |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | t     | U     | U    |
| VOLATILES        | Bromodichloromethane        | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Bromoform                   | 0.005  | 1      | <    | ម  | 0.005  | 1       | <   | U  |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Bromomethane                | 0.01   | 1      | <    | U  | 0.01   | 1       | <   | U  |        |         |       |     | 0.011  | 1      | U     | U   | 0.0116 | 1      | U      | U  | 0.0118  | 1     | U     | U    |
| VOLATILES        | Carbon disuffide            | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Carbon tetrachloride        | 0.005  | 1      | <    | ប  | 0.005  | 1       | <   | U  |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | Ð  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Chlorobenzene               | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | Ų  |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Chloroethane                | 0.01   | 1      | <    | U  | 0.01   | 1       | <   | U  |        |         |       |     | 0.011  | 1      | U     | U   | 0.0116 | 1      | U      | ប  | 0.0118  | 1     | U     | Ų    |
| VOLATILES        | Chloroform                  | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Chloromethane               | 0.01   | 1      | <    | U  | 0.01   | 1       | <   | U  |        |         |       |     | 0.011  | 1      | Ų     | U   | 0.0116 | 1      | U      | U  | 0.0118  | 1     | Ų     | U    |
| VOLATILES        | Chloroprene                 |        |        |      |    |        |         |     |    |        |         |       |     |        |        |       |     |        |        |        |    |         |       |       |      |
| VOLATILES        | cis-1,2-Dichloroethene      |        |        |      |    |        |         |     |    |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | cis-1,3-Dichloropropene     | 0.005  | 1      | <    | ប  | 0.005  | 1       | <   | ŧ  |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | t     | U     | IJ   |
| VOLATILES        | Dibromochloromethane        | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | ម  |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | Ų    |
| VOLATILES        | Dibromomethane              |        |        |      |    |        |         |     |    |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | Ų    |
| VOLATILES        | Dichlorodifluoromethane     |        |        |      |    |        |         |     |    |        |         |       |     | 0.011  | 1      | ឋ     | B   | 0.0116 | 1      | U      | U  | 0.0118  | 1     | U     | Ų    |
| VOLATILES        | Ethyl methacrylate          |        |        |      |    |        |         |     |    |        |         |       |     |        |        |       |     |        |        |        |    |         |       |       |      |
| VOLATILES        | Ethylbenzene                | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Hexachlorobutadiene         |        |        |      |    |        |         |     |    |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | <b>IODOMETHANE</b>          |        |        |      |    |        |         |     |    |        |         |       |     |        |        |       |     |        |        |        |    |         |       |       |      |
| VOLATILES        | ISOBUTYL ALCOHOL            |        |        |      |    |        |         |     |    |        |         |       |     |        |        |       |     |        |        |        |    |         |       |       |      |
| VOLATILES        | Isopropylbenzene            |        |        |      |    |        |         |     |    |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | υ  | 0.00591 | 1     | υ     | U    |
| VOLATILES        | m.p-Xylenes                 |        |        |      |    |        |         |     |    |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Methacrylonitile            |        |        |      |    |        |         |     |    |        |         |       |     |        |        |       |     |        |        |        |    |         |       |       |      |
| VOLATILES        | Methyl isobutyl ketone      | 0.05   | 1      | <    | U  | 0.05   | 1       | <   | U  |        |         |       |     | 0.011  | 1      | U     | U   | 0.0116 | 1      | U      | U  | 0.0118  | 1     | U     | U.   |
| VOLATILES        | METHYL METHACRYLATE         |        |        |      |    |        |         |     |    |        |         |       |     |        |        |       |     |        |        |        |    |         |       |       |      |
| VOLATILES        | Methylene chloride          | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  |        |         |       |     | 0.0019 | 1      | J     | J   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Naphthalene                 |        |        |      |    |        |         |     |    |        |         |       |     | 0.011  | 1      | U     | U   | 0.0116 | 1      | U      | U  | 0.0118  | 1     | U     | U    |
| VOLATILES        | n-BUTYLBENZENE              |        |        |      |    |        |         |     |    |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | n-PROPYLBENZENE             |        |        |      |    |        |         |     |    |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Pentachioroethane           |        |        |      |    |        |         |     |    |        |         |       |     |        |        |       |     |        |        |        |    |         |       |       |      |
| VOLATILES        | p-ISOPROPYLTQLUENE          |        |        |      |    |        |         |     |    |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Propionitrile               |        |        |      |    |        |         |     |    |        |         |       |     |        |        |       |     |        |        |        |    |         |       |       |      |
| VOLATILES        | sec-BUTYLBENZENE            |        |        |      |    |        |         |     |    |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Styrene                     | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | tert-BUTYLBENZENE           | İ      |        |      |    |        |         |     |    |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Tetrachloroethene           | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  | -      |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Toluene                     | 0.005  | t      | <    | U  | 0.005  | 1       | <   | U  |        |         |       |     | 0.0055 | 1      | υ     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | trans-1,2-Dichloroethene    |        |        |      |    |        |         |     |    |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | t     | U     | U    |
| VOLATILES        | trans-1,3-Dichloropropene   | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | trans-1,4-Dichloro-2-butene |        |        |      |    |        |         |     |    |        |         |       |     |        |        |       |     |        |        |        |    |         |       |       |      |
| VOLATILES        | Trichkroethene              | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  |        |         |       |     | 0.0055 | 1      | U     | U   | 0.0058 | 1      | U      | U  | 0.00591 | 1     | U     | U    |
| VOLATILES        | Trichlorofluoromethane      |        |        |      |    |        |         |     |    |        |         |       |     | 0.011  | 1      | U     | U   | 0.0116 | 1      | U      | U  | 0.0118  | 1     | U     | U    |
| VOLATILES        | Vinyl acetate               | 0.05   | 1      | <    | U  | 0.05   | 1       | <   | U  |        |         |       |     | 0.011  | t      | IJ    | U   | 0.0116 | 1      | U      | IJ | 0.0118  | 1     | U     | U    |
| VOLATILES        | Vinyl chloride              | 0.01   | t      | <    | U  | 0.01   | 1       | <   | U  |        |         |       |     | 0.011  | 1      | บ     | U   | 0.0116 | 1      | U      | U  | 0.0118  | 1     | U     | U    |
| VOLATILES        | Xylenes, Total              | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  |        |         |       |     |        |        |       |     |        | -      |        |    | -       |       |       |      |
|                  |                             |        |        |      |    |        |         |     |    |        | ·       |       |     |        |        |       |     |        |        |        |    |         |       | _     |      |

Footnotes are shown on cover page to Tables Section.





Table 3-9 Concentrations of Chemicals in Soil Samples Associated with Sump 009

| (SUMP) = SUMP009               |   |                                    |                         |                 |                         |                 |                          |                  |                             |                             |
|--------------------------------|---|------------------------------------|-------------------------|-----------------|-------------------------|-----------------|--------------------------|------------------|-----------------------------|-----------------------------|
| LOCATION CODE<br>SAMPLE NO     |   | 35SUMP008-SB01<br>35-SMP08-SB01-02 | 35SUMP009-SB01          | LH-S08-01       | LH-S08-01               | LH-S08-02       | LH-S08-02                | LH-S09-01        | LH-S09-01                   | LH-S09-01                   |
| SAMPLE_DATE                    |   | 9/8/2006                           | 9/11/2006               | 7/12/1993       | 7/12/1993               | 7/12/1993       | 7/12/1993                | 6/26/1993        | 6/26/1993                   | 6/26/1993                   |
| Depth                          |   | 6 - 6 FI                           | 8-8ft                   | 0 - 2 Ft        | 4 - 6 Ft                | 0 - 2 Ft        | 4-6Ft                    | 0.5-1.5 Ft       | 0.5 - 1.5 Ft                | 5 - 5.5 Ft                  |
| SAMPLE_PURPOSE                 | Parameter Alinite - molto)                      | REG<br>Parult DI 10 MO             | REG<br>Result DIL 10 VO | REG             | REG                     | REG             | REG                      | FD               | REG                         | REG                         |
| EXPLOSIVES                     | 1,3,5-Trinitrobenzene                           | 0.283 1 U                          | 0.245 1 U               | Resur Dal EQ VQ | Hesuat dil eq vq        | Hesur Da. LU VO | Hesuit Dil Loj Vo        | Hesuit DIL LQ VQ | Hesua Dii. LQ VQ            | Result DIL LO VO            |
| EXPLOSIVES                     | 1,3-Dinitrobenzene                              | 0.283 t U                          | 0.245 1 U               |                 |                         |                 |                          |                  |                             |                             |
| EXPLOSIVES                     | 2,4,6-Trinipotokuene                            | 0.283 t U                          | 0.245 1 U               |                 |                         |                 |                          |                  |                             |                             |
| EXPLOSIVES                     | 2,4-Dinitrotoluene                              | 0.283 1 U                          | 0.245 1 U               | 0.33 1 < U      | 0.33 1 < U              | 0.33 1 < U      | 0.33 t < U               | 1.111 1 < U      | 1.176 1 < U                 | 1.266 1 < U                 |
| EXPLOSIVES                     | 2,0-0 millologene<br>2-Amino-4.6-diaitrotaluene | 0.294 1 1                          | 0.255 1 10              | 0.33 1 < 0      | 0.33 1 < 0              | -0.33 1 < U     | 0.33 T < U               | 1.111 1 < 0      | 1.176 1 < 0                 | 1.266 1 < U                 |
| EXPLOSIVES                     | 4-Amino-2,6-dinitrotoluene                      | 0.294 1 U                          | 0.255 1 U               |                 |                         |                 |                          |                  |                             |                             |
| EXPLOSIVES                     | НМХ   | 2.49 1 U                           | 2.16 t U                |                 |                         |                 |                          |                  |                             |                             |
| EXPLOSIVES                     | m-Nitrolokuene                                  | 0.283 1 U                          | 0.245 1 U               |                 |                         |                 |                          |                  |                             |                             |
| EXPLOSIVES<br>EXPLOSIVES       | niropenzene                                     | 0.294 1 U                          | 0.255 1 0               |                 |                         |                 |                          |                  |                             |                             |
| EXPLOSIVES                     | p-Nitrotoluene                                  | 0.283 1 U                          | 0.245 1 U               |                 |                         |                 |                          |                  |                             |                             |
| EXPLOSIVES                     | ROX   | 1.13 1 U                           | 0.98 t U                |                 |                         |                 |                          |                  |                             |                             |
| EXPLOSIVES                     | Tetayl  | 0.735 1 U                          | 0.637 t U               |                 |                         |                 |                          |                  |                             |                             |
| METALS                         | Altimation                                      | 8220 1                             | 12300 1                 | 6100 1          | 11800 1                 | 5310 1          | 9500 1                   | 10500 1          | 6920 1                      | 9860 1                      |
| METALS                         | Arsenic   | 3.46 1 JL                          | 0.49 1                  | 21              | 17 1                    | 92 1            | 3 I < 0<br>74 1          | 5.02 I E         | 5.2 1 < U<br>374 1          | 5./4 1 < U<br>324 1         |
| METALS                         | Banum   | 39 1                               | 25.3 1                  | 66.3 1          | 77.5 1                  | 53.4 1          | 57.9 1                   | 131 1 < U        | 100 1 < U                   | 27.8 1 < U                  |
| METALS                         | Beryllium                                       | 0.517 1                            | 0.793 1                 |                 |                         |                 |                          |                  |                             |                             |
| METALS                         | Cadmium   | 0.0624 1 J J                       | 0.0789 1 J J            | 1 1 < U         | 11 < U                  | 11 < U          | 1 1 < U                  | 7.18 1           | 4.16 1                      | 4.59 1                      |
| METALS                         | Chromium  | 428 1<br>867 1 .H                  | 1340 1 J                | 1510 1<br>97 1  | 2130 1                  | 745 1           | 918 1<br>148 1           | 1830 1<br>277 1  | 1370 1                      | 1490 1                      |
| METALS                         | Cobalt  | 7.53 1 JH                          | 10.1 1 J                | 5 1             | 9.5 1                   | 4.1 1           | 8.8 1                    | 8.24 1           | 3.09 1                      | 815 1                       |
| METALS                         | Copper  | 4.36 1                             | 3.8 1                   | 2.4 1           | 5.5 1                   | 2.3 1           | 3.9 1                    | 6.84 1 < Ú       | 4.89 1 < U                  | 8.29 1 < U                  |
| METALS                         | Cyanide, Total                                  |                                    |                         |                 |                         |                 |                          |                  |                             |                             |
| METALS                         | lron<br>Lead                                    | 9850 1                             | 12600 1                 | 11700 1         | 18200 1                 | 22500 1         | 21200 1                  | 22600 1          | 18200 1                     | 19000 t                     |
| METALS                         | Magnesium                                       | 912 1                              | 2170 1                  | 404 1           | 1010 1                  | 264 1           | 858 1                    | 24.3 1           | 753 1                       | 19.5 1                      |
| METALS                         | Manganese                                       | 23.6 1                             | 21.9 1                  | 189 1           | 71.1 1                  | 196 1           | 107 1                    | 652 1            | 130 1                       | 91.4 1                      |
| METALS                         | Mercury   | 0.0147 1 J J                       | 0.276 1 U               | 0.1 1 < U       | 0.1 1 < U               | 0.1 1 < U       | 0.1 ¥ < U                | 0.129 1          | 0.053 1 < U                 | 0.056 1 < U                 |
| METALS                         | Nickel  | 10.4 1                             | 16.7 1                  |                 | ror 4                   |                 |                          |                  |                             |                             |
| METALS                         | Selenium  | 0.164 1 JP1                        | 0.221 1 1F              | 253 I           | 505 1<br>1 1 < 1        | 216 1           | 363 1                    | 420 1            | 332 1<br>052 1 - H          | 334 1                       |
| METALS                         | Silver  | 1.8 1 U                            | 1.71 1 U                | 1 1 < ti        | 11 < 1                  | 1 1 < U         | 11 < 0                   | 0.09 1           | 0.026 1 < U                 | 0.029 1 < U                 |
| METALS                         | Sodium  | 188 1                              | 550 1                   |                 |                         |                 |                          |                  |                             |                             |
| METALS                         | Strontium                                       | 0.0726 1                           | 0.0721 4                | 10.3 1          | 20.4 1                  | 5.6 1           | 14.4 1                   | 14 1 < U         | 8.87 1 < U                  | 22.5 1 < U                  |
| METALS                         | Vanadium  | 18.8 1                             | 16.5 1                  |                 |                         |                 |                          |                  |                             |                             |
| METALS                         | Zinc  | 34.5 1                             | 31.6 1                  | 16.1 1          | 25.7 1                  | 22.3 1          | 21.9 1                   | 44.5 1           | 32.1 1                      | 49.6 1                      |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene                          | -                                  |                         | 0.33 1 < U      | 0.33 1 < U              | 0.33 1 < U      | 0.33 1 < U               | 1.111 1 < U      | 1.176 1 < U                 | 1.266 1 < U                 |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene                             |                                    |                         | 0.33 1 < U      | 0.33 1 < U              | 0.33 1 < U      | 0.33 1 < U               | 1.111 1 < U      | 1.176 1 < U                 | 1.266 1 < U                 |
| SEMIVOLATILES                  | 1.4-Dichlorobenzene                             |                                    |                         | 0.33 1 < 0      | . 0.33 1 < 0            | 0.33 1 < 0      | 10.33 T < U              | 1.111 1 < U      | 1.176 1 < U                 | 1.266 1 < U                 |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenol                           |                                    |                         | 1.65 1 < U      | 1.65 1 < U              | 1.65 1 < U      | 1.65 1 < U               | 1.111 1 < U      | 1.176 1 < U                 | 1.266 1 < U                 |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol                           |                                    |                         | 0.33 t < U      | 0.33 <sup>°</sup> 1 < ∜ | 0.33 1 < U      | 0.33 1 < U               | 1.111 1 < U      | 1.176 1 < U                 | 1.266 1 < U                 |
| SEMIVOLATILES                  | 2,4-Dichlorophenel                              |                                    |                         | 0.33 1 < U      | 0.33 1 < U              | 0.33 t < U      | 0.33 1 < U               | 1.111 1 < U      | 1.176 1 < U                 | 1.266 1 < U                 |
| SEMIVOLATILES                  | 2,4-Danieorgysenos<br>2,4-Denitrophenol         | ł                                  |                         | 1.65 1 < U      | 165 1 < 11              | 165 1 < 1       | 0.33 1 < 0               | 0.556 1 < 0      | 0.588 1 < U                 | 0.633 1 < U                 |
| SEMIVOLATILES                  | 2,4-Dinisotokuene                               |                                    |                         |                 |                         | 1.00 1 2 0      | 1.05 1 1 0               |                  | 10.00 1 0                   | 12.000 7 < 0                |
| SEMIVOLATILES                  | 2,6-Dinitrotoluene                              |                                    |                         |                 |                         |                 |                          |                  |                             |                             |
| SEMIVOLATILES                  | 2-Chloronaphthalene                             |                                    |                         | 0.33 1 < U      | 0.33 t < U              | 0.33 1 < U      | 0.33 1 < U               | 0.333 1 < U      | 0.353 t < U                 | 0.38 1 < U                  |
| SEMIVOLATILES                  | 2-Methylnaobthalene                             |                                    |                         | 0.33 1 < 12     | 0.33 1 < 0              | 0.33 1 < 0      | 0.33 1 < 0               | 0.556 1 < 0      | 0.588 1 < 0                 | 0.633 1 < U                 |
| SEMIVOLATILES                  | 2-Methylphenol                                  |                                    |                         | 0.33 1 < U      | 0.33 1 < U              | 0.33 1 < U      | 0.33 t < U               | 0.556 1 < U      | 0.588 1 < U                 | 0.633 1 < U                 |
| SEMIVOLATILES                  | 2-Nitroaniline                                  | · ·                                |                         | 1.65 t < U      | 1.65 1 < V              | 1.65 t < U      | 1.65 1 < U               | 3.333 1 < U      | 3.529 1 < U                 | 3.797 1 < U                 |
| SEMIVOLATILES                  | 2-Nitrophenot                                   |                                    |                         | 0.33 1 < U      | 0.33 1 < U              | 0.33 1 < U      | 0.33 1 < U               | 1.111 1. < U     | 1.176 1 < U                 | 1.265 1 < U                 |
| SEMIVOLATILES<br>SEMIVOLATILES | 3,3-Dichlorobenzidine<br>3-Nitmariiline         |                                    |                         | 0.65 1 < U      | 0.65 T < U              | 0.65 T < U      | 0.65 1 < U               | 0.556 1 < U      | 0.588 1 < U                 | 0.633 1 < U                 |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol                      |                                    |                         | 1.65 1 < U      | 1.65 1 < U              | 1.65 1 < 1      | 1.05 i < U<br>185 i < 1  | 3.333 I < U      | 3.529 I < U<br>5.882 1 < U  | 3./9/ 1 < U                 |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether                      |                                    |                         | 0.33 1 < U      | 0.33 1 < U              | 0.33 1 < U      | 0.33 1 < 17              | 1.111 1 < U      | 1.176 1 < U                 | 1.266 1 < U                 |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol                         |                                    |                         | 0.65 1 < Ų      | 0.65 t < U              | 0.65 i < U      | 0.65 1 < U               | 0.556 1 < U      | 0.588 1 < U                 | 0.633 1 < U                 |
| SEMIVOLATILES                  | 4-Chloroaniliste                                |                                    |                         | 0.65 1 < U      | 0.65 1 < U              | 0.65 1 < U      | 0.65 t < U               | 3.333 1 < U      | 3.529 1 < U                 | 3.797 1 < U                 |
| SEMIVOLATILES<br>SEMIVOLATILES | <ul> <li></li></ul>                             |                                    |                         | 0.33 1 < U      | 0.33 1 < 1              | 0.33 1 < U      | 0.33 1 < U               | 1.111 1 < U      | 1.176 1 < U                 | 1.266 1 < U                 |
| SEMIVOLATILES                  | 4-Nitroaniline                                  | 1                                  |                         | 1.65 1 < 1      | 1.65 1 < 13             | 1.65 t < U      | 0.55 t < U<br>1.65 t < U | 0.556 1 < U      | u.∋oo i < V<br>5,882 1 < li | v.o.a i < U<br>6.329 1 ∠ li |
| SEMIVOLATILES                  | 4-Nitrophenal                                   | }                                  | -                       | 1.65 1 < U      | 1.65 1 < U              | 1.65 t < U      | 1.65 1 < U               | 5.556 1 < U      | 5.882 t < U                 | 6.329 1 < U                 |
| SEMIVOLATILES                  | Acenaphthene                                    | · .                                |                         | 0.33 t < U      | 0.33 1 < U              | 0.33 1 < U      | 0.33 1 < U               | 0.333 1 < V      | 0.353 t < U                 | 0.38 1 < U                  |
| SEMIVOLATILES                  | Acenaphthylene                                  | · .                                |                         | 0.33 1 < U      | 0/33 1 < U              | 0.33 1 < U      | 0.33 T < U               | 0.556 1 < U      | 0.588 t < U                 | 0.633 1 < U                 |
| OCIMINATILES                   | 74111725CR;                                     | ł                                  |                         | 0.33 1 < U      | 10.53 T < U             | 0.33 t < U      | 0.33 1 < U               | 0.556 1 < U      | 0,588 1 < U                 | 0.633 1 < U                 |



( :: ::)

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-9 Concentrations of Chemicals in Soil Samples Associated with Sump 009

| SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                                | 355UMP008-S801<br>35-SMP08-S801-02<br>9/8/2006<br>6 - 6 Ft<br>REG | 35SUMP009-SB01<br>35-SMP09-SB01-02<br>9/11/2006<br>8 - 8 Ft<br>REG | LH-S08-01<br>LH-S08-01_1<br>7/12/1993<br>0-2 F1<br>REG | U4-S08-01<br>LH-S08-01_2<br>7/12/1993<br>4 - 6 Ft<br>REG | LH-S08-02<br>LH-S08-02_1<br>7/12/1993<br>0 - 2 Fi<br>REG | LH-S08-02<br>LH-S08-02_2<br>7/12/1993<br>4 - 6 F1<br>REG | LH-S09-01<br>LH-S09-01 OC<br>6/26/1993<br>0.5 - 1.5 Ft<br>FD | LH-S09-01<br>LH-S09-01_1<br>6/26/1993<br>0.5-1.5 Ft<br>REG | LH-S09-01<br>LH-S09-01_2<br>6/26/1993<br>5 - 5.5 Ft<br>REG |
|---|--------------------------------|---|--|--|--|--|--|--|--|--|
| Test Group  | Parameter (Units = mg/kg)      | Result DIL LQ VO  | Result DIL LQ VQ   | Result DIL LO VO                                       | Result DIL LU VO   | Hesult UIL LQ VQ   | Result DIL LQ VQ   | Result UIL LU VU   | HESURE DIE LO VO   | ASS 1 - 11   |
| SEMIVOLATILES                                       | Benzo(a)anthracene             |   |  | 0.33 1 < 0   | 8.33 1 < U   | 0.33 1 < 0   | 0.33 1 < 0   | 0.333 1 4 0  | 0.553 1 < 0  | 0.633 1 4 1  |
| SEMIVOLATILES                                       | Benzo(a)pyrene                 |   |  |  | 0.33 1 < 0   | 0.22 1 4 1   | 0.33 1 < 0   | 111 1 2 1  | 1175 1 0   | 1266 1 4 11  |
| SEMIVOLATILES                                       | Benzo(D)suoraninene            |   |  | 0.33 1 < 0   | 0.33 I < U   | 0.00 1 4 0   | 0.33 1 < 0   | 2022 1 2 1   | 7959 1 4 11  | 2532 1 4 11  |
| SEMIVOLAGLES  | Benzo(gni)perviene             | 1   |  | 9.33 1 < 0   | 0.33 1 < 0   | · 0.00 I < 0   |  |  | 1176 1 4 11  | 1266 1 4 11  |
| SEMIVOLARLES  | Benzo(K)#uoranmene             |   |  | 0.33 I < U   | 0.33 1 < 0   | 1.55 1 < 0   | 165 1 4 15   |  | 1.170 2 5 0  | 1.200 2 1 0  |
| SEMIVOLATILES                                       | Benzoic Acid                   |   |  |  |  |  | 0.65 1 4 1   |  |  |  |
| SEMIVOLATILES                                       | Benzyt Alconol                 |   |  | 0.00 i < U   | 0.05 f < U   | 0:00 L < U   | 0.00 1 < 0   | 0556 1 × P   | 0.599 1 / 1  | 0.633 1 - 11   |
| SEMIVULATILES                                       | bs(2-Unkoroethoxy)methane      | 1   |  | 0.33 1 < 0   | 0.33 1 < 0   | 0.00 1 4 11  | 0.33 1 < 0   | 0.500 1 < 0  | 0.589 1 2 1  | 0.633 1 4 1  |
| SEMIVOLATILES                                       | os(2-Untorcethyt)ether         |   |  | 0.33 1 < 0   | 0.33 1 < 0   | 0.33 1 < 0   | 0.00 1 < 0   | 1111 1 2 11  | 1176 1 < 1   | 1266 1 4 11  |
| SEMIVULATILES                                       | bis(2-Chioroisopropyi)ener     |   |  | 0.00 1 4 1   | 0.33 1 < 0   | 0.00 r C U   | 0.33 1 < 1   | 0556 1 c B   | 0588 1 c 1   | 0.633 1 C U  |
| SEMIVULATILES                                       | Dis(2-Entymexy/printialate     | 1   |  | 0.00 1 4 1   | 0.33 1 < 0   | 0.33 1 < 1   |  | 0.556 1 < 1  | 0588 1 < 1   | 0.633 1 < 1  |
| SEMIVULATILES                                       | Sulys benzyi phasaate          |   |  | 0.00 1 4 0   | 0.00 1 < 0   | 0.30 1 4 0   | 4.30 1 4 0   | 1111 1 2 1   | 1176 1 4 11  | 1266 1 4 1   |
| SEMIVURATILES                                       | Carbazole                      | t   |  | 0.02 1 . 11  | 0.20 1 . 11  | 0.22 1 4 1   | 0.32 1 . 1   | 5.556 1 × H  | 5992 1 2 1   | 6320 1 C H   |
| SEMIVULATILES                                       | Chrysene                       |   |  | 0.33 1 < 0   | 0.33 1 < 0   | 0.33 1 4 1   | 0.00 1 < 0   | 2223 1 4 1   | 2352 1 4 11  | 2532 1 4 1   |
| SEMIVOLATILES                                       | Dibenzo(a,n)anthracene         |   |  | 0.03 1 < 0   | 0.33 1 < 0   | 0.03 1 4 0   | 0.00 1 < 0   | 1111 1 4 11  | 1176 1 4 16  | 1966 1 4 11  |
| SEMIVOLAHLES  | Didenzonran                    | 1   |  | ປ.ວ.3 1 < ປັ   | u.əi i < U   | · шаз і < U  | U > 1 10.00  | 0.558 1  | 0.599 1 - 11   | 1.c.u r < U<br>D10.1                                       |
| SEMIVOLATILES                                       | Usethyl phihalate              | -   |  | 0.33 1 < U   | 1 × U  | 0.33 1 < 0   | 0.00 1 < 0   | 0.000 I < U  | 0.000 t < U  | 0.13   |
| SEMIVOLATILES                                       | Danethyl phthalate             |   |  | 0.33 1 < U   | 0.33 1 < 0   | 0.33 1 < 10  | 0.33 1 < U   | 0.000 1 < U  | 0.366 / < U  | U.003 E < U  |
| SEMIVOLATILES                                       | di-n-Butyl phthalate           |   |  | 0.33 T < U   | 0.33 T < U   | 0.33 1 < U   | 0.33 1 < U   | 4.211 1  | 0.700 1  | 0.004 1  |
| SEMIVOLATILES                                       | di-n-Octyl phthalate           |   |  | 0.33 1 < U   | 0.33 1 < 0   | 0.33 1 < 0   | 0.33 1 < 0   | 9.556 1 < U  | 0.568 1 < 0  | 0.033 1 < U  |
| SEMIVOLATILES                                       | Fluoranthene                   | 1   |  | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 9.556 1 < U  | 0.588 1 < U  | 0.033 1 < U  |
| SEMIVOLATILES                                       | Fluorene                       | 1   |  | 0.33 1 < 0   | 0.33 1 < 0   | 0.33 1 < 0   | 0.33 1 < 0   | 0.556 1 < 0  | 0.588 1 < 0  | 0.033 1 < 0  |
| SEMIVOLATILES                                       | Hexachlorobenzene              |   |  | 0.33 1 < 0   | 0.33 1 < U   | 0.33 1 < 0   | 0.33 1 < 0   | 1.111 1 < 0  | 1.1/6 1 < 0  | 1.266 1 < U  |
| SEMIVOLATILES                                       | Hexachlorobutadiene            |   |  | 0.33 1 < 0   | 0.33 1 < 0   | 0.33 1 < U   | 0.33 1 < 0   | 3.333 1 < U  | 3.529 1 < 0  | 3./9/ 1 < 0  |
| SEMIVOLATILES                                       | Hexachlorocyclopentadiene      |   |  | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < 0   | 3.333 1 < U  | 3.529 1 < 0  | 3./9/ 1 < 0  |
| SEMIVOLATILES                                       | Hexachloroethane               |   |  | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < 0   | 1.111 3 < U  | 1.176 1 < U  | 1.266 1 < U  |
| SEMIVOLATILES                                       | Indeno(1,2,3-cd)pyrene         |   |  | 0.33 1 < U   | 0.33 t < U   | 0.33 1 < U   | 0.33 1 < 0   | 1.111 1 < U  | 1.176 1 < U  | 1.266 1 < 0  |
| SEMIVOLATILES                                       | Isophorone                     |   |  | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < 0   | 0.556 1 < 0  | 0.588 1 < U  | 0.633 1 < 0  |
| SEMIVOLATILES                                       | Naphthalene                    |   |  | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.333 1 < U  | 0.353 1 < U  | 0.38 1 < U   |
| SEMIVOLATILES                                       | Nitrobenzene                   |   |  | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < 0   | 0.33 1 < U   | 0.556 1 < 0  | 0.588 1 < U  | 0.633 t < 0  |
| SEMIVOLATILES                                       | n-Nitroso-di-n-propylamine     |   |  | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 1.111 1 < U  | 1.176 1 < 0  | 1.266 1 < 0  |
| SEMIVOLATILES                                       | n-Nitrosodiphenytamine         |   |  | 0.33 1 < U   | 0.33 ł < U   | 0.33 1 < U   | 0.33 1 < U   | 0.556 1 < U  | 0.588 1 < U  | 0.633 1 < 0  |
| SEMIVOLATILES                                       | Pentachlorophenol              |   |  | 1.65 1 < U   | 1.65 1 < U   | 1.65 1 < U   | 1.65 1 < U   | 5.556 1 < U  | 5.882 f < U  | 6.329 1 < U  |
| SEMIVOLATILES                                       | Phenanthrene                   |   |  | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.556 1 < U  | 0.588 1 < U  | 0.633 1 < U  |
| SEMIVOLATILES                                       | Phenol                         |   |  | 0.33 1 < U   | . 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.556 1 < U  | 0.588 1 < U  | 0.633 1 < U  |
| SEMIVOLATILES                                       | Pyrene                         |   |  | 0.33 1 < U   | 0.33 1 < U   | 0.33 t < U   | 0.33 1 < U   | 0.556 1 < U  | 0.588 1 < U  | 0.633 1 < U  |
| VOLATILES   | 1.1.1.2-Tetrachloroethane      |   |  |  |  |  |  |  |  |  |
| VOLATILES   | 1,1.1-Trichloroethane          |   |  | 0.005 t ≺ U  | 0.005 t < U  | 0.005 1 < U  | 0.005 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  |
| VOLATILES   | 1,1,2,2-Tetrachloroethane      | 1   |  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.006 1 < U  | 0.006 1 < 0  | 0.006 1 < U  |
| VOLATILES   | 1,1,2-Trichloroethane          |   |  | 0.005 1 < U  | 0.005 1 < 💔  | 0.005 1 < U  | 0.005 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.006 1 < 0  |
| VOLATILES   | 1,1-Dichloroethane             |   |  | 0.005 1 < U  | 0.005 1 < U  | 0.005 t < U  | 0.005 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  |
| VOLATILES   | 1,1-Dichloroethene             |   |  | 0.005 t < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < 1  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < 0  |
| VOLATILES   | 1.1-Dichloropropene            |   |  |  |  |  |  |  |  |  |
| VOLATILĖS   | 1,2,3-Trichtorobenzene         |   |  |  |  |  |  |  |  |  |
| VOLATILES   | 1,2,3-Trichloropropane         |   |  |  |  |  |  |  |  |  |
| VOLATILES   | 1,2,4-Trichlorobenzene         |   |  |  |  |  |  |  |  |  |
| VOLATILES   | 1,2,4-Trimetinylbenzene        |   |  |  |  |  |  |  |  |  |
| VOLATILES   | 1,2-Dibromo-3-chloropropane    |   |  |  |  |  |  |  |  |  |
| VOLATILES   | 1,2-Dibromoethane              |   |  |  |  |  |  |  |  |  |
| VOLATILES   | 1,2-Dichlorobenzene            | 1   |  |  |  |  |  |  |  |  |
| VOLATILES   | 1,2-Dichlomethane              |   |  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.006 1 < U  | 0.006 t < U  | 0.006 1 < U  |
| VOLATILES   | 1,2-Dichloroethene             |   |  | 0.005 t < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.006 1 < U  | 0.006 t < U  | 0.006 t < U  |
| VOLATILES   | 1.2-Dichloropropane            |   |  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  |
| VOLATILES   | 1,2-Dimethylbenzene (o-Xylene) |   |  |  |  |  |  |  |  |  |
| VOLATILES   | 1,3,5-Trimethylbenzene         |   |  |  |  |  |  |  |  |  |
| VOLATILES   | 1.3-Dichlorobenzene            | 1   |  |  |  |  |  |  |  |  |
| VOLATILES   | 1.3-Dichloropropane            |   |  |  |  |  |  |  |  |  |
| VOLATILES   | 1.4-Dichlorobenzene            |   |  |  |  |  |  |  |  |  |
| VOLATILES   | 2.2-Dichloropropane            | i i i i i i i i i i i i i i i i i i i                             |  |  |  |  |  |  |  |  |
| VOLATILES   | 2-Butanone                     |   |  | 0.05 t < U   | 0.05 t < U   | 0.05 1 < V   | 0.05 1 < U   | 0.11 ·1 < U  | 0.11 t < U   | 0.12 1 < U   |
| VOLATILES   | 2-Chlomethyl vinyl either      |   |  | 0.01 1 < U   | 0.01 1 < 1   | 0.01 1 < U   | 0.01 1 < U   | -  |  |  |
| VOLATILES   | 2-Chlorotoluene                |   |  |  |  |  |  |  |  |  |
| VOLATH ES   | 2-Hexanone                     |   |  | 0.05 1 < 1   | 0.05 1 < 13  | 0.05 1 < II  | 0.05 1 < U   | 0.055 1 < U  | 0.055 1 < U  | 0.062 1 < 0  |
| VOLATHES  | 2.Pronenal                     | }   |  |  |  |  |  |  | 2  |  |
| THE DOLLAR  |                                | 1   |  |  |  |  |  |  |  |  |
| VOI ATH ES  |                                |   |  |  |  |  |  |  |  |  |
| VOLATILES   | Acetone                        |   |  | 01 1 2 1   | 01 1 - 4   | 01 1 2 4   | 01 1 2 11  | 011 t < II   | 0.11 1 < 11  | 0.12 1 < 1   |
| VOLATILES<br>VOLATILES                              | Acetone                        |   |  | 0.1 1 < U  | 0.1 1 < U  | 0.1 1 < U  | 0.1 1 < U  | 0.11 t < U   | 0.11 i < U   | 0.12 1 < U   |
| VOLATILES<br>VOLATILES<br>VOLATILES                 | Acetone<br>Acetonibile         |   |  | .0.1 1 < U   | 0.1 1 < U  | 0.1 1 < U  | 0.1 1 < U  | 0.11 1 < U   | 0.11 1 < U   | 0.12 1 < U   |



 Table 3-9

 Concentrations of Chemicals in Soil Samples Associated with Sump 009

| [SUMP] = SUMP009 |                             |        |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
|------------------|-----------------------------|--------|-----------|------|--------|------------|------|--------|--------|------|------------|--------|---------|-------|--------|--------|------|----|--------|----------|------|-----|--------|---------|--------|-------|--------|------------|----|--------|---------------|------|----|
| LOCATION _CODE   |                             | 35SI   | JMP008-SI | BQ1  | 35SU   | IMP009-SB  | Dt   | LH     | S08-01 |      |            | UH-    | S08-01  |       | I      | LH-SO  | 8-02 |    | U      | I-S08-0  | 2    |     | LH-    | S09-01  |        |       | LH-S   | 09-01      |    | 1      | LH-S09        | 3-01 |    |
| SAMPLE_NO        |                             | 35-S   | MP08-SB0  | 1-02 | 35-SN  | APO9-SB01- | 02   | LH-S   | 08-01_ | 1    |            | LH-SI  | 08-01_2 |       | L      | H-S08  | 02_1 |    | UH-    | S08-02   | _2   |     | LH-SC  | 19-01 C | к<br>С |       | LH-SO  | 9-01_1     |    | U      | H-S09-        | 01_2 |    |
| SAMPLE_DATE      |                             |        | 9/8/2006  |      | ŝ      | 9/11/2006  |      | 7/1    | 2/1993 |      |            | 7/12   | 2/1993  |       |        | 7/12/1 | 993  |    | 7/     | 12/199   | 3    |     | 6/2    | 6/1993  |        |       | 6/26   | /1993      |    | ,      | 6/26/19       | 993  |    |
| DEPTH            |                             |        | 6~6Ft     |      |        | 8-8Ft      |      | 0      | - 2 Ft |      |            | 4-     | -6FI    |       |        | 0-2    | ft   |    | 4      | 4 - 6 Ft |      |     | 0.5    | 1.5 Fi  | 1      |       | 0.5 -  | 1,5 Ft     |    |        | 5 - 5.5       | Ft   |    |
| SAMPLE_PURPOSE   |                             |        | REG       |      |        | REG        |      |        | REG    |      |            | F      | REG     |       |        | RE     | G    |    |        | REG      |      |     |        | FD      |        |       | R      | ÊĞ         |    |        | REG           | 3    |    |
| Test Group       | Parameter (Units = mg/kg)   | Result | DAL L     | Q VQ | Result | DIL LO     | t VQ | Result | DILL   | Q VC | 2) Re      | suft ( | DIL LC  | i -VQ | Result | Di     | ιQ   | VQ | Result | DIL      | LQ V | Qſ  | Result | DIL     | Q VC   | ) Res | ut D   | DIL LQ     | VQ | Result | Dil           | LQ   | VQ |
| VOLATILES        | Benzene                     | T      |           |      |        |            |      | 0.005  | 1.     | < U  | 1 1        | 0.005  | 1 <     | U     | 0.00   | 5 1    | <    | U  | 0.005  | 1        | < t  | J   | 0.006  | 1       | < 1    | 0     | .006   | 1 <        | U  | 0.00   | â 1           | <    | U  |
| VOLATILES        | Bromobenzene                | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Bromochaoromethane          |        |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Bromodichloromethane        |        | -         |      |        |            |      | 0.005  | 1 ·    | < U  | •          | 0.005  | 1 <     | U     | 0.00   | 51     | <    | U  | 0.005  | 1        | < {  | J - | 0.006  | 1       | < U    | 0     | .006   | 1 <        | U  | 0.00   | 5 1           | <    | U  |
| VOLATILES        | Bromotorm                   | 1      |           |      |        |            |      | 0.005  | 1 .    | < lj | <b>i</b> 1 | 0.005  | 1 <     | U     | 0.00   | 51     | <    | U  | 0.605  | 1        | < 1  | J   | 0.006  | 1       | < U    | 0     | .006   | 1 <        | U  | 0.00/  | 51            | <    | U  |
| VOLATILES        | Bromomethane                |        |           |      |        |            |      | 0.01   | 1 .    | < 1  | 1          | 0.01   | 1 <     | ប     | 0.0    | 1 1    | <    | U  | 0.01   | 1        | < 1  | J . | 0.006  | 1       | < 'U   | 0     | .006   | 1 <        | υ  | 0.00/  | ð 1           | <    | 0  |
| VOLATILES        | Carbon disulfide            | 1      |           |      |        |            |      | 0.005  | 1 ·    | < U  | )          | 0.005  | 1 <     | U     | 0.00   | 5 1    | <    | U  | 0.005  | 1        | < ા  | J   | 0.006  | 1       | < 1    | 0     | .006 1 | 1 <        | U  | 0.00   | 5 1           | <    | U  |
| VOLATILES        | Carbon tetrachloride        | 1      |           |      |        |            |      | 0.005  | 1      | < 13 | 1          | 0.005  | 1 <     | ų     | 0.00   | 5 1    | <    | U  | 0.005  | 1        | < 1  | 1   | 0.006  | 1       | < U    | 0     | .006   | 1 <        | U  | 0.00   | 51            | <    | U  |
| VOLATILES        | Chlorobenzene               | 1      |           |      |        |            |      | 0.005  | 1      | < U  | }          | 0.005  | 1 <     | U     | 0.00   | 5 1    | <    | U  | 0.005  | 1        | < 1  | ł   | 0.006  | 1       | < U    | 0     | .006   | 1 <        | U  | 0.00   | 51            | <    | U  |
| VOLATILES        | Chloroethane                | 1      |           |      |        |            |      | 0.01   | 1      | < 1  | ļ          | 0.01   | 1 <     | U     | 0.0    | 1 1    | <    | U  | 0.01   | 1        | < 1  | J   | 0.006  | 1       | < U    | 0     | .006   | 1 <        | U  | 0.004  | 5 1           | <    | U  |
| VOLATILES        | Chloroform                  |        |           |      |        |            |      | 0.005  | 1      | < U  | 1          | 0.005  | 1 <     | υ     | 0.00   | 51     | <    | U  | 0.005  | 1        | < 1  | ł   | 0.006  | 1       | < U    | 0     | .006   | 1 <        | U  | 0.00   | 61            | <    | U  |
| VOLATILES        | Chloromethane               |        |           |      |        |            |      | 0.01   | 1      | < 1  | J          | 0.01   | 1 <     | U     | 0.0    | 1 1    | <    | U  | 0.01   | 1        | < t  | U   | 0.006  | 1       | < U    | 0     | .006   | 1 <        | U  | 0.00   | 61            | <    | U  |
| VOLATILES        | Chloroprene                 | .]     |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | cis-1,2-Dichloroethene      | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | cis-1,3-Dichloropropene     |        |           |      |        |            |      | 0.005  | ·1 ·   | < 8  | 1          | 0.005  | 1 · <   | ម     | 0.00   | 51     | <    | U  | 0.005  | 1        | < 1  | J   | 0.006  | 1       | < 1    | 0     | .006   | 1 <        | U  | 0.00   | 6 1           | <    | 0  |
| VOLATILES        | Dibromochloromethane        |        |           |      |        |            |      | 0.005  | 1      | < 1  | }          | 0.005  | 1 <     | u     | 0.00   | 51     | <    | U  | 0.005  | 1        | < 1  | 0   | 0.006  | 1       | < 1    | 1 0   | .006   | 1 <        | U  | 0.00   | 61            | <    | U  |
| VOLATILES        | Dibromomethane              | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     | -      |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Dichtorodifluoromethane     | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Ethyl methacrylate          | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Ethylbenzene                | 1      |           |      |        |            |      | 0.005  | 1      | < 1  | J          | 0.005  | 1 <     | U     | 0.00   | 51     | <    | U  | 0.005  | 1        | < 1  | U   | 0.006  | 1       | < U    | 1 0   | :006   | <u>۲</u> ۲ | U  | 0.00   | 6 1           | <    | IJ |
| VOLATILES        | Hexachlorobutadiene         | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | IODOMETHANE                 | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | ISOBUTYL ALCOHOL            |        |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Isopropylbenzene            | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | m.p-Xylenes                 | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Methacrylonitrile           | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        | _             |      |    |
| VOLATILES        | Methyl isobutyl ketone      |        |           |      |        |            |      | 0.05   | 1      | < L  | j          | 0.05   | 1 <     | U     | 0.0    | 6 1    | <    | U  | 0.05   | 1        | < 1  | U   | 0.055  | 1       | < L    | ) 0   | .055   | 1 <        | U  | 0.06   | 2 1           | <    | U  |
| VOLATILES        | METHYL METHACRYLATE         | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Methylene chloride          | ļ      |           |      |        |            | -    | 0.005  | 1      | < 6  | 1          | 0.005  | 1 <     | U     | 0.00   | 51     | <    | U  | 0.005  | 1        | < 1  | 0   | 0.006  | 1       | < t    | ) 0   | .006   | 1 <        | U. | 9.00   | 6 1           | <    | U  |
| VOLATILES        | Naphthalene                 | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | n-BUTYLBENZENE              | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | n-PROPYLBENZENE             | ſ      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Pentachkoroethane           | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | p-ISOPROPYLTOLUENE          |        |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Propionitnile               | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | sec-BUTYLBENZENE            | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Styrene                     | 1      |           |      |        |            |      | 0.005  | 1      | < 1  | J.         | 0.005  | 1 <     | υ     | 0.00   | 6 f    | <    | Ð  | 0.005  | 1        | < 1  | U   | 0.006  | 1       | < L    | ; 0   | .005   | 1 <        | 0  | 0.00   | 63            | <    | U  |
| VOLATILES        | tert-BUTYLBENZENE           |        |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        | -       |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Tetrachloroethene           |        |           |      |        |            |      | 0.005  | 1      | < 1  | J          | 0.005  | 1 <     | U     | 0.00   | 51     | <    | U  | 0.005  | 1        | < 1  | U   | 0.006  | 1       | < (    | ) (   | 005    | 1 <        | U  | 0.00   | 16 1          | <    | 0  |
| VOLATILES        | Toluene                     | 1      |           |      |        |            |      | 0.005  | 1      | < 1  | ł          | 0.005  | 1 <     | 0     | 0.00   | 51     | <    | U  | 0.005  | t        | <    | U   | 0.006  | 1       | < (    | ) 6   | .005   | 1 <        | Û  | 0.00   | 61            | <    | U  |
| VOLATILES        | trans-1,2-Dichkoroethene    |        |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | trans-1,3-Dichloropropene   | •      |           |      |        |            |      | 0.005  | 1      | < ເ  | J          | 0.005  | 1 <     | U     | 0.00   | 51     | <    | U  | 0.005  | 1        | < 1  | U   | 0.006  | 1       | < 1    | 1 0   | .006   | 1 <        | U  | 0.00   | 10 Ì.         | <    | U  |
| VOLATILES        | trans-1,4-Dichloro-2-butene | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        |        |      |    |        |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Trichloroethene             | 1      |           |      |        |            |      | 0.005  | 1      | < t  | 3          | 0.005  | 1 <     | U     | 0.00   | 15 1   | <    | 0  | 0.005  | 1        | < 1  | U   | 0.006  | 1       | < I    | ) (   | .006   | 1 <        | U  | 0.00   | <i>i</i> o 1  | <    | U  |
| VOLATILES        | Trichlorofluoromethane      | 1      |           |      |        |            |      |        |        |      |            |        |         |       |        | _      |      |    | _      |          |      |     |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Vinyl acetate               |        |           |      |        |            |      | 0.05   | 1      | < t  | \$         | 0.05   | 1 <     | U     | 0.0    | 5 1    | <    | U  | 0.05   | 1        | < !  | 0   |        |         |        |       |        |            |    |        |               |      |    |
| VOLATILES        | Vinyl chloride              |        |           |      |        |            |      | 0.01   | 1      | < t  | 3          | 0.01   | 1 <     | U     | 0.0    | 1 1    | <    | ប  | 0.01   | 1        | < 1  | 0   | 0.006  | 1       | < 1    | , (   | .005   | 1 <        | U  | 0.00   | 10 I          | <    | 0  |
| VOLATILES        | Xvienes Total               | 1      |           |      |        |            |      | 0.005  | 1      | < t  | 1          | 0.005  | 1 <     | : 10  | 0.00   | 15 1   | <    | U  | 0.005  | 1        | < 1  | U   | 0.006  | 1       | < 1    | ) (   | 1.006  | 1 <        | U  | 0.00   | <i>i</i> te 1 | <    | 0  |



1.0

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-9 Concentrations of Chemicals in Soil Samples Associated with Sump 009

| [SUMP] = SUMP009 |   |                  |                            |                  |                       |                  |                     |                           |                  |                  |                  |                     |
|------------------|---|------------------|----------------------------|------------------|-----------------------|------------------|---------------------|---------------------------|------------------|------------------|------------------|---------------------|
| LOCATION _CODE   |   | LH-S09-01        | LH-S09-02                  | LH-S09-02        | LH-S09-02             | 1.HS-2-05        | LH-WRS-5            | LH-WRS-5                  | WRSUMP005-SB01   | WRSUMP005-SB01   | WRSUMP005-SB02   | WRSUMP005-SB02      |
| SAMPLE_NO        |   | LH-S09-01_3      | LH-S09-02_1                | LH-S09-02_2      | LH-S09-02_3           | LHS-2-05         | LH-WRS-5_1          | LH-WRS-5_2                | WRSMP005-SB01-01 | WRSMP005-SB01-02 | WRSMP005-SB02-02 | WRSMP005-SB02-02-QC |
| Sample_date      |   | 6/26/1993        | 6/26/1993                  | 6/26/1993        | 6/26/1993             | 1/10/1995        | 7/12/1993           | 7/12/1993                 | 9/22/2006        | 9/22/2006        | 9/22/2006        | 9/22/2006           |
| DEPTH            |   | 6.5 - 7.5 Ft .   | 0.5 - 1.5 Ft               | 5 - 5.6 Ft       | 7 - 7.5 Ft            | 0-05Ft           | 0 - 2 Ft            | 3 - 4.5 Ft                | _5~_5 Ft         | 5 - 5 Ft         | 5 - 5 Ft         | 5 - 5 Ft            |
| SAMPLE_PURPOSE   |   | REG              | REG                        | REG              | REG                   | REG              | REG                 | REG                       | REG              | REG              | REG              | FD                  |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result Dill LQ VQ          | Result DIL LO VQ | Result DIL LO VO      | Result DIL LO VO | Result DIL LQ VQ    | Result DIL LQ VQ          | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ    |
| EXPLOSIVES       | 1,3,5-Trinitrobenzene   |                  |                            |                  |                       | 0.23 1 < U       |                     |                           | 0.242 1 U U      | 0.238 1 U U      | 0.245 1 U U      | 0.242 1 U U         |
| EXPLOSIVES       | 1,3-Dinitrobenzene  |                  |                            |                  |                       | 0-23 1 < U       |                     |                           | 0.242 1 U U      | 0.238 1 U U      | 0.245 1 U U      | 0.242 1 U U         |
| EXPLOSIVES       | 2,4,6-Trinitrotoluene   |                  |                            |                  |                       | 0.23 1 < U       |                     |                           | 0.242 1 U U      | 0.238 1 U U      | 9.245 1 U U      | 0.242 1 U U         |
| EXPLOSIVES       | 2,4-Dinitrotoluene  | 1.176 1 < U      | 1.149 1 < U                | 1.351 t < U      | 1.163 1 < U           | 0.23 t < U       | 0.33 1 < U          | 0.33 1 < U                | 0.242 1 U U      | 0.238 1 U U      | 0.245 1 U U      | 0.242 1 U U         |
| EXPLOSIVES       | 2,6-Dinitrotoluene  | 1.176 1 < U      | 1.149 1 < U                | 1.351 1 < U      | 1.163 1 < ป           | 0.25 t < 1/      | 0.33 1 < U          | 0.33 1 < U                | 0.251 1 U U      | 0.248 1 U U      | 0.255 1 U U      | 0.251 1 U U         |
| EXPLOSIVES       | 2-Amino-4,6-dinitrotoluene  | 1                |                            |                  |                       |                  |                     |                           | 0.251 1 U U      | 0.248 1 U U      | 0.255 1 U U      | 0.251 1 U U         |
| EXPLOSIVES       | 4-Amino-2,6-dinitrototuene  |                  |                            |                  |                       | 0.47 1 < U       |                     |                           | 0.251 1 U U      | 0.248 1 U U      | 0.255 1 U U      | 0.251 1 U U         |
| EXPLOSIVES       | HMX   |                  |                            |                  |                       | 2.1 1 < U        |                     |                           | 2.13 1 U U       | 2.1 1 U U        | 2.16 1 U U       | 2.13 1 U U          |
| EXPLOSIVES       | m-Nitroteluene  |                  |                            |                  |                       | 0.94 1 < U       |                     |                           | 0.242 I U U      | 0.238 1 U U      | 0.245 1 U U      | 0.242 1 U U         |
| EXPLOSIVES       | Nitrobenzene  |                  |                            |                  |                       | 0.25 1 < U       |                     |                           | 0.251 1 U U      | 0.248 1 U U      | 0.255 1 U U      | 0.251 1 U U         |
| EXPLOSIVES       | o-Nitrotoluene  |                  |                            |                  |                       | 0.94 1 < U       |                     |                           | 0.242 1 U U      | 0.238 1 U U      | 0.245 1 U U      | 0.242 1 U U         |
| EXPLOSIVES       | p-Nitrotoluene  |                  |                            |                  |                       | 2.8 1 < U        |                     |                           | 0.242 1 U U      | 0.238 1 U U      | 0.245 1 U U      | 0.242 1 U U         |
| EXPLOSIVES       | RDX   |                  |                            |                  |                       | 1 i < U          |                     |                           | 0.966 1 U U      | 0.952 1 U U      | 0.98 1 U U       | 0.966 1 U U         |
| EXPLOSIVES       | Tetryl  |                  |                            |                  |                       | 0.7 1 < U        |                     |                           | 0.628 1 U U      | 0.619 1 U U      | 0.637 1 U U      | 0.628 1 U U         |
| METALS           | Aluminum  | 8050 1           | 10400 1                    | 19800 1          | 6320 1                | 5140 1           | 10800 1             | 4270 1                    | 9100 1           | 18800 1          | 20900 1          | 16000 1             |
| METALS           | Antimony  | 6.12 1 < U       | 9.22 1 < U                 | 6.34 t < U       | 51 < U                | 102 1 < UJ       | 31 < 1              | 3 1 < U                   | 0.113 1 U UJL    | 0.115 1 U UJL    | 0.0758 1 J JL    | 0.12 1 U UJL        |
| METALS           | Arsenic   | 2.57 1           | 0.697 1 E                  | 2.19 1           | 0.5 1 < U             | 5.7 1 J          | 4.5 1               | 2.2 1                     | 4.26 1           | 1.33 1           | 1.77 1           | 1.73 1              |
| METALS           | Barium  | 272 1 < U        | 68.2 1 < U                 | 104 t < U        | 45.8 1 < U            | 60 1             | 117 1               | 43.6 1                    | 129 1 JH         | 51.4 1 JH        | 65.6 1 JH        | 61.9 1 JH           |
| METALS           | Beryllium   |                  |                            |                  |                       |                  |                     |                           | 0.56 1           | 0.939 1          | 109 1            | 0.849 1             |
| METALS           | Carmium   | 45 1             | 249 1                      | 6.02 1           | 125 1 < 1             | 1 1 2 11         | t 1 < ∛l            | 11 6 8                    | 0151 1 1 1       | 0.0758 1         | 0.0727 1         | 0.0985 1 .1 .1      |
| METALS           | Calcium   | 1320 1           | 1380 1                     | 3170 1           | 1050 1                | 578 1            | 2100 1              | 1120 1                    | 1510 1           | 940 1            | 610 1            | 662 1               |
| METALS           | Chromium  | 10.8 1           | 10.9 1                     | 163 1            | 73 1                  | 14.0 1           | 203 1               | 83 1                      | 14.1 1 14        | 160 1 14         | 24.1 1 H         | 165 1 14            |
| METALS           | Cohalt  | 814 1            | 456 1                      | 808 1            | 918 1                 | 31 1             | 92 1                | 38 1                      | 422 1            | 733 1            | 9.06 1           | 754 1               |
| METALS           | Comer   | 973 1 < 1        | 7.84 1 2 11                | 894 1 2 11       | 438 1 2 1             | 55 1             | 36 1                | 21 1                      | 227 1            | 502 1            | 68 1             | 552 1               |
| METALS           | Cvanide Total   | 2.10 1 2 0       | <i></i>                    | 0.54 1 1 0       | 1.00 1 1 0            | J.J              | 0.0 i<br>0.5 1 ~ il | 2.1                       | 2.27             | 3.02             | 0.0 1            | J.52 1              |
| METALS           | boo   | 17300 1          | 0220 1                     | 22200 t          | 4200 1                | 17100 1          | 25107 1             | 112/0 1                   | 29700 1 1        | 10200 1 1        | 24500 1 1        | -14500 1 I          |
| METALS           | teat  | 186 1            | 105 1 E                    | 22200 1          | 106 1 E               | 102 1            | 0.2 1               | 61 1                      | 20/00 1 0        | 19200 1 3        | 110 1            | 107 1               |
| METALS           | Managerium  | 043 1            | 19.5 F                     | 1510 1           | 1100 1 E              | 224 1            | 52 1                | 0.1 1                     | 0.3/ 4           | 1550 1           | 11.5 1           | 10.7 1              |
| METALS           | Magnesia  | 66.2 1           | 573 1                      | 129 1            | 1 2011                | 224 f            | 676 1               | 106 1                     | 198 1            | 1330 1           | 500 1 f          | 521 1 1             |
| METALS           | Mangaricoc  | 0.052 1 - 11     | 07.5 1 4 15                | 0.057 1          | 12.0 1<br>0.05 1 - 1t | 03.4             | 01 1 . 11           | 01 1 - 13                 | 129 1 3          | 27.7 1 1 1       | 0.0000 1 1 5     | 0.0417 1 1          |
| METALS           | Niskal  | 0.000 1 < 0      | 12.002 T C Q               | 0.057 1 < 0      | 0.05 1 4 0            | 0.3 1 < 0        | 0.1 1 < 0           | 0.1 1 < 0                 | 476 1 1          | 10.297 1 0 0     | 117 1 ()         | 0.0417 1 3 3        |
| METALO           | Babasium  | 200 1            | 610 1                      | 1070 1           | 007 4                 | 000 1 . 11       | 450 A               |                           | 4.70 / JN        | 10.1 1 11        | 11.7 1 Jri       | 0.94 F JH           |
| NETALO           | Foldssion   | 0,610 1 - FI     | 010 1                      | 13/0 1           | 26/ 1                 | 203 1 < 0        | 409 1               | 250                       | 262 i JH         | 45/ I JH         | 522 I JH         | 40 f I JH           |
| METALO           | Selement  |                  | 0.922 1 < 0                | U.034 I < U      | 0.5 1 < 0             | 0.45             |                     | 11 < 0                    | 0.293 1          | U.148 L J J      | 0.247 . 1 J J    | 0.262               |
| METALO           | Saver   | 0.031 1 < 0      | 0.040 1 < 0                | 0.032 1 < 0      | 0.025 1 < 0           | 1 < 0            | 11 < 0              | 1 1 < 0                   | 1.08 1 U U       | 1.87 1 0 0       | 1.82 1 0 0       | 1.92 1 0 0          |
| METALS           | Soorum  | <b>1</b>         |                            |                  |                       |                  |                     |                           | 42.5             | 326 1            | 243 1            | 212 1               |
| METALS           | Stonium   | 57.3 I < U       | 10.9 1 < 0                 | 42.5 1 < 0       | 20.9 1 < 0            | 10.2 1 < 0       | 17.4 1              | 9.2                       |                  |                  |                  |                     |
| METALS           | Inallium  |                  |                            |                  |                       | 50.8 1 < 0       |                     |                           | 0.0584 1         | 0.114 1          | 0.107 1          | 0.105 1             |
| METALS           | vanadium  |                  |                            |                  |                       |                  |                     |                           | 31.7 1 JH        | 29.7 1 JH        | 41 1 JH          | 28.9 1 JH           |
| METALS           | ∠thC  | 21.7 1           | 20.9 1                     | 39.8 1           | 16.8 1                | 21.6 1           | 26.1 1              | 13.3 T                    | 18.3 t JH        | 26.6 1 JH        | 31.8 1 JH        | 23.5 1 JH           |
| SEMIVOLATILES    | 1,2,4- inchiorobenzene  | 1,176 1 < U      | 1.149 1 < U                | 1.351 1 < 0      | 1.163 1 < U           | 0.44 1 < 0       | 0.33 1 < 0          | 0.33 1 < U                | 0.922 5 U U      | 0.201 1 U U      | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | 1,2-Dichlorobenzene   | 1.176 1 < U      | 1.149 1 < U                | 1.351 1 < U      | 1.163 1 < U           | 0.44 1 < U       | 0.33 i < U          | 0.33 1 < 0                | 30 5             | 0.247 1          | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVULATILES    | 1,3-Dichlorobenzene   | 1.176 1 < U      | 1.149 1 < U                | 1.351 1 < U      | 1.163 1 < U           | 0.44 1 < U       | 0.33 1 < U          | 0.33 1 < U                | 0.922 5 U U      | 0.201 1 U U      | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | 1,4-Dichlorobenzene   | 1.176 1 < U      | 1.149 1 < U                | 1.351 1 < U      | 1.163 1 < U           | 0.44 ∶1 < U      | 0.33 1 < U          | 0.33 T < U                | 0.922 5 U U      | 0.201 1 1 1      | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol   | 1.176 1 < U      | 1.149 1 < U                | 1.351 1 < U      | 1.163 1 < U           | 2.2 1 < U        | 1.65 t < 1∪.        | 1.65 î < U                | 0.922 5 U U      | 0.201 1 U U      | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol   | 1.176 t < U      | 1.149 1 < U                | 1.351 1 < U      | 1.163 i < U           | `0.44 1 < U      | 0.33 1 < U          | 0.33 1 < U                | 0.922 5 U U      | 0.201 1 U U      | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | 2,4-Dichlorophenol  | 1.176 1 < U      | 1.149 1 < U                | 1.351 1 < U      | 1.163 1 < U           | 0.44 1 < U       | 0.33 t < U          | 0.33 1 < U                | 0.922 5 U U      | 0.201 1 U U      | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | 2,4-Dimethylphenol  | 0.588 1 < U      | 0.575 1 < U                | 0.676 1 < U      | 0.581 1 < U           | 0.44 1 < U       | 0.33 1 < U          | 0.33 1 < U                | 0.922 5 U U      | 0.201 1 U U      | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | 2,4-Dinitrophenol   | 111.765 t < U    | 11.494 1 < U               | 13.514 1 < U     | 11.628 1 < U          | 2.2 1 < U        | 1.65 1 < U          | 1.65 1 < U                | 4.61 5 U U       | 1.01 1 U U       | 1.03 1 U U       | 1.02 1 U U          |
| SEMIVOLATILES    | 2,4-Dinitrotoluene  |                  |                            |                  |                       | 0.44 1 < U       |                     |                           | 0.922 5 U U      | 0.201 1 U U      | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | 2,6-Dinitrotolvene  |                  |                            |                  |                       | 0.44 1 < U       |                     |                           | 0.922 5 U U      | 0.201 1 U V      | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | 2-Chloronaphthalene   | 0.353 1 < U      | 0.345 1 < U                | 0.405 1 < U      | 0.349 1 < U           | 0.44 1 < U       | 0.33 1 < U          | 0.33 1 < U                | 0.922 5 U U      | 0.201 1 U U      | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | 2-Chlorophenol  | 0.588 1 < U      | 0.575 1 < U                | 0.676 1 < U      | 0.581 t < U           | 0.44 1 c U       | 0.33 1 < U          | 0.33 1 < U                | 0.922 5 V V      | 0.201 1 U U      | 0.207 1 U U      | 0.204 t U U         |
| SEMIVOLATILES    | 2-Methylnaphthalene   | 0.353 1 < U      | 0.345 1 < <del>U</del>     | 0.405 1 < U      | 0.349 1 < U           | 0.44 1 < U       | 0.33 1 < U          | 0.33 1 < U                | 0.922 5 U U      | 0.201 1 U U      | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | 2-Methylphenol  | 0.588 1 < U      | 0.575 1 < U                | 0.676 1 < U      | 0.581 1 < U           | 0.44 1 < U       | 0.33 1 < U          | 0.33 1 < U                | 0.922 5 U U      | 0.201 1 U U      | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | 2-Nitroaniline  | 3.529 1 < U      | 3.448 1 < U                | 4.054 1 < U      | 3.488 1 < ∛J          | 2.2 1 < U        | 1.65 1 < U          | 1.65 1 < U                | 4.61 5 U U       | 1.01 1 U U       | 1.03 1 U U       | 1.02 T U U          |
| SEMIVOLATILES    | 2-Nitrophenol   | 1.176 1 < U      | 1.149 1 < U                | 1.351 1 < U      | 1.163 1 < U           | 0.44 1 < U       | 0.33 1 < U          | 0.33 t < U                | 0.922 5 U U      | 0.201 1 U U      | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | 3,3'-Dichlorobenzidine  | 0.588 1 < U      | 0.575 1 < U                | 0.676 1 < U      | 0.581 1 < U           | 0.88 1 < ∜J      | 0.65 1 < U          | 0.65 1 < U                | 1.84 5 U U       | 0.402 1 U U      | 0.414 1 U U      | 0.407 1 U U         |
| SEMIVOLATILES    | 3-Nitroaniline  | 3.529 1 < U      | 3.448 1 < U                | 4.054 1 < U      | 3.488 1 < U           | 2.2 1 < U        | 1.65 1 < U          | 1.65 1 < 10               | 4.61 5 U U       | 1.01 1 U U       | 1.03 1 U U       | 1.02 1 U U          |
| SEMIVOLATILES    | 4.6-Dinitro-2-methylohenol  | 5.882 ! < U      | 5.747 1 < U                | 6.757 1 < U      | 5.814 1 < U           | 2.2 1 < 1        | 1.65 1 < 1/         | 1.65 1 < U                | 461 5 8 11       | 1.01 1 1/1       | 1.03 1 1 1       | 102 1 11 11         |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  | 1.175 1 < U      | 1.149 1 < U                | 1.351 1 < 1      | 1.163 1 < 1           | 0.44 1 < 0       | 0.33 1 < 11         | 0.33 1 < 11               | 0.922 5 11 11    | 0.201 1 11 11    | 0.207 1 11 11    | 0.204 1 10 11       |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol   | 0.588 1 < 11     | 0.575 1 < 11               | 0.676 1 < 1      | 0581 1 < 11           | 0.44 1 ∠ 11      | 0.65 1 < 11         | 0.65 1 c 11               | 0.922 5 11 11    | 0.201 1 11 11    | 0.207 1 11 11    | 0.204 1 10 11       |
| SEMIVOLATILES    | 4-Chloroaniline   | 3,529 1 2 11     | 3.448 1 2 11               | 4.054 1 2 3      | 3488 1 - 14           | 0.44 1 2 1       | 0.65 1 2 14         | 0.65 1 2 1                | 0.922 5 11 11    | 0.201 1 11 11    | 0207 1 11 11     | 0204 1 1 1          |
| SEMIVOLATILES    | 4-Chlomohenvi phenvi ether  | 1176 1 2 11      | 1149 1 2 11                | 1351 1 2 11      | 1 163 1 2 11          | 0.44 1 - 11      | 039 1 2 11          | 0.00 I × U                | 0.022 0 0 U      | 0.201 1 1 1      | 0.207 1 1 1      | 0.204 1 13 31       |
| SEMIVOLATILES    | 4-Methylinhean  | 0.588 1 2 1      | 0.575 1 - 11               | 0.676 1 - 1      | 0.581 1 2 1           | 0.44 1 C U       | 0.00 1 < 0          | 0.00 I < U<br>β133 1 - 11 | 0.722 J U U      | 0.201 1 0 0      | 0.207 1 0 0      | 0.204 1 0 0         |
| SEMIVOLATILES    | 4-Nitroaniine   | 5,992 1 - 11     | 5747 1 2 4                 | 6757 1 - 1       | 4 918 1 - 11          | 22 1 - 12        | 165 t - 11          | U > 1 LUUV                | 4.51 E 11 //     | 101 1 1 1        | 102 4 11 11      | 100 1 20 U          |
| SEMIVOLATILES    | - mauanane<br>A-Nitrophenol   | 2.002 I < U      | 5.147 F < U                | 0./0/ i < U      | 3.014 J < U           | 22 1 < 0         | U > + co.r          | 1.00 L < U                | 4.01 5 U U       | 1.01 ( U U       | 1.03 i U U       | 1.02 1 0 0          |
| SEMIVOLATILES    |   | 0.002 I < U      | 0.244 I < U<br>0.245 1 - ₩ | 0.737 1 < U      | 0.940 1 - U           | 2.2 I < U        |                     | 1.00 1 < 0                | 4.01 5 B U       | 1.03 1 0 0       | 1.00 1 U U       | 1.02 1 0 0          |
| SCHIVOLATE CO    | Accessebilitation   | 0.303 F < U      | 0.395 I < 0                | 9.905 F < U      | 0.349 1 < U           | 0.44 T < U       | 0.331 < 0           | 9.53 1 < U                | 0.922 5 U U      | 0.201 1 U U      | 0.207 1 U U      | 0.204 1 0 0         |
| SEMPOLATILES     | Automatica | . 9.388 T < €    | 0.5/5 1 < U                | . U.D/0 3 < U    | U.58F 1 < U           | U.44 1 < U       | ย.33 1 < ป          | V.33 1 < U                | 0.922 5 U U      | 0.201 1 U U      | 0.20/ 1 U U      | 0.204 1 U U         |
| JENNIVOLANILES   | ANNUALCHC .   | ປີ ເທດເປ         | v.ə/ə I < U                | 0.0/0 i < U      | U.581 I < U           | U.44 I < U       | 0.33 I < U          | 0.33 1 < U                | 0.922 5 U U      | U.201 1 U U      | 0.207 1 0 0      | 0.204 E U U         |



Table 3-9 Concentrations of Chemicals in Soil Samples Associated with Sump 009

| [SUMP] = SUMP009 |                                |                  |                  |                 |                      |                          |  |                         |                       |                       |                  |                     |
|------------------|--------------------------------|------------------|------------------|-----------------|----------------------|--------------------------|--|-------------------------|-----------------------|-----------------------|------------------|---------------------|
| LOCATION _CODE   |                                | LH-S09-01        | LH-S09-02        | LH-S09-02       | LH-S09-02            | LHS-2-05                 | LH-WRS-5   | LH-WRS-5                | WRSUMP005-SB01        | WRSUMP005-SB01        | WRSUMP005-SB02   | WRSUMP005-SB02      |
| SAMPLE_NO        |                                | LH-S09-01_3      | LH-S09-02_1      | LH-S09-02_2     | LH-S09-02_3          | LHS-2-05                 | LH-WRS-5_1   | LH-WHS-5_2              | WRSMP005-SB03-01      | WHSMP005-SB01-02      | WHSMP005-S802-02 | WRSMP005-SB02-02-OC |
| SAMPLE_BAIL      |                                | 6/20/1993        | 0/20/1993        | 6/26/1993       | 0/20/1993<br>7.75 Ft | 8/10/1995<br>005.Et      | 0.2 Ft   | 1/12/1993<br>3 - 4 5 Ft | 9/22/2000<br>5 - 5 Ft | 9/22/2000<br>5 - 5 Ft | 5.5Et            | 5-5.Ft              |
|                  |                                | REG              | 9FG              | 9-9.0FI<br>RFG  | 96G                  | REG                      | BEG  | 9-4.377<br>REG          | _0=_011               | REG                   | REG              | FD                  |
| Test Group       | Parameter (Units = mo/kg)      | Result DIt 10 VO | Result BILLIO VO | Result DILLO VO | Result Dil 10 VO     | Result DIL 10 VO         | Result DIL LO VO   | Result DIL LO VO        | Result DIL LO VO      | Result DIL LO VO      | Result DR LO VO  | Result DIE EQ VQ    |
| SEMIVOLATILES    | Benzo(a)anthracene             | 0.353 1 < U      | 0.345 1 < 0      | 0.405 t < U     | 0.349 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Benzo(a)pyrene                 | 0.588 1 < U      | 0.575 1 < U      | 0.676 1 < U     | 0.581 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 t U U         |
| SEMIVOLATILES    | Benzo(b)Buoranthene            | 1.176 1 < U      | 1.149 1 < U      | 1.351 1 < U     | 1.163 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 t < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Benzo(ghi)perylene             | 2.353 1 < U      | 2.299 1 < U      | 2.703 1 < U     | 2.326 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 t < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Benzo(k)fluoranthene           | 1.176 1 < U      | 1.149 1 < U      | 1.351 1 < U     | 1,163 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 8.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Benzoic Acid                   |                  |                  |                 |                      | 2.2 1 < U                | 1.65 1 < U   | 1.65 1 < U              | 4.61 5 U UJ           | 1,01 1 U UJ           | 1.03 1 U UJ      | 1.02 1 U UJ         |
| SEMIVOLATILES    | Benzył Akohol                  |                  |                  |                 |                      | 0.44 1 < 1               | 0.65 1 < U   | 0.65 1 < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane     | 0.588 1 < U      | 0.575 1 < U      | 0.676 1 < 0     | 0.581 1 < U          | 0.44 1 < ⊎               | 0.33 1 < 0   | 0.33 1 < U              | 0.922 5 0 0           | 0201 1 0 0            | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | bis(2-Chlorocatyl)einer        | 0.588 1 < 0      | 0.5/5 t < 0      | 0.6/6 3 < U     | 1162 1 4 1           | 0.44 1 < 0               | 0.33 1 < 0   | 0.33 1 < 0              | 0.922 5 U U           | 0.201 1 0 0           | 0.207 1 0 0      | 0.204 1 U U         |
| SEMINOLATILES    | his (2. Ethylhouduhthalata     | 0.5R8 1 < 11     | 0.575 1 2 1      | 0.576 1 4 1     | 0581 1 2 1           | 0.44 1 < U               |  | 0.33 1 < 1              | 0.922 5 6 6           | 0.201 1 1 1           | 0.207 1 11 11    | 0.204 1 1 1 1       |
| SEMIVOLATILES    | Butyt benzyl ohthalate         | 0.588 1 < 0      | 0.575 1 < ti     | 0.576 1 < 0     | 0.581 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATIKES    | Carbazole                      | 1.176 1 < U      | 1.149 1 < U      | 1.351 1 < 0     | 1,163 1 < U          |                          |  |                         |                       |                       |                  |                     |
| SEMIVOLATILES    | Chrysene                       | 5.882 1 < U      | 5.747 t < U      | 6.757 1 < U     | 5.814 1 < U          | 0.44 1 < U               | 0.33 t < ⊎   | 0.33 1 < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene         | 2.353 1 < U      | 2.299 1 < U      | 2.703 1 < U     | 2.326 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Dibenzofaran                   | 1.176 1 < U      | 1.149 1 < U      | 1.351 1 < U     | 1.163 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Diethyl phthalate              | 0.212 1          | 0.575 1 < U      | 0.676 1 < U     | 0.581 1 < U          | 0.44 1 < U               | 0.33 t < U   | 0.33 1 < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Dimethyl phthalate             | 0.588 1 < U      | 0.575 1 < U      | 0.676 1 < U     | 0.581 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 t < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | di-n-Butyl phthalate           | 5.894 1          | 3.287 1          | 4.351 1         | 4.628 1              | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 0.922 5 U U           | 0.201 1 ยัย           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | di-n-Octyl phthalate           | 0.588 1 < U      | 0.575 1 < U      | 0.676 1 < U     | 0.581 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Fluoranthene                   | 0.588 1 < U      | 0.575 1 < U      | 0.676 1 < U     | 0.581 1 < U          | 0.44 1 < U               | 0.33 1 < 0   | 0.33 1 < 0              | 0.922 5 0 0           | 0.201 1 0 0           | 0.207 1 U U      | 0.204 1 0 0         |
| SEMIVOLATILES    | Huorene                        | 0.558 1 < 0      | 0.5/5 1 < 0      | U.6/6 T < U     | 0.581 1 < U          | U.44 1 < U               | 0.33 1 < 0   | 0.33 1 < 0              | 0.922 5 0 0           | 0.201 1 1 1           | 0.207 1 0 0      | 0.204 1 0 0         |
| SEMIVOLATILES    | Hexachlorobutarliene           | 3520 1 2 1       | 3.448 1 < 13     | 4054 1 < 11     | 3488 1 2 1           | 0.44 1 < 0               | 0.33 1 < H   | 0.33 1 < ()             | 0.922 5 11 11         | 0.201 1 1 1           | 0207 1 18 U      | 0204 1 U U          |
| SEMINOLATILES    | Berachimourkmentadiene         | 3.529 t c ll     | 3448 1 < 1       | 4054 1 < 1      | 3.488 1 < It         | 0.44 1 < 8               | 0.33 1 < 1   | 0.33 1 < 11             | 0.922 5 U U           | 0201 1 1 1            | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Hexachloroethane               | 1,176 1 < U      | 1_149 1 < U      | 1.351 1 < U     | 1.163 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 0.606 5 J J           | 0.201 1 U U           | 0.207 1 U U      | 0.204 I U U         |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene         | 1_176 1 < U      | 1.149 1 < U      | 1.351 t < U     | 1.163 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 t U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Isophorene                     | 0.588 1 < U      | 0.575 1 < U      | 0.676 1 < U     | 0.581 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Naphshalene                    | 0.353 1 < U      | 0.345 1 < U      | 0.405 t < U     | 0.349 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 0.922 5 U U           | 0.201 1 U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Nitrobenzene                   | 0.588 1 < U      | 0.575 1 < U      | 0.676 1 < U     | 0.581 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 0.922 5 U U           | 0.201 I U U           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine     | 1.176 1 < U      | 1.149 1 < U      | 1.351 1 < U     | 1.163 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < 0              | 0.922 5 U U           | 0.201 I U U           | 0.207 1 U U      | 0.204 t U U         |
| SEMIVOLATILES    | n-Nitrosodiphenylamine         | 0.588 1 < U      | 0.575 1 < U      | 0.676 1 < U     | 0.581 1 < U          | 0.44 1 < U               | 0.33 1 < U   | 0.33 1 < U              | 0.922 5 U U           | 0.201 1 0 0           | 0.207 1 U U      | 0.204 1 U U         |
| SEMIVOLATILES    | Pentachiorophenol              | 5.882 1 < U      | 5.747 1 < U      | 6.757 1 < U     | 5.814 1 < U          | 22 1 < 0                 | 1.65 1 < 0   | 1.65 1 < U              | 4.61 5 U U            | 1.01 1 0 0            | 1.03 1 0 0       | 1.02 1 0 0          |
| SEMIVULANLES     | Phenanthrene                   | 0.588 i < U      | 0.575 1 < 0      | 0.676 1 < U     | 0.581 1 < 0          | 0.44 1 < 0               | 0.33 1 < 0   | 0.33 1 < 0              | 0.922 5 0 0           | 0.201 1 0 0           | 0.207 1 0 0      | 0.204 1 0 0         |
| SEMIVOLARIES     | Purene                         | 0.366 1 < 0      | 0.575 1 < 11     | 0.076 1 < U     | 0.501 7 4 0          | 0.44 1 < 1               | 0.33 1 < 1   | 0.33 1 < 0              | 0.922 5 0 0           | 0.201 7 0 0           | 0.207 1 0 0      | 0.204 1 1 1         |
| VOLATILES        | 1.1.1.2-Tetrachloroethane      | 0.300 1 1 0      | 0.515 1 4 6      | 0.070 7 4 0     | 0.001 / 0            | 0.013 1 < U              |  |                         | U.LL 0 0 0            | 0.0055 1 U U          | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | 1.1.1-Trichkoroethane          | 0.006 t < U      | 0.006 1 < U      | 0.006 t < U     | 0.006 1 < U          | 0.007 1 < U              | 0.005 1 < U  | 0.005 1 < U             |                       | 0.0055 t U U          | 0.0058 1 U U     | 0.00591 t U U       |
| VOLATILES        | 1,1,2,2-Tetrachloroethane      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U     | 0.006 1 < U          | 0.007 1 < U              | 0.005 1 < U  | 0.005 1 < U             |                       | 0.0055 1 U U          | 0.0058 1 U U     | 0.00591 t U U       |
| VOLATILES        | 1,1,2-Trichloroethane          | 0.006 t < U      | 0.006 1 < U      | 0.006 t < U     | 0.006 1 < U          | 0.007 1 < U              | 0.005 1 < U  | 0.005 1 < U             |                       | 0.0055 1 U U          | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | 1,1-Dichloroethane             | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U     | 0.006 1 < U          | 0.007 1 < U              | 0.005 1 < U  | 0.005 1 < U             |                       | 0.0055 1 U U          | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | 1,1-Dichloroethene             | 0.006 1 < U      | 0.006 1 < 0      | 0.006 1 < U     | 0.006 1 < U          | 0.007 1 < U              | 0.005 1 < U  | 0.005 1 < U             |                       | 0.0055 t U U          | 0.0058 t U U     | 0.00591 t U U       |
| VOLATILES        | 1,1-Dichloropropene            |                  |                  |                 |                      |                          |  |                         |                       | 0.0055 1 U U          | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | 1,2,3-Trichlorobenzene         |                  |                  |                 |                      |                          |  |                         |                       | 0.0055 1 U U          | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | 1,2,3-Inchloropropane          |                  |                  |                 |                      | 0.073 1 < 0              |  |                         |                       | 0.0055 1 0 0          | 0.0058 1 0 0     | 0.00591 1 0 0       |
| VOLABLES         | 1,2,4-Unchoodenzene            |                  |                  |                 |                      |                          |  |                         |                       | 0.0055100             | 0.0058 1 1 1     | 0.00391 1 0 0       |
| VOLATILES        | 1.2-Dibramo-3-chiomoronane     |                  |                  |                 |                      | 0.027 1 < 1              |  |                         |                       | 0.0055 1 U U          | 0.0058 t U U     | 0.00591 1 U U       |
| VOLATILES        | 1.2-Dibremoethane              |                  |                  |                 |                      | 0.027 1 < U              |  |                         |                       | 0.0055 1 U U          | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | 1.2-Dichlorobenzene            |                  |                  |                 |                      |                          |  |                         |                       | 0.0055 1 U U          | 0.0058 1 U U     | 0.00591 t U U       |
| VOLATILES        | 1,2-Dichloroethane             | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U     | 0.006 t < U          | 0.007 1 < U              | 0.005 t < U  | 0.005 1 < U             |                       | 0.0055 t U U          | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | 1,2-Dichloroethene             | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U     | 0.006 1 < U          | 0.007 1 < U              | 0.005 1 < U  | 0.005 1 < U             |                       |                       |                  |                     |
| VOLATILES        | 1,2-Dichloropropane            | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U     | 0.006 1 < U          | 0.007 1 < U              | 0.005 î < U  | 0.005 1 < U             |                       | 0.0055 1 U U          | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) |                  |                  |                 |                      |                          |  |                         |                       | 0.0055 1 U U          | 0.0058 1 U U     | 0.00591 T U U       |
| VOLATILES        | 1,3,5-1mmetrybenzene           |                  |                  |                 |                      |                          |  |                         |                       | 0.0055 1 0 0          | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | 1,3-Dichlorobenzene            |                  |                  |                 |                      |                          |  |                         |                       | 0.0055 1 0 0          | 0.0058 1 0 0     | 0.00591 1 1 1       |
| VOLATILES        | 1.6-Dichlorobenzene            |                  |                  |                 |                      |                          |  |                         |                       | 0.0055 1 11 11        | 0.0058 1 11 12   | 0.00591 1 1 1       |
| VOLATILES        | 2.2-Dichloropropane            |                  |                  |                 |                      |                          | 1. Sec. 1. Sec |                         |                       | 0.0055 1 U U          | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | 2-Butanone                     | 0.12 1 < U       | 0.12 1 < U       | 0.13 1 < U      | 0.12 1 < U           | 0.013 1 < U              | 0.05 t < U   | 0.05 1 < U              |                       | 0.011 t U U           | 0.0116 1 U U     | 0.0118 1 U U        |
| VOLATILES        | 2-Chloroethyl vinyl ether      | _                | -                | -               | -                    | 0.013 1 < U              | 0.01 1 < U   | 0.01 t < U              |                       | 0.011 1 U U           | 0.0116 1 U U     | 0.0118 1 U U        |
| VOLATILES        | 2-Chlorotoluene                |                  |                  |                 |                      |                          |  |                         |                       | 0.0055 1 U U          | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | 2-Hexanone                     | 0.059 1 < U      | 0.058 1 < U      | 0.064 1 < U     | 0.058 1 < U          | 0.013 1 < U              | 0.05 1 < U   | 0.05 1 < U              |                       | - 0.011 1 U U         | 0.0116 1 U U     | 0.0118 1 U U        |
| VOLATILES        | 2-Propenal                     |                  |                  |                 |                      | 0.67 t < U               |  |                         |                       |                       |                  |                     |
| VOLATILES        | 4-Chiorotoluene                |                  |                  |                 |                      |                          |  |                         |                       | 0.0055 1 U U          | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Acetone                        | 0.12 1 < U       | 0.12 1 < U       | 0.13 1 < U      | 0.12 1 < U           | 0.13 1 < U               | 9.1 1 < U  | 0.1 1 < U               |                       | 0.011 1 U U           | 0.0116 1 U U     | 0.0118 1 U U        |
| VULATILES        | Acetoninie                     |                  |                  |                 | -                    | 0.13 1 < U               |  |                         |                       |                       |                  |                     |
| VOLATILES        | ALLIYAOFABILE<br>Alkel ablanda |                  | -                |                 |                      | u.ia r < U<br>∩042 1 - ∺ |  |                         |                       |                       |                  |                     |
| VUATILEO         | ruyi chikhise                  |                  |                  |                 |                      | u.uið í < U              |  | -                       |                       |                       |                  |                     |



1....

Data Evaluation Report Chemical Concentrations in Soit Associated with LHAAP-35/36 Sumps

Table 3-9 Concentrations of Chemicals in Soil Samples Associated with Sump 009

| [SUMP] = SUMP009 |                             |                  |                         |                  |                         |                     |                  |                    |                  |                  |                  |                     |
|------------------|-----------------------------|------------------|-------------------------|------------------|-------------------------|---------------------|------------------|--------------------|------------------|------------------|------------------|---------------------|
| LOCATION _CODE   |                             | LH-\$09-01       | LH-S09-02               | LH-S09-02        | 1H-S09-02               | LHS-2-05            | LH-WRS-5         | LH-WRS-5           | WRSUMP005-SB01   | WRSUMP005-SB01   | WRSUMP005-SB02   | WRSUMP005-SB02      |
| SAMPLE_NO        |                             | LH-S09-01_3      | LH-S09-02_1             | LH-S09-02_2      | LH-509-02_3             | LHS-2-05            | LH-WRS-5_1       | LH-WRS-5_2         | WRSMP005-SB01-01 | WRSMP005-SB01-02 | WRSMP005-SB02-02 | WRSMP005-SB02-02-OC |
| SAMPLE_DATE      |                             | 6/26/1993        | 6/26/1993               | 6/26/1993        | 6/26/1993               | 1/10/1995           | 7/12/1993        | 7/12/1993          | 9/22/2006        | 9/22/2006        | 9/22/2006        | 9/22/2005           |
| Depth            |                             | 6.5 - 7.5 Ft     | 0.5 - 1.5 Ft            | 5-5.6Ft          | 7-7.5Ft                 | G - 0.5 Ft          | 0-2Ft            | 3 - 4.5 Ft         | _55 Et           | 5 - 5 Ft         | 5 - 5 Ft         | 5-5Ft               |
| SAMPLE_PURPOSE   |                             | REG              | REG                     | REG              | REG                     | REG                 | REG              | REG                | REG              | REG              | REG              | FD                  |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LQ VQ        | Result DIL LQ VQ | Result DIL LQ VQ        | Result Dil LO VO    | Result DIL LQ VQ | Result DIL LQ VQ   | Result Dil LQ VQ | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LQ VQ    |
| VOLATILES        | Benzene                     | 0.006 1 < U      | 0.006 1 < U             | 0.096 1 < U      | 0.006 1 < U             | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < U        |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Bromobenzene                |                  |                         |                  |                         |                     |                  |                    |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Bromochloromethane          |                  |                         |                  |                         |                     |                  |                    |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Bromodichloromethane        | 0.006 1 < U      | 0.006 1 < U             | 0.006 t < U      | 0.096 1 < U             | 0.007 1 < U         | 0.005 1 < U      | 0.005 t < U        |                  | 0.0055 t U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Bromoterm                   | 0.006 1 < U      | .0.006 1 < U            | 0.006 1 < U      | 0.006 1 < U             | 0.007.1 < U         | 0.005 1 < U      | 0.005 1 < U        | +                | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Bromomethane                | 0.006 1 < U      | 0.006 1 < U             | 0.006 1 < U      | 0.006 1 < U             | 0 <u>0</u> 13 1 < U | 0.01 1 < U       | 0.01 1 < U         |                  | 0.011 1 U U      | 0.0116 1 U U     | 0_0118 1 U U        |
| VOLATILES        | Carbon disulfide            | 0.006 t < U      | 0.006 1 < U             | 0.096 1 < U      | 0.006 1 < U             | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < U        |                  | 0.0055 🕴 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Carbon tetrachloride        | 9.006 1 < U      | 0.006 1 < U             | 0.006 1 < U      | 0.096 1 < U             | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < U        |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Chlorobenzene               | 0.006 1 < U      | 0.006 1 < U             | 0.006 1 < U      | 0.096 t < 10            | 0.607 1 < U         | 0.005 1 < U      | 0.005 1 < U        |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Chloroethane                | 0.006 1 < U      | 0.006 1 < U             | 0.006 1 < U      | 0.006 1 < U             | 0.013 1 < U         | 0.01 1 < U       | 0⊡01 t < U         |                  | 0.011 1 U U      | 0.0116 1 U U     | 0.0118 1 U U        |
| VOLATILES        | Chloroform                  | 0.006 t < U      | 0.006 1 < U             | 0.006 1 < U      | 0.006 1 < U             | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < U        |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Chloromethane               | 0.006 t < U      | 0.006 1 < U             | 0.006 1 < U      | 0.00 <del>6</del> 1 < U | 0.013 1 < U         | 0.01 1 < U       | 0 <u>.01</u> 1 < U |                  | 0.011 1 U U      | 0.0116 1 U U     | 0.0118 1 U U        |
| VOLATILES        | Chloroprene                 |                  |                         |                  |                         | 0.13 1 < U          |                  |                    |                  |                  |                  |                     |
| VOLATILES        | cis-1,2-Dichloroethene      |                  |                         |                  |                         |                     |                  |                    |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | cis-1,3-Dichloropropene     | 0.006 1 < U      | 0.006 1 < U             | 0.006 1 < U      | 0.006 1 < U             | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < U        |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Dibromochloromethane        | 0.006 1 < U      | 0.006 1 < U             | 0.006 1 < U      | 0.006 1 < U             | 0.007 t < U         | 0.005 1 < U      | 0.005 1 < U        |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Dibromomethane              |                  |                         |                  |                         | 0.027 1 < U         |                  |                    |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Dichlorodifluoromethane     |                  |                         |                  |                         | 10.027 1 < U        |                  |                    |                  | 0.011 1 U U      | 0.0116 1 U U     | 0.0118 1 U U        |
| VOLATILES        | Ethyl methacrylate          |                  |                         |                  |                         | 0.027 1 < U         |                  |                    |                  |                  |                  |                     |
| VOLATILES        | Ethylbenzene                | 0.006 1 < U      | 0.006 1 < U             | 0.006 1 < U      | 0.006 1 < U             | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < U        |                  | 0.0055 1 V U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Hexachlorobutadiene         |                  |                         |                  |                         |                     |                  |                    |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | IODOMETHANE                 | 1                |                         |                  |                         | 0.013 1 < U         |                  |                    |                  |                  |                  |                     |
| VOLATILES        | ISOBUTYL ALCOHOL            | 1                |                         |                  |                         | 2.7 1 < U           |                  |                    |                  |                  |                  |                     |
| VOLATILES        | lsopropyibenzene            |                  |                         |                  |                         |                     |                  |                    |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | m.p-Xylenes                 |                  |                         |                  |                         |                     |                  |                    |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Methacrylonitrile           |                  |                         |                  |                         | 0.027 1 < U         |                  |                    |                  |                  |                  |                     |
| VOLATILES        | Methyl isobutyl ketone      | 0.059 1 < U      | 0.058 1 < U             | 0.064 t < U      | 0.058 1 < U             | 0.013 1 < U         | 0.05 1 < U       | 0.05 1 < U         |                  | 0.011 1 U U      | 0.0116 1 U U     | 0.0118 1 U U        |
| VOLATILES        | METHYL METHACRYLATE         |                  |                         |                  |                         | 0.027 1 < U         |                  |                    |                  |                  |                  |                     |
| VOLATILES        | Methylene chloride          | 0.006 1 < U      | 0.006 1 < U             | 0.006 1 < U      | 0.006 1 < U             | . 0.007 1 < U       | 0.005 1 < U      | 0.005 1 < U        |                  | 0.0019 1 J J     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Naphthalene                 |                  |                         |                  |                         |                     |                  |                    |                  | 0.011 1 U U      | 0.0116 1 U U     | 0.0118 1 U U        |
| VOLATILES        | n-BUTYLBENZENE              |                  |                         |                  |                         |                     |                  |                    |                  | 0.0055 t U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | n-PROPYLBENZENE             |                  |                         |                  |                         |                     |                  |                    |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Pentachloroethane           |                  |                         |                  |                         | 0.027 1 < U         |                  |                    |                  |                  |                  |                     |
| VOLATILES        | p-ISOPROPYLTOLUENE          |                  |                         |                  |                         |                     |                  |                    |                  | 0.0055 t U U     | 0.0058 1 U U     | 0.00591 t U U       |
| VOLATILES        | Propionitrile               |                  |                         |                  |                         | 0.067 1 < U         |                  |                    |                  |                  |                  |                     |
| VOLATILES        | sec-BUTYLBENZENE            |                  |                         |                  |                         |                     |                  |                    |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Styrene                     | 0.006 t < U      | 0.006 1 < U             | 0.006 1 < U      | 0.006 1 < U             | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < U        |                  | 0.0055 t U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | tert-BUTYLBENZENE           |                  |                         |                  |                         |                     |                  |                    |                  | 0.0055 t U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Tetrachloroethene           | 0.006 1 < U      | 0.006 1 < U             | 0.006 1 < U      | 0.006 t < U             | 0.007 t < U         | 0.005 1 < U      | 0.005 1 < U        |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Toluene                     | 0.006 t < U      | 0.006 1 < U             | 0.006 1 < U      | 0.006 1 < ∛             | 0.907 t < U         | 0.005 1 < U      | 0.005 1 < U        |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | trans-1,2-Dichloroethene    |                  |                         |                  |                         |                     |                  |                    |                  | 0.0055 t U U     | 0.0058 t U U     | 0.00591 1 U U       |
| VOLATILES        | trans-1,3-Dichloropropene   | 0.006 t < U      | 0.006 t < U             | 0.006 1 < U      | 0.006 1 < U             | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < U        |                  | 0.0055 1 U U     | 0.0058 t U U     | 0.00591 1 U U       |
| VOLATILES        | trans-1,4-Dichloro-2-butene |                  |                         |                  |                         | 0.027 1 < U         |                  |                    |                  |                  |                  |                     |
| VOLATILES        | Trichloraethene             | 0.006 1 < U      | 0.00 <del>5</del> 1 < Մ | 0.006 1 < U      | 0.006 1 < U             | 0.007 t < U         | 0.005 1 < 🖯      | 0.005 1 < U        |                  | 0.0055 1 U U     | 0.0058 1 U U     | 0.00591 1 U U       |
| VOLATILES        | Trichlorofluoromethane      |                  |                         |                  |                         | 0.013 1 < U         |                  |                    |                  | 0.011 1 U U      | 0.0116 1 U U     | 0.0118 1 U U        |
| VOLATILES        | Vinyi acetate               |                  |                         |                  |                         | 0.013 1 < U         | 0.05 1 < U       | 0.05 1 < U         |                  | 0.011 1 U U      | 0.0116 1 U UJ    | 0.0118 1 U U        |
| VOLATILES        | Vinyl chloride              | 0.006 t < U      | 0.006 1 < U             | 0.006 î < U      | 0.006 1 < U             | 0.013 1 < U         | 0.01 1 < U       | 0.01 1 < U         |                  | 0.011 t U U      | 0.0116 1 U U     | 0.0118 1 U U        |
| VOLATILES        | Xylenes, Total              | 0.006 t < U      | 0.006 1 < U             | 0.006 1 < U      | 0.006 1 < U             | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < U        |                  |                  |                  |                     |
|                  |                             |                  |                         |                  |                         |                     |                  |                    | ••• •            |                  |                  |                     |

Footnotes are shown on cover page to Tables Section.



<u>1</u>

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-10 Concentrations of Chemicals in Soil Samples Associated with Sump 010

.

| (SUMP) = SUMP010               |   |                                    | 650184D645 0064                    | 000000000000000000000000000000000000000   | 5701 b 1004 b 0000                 | 01011 40040 CD00                   | 05 01 IN 1007 4 (2015)             | 0501100011 0001                    | 111 610 01        | 111 610 61                      | 14 610 00       | 1 12 610 00         | 10 611 01       | 19 511 01                     | 18.511.02                       | 111-511-02  |
|--------------------------------|---|------------------------------------|------------------------------------|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------|---------------------------------|-----------------|---------------------|-----------------|-------------------------------|---------------------------------|-------------|
| LOCATION _CODE                 |   | 35SUMP010-SB01<br>35 SMP10 SB01.01 | 35SUMP010-SB01<br>35.SUP10-SB01.02 | 35SUMP010-SB02<br>35_SMP10_SB02.01        | 355UMP010-5802<br>35_SMP10_SB02.02 | 355UMP010-5602<br>35.5MP10-5802.0C | 3550MP011-5801<br>35-SMP11-S801-01 | 35SUMPUTT-SBUT<br>35.SMP11.SB01.02 | 14-510-01         | 11-510-01 2                     | 18-510-02       | 1H-S10-02           | 18-511-01 1     | 1H-S11-01 2                   | LH-S11-02 1                     | LH-S11-02 2 |
| SAMPLE DATE                    |   | 9/11/2006                          | 9/11/2006                          | 9/11/2006                                 | 9/11/2006                          | 9/11/2006                          | 9/11/2006                          | 9/11/2006                          | 6/26/1993         | 6/26/1993                       | 7/11/1993       | 6/26/1993           | 6/25/1993       | 6/25/1993                     | 6/26/1993                       | 7/10/1993   |
| DEPTH                          |   | 0.5 - 0.5 Ft                       | 10 - 19 Ft                         | 0.5 - 0.5 Ft                              | 10 - 10 Ft                         | 10 - 10 Ft                         | 0.5 - 0.5 Ft                       | 12 - 12 Ft                         | 0.5 - 2.5 Fi      | 8.5 - 10.5 Ft                   | 0 - 2 Ft        | 9 - 9.5 Ft          | 0-2 Ft          | 10 - 12 Ft                    | 0.5 1.5 Ft                      | 10 - 12 F1  |
| SAMPLE_PURPOSE                 |   | REG                                | REG                                | REG                                       | REG                                | FD                                 | REG                                | REG                                | REG               | REG                             | REG             | REG                 | REG             | REG                           | REG                             | REG         |
| Test Group                     | Parameter (Units = mg/kg)                   | Result Dil LQ VQ                   | Result DiL LO VO                   | D Result DIL LO VO                        | 2 Result DiL LQ V                  | O Result DIL LO VO                 | Result Dil LO VO                   | Result DIL LO VO                   | Q Result OIL LO V | Q Hesutt Dil LQ VO              | Hesuit DIE LO   | VO Result DIL EC VO | Result DiL LQ V | AU Hesur DIL LU V             | U HESUS DIL LU YU               | 0.33 1 < U  |
| EXPLOSIVES<br>EXPLOSIVES       | 2,4-Dimitrotokiene<br>2,6-Dimitrotokiene    |                                    |                                    |   |                                    |                                    |                                    |                                    |                   |                                 | 0.33 1 <        | € 1.22 t < U        | 0.33 1 <        | U 0.33 1 < 1                  | ,<br>F                          | 0.33 1 < U  |
| METALS                         | Aluminum                                    | 1                                  |                                    |   |                                    |                                    |                                    |                                    | 7990 t            | 8010 t                          | 10200 1         | 6970 1              | 34900 1         | 12300 1                       | 8760 t                          | 7880 1      |
| METALS                         | Antimony                                    |                                    |                                    |   |                                    |                                    |                                    |                                    | 3.4 1             | 5.8 1                           | 3.4 1           | 4.58 1 < U          | 31 <            | ⊎ ૩૧<૫                        | 31 < U                          | 3 1 < U     |
| METALS                         | Arsenic                                     |                                    |                                    |   |                                    |                                    |                                    |                                    | 2.9 1             | 1.1 1                           | 3.4 1           | 0.458 \$ < U        | 4.5 1           | T.4 I                         | 2.1 1                           | 1.4 1       |
| METALS                         | Banum                                       |                                    |                                    |   |                                    |                                    |                                    |                                    | 109 1             | 86.8 1                          | 79.4 1          | 43.2 3 < U          | 128 1           | 69.2 1                        | 55.6 1                          | 129 1       |
| METALS                         | Cadmium                                     |                                    |                                    |   |                                    |                                    |                                    |                                    | 1050 1            | 015 1 < U                       | 1 1 <<br>1370 1 | 1170 1              | 22 I<br>8170 1  | 4.16 1                        | 5450 1                          | 1030 1      |
| METALS<br>METALS               | Chomium                                     |                                    |                                    |   |                                    |                                    |                                    |                                    | 12.9 1            | 11 1                            | 27.9 1          | 10.9 1              | 28.2 1          | 12 1                          | 11.8 1                          | 11.6 1      |
| METALS                         | Cobat                                       |                                    |                                    |   |                                    |                                    |                                    |                                    | 7.9 1             | 15.5 1                          | 9.3 1           | 3.92 1              | 7.46 1          | 6.19 1                        | 5.6 1                           | 7.7 1       |
| METALS                         | Copper                                      | ł.                                 |                                    |   |                                    |                                    |                                    |                                    | 5.6 1             | 6.5 1                           | 87.4 1          | 6.32 1 < U          | 9.24 1          | 6.16 1                        | 4.9 1                           | 6.1 1       |
| METALS                         | kon   |                                    |                                    |   |                                    |                                    |                                    |                                    | 16500 1           | 12900 1                         | 39100 1         | 8820 1              | 27900 1         | 11300 1                       | 12900 1                         | 16600 1     |
| METALS                         | Lead  |                                    |                                    |   |                                    |                                    |                                    |                                    | 7.6 1             | 4.8 .1                          | 8.8 1           | 8.7 1 E             | 7.8 1           | 3.9 1                         | 5.1 1<br>577 1                  | 7.8 F       |
| METALS                         | Magnesium                                   |                                    |                                    |   |                                    |                                    |                                    |                                    | 157 1             | 301 1                           | 222 1           | 657 1               | 2050 i<br>190 t | 47.5                          | 92.6 1                          | 245 1       |
| METALS                         | Mercury                                     |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.1 t < 1         | U 0.1 1 < U                     | 0.1 1 <         | U 0.055 1 < U       | 0.2 1           | 0.17 1                        | 0.1 1 < U                       | 0.1 1 < U   |
| METALS                         | Polassium                                   |                                    |                                    |   |                                    |                                    |                                    |                                    | 643 1             | 510 1                           | 519 1           | 343 t               | 2490 1          | 836 1                         | 623 1                           | 558 1       |
| METALS                         | Selenium                                    |                                    |                                    |   |                                    |                                    |                                    |                                    | 11 < 1            | ⊍ 11 < ⊍                        | × ۲ ۴           | U 0.458 1 < U       | 11 <            | U FF< (                       | j 11 < U                        | 1 1 < U     |
| METALS                         | .Silver                                     | · ·                                |                                    |   |                                    |                                    |                                    |                                    | 11 <              | ⊎ 11<0                          | 11<             | U 0.023 1 < U       | 11 <            | U 11< (                       | j t 1 < 0                       | 11 < U      |
| METALS                         | Strontium                                   |                                    |                                    |   |                                    |                                    |                                    |                                    | 16.2 1            | 18.6 1                          | 9.5 1           | 19.1 t < U          | 37.5 1          | 20.3 1                        | 13.6 1                          | 20.9 1      |
| METALS<br>BANCE ODCANICS       | Cartion Barran C12-C28                      | 585 1 11                           | 11 1 Ø 32                          | 55.8 t JI                                 | 597 1 8                            |                                    | 557 1 H                            | 546 1 U                            | 24.9              | 20.3 1                          | 10.7 3          | 24.3                | 51 1            | 23.3                          | 11.0                            | 33.7        |
| RANGE ORGANICS                 | Carbon Range C28-C35                        | 56.5 1 U                           | 56.9 1 U                           | 55.8 1 U                                  | 59.7 1 U                           |                                    | 55.7 1 U                           | 54.6 1 U                           |                   |                                 |                 |                     |                 |                               |                                 |             |
| RANGE_ORGANICS                 | Carbon Range C6-C12                         | 56.5 1 U                           | 56.9 1 U                           | 55.8 1 U                                  | 59.7 1 U                           |                                    | 55.7 1 U                           | 54.6 1 U                           |                   |                                 |                 |                     |                 |                               |                                 |             |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene                      |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 < 1        | U 0.33 1 < U                    | 0.33 ± <        | 1/3 1.22 1 < U      | 0.33 1 <        | U 0.33 1 < U                  | J 0.33 1 < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | t.2-Dichlorobenzene                         |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 ! < !        | U 0.33 1 < U                    | 0.33 1 <        | 10 1.22 1 < U       | 0.33 1 <        | U 0.33 1 < U                  | 0.33 1 < 0                      | 0.33 1 < 0  |
| SEMEVOLATILES                  | t,3-Dichlorobenzene                         |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 < 1        | U 0.33 1 < U                    | 0.33 1 <        | U 1.22 1 < U        | 0.33 1 <        | U U.33 1 < U<br>U 0.33 1 < U  | ) 0.33 3 < 0<br>  0.33 1 < 1]   | 0.33 1 < 0  |
| SEMBYOLATILES<br>SEMBYOLATILES | 2 4 5-Trichkyonhenol                        |                                    |                                    |   |                                    |                                    |                                    |                                    | 1.65 1 < 1        | U 1.65 1 < U                    | 1.65 1 <        | U 1.22 1 < U        | 1.65 1 <        | ₩ 1.651 < 1                   | J 1.65 1 < U                    | 1.65 1 < U  |
| SEMIVOLATILES                  | 2.4.6-Trichkorohenol                        |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 < 1        | U 0.33 1 < U                    | 0.33 1 <        | U 1.22 1 < U        | 0.33 1 <        | U 0.33 1 < 1                  | J 0.33 1 < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | 2,4-Dichlorophenol                          |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 < 1        | U 0.33 1 < U                    | 0.33 1 <        | ⊍ 1.22 1 < U        | 0.33 1 <        | U 0.33 t < 0                  | J 0.33 t < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | 2,4-Dimethylphenol                          |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | U 0.33 1 < U                    | 0.33 1 <        | U 0.61 1 < U        | 0.33 1 <        | υ 0.33 1 < 0                  | J 0.33 1 < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | 2,4-Diretrophenol                           |                                    |                                    |   |                                    |                                    |                                    |                                    | 1.65 1 <          | U 1.65 1 < U                    | 1.65 1 <        | U 12.195 1 < U      | 1.65 1 <        | U 1.65 1 < 1                  | J 1.65 1 < U                    | 1.65 1 < U  |
| SEMIVOLATILES                  | 2,4-Dinitrotoluene                          |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | U 0.33 1 < U                    |                 |                     |                 |                               | 0.33 1 < 0                      |             |
| SEMIVOLATILES<br>SEMIVOLATILES | 2,5-Diamonthiatene                          |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | 0 0.33 1 < D                    | 0.33 1 <        | U 0.366 1 < U       | 0.33 1 <        | U 0.33 1 < 1                  | 1 0.33 1 < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | 2-Chlorophenot                              |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | U 0.33 1 < U                    | 0.33 1 <        | U 0.61 1 < U        | 0.33 1 <        | U 0.33 1 < 1                  | J 0.33 1 < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | 2-Methylnaphthalene                         |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 < 1        | ∪ 0.33 1 < U                    | 0.33 1 <        | U 0.366 1 < U       | 0.33 1 <        | U 0.33 1 < 0                  | ) 0.33 1 < U                    | £9.33 1 < U |
| SEMIVOLATILES                  | 2-Methylphenol                              |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | 0 0.33 1 < 0                    | 0.33 1 <        | U 0.61 1 < U        | 0.33 1 <        | U 0.33 1 < 1                  | } 0.33 1 < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | 2-Nitroaniline                              |                                    |                                    |   |                                    |                                    |                                    |                                    | 1.65 1 <          | U 1.65 1 < U                    | 1.65 1 <        | U 3.659 1 < U       | 1.65 1 <        | U 1.155 i < (                 | 1.05   < U                      | 1.65 I < U  |
| SEMBVOLATILES                  | 2-Neropianos<br>3 3'-Dichlexobenzirline     |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.65 1 <          | 0 0.557 < 0<br>0 0.651 < 0      | 0.65 1 <        | U 0.61 1 < U        | 0.65 1 <        | U 0.65 1 < 1                  | } 0.65 1 < U                    | 0.65 1 < 0  |
| SEMIVOLATILES                  | 3-Nitroaniline                              | 1                                  |                                    |   |                                    |                                    |                                    |                                    | 1.65 1 <          | U 1.65 1 < U                    | 1.65 1 <        | U 3.659 1 < U       | 1.65 1 <        | U 1.65 1 < 1                  | ) 1…65 1 < U                    | 1.65 1 < U  |
| SEMBYOLATILES                  | 4,6-Dinitro-2-methylphenol                  |                                    |                                    |   |                                    |                                    |                                    |                                    | 1.65 1 <          | U, 1…65 t < U                   | 1.65 1 <        | U 6.098 1 < U       | 1.65 1 <        | U 1.65 1 < U                  | J 1.65 I < U                    | 1.65 1 < U  |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether                  |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | U 0.33 1 < U                    | 0.33 1 <        | U 1.22 1 < U        | 0.33 1 <        | U 0.33 1 < 1                  | ) 0.33 1 < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | 4-Chioro-3-methylphenol                     |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.65 1 < 1        | U. 0,65 1 < U<br>u. 0,65 1 → U  | 0.65 1 <        | U 0.61 1 < U        | 0.65 1 <        | U 0.65 1 < 1                  | J 0.65 1 < U                    | 0.65 1 < 0  |
| SEMIVOLATILES                  | 4-Unkroansine                               |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.03 1 < 1        | 0 0.65 i < 0<br>1i 10.33 t < 1i | 0.83 1 <        | 1 122 1 2 1         | 0.33 1 <        | 0 0.33 1 < 1                  | ) 0.33 1 < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | 4-Methylohenol                              |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | U 0.33 1 < U                    | 0.33 1 <        | U 0.61 1 < U        | 0.33 1 <        | U 0.33 1 < I                  | ) 0.33 1 < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | 4-Nitroaniane                               |                                    |                                    |   |                                    |                                    |                                    |                                    | 1.65 1 <          | U 1.65 t < U                    | 1.65 1 <        | U 6.098 t < U       | 1.65 1 <        | U 1.65 1 < 1                  | J 1.65 1 < U                    | 1.65 1 < U  |
| SEMIVOLATILES                  | 4-Nitrophenol                               |                                    |                                    |   |                                    |                                    |                                    |                                    | 1.65 1 <          | U 1.65 1 < U                    | 1.65 1 <        | U 6.098 t < U       | 1.65 1 <        | U 1.65 1 < 1                  | J 1.65 1 < 10                   | 1.65 1 < U  |
| SEMIVOLATILES                  | Acenaphthene                                |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | U 0.33 1 < U                    | 0.33 1 <        | U 0.366 1 < U       | 0.33 1 <        | U 0.33 1 < U                  | J 0.33 } < U                    | 0.33 1 < 0  |
| SEMIVOLATILES                  | Acenaprinylene                              |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | u u.sə ⊧ < u<br>li 0.33 t < li  | 0.33 1 <        | U 061 t < H         | 0.33 1 <        | 0 0.33 1 < 1                  | J 0.33 1 < U                    | 0.33 1 < 0  |
| SEMIVOLATILES                  | Beozo(a)anibracene                          |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 < 1        | U 0.33 1 < U                    | 0.33 1 <        | U 0.366 t < U       | 0.33 1 <        | U 0.33 1 < 1                  | J 0.33 1 < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | Benzo(a)pyrene                              |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | U 0.33 t < U                    | 0.33 1 <        | U 0.61 t < U        | 0.33 1 <        | U 0.33 1 < I                  | J 0.33 t < U                    | 0.33 1 .< U |
| SEMIVOLATILES                  | Benzo(b)fluoranthene                        |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 < 4        | <b>U 0.33 f &lt; U</b>          | 0.33 1 <        | U 1.22 t < U        | 0.33 1 <        | U 0.33 1 < 1                  | J 0.33 1 < U                    | 0.33 t < U  |
| SEMIVOLATILES                  | Benzo(ghi)perylene                          |                                    |                                    | 1. A. |                                    |                                    |                                    |                                    | 0.33 1 <          | U 0.33 t < U                    | 0.33 1 <        | U 2.439 T < U       | 0.33 1 <        | U 0.33 1 < 1                  | J 0.33 1 < U                    | 0.33 t < 1) |
| SEMIVOLATILES                  | Benzo(k)fluoranthene                        |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | U 0.33 1 < U                    | 0.33 1 <        | U 1.22 t < U        | 0.33 1 <        | U 0.33 1 < 0                  | J 0.33 1 < U                    | 0.33 1 < 0  |
| SEMIVOLATILES                  | Benzok: Ackd                                |                                    |                                    |   |                                    |                                    |                                    |                                    | 1.65 1 < 1        | U 1.551 < U<br>⊔ 0.651 ∠ U      | 1.65 1 <        | U<br>II             | 1.03 1 <        | U 1.0⊃ I < 1<br>{} 0.65 1 < 1 | ) 1.65 F < 0<br>1 0.65 T < 11   | 0.65 1 < 1  |
| SEMIVOLATILES<br>SEMIVOLATILES | benzyl Accolor<br>his/2.Chloroethow/methane |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | 0 0.03 1 < 0<br>   0.33 1 < 1   | 0.03 1 <        | U 0611 < U          | 0.33 1 <        | 10 0.33 1 < 1                 | J 0.33 1 < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | bis(2-Chloroethvi)ether                     |                                    |                                    | · .                                       |                                    | -                                  |                                    |                                    | 0.33 1 <          | U 0.33 1 < U                    | 0.33 1 <        | U 0.61 1 < U        | 0.33 1 <        | 10 0.33 1 < I                 | J 0.33 1 < U                    | 0.33 1 < 0  |
| SEMIVOLATILES                  | bis(2-Chloroisopropyi)ether                 |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | U 0.33 1 < U                    | 0.33 t <        | U 1.22 t < 9        | 0.33 t <        | U 0.33 1 < 1                  | J 0.33 1 < U                    | 0.33 t < U  |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthalate                  |                                    |                                    |   |                                    | -                                  |                                    |                                    | 0.33 1 < 1        | Ŭ 0.33 t < U                    | 0.33 1 <        | U 0.183 t           | 0.33 1 <        | U 0∟33 t < I                  | J 0.33 t < U                    | 0.33 1 < V  |
| SEMIVOLATILES                  | Butyl benzyl phthalate                      |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | U 0.33 t < U                    | 0.33 1 <        | U 0.61 1 < U        | 0.33 1 <        | U 0.33 1 < 1                  | J 0.33 t < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | Carbazole                                   |                                    |                                    |   |                                    |                                    |                                    |                                    |                   |                                 | 0.32            | 1.22 1 < ₩          | A 33 -          | 11 0.92                       | 1 0 92 1                        | 039 1       |
| SEMIVOLATILES                  | Chrysene<br>Dihonzola hisatharaa            |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | ∪ 0,331 < U<br>⊔ 0,331 - ''     | 0.33 1 <        | U 0.098 1 < U       | 0.33 1 <        | U U.33 I < U                  | J 10.33 1 < 10<br>} 0.33 1 < 11 | 0.33 1 - 1  |
| SEMIVOLAHLES<br>SEMIVOLAHLES   | Dibenzo(a,n)aninraceriê<br>Dibenzofuran     | 1                                  |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 < 1        | 0 0.33 t < 0<br>U 0.33 t ≥ 11   | 0.33 1 4        | U 1.22 1 c 11       | 0.33 1 <        | 10 0.33 t < 1                 | J 0.33 1 < 1                    | 0.33 1 < 1  |
| SEMIVOLATILES                  | Diethyl ohthatate                           |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 < 1        | U 0.33 1 < U                    | 0.33 1 <        | U 0.61 t < ੪        | 0.33 1 <        | U 0.33 t < 1                  | J 0.33 t < U                    | 0.33 t < U  |
| SEMIVOLATILES                  | Dimethyl phthalate                          |                                    |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 <          | U 0.33 t < U                    | 0.33 1 <        | U 0.61 1 < U        | 0.33 1 <        | t) 0.33 f < ∣                 | J 0.33 t < U                    | 0.33 1 < U  |
| SEMIVOLATILES                  | di-n-Butyl phthalate                        | ]                                  |                                    |   |                                    |                                    |                                    |                                    | 0.33 1 < 1        | U 0.33 1 < U                    | 0.33 1 <        | U 6.939 t           | 0.33 t <        | U 0.33 1 < 1                  | ) -0.33 1 < Ü                   | 0.33 1 < U  |
|                                |   |                                    |                                    |   |                                    |                                    |                                    |                                    |                   |                                 |                 |                     |                 |                               |                                 |             |

Shaw Environmental, inc.

Table 3-10 Concentrations of Chemicals in Soil Samples Associated with Sump 010

| [SUMP] = SUMPOTO     |                                |                  |                  |                  |                  |                     |                  |                     |                 |                       |                  |                   |                  |                    | 111 044 00          |                   |
|----------------------|--------------------------------|------------------|------------------|------------------|------------------|---------------------|------------------|---------------------|-----------------|-----------------------|------------------|-------------------|------------------|--------------------|---------------------|-------------------|
| LOCATION_CODE        |                                | 35SUMP010-SB01   | 35SUMP010-SB01   | 35SUMP010-SB02   | 35SUMP010-SB02   | 35SUMP010-SB02      | 35SUMP011-SB01   | 35SUMP011-SB01      | LH-S10-01       | LH-S10-01             | LH-S10-02        | 1H-S10-02         | 1H-511-01        | LH-S11-01          | LH-S11-02           | LH-S11-02         |
| SAMPLE_NO            |                                | 35-SMP10-S801-01 | 35-SMP10-SB01-02 | 35-SMP10-SB02-01 | 35-SMP10-SB02-02 | 35-SMP10-SB02-02-QC | 35-SMP11-S801-01 | 35-SMP11-SB01-02    | UH-S10-01_1     | LH-S10-01_2           | LH-S10-02_1      | LH-S10-02_2       | LH-\$11-01_1     | LH-St1-01_2        | LH-S11-02_1         | LH-\$11-02_2      |
| SAMPLE_DATE          |                                | 9/11/2006        | 9/11/2006        | 9/11/2006        | 9/11/2006        | 9/11/2006           | 9/11/2006        | 9/11/2006           | 6/26/1993       | 6/26/1993             | 7/11/1993        | 6/26/1993         | 6/25/1993        | 6/25/1993          | 6/26/1993           | 7/10/1993         |
| DEPTH                |                                | 0.5 - 0.5 Fi     | 10 - 10 Ft       | 0.5 - 0.5 Ft     | 10 - 10 Ft       | 10 - 10 Fl          | 0.5 - 0.5 Fi     | 12 - 12 Ft          | 0.5 - 2.5 Ft    | 8.5 - 10.5 Ft         | 0-2FI            | 9 - 9.5 Ft        | 0 - 2 Ft         | 10 - 12 Fi         | 0.5 - 1.5 Ft        | 10 - 12 Fi        |
| SAMPLE_PURPOSE       |                                | REG              | REG              | REG              | REG              | FD                  | REG              | REG                 | REG             | REG                   | REG              | REG               | REG              | REG                | REG                 | REG               |
| Test Group           | Parameter (Units = mg/kg)      | Result DIL LO VO | Result DIL LQ VQ | Result DiL LO VQ | Result DHL LQ VQ | Result DIL LQ VQ    | Result DIL LO VQ | Result DIL LO VO Re | esult DIL LQ VQ | Result DIL LO VO      | Result DIL LO VO | Result Dil, LQ VQ | Result DIL LO VO | Result DIL LQ VO F | lesult DIL LQ VQ fi | esult DIL LO VO   |
| SEMIVOLATILES        | di-n-Octyl phthalate           |                  |                  |                  |                  |                     |                  |                     | 0.33 1 < U      | 0.33 1 < U            | 0.33 I < U       | 0.61 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U          | 0.33 1 < U        |
| SEMIVOLATILES        | Fluoranthene                   |                  |                  |                  |                  |                     |                  |                     | 0.33 ł < U      | 0.33 1 < <del>U</del> | 0.33 1 < U       | 0.61 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U          | 0.33 1 < U        |
| SEMIVOLATILES        | Fluorene                       |                  |                  |                  |                  |                     |                  |                     | 0.33 1 < U      | 0.33 1 < U            | 0.33 1 < U       | 0.51 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 t < U          | 0.33 t < 10       |
| SEMIVOLATILES        | Hexachlorobeozene              |                  |                  |                  |                  |                     |                  |                     | 0.33 1 < U      | 0.33 1 < 1/           | 0.33 t < U       | 1.22 1 < U        | 0.33 1 < U       | 0.33 1 < ⊎         | 0.33 1 < U          | 0.33 1 < U        |
| SEMIVOLATILES        | Boyachlombutaciene             |                  |                  |                  |                  |                     |                  |                     | 0.33 t < U      | 0.33 1 < 0            | 0.33 1 < U       | 3.659 1 < U       | 0.33 1 < 1       | +0.33 1 < U        | 0.33 1 < U          | 0.33 t < U        |
| SEMINOLATE ES        | Herachonovchonterte            |                  |                  |                  |                  |                     |                  |                     | 0.33 t < 1      | 0.33 1 < 8            | 0.33 1 < U       | 3.659 1 < 1       | 0.33 1 < 1       | 0.33 1 < U         | 0-33 1 < U          | 0.33 1 < U        |
| SCHRUCH ATHLES       | Keyschlorsethan                |                  |                  |                  |                  |                     |                  |                     | B33 f < U       | 0.33 1 < 17           | 039 1 2 1        | 122 1 4 11        | ₽33 1 < 1        | 0.33 1 < 8         | 0.33 1 < 11         | 0.33 1 < 11       |
| CONTROLATION AT      |                                |                  |                  |                  |                  |                     |                  |                     | 0.00 1 4 1      | 0.33 1 - 11           | 0.33 1 4 11      | 122 1 4 11        | A33 1 2 B        | 0.93 1 × 11        | 693 1 4 11          | 033 1 / 11        |
| SEMIVOLATILES        | Indetio(1.2,3-cu)pyrene        |                  |                  |                  |                  |                     |                  |                     | 0.00 1 4 11     | 0.00 1 4 10           | 0.00 1 4 1       |                   | 0.22 1 / 13      | 0.33 1 < 0         | 0.33 1 < 0          | 0.00 1 4 0        |
| SEMIVOLATILES        | Isophorone                     |                  |                  |                  |                  |                     |                  |                     | 0.00 / 10       | 0.00 4 4 0            | 0.03 1 < 0       |                   | 0.30 1 4 0       | 0.03 1 4 0         |                     | 0.00 1            |
| SEMIVOLATILES        | Naphthalene                    |                  |                  |                  |                  |                     | -                |                     | 0.33 1 < 0      | 0.33 1 < 0            | 0.33 1 < 0       | 0.300 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0          | 0.33 1 < 0        |
| SEMIVOLATILES        | Nitrobenzene                   |                  |                  |                  |                  |                     |                  |                     | 0.33 1 < 0      | 0.33 1 < 0            | 0.33 1 < 0       | 0±61 1 < 0        | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0          | 0.33 1 < 0        |
| SEMIVOLATILES        | n-Natroso-di-n-propylamine     |                  |                  |                  |                  |                     |                  |                     | 0.33 1 < U      | 0.33 1 < U            | 0.33 1 < U       | 1.22 1 < 0        | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0          | 0.33 1 < 0        |
| SEMIVOLATILES        | n-Närosodiphenylamine          |                  |                  |                  |                  |                     |                  |                     | 0.33 t < U      | 0.33 1 < U            | 0.33 1 < U       | 0.61 1 < U        | 0.33 1 < U       | 0.33 t < U         | 0.33 1 < U          | 0.33 1 < 0        |
| SEMIVOLATILES        | Pentachlorophenol              |                  |                  |                  |                  |                     |                  |                     | 1.65 1 < U      | 1.65 1 < U            | 1.65 1 < U       | 6.098 1 < U       | 1.65 1 < U       | 1.85 1 < U         | 1.65 1 < U          | 1.65 1 < U        |
| SEMIVOLATRES         | Phenanthrene                   |                  |                  |                  |                  |                     |                  |                     | 0.33 t < U      | 0.39 1 < U            | 0.33 t < U       | 0.61 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U          | 0.33 1 < U        |
| SEMIVOLATILES        | Phenol                         |                  |                  |                  |                  |                     |                  |                     | 0.33 t < U      | 0.33 1 < U            | 0.33 1 < U       | 0.61 1 < U        | 0.33 1 < U       | 0.33 t < U         | 0.33 t < U          | 0.33 1 < U        |
| SEMIVOLATILES        | Pyrene                         |                  |                  |                  |                  |                     |                  |                     | 0.33 1 < U      | 0.33 1 < U            | 0.33 1 < U       | 0.61 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U          | 0.33 1 < U        |
| VOLATILES            | 1 1 1 2 Tetrachiomothana       |                  | 11 7 10000       |                  | 0.00494 1 10     | 0.0059 1 13         |                  | 0.0047 1 11         |                 |                       |                  |                   |                  |                    |                     |                   |
| NOLATILES            | 1 1 1 Triphlemothane           |                  | 0.00401 1 11     |                  | 0.00404 1 11     | 0.0050 1 11         |                  | 0.0047 1 12 /       | 0.005 1 2 11    | 0.005 t ∠ łl          | 0.005 1 2 31     | 0.006 1 c H       | 0.005 t < +t     | 0.005 t < 34       | 0-005 t < 1i        | 0.005 1 < 1       |
| VOLATRES             |                                |                  |                  |                  | 0.00404 1 12     | 0.0055 1 0          |                  | 0.0047 1 11 1       | 0.005 1 4 0     | 0.005 1 4 0           | 0.005 1 4 5      | 0.000 1 2 10      | 0.005 1 4 11     | 0.005 1 - 11       | 0.005 1 - 1         | 0.005 1 2 0       |
| VULANLES             | I, 1, 2, 2- Terrachioroethane  |                  | 0.00491 0        |                  | 0.00494 1 0      | 0.0009 1 0          |                  | 0.0047 1 0 0        |                 | 0.005 1 . 1           | 0.005 1 4 0      | 0.000 1 0 0       | 0.005 1 < 0      | 0.005 1 4 11       | 0.005 F < 0         | 0.005 1 < 0       |
| VULANLES             | 1,1,2-Inchloroelhane           |                  | V.00491 1 U      |                  | 0.00494 1 10     | 0.0059 1 0          |                  | 0.0047 1 10 0       | 0.003 1 < U     | 0.003 1 < U           |                  | U > 1 000.0       | 0.005 1 < 0      | 0.000 s < U        |                     | 0.000 1 < 0       |
| VOLATILES            | 1,1-Dichloroethane             |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 10 0       | 0.005 1 < 0     | 0.005 1 < 0           | 0.065 1 < U      | 0.006 1 < 0       | 9.005 1 < 0      | 0.005 1 < 0        | 0.005 1 < 0         | 0.065 1 < 0       |
| VOLATILES            | 1,1-Dichloroethene             |                  | 0.00491 t U      |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U (        | 0.005 ! < U     | 0.005 1 < U           | 0.005 1 < 0      | 0.006 1 < 0       | 0.005 t < U      | 0.005 ! < 0        | 0.005 1 < 0         | $0.005 \ 1 \ < 0$ |
| VOLATILES            | 1,1-Dichloropropene            |                  | 0.00491 t U      |                  | 0.00494 t U      | 0.0059 1 U          |                  | 0.0047 1 U          | -               |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | 1,2,3-Trichlorobenzene         | 1                | 0.00491 t U      |                  | 0.00494 f U      | 0.0059 1 U          |                  | 0.0047 1 U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | 1,2,3-Trichloropropane         | 1                | 0.00491 1 U      |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | 1,2,4-Trichkorobenzene         |                  | 0.00491 1 U      |                  | 0.00494 t U      | 0.0059 1 U          |                  | 0.0047 1 U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | 1,2,4-Trimethybenzene          |                  | 0.00491 1 U      |                  | 0.60494 t U      | 0.0059 1 U          |                  | 0.0047 1 U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | 1.2-Dibromo-3-chloropropane    |                  | 0.00491 1 U      |                  | 0.00494 t U      | 0.0059 1 U          |                  | 0.0047 1 U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | 1 2-Ditemmoethage              |                  | 0.00491 1 1/     |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATIES             | 12-Dichlombaizage              |                  | 0.00491 1 1/     |                  | 0.00494 1 11     | 0.0059 1 11         |                  | 0.0047 1 11         |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATIES             | 1.0 Dishlamathasa              |                  | 0.00401 1 11     |                  | 0.00404 t 11     | 0.0050 t 11         |                  | 0.0047 1 11 4       | 0.005 1 2 11    | 0.005 1 < 11          | 0.005 1 c 11     | 0.006 1           | 0.005 1 4 11     | 0.005 \$ < 11      | 0.005 t < 11        | 0:005 1 < U       |
| VOLATILES            | 1.0 Disblassthees              |                  | 0.00437 1 0      |                  | 0.00434 1 0      | 0.0033 1 0          |                  | 0.0047 1 0 0        |                 | 0.005 1 4 11          | 0.005 1 < 0      | 0.006 1 < U       | 0.005 t < U      | 0.005 1 < 0        | 0.005 1 < 11        | 0.005 1 4 1       |
| VOLATILES            | 1,2-Dichloroeutene             |                  |                  |                  |                  | 0.0050 4 11         |                  | 0.0047 1 11 (       |                 | 0.005 1 0             | 0.005 1          | 0.000 1 - 11      | 0.005 1 4 11     | 0.005 1 < 0        | 0.005 1             | 0.005 1 < 0       |
| VOLARLES             | 1,2-Dichloropropane            |                  | 0.00491 1 0      |                  | 0.00494 1 0      | 0.0059 1 0          |                  | 0.0047 1 0 0        | 0.005 1 < 0     | 0.005 1 < 0           | 0.005 1 < 0      | 0.000 1 < 0       | 0.005 1 < 0      | 0.003 1 < 0        | 0.005 1 < 0         | 0.005 1 < 0       |
| VOLABLES             | 1,2-Dimethylbenzene (o-Xylene) |                  | 0.00491 1 10     |                  | 0.00494 1 0      | 0.0059 1 0          |                  | 0.0047 1 0          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | 1,3,5-Trimethylbenzene         |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.0059 1 0          |                  | 0.0047 1 0          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | 1,3-Dichlorobenzene            |                  | 0.00491 t U      |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | 1,3-Dichlozopropane            |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | 1,4-Dichlorobenzene            |                  | 0.00491 t U      |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | 2,2-Dichloropropane            |                  | 0.00491 1 U      |                  | 0.00494 🕴 U      | 0.0059 1 U          |                  | 0.0047 1 U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | 2-Butanone                     |                  | 0.00982 t U      |                  | 0.00968 1 U      | 0.0119 1 U          |                  | 0.0093 1 U          | 0.05 1 < U      | 0.05 1 < U            | 0.05 1 < U       | 0.12 t < U        | 0.05 1 < U       | 0.05 1 < U         | 0.05 1 < U          | 0.05 t < U        |
| VOLATILES            | 2-Chloroethyl vinyl ether      | . 1              | 0.00982 t U      |                  | 0.00988 1 U      | 0.0119 1 U          |                  | 0.0093 t U          | 0.01 1 < U      | 0.01 1 < U            | 10.01 1 < U      |                   | 0.01 î < U       | 0.01 1 < U         | 0.01 1 < U          | 0.01 t < U        |
| VOLATILES            | 2-Chlorotoluene                |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | 2-Hexagone                     |                  | 0.00982 1 10 10  |                  | 0.00988 1 U UJ   | 0.0119 1 V VJ       |                  | 0.0093 1 U UJ       | 0.05 1 < U      | 0.05 f < U            | 0.05 1 < U       | 0.06 1 < U        | 0.05 i < U       | 0.05 1 < U         | 0.05 1 < U          | 0.05 t < U        |
| VIX ATTLES           | 4-Chiorotokene                 |                  | 0 00491 t 17     |                  | 0 00494 1 11     | 0.0059 t U          |                  | 0.0047 1 U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATHES             | érotone                        |                  | 0.00982 1 11 114 |                  | 0.00988 1 11 113 | 00119 1 1/ 1/       |                  | 0.0093 1 11 11.1    | 0.1 1 < U       | 91 L < H              | 01 1 < 1         | £12 t < U         | 0.1 1 < U        | 0.1 1 < U          | 0.1 1 < U           | 9.1 1 ≺ U         |
| WOLATHER             | Papagaga                       |                  | 0.00302 1 0 00   |                  | 0.00303 1 0 00   | 0.0050 1 11         |                  | 0.0047 1 11 (       | 0.005 f < H     | 0.005 t < H           | 0.005 1 × H      | 0.006 1 < 1       | 0.005 1 2 1      | 0.005 1 < 1        | 0.005 1 < 12        | 0.005 t ∠ (t      |
| VOLATILES            | Oramahaaaaa                    |                  | 0.00401 1 11     |                  | 0.00404 1 11     | 0.0055 1 1          |                  | 0.0047 1 11         |                 | 0.000 0               |                  | 0.000 / 1 0       |                  |                    |                     |                   |
| VOLATILES            | Bromoderizene                  |                  | 0.00491 1 0      |                  | 0.00494 1 0      | 0.0039 1 0          |                  | 0.0047 1 0          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | Bromochionomethane             |                  | 0.00491 0        |                  | 0.00494 1 0      | 0.0039 1 0          |                  | 0.0047 1 0          |                 |                       |                  | D 000 4 11        | 0.000 A          | 0.005 4 14         | 0.005 4             |                   |
| VOLATILES            | Bromodichioromethane           |                  | 0.00491 1 0      |                  | 0.00494 1 0      | 0.0059 1 0          |                  | 0.0047 1 0 0        | 0.005 1 < 0     | 1.005 1 < 0           | 0.005 1 < 0      | 0.006 1 < 0       | 0.005 1 < 0      | 0.005 1 < 0        | 0.005 + < 0         | 0.005 1 < 0       |
| VOLATILES            | Bromotorm                      |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U U        | 0.005 1 < 0     | 0.005 1 < 0           | 0.005 1 < U      | 0.006 1 < U       | 0.005 1 < 0      | 0.005 1 < 0        | 0.005 1 < 0         | 0.005 1 < 0       |
| VOLATILES            | Bromomethane                   |                  | 0.00982 1 U      |                  | 0.00988 1 U      | 0.0119 1 U          |                  | 0.0093 1 U          | 0.01 1 < U      | 0.01 í < U            | 0.01 1 < U       | 0.006 t < U       | 0.01 1 < U       | 0.01 1 < U         | 0.01 1 < 0          | 0.01 1 < U        |
| VOLATILES            | Carbon disulfide               |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U 6        | 0.005 1 < U     | 0.005 t < U           | 0.005 1 < U      | 0.006 1 < U       | 0.005 t < U      | 0.005 1 < U        | 0.005 1 < 0         | 0.005 \$ < U      |
| VOLATILES            | Carbon tetrachloride           |                  | 0.00491 t U      |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 10 (       | 0.005 1 < U     | 0.005 1 < U           | 0.005 1 < U      | 0.006 f < U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U         | 0.005 t < U       |
| VOLATILES            | Chlorobenzene                  |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U G        | 0.005 1 < U     | 0.005 1 < U           | 0.005 1 < U      | 0.006 t < U       | 0.005 1 < U      | 0.005 t < U        | 0.005 1 < U         | 0.005 1 < U       |
| VOLATILES            | Chlomethane                    |                  | 0.00982 1 U      |                  | 0.00988 1 U      | 0.0119 1 U          |                  | 0.0093 1 U          | U > 1 10.0      | 0.01 1 < U            | 0.01 1 < U       | 0.006 t < U       | 0.01 1 < U       | 0.01 1 < U         | 0.01 i < 간          | 0.01 t < U        |
| VOLATILES            | Chiorotorm                     |                  | 0.00491 1 U      |                  | 0.00494 t U      | 0.0059 t U          |                  | 0.0047 1 U (        | 0.005 t < U     | 0.005 1 < U           | 0.005 1 < U      | 0.006 t < U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U       |
| VOLATILES            | Chlommethane                   |                  | 0.60982 1 11     |                  | 0.00988 t U      | 0.0119 1 U          |                  | 0.0093 1 U          | 0.01 1 < U      | 0.01 t < U            | 0.01 1 < U       | 0.006 1 < U       | 0.01 1 < U       | 0.01 1 < U         | 0.01 1 < U          | 0.01 1 < U        |
| VOLATILES            | cis_1 2. Dichloroethene        |                  | 6 00/491 1 15    |                  | 0.00494 1 11     | 0.0059 f U          |                  | 0.0047 1 11         |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATHER<br>VOLATHER | cin 1.2 Dichterestences        |                  | 0.00401 1 23     |                  | 0.00404 1 11     | 0.0050 1 13         |                  | A 0027 1 15 /       | 0.005 t 2 11    | 0.005 1 2 11          | ม005 1 🖌 ป       | 0.006 1 2 11      | 0.005 t < U      | 0.005 t < 11       | 0.005 1 2 12        | 0.005 t 2 H       |
| VOLATILES            | CIS-1,3-Dicialiopidpene        |                  | 0.00431 1 1      |                  | 0.00434 1 0      | 0.0000 1 11         |                  | 0.0047 1 22 7       |                 | 0.005 1 4 1           | 0.005 1 4 1      | 0.000 1 4 0       | 0.005 1 4 0      | 0.005 1 4 11       | 0.005 1 - 1         | 0.005 1 4 11      |
| VOLATILES            | Daronochormeinane              |                  |                  |                  | 0.00494 1 0      | 0.0009 1 0          |                  | 0.0047 1 11         | 0.005 1 < 0     | 0.005 1 < 0           | 0.005 1 < 0      | 0.000 1 < 0       | 0.000 5 C D      | 0.003 3 2 0        | 0.003 1 4 0         | 0.000 1 < 0       |
| WALANLES             | UILYOMOTOPIOANE                |                  | 0.00491 I U      |                  | 0.00434 I U      | 0.0039 1 U          |                  | 0.0047 € Ŭ          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | Dichlorodifluoromethane        |                  | 0.00982 1 U      |                  | 0.00988 t U      | 0.0119 1 0          |                  | 0.0093 1 U          |                 |                       |                  |                   | A 447            |                    |                     |                   |
| VOLATILES            | Ethylbenzene                   |                  | 0.00491 1 U      |                  | 0.00494 t U      | 0.0059 1 U          |                  | 0.0047 1 () {       | 0.005 1 < U     | 0.005 t < U           | 0.005 1 < U      | 0.006 t < U       | 0.005 1 < U      | 0.005 1 < €        | 0.005 1 < U         | 0.005 1 < U       |
| VOLATILES            | Hexachlorobutadiene            |                  | 0.00491 1 U      |                  | 0.00494 t U      | 0.0059 1 U          |                  | 0.0047 ! U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | tsopropytbenzene               | I                | 0.00491 1 U      |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 t U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | m.p-Xylenes                    | 1                | 0.00491 1 U      |                  | 0.00494 1 U      | 0.0059 1 V          |                  | 0.0047 1 U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATILES            | Methyl isobutyl ketone         |                  | 0.00982 1 U      |                  | 0.00988 t U      | 0.0119 1 U          |                  | U 1 6000            | 0.05 1 < ₺      | 0.05 1 < U            | 0.05 1 < U       | 0.06 1 < U        | 0.05 t < U       | 0.05 1 < U         | 0.05 1 < U          | 0.05 1 < U        |
| VOLATILES            | Methylene chloride             |                  | 0.00491 1 U      |                  | 0.00494 t U      | 0.0059 1 U          |                  | 0.0047 1 U 0        | 0.005 1 < 8     | 0.005 t < U           | 9.005 1 < U      | 0.006 1 < U       | 0.005 1 < U      | 0.005 t < U        | 0.005 1 < U         | 0.005 1 < U       |
| VOLATILES            | Naphthalene                    |                  | 0.00982 t U      |                  | 0.00988 t U      | 0.0119 1 1          |                  | 0.0093 t U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATHES             | n-8HTYLBENZENE                 |                  | 0.00491 1 11     |                  | 0.00494 1 10     | 0.0059 1 U          |                  | 0.0047 1            |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATICES            | PROPYI BENZENE                 |                  | 0.00491 1 11     |                  | 0 00494 1 11     | 0.0059 1 13         |                  | 0.0047 1 1          |                 |                       |                  |                   |                  |                    |                     |                   |
| VOLATI CO            |                                |                  | 0.00401 1 U      |                  | 0.00404 7 14     | 0.0050 1 11         |                  | 0.0047 t U          |                 |                       |                  |                   |                  |                    |                     |                   |
| VULATILEÀ            | proof to Fill TOLUEIRE         |                  | 0.00921 1 0      |                  | v                | 0.0000 I U          |                  |                     |                 |                       |                  |                   |                  |                    |                     |                   |

Shaw Environmental, Inc.

1.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-10 Concentrations of Chemicals in Soil Samples Associated with Sump 010

| (SUMP) = SUMP010      |                               |                  |                    |                  |                  |                     |                  |                  |                     |                  |                   | _                  |                  |                 |                      | 111 011 00       |
|-----------------------|-------------------------------|------------------|--------------------|------------------|------------------|---------------------|------------------|------------------|---------------------|------------------|-------------------|--------------------|------------------|-----------------|----------------------|------------------|
| LOCATION_CODE         |                               | 35SUMP010-SB01   | 35SUMP010-SB01     | 35SUMP010-SB02   | 355UMP010-S802   | 35SUMP010-SB02      | 35SUMP011-SB01   | 35SUMP011-SB01   | LH-S10-01           | LH-\$10-01       | LH-S10-02         | LH-S10-02          | LH-SI1-DI        | LH-S11-01       | LH-S11-02            | LH-ST1-02        |
| SAMPLE_NO             |                               | 35-SMP10-SB01-01 | 35-SMP10-SB01-02   | 35-SMP10-SB02-01 | 35-SMP10-SB02-02 | 35-SMP10-SB02-02-QC | 35-SMP11-SB01-01 | 35-SMP11-SB01-02 | LH-S10-01_1         | LH-S10-01_2      | LH-S10-02_1       | LH-S10-02_2        | LH-S11-01_1      | LH-S11-01_2     | LH-S11-02_1          | LH-S11-02_2      |
| SAMPLE_DATE           |                               | 9/11/2006        | 9/11/2006          | 9/11/2006        | 9/11/2006        | 9/11/2006           | 9/11/2006        | 9/11/2006        | 6/26/1993           | 6/26/1993        | 7/11/1993         | 6/26/1993          | 6/25/1993        | 6/25/1993       | 6/26/1993            | 7/10/1993        |
| DEPTH                 |                               | 0.5 - 0.5 Ft     | 10 - 10 Ft         | 0.5 - 0.5 Ft     | 10 - 10 Ft       | 10 - 10 Ft          | 0.5 - 0.5 Ft     | 12 - 12 Ft       | 0.5 - 2.5 Ft        | 8.5 - 10.5 Ft    | 0 - 2 Ft          | 9 - 9.5 Ft         | 0-2Ft            | 10 - 12 Ft      | 0.5 - 1.5 Pt         | 10 - 12 Ft       |
| SAMPLE_PURPOSE        |                               | REG              | REG                | REG              | REG              | - FD                | REG              | REG              | REG                 | REG              | REG               | REG                | REG              | REG             | REG                  | REG              |
| Test Group            | Parameter (Units = mg/kg)     | Result DIL LQ VQ | Result Dil. 1.0 VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO    | Result DIL LO VQ | Result DIL LO VO | Result DIL LO VO    | Result DIL LO VO | D Result DIL LQ V | Q Result DIL LQ VQ | Result DIL LO VO | Q Result DIL LO | VQ Result Dil. LQ VQ | Result OIL LO VO |
| VOLATILES             | SEC-BUTYLBENZENE              |                  | 0.00491 1 U        |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 0       |                     |                  |                   |                    |                  |                 |                      |                  |
| VOLATILES             | Stytene                       |                  | 0.00491 1 U        |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U       | 0.005 1 < U         | 0.005 t < U      | 10.0051 < L       | ) 0.006 t < U      | 0.005 1 < U      | J 0.005 1 <     | 0 0.005 1 < 0        | 0.005 1 < 0      |
| VOLATILES             | tert-BUTYLBENZENE             |                  | 0.00491 1 U        |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U       |                     |                  |                   |                    |                  |                 |                      |                  |
| VOLATILES             | Tetrachioroethene             |                  | 0.00491 1 U        |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U       | 0.005 1 < U         | 0.005 1 < U      | 1 0.005 1 < 6     | U 0.006 1 < U      | 0.005 1 < 10     | J 0.005 1 <     | V 0.005 1 < U        | 0.005 t < U      |
| VOLATILES             | Toluene                       |                  | 0.00491 1 U        |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 8       | £0.005 1 < U        | 0.005 1 < U      | 0.005 1 < 1       | U 0.006 1 < U      | 0.005 t < 0      | ] 0.005 1 <     | U 0.905 1 < U        | 0.005 1 < 0      |
| VOLATILES             | trans-1,2-Dichloroethene      |                  | 0.00491 1 U        |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U       |                     |                  |                   |                    |                  |                 |                      |                  |
| VOLATILES             | trans-1,3-Dichloropropene     |                  | 0.00491 1 U        |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U       | 0.005 t < U         | 0.005 1 < U      | 0.005 1 < 1       | U 0.006 1 < U      | 0.005 t < U      | J 0.005 1 <     | U 0.005 I < U        | 0.005 1 < 0      |
| VOLATILES             | Trichloroethene               |                  | 0.00491 1 U        |                  | 0.00494 1 U      | 0.0059 1 U          |                  | 0.0047 1 U       | 0.005 f < U         | 0.905 1 < U      | 0.005 1 < 1       | U 0.006 1 < U      | 0.005 t < U      | J 0.005 1 <     | t⊁ 0.005 1 < U       | 0.005 t < U      |
| VOLATILES             | Trichlorolluoromethane        |                  | 0.00982 t U        |                  | 0.00988 1 U      | 0.0119 1 U          |                  | 0.0093 1 U       |                     |                  |                   |                    |                  |                 |                      |                  |
| VOLATILES             | Vinyl acetate                 |                  | 0.00982 t U        |                  | 0.00988 1 U      | 0.01:19 t U         |                  | 0.0093 1 U       | 0.05 1 < U          | 0.05 1 < U       | ) 0.05 1 < l      | j.                 | 0.05 1 < 0       | J 0.05 1 <      | U 0.05 1 < U         | 0.05 I < U       |
| VOLATILES             | Vinyl chloride                | 1                | 0.00982 I U        |                  | 0.00988 1 U      | 0.0119 1 U          |                  | 0.0093 1 U       | 0 <u>.</u> 01 1 < U | 0.01 1 < U       | 10.011 < 1        | U 0.006 1 < U      | 0.01 1 < 0       | 3 0.01 1 <      | U 0.01 1 < U         | 0.01 1 < U       |
| VOLATILES             | Xylenes, Total                |                  |                    |                  |                  |                     |                  |                  | 0.005 1 < U         | 0.005 1 < U      | 0.005 1 < 1       | U 0.006 1 < U      | 0.005 1 < L      | J 0.005 1 <     | U 0.005 1 < U        | 0.005 1 < U      |
| Cashalan are chown or | server cane to Tables Section |                  |                    |                  |                  |                     |                  |                  |                     |                  |                   |                    |                  |                 |                      |                  |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-11 Concentrations of Chemicals in Soil Samples Associated with Sump 011

| (SUMP) = SUMP011<br>LOCATION_CODE |  | 35SUM2010-SB01            | 35SUMP010-SB01          | 35SUMP010-SB02            | 35SUMP010-SB02          | 35SUMP010-SB02          | 35SUMP011-SB01            | 35SUMP011-SB01          | LH-S10-01                  | LH-S10-01                  | LH-S10-02                | LH-\$10-02                | LH-S11-01                 | LH-\$11-01                 | LH-S11-02                   | LH-S11-02                 |
|-----------------------------------|--|---------------------------|-------------------------|---------------------------|-------------------------|-------------------------|---------------------------|-------------------------|----------------------------|----------------------------|--------------------------|---------------------------|---------------------------|----------------------------|-----------------------------|---------------------------|
| SAMPLE_NO                         |  | 35-SMP10-S801-01          | 35-SMP10-SB01-02        | 35-SMP10-SB02-01          | 35-SMP10-SB02-02        | 35-SMP10-SB02-02-QC     | 35-SMP11-SB01-01          | 35-SMP11-S801-02        | LH-S10-01_1                | LH-\$10-01_2               | LH-S10-02_1              | LH-S10-02_2               | LH-S11-01_1               | LH-S11-01_2                | LH-S11-02_1                 | LH-S11-02_2               |
| SAMPLE_DATE                       |  | 9/11/2006<br>0.5 - 0.5 Ft | 9/11/2006<br>10 - 10 Ft | 9/11/2006<br>0.5 - 0.5 Ft | 9/11/2006<br>10 - 10 Ft | 9/11/2006<br>10 - 10 Ft | 9/11/2006<br>0.5 - 0.5 Ft | 9/11/2006<br>12 - 12 Ft | 6/26/1993<br>0.5 - 2.5 Ft  | 6/26/1993<br>8.5 - 10.5 Ft | 0 - 2 Ft                 | 9 - 9.5 Ft                | 0-2 Ft                    | 10-12 Ft                   | 0.5 - 1.5 Ft                | 10 - 12 Ft                |
| SAMPLE_PURPOSE                    |  | REG                       | REG                     | REG                       | REG                     | FD                      | REG                       | REG                     | REG                        | REG                        | REG                      | REG                       | REG                       | REG                        | REG<br>Recuit Dit LO VO Rec | REG                       |
| Test Group                        | Parameter (Units = mg/kg)<br>2 4-Dimitrotokeene          | Result DIL LO VQ          | Result DIL LO VO        | Result (Dil, LQ VQ        | Result DIL LO VO        | Result DIL LQ VQ        | Result DIL LO VO          | Result DIL LQ VQ        | Result DIL LO VO           | Result DIL LO VO           | 0.33 t < U               | 1.22 1 < U                | 0.33 1 < U                | 0.33 1 < U                 | Result DIL LO VO MES        | 0.33 1 < V                |
| EXPLOSIVES                        | 2,6-Dinitrotoluene                                       |                           |                         |                           |                         |                         |                           |                         |                            |                            | 0.33 1 < U               | 1.22 1 < U                | 0.33 1 < U                | 0.33 t < U                 | 1                           | 0.33 1 < U                |
| METALS                            | Atuminum   |                           |                         |                           |                         |                         |                           |                         | 7990 t<br>3.4 t            | 8010 1<br>5.8 1            | 10200 1<br>3.4 1         | 6970 1<br>4,58 1 < U      | 34900 1<br>3 1 < U        | 12,300 ĭ<br>3 1 < U        | 8/6⊎1 /<br>3.t < U          | 31 < U                    |
| METALS                            | Arsenic  |                           |                         |                           |                         |                         |                           |                         | 2.9 1                      | 1.1 1                      | 3.4 t                    | 0.458 1 < U               | 4.5 1                     | 1.4 1                      | 2.1 1                       | 1.4 1                     |
| METALS                            | Banium   | 1                         |                         |                           |                         |                         |                           |                         | 109 1                      | 86.8 1                     | 79.4                     | 43.2 1 < U                | 128 1                     | 69.2 l                     | 55.6 1                      | 129 1<br>t 1 < 1          |
| METALS<br>METALS                  | Cadmium<br>Calcium                                       |                           |                         |                           |                         |                         |                           |                         | 1050 1                     | 915 1                      | 1370 1                   | 1170 1                    | 4170 1                    | 989 1                      | 5450 1 1                    | 030 1                     |
| METALS                            | Chromium   | 1                         |                         |                           |                         |                         |                           |                         | 12.9 1                     | 11 1                       | 27.9 1                   | 10.9 1                    | 28.2 1                    | 12 1                       | 11.8 1                      | 11.6 1                    |
| METALS                            | Cobalt   |                           |                         |                           |                         |                         |                           |                         | 7.9 1<br>5.6 1             | 15.5 1<br>6.5 1            | 9.3 1<br>87.4 1          | 3.92 1<br>6.32 1 < U      | 7.46 1<br>9.24 1          | 6.19 1<br>6.16 1           | 4.9 1                       | 6.1 I                     |
| METALS                            | iron   |                           |                         |                           |                         |                         |                           |                         | 16500 1                    | 12900 1                    | 39100 t                  | 8820 1                    | 27900 1                   | 11300 1                    | 12900 1 16                  | 600 1                     |
| METALS                            | Lead   |                           |                         |                           |                         |                         |                           |                         | 7.6 1                      | 4.8 1                      | 8.8 1<br>594 t           | 8.7 1 E                   | 7.8 1<br>2893 1           | 3.9 1<br>1220 1            | 5.1 1<br>577 1 1            | 7.8 1<br>480 1            |
| METALS                            | Magnesium<br>Manganese                                   |                           |                         |                           |                         |                         |                           |                         | 157 1                      | 301 1                      | 222 1                    | 66.2 1                    | 190 1                     | 47.5 1                     | 92.6 1                      | 245 1                     |
| METALS                            | Mercury  |                           |                         |                           |                         |                         |                           |                         | 0.1 t < U                  | 0.1 1 < U                  | 0.1 t < U                | 0.055 1 < U               | 0.2 1                     | 0.17 1                     | 0.1 1 < Ŭ                   | 0.1 1 < U                 |
| METALS                            | Potassium<br>Seleniam                                    |                           |                         |                           |                         |                         |                           |                         | 643 1<br>1 1 < U           | 510 î<br>1 î < U           | 5191<br>1 t < U          | 0.458 1 < ∛               | 24977 I<br>1 t < V        | 1 t < U                    | 1 1 < U                     | 11 < U                    |
| METALS                            | Silver   |                           |                         |                           |                         |                         |                           |                         | 1 1 < U                    | t i < ⊍                    | 1 1 < U                  | 0.023 1 < V               | 11 < 13                   | t t < U                    | 1 t < U                     | 11 < U                    |
| METALS                            | Strontium  | [                         |                         |                           |                         |                         |                           |                         | 16.2 1                     | 18.6 1                     | 9.5 1                    | 19.1 1 < U<br>24.9 1      | 37.5 f                    | 20.3 1                     | 13.6 1                      | 20.9 1<br>33.7 1          |
| RANGE ORGANICS                    | Zinc<br>Carbon Range C12-C28                             | 56.5 1 U                  | 56.9 1 U                | 55.8 1 13                 | 59.7 1 U                |                         | 55.7 1 U                  | 54.6 1 U                | 24.3                       | 10.5                       | 10.1                     | 21.0                      |                           |                            |                             |                           |
| RANGE_ORGANICS                    | Carbon Range C28-C35                                     | 56.5 1 U                  | 56.9 1 U                | 55.8 1 U                  | 59.7 1 U                |                         | 55.7 1 U                  | 54.6 t U                |                            |                            |                          |                           |                           |                            |                             |                           |
| RANGE_ORGANICS                    | Carbon Range C6-C12<br>1.2.4-Tochkombeozene              | 56.5 I U                  | 56.9 1 U                | 55.8 1 U                  | 59.7 1 U                |                         | 55.7 1 U                  | 54.6 1 U                | 0.33 1 < U                 | 0…33 1 < U                 | 9.33 1 < U               | 1.22 f < U                | 0.33 1 < U                | 0.33 1 < U                 | 0.33 1 < U                  | 0.33 1 < U                |
| SEMIVOLATILES                     | 1,2-Dichlorobenzene                                      |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 1.22 t < U                | 0.33 1 < U                | 0.33 1 < U                 | 0.33 1 < U                  | 0.33 t < U                |
| SEMIVOLATILES                     | 1,3-Dichlorobenzene                                      |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U                 | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U | 1.22 f < U<br>1.22 f < U  | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < ∜<br>0.33 1 < ∜   | 0.33 1 < U<br>0.33 1 < U    | 0.33 1 < U<br>0.33 1 < U  |
| SEMIVOLATILES                     | 2,4,5-Trichlorophenol                                    |                           |                         |                           |                         |                         |                           |                         | 1.65 t < U                 | 1.65 1 < U                 | 1.65 t < U               | 1.22 t < U                | 1.65 1 < U                | 1.65 1 < U                 | 1.65 1 < U                  | 1.65 1 < U                |
| SEMIVOLATILES                     | 2,4,6-Trichkorophenol                                    |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U                 | 0.33 t < U                 | 0.33 1 < U               | 1.22 1 < U                | 0.33 1- < U<br>0.39 1 < U | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 t < U    | 0.33 1 < U<br>0.33 1 < U  |
| SEMIVOLATILES                     | 2,4-Dichlorophenol<br>2,4-Dimethylphenol                 |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 t < U               | 0.61 1 < U                | 0.33 1 < 0                | 0.33 1 < U                 | 0.33 1 < U                  | 0.33 1 < U                |
| SEMIVOLATILES                     | 2,4-Dinitrophenol  |                           |                         |                           |                         |                         |                           |                         | 1.65 1 < U                 | 1.65 1 < U                 | 1.65 1 < U               | 12.195 1 < U              | 1.65 1 < U                | 1.65 1 < U                 | 1.65 1 < ₩                  | 1.65 1 < U                |
| SEMIVOLATILES<br>SEMIVOLATILES    | 2,4-Distrotoluese<br>2.6-Distrotoluese                   |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < 0<br>0.33 1 < 0   | 0.33 1 < 0                 |                          |                           |                           |                            | 0.33 t < U                  |                           |
| SEMIVOLATILES                     | 2-Chloronaphthalene                                      |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.366 1 < U               | 0.33 t < U                | 0.33 1 < U                 | 0.33 1 < U                  | 0.33 1 < U                |
| SEMIVOLATILES                     | 2-Chlorophenol   |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U<br>A33 1 < U    | 0.33 t < U                 | 0.33 1 < U               | 0.61 1 < U<br>0.3651 < U  | 0.33 t < U<br>0.33 t < U  | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U    | 0.33 1 < 0<br>0.33 1 < 0  |
| SEMIVOLATILES                     | 2-Methylphenol   |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.61 1 < U                | 0.33 1 < U                | 0.33 1 < U                 | 0.33 1 < U                  | 0.33 t < U                |
| SEMIVOLATILES                     | 2-Naroaniline  |                           |                         |                           |                         |                         |                           |                         | 1.65 1 < U                 | 1.65 1 < U                 | 1.65 £ < U               | 3.659 4 < U               | 1.65 1 < U                | 1.65 1 < U<br>033 1 < U    | 1.65 1 < U<br>0.33 1 < U    | 1.65 1 < U<br>0.33 1 < U  |
| SEMIVOLATILES                     | 2-rearophenos<br>3,3'-Dichlorobenzidine                  | -                         |                         |                           |                         |                         |                           |                         | 0.65 ! < U                 | 0.65 1 < U                 | 0.65 t < U               | 0.61 1 < U                | 0.65 1 < U                | 0.65 1 < U                 | 0.65 1 < U                  | 0.65 1 < U                |
| SEMIVOLATILES                     | 3-Nitroaniline   |                           |                         |                           |                         |                         |                           |                         | 1.65 1 < U                 | 1.65 1 < U                 | 1_65 1 < U               | 3.659 1 < U               | 1.65 1 < U                | 1.65 1 < U                 | 1.65 1 < 0                  | 1.65 1 ≺ U                |
| SEMIVOLATILES                     | 4,6-Dinitro-2-methylphenol<br>4-Bromoohenvl phenvl ether |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 1.22 1 < U                | 0.33 1 < U                | 0.33 t < Ŭ                 | 0.33 1 < U                  | 0.33 t < U                |
| SEMIVOLATILES                     | 4-Chloro-3-methylohenol                                  |                           |                         |                           |                         |                         |                           |                         | 0.65 1 < U                 | 0.65 i < U                 | 0.65 1 < U               | 0.61 1 < U                | 0.65 1 < U                | 0.65 1 < Ŭ                 | 0.65 1 < U                  | 0.65 t < U                |
| SEMIVOLATILES                     | 4-Chloroaniline<br>4-Chlorophend phend ather             |                           |                         |                           |                         |                         |                           |                         | 0.65 t < U<br>0.33 1 < U   | 0.65 1 < U<br>0.33 1 < U   | 0.65 1 < 0               | 3.659 1 < U<br>1.22 1 < U | 0.65 1 < 0                | 0.65 t < U<br>0.33 t < U   | 0.33 1 < U                  | 0.63 1 < U                |
| SEMIVOLATILES                     | 4-Methylphenol   |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.61 1 < U                | 0.33 1 < U                | 0.33 1 < U                 | 0.33 1 < U                  | 0.33 1 < U                |
| SEMIVOLATILES                     | 4-Nitsoaniline   |                           |                         |                           |                         |                         |                           |                         | 1.65 1 < U                 | 1.65 1 < U                 | 1.65 1 < 0               | 6.098 t < U               | 1.65 1 < U<br>1.65 1 < U  | 1.65 1 < U<br>165 1 < U    | 1.65 1 < 0<br>1.65 1 < 0    | 1.65 3 < U<br>1.65 1 < U  |
| SEMIVOLATILES                     | Acenaphthene   |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.366 1 < U               | 0.33 t < U                | 0.33 1 < U                 | 0.33 1 < U                  | 0.33 ti < U               |
| SEMIVOLATILES                     | Acenaphthylene   |                           |                         |                           |                         | -                       |                           |                         | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.61 t < U                | 0.33 1 < U                | 0.33 t < U                 | 0.33 1 < U<br>∩33 1 < ∐     | 0.33 t < U<br>0.33 t < U  |
| SEMIVOLAULES                      | Anthracene<br>Benzolaiantivacene                         |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U                 | · 0.33 1 < U               | 0.33 1 < 0               | 0.366 1 < U               | 0.33 1 < U                | 0.33 1 < U                 | 0.33 1 < U                  | 0.33 1 < U                |
| SEMIVOLATILES                     | Benzo(a)pyrene   |                           |                         |                           |                         |                         | -                         |                         | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.61 1 < U                | 0.33 1 < U                | 0.33 t < U                 | 0.33 1 < U                  | 0.33 1 < U                |
| SEMIVOLATILES                     | Benzo(b)fluoranthene<br>Benzo(chilosos/long              |                           |                         |                           |                         |                         |                           |                         | 10.33 1 < 1/<br>∩33 1 < 1/ | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U               | 1.22 1 < U<br>2.439 1 < U | 0.33 t < U<br>0.33 t < U  | 0.33 1 < U<br>0.33 1 < U   | 0.33 t < U<br>0.33 t < U    | 0.33 1 < U<br>0.33 1 < U  |
| SEMIVOLATILES                     | Benzo(k)/luoranthene                                     |                           |                         |                           |                         |                         | -                         |                         | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 1.22 1 < U                | 0.33 t < U                | 0.33 1 < U                 | 0.33 t < U                  | 0.33 1 < U                |
| SEMIVOLATILES                     | Benzoic Acid   |                           |                         |                           |                         |                         |                           |                         | 1.65 1 < U                 | 1.65 1 < 0                 | 1.65 1 < U               |                           | 1.65 1 < U<br>0.65 1 ∠ U  | 1.65.1 < U<br>0.65.1 ≠ U   | 1.65 1 < U<br>0.65 1 < U    | 1.65 1 < U<br>0.65 1 < U  |
| SEMIVOLATILES<br>SEMIVOLATILES    | penzyi Alconol<br>bis(2-Chloroethoxy)methane             |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < 0                 | 0.33 1 < U                 | 0.33 t < 1               | 0.61 I < U                | 0.33 1 < U                | 0.33 1 < U                 | 0.33 t < U                  | 0.33 1 < U                |
| SEMIVOLATILES                     | bis(2-Chloroethyl)ether                                  |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.61 1 < U                | 0.33 ‡ < U                | 0.33 1 < U                 | 0.33 1 < U                  | 0.33 1 < U                |
| SEMIVOLATILES                     | bis(2-Chloroisopropyl)ether                              |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U<br>0.33 1 < H   | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U | 1,22 1 < U<br>0,183 1     | ⊎.33 î < U<br>0.33 î < U  | 0.33 ⊺ < 1/<br>0.33 1 < 1/ | u.aa t < U<br>0.33 1 < U    | v.əэ i < ป<br>0.33 1 < ปi |
| SEMIVOLATILES                     | Butyl benzyl phthatate                                   |                           |                         |                           |                         |                         |                           |                         | 0.33 t < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.61 1 < U                | 0.33 1 < U                | 0.33 1 < U                 | 0.33 1 < U                  | 0.33 1 < U                |
| SEMIVOLATILES                     | Carbazote  |                           |                         |                           |                         |                         | -                         |                         | 0.22 4                     | 033 1 - 17                 | <b>032 1 . 1</b>         | 1.22 1 < U                | 033 1 - 11                | · 0 33 1 - 11              | 0.33 1 - 11                 | 033 1 - 11                |
| SEMIVOLATILES                     | Untysene<br>Dibenzo(a,h)anthracene                       |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U                 | 0.33 t < U                 | 0.33 1 < U               | 2.439 1 < U               | 0.33 t < U                | 0.33 1 < V                 | 0.33 1 < U                  | 0.33 1 < U                |
| SEMIVOLATILES                     | Dibenzoluran   |                           |                         |                           |                         |                         | -                         |                         | 0.33 t < U                 | 0.33 1 < U                 | 0.33 1 < U               | 1.22 1 < U                | 0.33 1 < U                | 0.33 t < U                 | 0.33 1 < U                  | 0.33 1 < U                |
| SEMIVOLATILES                     | Diethyl phthalate  |                           |                         |                           |                         |                         |                           |                         | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.61 t < U                | 0.33 1 < U                | 0.33 1 < U                 | 0.33 T < U                  | ບ.33 1 < ປ                |

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-11 Concentrations of Chemicals in Soil Samples Associated with Sump 011

| (SUMP) = SUMP011             |  |                  |                             | SCULINDONS CROSS                   | 362100040 2004                     | 200100000 0000                        | 2001 NJD011 0001                   | 250UBJD011_CD01   | 18.510.01        | 14-510-01        | 18.510-02        | 18-510-02                      | 18-511-01                       | LH-St1-01                | LH-S11-02           | LH-S11-02       |
|------------------------------|--|------------------|-----------------------------|------------------------------------|------------------------------------|---------------------------------------|------------------------------------|-------------------|------------------|------------------|------------------|--------------------------------|---------------------------------|--------------------------|---------------------|-----------------|
| LOCATION _CODE               |  | 355UMP010-SB01   | 35SUMP010-SB01              | 35SUMP070-SB02<br>35.SMP10.SB02.01 | 355UMP010-5802<br>35.5MP10.5802.02 | 3550MP010-5502<br>35.5MP16.5R02.02.00 | 3550MP011-5601<br>35.SMP11-SB01-03 | 3550MP011-5801-02 | LH-S10-01 1      | LH-S10-01 2      | LH-S10-02 1      | UH-S10-02 2                    | LH-S11-01_1                     | LH-S11-01_2              | LH-S11-02_1         | LH-S11-02_2     |
| SAMPLE_NO<br>SAMPLE DATE     |  | 9/11/2006        | 9/11/2006                   | 9/11/2006                          | 9/11/2006                          | 9/11/2005                             | 9/11/2005                          | 9/11/2006         | 6/26/1993        | 6/26/1993        | 7/11/1993        | 6/26/1993                      | 6/25/1993                       | 6/25/1993                | 6/26/1993           | 7/10/1993       |
| DEPTH                        |  | 0.5 - 0.5 Ft     | 10 - 10 Ft                  | 0.5 - 0.5 Ft                       | 10 - 10 Ft                         | 10 - 10 Ft                            | 0.5-0.5 Ft                         | 12 - 12 Ft        | 0.5 - 2.5 Ft     | 8.5 - 10.5 Ft    | 0 - 2 Ft         | 9 - 9.5 Ft                     | 0 - 2 Ft                        | 10 - 12 Ft               | 0.5 - 1.5 Ft        | 10 - 12 Ft      |
| SAMPLE_PURPOSE               |  | REG              | REG                         | REG                                | REG                                | FD                                    | REG                                | REG               | REG              | REG              | REG              | REG                            | REG                             | REG                      | REG                 | REG             |
| Test Group                   | Parameter (Units = mg/kg)                | Result DHL LQ VQ | Result DIL LQ VQ            | Result DIL LQ VO                   | Result DIL LO VO                   | Result DIL LQ VQ                      | Result DIL LQ VO                   | Result DIL LO VO  | Result DIL LQ VQ | Result DIL LQ VC | Result DIL LO VO | P Result DIL LQ VQ             | 2 Result DiL LO VC              | Result DIL LO VO         | Result DIL LO VO H  | Insur DIL LO VO |
| SEMIVOLATILES                | Dimethyl phthalate                       |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 1 < U       | 42.33 1 < U      | 0.33 1 < 0       | . ULD1 1 < U<br>5030 1         | 0.33 1 < 0                      | 0.33 1 4 1               | 0.33 1 < 1          | 0.33 1 < U      |
| SEMIVOLATILES                | di-n-Butyt phthalate                     |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 1 < 0       | 0.33 1 < 1       | 0.33 1 < 0       | 0.61 t < U                     | 0.33 1 < U                      | 0.33 1 < U               | 0.33 1 < U          | 0.33 t < U      |
| SEMIVOLAHLES<br>SEMIVOLAHLES | ennouty prenate.                         |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.61 1 < U                     | 0.33 1 < U                      | 10.33 1 < U              | 0.33 t < U          | 0.33 1 < U      |
| SEMIVOLATILES                | Fluorene                                 |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 1 < ป       | 0.33 1 < U       | 0.33 1 < U       | 0.61 1 < U                     | 0.33 t < U                      | 0.33 1 < U               | .0.33 1 < U         | 0.33 1 < U      |
| SEMIVOLATILES                | Hexachlorobenzene                        |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 1.22 t < U                     | 0.33 t < U                      | 0.33 1 < U               | 0.33 1 < U          | 0.33 1 < U      |
| SEMIVOLATILES                | Hexachlorobutadiene                      |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 3.659 1 < U                    | 0.33 t < U                      | 0.33 t < U               | 0.33 1 < U          | 0.33 1 < 0      |
| SEMIVOLATILES                | Hexachtorocyclopentadiene                |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 3.659 t < U                    | 0.33 1 < U                      | 0.33 1 < U<br>0.23 t ∠ U | 0.33 1 < U          | 0.33 1 < 0      |
| SEMIVOLATILES                | Hexachloroethane                         |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 I < U       | 0.33 1 < 0       | 0.33 1 < 0       | 122 1 4 0                      | 0.33 1 < 0                      | 0.33 1 < U               | 0.33 1 < U          | 0.33 1 < U      |
| SEMIVOLATILES                | Indeno(1,2,3-cd)pyrene                   |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.61 1 < U                     | 0.33 1 < U                      | 0.33 1 < U               | 0.33 1 < U          | 0.33 1 < U      |
| SEMIVOLATILES                | Nanhthalene                              |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 t < U       | 0.33 t < U       | 0.33 1 < U       | 0.366 1 < U                    | 0.33 1 < 13                     | €.33 î < U               | 0.33 1 < U          | 0.33 t < U      |
| SEMIVOLATILES                | Nitrobenzene                             |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 1 < U       | 0.33 f < U       | 0.33 1 < U       | 0.61 1 < U                     | 0.33 1 < U                      | 0.33 t < U               | 0.33 1 < 5          | 0.33 I < U      |
| SEMIVOLATILES                | n-Nitroso-di-n-propylamine               |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 t < U       | 0.33 t < U       | 0.33 1 < U       | 1.22 1 < U                     | 0.33 1 < U                      | 0.33 1 < U               | 0.33 1 < U          | 0.33 1 < U      |
| SEMIVOLATILES                | n-Nitrosodiphenylamine                   |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.61 1 < U                     | 0.33 1 < U                      | 0.33 t < U               | 0.33 1 < U          | 0.33 1 < U      |
| SEMIVOLATILES                | Pentachlorophenol                        |                  |                             |                                    |                                    |                                       |                                    |                   | 1.65 t < U       | 1.65 1 < U       | 1.65 1 < U       | 6.098 1 < U                    | 1.65 1 < U                      | 1.65 1 < 0               | 1.65 1 < U          | 1.65 1 < 0      |
| SEMIVOLATILES                | Phenanthrene                             |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 T < 0       |                                | 0.33 1 < 0                      | 0.33 1 < 0               | 0.33 1 4 0          | 0.33 1 < 1      |
| SEMIVOLATILES                | Phenol                                   |                  |                             |                                    |                                    |                                       |                                    |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 1       | i 0.01 1 < U                   | 0.33 1 < 1)                     | 0.33 1 < U               | 0.33 1 < 0          | 0.33 1 < U      |
| SEMIVULATILES                | Pyrene<br>1.1.1.2 Tolerablemathano       |                  | 0.00501 1 11                |                                    | 0-00404 1 11                       | 0.00593 1 11                          |                                    | 0-00465 t II      | 2.03 1 2 0       |                  |                  |                                | 0.00                            |                          |                     |                 |
| VOLATILES                    | 1.1.1.Fachiomethane                      | 1                | 0.00491 1 1                 |                                    | 0.00494 1 11                       | 0.00593 1 U                           |                                    | 0.00465 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.006 t < U                    | 0.005 t < U                     | 0.005 1 < U              | 0.995 t < U         | 0.005 1 < U     |
| VOLATILES                    | 1.1.2.2-Tetrachiomethane                 | ł                | 0.00491 1 U                 |                                    | 9.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 1 1       | 0.005 1 < U      | -<br>€.005 1 < U | €.005 t < U      | 0.006 1 < U                    | 0.005 t < U                     | 0.005 1 < U              | 0 <u>.005</u> 1 < U | 0.005 t < U     |
| VOLATILES                    | 1.1.2-Trichloroethane                    |                  | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00465 1 U       | 0.005 1 < U      | 0≟005 1 < U      | 0.005 1 < U      | 0.006 1 < U                    | 0.005 1 < U                     | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U     |
| VOLATILES                    | 1,1-Dichloroethane                       | ļ                | 0.00491 t U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00465 1 U       | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.006 1 < U                    | 0.005 1 < U                     | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U     |
| VOLATILES                    | 1,1-Dichloroethene                       |                  | 0.0049t i U                 |                                    | 0.00494 t U                        | 0.00593 t U                           |                                    | 0.00466 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | I 0.006 1 < U                  | 0.005 1 < U                     | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < 0     |
| VOLATILES                    | 1,1-Dictricropropene                     |                  | 0.00491 t U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 1 U       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATILES                    | 1,2,3-Trichkorobenzene                   | 1                | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 1 U       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATILES                    | 1,2,3-Trichloropropane                   |                  | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00400 1 0       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATILES                    | 1,2,4-1 richlorobenzene                  |                  | 0.00491 1 0                 |                                    | 0.00494 \$ 0                       | 0.00593 1 0                           |                                    | 0.00466 1 14      |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATILES                    | 1.2.4-1 memyweizene                      |                  | 0.00491 1 1                 |                                    | 0.00494 ¥ U                        | 0.00593 1 U                           |                                    | 0.00466 1 U       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATILES                    | 1.2-Dibromoethane                        |                  | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 1 U       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATILES                    | 1,2-Dichlorobenzene                      |                  | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 1 U       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATILES                    | 1,2-Dichloroethane                       |                  | 0.00491 I U                 |                                    | 0.00494 i U                        | 0.00593 1 U                           |                                    | 0.00466 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.006 1 < U                    | 0.005 1 < 0                     | 0.005 i < U              | 0.005 1 < U         | 0.005 1 < U     |
| VOLATILES                    | 1.2-Dichloroethene                       |                  |                             |                                    |                                    |                                       |                                    |                   | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 1      | 0.005 1 < U                    | 1 0.005 1 < U                   | 0.005 1 < U              | 0.005 1 < U         | 0.005 t < U     |
| VOLATILES                    | 1.2-Dichloropropane                      |                  | 0.00491 1 1                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 1 U       | 0.005 t < U      | 0.005 1 < 0      | 0.005 1 < 0      | i 0.006 1 < €                  | 1 0.005 1 < 0                   | 0.005 1 < 0              | 0.005 1 < 0         | 0.005 1 < 0     |
| VOLATILES                    | 1,2-Dimethylbenzene (o-Xylene)           |                  | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 1 0       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VULATILES                    | 1,3,5-1 Amethyloenzene                   |                  | 0.00491 1 0                 |                                    | 0.00494 1 0                        | 0.00593 1 0                           |                                    | 0.00466 1 11      |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATIEES                    | 1.3-Dichleroprocane                      |                  | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00465 1 U       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATILES                    | 1,4-Dichlorobenzene                      | 1                | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 1 U       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATILES                    | 2,2-Dichloropropane                      |                  | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 1 U       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATILES                    | 2-Butanone                               |                  | 0.00982 1 U                 |                                    | 0.00988 1 U                        | 0.0119 1 U                            |                                    | 0.00932 1 U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U       | 1 0.12 1 < 0                   | I 0.05 1 < U                    | 0.05 1 < U               | 0.05 1 < U          | 0.05 1 < 0      |
| VOLATILES                    | 2-Chioroethyl vinyl ether                |                  | 0.00982 1 U                 |                                    | 0.00988 1 12                       | 0.0119 1 U                            |                                    | 0.00932 1 U       | 9.01 1 < U       | 0.01 1 < U       | 0.01 \$ < 0      | l                              | 0.01 ·1 < U                     | 0.01 1 < 0               | 0.01 t < 0          | 0.01 1 < 0      |
| VOLATILES                    | 2-Chlorololuene                          |                  | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 1 0                           |                                    | 0.00466 1 U       |                  | 0.05 1 / 13      | 0.05 1 4         | 1 200 1 200                    | 1 005 1 × H                     | 005 t < 1)               | 0.05 1 c il         | A05 1 < U       |
| VOLATILES                    | 2-Hexanone                               | ł                | 0.00982 1 U UJ              |                                    | 0.00968 1 U UJ                     | 0.0119 1 0 0.0                        |                                    | 0.00932 1 0 0.    |                  | 0.00 1 4 0       | 0.03 7 4 6       | 0.00 1 1 0                     |                                 | 0.00 1 - 0               |                     |                 |
| VOLATILES                    | 4-Calorololuene                          |                  | 0.00497 1 U                 |                                    | 0.00434 1 0                        | 0.00335 t U                           |                                    | 0.00932 1 U UJ    | ] 0.1 1 < V      | 0.1 1 < U        | 0.1 1 < U        | J 0.12 1 < U                   | 0.1 1 < 10                      | 0.1 1 < U                | 0.1 1 < U           | 0.1 1 < V       |
| VOLATILES                    | Benzene                                  |                  | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 t U                           |                                    | 0.00466 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | J 0.006 1 < U                  | 0.005 t < U                     | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U     |
| VOLATILES                    | Bromobenzene                             |                  | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 \$ U      |                  |                  |                  |                                |                                 | •                        |                     |                 |
| VOLATILES                    | Bromochloromethane                       |                  | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 t U       |                  |                  |                  |                                |                                 |                          | ···· ·              | · · · ·         |
| VOLATILES                    | Bromodichtoromethane                     |                  | 0.00491 t U                 |                                    | 0.00494 1 U                        | 0.00593 t U                           |                                    | 0.00466 t U       | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | U 0.006 1 < U                  | 0.005 1 < 0                     | 0.005 f < U              | 0.005 1 < U         | 0.005 1 < 0     |
| VOLATILES                    | Bromoform                                | -                | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 t U                           |                                    | 0.00466 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | / 0.006 1 < U                  | 0.005 1 < 0                     | 0.005 1 < 0              | 0.005 1 < 0         | 0.005 1 < 0     |
| VOLATILES                    | Bromornethane                            |                  | 0.00982 1 U                 |                                    | 0.00988 1 U                        | 0.0119 1 U                            |                                    | 0.00932 1 U       | 0.01 1 < 0       | 0.01 1 < 0       | 0.01 1 < 0       | ) 0.006 1 < U<br>t 0.006 1 < U | ) 0,03 8 < 0<br>I 0,045 t ∠ 30  | 0.01 1 < 0               | 0.01 F < U          | 0.005 1 < 32    |
| VOLATILES                    | Carbon disuttide                         |                  | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.000000 + 11                         |                                    | 0.00400 1 0       | 0.005 1 < 0      | 0.005 F < U      | 0.005 1 < 0      | F 0.006 1 < U                  | , 0.005 t < 0<br>I 0.005 t < 10 | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < 17    |
| VOLANLES                     | Carbon tetrachionde                      |                  | 0.00497 7 U                 |                                    | 0.00494 1 0                        | 0.00393 1 0                           |                                    | 0.00466 1 11      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | / 0.006 1 < U                  | ) 0.005 1 < U                   | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U     |
| VOLATILES                    | Chlomethane                              |                  | 0.00491 1 0<br>0.00982 1 Li |                                    | 0.00988 1 1                        | 0.0119 1 U                            |                                    | 0.00932 1 U       | 0.01 t < U       | 0.0t 1 < U       | 0.61 1 < 0       | 0.006 1 < U                    | 0.01 1 < U                      | 0.01 1 < U               | 0.01 1 < U          | 0.01 1 < U      |
| VOLATILES                    | Chloroform                               |                  | 0.00491 1 1                 |                                    | 0.00494 I U                        | 0.00593 t U                           |                                    | 0.00466 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | t 0.095 1 < U                  | l 0.005 t < U                   | 0.005 f < U              | 0.005 t < U         | 0.005 1 < Ü     |
| VOLATILES                    | Chloromethane                            |                  | 0.00982 1 U                 |                                    | 0.00988 1 U                        | 0.0119 t U                            |                                    | 0.00932 1 U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 0       | t 0.006 1 < U                  | I 0.01 1 < Ü                    | 0.01 1 < U               | 0.01:1 < U          | 0.01 1 < U      |
| VOLATILES                    | cis-1,2-Dichloroethene                   |                  | 0.00491 1 U                 |                                    | 0.00494 1 U                        | 0.00593 † U                           |                                    | 0.00466 i U       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATILES                    | cis-1,3-Dichloropropene                  |                  | 0.00491 t U                 |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 1 U       | 0.905 1 < U      | 0.005 1 < U      | 0.005 1 < 1      | 1 0.006 1 < U                  | i 0.095 1 < U                   | 0.005 1 < U              | 0.005 1 < U         | 0.005 t < U     |
| VOLATILES                    | Dibromochloromethane                     |                  | 0.00491 t U                 |                                    | 0.00494 t U                        | 0.00593 t U                           |                                    | 0.00466 1 U       | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 1 0.006 1 < U                  | I 0.005 1 < U                   | 0.005 1 < U              | ⊎.005 1 < U         | U.005 1 < U     |
| VOLATILES                    | Dibromomethane                           |                  | 0.00491 U                   |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 1 U       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATILES                    | Dichlorodifluoromethane                  |                  | 0.00982 1 U                 |                                    | 0.00988 1 U                        | 0.0119 1 U                            |                                    | - U.00932 1 U     | A 805 1 - 11     | 0.005 1 2 14     | 0.005 1          | i 0.005 t 2 if                 | 0.035 1 - 1                     | 0.005 1 2 1              | 0.005 1 < 1         | 0.005 1 < 11    |
| VOLATILES                    | t myloenzene<br>Kanachlarchu tarfinne    |                  | 0.00491 1 U                 |                                    | 0.00494 1 U<br>0.00494 1 U         | 0.00593 1 11                          |                                    | 0.00400 1 0       | 10.000 I < U     | 0.003 ( < 0      |                  | , 0.200 i K U                  | 2.000 I X U                     | 0.000 1 1 0              |                     |                 |
| VOLAHLES<br>VOLATIES         | nexactitorooutagiene<br>Isonropyibeezaee | l                | 0.00491 1 1                 |                                    | 0.00494 1 11                       | 0.00593 1 11                          |                                    | 0.00466 1 1       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATUES                     | m.o-Xvienes                              |                  | 0.00491 1 11                |                                    | 0.00494 1 U                        | 0.00593 1 U                           |                                    | 0.00466 1 U       |                  |                  |                  |                                |                                 |                          |                     |                 |
| VOLATILES                    | Methyl isobutyl ketone                   |                  | 0.00982 1 U                 |                                    | 0.00988 1 U                        | 0.0119 1 U                            |                                    | 0.00932 1 1       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < L       | y 0.06 1 < U                   | ) 0.05 1 < U                    | 0.05 1 < U               | 0.05 t < U          | 0.05 t < U      |
| VOLATILES                    | Methylene chloride                       |                  | 0.00491 1 U                 |                                    | 0,00494 1 U                        | 0.00593 t U                           |                                    | 0.00466 1 U       | .0.005 1 < U     | 0.005 t < U      | 0.005 1 < 1      | ) 0.006 1 < U                  | / 0.005 1 < U                   | 0.005 1 < U              | 0.095 1 < U         | 0.005 1 < U     |

Shaw Environmental, Inc.

 $-\left( \cdot,\cdot,\right)$ 

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-11 Concentrations of Chemicals in Soil Samples Associated with Sump 011

| [SUMP] = SUMP011 |                           |                  |                  |                  |                  |                     |                  |                  |                 |                    |                     |                  |                  |                    |                  |                  |
|------------------|---------------------------|------------------|------------------|------------------|------------------|---------------------|------------------|------------------|-----------------|--------------------|---------------------|------------------|------------------|--------------------|------------------|------------------|
| LOCATION _CODE   |                           | 35SUMP010-SB01   | 35SUMP010-SB01   | 35SUMP010-SB02   | 35SUMP010-SB02   | 35SUMP010-SB02      | 35SUMP011-SB01   | 35SUMP011-SB01   | 10-01 UH-S10-01 | 1.H-S10-01         | LH-S10-02           | LH-St0-02        | LH-\$11-01       | LH-S11-01          | LH-S11-02        | LH-\$11-02       |
| SAMPLE_NO        |                           | 35-SMP10-SB01-01 | 35-SMP10-SB01-02 | 35-SMPto-SB02-01 | 35-SMP10-SB02-02 | 35-SMP10-SB02-02-QC | 35-SMP11-SB01-01 | 35-SMP11-SB01-02 | LH-S10-01_1     | LH-S10-01_2        | LH-S#0-02_1         | 1H-S10-02_2      | UH-S11-01_1      | LH-S11-01_2        | LH-S11-02_1      | LH-S11-02_2      |
| SAMPLE_DATE      |                           | 9/11/2006        | 9/11/2006        | 9/11/2005        | 9/11/2006        | 9/11/2006           | 9/11/2006        | 9/11/2005        | 6/26/1993       | 6/26/1993          | 7/11/1993           | 6/26/1993        | 6/25/1993        | 6/25/1993          | 6/26/1993        | 7/10/1993        |
| DEPTH            |                           | 0.5 - 0.5 Ft     | 10 - 10 Ft       | 0.5 - 0.5 Ft     | 10 - 10 Ft       | 10 - 10 Fi          | 0.5 - 0.5 Ft     | 12 - 12 Ft       | 0.5 - 2.5 Ft    | 8.5 - 10.5 Ft      | 0 - 2 Ft            | 9 - 9:5 Fl       | 0 2 Ft           | 10 - 12 Ft         | 0.5 - 1.5 Ft     | 10 - 12 Ft       |
| SAMPLE_PURPOSE   |                           | REG              | REG              | REG              | REG              | FD                  | REG              | REG              | REG             | REG                | REG                 | REG              | REG              | REG                | REG              | REG              |
| Test Group       | Parameter (Units ≃ mg/kg) | Result DIL LQ VQ | Result Dil LO VQ | Result DIL LO VQ | Result DIL LO VO | Result Dill LO VO   | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO V | Q Result DIL LQ VC | ) Result Dill LQ VQ | Result DIL LQ VQ | Result DIL LQ VI | Q Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ |
| VOLATILES        | Naphthalene               | 1                | 0.00982 1 U      |                  | 0.00988 1 U      | 0.0119 1 U          |                  | 0.00932 1 U      |                 |                    |                     |                  |                  |                    |                  |                  |
| VOLATILES        | n-BUTYLBENZENE            |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.00593 1 U         |                  | 0.00466 1 U      |                 |                    |                     |                  |                  |                    |                  |                  |
| VOLATILES        | <b>p-PROPYLBENZENE</b>    |                  | 0.00491 i U      |                  | 0.00494 1 U      | 0.00593 t U         |                  | 0.00465 t U      |                 |                    |                     |                  |                  |                    |                  |                  |
| VOLATILES        | p-ISOPROPYLTOLUENE        |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.00593 1 U         |                  | 0.00456 1 U      |                 |                    |                     |                  |                  |                    |                  |                  |
| VOLATILES        | SEC-BUTYLBENZENE          |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.00593 t U         |                  | 0.00466 1 U      |                 |                    |                     |                  |                  |                    |                  |                  |
| VOLATILES        | Styrene                   |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.00593 1 U         |                  | 0.00466 1 U      | 0.005 t < l     | U 0⊴005 1 < 1J     | 0.005 1 < U         | 0.006 t < U      | 0.005 1 < 1      | J 0.005 1 < U      | 0.005 t < U      | 0.005 t < U      |
| VOLATILES        | led-BUTYLBENZENE          |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.00593 1 U         |                  | 0.00466 1 U      |                 |                    |                     |                  |                  |                    |                  |                  |
| VOLATILES        | Tetrachloroethene         |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.00593 t U         |                  | 0.00466 1 U      | 0.005 t < t     | U 0.005 t < U      | 0.005 1 < U         | 0.006 1 < U      | 0.005 1 < 0      | J 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Toluene                   |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.00593 t U         |                  | 0.00466 1 U      | 0.005 i < t     | U 0.005 t < U      | 0.005 1 < U         | 0.006 t < U      | 0.005 1 < U      | J 0.005 1 < U      | 0.005 \$ < U     | 0.005 1 < U      |
| VOLATILES        | trans-1,2-Dichloroethene  |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.00593 t U         |                  | 0.00466 1 U      |                 |                    |                     |                  |                  |                    |                  |                  |
| VOLATILES        | trans-1,3-Dichloropropene |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.00593 1 U         |                  | 0.00466 1 U      | 0.005 1 < t     | U 0.005 1 < U      | 0.005 1 < U         | 0.006 1 < U      | 0.005 1 < t      | jt 0.005 t < U     | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | Trichloroethene           |                  | 0.00491 1 U      |                  | 0.00494 1 U      | 0.00593 t U         |                  | 0.00466 1 U      | 0.005 1 < 1     | ឞ 0.0405 1 < U     | 0.005 4 < 0         | 0.006 1 < U      | 0.005 1 < U      | J 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | Trichlorofluoromethane    |                  | 0.00982 1 U      |                  | 0.00988 1 U      | 0.0119 1 U          |                  | 0.00932 1 U      |                 |                    |                     |                  |                  |                    |                  |                  |
| VOLATILES        | Varvi acetate             |                  | 0.00982 1 U      |                  | 0.00988 t U      | 0.0119 1 U          |                  | 0.00932 t U      | 0.05 1 < ł      | U 0.05 1 < U       | 0.05 1 < U          |                  | 0.05 t < b       | 1/ 0.05 1 < U      | 0.05 1 < U       | 0.05 t < U       |
| VOLATILES        | Vavi chloride             |                  | 0.00982 1 U      |                  | 0.00988 t U      | 0.0119 1 U          |                  | 0.00932 1 U      | 0.01 1 < 1      | U 0.01 1 < U       | 0.01 1 < U          | 0.006 t < U      | 0.01 t < t       | 9 0.01 t < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Xylenes, Total            |                  |                  |                  |                  |                     |                  |                  | 0.005 1 < l     | U 0.005 1 < U      | 0.005 t < U         | 0.006 t < U      | 0.005 1 < L      | U 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
|                  |                           |                  |                  |                  |                  |                     |                  |                  |                 |                    |                     |                  |                  |                    |                  |                  |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

| Deta Eva                       | luation Report   |   |                                    |                                    |                           |                          |                           |                          |                          |                            |  |                          |                          |                          |  |                          |                           | Shaw Envir                  | onmental, Inc.             |
|--------------------------------|--|---|------------------------------------|------------------------------------|---------------------------|--------------------------|---------------------------|--------------------------|--------------------------|----------------------------|--|--------------------------|--------------------------|--------------------------|--|--------------------------|---------------------------|-----------------------------|----------------------------|
| Chemica                        | 1 Concentrations in Soil Associated                      | swith LHAAP-35/36 Sumps                   |                                    |                                    |                           |                          |                           |                          | Table 3-                 | 12                         |  |                          |                          |                          |  |                          |                           | 000                         |                            |
| [SUMP] = SUMPO1                | 2  |   |                                    |                                    |                           |                          | Conce                     | ntrations of Che         | micals in Soil Sa        | mples Associate            | d with Sump 012  |                          | 111 012 00               | 105 2 01                 | 114 19/07 6  | HINDE C                  |                           |                             | 100940                     |
| LOCATION CODE                  |  | 35SUMP012-SB01<br>35-SMP12-SB01-02        | 35SUMP013-SB01<br>35-SMP13-SB01-01 | 35SUMP013-SB01<br>35-SMP13-SB01-02 | LH-S12-01<br>1H-S12-01 1  | 1H-S12-01 2              | LH-S12-02                 | LH-S12-02 2              | EH-S13-01 QC             | LH-513-01 1                | 2H-S13-01 2  | LH-S13-02 1              | LH-S13-02 2              | LHS-2-01                 | LH-WRS-6_1   | LH-WRS-6_2               | LH-WRS-6_3                | WRS05-SB01-01               | WRS06-SB01-02              |
| AMPLE_NO                       |  | 9/12/2005                                 | 9/12/2006                          | 9/12/2006                          | 7/11/1993                 | 7/11/1993                | 7/11/1993                 | 7/11/1993                | 7/10/1993                | 7/10/1993                  | 7/10/1993  | 7/10/1993                | 7/10/1993                | 1/9/1995                 | 7/10/1993  | 7/10/1993                | 7/24/1993                 | 9/25/2006                   | 9/25/2006                  |
| DEPTH                          |  | 11 - 11 FI                                | _55A                               | 10 - 10 Pt                         | 0-2F1                     | 9-11Fl                   | 0-2Ft                     | 9-11 Ft                  | 0-2Ft                    | 0-2Ft                      | 8 - 10 Ft<br>PEC   | 0-2f1<br>860             | 8 - 10 Ft<br>REG         | 05Ft<br>866              | 0-2F1<br>REG   | 2.5 - 4.5 Ft<br>BEG      | 18 - 20 Ft<br>BEG         | _55 Fi<br>8FG               | 4_5-4_5 Ft<br>BEG          |
| SAMPLE_PURPOS<br>Test Group    | Parameter (Units = mo/kg)                                | Result DIL LO VO                          | Result DtL LO VO                   | Result DIL EQ VO                   | Result DIE LO VO Re       | ssuli DIL LO VO H        | Result Difi LQ VQ         | Result DiL LO VO         | Result DIL LO VO         | Result DIL LO VO           | Result DIL LO VQ   | Result DIL LO VO         | Result DIL LO VO         | Result DIL LO VO         | Result DtL LQ VQ   | Result DIL LO VO         | Result DIL LO VO          | Result DHL LO VO            | Result DIL LO VO           |
| EXPLOSIVES                     | 1,3,5-Trintrobenzene                                     |   |                                    |                                    |                           |                          |                           |                          |                          |                            |  |                          |                          | 0.22 1 < U               |  |                          |                           |                             |                            |
| EXPLOSIVES<br>EXPLOSIVES       | 1,3-Dinitrobenzene<br>2.4.6-Teinitrotoluene              |   |                                    |                                    |                           |                          |                           |                          |                          |                            |  |                          |                          | 0.22 1 < 17              |  |                          |                           |                             |                            |
| EXPLOSIVES                     | 2,4 Dinitrotohiene                                       |   |                                    |                                    | 0.33 1 < U                | 0.33 1 < 19              | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 t < U   | 0.33 1 < U               | 0.33 t < U               | 0.22 1 < U               | 0.33 1 < U   | 0.33 1 < U               |                           |                             |                            |
| EXPLOSIVES                     | 2,6-Dinitrotokiene                                       |   |                                    |                                    | 0.33 1 < U                | 0.33 1 < 13              | 0.33 1 < 10               | 0.33 1 < U               | 0,33 1 < U               | 0.33 1 < U                 | 0.33 1 < 0   | 0.33 t < U               | 0.33 7 < 0               | 0.23 1 < U<br>0.45 1 < U | 0.33 1 < 0   | 0.33 1 < 0               |                           |                             |                            |
| EXPLOSIVES                     | 4-Americ-2,6-Ommiciologiene<br>HMX                       |   |                                    |                                    |                           |                          |                           |                          |                          |                            |  |                          |                          | 21 < U                   |  |                          |                           |                             |                            |
| EXPLOSIVES                     | m-Nitrololuene   | 1   |                                    |                                    |                           |                          |                           |                          |                          |                            |  |                          |                          | 0.9 1 < U                |  |                          |                           |                             |                            |
| EXPLOSIVES                     | Nitrobenzene   | 1   |                                    |                                    |                           |                          |                           |                          |                          |                            |  |                          |                          | 0.9 f < U                |  |                          |                           |                             |                            |
| EXPLOSIVES                     | p-Nitroluene   |   |                                    |                                    |                           |                          |                           |                          |                          |                            |  |                          |                          | 2.7 1 < U                |  |                          |                           |                             |                            |
| EXPLOSIVES                     | RDX  |   |                                    |                                    |                           |                          |                           |                          |                          |                            |  | -                        |                          | 0.97 1 < U<br>0.67 1 < U |  |                          |                           |                             |                            |
| METALS                         | Aluminum   |   |                                    |                                    | 8080 1                    | 19000 t                  | 20800 1                   | 9800 1                   | 6940 1                   | 8010 t                     | 9560 1   | 8260 1                   | 19600 1                  | 12700 1                  | 7050 1   | 7840 1                   | 6880 1 < U                |                             |                            |
| METALS                         | Antimony   |   |                                    |                                    | 31 < 0                    | 31 < U                   | 3 1 < U                   | 3 1 < U                  | 31 < U                   | 31 < U                     | 31 < U   | 31 < ⊎                   | 31 < U                   | 13.7 1 < 1U              | 31 < U   | 3 7 < U                  | 31 < U                    |                             |                            |
| METALS<br>METALS               | Arsenic<br>Radum   | Į   |                                    |                                    | 1.4 1<br>173 1            | 236 1                    | 4.8 1                     | 47,4 1                   | 74.6 1                   | 68.6 1                     | 171 1  | 90.4 1                   | 99.4 1                   | 1270 1                   | 81.2 1   | 56.7 1                   | 53.7 1                    |                             |                            |
| METALS                         | Cadmium  |   |                                    |                                    | 11<1                      | 11<                      | 11 < U                    | 11<0                     | t t < U                  | 1 t < U                    | 11<1   | 11 < U                   | 1 t < U                  | 1.4 1 < U                | 1 1 < U  | 11 < 1                   | 11 < U                    |                             | ·                          |
| METALS                         | Calcium  |   |                                    |                                    | 490 1<br>83 1             | 1660 1                   | 1810 1<br>34. 1           | 1520 1                   | 897 1<br>14.5 1          | 982 1<br>17.4 1            | 1760 1   | 1250 1                   | 1030 1                   | 1650/1<br>37.8/1 J       | 19.7   | 562 1<br>17.2 1          | 13.8                      |                             |                            |
| METALS                         | Cobalt   |   |                                    |                                    | 3.4 1                     | 7.9 1                    | 9.5 1                     | 37.9 1                   | 6.4 1                    | 6.6 1                      | 27.9 1   | 10.8 1                   | 9.9 1                    | 9.8 1                    | 9.1 1  | 3.8 1                    | 6.6 1                     |                             |                            |
| METALS                         | Copper   |   |                                    |                                    | 21 1                      | 7.B 1                    | 2.5 1                     | 7 1                      | 1,4 1                    | 2.7 1                      | 9.4 1<br>19000 1   | 26 1                     | 3.6 1                    | 15.3 1                   | 2.5 1<br>25300 1   | 2.5 1                    | 9.3 1<br>18200 1 c 11     |                             |                            |
| METALS                         | tron<br>Lead   | 1   |                                    |                                    | 5.4 1                     | 7.2 1                    | 11.9 1                    | 10.7 1                   | 10 1                     | 16 1                       | 12.1 1   | 13.7 1                   | 8.1 1                    | 24.4 1                   | 14.3 1   | 6.7 1                    | 9,1 1                     |                             |                            |
| METALS                         | Magnesium  |   |                                    |                                    | 435 1                     | 2800 1                   | 1260 1                    | 1990 1                   | 343 1                    | 451 1                      | 1920 1   | 505 1                    | 1080 1                   | 818 1                    | 329 1  | 380 t                    | 2230 1                    |                             |                            |
| METALS<br>METALS               | Manganese<br>Mercury                                     |   |                                    |                                    | 54.1 1<br>0.1 1 < U       | 145 1<br>0.1 1 < 13      | 255 1<br>0,1 1 < U        | 228 1<br>0.1:1 < 10      | 28/1<br>0.5 1 < U        | 0.1 1 < U                  | 0.1 1 < U  | 431 1<br>0.1 1 < 10      | /6.7 I<br>0.1 1 < U      | 0.18 1                   | -382 :<br>0.1 1 < 19   | 33.5 1<br>0.1 1 < U      | 35.∠2 1<br>0.1 1 < U      |                             |                            |
| METALS                         | Potassium  |   |                                    |                                    | 538 1                     | 1050 1                   | 988 1                     | 550 1                    | 347 1                    | 354 1                      | 654 1  | 413 1                    | 479 1                    | 619 t                    | 249 1  | 262 1                    | 613 1                     |                             |                            |
| METALS                         | Selenium   |   |                                    |                                    | 1 1 < U                   | 11 < U                   | 11 < 1                    | 1 I < U                  | 11 < U<br>11 < U         | 1 1 < U                    | 11 <u< th=""><th>11&lt;0</th><th>11&lt;0</th><th>0.58 1 J<br/>1.4 1 &lt; U</th><th>11<u< th=""><th>11&lt;0</th><th>11 &lt; V<br/>11 &lt; V</th><th></th><th></th></u<></th></u<> | 11<0                     | 11<0                     | 0.58 1 J<br>1.4 1 < U    | 11 <u< th=""><th>11&lt;0</th><th>11 &lt; V<br/>11 &lt; V</th><th></th><th></th></u<> | 11<0                     | 11 < V<br>11 < V          |                             |                            |
| METALS                         | Stronlium  |   |                                    |                                    | 159 1                     | 39.3 1                   | 24 1                      | 29.6 1                   | 6.3 t                    | 8.6 1                      | 32.3 1   | 10 1                     | 16.7 1                   | 320 1                    | 8.3 1  | 5.1 1                    | 29 1                      |                             |                            |
| METALS                         | Thalium  | ļ   |                                    |                                    | 13 1 1                    | so t t                   | 216 1                     | 49.9 1                   | 15.9 1                   | 335 \$                     | 50.9 1   | 18.2 1                   | 28.1 1                   | 68.4 1 < U<br>222 1      | 213 1  | 12.2 1                   | 42 1                      |                             |                            |
| RANGE_ORGANIC                  | CS Carbon Range C12-C28                                  | 59.4 1 U                                  | 62.8 1 U                           | 60.8 1 U                           | 10.1                      | 30.1                     | 01.0                      | -5.5                     | 104 V                    |                            |  |                          |                          | /                        |  |                          |                           | 36.2 I J B                  | 40.8 1 J B                 |
| RANGE_ORGANIC                  | CS Carbon Range C28-C35                                  | 59.4 1 U                                  | 52.8 1 U                           | 60.6 1 U                           |                           |                          |                           |                          |                          |                            |  |                          |                          |                          |  |                          |                           | 56.2 1 U U<br>56.2 1 U U    | 38.4 1 J J<br>61.4 1 11 11 |
| PANGE_ORGANIC                  | CS Carbon Range C6-C12<br>1.2.4-Trichkorobenzene         | 59.4 1 0                                  | 62.8 1 U                           | 60.8 1 0                           | 0.33 t < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 ł < U               | 0.33 t < U               | 0.33 1 < U                 | 0.33 1 < U   | 0.33 1 < 1J              | 0.33 f < U               | 0.56 1 < U               | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene                                      |   |                                    |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 t < U                | 0.33 1 < U               | 0.33 1 < U               | .0.33 t < U                | 0.33 t < U   | 0.33 1 < U               | 0.33 1 < U               | 0.56 1 < U               | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U                | 1.62 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | 1,3-Dichlorobenzene<br>1,4 Dichlorobenzene               |   |                                    |                                    | 0.33 1 < U                | 0.33 1 < U<br>0.33 1 < U | 0.33 t < U<br>0.33 t < 11 | 0.33 1 < 1               | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U | 0.56 1 < U               | 0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 0                | 1.82 10 0 U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenol                                    |   |                                    |                                    | 1.55 1 < U                | 1.65 1 < U               | 1.65 t < U                | 1.55 1 < U               | 1.65 1 < U               | 1.65 t < U                 | 1.65 1 < U   | 1.65 1 < U               | 1.65 1 < U               | 28 1 < U                 | 1.65 t < U   | 1.65 1 < U               | 1.65 1 < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol                                    |   |                                    |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 t < 10              | 0.33 t < U               | 0.33 1 < U                 | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.56 1 < U               | 0.33 t < U<br>0.33 t < U   | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>033 1 ∈ U   | 1.82 10 U U<br>1.82 10 U U  | 0.205 1 U U<br>0.205 1 U U |
| SEMIVOLATILES                  | 2,4-Dichlorophenol<br>2,4-Dimethylohenol                 |   |                                    |                                    | 0.33 t < U                | 0.33 t < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 1                 | 0.33 1 < 0   | 0.33 1 < 0               | 0.33 1 < 0               | 0.56 1 < 0               | 0.33 t < U   | 0.33 1 < U               | 0.33 1 < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | 2,4-Diaitrophenol  |   |                                    |                                    | 1.65 1 < 0                | 1.65 1 < U               | 1.65 1 < U                | 1.65 t < U               | 1.65 1 < LJ              | 1.65 1 < U                 | 1.65 1 < 0   | 1.65 1 < U               | 1.65 1 < ⊍               | 28 1 < U                 | 1.55 1 < U   | t.65 1 ≺ U               | 1.55 1 < U                | 9.12 10 U U                 | 1.03 1 U U<br>0.205 1 U H  |
| SEMIVOLATILES                  | 2,4-Dinitrololuene<br>2,6-Dinitrololuene                 |   |                                    |                                    |                           |                          |                           |                          |                          |                            |  |                          |                          | 0.55 1 < U               |  |                          | 0.33 1 < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | 2-Chioronaphthaiene                                      |   |                                    |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 년                 | 0.33 1 < U   | 0.33 t < U               | 0.33 1 < U               | 0.56 f < U               | 0.33 1 < U   | 0.33 1 < 1               | 0.33 1 < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES<br>SEMIVOLATILES | 2-Chlorophenol<br>2-Methylnachthaiene                    |   |                                    |                                    | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 0               | 0.55 1 < U               | 0.33 1 < 0<br>0.33 1 < 10  | 0.33 t < U               | 0.33 1 < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | 2-Methylphenol   |   |                                    |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 T < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.56 1 < U               | 0.33 1 < 1   | 0.33 1 < U               | 0.33 1 < U                | 1.82 10 U                   | 0.205 1 U U                |
| SEMIVOLATILES                  | 2-Nitroaniine  |   |                                    |                                    | 1.65 1 < U<br>0.33 1 < 14 | 1.65 1 < U<br>0.33 1 ∠ H | 1.65 1 < U                | 1.55 1 < U<br>0.33 1 < U | 1.65 1 ≺ U<br>1.33 1 < U | 1.65 1 < U<br>0.39 1 < H   | 1.65 1 < U<br>0.33 1 < U   | 1.65 1 < U<br>0.33 1 < U | 1.55 1 < U<br>0.33 1 < U | 2.8 1 < U<br>0.56 1 < U  | 1.65 1 < U<br>0.33 1 < U   | 1.65 1 < U<br>0.33 1 < U | 1.65 1 < 0<br>0.33 1 < 0  | 9.12 10 0 0<br>1.82 10 U U  | 1.03 1 0 0<br>0.205 1 U U  |
| SEMIVOLATILES                  | 3,3-Dichtorobenzidine                                    |   |                                    |                                    | 0.65 1 < U                | 0.65 1 < U               | 0.65 t < U                | 0.55 1 < U               | 0.65 1 < U               | 0.65 1 < U                 | 0.65 1 < V   | 0.65 1 < U               | 0.65 t < U               | 1.1 1 < U                | 0.65 1 < ∜   | 0.65 1 < U               | 0.65 1 < U                | 3.65 10 U U                 | 0.41 U U                   |
| SEMIVOLATILES                  | 3-Nitroanline  |   |                                    |                                    | 1.65 1 < U                | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < 1               | 1.65 1 < U               | 1.65 1 < U<br>1.65 1 ∠ U   | 1.65 1 < U   | 1.65 1 < U               | 1.65 1 < U<br>1.65 1 < U | 28 1 < U<br>28 1 < U     | 1.65 1 < U<br>1.65 1 < U   | 1.65 1 < U<br>1.65 1 < U | 1.65 1 < U<br>1.65 1 < U  | 9.12 10 U U<br>9.12 10 U U  | 1.03 1 U U<br>1.03 1 U U   |
| SEMIVOLATILES                  | 4,6-biomophenyl phenyl ether                             |   |                                    | •                                  | 0.33 1 < U                | 0.33 1 < U               | 0.33 t < U                | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 11                | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.55 1 < U               | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol                                  |   |                                    |                                    | 0.65 1 < U                | 0.65 1 < U               | 0.55 1 < U                | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U                 | 0.65 1 < U   | 0.65 1 < U               | 0.65 t < U               | 0.56 1 < U               | 0.65 1 < U<br>0.65 1 < U   | 0.65 1 < U               | 0.65 1 < U<br>0.65 1 < U  | 1.82 10 U U<br>1.82 10 U U  | 0.205 1 U U<br>0.205 1 U U |
| SEMIVOLATILES                  | 4-Chloroan/ine<br>4-Chloropheryt phenyi etber            | 1   |                                    |                                    | 0.65 J < 0<br>0.33 1 < U  | 0.33 1 < U               | 0.33 1 < 0                | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < 0   | 0.33 1 < U               | 0.33 1 < U               | 0.56 1 < 0               | 0.33 t < U   | 0.33 1 < 1               | 0.33 1 < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | 4-Methylphenol   | }   |                                    |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U   | 0.33 t < U               | 0.33 1 < 10              | 0.56 t < U               | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES<br>SEMIVOLATILES | 4-Nitrophenol  | }   |                                    |                                    | 1.65 1 < U<br>1.65 1 < U  | ו כמו < U<br>1.65 1 < U  | 1.65 1 < U                | 1.0⊃ I < U<br>1.65 1 < U | 1.65 1 < U               | י.זס⊃ו < U<br>1.65 1 < U   | 1.65 t < U   |                          | 1.65 t < 1J              | 2.8 1 < U                | 1.65 1 < U   | 1.65 1 < U               | 1.65 1 < U                | 9.12 10 U U                 | 1.03 1 U U                 |
| SEMIVOLATILES                  | Acenaphthene   | 1   |                                    |                                    | 0.33 1 < Ŭ                | 0.33 t < Ư               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.56 1 < U               | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | Acesaphthylene   | ł   |                                    |                                    | 9.33 1 < U<br>9.33 1 < U  | 0.33 1 < U<br>0.33 1 < B | 0.33 1 < U<br>0.33 1 < ₽  | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U | 0.33 t < 1)<br>0.33 t < 1) | 0.33 t < U<br>0.33 t < U   | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U | 0.56 1 < U<br>0.56 1 < U | 0.33 1 < 0<br>0.33 1 < 0   | 0.33 1 < U<br>0.33 1 < U | 0.aa i < U<br>0.33 t < U  | 1.82 10 U U<br>1.82 10 U U  | 0.205 1 U U<br>0.205 1 U U |
| SEMIVOLATILES                  | Benzo(a)anthracene                                       | 1   |                                    |                                    | 0.33 1 < U                | 0.33 1 < 1/              | 0.33 1 < U                | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.56 1 < U               | 0.33 1 < U   | 0.33 1 < U               | 0.33 t < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | Benzo(a)pyrene   | }   |                                    |                                    | 0.33 1 < U                | 0.33 1 ≺ U .             | 0.33 1 < U                | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 번<br>0.33 1 - 바 | 0.33 t < U<br>0.33 t < U   | 0.33 1 < U<br>0.13 t < U   | 0.33 1 < U<br>0.33 1 < ₽ | 0.33 t < U               | 0.077 1 J                | 0.33 t < U<br>0.33 t < U   | 0.33 1 < U<br>0.33 1 ≺ U | 0.33 t < U<br>0.001 t < U | 1.82 10 U U<br>1.82 10 U ม  | 0.205 1 U U<br>0.205 1 U U |
| SEMIVOLATILES                  | penzo(o)nuoraninene<br>Benzo(ghi)penylene                | 1   |                                    |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 17                | 0.33 t < U   | 0.33 1 < U               | 0.33 1 < U               | 0.56 1 < U               | 0.33 t < U   | 0.33 1 < U               | 0.33 1 < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | Benzo(k)Iluoranthene                                     | 1   |                                    |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U   | 0.33 1 < U               | 0.33 F < U               | 0.56 1 < U               | 0.33 1 < U   | 0.33 1 < U               | 0.001 t < U               | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | Benzoic Acid<br>Benzoit Alcohol                          | 1   |                                    |                                    | 1.65 1 < U<br>0.65 1 < U  | 1.65 1 < U<br>0.65 1 < U | 1.65 1 < U<br>0.65 1 < U  | 1.65 1 < U<br>0.65 1 < U | 1.65 1 < U<br>0.65 1 < U | 1.65 1 < U<br>0.65 1 < U   | 1.65 1 < U<br>0.65 † < U   | 1.55 1 < U<br>0.65 1 < U | 1.65 1 < ป<br>0.65 t < ป | ⊻≊ i < U<br>0.56 i < U   | 1.55 1 < U<br>0.65 1 < U   | +∋s i < U<br>0.65 1 < U  | 0.65 t < U                | 3.12 10 U UJ<br>1.82 10 U U | 0.205 1 0 0                |
| SEMIVOLATILES                  | - bis(2-Chloroethoxy)methane                             | 1   |                                    |                                    | 0.33 t < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U                 | 0.33 1 < U   | 0.33 1 < U               | 0.33 t < U               | 0.56 1 < U               | 0.33 1 < U   | 0.33 1 < U               | 0.33 t < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether                                  | ]   |                                    |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U<br>0.33 1 - U   | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.56 1 < U<br>0.56 1 - D | 0.33 1 < U<br>0.33 1 ∠ U   | 0.33 1 < U<br>0.33 1 ≠ U | 0.33 1 < U<br>0.33 1 ≠ U  | 1.82 10 U U<br>1.82 10 U II | 0.205 1 U U<br>0.205 1 U U |
| MIVOLATILES                    | us(2-Unioroisopropyi)etter<br>bis(2-Ethylhexyi)ohthalate | 1   |                                    |                                    | 0.33 T < U                | 0.33 1 < U               | 0.33 t < U                | 0.33 1 < U               | 0.349 1                  | 0.33 t < U                 | 0.33 1 < U   | 0.33 1 < 1               | 0.33 î < U               | 0.11 I J                 | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U                | 1.82 10 U U                 | 0.205 T U U                |
| SEMIVOLATILES                  | Bulyl benzyl phthalale                                   | ]   |                                    |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < 10               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.56 1 < U               | 0.33 1 < U   | 0.33 t < U               | 0.33 t < U                | 1.82 10 U U                 | 0.205 1 U U                |
| SEMIVOLATILES                  | Chrysene<br>Riberzola hisothracont                       | 1   |                                    |                                    | -0.33 1 < U<br>0.33 1 ∈ U | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < 11 | 0,33 1 < U<br>0,33 1 < U | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U | 0.56 1 < U<br>0.56 1 < U | u.≾a t < .U<br>0.33 t < U  | u…usi < U<br>10.33 t < U | ປ.33 1 < ປ<br>0.33 1 < ປ  | 1.62 10 U U                 | 0.205 1 U U                |
| ogun yournilleð                | and any any and any and                                  | L. C. |                                    |                                    |                           | ···· · · •               |                           |                          | · · · · -                |                            |  | · · · · -                |                          |                          |  |                          |                           |                             |                            |

Page 1 of 3

|   | Chemica  | I Concentrations in Soil Associated  | t with LHAAP-35/36 Sump   | s   |  |  |  | Conc   | entrations of Ch   | Table 3<br>Iemicals in Soil S  | -12<br>amples Associat   | ed with Sump 01   | 12   |  |   |   |   |   | 00  | 06594  |
|---|--|--|---|---|--|--|--|--|--|--|--|---|--|--|---|---|---|---|---|--|
|   | LOCATION _CODE   |  | 35SUMP012-SB01<br>35-SMP12-SB01-02<br>9/12/2006   | 355UMP013-SB01<br>35-SMP13-SB01-01<br>9/12/2006 | 355UMP013-S801<br>35-SMP13-S801-02<br>9/12/2006  | LH-S12-01<br>LH-S12-01_1<br>7/11/1993  | UH-S12-01<br>LH-S12-01_2<br>7/11/1993  | 1H-S12-02<br>1H-S12-02_1<br>7/11/1993  | LH-S12-02<br>LH-S12-02_2<br>7/11/1993  | LH-S13-01<br>LH-S13-01 QC<br>7/10/1993   | LH-S13-01<br>LH-S13-01_1<br>7/10/1993  | EH-S13-01<br>EH-S13-01_2<br>7/10/1993   | LH-S13-02<br>LH-S13-02_1<br>7/10/1993  | LH-S13-02<br>LH-S13-02_2<br>7/10/1993  | LHS-2-01<br>LHS-2-01<br>1/9/1995  | LH-WRS-6<br>LH-WRS-6_1<br>7/10/1993   | LH-WRS-6<br>LH-WRS-6_2<br>7/10/1993   | LH-WRS-6<br>LH-WRS-6_3<br>7/24/1993   | WRS06-SB01<br>WRS06-SB01-01<br>-9/25/2006   | WRS06-SB01<br>WRS06-SB01-02<br>9/25/2006   |
|   | SAMPLE_PURPOS  | SE   | 11 - 11 Ft<br>REG   | _55 Ft<br>REG                                   | 10 - 10 Ft<br>REG  | 0-2Ft<br>REG   | 9 - 11 F1<br>REG   | 0-2Ft<br>REG   | 9 - 11 F1<br>REG   | 0-2H<br>FD   | 0-2H<br>REG  | B-10 H<br>REG   | 0-2H<br>REG  | REG  | REG   | REG   | REG   | REG   | _55ri<br>REG  | 4_5-4_5FI<br>REG   |
| • | SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES | Parameter (Units = mg/kg)<br>Dibenzoluran<br>Diethyl phthalate<br>Dimethyl phthalate<br>di-n-Octyl phthalate<br>Fluoranthene<br>Huoranthene<br>Hexachlorobenzene<br>Hexachlorobenzene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Hexachlorobtadiene<br>Naphthalene<br>Närbbenzene<br>n-Närosodiphenyfamine<br>Peritachtorophenol<br>Phenanthrene | Result Dit LO VG  | Resuli OIL LO VO                                | Result DL LO VO  | Result         DIL         LO         VO           0.33         1         <         U           0.33         1          U           0.33         1          U           0.33         1         U         U           0.33         1         U <td< th=""><th>Result         DIL         LO         VO           0.33         1         &lt;         U           0.33         1          U           0.33         1          U           0.33         1         U         <td< th=""><th>Result         DIL         EQ         VO           0.33         1         &lt;         U           0.33         1          U           0.33         1         U         <t< th=""><th>Passit         DIL         UI         VO           0.33         1         &lt;         U           0.33         1                   U</th><th><math display="block">\begin{array}{c c c c c c c c c c c c c c c c c c c </math></th><th>Besult         OIL         LO         VO           0.33         1         &lt;         U           0.33         1          U           0.33         1         U         <t< th=""><th>Result         DEL         102         VQ           0.33         1         &lt;         U           0.33         1                   U           0.33         1         U</th><th>Hesut         DBL         LO         VO           0.33         1         &lt;         U           0.33         1         U         <t< th=""><th>Pasult         DH.         LO         VO           0.33         1         &lt;         U           0.33         1          <t< th=""><th>Result         D1.         LO         VO           0.56         1         &lt;         U           0.56         2.8          U           0.56         1         &lt;</th><th>Result         Dil.         LO         VO           0.33         1         &lt;         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U</th><th>Result         DIL         LO         VO           0.33         1         &lt;         U           0.33         1          U           0.33         1          U           0.33         1         U         U           0.33         1         U         U           0.33         1         U         <td< th=""><th>Present         DIL         LQ         VO           0.33         1         &lt;         U           0.33         1         U</th><th>Regult         DH         LQ         VO           1,82         10         U         U           1,82         10         &lt;</th><th>Hesult         DIL         10         VI           0.205         1         U         U           0.205         1</th></td<></th></t<></th></t<></th></t<></th></t<></th></td<></th></td<> | Result         DIL         LO         VO           0.33         1         <         U           0.33         1          U           0.33         1          U           0.33         1         U         U           0.33         1         U <td< th=""><th>Result         DIL         EQ         VO           0.33         1         &lt;         U           0.33         1          U           0.33         1         U         <t< th=""><th>Passit         DIL         UI         VO           0.33         1         &lt;         U           0.33         1                   U</th><th><math display="block">\begin{array}{c c c c c c c c c c c c c c c c c c c </math></th><th>Besult         OIL         LO         VO           0.33         1         &lt;         U           0.33         1          U           0.33         1         U         <t< th=""><th>Result         DEL         102         VQ           0.33         1         &lt;         U           0.33         1                   U           0.33         1         U</th><th>Hesut         DBL         LO         VO           0.33         1         &lt;         U           0.33         1         U         <t< th=""><th>Pasult         DH.         LO         VO           0.33         1         &lt;         U           0.33         1          <t< th=""><th>Result         D1.         LO         VO           0.56         1         &lt;         U           0.56         2.8          U           0.56         1         &lt;</th><th>Result         Dil.         LO         VO           0.33         1         &lt;         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U</th><th>Result         DIL         LO         VO           0.33         1         &lt;         U           0.33         1          U           0.33         1          U           0.33         1         U         U           0.33         1         U         U           0.33         1         U         <td< th=""><th>Present         DIL         LQ         VO           0.33         1         &lt;         U           0.33         1         U</th><th>Regult         DH         LQ         VO           1,82         10         U         U           1,82         10         &lt;</th><th>Hesult         DIL         10         VI           0.205         1         U         U           0.205         1</th></td<></th></t<></th></t<></th></t<></th></t<></th></td<> | Result         DIL         EQ         VO           0.33         1         <         U           0.33         1          U           0.33         1         U         U           0.33         1         U <t< th=""><th>Passit         DIL         UI         VO           0.33         1         &lt;         U           0.33         1                   U</th><th><math display="block">\begin{array}{c c c c c c c c c c c c c c c c c c c </math></th><th>Besult         OIL         LO         VO           0.33         1         &lt;         U           0.33         1          U           0.33         1         U         <t< th=""><th>Result         DEL         102         VQ           0.33         1         &lt;         U           0.33         1                   U           0.33         1         U</th><th>Hesut         DBL         LO         VO           0.33         1         &lt;         U           0.33         1         U         <t< th=""><th>Pasult         DH.         LO         VO           0.33         1         &lt;         U           0.33         1          <t< th=""><th>Result         D1.         LO         VO           0.56         1         &lt;         U           0.56         2.8          U           0.56         1         &lt;</th><th>Result         Dil.         LO         VO           0.33         1         &lt;         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U</th><th>Result         DIL         LO         VO           0.33         1         &lt;         U           0.33         1          U           0.33         1          U           0.33         1         U         U           0.33         1         U         U           0.33         1         U         <td< th=""><th>Present         DIL         LQ         VO           0.33         1         &lt;         U           0.33         1         U</th><th>Regult         DH         LQ         VO           1,82         10         U         U           1,82         10         &lt;</th><th>Hesult         DIL         10         VI           0.205         1         U         U           0.205         1</th></td<></th></t<></th></t<></th></t<></th></t<> | Passit         DIL         UI         VO           0.33         1         <         U           0.33         1                   U | $\begin{array}{c c c c c c c c c c c c c c c c c c c $   | Besult         OIL         LO         VO           0.33         1         <         U           0.33         1          U           0.33         1         U         U           0.33         1         U <t< th=""><th>Result         DEL         102         VQ           0.33         1         &lt;         U           0.33         1                   U           0.33         1         U</th><th>Hesut         DBL         LO         VO           0.33         1         &lt;         U           0.33         1         U         <t< th=""><th>Pasult         DH.         LO         VO           0.33         1         &lt;         U           0.33         1          <t< th=""><th>Result         D1.         LO         VO           0.56         1         &lt;         U           0.56         2.8          U           0.56         1         &lt;</th><th>Result         Dil.         LO         VO           0.33         1         &lt;         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U</th><th>Result         DIL         LO         VO           0.33         1         &lt;         U           0.33         1          U           0.33         1          U           0.33         1         U         U           0.33         1         U         U           0.33         1         U         <td< th=""><th>Present         DIL         LQ         VO           0.33         1         &lt;         U           0.33         1         U</th><th>Regult         DH         LQ         VO           1,82         10         U         U           1,82         10         &lt;</th><th>Hesult         DIL         10         VI           0.205         1         U         U           0.205         1</th></td<></th></t<></th></t<></th></t<> | Result         DEL         102         VQ           0.33         1         <         U           0.33         1                   U           0.33         1         U | Hesut         DBL         LO         VO           0.33         1         <         U           0.33         1         U <t< th=""><th>Pasult         DH.         LO         VO           0.33         1         &lt;         U           0.33         1          <t< th=""><th>Result         D1.         LO         VO           0.56         1         &lt;         U           0.56         2.8          U           0.56         1         &lt;</th><th>Result         Dil.         LO         VO           0.33         1         &lt;         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U</th><th>Result         DIL         LO         VO           0.33         1         &lt;         U           0.33         1          U           0.33         1          U           0.33         1         U         U           0.33         1         U         U           0.33         1         U         <td< th=""><th>Present         DIL         LQ         VO           0.33         1         &lt;         U           0.33         1         U</th><th>Regult         DH         LQ         VO           1,82         10         U         U           1,82         10         &lt;</th><th>Hesult         DIL         10         VI           0.205         1         U         U           0.205         1</th></td<></th></t<></th></t<> | Pasult         DH.         LO         VO           0.33         1         <         U           0.33         1 <t< th=""><th>Result         D1.         LO         VO           0.56         1         &lt;         U           0.56         2.8          U           0.56         1         &lt;</th><th>Result         Dil.         LO         VO           0.33         1         &lt;         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U</th><th>Result         DIL         LO         VO           0.33         1         &lt;         U           0.33         1          U           0.33         1          U           0.33         1         U         U           0.33         1         U         U           0.33         1         U         <td< th=""><th>Present         DIL         LQ         VO           0.33         1         &lt;         U           0.33         1         U</th><th>Regult         DH         LQ         VO           1,82         10         U         U           1,82         10         &lt;</th><th>Hesult         DIL         10         VI           0.205         1         U         U           0.205         1</th></td<></th></t<> | Result         D1.         LO         VO           0.56         1         <         U           0.56         2.8          U           0.56         1         < | Result         Dil.         LO         VO           0.33         1         <         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U         U           0.33         1         U | Result         DIL         LO         VO           0.33         1         <         U           0.33         1          U           0.33         1          U           0.33         1         U         U           0.33         1         U         U           0.33         1         U <td< th=""><th>Present         DIL         LQ         VO           0.33         1         &lt;         U           0.33         1         U</th><th>Regult         DH         LQ         VO           1,82         10         U         U           1,82         10         &lt;</th><th>Hesult         DIL         10         VI           0.205         1         U         U           0.205         1</th></td<> | Present         DIL         LQ         VO           0.33         1         <         U           0.33         1         U | Regult         DH         LQ         VO           1,82         10         U         U           1,82         10         < | Hesult         DIL         10         VI           0.205         1         U         U           0.205         1 |
|   | SEMIVOLATILES<br>SEMIVOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES  | Phenol<br>Pyrene<br>1,1,1,2-Tetrachloroethane<br>1,1,1-Trichloroethane<br>1,1,2-Tetrachloroethane<br>1,1,2-Trichloroethane<br>1,1-Dichloroethane<br>1,1-Dichloroethane<br>1,2,3-Trichlorobenzene<br>1,2,3-Trichlorobenzene<br>1,2,3-Trichlorobenzene<br>1,2,4-Trichlorobenzene<br>1,2,4-Trichlorobenzene   | 0.00536 1 U<br>0.00536 1 U   |   | 0.0051 1 U<br>0.0051 1 U   | 0.33 1 < U<br>0.33 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U   | 0.33 1 < U<br>0.33 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U  | 0.33 1 < 0<br>0.33 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0   | 0.33 1 < U<br>0.33 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U  | 0.33 1 < U<br>0.33 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U                                | 0.33 1 < U<br>0.33 T < U<br>0.005 1 < U<br>0.005 T < U<br>0.005 T < U<br>0.005 T < U<br>0.005 T < U  | 0.33 1 < 0<br>0.33 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0  | 0.33 T < U<br>0.33 T < U<br>0.005 1 < U<br>0.005 T < U<br>0.005 T < U<br>0.005 T < U<br>0.005 T < U  | 0.33 1 < U<br>0.33 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U   | 0.56 1 < 0<br>0.55 1 < U<br>0.017 1 < U<br>0.008 1 < U<br>0.008 1 < U<br>0.008 1 < U<br>0.008 1 < U<br>0.008 1 < U<br>0.008 1 < U<br>0.008 1 < U<br>0.008 1 < U   | 0.33 1 < 0<br>0.33 1 < U<br>0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0  | 9.33 1 < 0<br>9.33 1 < 0<br>9.33 1 < 0<br>9.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0   | 0.33 1 < 0<br>0.33 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U   | 1.82 10 U U   | 0.205         1         0         0           0.205         1         U         U           0.00629         1         U         U  |
|   | VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES   | 1.2-Dibronosthane<br>1.2-Dibronosthane<br>1.2-Dictiorobenzene<br>1.2-Dictiorobenzene<br>1.2-Dictiorosthane<br>1.2-Dictiorosthane<br>1.2-Dictiorosthane<br>1.2-Dictiorosthane<br>1.2-Dictiorosthane<br>1.3-Dictiorosthane<br>1.3-Dictiorophane<br>1.3-Dictiorophane   | 0.00536 1 U<br>0.00536 1 U   |   | 0.0051 1 U<br>0.0051 1 U<br>0.0051 1 U<br>0.0051 1 U<br>0.0051 1 U<br>0.0051 1 U<br>0.0051 1 J<br>0.000986 1 J J<br>0.000986 1 J J<br>0.00051 1 U<br>0.0051 1 U  | 0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0<br>0.005 1 < 0   | 0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U  | 0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U  | 0.005 î < U<br>0.005 î < U<br>0.005 î < U  | 0.005 1 < U<br>0.005 1 < U<br>0.905 1 < U  | 0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U  | 0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U   | 0.005 1 < U<br>0.005 f < U<br>0.005 1 < U  | 0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U  | 0.034 1 < U<br>0.034 1 < U<br>0.068 1 < U<br>0.068 1 < U<br>0.068 1 < U<br>0.068 1 < U  | 0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U   | 0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U   | 0.005 T < U<br>0.005 T < U<br>0.005 T < U   |   | 0.00629         1         U         U           0.00629         1         U         U           0.00629         1         U         U           0.00629         1         U         U           0.00629         1         U         U           0.00629         1         U         U           0.00629         1         U         U           0.00629         1         U         U           0.00629         1         U         U           0.00629         1         U         E           0.00629         1         U         U           0.00629         1         U         E           0.00629         1         U         E           0.00629         1         U         U  |
|   | VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES  | 2.2-Dichloropropane<br>2-Butanone<br>2-Chloroethyl vinyl eliter<br>2-Chlorotoluene<br>2-Hexanone<br>2-Promonal   | 0.00536 1 U<br>0.0107 1 U<br>0.0107 1 U<br>0.00536 1 U<br>0.0107 1 U UJ   |   | 0.0053 1 U<br>0.0102 1 U<br>0.0102 1 U<br>0.0102 1 U<br>0.0051 1 U<br>0.0102 1 U UU  | 0.05 1 < 10<br>0.01 1 < 10<br>0.05 1 < 10  | 0.05 1 < U<br>0.01 t < U<br>0.05 1 < U   | 0.05 1 < U<br>0.01 1 < U<br>0.05 1 < U   | 0.05 î < U<br>0.01 î < U<br>0.05 î < U   | 0.05 1 < 9<br>0.01 T < 9<br>0.05 1 < 9   | 0.05 1 < U<br>0.01 1 < U<br>0.05 1 < U   | 0.05 1 < U<br>0.01 1 < U<br>0.05 1 < U  | 0.05 1 < U<br>0.01 1 < U<br>0.05 1 < U   | 0.05 1 < 9<br>9.01 1 < 9<br>0.05 1 < 9   | 0.017 1 < U<br>0.017 1 < U<br>0.85 1 < U  | 0.05 1 < U<br>0.01 1 < U<br>0.05 1 < U  | 0.05 1 < U<br>0.01 1 < U<br>0.05 1 < U  | 0.05 1 < U<br>0.01 1 < U<br>0.05 1 < U  |   | 0.00629 1 U U<br>0.0126 1 U U<br>0.0126 1 U U<br>0.0126 1 U U<br>0.00629 1 U U<br>0.0126 1 U U   |
|   | VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES  | 4-Chlorotoluene<br>Acetone<br>Acetonitrile<br>Actylonitrile<br>Allyl ckloride  | 0.00536 1 U<br>0.0107 1 U U   |   | 0.0051 1 U<br>0.0102 1 U UU  | 0.1 t < U  | 0.1 1 < U  | 0.1 t < U  | 0.1 1 < U  | 0.1 1 < U  | 0.1 1 < U  | 0.1 1 < U   | 0.1 1 < U  | 0.1 1 < U  | 0.017 1 < U<br>0.17 1 < U<br>0.17 1 < U<br>0.034 1 < U<br>0.034 1 < U   | 0.1 1 < 0   | 0.1 1 < U   | 0.1 1 < U   |   | 0.00629 1 U U<br>0.0126 1 U U  |
|   | VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES   | Bronoberzane<br>Bronoberzane<br>Bromochioromethane<br>Bromodchioromethane<br>Bromonethane<br>Carbon disuffide<br>Carbon tetrachloride<br>Ohioroberzane<br>Obiorethane<br>Obiorethane   | 0.00536         1         U           0.00536         1         U           0.00536         1         U           0.00536         1         U           0.00536         1         U           0.00536         1         U           0.00536         1         U           0.00536         1         U           0.00536         1         U           0.00536         1         U           0.00536         1         U           0.00536         1         U |   | 0.0051         1         U           0.0051         1         U           0.0051         1         U           0.0051         1         U           0.0051         1         U           0.0051         1         U           0.0051         1         U           0.0051         1         U           0.0051         1         U           0.0051         1         U           0.0053         1         U           0.0053         1         U           0.0051         1         U | 0.005 1 < U<br>0.005 1 < U<br>0.01 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.01 1 < U   | 0.005 1 < U<br>0.005 1 < U<br>0.01 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U  | 0.005 1 < U<br>0.005 1 < U   | 0.005 1 < U<br>0.005 1 < U<br>0.01 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.01 1 < U   | 0.005 1 < U<br>0.005 1 < U<br>0.01 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U | 0.005 1 < U<br>0.005 1 < U   | 0.005 1 < U<br>0.005 1 < U  | 0.005 1 < U<br>0.005 1 < U  | 0.005 1 < U<br>0.005 1 < U<br>0.01 1 < U<br>0.005 7 < U<br>0.005 1 < U<br>0.005 5 < U<br>0.005 1 < U<br>0.005 1 < U  | 0.008 1 < U<br>0.008 1 < U   | 0.005 1 < U<br>0.065 1 < U<br>0.05 1 < U<br>0.055 1 < U<br>0.055 1 < U<br>0.055 1 < U<br>0.055 1 < U  | 0.005 1. < U<br>0.005 1. < U<br>0.01 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.015 1 < U<br>0.015 1 < U   | 0.005 1 < U<br>0.005 1 < U<br>0.01 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.01 1 < U  |   | 0.00629         1         U         U           0.00629         1         U         U         U  |
|   | VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES  | Chloromethane<br>Chloroprene<br>cis-1,2-Dichloroethene<br>cis-1,3-Dichloropropene<br>Dhoromochloromethane<br>Dichlorodifluoromethane<br>Ethyl methacrylate   | 0.0107 I U<br>0.00536 I U<br>0.00536 I U<br>0.00536 I U<br>0.00536 I U<br>0.00536 I U<br>0.0107 I U   |   | 0.0102 1 U<br>0.0051 1 U<br>0.0051 1 U<br>0.0051 1 U<br>0.0051 1 U<br>0.0051 1 U<br>0.0051 1 U<br>0.0102 1 U   | 0.01 t < U<br>0.005 t < U<br>0.005 t < U   | 0.01 1 < U<br>0.005 1 < U<br>0.005 1 < U   | 0.03 1 < U<br>0.005 1 < U<br>0.005 1 < U   | 0.01 t < U<br>0.005 t < U<br>0.005 t < U   | 0.01 1 < U<br>0.005 1 < U<br>0.005 1 < U   | 0.01 1 < U<br>0.005 1 < U<br>0.005 1 < U   | 0.01 1 < U<br>0.005 1 < U<br>0.005 1 < U  | 0.03 f < U<br>0.005 1 < U<br>0.005 1 < U   | 0.01 1 < U<br>0.005 1 < U<br>0.005 1 < U   | 0.017 1 < U<br>0.17 1 < U<br>0.008 1 < U<br>0.006 1 < U<br>0.006 1 < U<br>0.017 1 < U<br>0.034 1 < U<br>0.034 1 < U   | 0.01 f < U<br>0.005 t < U<br>0.005 t < U  | 0.01 1 < U<br>0.005 T < U<br>0.005 T < U  | 0.07 1 < U<br>0.095 1 < U<br>0.095 1 < U  |   | 0.0126 1 U U<br>0.00629 1 U U<br>0.00629 1 U U<br>0.00629 1 U U<br>0.00629 1 U U<br>0.00629 1 U U<br>0.0126 1 U U  |
|   | VOLATILES<br>VOLATILES<br>ILATILES<br>LATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES   | Ethylbenzene<br>Hexachiombutadiene<br>KODUTYL ALCOHOL<br>Isoproyttenzene<br>m.p-Xylenes<br>Methacrylonitrile   | 0.00536 1 U<br>0.00536 1 U<br>0.00536 1 U<br>0.00536 1 U<br>0.00536 1 U   |   | 0.00485 1 J J<br>0.0051 1 U<br>0.000526 1 J J<br>0.0101 1  | 0.005 ! < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U   | 0.005 1 < U  | 0.005 1 < U  | 0.008 1 < U<br>0.017 1 < U<br>3.4 1 < U<br>. 0.034 1 < U  | u.uus ? < U   | 0,005 i < U   | 0.005 T < U   | . •   | 0.00629 1 U U<br>0.00629 1 U U<br>0.00629 1 U U<br>0.00629 1 U U   |

Shaw Environmental, Inc.

| Data E        | valuation Report                    |                           |                  |                    |                  |                  |                  |                   |                        |                   |                  |                  |                  |                  |   |                  |                  | Shaw E           | nvironmental, Inc. |
|---------------|-------------------------------------|---------------------------|------------------|--------------------|------------------|------------------|------------------|-------------------|------------------------|-------------------|------------------|------------------|------------------|------------------|---|------------------|------------------|------------------|--------------------|
| Chemi         | al Concentrations in Soil Associate | ed with LHAAP-35/36 Sumps | 5                |                    |                  |                  |                  |                   | Table                  | 2.12              |                  |                  |                  |                  |   |                  |                  |                  |                    |
|               |                                     |                           |                  |                    |                  |                  | Con              | antrotions of Ch  | amicale in Soit S      | Complee Accession | nd with Suma A1  | 2                |                  |                  |   |                  |                  | $\cap$           | 10650/             |
| (SUMP) = SUMP | 12                                  |                           |                  |                    |                  |                  | CON              | entrations of Cr  | iennicais in Joar J    | samples Associat  | en mus south o t |                  |                  |                  |   | 111,000,0        | 1111000 0        |                  | $\mathcal{M}$      |
| LOCATION _CO  | )E                                  | 35SUMP012-SB01            | 35SUMP013-SB01   | 35SUMP013-SB01     | LH-S12-01        | LH-S12-01        | LH-S12-02        | LH-S12-02         | UH-S13-01              | LH-S13-01         | LH-S13-01        | LH-S13-02        | LH-S13-02        | LHS-2-01         | LH-WKS-6                                | UH-WKS-6         | LH-WHS-b         | WA306-3501       | WERCON COOL OD     |
| MPLE_NO       |                                     | 35-SMP12-S801-02          | 35-SMP13-SB01-01 | 35-SMP13-S801-02   | LH-\$12-01_1     | LH-\$12-01_2     | LH-\$12-02_1     | LH-\$12-02_2      | LH-S13-01 QC           | UH-S13-01_1       | LH-S13-01_2      | LH-S13-02_1      | LH-S13-02_2      | LHS-2-01         | LH-WHS-6_1                              | LH-WHS-5_2       | UH-WHS-0_3       | WHSUB-SBUT-UT    | 9971300-300 F102   |
| MPLE_DATE     |                                     | 9/12/2006                 | 9/12/2006        | 9/12/2006          | 7/11/1993        | 7/11/1993        | 7/11/1993        | 7/11/1993         | 7/10/1993              | 7/10/1993         | 7/10/1993        | 7/10/1993        | 7/10/1993        | 1/9/1995         | 7/10/1993                               | 7/10/1993        | //24/1993        | 9729/2005        | 929200             |
| .,ÃPTH        |                                     | 11 - 11 Ft                | _55 PI           | 10 - 10 Ft         | 0-281            | 9 - 11 Ft        | 0-2Ft            | 9-11 Ft           | 0-2F1                  | 0-2Fl             | 8 - 10 Ft        | 0-2FL            | 8 - 10 Ft        | 05 Ft            | 0-2ft                                   | 2.5 - 4.5 H      | 18 - 20 FC       | _33H             | 4_3-4_3 Ft         |
| SAMPLE_PURPO  | DSE                                 | REG                       | REG              | REG                | REG              | REG              | REG              | REG               | FÐ                     | REG               | REG              | REG              | REG              | REG              | REG                                     | REG              | REG              | REG              | #156               |
| Test Group    | Parameter (Units = mg/kg)           | Result DEL LO VO          | Result DIL LÓ VO | ) Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result Dil LO VO | Result Dit 1.0 VO | Result Off LO VO       | Result DtL LQ VQ  | Result DIL LO VO | Result DIL LQ VQ | Result Dil LQ VQ | Result DIL LQ VC | 3 Result DHL LO VO                      | Hesult Dil LO VO | Mesuit UIL LU VU | Result DIL DU VO | RESULT LAL LO VO   |
| VOLATILES     | Methyl isobutyl ketone              | 0.0107 T U                |                  | 0.0102 I U         | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U             | 0.05 1 < U        | 0.05 1 < U       | 0.05 .1 < U      | 0.05 1 < U       | 0.017 1 < U      | 0.05 1 < 0                              | 0.05 1 < U       | 0.05 3 < 0       |                  | 0.0126 1 0 0       |
| VOLATILES     | METHYL METHACRYLATE                 |                           |                  |                    |                  |                  |                  |                   |                        |                   |                  |                  |                  | 0.034 1 < 0      |   |                  |                  |                  |                    |
| VOLATILES     | Methylene chloride                  | 0.00536 1 U               |                  | 0.0051 1 U         | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < 1       | 0.005 t < U            | 0.005 1 < U       | 0.005 t < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.008 t < U      | 0.005 1 < 0                             | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00629 } 0 0      |
| VOLATILES     | Naphthalene                         | 0.0107 1 U                |                  | 0.0102 1 U         |                  |                  |                  |                   |                        |                   |                  |                  |                  |                  |   |                  |                  |                  | 0.0126 1 U U       |
| VOLATILES     | n-BUTYLBENZENE                      | 0.00535 1 U               |                  | 0.0051 1 U         |                  |                  |                  |                   |                        |                   |                  |                  |                  |                  |   |                  |                  |                  | 0.00629 1 0 0      |
| VOLATILES     | n-PROPYLBENZENE                     | 0.00536 1 U               |                  | 0.00114 1 J J      |                  |                  |                  |                   |                        |                   |                  |                  |                  |                  |   |                  |                  |                  | 0.00629 1 0 0      |
| VOLATILES     | Pentachlomethane                    |                           |                  |                    |                  |                  |                  |                   |                        |                   |                  |                  |                  | 0.034 1 < 10     |   |                  |                  |                  |                    |
| VOLATILES     | p-ISOPROPYLTOLUENE                  | 0.00536 1 U               |                  | 0.0051 1 U         |                  |                  |                  |                   |                        |                   |                  |                  |                  |                  |   |                  |                  |                  | 0.00629 1 0 0      |
| VOLATILES     | Propionitale                        |                           |                  |                    |                  |                  |                  |                   |                        |                   |                  |                  |                  | 0.085 1 < V      |   |                  |                  |                  |                    |
| VOLATILES     | sec-BUTYLBENZENE                    | 0.00536 1 U               |                  | 0.0051 1 U         |                  |                  |                  |                   |                        |                   |                  |                  |                  |                  |   |                  |                  |                  | 0.00629 1 U U      |
| VOLATILES     | Styrene                             | 0.00536 1 1               |                  | 0.0051 1 U         | 0.005 1 < U      | 0.005 1 < ⊍      | 0.005 t < 1/     | 0.005 1 < U       | 0.005 1 < 10           | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < 0                             | 0.005 1 < U      | 0.005 t < U      |                  | 0.00629 1 10 0     |
| VOLATILES     | tert-BUTYL8ENZENE                   | 0.00536 t U               |                  | 0.0051 1 U         |                  |                  |                  |                   |                        |                   |                  |                  |                  |                  |   |                  |                  |                  | 0.00629 1 U U      |
| VOLATILES     | Tetrachioroethene                   | 0.00536 t U               |                  | 0.0051 1 U         | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < 10      | 0.005 1 < U            | 0L005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < 0                             | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00629 1 U U      |
| VOLATHES      | Toluene                             | 0.00536 t U               |                  | 0.0051 1 U         | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 î < U            | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | I 0.005 ₹ < U                           | 0.005 I < U      | 0.005 1 < U      |                  | 0.00629 1 U U      |
| VOLATILES     | trans-1,2-Dichloroethene            | 0.00536 1 U               |                  | 0.0051 1 U         |                  |                  |                  |                   |                        |                   |                  |                  |                  |                  |   |                  |                  |                  | 0.00629 1 U U      |
| VOLATILES     | trans-1,3-Dichloropropene           | 0.00536 1 U               |                  | 0.0051 1 U         | 0_005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < ∛       | 0.005 1 < U            | 0.005 t < U       | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U                             | 0.005 1 < 0      | 0.005 1 < U      |                  | 0.00629 1 U U      |
| VOLATILES     | trans-1,4-Dichloro-2-butene         |                           |                  |                    |                  |                  |                  |                   |                        |                   |                  |                  |                  | 0.034 1 < 19     | l i i i i i i i i i i i i i i i i i i i |                  |                  |                  |                    |
| VOLATILES     | Trichloroethene                     | 0.00536 1 U               |                  | 0.0051 1 U         | 0.005 ! < U      | 0.005 T < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U            | 0.005 1 < 0       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | I 0…005 1 < U                           | 0.005 1 < U      | 0.005 ! < U      |                  | 0.00629 1 U U      |
| VOLATILES     | Trichlorofluoromethane              | 0.0107 1 U                |                  | 0.0102 1 U         |                  |                  |                  |                   |                        |                   |                  |                  |                  | 0.017 î < U      | I                                       |                  |                  |                  | 0.0126 I U U       |
| VOLATILES     | Vinvi acetate                       | 0.0107 1 U                |                  | 0.0102 1 U         | 0.05 t < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U        | 0.05 1 < ∜             | 0.05 1 < U        | 0.05 1 < Ü       | 0.05 1 < U       | 0.05 1 < U       | 0.017 1 < U      | U 0.05 1 < U                            | 0.05 1 < U       | 0.05 1 < U       |                  | 0.0126 1 U U       |
| VOLATILES     | Vinyl chlaride                      | 0.0107 1 U                |                  | 0.0102 1 U         | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U        | <del>0</del> .01 1 < ଏ | 0.01 1 < U        | 0.01 1 < U       | 0,01 1 < U       | 0.01 1 < U       | 0.017 t < U      | I 0.01 1 < U                            | 0.01 1 < U       | 0.01 1 < U       |                  | 0.0126 ‡ U U       |
| VOLATILES     | Xylenes, Totai                      |                           |                  |                    | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < 1/      | 0.005 1 < U            | 0.005 1 < U       | 0.005 t < U      | 0.905 1 < U      | 0.005 1 < U      | 0.008 1 < U      | I 0.005 1 < U                           | 0.005 1 < U      | 0.005 1 < U      |                  |                    |

Footnotes are shown on cover page to Tables Section.

Shaw Env

|            | 00            | 065947        |
|------------|---------------|---------------|
| LH-WRS-6   | WRS06-S801    | WRS06-SB01    |
| UH-WRS-6_3 | WRS06-SB01-01 | WRS06-5801-02 |
| 7/24/1993  | 9/25/2006     | 9/25/2006     |
| 18 - 20 Ft | _55 Ft        | 4_5-4_5 Ft    |
| 050        | 850           | 000           |

Table 3-13 Concentrations of Chemicals in Soil Samples Associated with Sump 013

| [SUMP] = SUMP013               |   | 35SUMP012-SR01          | 3550100013-5801           | 355HM2013-SB01          | 18-512-01                 | 1H-S12-01                  | LH-S12-02                | LH-S12-02                | LH-S13-01                | LH-S13-01                | LH-S13-01                 | 1H-S13-02                | LH-S13-02                | LHS-2-01                       | LH-WRS-6                   | EH-WRS-6                   | LH-WRS-6                   | WRS06-SB01                   | WRS06-S801                 |
|--------------------------------|---|-------------------------|---------------------------|-------------------------|---------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------------|----------------------------|----------------------------|----------------------------|------------------------------|----------------------------|
| AMPLE_NO                       |   | 35-SMP12-SB01-02        | 35-SMP13-SB01-01          | 35-SMP13-S801-02        | UH-S12-01_1               | LH-S12-01_2                | LH-S12-02_1              | LH-\$12-02_2             | LH-S13-01 QC             | LH-S13-01_1              | LH-S13-01_2               | LH-S13-02_1              | LH-S13-02_2              | LHS-2-01                       | LH-WRS-6_1                 | LH-WRS-6_2                 | LH-WRS-6_3                 | WRS06-SB01-01                | WRS06-SB01-02<br>9/25/2006 |
| SAMPLE_DATE                    |   | 9/12/2006<br>11 - 11 Ft | 9/12/2006<br>0.5 - 0.5 Ft | 9/12/2006<br>10 - 10 Ft | 7/11/1993<br>0 - 2 Ft     | 7/11/1993<br>9 - 11 Ft     | 7/11/1993<br>0-2/1       | 9-11Ft                   | 0-2F1                    | 0-2Ft                    | 8 - 10 Ft                 | 0 - 2 Ft                 | 8 - 10 Ft                | 0 - 0.5 Ft                     | 0-2Ft                      | 2.5 - 4.5 FI               | 18 - 20 Ft                 | 0.5 - 0.5 Pt                 | 4.5 - 4.5 Fi               |
| SAMPLE_PURPOSE                 |   | REG                     | REG                       | REG                     | REG                       | REG                        | REG                      | REG                      | FD                       | REG                      | REG                       | REG                      | REG                      | REG                            | REG                        | REG                        | REG                        | REG                          | REG<br>Partit Dit LO VO    |
| Test Group                     | Parameter (Units = mg/kg)   | Result Dii. LO VO       | Result DiL LQ VQ          | Result DIL LO VO        | Result DIL LO VQ          | Result DIL LQ VQ           | Result DIL LQ VQ         | Result DiL LQ VQ         | Result DHL LQ VC         | Result DIL LG VG         | Result DIL LO VO I        | Result DIL LO VO         | Hesat DHL LO VQ          | Result DIL LO VO<br>0.22 1 < U | Hesult OIL LO VO           | Hesun UIL LU VO            | Hesuri Dil Lui Vui         | HESUE DAL LO VO              | hesuit Dic Lo vo           |
| EXPLOSIVES                     | 1,3,5-1 rantrodenzene<br>1,3-Dinitrobenzene                                       |                         |                           |                         |                           |                            |                          |                          |                          |                          |                           |                          |                          | 0.22 1 < U                     | -                          |                            |                            |                              |                            |
| EXPLOSIVES                     | 2,4,6-Trinitrotoluene   |                         |                           |                         |                           |                            |                          |                          |                          |                          |                           |                          |                          | 0.22 1 < U                     | 0.32 1 . 18                | 0.32 1 . 12                |                            |                              |                            |
| EXPLOSIVES                     | 2.4-Dinitratoluene  |                         |                           |                         | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U                 | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 I < 0<br>0.33 I < 0  | 0.33 1 < 0               | 0.33 1 < U               | 0.23 t < U                     | 0.33 1 < 12                | 0.33 1 < U                 |                            |                              |                            |
| EXPLOSIVES                     | 4-Amino-2,6-dinitrololuene  |                         |                           |                         |                           |                            |                          |                          |                          |                          |                           |                          |                          | 0.45 1 < U                     |                            |                            |                            |                              |                            |
| EXPLOSIVES                     | HMX   |                         |                           |                         |                           |                            |                          |                          |                          |                          |                           |                          |                          | 2 1 < U                        |                            |                            |                            |                              |                            |
| EXPLOSIVES                     | m-Nitrotoluene<br>Nitrohenzene  |                         |                           |                         |                           |                            |                          |                          |                          |                          |                           |                          |                          | 0.23 1 < U                     |                            |                            |                            |                              |                            |
| EXPLOSIVES                     | o-Nitrotoluene  |                         |                           |                         |                           |                            |                          |                          |                          |                          |                           |                          |                          | 0.9 t < U                      |                            |                            |                            |                              |                            |
| EXPLOSIVES                     | p-Nitrotokuene  |                         |                           |                         |                           |                            |                          |                          |                          |                          |                           |                          |                          | 27 1 < U                       |                            |                            |                            |                              |                            |
| EXPLOSIVES<br>EXPLOSIVES       | RDX<br>Telmi  |                         |                           |                         |                           |                            |                          |                          |                          |                          |                           |                          |                          | 0.67 1 < U                     |                            |                            |                            |                              |                            |
| METALS                         | Akminum   |                         |                           |                         | 8080 1                    | 19000 1                    | 20800 1                  | 9800 1                   | 6940 1                   | 8010 1                   | 9560 1                    | 8260 1                   | 10600 1                  | 12700 1                        | 7050 1                     | 7840 t                     | 6880 1 < Ŭ                 |                              |                            |
| METALS                         | Antimony  |                         |                           |                         | 31 < 10                   | 31 < U                     | 31 < U                   | 31 < U                   | 31 < U<br>231            | 3 t < U<br>37 1          | 31 < U<br>161             | 31 < U<br>191            | 31 < U<br>131            | 13.7 1 < UJ<br>81 1 J          | 3 1 < U<br>8.9 1           | 27 1                       | 3 1 < 0<br>29 1            |                              |                            |
| METALS<br>METALS               | Arsenic<br>Banium   |                         |                           |                         | 173 1                     | 236 1                      | 124 1                    | 47.4 t                   | 74.5 1                   | 68.6 t                   | 171 1                     | 90.4 1                   | 99.4 1                   | 1270 1                         | 81.2 1                     | 58.7 1                     | 53.7 t                     |                              |                            |
| METALS                         | Cadinium  |                         |                           |                         | 1 1 < U                   | 1 % < U                    | 1 1 < U                  | 1 t < U                  | 11 < 0                   | 11< U                    | 11 < U                    | 11 < U                   | 1 1 < U                  | 1.4 1 < U                      | 1 t < U                    | 1 1 < U                    | 11 < U                     |                              |                            |
| METALS                         | Calcium   |                         |                           |                         | 490 1                     | 1650 1                     | 1810 1                   | 1520 1                   | 897 1                    | 982 i<br>174 i           | 1760 1                    | 1250 1                   | 1030 1                   | 1650 1<br>37.8 1 J             | 100 1                      | 562 1<br>17.2 1            | 1550 1                     |                              |                            |
| METALS<br>METALS               | Chromium<br>Cobalt  |                         |                           |                         | 3.4 1                     | 7.9 1                      | 9.6 1                    | 37.9 1                   | 6.4 1                    | 6.6 1                    | 27.9 1                    | 10.8 1                   | 9.9 1                    | 9.8 1                          | 9,1 1                      | 3.8 1                      | 6.6 1                      |                              |                            |
| METALS                         | Copper  |                         |                           |                         | 2.1 1                     | 7.8 1                      | 26 1                     | 71                       | 1.4 1                    | 27 1                     | 9.4 1                     | 2.6 1                    | 3.6 t                    | 15.3 1                         | 25 1                       | 2.5 1                      | 9.3 1                      |                              |                            |
| METALS                         | iron  |                         |                           |                         | 8260 1                    | 31800 1                    | 39800 1                  | 24000 1                  | 15600 1                  | 20700 1                  | 18000 1                   | 13500 1                  | 13200 1<br>8.1 1         | 24.4 1                         | 20300 1<br>14,3 1          | 6.7 1                      | 9.1 1                      |                              |                            |
| METALS                         | Leao<br>Magnesium   |                         |                           |                         | 435 1                     | 2800 1                     | 1250 1                   | 1990 1                   | 343 1                    | 451 1                    | 1920 t                    | 505 1                    | 1080 1                   | 818 1                          | 329 t                      | 380 1                      | 2230 1                     |                              |                            |
| METALS                         | Manganese   |                         |                           |                         | 64.1 1                    | 145 1                      | 255 1                    | 228 1                    | 287 1                    | 191 1                    | 299 1                     | 431 1                    | 76.7 1                   | 350 1 J                        | 382 1                      | 93.6 t                     | 95.2 1<br>01 1 c H         |                              |                            |
| METALS                         | Mercury   |                         |                           |                         | 0.1 1 < U<br>539 1        | 0.1 1 < U<br>1050 1        | 0.1 1 < U<br>988 1       | 0.1 1 < U<br>550 1       | 0.1 1 < 0<br>347 1       | 0.1 1 < U<br>354 1       | 654 1                     | 413 1                    | 479 1                    | 619 1                          | 249 1                      | 262 1                      | 613 1                      |                              |                            |
| METALS                         | Selenium  |                         |                           |                         | 1 1 < U                   | 1 T < V                    | 11 < 0                   | 11 < 1                   | 11 < U                   | 1 T < Ü                  | 11<10                     | 11 < U                   | 1 1 < ₹                  | 0.58 1 J                       | 11 < U                     | 1 t < U                    | t 1 < U                    |                              |                            |
| METALS                         | Säver   |                         |                           |                         | 11 < U                    | 11 < U                     | tt < U                   | , t1 < U                 | 11 < V                   | 1 t < U                  | 11 < U                    | 1 1 < U                  | 1 1 < ∛<br>167 1         | 1.4 1 < U<br>220 1             | 11 < U<br>831              | 1 1 < U<br>51 2            | 11 <u<br>297</u<br>        |                              |                            |
| METALS                         | Strontium<br>Theiliem   |                         |                           |                         | 158 1                     | 39.3 1                     | 24 1                     | 29.0                     | 1 6.0                    | 5.0 I                    | 1 1.25                    | 10 1                     | 12.1                     | 58.4 1 < U                     |                            | 2.7                        |                            |                              |                            |
| METALS                         | Zinc  |                         |                           |                         | 13.1 1                    | 58.1 I                     | 31.5 1                   | 49.3 1                   | 15.2 1                   | 33.5 1                   | 50.9 1                    | 18.2 1                   | 28.1 1                   | 222 1                          | 21.3 1                     | 12.2 1                     | 42 1                       |                              | 40.9 1 F R                 |
| RANGE_ORGANICS                 | Carbon Range C12-C28  | 59.4 1 U                | 52.8 1 U                  | 60.8 1 U                |                           |                            |                          |                          |                          |                          |                           |                          |                          |                                |                            |                            |                            | 36.2 1 J B<br>56.2 1 U U     | 38.4 1 J J                 |
| ANGE_ORGANICS                  | Carbon Hange C28-C35<br>Carbon Range C6-C12                                       | 59.4 1 U                | 52.8 1 U                  | 60.8 1 U                |                           |                            |                          |                          |                          |                          |                           |                          |                          |                                |                            |                            |                            | 56.2 1 U U                   | 61.4 1 U U                 |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene  |                         |                           |                         | 0.33 1 < U                | 0.33 t < U                 | 0.33 t < U               | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U                | 0.33 t < U               | 0.33 1 < U               | 0.56 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U                 | 1.82 10 U U                  | 0.205 T U U<br>0.205 T U U |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene   |                         |                           |                         | 0.33 1 < U<br>0.33 1 < ⊎  | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 0               | 0.33 1 < U<br>0.33 1 < U | 0.33 I < U<br>0.33 I < U  | 0.33 1 < U               | 0.33 1 < U               | 0.56 t < U                     | 0.33 1 < 0                 | 0.33 1 < U                 | 0.33 1 < U                 | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene   |                         |                           |                         | 0.33 1 < 1                | 0.33 1 < U                 | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 t < U               | 0.33 î < U               | 0.56 i < U                     | 0.33 t < U                 | 0.33 1 < U                 | 0.33 1 < U                 | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | 2,4,5 Trichlorophenol   |                         |                           |                         | 1.65 1 < U                | 1.65 t < U                 | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < 10              | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < 0               | 1.65 1 < U               | 2.8 1 < U                      | 1.65 1 < U                 | 1.65 1 < U                 | 1.65 1 < U<br>033 1 ⊂ H    | 1.82 10 U U                  | 0.205 1 U U<br>0.205 1 U U |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol<br>2,4,Dichlorophenol                                       |                         |                           |                         | 0.33 1 < 1                | 0.331 < U                  | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < 0                | 0.33 1 < U               | 0.33 1 < 0               | 0.56 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 t < U                 | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | 2.4-Dimethylphenol  |                         |                           |                         | 0.33 1 < U                | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < ∜J              | 0.56 1 < U                     | 0.33 1 < U                 | 0.33 t < U                 | 0.33 1 < U                 | 1.62 10 U U                  | 0.205 1 10 0               |
| SEMIVOLATILES                  | 2,4-Dinitrophenol   |                         |                           |                         | 1.65 1 < U                | 1.65 1 < U                 | 1.65 1 < U               | 1.55 1 < U               | 1.65 1 < ₩               | 1.55 1 < U               | 1.65 1 < U                | 1.65 t < U               | 1.65 1 < ∛J              | 28 1 < 0<br>055 1 < 0          | 1.65 1 < U                 | 1,65 1 < 0                 | 1.65 1 < U<br>0.33 1 < U   | 9.12 10 U U<br>1.82 10 U U   | 0.205 1 U U                |
| SEMIVOLATILES                  | 2,4-Dimitrotoluene  |                         |                           |                         |                           |                            |                          |                          |                          |                          |                           |                          |                          | 0.56 t < U                     |                            |                            | 0.33 t < U                 | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | 2-Chioronaphthalene   |                         |                           |                         | 0.33 1 < U                | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 t < U               | 0.33 1 < U               | 0.56 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U                 | 1.82 10 U U                  | 0.205 1 U U                |
| SEM#VOLATILES                  | 2-Chlorophenol  |                         |                           |                         | 0.33 1 < U                | 0.33 i < U                 | 0.33 1 < U               | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U               | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < 0               | 0.33 1 < U<br>0.33 1 < U | 0.56 1 < 0                     | 0.33 1 < 0                 | 0.33 1 < U                 | 0.33 1 < U                 | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | 2-Methylphenol  | ]                       |                           |                         | 0.33 1 < U                | 0.33 1 < U                 | 0.33 t < U               | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               | 0.56 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U                 | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | 2-Nilroanikne   |                         |                           |                         | 1.65 t < U                | 1.55 1 < U                 | 1.65 1 < U               | t.65 1 < Ư               | 1,65 1 < U               | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < ∛               | 1.65 1 < 1               | 2.8 1 < U                      | 1.65 f < U                 | 1.65 1 < U                 | 1.65 1 < U                 | 9.12 10 U U<br>1.92 10 11 11 | 1,03 1 U U<br>n:205 1 U U  |
| SEMIVOLATILES<br>SEMIVOLATILES | 2-Nitrophenol<br>3 3'-Dichlorobenzidine   |                         |                           |                         | 0.33 1 < U<br>0.65 1 < U  | 0.33 F < U<br>0.65 1 < U   | 0.33 T < 0<br>0.65 T < 0 | 0.33 I < 0<br>0.65 1 < 0 | 0.55 1 < U               | 0.65 1 < U               | 0.65 1 < U                | 0.65 1 < 10              | 0.55 1 < 0               | 1.1 1 < 1                      | 0.65 1 < U                 | 0.65 1 < U                 | 0.65 1 < 1/                | 3.65 10 U U                  | 0.41 1 U U                 |
| SEMIVOLATILES                  | 3-Nitroaniline  |                         |                           |                         | 1.65 t < U                | 1.65 1 < U                 | 1.65 f < U               | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U               | 1.65 1 < U               | 2.8 1 < U                      | 1.65 1 < U                 | 1.65 1 < U                 | 1.55 1 < U                 | 9.12 10 U U                  | 1.03 1 U U                 |
| SEMIVOLATILES                  | 4.6-Dinitro-2-methylphenol  | ł                       |                           |                         | 1.65 t < U                | 1.65 t < 1/                | 1.65 1 < U               | 1.65 1 < U               | 1.55 1 < U               | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U<br>1.33 1 < H | 1.65 1 < U<br>0.33 1 < U | 2.B 1 < U<br>0.55 1 < U        | 1.65 1 < 0                 | 1.65 1 < U<br>0.33 1 < U   | 1.55 I < U<br>0.33 I < U   | 9.12 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | 4-biomophenyi phenyi eviel<br>4-Chioro-3-methylohenol                             |                         |                           |                         | 0.65 1 < U                | 0.65 1 < U                 | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < 1/              | 0.65 1 < U                | 0.55 1 < U               | 0.65 1 < U               | 0.56 1 < U                     | 0.65 1 < U                 | 0.65 1 < U                 | 0.65 1 < U                 | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | 4-Chloroaniline   |                         |                           |                         | 0.65 1 < U                | 0.65 t < U                 | 0.65 t < U               | 0.65 1 < U               | 0.65 1 < 1)              | 0.65 1 < U               | 0.65 1 < U                | 0.65 1 < U               | 0.65 1 < U               | 0.55 t < U                     | 0,65 1 < U                 | 0.65 1 < 0                 | 0.65 1 < U                 | 1.82 10 U U                  | 0.205 1 U U<br>0.205 1 U U |
| SEMIVOLATILES                  | <ol> <li>Chlorophenyl phenyl ether</li> <li>Motholophenyl phenyl ether</li> </ol> |                         |                           |                         | 0.33 1 < 0                | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < 0               | 0.33 T < U<br>0.33 T < U | 0.33 1 < 0               | 0.33 1 < 1/              | 0.33 1 < 0                | 0.33 1 < 12              | 0.33 1 < 0               | 0.55 1 < U                     | 0.33 1 < 0                 | 0.33 1 < U                 | 0.33 1 < U                 | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | 4-Nitroaniline  |                         |                           |                         | 1.65 1 < U                | 1.65 1 < U                 | 1.65 t < U               | 1.65 1 < U               | 1.65 t < U               | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < ⊍               | 1.65 1 < U               | 2.8 ī < U                      | 1.65 1 < U                 | 1.65 1 < U                 | 1.65 1 < U                 | 9.12 10 U U                  | 1.03 1 U U                 |
| SEMIVOLATILES                  | 4-Nitrophenol   |                         |                           |                         | 1.65 t < U                | 1.65 1 < U                 | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U               | 1.65 t < U               | 2.8 1 < U<br>055 1 - H         | 1.65 1 < U<br>0.33 1 - 17  | 1.55 1 < U<br>0.33 1 - 4   | 1.65 3 < U<br>0.33 t - U   | 9.12 10 U U<br>1.82 10 U U   | 1.03 3 0 0<br>0.205 t 11 U |
| SEMIVOLATILES<br>SEMIVOLATILES | Acenaphthène<br>Acenaphthylene  |                         |                           |                         | u.sa ≀ < U<br>0.33 1 < ยี | v.sa ∔ < 0/<br>0.33 1 < 0/ | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < 12              | 0.33 1 < U                | 0.33 t < U               | 0.33 1 < U               | 0.56 1 < U                     | 0.33 1 < 13                | 0.33 1 < U                 | 0.33 1 < U                 | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | Anihracene  |                         |                           |                         | 0.33 1 < U                | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               | 0.56 t < U                     | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 t < U                 | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | Benzo(a)anthracene  |                         |                           |                         | 0.33 t < U                | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U<br>0.33 1 < U | 0.33 t < U<br>0.33 t ∠ U  | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 t ∈ U | 0.56 1 < U<br>0.077 1 .I       | 0.33 1 < 1/<br>0.33 1 < 1/ | ย.33 ⊺ < ปี<br>0.33 † < ปี | ∪.3a ⊺ < U<br>0.33 t < U   | 1.82 10 U U                  | 0.205 t U U                |
| SEMIVOLATILES<br>SEMIVOLATILES | penzo(a)pyrene<br>Benzo(b)iluoranthene  |                         |                           |                         | 0.33 t < 1/               | 0.33 1 < 1/                | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 1               | 0.33 1 < U               | 0.33 t < t                | 0.33 1 < U               | 0.33 1 < U               | 0.13 1 J                       | 0.33 1 < U                 | 0.33 1 < U                 | 0.001 t < U                | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | Benzo(ghi)perviene  |                         |                           |                         | 0.33 1 < ∛J               | 0.33 1 < 0                 | 0.33 1 < ∜               | 0.33 1 < U                | 0.33 t < U               | 0.33 1 < U               | 0.56 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U                 | 1.82 10 U U                  | 0.205 1 U U<br>0.205 t U U |
| SEMIVOLATILES                  | Benzo(k)fiuoranthene  |                         |                           |                         | 0.33 1 < U                | 0.33 1 < U                 | 0.33 1 < 1/<br>165 1 - ™ | 0.33 1 < U               | 0.33 1 < U<br>165 1 - 1  | 0.33 1 < U               | 0.33 1 < 10<br>165 1 - 11 | 0.33 1 < U<br>1.65 1 ∠ H | 0.33 f < U<br>1.65 t < U | 0,56 t < U<br>2.8 t < U        | 0.33 i < U<br>1.65 1 < U   | 0.33 i < U<br>1.65 i < U   | 0.001 t < 0<br>0.001 t < 0 | 1.62 10 U U<br>9.12 10 U U2  | 1.03 1 U UJ                |
| SEMIVOLATILES                  | əenzaic add<br>Benzyl Alcohol   |                         |                           |                         | 0.65 1 < U                | 0.65 1 < U                 | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U                | 0.65 1 < U               | 0.65 1 < U               | 0.56 1 < U                     | 0.65 1 < U                 | 0.65 1 < U                 | 0.65 1 < U                 | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLABLES                   | bis(2-Chloroethoxy)methane  |                         |                           |                         | 0.33 1 < U                | 0.33 1 < U                 | Ð.33 1 ≺ U#              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U                | 0.33 1 < U               | 0.33 1 < U               | 0.56 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U                 | 1.82 10 U U                  | 0.205 T U U                |
| MIVOLATILES                    | bis(2-Chloroethyl)ether   |                         |                           |                         | 0.33 1 < U                | 0.33 1 < ∛<br>0.33 1 < ∛   | 0.33 1 < U               | 0.33 1 < U<br>0.33 1 < H  | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U | 0.56 1 < U<br>0.56 1 < U       | 0.33 1 < U<br>0.33 1 < U   | U > 1 دست<br>0.33 1 < U    | 0.33 i < 0<br>0.33 i < 13  | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | us(2-Chorosopropyl)ether<br>bis(2-Ethylhexyl)ohthalate                            |                         |                           |                         | 0.33 t < U                | v.as i < 0<br>0.33 1 < 10  | 0.33 1 < U               | 0.33 1 < U               | 0.349 1                  | 0.33 1 < U               | 0.33 1 < U                | -0.33 1 < 10             | 0.33 1 < U               | 0.11 1 J                       | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U                 | 1.82 TO U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | Butyl benzyl phthalate  |                         |                           |                         | 0.33 1 < U                | 0.33 1 < U                 | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               | 0.56 T < U                     | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U                 | 1.82 10 U U                  | 0.205 1 U U                |
| SEMIVOLATILES                  | Chrysene  | 1                       |                           |                         | 0.33 1 < U                | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < V                | 0.33 t < U               | 0.33 1 < U               | 0.56 1 < 0                     | 0.33 1 < U                 | 0.33 1 < U                 | 0.38 1 < U                 | 1.82 10 U U                  | 0.200 I U U                |

Shaw Environmental, Inc.

## Table 3-13 Concentrations of Chemicals in Soil Samples Associated with Sump 013

| [SUMP] = SUMP013<br>COCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |   | 35SUMP012-5<br>35-SMP12-SBC<br>9/12/2006<br>11 - 11 Ft<br>REG              | 5801 3:<br>51-02 35<br>; | SSUMP013-SB01<br>5-SMP13-SB01-01<br>9/12/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP013-5<br>35-SMP13-SB<br>9/12/2006<br>10 - 10 F1<br>REG         | 5801<br>01-02         | LH-S12-01<br>LH-S12-01<br>7/11/199<br>0 - 2 Ft<br>REG       | 01<br>I_1<br>I3                 | LH-S12-<br>LH-S12-0<br>7/11/19<br>9 - 11 H<br>REG             | 01<br>11_2<br>93<br>Ft                     | UH-S12-0<br>UH-S12-0<br>7/11/199<br>0 - 2 Fi<br>REG  | 02<br>2_1<br>33                      | LH-S12-02<br>LH-S12-02<br>7/11/1993<br>9 - 11 Fl<br>REG      | 2                                   | UH-S13-01<br>UH-S13-01 (<br>7/10/1993<br>0-2 Ft<br>FD         | 1<br>20                                    | LH-S136<br>LH-S13-01<br>7/10/199<br>0 - 2 FL<br>REG          | 01<br>1_1<br>23<br>1                     | LH-S13-01<br>LH-S13-01<br>7/10/1990<br>B - 10 FI<br>REG   | 1<br>_2<br>3                    | UH-S13-02<br>UH-S13-02<br>7/10/199<br>0 - 2 Ft<br>REG        | 02<br>2_1<br>13                              | LH-S134<br>LH-S13-0<br>7/10/199<br>8 - 10 F<br>REG           | 02<br>12_2<br>93<br>F1              | UHS-2-0<br>UHS-2-0<br>1/9/1999<br>0 - 0.5 F<br>REG  | 11<br>13<br>5<br>Fl             | UH-WRS<br>UK-WRS-0<br>7/10/199<br>0 - 2 Fi<br>REG            | i-6<br>6_1<br>33   | LH-WR<br>LH-WR5<br>7/10/19<br>2.5 - 4/<br>REC            | IS-6<br>;-6_2<br>993<br>5 FI   | LH-WR5<br>LH-WRS-<br>7/24/19<br>18 - 20<br>REG               | H6<br>6_3<br>23<br>Ft  | WRS06-SB01<br>WRS06-SB01-01<br>9/25/2006<br>0.5 - 0.5 Ft<br>REG   | WRS06-S<br>WRS06-S<br>9/25/2<br>4.5 - 4<br>RE                            | -SB01<br>3801-02<br>2006<br>1.5 FL<br>3G           |
|---|---|--|--------------------------|--|--|-----------------------|---|---------------------------------|---|--|--|--------------------------------------|--|-------------------------------------|---|--|--|--|---|---------------------------------|--|--|--|-------------------------------------|---|---------------------------------|--|--|--|--|--|--|---|--|--|
| Test Group<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES            | Parameter (Units = mg/kg)<br>Dibenzo(a,h)anthracene<br>Dibenzofuran<br>Diettyl phthalate<br>Dimettyl phthalate  | Result DIL   | LO VO Res                | sunt DHL 2.0 VQ  | Result DHL   | 10 VO Re              | esult DiL<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1 | 10 V0<br>< U<br>< U<br>< U      | Result Dil.<br>0.33 F<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1 | <u>. 10 VQ</u><br>< ປ<br>< ປ<br>< ປ<br>< ປ | Result         DtL           0.33         1           0.33         1           0.33         1           0.33         1           0.33         1           0.33         1 | LQ VO 1<br>< U<br>< U<br>< U<br>< U  | Result DHL<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1 | 10 VO F<br>< U<br>< U<br>< U<br>< U | lesuit Dit.<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1 | <u>LO VO</u> R<br>< U<br>< U<br>< U<br>< U | lesult OIL<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1 | LQ VQ<br>< U<br>< U<br>< U<br>< U<br>< U | Result         DIL           0.33         1           0.33         1           0.33         1           0.33         1           0.33         1 | - U<br>- U<br>- U<br>- U<br>- U | Result DiL<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1 | LQ VQ  <br>< U<br>< U<br>< U<br>< U          | Result D/L<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1 | 10 V0  <br>< U<br>< U<br>< U<br>< U | Result         Dil.           0.56         1           0.56         1           0.56         1           0.56         1           0.56         1           0.56         1 | (Q VQ )<br>< U<br>< U<br>< U    | 1esuff DHL<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1           | <ul> <li>10</li> <li>VQ</li> <li>V</li></ul> | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1           | <ul> <li>U</li> <li>U</li> <li>U</li> <li>U</li> <li>U</li> <li>U</li> </ul> | Hesult Dill.<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1         | <ul> <li>U</li> <li>VQ</li> <li>V</li> /ul> | Issait         Dit.         LO         VO           1.82         10         U         U           1.82         10         U         U | Result DH<br>0.205 1<br>0.205 1<br>0.205 1<br>0.205 1                    | 100<br>100<br>100<br>100<br>100                    |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES         | di-n-Butyl phthalate<br>di-n-Octyl phthalate<br>Fluoranthene<br>Fluorane<br>Hexachlorobenzene   |  |                          |  |  |                       | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1    | < U<br>< U<br>< U<br>< U<br>< U | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1      | < U<br>< U<br>< บ<br>< บ<br>< บ            | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1   | < 1)<br>< 1)<br>< 1)<br>< 1)<br>< 1) | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1     | < U<br>< U<br>< U<br>< U            | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1      | < ଧ<br>< ଧ<br>< U<br>< ଧ<br>< ଧ            | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1     | < U<br>< U<br>< U<br>< U<br>< U          | 0.33 f<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1  | < U<br>< U<br>< U<br>< U<br>< U | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1     | < 1)<br>< 1)<br>< 1)<br>< 1)<br>< 1)<br>< 1) | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1     | < U<br>< U<br>< U<br>< U<br>< U     | 0.56 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.56 1  | < U<br>< U<br>< U<br>< U<br>< U | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1     | < U<br>< U<br>< U<br>< U<br>< U  | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1           | < 1)<br>< 1)<br>< 1)<br>< 1)   | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1     | < 1)<br>< U<br>< U<br>< U<br>< U   | 1.82 10 U U<br>1.82 10 U U  | 0.205 1<br>0.205 1<br>0.205 1<br>0.205 1<br>0.205 1                      | . U U<br>I U U<br>I U U<br>I U U<br>I U U          |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES         | Hexachlorobutadiene<br>Hexachlorocyclopentadiene<br>Hexachloroethane<br>Indeno(1,2,3-cd)pyrene<br>iscohorone  | -  |                          |  |  |                       | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1    | < ย<br>< ย<br>< ย               | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1      | < 1)<br>< 1)<br>< 1)<br>< 1)<br>< 1)       | 0.33 t<br>0.33 1<br>0.33 t<br>0.33 t<br>0.33 1   | < U<br>< U<br>< U<br>< U<br>< U      | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1     | < U<br>< U<br>< U<br>< U<br>< U     | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1      | < บ<br>< บ<br>< บ<br>< บ<br>< บ            | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1     | < 1)<br>< 1)<br>< 1)<br>< 1)<br>< 1)     | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1  | < U<br>< U<br>< U<br>< U<br>< U | 0.33 t<br>0.33 t<br>0.33 1<br>0.33 t<br>0.33 1               | < U<br>< U<br>< U<br>< U<br>< U              | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1               | < U<br>< U<br>< U<br>< U<br>< U     | 0.56 1<br>0.56 1<br>0.56 1<br>0.56 1<br>0.56 1  | < U<br>< U<br>< U<br>< U<br>< U | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1     | < ປ<br>< ປ<br>< ປ<br>< ປ<br>< ປ<br>< U   | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1 | < ย<br>< บ<br>< บ<br>< บ   | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1     | < U<br>< U<br>< U<br>< U<br>< U  | 1.82 10 U U<br>1.82 10 U U  | 0.205 1<br>0.205 1<br>0.205 1<br>0.205 1<br>0.205 1                      | 1 U U<br>1 U U<br>1 U U<br>1 U U<br>1 U U          |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES         | Naphthalene<br>Nitrobanzene<br>n-Nitroso-di-n-propylamine<br>n-Nitrosodiphenylamine<br>Penlachlorophenol  |  |                          |  |  |                       | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>1.65 1    | < U<br>< U<br>< U<br>< U        | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>1.55 1                | < U<br>< U<br>< U<br>< U<br>< U            | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>1.65 1   | < U<br>< U<br>< U<br>< U<br>< U      | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>1.65 1     | < U<br>< U<br>< U<br>< U<br>< U     | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>1.65 1      | < 1)<br>< 1)<br>< 1)<br>< 1)<br>< 1)       | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>1.65 1     | < ปั<br>< ปั<br>< ป<br>< ป<br>< ป        | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>1.65 1  | < U<br>< U<br>< U<br>< U<br>< U | 0.33 1<br>0.33 7<br>0.33 1<br>0.33 1<br>1.65 1               | < ()<br>< ()<br>< ()<br>< ()<br>< ()         | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>1.55 1     | < U<br>< U<br>< U<br>< U<br>< U     | 0.56 ‡<br>0.56 1<br>0.56 1<br>0.56 1<br>2.8 1   | < U<br>< U<br>< U<br>< U        | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>1.65 1     | < U<br>< U<br>< U<br>< บ<br>< บ  | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>1.65 1 | < U<br>< U<br>< U<br>< U<br>< U  | 0.33 1<br>0.33 1<br>0.001 1<br>0.33 1<br>1.65 1              | < U<br>< U<br>< U<br>< U<br>< U  | 1.82 10 U U<br>1.82 10 U U<br>1.82 10 U U<br>1.82 10 U U<br>1.82 10 U U<br>9.12 10 U U  | 0.205 1<br>0.205 1<br>0.205 1<br>0.205 1<br>1.03                         | 1 U U<br>1 U U<br>1 U U<br>1 U U<br>1 U U          |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>VOLATILES<br>VOLATILES                 | Phenanthrene<br>Phenol<br>Pyrene<br>1,1,1,2-Tetrachloroethane<br>1,1,1-Trichloroethane  | 0.00536 1<br>0.00536 1   | U<br>V                   |  | 0.0051 1<br>0.0051 1   | ម<br>ម                | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1                        | < U<br>< U<br>< U               | 0.33 1<br>0.33 1<br>0.33 1<br>0.035 1                         | < 간<br>< 긴<br>< 단<br>< 반                   | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1   | < U<br>< U<br>< U<br>< U             | 0.33 1<br>0.33 1<br>0.33 t<br>0.005 1                        | 4 U<br>4 U<br>4 U<br>4 V            | 0.33 1<br>0.33 1<br>0.33 1<br>0.005 1                         | < U<br>< U<br>< U                          | 0.33 1<br>0.33 1<br>0.33 1<br>0.005 1                        | < U<br>< U<br>< U                        | 0:33 1<br>0.33 1<br>0.33 1<br>0.33 1  | < U<br>< U<br>< U               | 0.33 t<br>0.33 1<br>0.33 1<br>0.005 1                        | < U<br>< U<br>< U                            | 0.33 t<br>0.33 t<br>0.33 t<br>0.33 t                         | < U<br>< U<br>< U<br>< U            | 0.56 1<br>0.56 1<br>0.56 1<br>0.017 1<br>0.008 1  | < U<br>< U<br>< U<br>< U<br>< U | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1                         | < U<br>< U<br>< U  | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1                     | < U<br>< U<br>< U  | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1                         | < U<br>< U<br>< U<br>< U   | 1.82 10 U U<br>1.82 10 U U<br>1.82 10 U U   | 0.205 1<br>0.205 1<br>0.205 1<br>0.00629 1<br>0.00629 1                  | i U U<br>I U U<br>I U U<br>I U U<br>I U U          |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                             | 1,1,2,2-Tetrachloroeithane<br>1,1,2-Trictloroethane<br>1,1-Dichloroethane<br>1,1-Dichloroethene<br>1,1-Dichloropropene  | 0.00536 1<br>0.00536 1<br>0.00536 1<br>0.00536 1<br>0.00536 1              | บ<br>บ<br>บ<br>บ         |  | 0.0051 1<br>0.0051 1<br>0.0051 1<br>0.0051 1<br>0.0051 1             | บ<br>บ<br>บ<br>บ      | 0.005 1<br>0.005 1<br>0.005 1<br>0.005 1                    | < ย<br>< ย<br>< ย               | 0.005 1<br>0.005 1<br>0.005 1<br>0.005 1                      | < U<br>< U<br>< U<br>< U                   | 0.005 1<br>0.005 1<br>0.005 1<br>0.005 1   | < U<br>< U<br>< U<br>< U             | 0.005 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.005 1          | < U<br>< U<br>< U<br>< U            | 0.005 1<br>0.005 1<br>0.005 1<br>0.005 1                      | < U<br>< U<br>< U                          | 0.005 1<br>0.005 1<br>0.005 1<br>0.005 1                     | < U<br>< U<br>< U                        | 0.005 1<br>0.005 1<br>0.005 1<br>0.005 1  | < U<br>< U<br>< U<br>< U        | 0.005 1<br>0.005 1<br>0.005 1<br>0.005 1                     | < U<br>< U<br>< U<br>< U                     | 0.005 1<br>0.005 1<br>0.005 1<br>0.005 1                     | < U<br>< U<br>< U<br>< U            | 0.008 1<br>0.008 1<br>0.008 1<br>0.008 1  | < U<br>< U<br>< U<br>< U        | 0.005 1<br>0.005 1<br>0.005 1<br>0.005 1                     | < U<br>< U<br>< U  | 0.005 1<br>0.005 1<br>0.005 1<br>0.005 1                 | < U<br>< U<br>< U<br>< U   | 0.005 1<br>0.005 1<br>0.005 1<br>0.005 1                     | < บ<br>< บ<br>< บ  |   | 0.00629 1<br>0.00629 1<br>0.00629 1<br>0.00629 1<br>0.00629 1<br>0.00629 | 1 0 0<br>1 0 0<br>1 0 0<br>1 0 0<br>1 0 0          |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES  | 1.2.3-Trictiorobenzene<br>1.2.3-Trictioropropane<br>1.2.4-Trinstitylbenzene<br>1.2.4-Trinstitylbenzene<br>1.2.4-Trinstitylbenzene<br>1.2.Dibromo-3-chicopropane | 0.00536 1<br>0.00536 1<br>0.00536 1<br>0.00536 1<br>0.00536 1<br>0.00536 1 | บ<br>บ<br>บ<br>บ         |  | 0.0051 1<br>0.0051 1<br>0.0051 1<br>0.00324 1<br>0.0051 1            | ប<br>ប<br>ប<br>ប      |   | -                               |   |  |  |                                      |  |                                     |   |  |  |  |   |                                 |  |  |  |                                     | 0.017 1   | < U<br>< U                      |  |  |  |  |  |  |   | 0.00629 1<br>0.00629 1<br>0.00629 1<br>0.00629 1<br>0.00629 1<br>0.00629 | 1 U U<br>1 U U<br>1 U U<br>1 U U<br>1 U U<br>1 U U |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                | 1,2-Dichlorobenzene<br>1,2-Dichlorobenzene<br>1,2-Dichloroethene<br>1,2-Dichloroethene<br>1,2-Dichloroptopane<br>1,2-Dimethybenzene (o.Xviene)                  | 0.00536 1<br>0.00536 1<br>0.00536 1<br>0.00536 1                           | ย<br>บ<br>บ              |  | 0.0051 1<br>0.0051 1<br>0.0051 1<br>0.0051 1                         | ย<br>ย<br>ม           | 0.005 1<br>0.005 1<br>0.005 1                               | < U<br>< U<br>< U               | 0.005 1<br>0.005 1<br>0.005 1                                 | < U<br>< U<br>< U                          | 0.005 1<br>0.005 1<br>0.005 1  | < U<br>< U<br>< U                    | 0.005 1<br>0.005 1<br>0.005 1                                | < U<br>< U<br>< U                   | 0.005 1<br>0.005 1<br>0.005 1                                 | < U<br>< U<br>< ป                          | 0.005 1<br>0.005 1<br>0.005 1                                | < U<br>< U<br>< U                        | 0.005 1<br>0.005 1<br>0.005 1   | < U<br>< U<br>< U               | 0.005 t<br>0.005 1<br>0.005 1                                | < U<br>< U<br>< U                            | 0.005 1<br>0.005 1<br>0.005 1                                | < U<br>< U<br>< U                   | 0.008 1<br>0.008 1<br>0.008 1   | < U<br>< U<br>< U               | 0.005 1<br>0.005 1<br>0.005 1                                | < ប<br>< ប<br>< ប  | 0.005 1<br>0.005 1<br>0.005 1                            | < U<br>< U<br>< U  | 0.005 1<br>0.005 1<br>0.005 1                                | < บ<br>< บ<br>< บ  |   | 0.00629 1<br>0.00629 1<br>0.00629 1<br>0.00629                           |  |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                             | 1,3,5-Trimethytbenzene<br>1,3-Dichlorobenzene<br>1,3-Dichloropropane<br>1,4-Dichloropropane<br>2,2-Dichloropropane  | 0.00536 1<br>0.00536 1<br>0.00536 1<br>0.00536 1<br>0.00536 1              | ย<br>ย<br>ย<br>ย<br>ย    |  | 0.0036 1<br>0.0051 1<br>0.0051 1<br>0.0051 1<br>0.0051 1             | Ω<br>Ω<br>Ω<br>Γ<br>Γ |   |                                 |   |  |  |                                      |  |                                     |   |  |  |  |   |                                 |  |  |  |                                     |   |                                 |  |  |  |  |  |  |   | 0.00629 1<br>0.00629 1<br>0.00629 1<br>0.00629 1<br>0.00629              | 1 U U<br>1 U U<br>1 U U<br>1 U U                   |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                             | 2-Butanone<br>2-Chloroethyl vinyl ether<br>2-Chlorololuene<br>2-Hexanone<br>2-Procental   | 0.0107 1<br>0.0107 1<br>0.00536 1<br>0.0107 1                              | ម<br>ម<br>ម<br>ម         |  | 0.0102 1<br>0.0102 1<br>0.0051 1<br>0.0102 1                         | ម<br>ម<br>ម<br>ម      | 0.05 1<br>0.01 1<br>0.05 1                                  | < ប<br>< ប<br>< ប               | 0.05 1<br>0.01 1<br>.0.05 1                                   | < บ<br>< บ                                 | 0.05 f<br>0.01 t<br>0.05 1   | < U<br>< U<br>< U                    | 0.05 1<br>0.01 1<br>0.05 1                                   | < U<br>< U<br>< U                   | 0.05 f<br>0.01 1<br>0.05 1                                    | < U<br>< U<br>< U                          | 0.05 1<br>0.01 1<br>0.05 1                                   | < U<br>< U<br>< U                        | 0.05 1<br>0.01 1<br>0.05 1  | < U<br>< U                      | 0.05 1<br>0.01 1<br>0.05 1                                   | < U<br>< U<br>< U                            | 0.05 1<br>0.01 1<br>0.05 1                                   | ป ><br>ช ><br>ป >                   | 0.017 1<br>0.017 1<br>0.85 1  | < U<br>< U<br>< U               | 0.05 1<br>0.01 1<br>0.05 1                                   | < U<br>< U<br>< U  | 0.05 1<br>0.01 1<br>0.05 1                               | < U<br>< U<br>< U  | 0.05 1<br>0.01 1<br>0.05 1                                   | < U<br>< U<br>< U  |   | 0.0126 1<br>0.0126 1<br>0.00629 1<br>0.0126 1                            | ៖ ប ប<br>៖ ម ប<br>៖ ម ប<br>៖ ម ម<br>៖ ម ម          |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                             | 4-Chiorolaiuene<br>Acetone<br>Acetonitrile<br>Acrytonitrile<br>Atlyt chiorice   | 0.00536 1<br>0.0107 7  | ម<br>បយ                  |  | 0.0051 1<br>0.0102 1   | ម<br>ប បរ             | 0.1 1   | < U                             | 0.1 î   | < ≀  | 0.1 1  | < U                                  | 0.5 1  | < V                                 | 0.1 1   | < U  | 0.1 1  | < U                                      | 0.1 f   | < ઇ                             | 0.1 1  | < U  | 0.1 1  | < U                                 | 0.017 1<br>0.17 1<br>0.17 1<br>0.034 1  | < ป<br>< บ<br>< บ<br>< บ        | 0.1 1  | < V  | 0.1 1  | < U  | Q.1 1  | < U  |   | 0.00629 t<br>0.0126 1  | មេប<br>មេប   |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                             | Benzene<br>Bromobenzene<br>Bromochloromethane<br>Bromodichloromethane<br>Bromotorm  | 0.00536 1<br>0.00536 1<br>0.00536 1<br>0.00536 1<br>0.00536 1              | ប<br>ប<br>ប<br>ប         |  | 0.0051 1<br>0.0051 1<br>0.0051 1<br>0.0051 1<br>0.0051 1             | ກ<br>ຄ<br>ກ<br>ກ      | 0.005 1<br>0.005 1<br>0.005 1                               | < U<br>< U<br>< U               | 0.005 t<br>0.006 t<br>0.005 t                                 | < ป<br>< บ<br>< บ                          | 0.005 1<br>0.005 1<br>0.005 1  | < U<br>< U<br>< U                    | 0.005 1<br>0.005 1<br>0.005 1                                | < U<br>< U                          | 0.005 1<br>0.005 1<br>0.005 1                                 | < U<br>< V<br>< U                          | 0.005 1<br>0.005 1<br>0.005 1                                | < U<br>< U<br>< U                        | 0.005 1<br>0.005 1<br>0.005 1   | < U<br>< U<br>< U               | 0.005 1<br>0.005 1<br>0.005 1                                | < U<br>< U<br>< U                            | 0.005 1<br>0.005 1<br>0.005 1                                | < U<br>< U<br>< U                   | 0.008 1<br>0.008 1<br>0.008 1   | < U<br>< U<br>< U               | 0:005 1<br>0.005 1<br>0.005 1                                | < U<br>< U<br>< U  | 0.005 1<br>0.005 1<br>0.005 1                            | < U<br>< U<br>< U  | 0.005 1<br>0.005 1<br>0.005 1                                | < U<br>< U<br>< U  |   | 0.00629 1<br>0.00629 1<br>0.00629 1<br>0.00629 2<br>0.00629              | ៖ U ប<br>៖ U ប<br>៖ U ប<br>៖ U U<br>៖ U U<br>1 U U |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                             | Bromomethane<br>Carbon disulfide<br>Carbon tetrachloride<br>Chlorobenzene<br>Chloroethane   | 0.0107 1<br>0.00535 1<br>0.00536 1<br>0.00536 1<br>0.00536 1<br>0.0107 1   | ប<br>ប<br>ប<br>ប         |  | 0.0102 1<br>0.0051 1<br>0.0051 1<br>0.0051 1<br>0.0051 1<br>0.0102 1 | U<br>U<br>U<br>U      | 0.01 \$<br>0.005 \$<br>0.005 \$<br>0.005 \$<br>0.005 \$     | < U<br>< U<br>< U<br>< U<br>< U | 0.01 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.005 1            | < U<br>< U<br>< U<br>< U                   | 0.01 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.01 1  | < U<br>< U<br>< U<br>< U<br>< U      | 0.01 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.01 1 | < U<br>< U<br>< U<br>< U<br>< U     | 0.01 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.005 1 | < 1)<br>< 1)<br>< 1)<br>< 1)<br>< 1)       | 0.01 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.005 1           | < U<br>< U<br>< U<br>< U<br>< U          | 0.01 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.065 1  | < U<br>< U<br>< U<br>< U<br>< U | 0.01 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.005 1           | < U<br>< U<br>< U<br>< U<br>< U              | 0.01 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.01 1 | < U<br>< U<br>< U<br>< U<br>< U     | 0.017 1<br>0.008 1<br>0.008 1<br>0.008 1<br>0.008 1<br>0.017 1  | < U<br>< U<br>< U<br>< U        | 0.01 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.01 1 | < V<br>< U<br>< U<br>< U<br>< U  | 0.01 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.01 1        | < U<br>< U<br>< U<br>< U   | 0.01 F<br>0.005 1<br>0.005 1<br>0.005 1<br>0.005 1<br>0.01 1 | < U<br>< U<br>< U<br>< U   |   | 0.0126 1<br>0.00629 1<br>0.00629 1<br>0.00629 1<br>0.0126                | : U U<br>: U U<br>1 U U<br>1 U U<br>1 U U          |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                             | Chloroform<br>Chloromethane<br>Chloroprene<br>cis-1,2-Dichloroethane<br>cis-1,3-Dichloropropene   | 0.00536 1<br>0.0107 1<br>0.00536 1<br>0.00536 1                            | ម<br>ប<br>ម              |  | 0.0051 1<br>0.0102 1<br>0.0051 1<br>0.0051 1                         | ប<br>ប<br>ប           | 0.005 1 0.01 1 0.005 1                                      | < U<br>< U<br>< U               | 0.005 1<br>0.01 1   | < U<br>< U<br>< U                          | 0.005 1 0.01 1   | < U<br>< U<br>< U                    | 0.005 1<br>0.01 1<br>0.005 1                                 | < U<br>< U<br>< U                   | 0.005 1<br>0.01 1   | < 1)<br>< 1 <sup>2</sup><br>< 1)           | 0.005 1<br>0.01 1  | < U<br>< U<br>< U                        | 0.005 1   | < U<br>< U<br>< U               | 0.005 1<br>0.01 1<br>0.005 1                                 | < U<br>< U<br>< U                            | 0.005 1<br>0.01 1  | < U<br>< U<br>< U                   | 0.008 1<br>0.017 1<br>0.17 1<br>0.008 1   | < U<br>< U<br>< U<br>< U        | 0.005 1<br>0.01 1<br>0.005 1                                 | < ย<br>< บ<br>< ย  | 0.005 1<br>0.01 1<br>0.005 1                             | < U<br>< U<br>< U  | 0.005 1<br>0.01 1<br>0.005 1                                 | < U<br>< U<br>< U  |   | 0.00629 1<br>0.0126 1<br>0.00629<br>0.00629                              | 1 0 0<br>1 0 0<br>1 0 0<br>1 0 0                   |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>DLATILES<br>OLATILES                               | Dibromomethane<br>Dibromomethane<br>Dichlorodifluoromethane<br>Ethyl methacrylate<br>Ethyl Benzene<br>Hansoblenebrit - finn                                     | 0.00536 1 0.00536 1 0.00536 1 0.00536 1                                    | ย<br>ย<br>ย<br>ย         |  | 0.0051 1<br>0.0102 1<br>0.00486 1                                    | 1 J<br>U              | 0.005 1   | < U                             | 0.005 1   | < U<br>< U                                 | 0.005 1  | < U<br>< U                           | 0.005 1  | < U<br>< U                          | 0.005 1   | < U  | 0.005 1  | < U                                      | 0.005 1   | < U<br>< U                      | 0.005 1  | < ປ  | 0.005 1  | < U                                 | 0.008 1<br>0.034 1<br>0.034 1<br>0.034 1<br>0.008 1   | < U<br>< U<br>< U<br>< U<br>< U | 0.005 1  | < U  | 0.005 1  | < U  | 0.005 1  | < U  |   | 0.00629 1<br>0.0126 1<br>0.00629   | ្រូប<br>ប្រូប<br>ប្រូប<br>ប្រូប                    |
| VOLATILES<br>VOLATILES<br>VOLATILES   | rezacruorouraciene<br>IODOMETHANE<br>ISOBUTYL ALCOHOL<br>Isopropylbenzene   | 0.00536 1  | บ<br>บ                   |  | 0.000526 1   | 1. T                  |   | •                               |   |  |  |                                      |  | -                                   |   |  |  |  |   |                                 |  |  |  |                                     | 0.017 t<br>3.4 1  | < 1)<br>< 1)                    |  |  |  |  |  |  |   | 0.00629  | 1 U U  |

Shaw Environmental, Inc.

Table 3-13 Concentrations of Chemicals in Soil Samples Associated with Sump 013

| (SUMP) = SUMP013 |                           |                   |                  |                  |                  |                  |                    |                      |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  | 100000 0000      |
|------------------|---------------------------|-------------------|------------------|------------------|------------------|------------------|--------------------|----------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| CATION CODE      |                           | 35SUMP012-SB01    | 35SUMP013-S801   | 355UMP013-SB01   | LH-S12-01        | LH-S12-01        | LH-S12-02          | LH-\$12-02           | LH-S13-01        | LH-S13-01         | LH-S13-01        | LH-S13-02        | LH-S13-02        | LHS-2-01         | LH-WRS-6         | LH-WRS-6         | LH-WHS-6         | WHS05-SB01       | 101506-5001      |
| AMPLE_NO         |                           | 35-SMP12-SB01-02  | 35-SMP13-SB01-01 | 35-SMP13-SB01-02 | LH-\$12-01_1     | LH-\$12-01_2     | 1H-S12-02_1        | LH-S12-02_2          | LH-S13-01 QC     | LH-S13-01_1       | LH-S13-01_2      | LH-\$13-02_1     | LH-513-02_2      | LHS-2-01         | UH-WRS-6_1       | LH-WRS-6_2       | LH-WHS-6_3       | WHS06-S801-01    | WH:506-560 -02   |
| SAMPLE_DATE      |                           | 9/12/2006         | 9/12/2005        | 9/12/2005        | 7/11/1993        | 7/11/1993        | 7/11/1993          | 7/11/1993            | 7/10/1993        | 7/10/1993         | 7/10/1993        | 7/10/1993        | 7/10/1993        | 1/9/1995         | 7/10/1993        | 7/10/1993        | 7/24/1993        | 9/25/2006        | 9/25/2006        |
| DEPTH            |                           | 11 - 11 Ft        | 0.5 - 0.5 Ft     | 10 - 10 Ft       | 0 - 2 Ft         | 9 - 11 Pt        | 0 - 2 Ft           | 9–11 Ft              | 6-2Ft            | 0-2Ft             | 8 - 10 Ft        | 0-2Ft            | 8 - 10 Ft        | 0 - 0.5 Fl       | 0-2Ft            | 2.5 - 4.5 Ft     | 18 - 20 Ft       | 0.5 - 0.5 Ft     | 4.5 - 4.5 H      |
| SAMPLE_PURPOSE   |                           | REG               | REG              | REG              | REG              | REG              | REG                | REG                  | FÐ               | REG               | REG              | REG              | REG              | REG              | REG              | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg) | Result Dil. LQ VQ | Result DAL LQ VQ | Result DIL LO VO | Result DIL LO VQ | Result DIE 10 VO | ) Result DIL LQ VO | ) Result Dift. LQ VQ | Result Dil LO VO | Result Dill LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result Dil LQ VQ | Result DIL LO VO | Result DIL LO VO |
| VOLATILES        | m.p-Xylenes               | 0.00536 1 U       | ~~~~             | 0.0101 1         |                  |                  |                    |                      | <b>u</b>         |                   |                  |                  |                  |                  |                  |                  |                  |                  | 0.00629 1 U U    |
| VOLATILES        | Methacrylonitrile         |                   |                  |                  |                  |                  |                    |                      |                  |                   |                  |                  |                  | 0.034 1 < U      |                  |                  |                  |                  |                  |
| VOLATILES        | Methyl isobulyl ketone    | 0.0107 1 U        |                  | 0.0102 1 10      | 0.05 t < U       | 0.05 1 × U       | 0.05 1 < U         | 0.05 1 < U           | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 f < U       | 0.017 1 < U      | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < 0       |                  | 0.0126 1 0 0     |
| VOLATILES        | METHYL METHACRYLATE       | ]                 |                  |                  |                  |                  |                    |                      |                  |                   |                  |                  |                  | 0.034 1 < U      |                  |                  |                  |                  |                  |
| VOLATILES        | Methylene chloride        | 0.00536 1 U       |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U          | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 t < ⊎      | 0.005 1 < U      |                  | 0.00629 1 U U    |
| VOLATILES        | Nachthalene               | 0.0107 1 U        |                  | 0.0102 t U       |                  |                  |                    |                      |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  | 0.0126 1 U U     |
| VOI ATH ES       | n-BLITYLBENZENE           | 0.00536 1 U       |                  | 0.0051 1 U       |                  |                  |                    |                      |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  | 0.00629 1 U U    |
| VOLATILES        | n-PROPYLBENZENE           | 0.00536 1 8       |                  | 0.00114 1 J J    |                  |                  |                    |                      |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  | 0.00629 1 U U    |
| VOLATILES        | Pentachlomethane          |                   |                  |                  |                  |                  |                    |                      |                  |                   |                  |                  |                  | 0.034 1 < U      |                  |                  |                  |                  |                  |
| VOLATILES        | p-ISOPROPYLTOUUENE        | 0.00536 1 U       |                  | 0.0051 1 U       |                  |                  |                    |                      |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  | 0.00629 1 U U    |
| VOLATILES        | Pmoinsilrile              |                   |                  |                  |                  |                  |                    |                      |                  |                   |                  |                  |                  | 0.085 1 < U      |                  |                  |                  |                  |                  |
| VOLATILES        | Sec-BUTYI BENZENE         | 0.00536 t U       |                  | 0.0051 1 U       |                  |                  |                    |                      |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  | 0.00629 I U U    |
| VOLATILES        | Styrene                   | 0.00536 1 U       |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U        | 0.005 1 < U          | 0.005 t < U      | 0.005 1 < 1J      | 0.005 1 < 13     | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00629 1 U U    |
| VOLATILES        | 1ed-BLITYL BENZENE        | 0.00536 1 1       |                  | 0.0051 1 U       |                  |                  |                    |                      |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  | 0.00629 1 U U    |
| VOLATILES        | Totrachiomethene          | 0.00536 1 11      |                  | 0.0051 1 U       | 0.005 1 < €      | 0.905 1 < U      | 0.005 f < U        | 0.035 1 < U          | 0.005 1 < 10     | 0.005 · 1 < U     | 0.005 t < U      | 0.005 t < U      | 0.005 1 < 간      | 0.008 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00629 1 U U    |
| NOLATILES        | Tohono                    | 0.00535 1 1       |                  | 00051 t U        | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < 1        | 0.005 1 < 1/         | 0.005 1 < 11     | 0.005 1 < U       | 0.005 t < U      | 0.005 t < U      | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |                  | 0.00629 t U U    |
| VOLATILES        | Irans.1 2.Dichlomathana   | 0.00536 1 H       |                  | 0.0051 1 U       |                  |                  |                    |                      |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  | 0.00629 1 U U    |
| VOLATILES        | trans-13 Dichlamomono     | 0.00536 1 11      |                  | 0.0051 1 1       | 0005 1 c U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U          | 0.005 1 < ∜      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00629 1 U U    |
| VOLATINES        | mas 1 4 Dichlam 2 butan   |                   |                  | 4.5051 1 0       |                  |                  |                    |                      |                  |                   |                  |                  |                  | 0.034 1 < U      |                  |                  |                  |                  |                  |
| VAANLES          | Trickis methode           | 0.00536 1 11      |                  | 0.0051 1 11      | 0.005 1 4 18     | 0.005 1 2 11     | 0.005 1 < 1        | 0.005 1 4 11         | 0.005 1 < 15     | 0.005 1 < 11      | ₽005 t c łł      | 0.005 1 < 1/     | 0.005 1 < U      | 0.008 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00629 1 U U    |
| VULAINES         | Trickle - Runnersothe ac  | 0.00000 1 0       |                  | 0.0007 1 11      | 0.000 .1 < 0     | 0.000 1 1 0      | 2.303              |                      | 0.000            |                   |                  |                  |                  | 0.017 1 < U      |                  |                  |                  |                  | 0.0126 1 U U     |
| VOLATILES        | Manda a antesta           | 0.0107 1 11       |                  | 0.0102 1 11      | 0.05 1 2 11      | 0.05 1 < 1       | 005 1 2 1          | 005 1 < U            | 0-05 1 c II      | 0.05 T < U        | 0.05 1 c 1/      | 0.05 1 < U       | û.05 î < ⊎       | 0.017 1 < U      | 0.05 1 < U       | 0.05 t < 10      | 0.05 1 < U       |                  | 0.0126 1 U U     |
| VOLATILES        | www.accelars              | 0.0107 1 0        |                  | 0.0102 1 11      |                  | 0.01 1 4 17      |                    |                      |                  |                   |                  | ANT 1 < U        | 0.01 1 < U       | 0.017 1 < 1      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 0       |                  | 0.0126 1 U U     |
| VULATILES        |                           | 0.0107 1 0        |                  | 0.0102 1 0       | 0.01 1 4 12      | 0.01 1 < 0       |                    | 0.05 1 2 1           |                  | 0.07 7 1 2 1      | 8005 1 × 15      | 0.005 1 2 1      | 0.05 1 2 15      | 1008 1 c 1       | 0.005 1 4 18     | 0.005 t < 11     | 0.005 1 < U      |                  |                  |
| VULATILES        | Aylenes, Lotat            | 1                 |                  |                  | 0.003 3 < 0      | 0.005 1 < 0      | 0.000 1 < 12       |                      | 0.000 1 C U      | 4.000 1 < 0       | 0.000 1 4 0      | 0.000 1 C U      | 0.000 1 1 0      |                  |                  |                  |                  |                  |                  |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-14 Concentrations of Chemicals in Soil Samples Associated with Sump 014

| [SUMP] = SUMP014<br>LOCATION _CODE |  | U      | H-S14-  | 01       |           | เห           | S14-01 |              | Ա       | 1-514-02             | 2            | ហ      | -S14-            | 02      |         | ٤H           | S-2-17           | 7      |         | STEP-46SS01             | :    | step- | 46SS01        | sn     | EP-46SS02          |      | STEP    | 465502   | ?   |
|------------------------------------|--|--------|---------|----------|-----------|--------------|--------|--------------|---------|----------------------|--------------|--------|------------------|---------|---------|--------------|------------------|--------|---------|-------------------------|------|-------|---------------|--------|--------------------|------|---------|----------|-----|
| SAMPLE_NO                          |  | ŁH     | -S14-0  | 1_1      |           | LH-S         | 514-01 | 2            | L'H-    | \$14-02_             | _1           | LH     | S14-0            | 2_2     | -       | ŁH           | S-2-17           | 7      |         | 46SS01(0-0.5)-020311    | 465  | S01(1 | -2)-020311    | 46SS02 | (0-0.5)-0203       | 11 4 | 46SS02( | 1-2)-020 | 311 |
| SAMPLE_DATE                        |  | 0      | 7/8/199 | 13<br>Ft |           | 32           | -42 Fi |              | /<br>04 | /8/1993<br>5 - 1 5 F | 4            | 31     | 8/199<br>5 - 4 5 | 3<br>Ft |         | 1/1<br>ft-   | 1/1990<br>0.5 Fi | 5<br>1 |         | 3/11/2002<br>0 - 0 5 Ft |      | 3/11/ | /2002<br>2 F1 | 3      | 11/2002<br>3-05 Ft |      | 3/1     | -2 Ft    |     |
| SAMPLE_PURPOSE                     |  |        | REG     |          |           |              | REG    |              | -       | REG                  | -            |        | REG              |         |         | F            | REG              | -      |         | REG                     |      | R     | EG            |        | REG                |      | 1       | REG      |     |
| Test Group                         | Parameter (Units = mg/kg)                              | Result | DIL     | LQ       | VQ R      | lesult       | DIL L  | Q VQ         | Result  | D1L i                | LQ VQ        | Result | DIL.             | iQ 1    | VQ      | Result       | DIL              | LQ     | VQ      | Result Dil. LQ VC       | Resu | nt D  | IL LO VO      | Result | DIL LO             | VQ R | esuit l | nil lq   | VQ  |
| EXPLOSIVES<br>EXPLOSIVES           | 1,3,5-Trinitrobenzene<br>1 3-Diritrobenzene            |        |         |          |           |              |        |              |         |                      |              |        |                  |         |         | 0.23         | 1                | ×<br>× | U<br>TI |                         |      |       |               |        |                    |      |         |          |     |
| EXPLOSIVES                         | 2,4,6-Trinitrotoluene                                  |        |         |          |           |              |        |              |         |                      |              |        |                  |         |         | 0.23         | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| EXPLOSIVES                         | 2,4-Dinitrotoluene                                     | 0.33   | 1       | <        | U         | 0.33         | 1      | < บ          | 0.33    | 1                    | < U          | 0.33   | 1                | <       | U       | 0.23         | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| EXPLOSIVES<br>EXPLOSIVES           | 2,6-Dinitrotoluene<br>4-Amino-2 6-dinitrotokuene       | 0.33   | 1       | <        | υ         | 0.33         | 1      | < บ          | 0.33    | Ť                    | < (ł         | 0.33   | 1                | <       | U       | 0.25         | 1                | ۲<br>۲ | U<br>H  |                         |      |       |               |        |                    |      |         |          |     |
| EXPLOSIVES                         | HMX  |        |         |          |           |              |        |              |         |                      |              |        |                  |         |         | 2.1          | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| EXPLOSIVES                         | m-Nitrotoluene   | [      |         |          |           |              |        |              |         |                      |              |        |                  |         |         | 0.95         | 1                | <      | บ       |                         |      |       |               |        |                    |      |         |          |     |
| EXPLOSIVES<br>EXPLOSIVES           | Nitrobenzene   |        |         |          |           |              |        |              |         |                      |              |        |                  |         |         | 0.25         | 1                | ۲<br>۲ | บ<br>ม  |                         |      |       |               |        |                    |      |         |          |     |
| EXPLOSIVES                         | p-Nitrotoluene   | ł      |         |          |           |              |        |              |         |                      |              |        |                  |         |         | 2.8          | 1                | <      | Ð       |                         |      |       |               |        |                    |      |         |          |     |
| EXPLOSIVES                         | RDX  |        |         |          |           |              |        |              |         |                      |              |        |                  |         |         | 1            | 1                | <      | υ       |                         |      |       |               |        |                    |      |         |          |     |
| EXPLOSIVES                         | Tetryi<br>Aluminum                                     | 1090   | •       |          |           | 15100        |        |              | 3720    | 1                    |              | 8400   | 1                |         |         | 0.7          | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Antimony   | 3      | 1       | <        | U         | 3100         | 1      | < U          | 6.3     | i                    |              | 6.1    | 1                |         |         | 16.5         | 1                | <      | UJ      |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Arsenic  | ,      | 1       | <        | U         | 2            | 1      |              | 5.4     | 1                    |              | 2.4    | 1                |         |         | 6            | 1                |        |         |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Barium   | 15     | 1       |          | п         | 106          | 1      | ~ 11         | 19.6    | 1                    | < 11         | 82.3   | 1                |         | н       | 332          | 1                | ,      | 13      |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Calcium  | 158    | ,<br>†  | •        | 0         | 1670         | 1      |              | 508     | 1                    |              | 1740   | 1                | `       | v       | 1230         | 1                | `      | U       |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Chromium   | 1,6    | 1       |          |           | 13,7         | 1      |              | 84.5    | 1                    |              | 8.7    | 1                |         |         | 22.4         | 1                |        |         |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Cobalt   |        | 1       | <        | บ         | 7.4          | 1      |              | 1.1     | 1                    |              | 3.7    | 1                |         |         | 3.3          | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | lron   | 1870   | 1       |          |           | 6.7<br>22400 | 1      |              | 47900   | 1                    |              | 13000  | 1                |         |         | 10800        | 1                |        |         |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Lead   | 1.5    | 1       |          |           | 7.7          | 1      |              | 7.7     | 1                    |              | 11.5   | 1                |         |         | 38.8         | 1                |        |         |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Magnesium  | 60.9   | 1       |          |           | 1610         | 1      |              | 58      | 1                    |              | 654    | 1                |         |         | 992          | 1                |        |         |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Manganese<br>Mercurv                                   | 94.9   | 1       | <        | U         | 0.1          | 1      | < 1)         | 18.9    | 1                    | < 11         | 41.7   | 1                | <       | IJ      | 0.19         | 1                |        |         |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Potassium  | 83.4   | 1       |          | -         | 989          | 1      | -            | 105     | 1                    |              | 412    | 1                |         |         | 690          | t                |        |         |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Selenium   |        | 1       | <        | U         | 1            | 1      | < U          | 1       | 1                    | < 19         | 1      | 1                | <       | U       | 0.46         | 1                |        | J       |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Sirver   | 14     | 1       | <        | U         | 1<br>29.4    | 1      | < 1          | 4.5     | 1                    | < U          | 19.5   | 1<br>1           | <       | U       | 23.3         | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Thallium   |        |         |          |           |              |        |              |         |                      |              |        |                  |         |         | 82.4         | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| METALS                             | Zinc   | 46.6   | 1       |          |           | 41.9         | 1      |              | 8.8     | 1                    |              | 20.9   | 1                |         |         | 131          | 1                |        | J       |                         |      |       |               | 0.0000 |                    |      | 0000    |          |     |
| PERC<br>SEMIVOLATILES              | Perchiorate<br>1.2 4-Trichlorobenzene                  | 0.33   | 1       | <        | IJ        | 0.33         | 1      | < U          | 0.33    | 1                    | < 11         | 0.33   | 1                | <       | บ       | 0.69         | 1                | <      | U       | 0.061 1 0 0             | 0.04 | ./4   | : 0 0         | 0.0006 | 1 0                | υυ   | 0000    | 1 0      | U   |
| SEMIVOLATILES                      | 1,2-Dichlorobenzene                                    | 0.33   | 1       | <        | U         | 0.33         | t      | < ป          | 0.33    | 1                    | < 1          | 0.33   | 1                | <       | U       | 0.69         | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 1,3-Dichkorobenzene                                    | 0.33   | 1       | <        | U         | 0.33         | 1      | < 1)         | 0.33    | 1                    | < U          | 0.33   | 1                | <       | U       | 0.69         | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 1,4-Dichlorobenzene<br>2,4,5-Trichlorobhenol           | 1.65   | 1       | د<br>د   | U<br>U    | 1.65         | 1      | < บ<br>< ป   | 0.33    | 1                    | < U<br>< U   | 1.65   | 1                | ۲<br>۲  | บ<br>ป  | 3.4          | 1                | <<br>< | U       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 2,4,6-Trichlorophenol                                  | 0.33   | t       | <        | U         | 0.33         | t      | < U          | 0.33    | 1                    | < U          | 0.33   | 1                | <       | U       | 0.69         | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 2,4-Dichlorophenol                                     | 0.33   | 1       | <        | U         | 0.33         | 1      | < U          | 0.33    | 1                    | < 1          | 0.33   | 1                | <       | ບ<br>ເ  | 0.69         | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 2,4-Dimethyphenol<br>2 4-Dinitrophenol                 | 165    | 1       | <<br><   | ս<br>14 - | 0.33         | 1<br>1 | < 11<br>< 11 | 0.33    | 1                    | < U<br>< U   | 0.33   | 1                | <       | U<br>U  | 0.69         | 1                | <      | U<br>U  |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 2,4-Dinitrotoluene                                     |        |         |          | -         |              |        |              |         |                      |              |        |                  |         |         | 0.69         | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 2,6-Dinitrototuene                                     |        |         |          |           | 0.00         |        |              |         |                      |              | 0.00   |                  |         |         | 0.69         | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 2-Unioronaprinaiene<br>2-Chlorophenol                  | 0.33   | 1       | ۲<br>۲   | U         | 0.33         | 1      | < ប<br>< ប   | 0.33    | ،<br>1               | < U          | 0.33   | 1                | <<br><  | U       | 0.69         | 1                | ۲<br>۲ | U       |                         |      |       |               |        |                    | -    |         |          |     |
| SEMIVOLATILES                      | 2-Methylnaphthalene                                    | 0.33   | 1       | <        | U         | 0.33         | 1      | < U          | 0.33    | 1                    | < U          | 0.33   | 1                | <       | U       | 0.69         | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 2-Methylphenol   | 0.33   | 1       | <        | 0         | 0.33         | 1      | < U          | 0.33    | 1                    | < 1          | 0.33   | 1                | <       | U<br>II | 0.69         | 1                | <      | บ       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES<br>SEMIVOLATILES     | 2-Natroansine<br>2-Natropheno!                         | 0.33   | 1       | <<br><   | U<br>U    | 0.33         | 1      | < 1.<br>< 1. | 0.33    | 1                    | < 10<br>< 10 | 1.65   | 1                | ۲<br>۲  | U<br>U  | 3.4.<br>0.69 | ו<br>1           | <<br>< | บ<br>บ  |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 3,3'-Dichlorobenzidine                                 | 0.65   | t       | <        | U         | 0.65         | ţ      | < U          | 0.65    | 1                    | < U          | 0.65   | 1                | <       | U       | 1.4          | 1                | <      | ບ       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 3-Nitroaniline   | 1.65   | 1       | <        | U         | 1.65         | 1      | < U          | 1.65    | 1                    | < 1          | 1.65   | 1                | <       | U       | 3.4          | 1                | <      | ບ       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES<br>SEMIVOLATILES     | 4,6-Osnaro-2-methyphenol<br>4-Bromophenyl phenyl ether | 0.33   | 1       | <<br><   | U<br>U    | 0.33         | י<br>1 | < บ<br>< ปี  | 0.33    | י<br>1               | < U<br>< U   | 0.33   | 1                | ۲<br>۲  | U       | 3.4<br>0.69  | 1<br>1           | <<br>< | υ<br>υ  |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 4-Chloro-3-methylphenol                                | 0.65   | 1       | <        | U         | 0.65         | 1      | < U          | 0.65    | 1                    | < U          | 0.65   | 1                | <       | U       | 0.69         | t                | <      | υ       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 4-Chloroaniline  | 0.65   | 1       | <        | U         | 0.65         | 1      | < U          | 0.65    | 1                    | < U          | 0.65   | 1                | <       | U       | 0.69         | 1                | <      | บ       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 4-Chlorophenyi phenyi ether<br>4-Methvinhenol          | 0.33   | 1       | د<br>د   | U         | 0.33         | 1      | < บ<br>< บ   | 0.33    | i<br>t               | < U<br>< U   | 0.33   | 1                | د<br>د  | บ<br>เม | 0.69         | 1                | <<br>< | บ<br>บ  |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | 4-Nitroaniline   | 1.65   | 1       | <        | Ŭ         | 1.65         | 1      | < U          | 1.65    | 1                    | < 1)         | 1.65   | 1                | <       | Ū       | 3.4          | 1                | <      | U       |                         |      |       |               | -      |                    |      |         |          |     |
| SEMIVOLATILES                      | 4-Nitropheno?  | 1.65   | 1       | <        | U         | 1.65         | t      | < U          | 1.65    | 1                    | < 1)         | 1.65   | 1                | <       | U       | 3.4          | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES<br>SEMIVOLATILES     | Acenaphthene<br>Acenaphthviene                         | 0.33   | 1       | ۲<br>۲   | U<br>U    | 0.33         | 1<br>1 | < 13<br>∠ 11 | 0.33    | 1                    | < 1)         | 0.33   | 1                | <<br><  | U<br>U  | 0.69<br>0.69 | 1                | <<br>< | U<br>U  |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | Anthracene   | 0.33   | 1       | <        | Ŭ         | 0.33         | 1      | < 10         | 0.33    | 1                    | < บ          | 0.33   | 1                | <       | Ū       | 0.69         | 1                | <      | Ű       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | Benzo(a)anthracene                                     | 0.33   | 1       | <        | U         | 0.33         | 1      | < U          | 0.33    | 1                    | < U          | 0.33   | 1                | <       | U       | 0.69         | 1                | <      | U       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | Benzo(a)pyrene<br>Benzo(h)fluoranthene                 | 0.33   | 1       | <        | U<br>Li   | 0.33         | 1      | < ل+<br>د 11 | 0.33    | 1<br>1               | < U          | 0.33   | 1                | ۲<br>۲  | ษ<br>ม  | 0.69<br>0.60 | 1                | ۲<br>۲ | U<br>II |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | Benzo(ghi)perytene                                     | 0.33   | 1       | <        | ŭ         | 0.33         | 1      | < U          | 0.33    | 1                    | < 1J         | 0.33   | 1                | <       | U       | 0.69         | 1                | ~      | Ű       |                         |      |       |               |        |                    |      |         |          |     |
| SEMIVOLATILES                      | Benzo(k)fluoranthene                                   | 0.33   | 1,      | <        | U.        | 0.33         | 1      | < U          | 0.33    | t                    | < U          | 0.33   | 1                | ۲       | U       | 0.69         | 1                | ۲.     | U       |                         |      |       |               |        |                    |      |         |          |     |



Shaw Project No. 117591 7/11/2007

Table 3-14 Concentrations of Chemicals in Soil Samples Associated with Sump 014

| [SUMP] = SUMP014               |   |        |                    |         |         |         |               |             |        |                  |             |            |                    |                    |         |              |         |        |          |              |             |              |                           |      |                     |        |
|--------------------------------|---|--------|--------------------|---------|---------|---------|---------------|-------------|--------|------------------|-------------|------------|--------------------|--------------------|---------|--------------|---------|--------|----------|--------------|-------------|--------------|---------------------------|------|---------------------|--------|
| LOCATION _CODE                 |   | U      | H-\$14-            | 01      |         | LH-S    | 14-01         |             | UH-    | \$14-02          | 2           |            | UH-S1              | 4-02               |         | 14<br>14     | IS-2-17 |        | 4        | STEP-46550   | )]<br>20311 | 116<br>02231 | -P-465501<br>(1/1-2)-0203 |      | 5188-4<br>1-0202228 | 15502  |
| SAMPLE_NO                      |   | LH     | I-S14-0<br>7/0/100 | 1_1     |         | 117-514 | 1-01_2<br>002 |             | 28     | 14-02_<br>2/1002 | .1          |            | L/1-514            | -U2_2<br>3033      |         | 1/1          | 1/199   |        | 4        | 3/11/2002    | 20013       | 40000        | 1(1-2)-02.031<br>1/1/2002 |      | 3/11/               | 2902   |
| DEDTH                          |   |        | 5-15               | S<br>Fr |         | 32-     | 995<br>1.2 Ft |             | 05     | -15F             | •           |            | 35-4               | 5 Ft               |         | 0.           | - 0.5 F |        |          | 0-0.5 Ft     |             |              | 1-2Ft                     |      | 0.0                 | .5 Ft  |
| SAMPLE PURPOSE                 |   | ~      | REG                |         |         | RE      | G             |             | 1      | REG              |             |            | RE                 | G                  |         |              | REG     |        |          | REG          |             |              | REG                       |      | RE                  | G      |
| Test Group                     | -<br>Parameter (Units = mg/kg)                        | Result | DIL                | LQ V    | Q Re    | suit D  | 1. 1.0        | vQ :        | Result | DIL I            | Q VO        | ) Res      | sult Di            | LQ                 | VQ      | Result       | DIL     | LQ V   | QR       | esult DIL LI | a va        | Result       | DIL LQ                    | VQ I | Result Dil          | LLQ VQ |
| SEMIVOLATILES                  | Benzeic Acid  | 1.65   | 1                  | < 1     | 1       | 1.65 1  | <             | U           | 1.65   | 1                | < U         | 1          | 1.65 1             | <                  | ป       | 3.4          | 1       | < t    | 3        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Benzyl Alcohol  | 0.55   | 1                  | < (     | ł       | 0.65    | <             | บ           | 0.65   | 1                | < U         |            | 0.65 1             | <                  | U       | 0.69         | 1       | < (    | 1        |              |             |              |                           | -    |                     |        |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane                            | .0.33  | 1                  | < 1     | J       | 0.33 1  | <             | U           | 0.33   | 1                | < 1)        | •          | 0.33 1             | <                  | ຍ       | 0.69         | 1       | < 1    | ,        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether                               | 0.33   | 1                  | < 1     | }<br>•  | 0.33 1  | <             | 0           | 0.33   | 1                | < U         |            | 0.33 1             | <                  | U<br>II | 0.69         | 1       |        | ,<br>,   |              |             |              |                           |      |                     |        |
| SEMIVOLANLES<br>SEMIVOLANLES   | hst2-Chlorosopropytjellet<br>hat2-Chlorosophoptialata | 0.33   |                    |         | ,<br>1  | 0.33    |               | U<br>H      | 0.33   | 1                | < U<br>< 11 |            | 0.33 1             | ž                  | Lf      | 0.03         | 1       | ` .    | j        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Butvi benzvi ohthalate                                | 0.33   | 1                  | < 1     | ,<br>,  | 0.33 1  |               | Ŭ           | 0.33   | 1                | < U         |            | 0.33 1             | <                  | υ       | 0.69         | 1       | < 1    | J        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Chrysene  | 0.33   | 1                  | < 1     | j       | 0.33    |               | U           | 0.33   | 1                | < 0         |            | 0.33 1             | <                  | U       | 0.69         | 1       | < 1    | J        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Dibenzo(a,h)anthracene                                | 0.33   | 1                  | < 1     | J       | 0.33    | i <           | U           | 0.33   | 1                | < U         |            | 0.33 1             | <                  | U       | 0.69         | 1       | < (    | ł        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Dibenzoluran  | 0.33   | 1                  | < 1     | ł       | 0.33    | <             | U           | 0.33   | t                | < U         |            | 0.33 1             | <                  | ບ       | 0.69         | 1       | < (    | J        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Diethyl phthalate                                     | 0.33   | 1                  | < 1     | J       | 0.33    | <             | U           | 0.33   | 1                | < 1         |            | 0.33 1             | <                  | บ       | 0.69         | 1       | < 1    | ;        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Dimethyl phthalate                                    | 0.33   | 1                  | < 1     | J       | 0.33    | ۱ <           | U           | 0.33   | 1                | < 0         |            | 0.33 1             | <                  | U       | 0.69         | 1       | < (    | و        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | di-n-Butyl phthalate                                  | 0.33   | 1                  | <       | J<br>,  | 0.33    | × ۱           | - U<br>- 11 | 0.33   | 1                | < 0         |            | 0.33 1             | <                  | U<br>11 | 0.69         | 1       | < 1    | J.       |              |             |              |                           |      |                     |        |
| SEMIVOLAHLES                   | di-n-Ociyi pomalate                                   | 0.33   | 1                  | < 1     | 3<br>1  | 0.33    |               | - U         | 0.33   | 1                | < U         |            | 0.33 1             | È                  | 11      | 0.03         | 1       | < 1    | 1        |              |             |              |                           |      |                     |        |
| SEMBVOLATILES                  | Fluorene  | 0.33   | 1                  | è l     | )       | 0.33    |               | ŭ           | 0.33   | 1                | < 1         |            | 0.33 1             | <                  | Ŭ       | 0.69         | 1       | < 1    | J        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Hexachlorobenzene                                     | 0.33   | 1                  | < I     | J       | 0.33    | . <           | Ū           | 0.33   | 1                | < 0         |            | 0.33 1             | <                  | U       | 0.69         | 1       | < 1    | J        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Hexachlorobutadiene                                   | 0.33   | 1                  | < 1     | J       | 0.33    | <u>ہ</u>      | U           | 0.33   | t                | < 1         |            | 0.33 1             | <                  | U       | 0.69         | 1       | < 1    | J        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Hexachiorocyclopentadiene                             | 0.33   | 1                  | < 1     | U       | 0.33    | t <           | U           | 0.33   | t                | < U         | 1 1        | 0.33 1             | <                  | U       | 0.69         | 1       | < 1    | J        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Hexachloroethane                                      | 0.33   | 1                  | < 1     | ŀ       | 0.33    | 1 <           | U           | 0.33   | 1                | < U         | 1          | 0.33 1             | <                  | U       | 0.69         | 1       | < !    | 3        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Indeno(1,2,3-cd)pyrene                                | 0.33   | 1                  | < 1     | U       | 0.33    | 1 <           | υ           | 0.33   | 1                | < ti        |            | 0.33 1             | <                  | U       | 0.69         | 1       | < !    | J        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Isophorane  | 0.33   | 1                  | <       | J       | 0.33    | 1 <           | : U         | 0.33   | 1                | < 1         |            | 0.33 1             | <                  | 0       | 0.69         | 1       | < 1    | U<br>11  |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Naphthalene   | 0.33   | 1                  | < .     | U<br>I  | 0.33    | 1 <           |             | 0.33   | 1                | < 1         |            | 10.33 I<br>0.33 I  | <                  | 11      | 60.0<br>63.0 | 1       | ~ ;    | נו       |              |             |              |                           |      |                     |        |
| SEMIVOLATILES<br>SEMIVOLATILES | n Nitroso di n. nronvia mine                          | 0.33   | 1                  | ~       | 1       | 0.33    | 1 4           |             | 0.33   | 1                | < ti        |            | 0.33 1             | ~                  | Ū       | 0.69         | 1       | < 1    | U        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | n-Nitrosodiphenvlamine                                | 0.33   | 1                  | <       | U       | 0.33    | 1 <           |             | 0.33   | 1                | < 1         | ) I        | 0.33 1             | <                  | U       | 0.69         | i       | < 1    | U        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Pentachiorophenol                                     | 1.65   | 1                  | <       | U       | 1.65    | 1 <           | U           | 1.65   | 1                | < 0         |            | 1.65 1             | <                  | U       | 3.4          | 1       | < 1    | U        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Phenanthrene  | 0.33   | 1                  | <       | U       | 0.33    | 1 <           | U           | 0.33   | 1                | < 1         | 1          | 0.33 1             | <                  | U       | 0.69         | 1       | < 1    | U        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Phenol  | 0.33   | 1                  | <       | U       | 0.33    | 1 <           | U           | 0.33   | 1                | < 1         | 1          | 0.33 1             | <                  | U       | 0.69         | 1       | < 1    | U        |              |             |              |                           |      |                     |        |
| SEMIVOLATILES                  | Pyrene  | 0.33   | 1                  | <       | U       | 0.33    | 1 <           | U           | 0.33   | t                | < 1         |            | 0.33 1             | <                  | υ       | 0.19         | 1       |        | J        |              |             |              |                           |      |                     |        |
| VOLATILES                      | 1,1,1,2-Tetrachloroethane                             | 0.005  |                    |         |         | 0.005   |               |             | 0.005  | 4                |             | . 0        | 1 005 1            |                    | 11      | 0.021        | 1       | ~ 1    | 0<br>13  |              |             |              |                           |      |                     |        |
| VOLATILES                      | 1,1,1-increoroemane                                   | 0.005  | 1                  | -       |         | 0.005   | , .<br>1 .    | . U         | 0.005  | 1                | < t         | , 0<br>; 0 | 1.005 1            | ~                  | U U     | 0.01         | 1       | < 1    | U<br>U   |              |             |              |                           |      |                     |        |
| VOLATILES                      | 1.1.2-Trichloroethane                                 | 0.005  | 1                  | ~       | U       | 0.005   | 1 4           |             | 0.005  | 1                | < 1         | , 0        | 0.005 1            | <                  | U       | 0.01         | 1       | < 1    | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | 1,1-Dichloroethane                                    | 0.005  | 1                  | <       | -<br>U  | 0.005   | 1 <           | ÷U          | 0.005  | 1                | < 1         | 1 0        | 0.005 1            | <                  | U       | 0.01         | 1       | < 1    | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | 1,1-Dichloroethene                                    | 0.005  | 1                  | <       | U       | 0.005   | 1 <           | : U         | 0.005  | 1                | < (         | ; 0        | 0.005 1            | <                  | U       | 0.01         | 1       | < 1    | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | 1,2,3-Trichloropropane                                | 1      |                    |         |         |         |               |             |        |                  |             |            |                    |                    |         | 0.021        | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | 1,2-Dibromo-3-chloropropane                           |        |                    |         |         |         |               |             |        |                  |             |            |                    |                    |         | 0.042        | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | 1,2-Dibromoethane                                     |        |                    |         |         | 0.005   |               |             | D 007  |                  |             |            | n oor 1            |                    |         | 0.042        | 1       | <      | U.<br>11 |              |             |              |                           |      |                     |        |
| VOLATILES                      | 1,2-Dichloroethane                                    | 0.005  | 1                  | <       | U<br>LI | 0.005   | 1 4<br>1 -    | с U<br>- н  | 0.005  | 1                | < 1         | ט נ<br>ו ו | 0,000 I<br>0,005 1 |                    | . U     | 0.01         | 1       | ~      | U U      |              |             |              |                           |      |                     |        |
| VOLATILES                      | 1,2-Dichloroponane                                    | 0.005  | . 1                | Ż       | 0<br>1} | 0.005   |               |             | 0.005  | 1                | < 1         | , .<br>, 0 | 0.005 1            | <                  | ັບ      | 0.01         | 1       | <      | Ŭ        |              |             |              |                           |      |                     |        |
| VOLATE ES                      | 2-Butanone  | 0.05   | 1                  | <       | Ű       | 0.05    | 1             | : U         | 0.05   | 1                | < 1         |            | 0.05 1             | <                  | U       | 0.021        | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | 2-Chloroethyl vinyl ether                             | 0.01   | 1                  | <       | U       | 0.01    | 1.            | : 10        | 0.01   | 1                | < 1         | ļ          | 0.01 1             | <                  | ป       | 0.021        | 1       | <      | U        |              | -           |              |                           |      |                     |        |
| VOLATILES                      | 2-Hexanone  | 0.05   | 5 1                | <       | U       | 0.05    | 1 4           | ะ บ         | 0.05   | 1                | < i         | J          | 0.05 1             | <                  | U       | 0.021        | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | 2-Propenal  | 1      |                    |         |         |         |               |             |        |                  |             |            |                    |                    |         | 1            | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | Acetone   | 0.1    | t                  | <       | U       | 0.1     | 1 •           | < U         | 0.1    | 1                | < 1         | ţ          | 0.1                | <                  | U       | 0.021        | 1       | <      | 0        |              |             |              |                           |      |                     |        |
| VOLATILES                      | Acetonitrile  |        |                    |         |         |         |               |             |        |                  |             |            |                    |                    |         | 0.21         | 1       | ~      | и        |              |             |              |                           |      |                     |        |
| VOLABLES                       | Acryloniese   |        |                    |         |         |         |               |             |        |                  |             |            |                    |                    |         | 0.021        | 1       | ~      | υ        |              |             |              |                           |      |                     |        |
| VOLATILES                      | Benzene   | 0.005  | ; 1                | <       | U       | 0.005   | 1 .           | < U         | 0.005  | 1                | < 1         |            | 0:005 1            | <ul><li></li></ul> | U       | 0.01         | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | Bromodichloromethane                                  | 0.005  | i .1               | <       | Ū       | 0.005   | 1 -           | c U         | 0.005  | 1                | < {         | ) 0        | 0.005 1            | <ul><li></li></ul> | U       | 0.01         | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | Bromotorm   | 0.005  | 1                  | <       | v       | 0.005   | 1             | c U         | 0.005  | 1                | < 1         | ) (        | 0.005 1            | < ا                | U       | 0.01         | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | Bromomethane  | £0.0   | 1                  | <       | U       | 0.01    | 1             | : U         | 0.01   | 1.               | < 1         | J          | 0.01 1             | <                  | ีย      | 0.021        | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | Carbon disulfide                                      | 0.005  | 5 1                | <       | U       | 0.005   | 1 .           | < U         | 0.005  | 1                | < 1         | JO         | 0.005              | <                  | U       | 0.01         | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | Carbon tetrachloride                                  | 0.005  | 5 1                | <       | 0       | 0.005   | 1 -           | < 0         | 0.005  | 1                | < 1         | , v        | 0.005 1            | t <                | : 10    | 0.01         | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | Chlorobenzene   | 0.005  | , 1<br>            | <       | ย<br>เ  | 0.005   | •             | ε U<br>- Π  | 0.005  | 1                | < 1         | ju<br>t    | 0.005 1            | . <                | . U     | 0.021        |         | -      | 0<br>11  |              |             |              |                           |      |                     |        |
| VOLAULES                       | Chicologiane  | 0.01   | 1 1.<br>1          | è       | υ       | 0.005   | 1.            | ς 1)        | 0.005  | i                | < 1         | ,<br>I G   | 0.805 1            | t <                | . U     | 0.01         | 1       | `<br>< | ν<br>U   |              |             |              |                           |      |                     |        |
| VOLATILES                      | Chloromethane   | 0.01   | <br>. 1            | <       | U       | 0.01    | 1 •           | : U         | 0.01   | 1                | < 1         | j .        | 0.01               | · ·                | ÷ Ū     | 0.021        | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | Chloroprene   |        | -                  |         |         |         |               |             | -      |                  |             |            |                    |                    |         | 0.21         | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | cis-1,3-Dichloropropene                               | 0.005  | 5 1                | <       | U       | 0.005   | 1 .           | ະ ບ         | 0.005  | 1                | < 1         | ) (        | 0.005              | <                  | U B     | 10.0         | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | Dibromochloromethane                                  | 0.005  | 5 1                | <       | U       | 0.005   | t -           | < Ų         | 0.005  | 1                | < {         | ) (        | 0.005              | i <                | : U     | 0.01         | 1       | <      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | Dibromomethane  | 1      |                    |         |         |         |               |             |        |                  |             |            |                    |                    |         | 0.042        | 1       | <      | ម        |              |             |              |                           |      |                     |        |
| VOLATILES                      | Dichlorodifluoromethane                               | 1      |                    |         |         |         |               |             |        |                  |             |            |                    |                    |         | 0.042        | 1       | <      | ម<br>ព   |              |             |              |                           |      |                     |        |
| VULATILES                      | Emyi menaciylale                                      | n ^^~  | ; +                | ,       | 13      | 0.005   | 1             | . 11        | 0.005  | 1                | ~ 1         | 1 1        | 0.005              | 1 -                | . 11    | 0.042        | 1       | č      | U        |              |             |              |                           |      |                     |        |
| VOLATILES                      | KODOMETHANE   | 0.005  | . 1                | `       | ~       | 0.000   | , ,           |             | 0.000  | •                |             |            |                    |                    | . 0     | 0.021        | 1       | <      | Ū        |              |             |              |                           |      |                     |        |
| VOLATILES                      | ISOBILTYL ALCOHOL                                     | 1      |                    |         |         |         |               |             |        |                  |             |            |                    |                    |         | 42           | 1       | <      | U        |              |             |              |                           |      |                     |        |
|                                |   | ł:     |                    |         |         |         |               |             |        |                  |             |            |                    |                    |         |              |         |        |          |              |             |              |                           |      |                     |        |

Shaw Environmental, Inc.



STEP-46SS02 46SS02(1-2)-020311 3/11/2002 t - 2 Ft REG Result DIL LQ VQ

X -

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-14 Concentrations of Chemicals in Soil Samples Associated with Sump 014

| LOCATION_CODE       LH-S14-01       LH-S14-01       LH-S14-02       LH-S14-02 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>UMP] = SUMP014</th> <th>[S</th>  |   |             |           |        |      |       |         |     |     |        |         |     |      |    |    |       |       |        |    |     |         |        |    |            |          |        |    |     |        |       |          |     |      |         |     |        |                         | UMP] = SUMP014 | [S |
|---|---|-------------|-----------|--------|------|-------|---------|-----|-----|--------|---------|-----|------|----|----|-------|-------|--------|----|-----|---------|--------|----|------------|----------|--------|----|-----|--------|-------|----------|-----|------|---------|-----|--------|-------------------------|----------------|----|
| SAMPLE_NO       LH-\$14-01_1       LH-\$14-01_2       LH-\$14-01_2       LH-\$14-02_1       LH-\$14-02_2       LH-\$14-02_311       46SSD1(0-0.5)-020311       46SSD1(0-2.5)-020311  |   | 46SS02      | STEP-4    | S      | 31   | 4655  | STEP-4  |     |     | SS01   | EP-46   | STE | 5    |    | 7  | 2-17  | LH\$- | 1      |    | 2   | -S14-   | Ŀ      |    | -02        | H-\$14   | L      |    | 01  | -\$14- | LH    |          |     | -01  | 1-514   | UΗ  | 4      |                         | CATION _CODE   | ι  |
| SAMPLE_DATE       7/8/1993       7/8/1993       7/8/1993       7/8/1993       1/11/1995       3/11/2002   | 4 | 1.5}-020311 | \$02(0-0. | 46SS/  | 0311 | -2)-0 | SS01(1- | 46  | 311 | 5)-020 | 1(0-0.5 | S01 | 46SS |    | 7  | 2-17  | lhs-  | i      |    | 2_2 | S14-0   | {H}    |    | 12_1       | -\$14-{  | U      |    | t_2 | S14-0  | 1H-   |          |     | 01_1 | \$14-(  | H-S | E      |                         | MPLE_NO        | Si |
| DEPTH       0.5 - 1.5 Ft       3.2 - 4.2 Ft       0.5 - 1.5 Ft       3.5 - 4.5 Ft       0 - 0.5 Ft       0 - 0.5 Ft       1 - 2 Ft       0 - 0.5 Ft </td <td></td> <td>2002</td> <td>3/11/2</td> <td></td> <td></td> <td>/2002</td> <td>3/11/</td> <td></td> <td></td> <td>)02</td> <td>/11/20</td> <td>3/</td> <td></td> <td></td> <td>5</td> <td>1995</td> <td>1/11/</td> <td>1</td> <td></td> <td>3</td> <td>/8/199</td> <td>7</td> <td></td> <td>33</td> <td>7/8/19</td> <td></td> <td></td> <td>3</td> <td>/8/199</td> <td>7.</td> <td></td> <td></td> <td>93</td> <td>/8/199</td> <td>7/</td> <td></td> <td></td> <td>MPLE_DATE</td> <td>S/</td> |   | 2002        | 3/11/2    |        |      | /2002 | 3/11/   |     |     | )02    | /11/20  | 3/  |      |    | 5  | 1995  | 1/11/ | 1      |    | 3   | /8/199  | 7      |    | 33         | 7/8/19   |        |    | 3   | /8/199 | 7.    |          |     | 93   | /8/199  | 7/  |        |                         | MPLE_DATE      | S/ |
| SAMPLE_PURPOSE       REG       REG       REG       REG       REG       REG       REG       REG         Test Group       Parameter (Units = mg/kg)   |   | .5 Ft       | 0-0.      |        |      | 2 Ft  | 1-:     |     |     | Ft     | 0 - 0.5 | 0   |      |    | 1  | .5 Ft | 0-0   |        |    | F۱  | 5 - 4.5 | 3.     |    | i Ft       | .5 - 1.5 | G      |    | Ft  | 2-4.2  | 3.2   |          |     | 5 Ft | 5 - 1.5 | 0.5 | 1      |                         | EPTH           | D  |
| Test Group       Parameter (Units = mg/kg)       Result       DIL       LQ       VQ       Result       D  |   | G           | RE        |        |      | EG    | RI      |     |     | 5      | REC     |     |      |    |    | G     | R     |        |    |     | reg     |        |    | i i        | REG      |        |    |     | REG    |       |          |     | 5    | REG     |     |        |                         | MPLE_PURPOSE   | S  |
| VOLATLES         Methacrytonibile $0.05$ 1         V $0.06$ 1         V $0.042$ 1 <td>8</td> <td>L LO VO</td> <td>ult DIL</td> <td>Result</td> <td>a va</td> <td>IL L</td> <td>ult DI</td> <td>Res</td> <td>٧Q</td> <td>LQ</td> <td>ÐIL</td> <td>ult</td> <td>Resu</td> <td>٧Q</td> <td>LQ</td> <td>۱L.</td> <td>D</td> <td>Result</td> <td>٧Q</td> <td>LQ</td> <td>DiL</td> <td>Result</td> <td>٧Q</td> <td>LQ</td> <td>DIL</td> <td>Result</td> <td>VQ</td> <td>LQ</td> <td>DIL</td> <td>esult</td> <td>Q F</td> <td>) V</td> <td>LQ</td> <td>DIL</td> <td>ł</td> <td>Result</td> <td>imeter (Units = mg/kg)</td> <td>est Group</td> <td>Te</td>   | 8 | L LO VO     | ult DIL   | Result | a va | IL L  | ult DI  | Res | ٧Q  | LQ     | ÐIL     | ult | Resu | ٧Q | LQ | ۱L.   | D     | Result | ٧Q | LQ  | DiL     | Result | ٧Q | LQ         | DIL      | Result | VQ | LQ  | DIL    | esult | Q F      | ) V | LQ   | DIL     | ł   | Result | imeter (Units = mg/kg)  | est Group      | Te |
| VOLATHLES       Methylisobutyl kebne       0.05       1       V       0.06       1       V       0.06       1       V       0.06       1       V       0.07       1       V       0.007  |   |             |           |        |      |       |         |     |     |        |         |     |      | U  | <  | i     | 2 1   | 0.042  |    |     |         |        |    |            |          |        |    |     |        |       |          |     |      |         |     | 1      | acrylonitrile           | OLATILES       | ٧  |
| VOLATILES       METHYL METHACRYLATE       0.005       1       <       U       0.014       1       <       U         VOLATILES       Propionitifie       0.005       1       <       U       0.005   |   |             |           |        |      |       |         |     |     |        |         |     |      | U  | <  |       | 1     | 0.021  | IJ | <   | 1       | 0.05   | υ  | <          | t        | 0.05   | U  | <   | 1      | 0.05  | <b>;</b> | t   | <    | 1       | 15  | 0.05   | ryl isobutył ketone     | OLATRES        | ٧  |
| VOLATILES       Methylene chloride       0.005       1       V       0.01       1       <       U         VOLATILES       Propionitrile       0.005       1       <       U       0.005       1       <       U       0.005       1       <       U       0.01       1       <       U         VOLATILES       Propionitrile       0.005       1       <       U       0.00   |   |             |           |        |      |       |         |     |     |        |         |     |      | U  | <  | 1     | 2 1   | 0.042  |    |     |         |        |    |            |          |        |    |     |        |       |          |     |      |         |     | 1      | HYL METHACRYLATE        | OLATILES       | ٧  |
| VOLATILES       Pentachloroethane       0.042       1       <       U         VOLATILES       Propionitrile       0.005       1       <   |   |             |           |        |      |       |         |     |     |        |         |     |      | U  | <  |       | 1 1   | 0.01   | U  | <   | 1       | 0.005  | U  | <          | 1        | 0.005  | ម  | <   | 1      | 0.005 | ,        | U   | <    | 1       | 15  | 0.005  | xylene chloride         | OLATILES       | V  |
| VOLATILESPropionitrile $0.1 \ 1 < U$ VOLATILESStyrene $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.01 \ 1 < U$ VOLATILESTetrachloroethene $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.01 \ 1 < U$ VOLATILESTetrachloroethene $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.001 \ 1 < U$ VOLATILESTakene $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ VOLATILEStrans-1,3-Dichloropropene $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ VOLATILEStrans-1,4-Dichloro-2-butene $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$ $0.005 \ 1 < U$   |   |             |           |        |      |       |         |     |     |        |         |     |      | U  | <  | l I   | 2 1   | 0.042  |    |     |         |        |    |            |          |        |    |     |        |       |          |     |      |         |     |        | achioroethane           | OLATILES       | V  |
| VOLATILES       Styrene       0.005       1        U       0.005       1  |   |             |           |        |      |       |         |     |     |        |         |     |      | υ  | <  | E     | 1 1   | 0.1    |    |     |         |        |    |            |          |        |    |     |        |       |          |     |      |         |     | 1      | ionitrile               | OLATILES       | v  |
| VOLATILES       Tetrachloroethene       0.005       1       V       0.005       1   |   |             |           |        |      |       |         |     |     |        |         |     |      | U  | <  | t i   | 1 1   | 0.01   | U  | <   | 1       | 0.005  | U  | <          | i 1      | 0.005  | U  | <   | 1      | 0.005 | J        | ŧ   | <    | t       | 5   | 0.005  | ene                     | OLATILES       | V  |
| VOLATILES         Toluene         0.005         1         U         0.011         1         U         0.011   |   |             |           |        |      |       |         |     |     |        |         |     |      | U  | <  | 1     | 1 1   | 0.01   | U  | <   | 1       | 0.005  | U  | <          | 1        | 0.005  | IJ | <   | 1      | 0.005 | ł        | : U | <    | 1       | 15  | 0.005  | achioroethene           | OLATILES       | V  |
| VOLATILES         trans-1,3-Dichloropropene         0.005         1         V         0.01         1         C         U           VOLATILES         trans-1,4-Dichloro-2-butene         0.042         1          U   |   |             |           |        |      |       |         |     |     |        |         |     |      | U  | <  | 5     | 1 1   | 0.01   | U  | <   | 1       | 0.005  | U  | <          | 1        | 0.005  | U  | <   | 1      | 0.005 | t        | - U | <    | 1       | 5   | 0.00   | ene                     | DLATILES       | V  |
| VOLATILES trans-1,4-Dichloro-2-butene 0.042 1 < U   |   |             |           |        |      |       |         |     |     |        |         |     |      | υ  | <  | 1     | 1 1   | 0.01   | U  | <   | ١       | 0.005  | U  | <          | 1        | 0.005  | U  | <   | 1      | 0.005 | 1        | t U | <    | 1       | 5   | 0.00   | s-1,3-Dichloropropene   | DLATILES       | ۷  |
|   |   |             |           |        |      |       |         |     |     |        |         |     |      | U  | <  | 1     | 2     | 0.042  |    |     |         |        |    |            |          |        |    |     |        |       |          |     |      |         |     | 1      | s-1,4-Dichloro-2-butene | OLATILES       | V  |
| VOLATILES Trichloroethene [ 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.001 1 < U   |   |             |           |        |      |       |         |     |     |        |         |     |      | U  | <  | 1     | 1     | 0.01   | ម  | ۲   | 1       | 0.005  | υ  | <          | 1        | 0.005  | U  | <   | 1      | 0.005 | 3        | t t | <    | 1       | 5   | 0.00   | horoethene              | OLATILES       | ۷  |
| VOLATILES Trichlorofluoromethane 0.021 1 < U  |   |             |           |        |      |       |         |     |     |        |         |     |      | υ  | <  | 1     | 1     | 0.021  |    |     |         |        |    |            |          |        |    |     |        |       |          |     |      |         |     | 1      | losofluoromethane       | OLATILES       | ¥  |
| VOLATILES Vinylacelate 0.05 1 < U 0.06 1 < U 0.05 1 < U 0.05 1 < U 0.021 1 < U  |   |             |           |        |      |       |         |     |     |        |         |     |      | U  | <  | 1     | 1     | 0.021  | U  | <   | Ť       | 0.05   | U  | <          | ; 1      | 0.05   | U  | <   | t      | 0.05  | ł        | ł   | <    | 1       | 5   | 0.0    | 1 acetate               | OLATILES       | ٧  |
| VOLATILES Vinytchloride 0.01 1 < U 0.01 1 < U 0.01 1 < U 0.01 1 < U 0.021 1 < U   |   |             |           |        |      |       |         |     |     | -      |         |     |      | U  | <  | 1     | 1     | 0.021  | U  | <   | 1       | 0.01   | U  | <          | 1        | 0.01   | U  | <   | 1      | 0.01  | J        | t t | <    | 1       | )1  | 0.0    | 1 chloride              | OLATILES       | V  |
| VOLATILES Xylenes, Total 0.095 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.01 1 < U   |   |             |           |        |      |       |         |     |     |        |         |     |      | U  | <  | 1     | 1     | 0.0    | U  | <   | 1       | 0.005  | U  | . <b>.</b> | 1        | 0.005  | U  | <   | 1      | 0.005 | Ľ        | : 1 | <    | 1       | 15  | 0.00   | nes, Total              | OLATILES       | ٧  |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.



STEP-46SS02 46SS02{1-2}-020311 3/11/2002 1 - 2 Ft REG Result DIL LQ VQ

## Table 3-15 Concentrations of Chemicals in Soil Samples Associated with Sump 015

| (SUMP) = SUMP015         |                             |                  |                     |                    |                       |                     |                  |                     |                  | 100004           | 1100004             | 1100004          | 100000           | LICEDO           | LICEDAS          |
|--------------------------|-----------------------------|------------------|---------------------|--------------------|-----------------------|---------------------|------------------|---------------------|------------------|------------------|---------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE           |                             | 35SUMP015-SB01   | 35SUMP015-SB02      | 35SUMP015-SB02     | 35SUMP016-SB01        | 35SUMP016-SB01      | 35SUMP016-SB01   | 35SUMP016-SB01      | HOSB01           | HOSB01           | HUSB01              | HUSBUI           | HUSBUZ           | HUSBUZ           |                  |
| SAMPLE_NO                |                             | 35-SMP15-SB01-02 | 35-SMP15-SB02-01    | 35-SMP15-SB02-02   | 35-SMP16-SB01-01      | 35-SMP16-SB01-01-QC | 35-SMP16-SB01-02 | 35-SMP16-SB01-02-0C | HUSBUT(0-0.5)    | HUSBUI(3-5)      | 100001(0-0)00       | 12/00/0000       | 12/4/2000        | 103502(3-3)      | 12/4/2000        |
| SAMPLE_DATE              |                             | 9/11/2006        | 9/8/2006            | 9/8/2006           | 9/8/2006              | 9/8/2006            | 9/8/2006         | 9/8/2006            | 0.055+           | 2.55             | 12/4/2000<br>3_5 Et | 8-10-51          | 0-0551           | 3-5Ft            | 8+10Ft           |
| DEPTH                    |                             | 6-6F1            | 0-0.5 Ft            | 5-571<br>DEC       | 0-0.5 Ft              | -U-U.5 FI           | 5-3FL<br>DEC     | 5-3FL<br>FD         | REG              | REG              | 5-511<br>FD         | REG              | REG              | REG              | REG              |
| SAMPLE_PURPUSE           | Parameter (Lipite - maile)  |                  | Result DN IO VO     | Result DI IO VO    | Result DI LO VO       | Result Dtl IO VO    | Result DII LO VO | Result Dil 1.0 VQ   | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ    | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| EXPLOSIVES               | 2 A Dinitrotoluogo          |                  |                     | NESUL DIL LOL VOL  | TOBOL DIE EG TO       | HOJON DIE EN PR     | NOOM DAL COL POL |                     |                  |                  |                     |                  |                  |                  |                  |
| EXPLOSIVES<br>EXPLOSIVES | 2.4-Dinitrotokiene          |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Aluminum                    | 14100 1          | 13800 1             | 7470 1             | 7570 1                | 8130 1              | 7800 1           |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Antimony                    | 0.116 1 U        | 0.104 1 U UJL       | 0.111 1 U UJL      | 0.107 1 U UJL         | 0.105 1 U UJL       | 0.0836 1 J JL    |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Arsenic                     | 0.664 1          | 4.59 1 JL           | 2.31 t JL          | 2.52 1 JL             | 2.5 1 JL            | 6.62 1 JL        |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Barium                      | 78.5 1           | 129 1               | 171 1              | 66.4 1                | 61.3 1              | 2430 10          |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Beryllium                   | 0.499 1          | 0.432 1             | 0.379 1 J J        | 0.352 1 J J           | 0.342 1 J J         | 1.17 1           |                     |                  |                  |                     |                  |                  |                  | -                |
| METALS                   | Cadmium                     | 0.0943 1 J J     | 0.221 1 J J         | 0.15 1 J J         | 0.0618 t J J          | 0.0595 1 J J        | 0.376 1 J J      |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Calcium                     | 813 1 J          | 1640 1              | 753 1              | 953 1                 | 968 1               | 1970 1           |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Chromium                    | 13.9 1           | 19.2 1 JH           | 8.12 1 JH          | 12 1 JH               | 13.1 1 JH           | 8.43 1 JH        |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Cobalt                      | 5.17 t J         | 2.01 1 JH           | 4.66 1 JH          | 3.31 1 JH             | 3:27 t JH           | 6.08 1 JH        |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Copper                      | 5.62 1           | 7.9 1               | 4.12 1             | 2.33 1                | 2.44 1              | 5.72 1           |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Iron                        | 11400 1          | 37400 5             | f1900 1            | 10800 1               | 10500 1             | 15800 1          |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Lead                        | 13 1 J           | 11.7 1 JL           | 7.08 1 JL          | 7.87 1 JL             | 8.29 1 JL           | 17.1 1 JE        |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Magnesium                   | 1550 1           | 841 1               | 993 1              | 395 1                 | 425 1               | 1700 I           |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Manganese                   | 22.4 1           |                     | 23.4 1             | 200 1                 | 231 1               | 0.0.112 1 1 1    |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Mercury                     | 161 1            | 0.0004 LJJ<br>630 1 | 0.0130 IJJ<br>12 1 | 0.0100 i J J<br>377 1 | 407 1               | 186 1            |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Rataccium                   | 576 1            | 430 1 H             | 314 1 .04          | 234 1 .14             | 260 1 .114          | 501 t JH         |                     |                  |                  |                     |                  |                  |                  |                  |
| METALO                   | Solonium                    | 0.231 1 11       | 073 1               | 0216 t J J         | 0.288 1               | 0.215 1             | 0.246 1          |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Silver                      | 171 1 U          | 1.72 1 U            | 1.72 1 U           | 1.61 1 U              | 1.52 1 U            | 1.72 1 U         |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Sodium                      | 399 1            | 33 1                | 149 1              | 34 1                  | 34.1 1              | 649 1            |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Strontium                   |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Thatium                     | 0.0948 1         | 0.0686 1            | 0.0695 1           | 0.0654 1              | 0.0638 t            | 0.0877 1         |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Vanadium                    | 15 1             | 40.8 1              | 15.9 1             | 22.8 1                | 23.9 1              | 32.5 1           |                     |                  |                  |                     |                  |                  |                  |                  |
| METALS                   | Zinc                        | 34.2 t           | 60.5 1              | 19.6 1             | 10.4 1                | 10.7 1              | 19.2 1           |                     |                  |                  |                     |                  |                  |                  |                  |
| PERC                     | Perchlorate                 | 0.01 1 U         | 0.02 2 U            | 0.05 5 U           | 0.02 2 U              | 0.02 2 U            | 0.1 10 U         |                     |                  |                  |                     |                  |                  |                  |                  |
| RANGE_ORGANICS           | Carbon Range C12-C28        | 58 1 U           | 55.8 1 U            | 56.5 1 U           | 52.7 1 U              | 52.9 1 U            | 55.9 1 U         |                     |                  |                  |                     |                  |                  |                  |                  |
| RANGE_ORGANICS           | Carbon Range C28-C35        | 58 1 U           | 55.8 1 U            | 56.5 1 U           | 52.7 1 U              | 52.9 1 U            | 55.9 1 U         |                     |                  |                  |                     |                  |                  |                  |                  |
| RANGE_ORGANICS           | Carbon Range C6-C12         | 58 1 U           | 55.8 1 U            | 56.5 1 U           | 52.7 1 U              | 52.9 1 U            | 55.9 1 U         |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 1,2,4-Trichlorobenzene      |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 1,2-Dichlorobenzene         |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 1,3-Dichlorobenzene         |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 1,4-Dichlorobenzene         |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 2.4.5-Enchlorophenol        |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 2 4-Dichlorophenol          |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 2.4-Dimethylphenol          |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 2.4-Dinitrophenol           |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 2-Chloronaphthalene         |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 2-Chlorophenol              |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 2-Methylnaphthalene         |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 2-Methylphenol              |                  |                     |                    |                       |                     |                  |                     |                  |                  | · .                 |                  |                  |                  |                  |
| SEMIVOLATILES            | 2-Nitroaniline              |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 2-Nitrophenol               |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 3,3'-Dichlorobenzidine      |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 5-Nitroaniline              |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 4,0-Dinitto-Z-methyaphenol  |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
|                          | 4_Chlore_3_mathulahaaal     |                  |                     |                    |                       |                     |                  |                     |                  | -                |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 4-Chlorospiline             |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 4-Chioronberyl nberyl ether |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMINOLATILES            | 4-Methvinbenol              |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 4-Nitroaniline              |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | 4-Nitrophenol               |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | Acenaphthene                |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | Acenaphthylene              |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | Anthracene                  |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | Benzo(a)anthracene          |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | Benzo(a)pyrene              |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | Benzo(b)fluoranthene        |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | Benzo(ghi)perylene          |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | Benzo(k)Ruoranthene         |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
| SEMIVOLATILES            | Benzoic Acid                |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |
|                          |                             |                  |                     |                    |                       |                     |                  |                     |                  |                  |                     |                  |                  |                  |                  |

()

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-15 Concentrations of Chemicals in Soil Samples Associated with Sump 015

| [SUMP] = SUMP015 |                                |                  |                  |                  |                    |                     |                  |                     |                  |  | 100204           | 1000004                | LOCDO            | LICEDAT          | LIOCDAD          |
|------------------|--------------------------------|------------------|------------------|------------------|--------------------|---------------------|------------------|---------------------|------------------|--|------------------|------------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                                | 35SUMP015-SB01   | 35SUMP015-SB02   | 35SUMP015-SB02   | 35SUMP016-SB01     | 35SUMP016-SB01      | 35SUMP016-SB01   | 35SUMP016-SB01      | HUSBUI           | HUSBUT                                 | HUSBUT           | HUSBUI<br>HOSB01/9_10) | HOSB02(0.0.5)    | HOSB02(3-5)      | HOSB02(8-10)     |
| SAMPLE_NO        |                                | 35-SMP15-SB01-02 | 35-SMP15-SB02-01 | 35-SMP15-SB02-02 | 35-SMP16-SB01-01   | 35-SMP16-SB01-01-UC | 35-SMP16-SB01-02 | 35-SMP16-SB01-02-GG | 12/4/2000        | 12/8/2000                              | 12/8/2020        | 12/4/2000              | 12/4/2000        | 12/4/2000        | 12/4/2000        |
| SAMPLE_DATE      |                                | 9/11/2006        | 9/8/2006         | 9/8/2000         | 9/6/2000           | 9/0/2005            | 5 5 54           | 5-5 54              | 0-056            | 3-5 Ft                                 | 3-5Ft            | 8-10 Ft                | 0-0.5Ft          | 3-5Ft            | 8 - 10 Ft        |
|                  |                                | 6-6FI            | 0-0.5Ft          | 0-0FL            | REC                | 0-0.3 FL<br>FD      | REG              | FD                  | REG              | REG                                    | FD               | REG                    | REG              | REG              | REG              |
| SAMPLE_PURPUSE   | Parameter // Inite = mn/m)     | Reput DI LO VO   | Result Dil 10 VO | Result DII 10 VO | Result Dill I O VO | Result Dil IO VO    | Result DIL LO VO | Result DIL LQ VQ    | Result DIL LQ VQ | Result DIL LQ VQ                       | Result DIL LQ VQ | Result DIL LQ VQ       | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| SEMIVOLATILES    | Renzyl Alcohol                 | NOSOR DIL LO VO  |                  |                  |                    |                     |                  |                     |                  | ······································ |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | bis/2-Chloroethoxy)methane     |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | bis/2-Chloroethyliether        |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | bis(2-Chloroisopropyi)ether    |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate     |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Butyl benzyl phthalate         |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Chrysene                       |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene         |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Dibenzofuran                   |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Diethyl phthalate              |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Dimethyl phthalate             |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | dr-n-Buty phthalate            |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Character Philipping           |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Filorene                       |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Hexachiorohenzene              |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Hexachlorobutadiene            |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Hexachlorocyclopentadiene      |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Hexachioroethane               |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene         |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Isophorone                     |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Naphthalene                    |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Nitrobenzene                   |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine     |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | n-Nitrosodiphenyiamine         |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVULATILES    | Penizahorophenoi               |                  |                  |                  |                    |                     |                  |                     |                  | -                                      |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Phenol                         |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| SEMIVOLATILES    | Pyrene                         |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| TPH              | Hydrocarbons as Diesel Fuel    |                  |                  |                  |                    |                     |                  |                     | 493 t C          | 58.6 1 < U                             | 58 1 < U         | 65 1 < U               | 1150 1 C         | 57.7 1 < U       | 64.9 1 < U       |
| трн              | Hydrocarbons as Gasoline       |                  |                  |                  |                    |                     |                  |                     | 56 1 < U         | 58.6 1 < U                             | 58 1 < U         | 65 1 < U               | 55.6 1 < U       | 57.7 1 < U       | 64.9 1 < U       |
| TPH              | TOTAL HYDROCARBONS             |                  |                  |                  |                    |                     |                  |                     | 493 1 C          | 58.6 1 < U                             | 58 1 < U         | 65 1 < U               | 1150 1 C         | 57.7 1 < U       | 64.9 1 < U       |
| VOLATILES        | 1,1,1,2-Tetrachloroethane      | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1,1,1-Trichloroethane          | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1,1,2,2-Tetrachloroethane      | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1,1,2-Trichloroethane          | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1,1-Dichloroethane             | 0.0049 1 U       |                  | 0.00474 1 0      |                    |                     | 0.00455 1 0      | 0.0049 1 0          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1,1-Dichloroemene              | 0.0049 1 0       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 1      | 0.0045 1 0          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1 2 3 Trichlorobenzene         | 0.0045 1 0       |                  | 0.00474 1 0      |                    |                     | 0.00455 1 1      | 0.0049 1 1          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1.2.3-Trichloropropage         | 0.0049 1 0       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 1          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1.2.4-Trichlorobenzene         | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1.2.4-Trimethylbenzene         | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1,2-Dibromoethane              | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1,2-Dichlorobenzene            | 0.00137 1 J J    |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  | •                |                        |                  | •.               |                  |
| VOLATILES        | 1,2-Dichloroethane             | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1,2-Dichloroethene             |                  |                  |                  |                    |                     |                  |                     |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1,2-Dichloropropane            | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) | 0.0049 1 U       |                  | 0.004/4 1 0      |                    |                     | 0.00455 1 0      | 0.0049 1 0          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 1,3,5-Inmemylbenzene           | 0.0049 1 0       |                  | 0.00474 1 0      |                    |                     | 0.00455 1 11     | 0.0049 1 0          |                  |  |                  |                        |                  | · · · · · ·      |                  |
| VOLATILES        | 1,3-Dichloropropage            | 0.0049 1 0       |                  | 0.00474 1 0      |                    |                     | 0.00455 1 11     | 0.0049 1 1          |                  |  |                  |                        |                  |                  |                  |
| VOLATIEES        | 1 4-Dichlombenzene             | 0.0049 1 1       |                  | 0.00474 1 1      |                    |                     | 0.00455 t U      | 0.0049 1 U          |                  |  |                  | ·                      |                  |                  |                  |
| VOLATILES        | 2,2-Dichloropropane            | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  | -                                      |                  |                        |                  |                  | -                |
| VOLATILES        | 2-Butanone                     | 0.0098 1 U UJ    |                  | 0.00947 1 U      |                    |                     | 0.0091 1 U       | 0.0098 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 2-Chloroethyl vinyl ether      | 0.0098 1 U       |                  | 0.00947 1 U      |                    |                     | 0.0091 1 U       | 0.0098 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 2-Chlorotoluene                | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 2-Hexanone                     | 0.0098 1 U UJ    |                  | 0.00947 1 U UJ   |                    |                     | 0.0091 1 U       | 0.0098 1 U UJ       |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | 4-Chiorotoluene                | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | Acetone                        | 0.0098 1 U       |                  | 0.00873 1 J J    |                    |                     | 0_0091 1 U       | 0.0098 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | Benzene                        | 0.0049 1 U       | -                | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | Bromobenzene                   | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |
| VOLATILES        | Bromochloromethane             | 0.0049 1 U       |                  | 0.00474 1 U      |                    |                     | 0.00455 1 U      | 0.0049 1 U          |                  |  |                  |                        |                  |                  |                  |

Shaw Environmental, Inc.

Table 3-15 Concentrations of Chemicals in Soil Samples Associated with Sump 015

| [SUMP] = SUMP015 |                           |                  |                  |                  |                  |                     |                  |                     | 100004           | 1000004          | 1000004             | LICEDO           | LICEDAS          | 000000              | HU2802             |
|------------------|---------------------------|------------------|------------------|------------------|------------------|---------------------|------------------|---------------------|------------------|------------------|---------------------|------------------|------------------|---------------------|--------------------|
| LOCATION _CODE   |                           | 35SUMP015-SB01   | 35SUMP015-SB02   | 35SUMP015-SB02   | 35SUMP016-SB01   | 35SUMP016-SB01      | 35SUMP016-SB01   | 35SUMP016-SB01      | HUSBUT           | MOSBUI           | HUSBUI              |                  |                  | HOCD02              | LIOSB02/8-103      |
| SAMPLE_NO        |                           | 35-SMP15-SB01-02 | 35-SMP15-SB02-01 | 35-SMP15-SB02-02 | 35-SMP16-SB01-01 | 35-SMP16-SB01-01-QC | 35-SMP16-SB01-02 | 35-SMP16-SB01-02-QC | HOSB01(0-0.5)    | HUSBU1(3-5)      | HO2BUI(3-2)CC       | HU3091(0-10)     | nUSB02(0-0.5)    | 43(8/2000)          | 12/4/2000          |
| SAMPLE_DATE      |                           | 9/11/2006        | 9/8/2006         | 9/8/2006         | 9/8/2006         | 9/8/2006            | 9/8/2006         | 9/8/2005            | 12/4/2000        | 12/4/2000        | 12/4/2000           | 12/4/2000        |                  | 2 5 51              | 8_10.51            |
| DEPTH            |                           | 6 - 6 Ft         | 0 - 0.5 Ft       | 6 - 6 Ft         | 0 - 0.5 Ft       | 0 - 0.5 Ft          | 5-5Ft            | 5-5Ft               | 0-0.5Ht          | 3-5H             | 3-541               | 6- IUFI          | 0-0.3FL          | 3-370               | PEC                |
| SAMPLE_PURPOSE   |                           | REG              | REG              | REG              | REG              | FD                  | REG              | FD                  | REG              | REG              | FU<br>Doublet to MO |                  |                  |                     |                    |
| Test Group       | Parameter (Units = mg/kg) | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ    | Result DIL LQ VQ | Result DIL LQ VQ    | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LOI VO   | Result DHL LQ VQ | Result DIL LU VU | Result Dit. Lot Vol | Result DIL Loz Voz |
| VOLATILES        | Bromodichloromethane      | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Bromoform                 | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 t U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Bromomethane              | 0.0098 1 U       |                  | 0.00947 1 U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Carbon disulfide          | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Carbon tetrachloride      | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Chlorobenzene             | 0.00731 1        |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Chloroethane              | 0.0098 1 U       |                  | 0.00947 1 U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Chloroform                | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Chloromethane             | 0.0098 1 U       |                  | 0.00947 1 U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | cis-1,2-Dichloroethene    | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | cis-1,3-Dichloropropene   | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Dibromochloromethane      | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Dibromomethane            | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Dichlorodifluoromethane   | 0.0098 1 U       |                  | 0.00947 1 U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Ethyfbenzene              | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Hexachlorobutadiene       | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Isopropylbenzene          | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | m.p-Xylenes               | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Methyl isobutyl ketone    | 0.0098 1 U       |                  | 0.00947 1 U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Methylene chloride        | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Naphthalene               | 0.0098 1 U       |                  | 0.00947 1 U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | n-BUTYLBENZENE            | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | n-PROPYLBENZENE           | 0.0049 t U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | p-ISOPROPYLTOLUENE        | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | sec-BUTYLBENZENE          | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Styrene                   | 0.0049 1 U       |                  | 0.00474 t U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | tert-BUTYLBENZENE         | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Tetrachloroethene         | 0.0049 1 U       |                  | 0.00474 t U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Toluene                   | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | trans-1,2-Dichloroethene  | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | trans-1,3-Dichloropropene | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Trichloroethene           | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Trichlorofluoromethane    | 0.0098 1 U       |                  | 0.00947 1 U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Vinyl acetate             | 0.0098 1 U       |                  | 0.00947 1 U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Vinyl chloride            | 0.0098 1 U       |                  | 0.00947 1 U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                     |                  |                  |                     |                    |
| VOLATILES        | Xylenes, Total            |                  |                  |                  |                  |                     |                  |                     |                  |                  |                     |                  |                  |                     |                    |

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-15 Concentrations of Chemicals in Soil Samples Associated with Sump 015

.

| SUMP] = SUMP015 |                             |                  |                  | -                |                  |                          |                  |                   |   |     |  |
|-----------------|-----------------------------|------------------|------------------|------------------|------------------|--------------------------|------------------|-------------------|---|-----|--|
| OCATION _CODE   |                             | LH-S15-01        | LH-S15-01        | LH-S15-02        | LH-S15-02        | LH-S16-01                | LH-\$16-01       | LH-S16-01         |   |     |  |
| SAMPLE_NO       |                             | LH-S15-01_1      | LH-S15-01_2      | LH-S15-02_1      | LH-S15-02_2      | LH-\$16-01_1             | LH-S16-01_2      | LH-S16-01_3       |   |     |  |
| SAMPLE_DATE     |                             | 7/8/1993         | 7/8/1993         | 7/8/1993         | 7/8/1993         | 7/8/1993                 | 7/8/1993         | 7/8/1993          |   |     |  |
| DEPTH           |                             | 0.5 - 1.5 Ft     | 5.2 - 6 Ft       | 0.5 - 1.5 Ft     | 5 - 5.8 Ft       | 0.5 - 1.5 Ft             | 4.2 - 4.8 Ft     | 8 - 8.6 Ft        |   |     |  |
| SAMPLE_PURPOSE  |                             | REG              | REG              | REG              | REG              | REG                      | REG              | REG               |   |     |  |
| Fest Group      | Parameter (Units ≃ mg/kg)   | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ         | Result DIL LQ VQ | Result DIL LQ VQ  |   |     |  |
| EXPLOSIVES      | 2,4-Dinitrotoluene          | 0.33 1 < U       | 0.33 1 < U       | 0.35 t < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| EXPLOSIVES      | 2,6-Dinitrotoluene          | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 t < U       | 0.33 1 < U        |   |     |  |
| METALS          | Aluminum                    | 3890 1           | 9270 t           | 3990 1           | 15400 1          | 7010 1                   | 8190 1           | 12300 1           |   |     |  |
| METALS          | Antimony                    | 5.9 1            | 31 < U           | 3.1 1            | 3 1 < ⊎          | 31 < U                   | 31 < U           | 3 1 < U           |   |     |  |
| METALS          | Arsenic                     | 3.7 1            | 1.9 1            | 2.4 1            | 11 < U           | 2.7 1 < U                | 23 1 < U         | 11< U             |   |     |  |
| METALS          | Barium                      | 454 1            | 492 1            | 366 1            | 594 1            | 67 1 < U                 | 935 1 < U        | 105 1 < 0         |   |     |  |
| WETALS          | Berytäum                    |                  |                  |                  |                  |                          |                  | ·                 |   |     |  |
| METALS          | Cadmium                     | 1 1 < U          | 11< U            | 11<0             | 11 < U           | 11<0                     | 11 < U           | 11< 1             |   |     |  |
| METALS          | Calcium                     | 389 1            | 938 1            | 434 1            | 1790 1           | 500 1                    | 1890 1           | 3030 I            |   |     |  |
|                 | Chromuna<br>Calaak          | 18.8 1           | 7.8 1<br>5.4 1   | 20.4 1           | 15.9 1           | 12.0 1 < U               | 9.2 1 4 0        | 22.9 I < U        |   |     |  |
|                 | Copar                       | 54.4             | 5.1 F            | 1.3 F            | 7.2 1            | 1.2 1                    | 7.3 i<br>A 1     | 10.5 t<br>20.7 1  |   |     |  |
|                 | Copper                      | 10500 1          | 12000 1          | 91200 1          | 16000 1          | 12200 1                  | 12800 1          | 23800 1           |   |     |  |
|                 | l ead                       | 11.2 1           | 10.7 1           | 7 1              | 8 1              | 45 1                     | 5 1              | 75 t              |   |     |  |
| UFTALS          | Magnesium                   | 585 1            | 982 1            | 274 1            | 1700 1           | 304 1                    | 1450 1           | 5080 1            |   |     |  |
|                 | Magnesian                   | 86 1             | 535 1            | 12.5 1           | 37.2 1           | 20.8 1                   | 75 1             | 574 1             |   |     |  |
| WETALS          | Mercury                     | 0.1 1 < 1        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < 1        | 0.1 1 < U                | 0.1 1 < U        | 0.1 1 < U         |   |     |  |
| WETALS          | Nickel                      |                  |                  |                  |                  |                          |                  |                   |   |     |  |
| WETALS          | Potassium                   | 150 1            | 350 1            | 151 I            | 848 1            | 386 1                    | 429 1            | 885 1             |   |     |  |
| METALS          | Selenium                    | 1 1 < U          | 1 1 < U          | 11< 0            | 11< 1            | 11 < U                   | 11 < U           | 1 <b>1 &lt; U</b> |   |     |  |
| METALS          | Silver                      | 11< U            | 11 < U           | 11 < U           | 11< 13           | 11< 0                    | 1 1 < U          | 1 1 < U           |   |     |  |
| WETALS          | Sodium                      |                  |                  |                  |                  |                          |                  |                   |   |     |  |
| METALS          | Strontium                   | 5.2 1            | 27.2 1           | 5.2 1            | 29.7 1           | 6.1 1                    | 29.5 1           | 51.7 1            |   |     |  |
| METALS          | Thalikum                    |                  |                  |                  |                  |                          |                  |                   |   |     |  |
| METALS          | Vanadium                    |                  |                  |                  |                  |                          | <b></b> .        |                   |   |     |  |
| METALS          | Zinc                        | 16.5 1           | 25.8 1           | 12 1             | 34.8 1           | 16 1                     | 23.1 1           | 119 1             |   |     |  |
| PERC            | Perchiorate                 |                  |                  |                  |                  |                          |                  |                   |   |     |  |
|                 | Carbon Range C12-C28        |                  |                  |                  |                  |                          |                  |                   |   |     |  |
| RANGE ORGANICS  | Carbon Range C6-C12         |                  |                  |                  |                  |                          |                  |                   |   |     |  |
| SEMIVOLATILES   | 1.2.4-Trichlorobenzene      | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| SEMIVOLATILES   | 1,2-Dichlorobenzene         | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| SEMIVOLATILES   | 1,3-Dichlorobenzene         | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| SEMIVOLATILES   | 1,4-Dichlorobenzene         | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| SEMIVOLATILES   | 2,4,5-Trichlorophenol       | 1.65 1 < U       | 1.65 1 < U       | 1.75 1 < U       | 1.65 1 < U       | 16.5 1 < UD              | 1.65 1 < U       | 1.65 1 < U        |   |     |  |
| SEMIVOLATILES   | 2,4,6-Trichlorophenol       | 0.33 f < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 f < U        |   |     |  |
| SEMIVOLATILES   | 2,4-Dichlorophenol          | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| SEMIVOLATILES   | 2,4-Dimethylphenol          | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| SEMIVULATILES   | 2,4-Dimbophenol             | 1.65 1 < U       | 1.65 1 < U       | 1.75 1 < U       | 1.00 1 < U       | 16.5 1 < UU              | 1.05 1 < U       | 1.05 1 < 0        |   |     |  |
|                 | 2 Chlorophonol              | 0.33 1 4 0       |                  | 0.35 1 < 0       |                  | 3.3 1 < 10               |                  | 0.33 1 < 0        |   |     |  |
| SEMIVOLATILES   | 2 Methylosobthalana         | 033 1 < 1        |                  | 0.35 1 < 1       | 133 1 < 11       | 33 1 < 10                | 0.33 1 < 11      | 0.33 1 < 11       |   |     |  |
| SEMIVOLATILES   | 2-Methylohenol              | 0.33 1 < 1       | 0.33 1 < 1       | 0.35 1 < 0       | 0.33 1 < 1       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| SEMIVOLATILES   | 2-Nitroaniline              | 1.65 1 < U       | 1.65 1 < U       | 1.75 1 < U       | 1.65 1 < U       | 16.5 1 < UD              | 1.65 t < U       | 1.65 1 < U        |   |     |  |
| SEMIVOLATILES   | 2-Nitrophenol               | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| SEMIVOLATILES   | 3,3'-Dichlorobenzidine      | 0.65 1 < U       | 0.65 1 < U       | 0.689 1 < U      | 0.65 1 < U       | 6.5 1 < UD               | 0.65 1 < U       | 0.65 1 < U        |   |     |  |
| SEMIVOLATILES   | 3-Nitroaniline              | 1.65 1 < U       | 1.65 1 < U       | 1.75 1 < U       | 1.65 1 < U       | 16.5 1 < UD              | 1.65 1 < U       | 1.65 1 < U        |   |     |  |
| SEMIVOLATILES   | 4,6-Dinitro-2-methylphenol  | 1.65 t < U       | 1.65 1 < U       | 1.75 1 < U       | 1.65 1 < U       | 16.5 1 < UD              | 1.65 1 < U       | 1.65 1 < U        |   |     |  |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether  | 0.33 t < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| SEMIVOLATILES   | 4-Chloro-3-methylphenol     | 0.65 1 < U       | 0.65 1 < U       | 0.689 1 < U      | 0.65 1 < U       | 6.5 1 < UD               | 0.65 1 < U       | 0.65 1 < U        |   |     |  |
| SEMIVOLATILES   | 4-Chloroaniline             | 0.65 1 < U       | 0.65 1 < 0       | 0.689 1 < 0      | 0.65 1 < U       | 6.5 1 < UD               | 0.65 1 < U       | 0.65 1 < 0        |   | •   |  |
|                 | 4-Chiorophenyi phenyi ether |                  |                  | 0.35 1 < U       | 0.33 1 < 0       | 3.3 1 4 00               | U.33 1 < U       | 0.33 1 < 0        | - |     |  |
|                 | 4-Metryphenol               | 165 1 < 1        | 0.55 1 4 0       | 1,35 1 < 0       | 1.55 1 < 1       | 3.3 L S UU<br>165 4 4 UD |                  | 155 1 - 11        |   |     |  |
| SEMIVOLATILES   | 4-Nitronhenol               | 165 1 < 1        | 1.00 1 < 0       | 175 1 < 1        | 1.00 1 < 0       | 165 1 < UD               | 165 1 < LL       | 165 1 < 1         |   |     |  |
| SEMIVOLATILES   | Acenaphthene                | 9.33 1 < U       | 0.33 1 < 1       | 0.35 1 < 0       | 0.33 t < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 t < U        |   | ÷ . |  |
| SEMIVOLATILES   | Acenaphthviene              | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| SEMIVOLATILES   | Anthracene                  | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 t < U        |   |     |  |
| SEMIVOLATILES   | Benzo(a)anthracene          | 0.33 1 < U       | 0.33 t < U       | 0.35 1 < U       | 0.33 t < U       | 3.3 1 < UD               | 0.33 t < U       | 0.33 1 < U        |   |     |  |
| SEMIVOLATILES   | Benzo(a)pyrene              | 0.33 1 < ⊍       | 0.33 1 < U       | 0.35 t < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| SEMIVOLATILES   | Benzo(b)fluoranthene        | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 t < U        |   |     |  |
| SEMIVOLATILES   | Benzo(ghi)perylene          | 0.33 1 < U       | 0.33 t < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| SEMIVOLATILES   | Benzo(k)fluoranthene        | 0.33 1 < U       | 0.33 t < U       | 0.35 1 < U       | 0.33 t < U       | 3.3 1 < UD               | 0.33 1 < U       | 0.33 1 < U        |   |     |  |
| SEMIVOLATILES   | Henzoic Acid                | 1.55 1 < U       | 1.65 1 < U       | 1.749 1 < U      | 1.65 1 < U       | 16.5 1 < UD              | 1.65 1 < U       | 1.65 1 < U        |   |     |  |



Table 3-15 Concentrations of Chemicals in Soil Samples Associated with Sump 015

| [SUMP] = SUMP015       |   |                  |                  | 111 025 88       | 111 045 00       | 111 646 04               | 14 545 64                 | 14.516.01                 |  |   |
|------------------------|---|------------------|------------------|------------------|------------------|--------------------------|---------------------------|---------------------------|--|---|
| LOCATION _CODE         |   | LH-S15-01        | LH-S15-01        | LH-S15-02        | LH-515-02        | 14.516-01                | LH-S16-01 2               | 18-516-01-3               |  |   |
| SAMPLE_NO              |   | 7/0/1003         | 7/8/1003         | 7/8/1003         | 7/8/1993         | 7/8/1993                 | 7/8/1993                  | 7/8/1993                  |  |   |
| SAMPLE_DATE            |   | 10/1995          | 52-6 Ft          | 05-15Ft          | 5-5.8 Ft         | 0.5 - 1.5 Ft             | 4.2 - 4.8 Ft              | 8-8.6 Ft                  |  |   |
| SAMPLE PURPOSE         |   | REG              | REG              | REG              | REG              | REG                      | REG                       | REG                       |  |   |
| Test Group             | Parameter (Units = mg/kg)                               | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ         | Result DIL LQ VQ          | Result DIL LQ VQ          |  |   |
| SEMIVOLATILES          | Benzyl Alcohol  | 0.65 1 < U       | 0.65 1 < U       | 0.689 t < U      | 0.65 1 < U       | 6.5 1 < UD               | 0.65 1 < U                | 0.65 1 < U                |  |   |
| SEMIVOLATILES          | bis(2-Chloroethoxy)methane                              | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < 0                |  |   |
| SEMIVOLATILES          | bis(2-Chloroethyf)ether                                 | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < 0                | 0.33 1 < 0                |  |   |
| SEMIVOLATILES          | bis(2-Chloroisopropy/)ether                             | 0.33 1 < U       | 0.33 1 < 0       | 0.35 1 < 0       | 0.33 1 < 0       | 3.3 1 < 00               | 0.33 1 < 1                | 0.33 1 < 13               |  |   |
| SEMIVOLATILES          | bis(2-Ethylhexyl)phthalate                              | 0.33 1 < 0       | 0.33 1 < 0       |                  | 0.33 1 < 0       | 33 1 < UD                | 0.33 1 < U                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | Chocono   | 0.33 1 < 1       | 0.33 1 < 1       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | Dibenzo(a,h)anthracene                                  | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | Dibenzofuran  | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 t < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | Diethyl phthalate                                       | 0.33 1 < U       | 0.33 1 < U       | 0.35 t < U       | 0.33 t < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | Dimethył phthaiate                                      | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 t < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < 0                |  |   |
| SEMIVOLATILES          | di-n-Butyt phthalate                                    | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < 0                | 0.33 1 < 0                | 0.33 1 < 0                |  |   |
| SEMIVOLATILES          | di-n-Octyl phthalate                                    | 0.33 1 < 0       |                  | 0.35 1 < 0       | 0.33 1 < 0       | 33 1 < 10                | 0.33 1 < 1                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | Fluoranthene  |                  | 0.33 1 < 11      | 0.35 1 < 1/      | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | Hexachlorobenzene                                       | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | Hexachlorobutadiene                                     | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | Hexachlorocyclopentadiene                               | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | Hexachloroethane  | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | Indeno(1,2,3-cd)pyrene                                  | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < 0                | 0.33 1 < 0                |  |   |
| SEMIVOLATILES          | Isophorone  | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < 0       | 3.3 I < UD<br>3.3 I < UD | 0.33 1 < 1                | 0.33 1 < 1                |  |   |
| SEMIVOLATILES          | Naphthalene   | 0.33 1 < 0       | 0.33 1 < 1       | 0.35 1 < 1       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | n-Nitroso-di-n-oropylamine                              | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | n-Nitrosodiphenylamine                                  | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < U                |  |   |
| SEMIVOLATILES          | Pentachlorophenol                                       | 1.65 1 < U       | 1.65 1 < U       | 1.75 1 < U       | 1.65 1 < U       | 16.5 1 < UD              | 1.65 1 < U                | 1.65 1 < U                |  |   |
| SEMIVOLATILES          | Phenanthrene  | 0.33 1 < U       | 0.33 1 < U       | 0.35 t < U       | 0.33 t < U       | 3.3 1 < UD               | 0.33 1 < U                | 0.33 1 < 0                |  |   |
| SEMIVOLATILES          | Phenol  | 0.33 t < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < 00               | 0.33 1 < 0                | 0.33 1 < 0                |  |   |
| SEMIVOLATILES          | Pyrene<br>15 stars data an Dissel Evel                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.35 1 < U       | 0.33 1 < 0       | 3.3 1 00                 | . 0.35 1 - 0              | 0.35 1 4 0                |  |   |
| 1PK<br>TDV             | Hydrocarbons as Diesel Fuel<br>Hydrocarbons as Casoline |                  |                  |                  |                  |                          |                           |                           |  |   |
| TPH                    | TOTAL HYDROCARBONS                                      |                  |                  |                  |                  |                          |                           |                           |  |   |
| VOLATILES              | 1,1,1,2-Tetrachloroethane                               |                  |                  |                  |                  |                          |                           |                           |  |   |
| VOLATILES              | 1,1,1-Trichloroethane                                   | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U               |  |   |
| VOLATILES              | 1,1,2,2-Tetrachloroethane                               | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < 0               |  |   |
| VOLATILES              | 1,1,2-Trichloroethane                                   | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0              | 0.005 1 < 0               | 0.005 1 < 0               |  |   |
| VOLATILES              | 1,1-Uichloroethane                                      |                  | 0.005 1 < 0      |                  | 0.005 1 < 0      | 0.005 1 < 0              | 0.005 1 < U               | 0.005 1 < U               |  |   |
| VOLATILES              | 1,1-Dichioroconene                                      |                  | 0.000 1 4 0      | 0.000 7 4 0      | 0.000 1 2 0      | 0.000                    |                           |                           |  |   |
| VOLATILES              | 1.2.3-Trichlorobenzene                                  |                  |                  |                  |                  |                          |                           | •                         |  |   |
| VOLATILES              | 1,2,3-Trichloropropane                                  |                  |                  |                  |                  |                          |                           |                           |  |   |
| VOLATILES              | 1,2,4-Trichlorobenzene                                  |                  |                  |                  |                  |                          |                           |                           |  |   |
| VOLATILES              | 1,2,4-Trimethylbenzene                                  |                  |                  |                  |                  |                          |                           |                           |  |   |
| VOLATILES              | 1,2-Dibromo-3-chloropropane                             |                  |                  |                  |                  |                          |                           |                           |  |   |
| VOLATILES              | 1,2-Dibromoethane                                       |                  |                  |                  |                  |                          |                           |                           |  |   |
| VOLATILES<br>VOLATILES | 1,2-Dichorosthane                                       | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < 1      | 0.005 1 < U      | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U               |  | - |
| VOLATILES              | 1.2-Dichloroethene                                      | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U               |  |   |
| VOLATILES              | 1,2-Dichloropropane                                     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U               |  |   |
| VOLATILES              | 1,2-Dimethylbenzene (o-Xylene)                          |                  |                  |                  |                  |                          |                           |                           |  |   |
| VOLATILES              | 1,3,5-Trimethylbenzene                                  |                  |                  |                  |                  |                          |                           |                           |  |   |
| VOLATILES              | 1,3-Dichlorobenzene                                     |                  |                  |                  |                  |                          |                           |                           |  |   |
| VOLATILES              | 1,3-Dichloropropane                                     |                  |                  |                  |                  |                          |                           |                           |  |   |
| VOLATEES               | 1,4-DICTIOLODENZERE                                     |                  |                  |                  |                  |                          |                           |                           |  |   |
| VOLATILES              | 2-Butanone  | 0.0656 1         | 0.05 1 < U       | 0.05 t < U       | 0.05 f < U       | 0.05 1 < U               | 0.05 1 < U                | 0.05 1 < U                |  |   |
| VOLATILES              | 2-Chloroethyl vinyl ether                               | 0.01 1 < U               | 0.01 t < U                | 0.01 1 < U                |  |   |
| VOLATILES              | 2-Chlorotoluene   | -                |                  |                  |                  |                          |                           |                           |  |   |
| VOLATILES              | 2-Hexanone  | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U       | 0.05 1 < U               | 0.05 1 < U                | 0.05 1 < U                |  |   |
| VOLATILES              | 4-Chiorototuene   | _                |                  | <b>.</b>         |                  |                          |                           |                           |  |   |
| VOLATILES              | Acetone   | 0.1 1 < U                | U.1 1 < U<br>0.005 4 - 11 | ∴ 0.1 T < U<br>∩∩05 + < U |  |   |
| VOLATILES              | Benzene   | 0.005 1 < U      | 0.005 1 < U      | U.90,5 1 < U     | U.U.0 1 < U      | 0.003 1 < U              | 0.000 1 5 0               | 0.000 1 5 0               |  |   |
| VOLATILES              | Bromobenzene<br>Bromochlaromathano                      |                  |                  |                  |                  |                          |                           |                           |  |   |
| PULNIELO               | Plátnéé intérnég jatie                                  | ſ                |                  |                  |                  |                          |                           |                           |  |   |



 $( \uparrow )$ 

Table 3-15 Concentrations of Chemicals in Soil Samples Associated with Sump 015

| (SUMP) = SUMP015 |                           |                   |                  |                  |                  |                  |                  |                  |
|------------------|---------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                           | LH-S15-01         | LH-S15-01        | LH-S15-02        | LH-S15-02        | LH-S16-01        | LH-S16-01        | LH-S16-01        |
| SAMPLE_NO        |                           | LH-\$15-01_1      | LH-S15-01_2      | LH-\$15-02_1     | LH-\$15-02_2     | LH-S16-01_1      | LH-\$16-01_2     | LH-S16-01_3      |
| SAMPLE_DATE      |                           | 7/8/1993          | 7/8/1993         | 7/8/1993         | 7/8/1993         | 7/8/1993         | 7/8/1993         | 7/8/1993         |
| DEPTH            |                           | 0.5 - 1.5 Ft      | 5.2 - 6 Ft       | 0.5 - 1.5 Ft     | 5 - 5.8 Ft       | 0.5 - 1.5 Ft     | 4.2 - 4.8 Ft     | 8-8.6 Ft         |
| SAMPLE_PURPOSE   |                           | REG               | REG              | REG              | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg) | Result Dil. LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| VOLATILES        | Bromodichloromethane      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromoform                 | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromomethane              | 0.01 t < U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 f < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Carbon disulfide          | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Carbon tetrachloride      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chlorobenzene             | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.0588 1         | 0.005 1 < U      | 0.0422 1         |
| VOLATILES        | Chloroethane              | 0.01 1 < U        | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Chloroform                | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloromethane             | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | cis-1,2-Dichloroethene    |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | cis-1,3-Dichloropropene   | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromochloromethane      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromomethane            |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Dichlorodifluoromethane   | [                 |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Ethylbenzene              | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Hexachlorobutadiene       | ļ                 |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Isopropylaenzene          |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | m.p-Xylenes               |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Methyl isobutyl ketone    | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | Methylene chloride        | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Naphthalene               |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | n-BUTYLBENZENE            |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | n-PROPYLBENZENE           |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | p-ISOPROPYLTOLUENE        |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | sec-BUTYLBENZENE          |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Styrene                   | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | tert-BUTYLBENZENE         |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Tetrachkoroethene         | 0.005 t < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Toluene                   | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.0224 1         | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | trans-1,2-Dichloroethene  |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | trans-1.3-Dichloropropene | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Trichloroethene           | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Trichlorofiuoromethane    |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Vinyl acetate             | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | Vinyl chloride            | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Xylenes, Total            | 0.0405 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.0997 1         | 0.005 1 < U      | 0.005 t < U      |

Footnotes are shown on cover page to Tables Section.



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-16 Concentrations of Chemicals in Soil Samples Associated with Sump 016

| [SUMP] = SUMP016<br>LOCATION_CODE |   | 35SUMP015-SB01  | 35SUMP015-SB02               | 35SUMP015-SB02               | 35SUMP016-SB01               | 35SUMP016-SB01                  | 35SUMP016-SB01               | 35SUMP016-SB01                  | HOSB01                  | HOSB01           | HOSE01           | HOSB01           | HOSB02           | HOSB02           | HOSB02           |
|-----------------------------------|---|---|------------------------------|------------------------------|------------------------------|---------------------------------|------------------------------|---------------------------------|-------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| SAMPLE_NO<br>SAMPLE DATE          |   | 35-SMP15-SB01-02<br>9/11/2006   | 35-SMP15-SB02-01<br>9/8/2006 | 35-SMP15-SB02-02<br>9/8/2006 | 35-SMP16-SB01-01<br>9/8/2006 | 35-SMP16-SB01-01-QC<br>9/8/2006 | 35-SMP16-SB01-02<br>9/8/2006 | 35-SMP16-SB01-02-QC<br>9/8/2006 | 12/4/2000               | 12/4/2000        | 12/4/2000        | 12/4/2000        | 12/4/2000        | 12/4/2000        | 12/4/2000        |
| DEPTH                             |   | 6-6Ft   | 0 - 0.5 Ft                   | 6-6Ft                        | 0 - 0.5 Ft                   | 0-0.5 Ft                        | 5-5Ft                        | 5-5Ft                           | 0-0.5Ft                 | 3-5Ft            | 3-5Ft            | 8-10 Ft          | 0-0.5 Ft         | 3-5Ft            | 8-10 Ft          |
| SAMPLE_PURPOSE<br>Test Group      | Parameter (1 Inits = mo/ko)                           | REG<br>Result DIL LO VO   | REG<br>Result DIL LQ VQ      | REG<br>Result DIL LQ VQ      | REG<br>Result DIL LQ VQ      | FD<br>Result DIL LQ VQ          | REG<br>Result DIL LQ VQ      | FD<br>Result DHL LQ VQ          | REG<br>Result DIL LQ VQ | Result DIL LQ VQ |
| EXPLOSIVES                        | 2,4-Dinitrotoluene                                    | I   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| EXPLOSIVES                        | 2,6-Dinitrotoluene                                    | 1/100 1   | 13806 1                      | 7470 1                       | 7570 1                       | 8130 t                          | 7800 1                       |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Antimony  | 0.116 1 U   | 0.104 1 U UJL                | 0.111 1 U UJL                | 0.107 1 U UJL                | 0.105 1 U UJL                   | 0.0836 1 J JL                |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Arsenic   | 0.664 1   | 4.59 1 JL                    | 2.31 1 JL                    | 2.52 1 JL                    | 2.5 1 JL                        | 6.62 1 JL                    |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Banum<br>Republicam                                   | 78.5 1  | 129 1<br>0.432 1             | 1/1 1<br>0.379 1 J J         | 65.4 1<br>0.352 1 J J        | 61.3 1<br>0.342 1 J J           | 2430 10                      |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Cadmium   | 0.0943 1 J J  | 0.221 1 J J                  | 0.15 1 J J                   | 0.0618 1 J J                 | 0.0595 1 J J                    | 0.376 1 J J                  |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Calcium   | 813 1 J   | 1640 1                       | 753 1                        | 953 1                        | 968 1                           | 1970 1                       |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS<br>METALS                  | Chromium<br>Cohalt                                    | 13.9 1<br>5.17 1 J  | 19.2 1 JH<br>2.01 1 JH       | 4.66 1 JH                    | 12 1 JH<br>3.31 1 JH         | 3.27 1 JH                       | 6.08 1 JH                    |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Copper  | 5.62 1  | 7.9 1                        | 4.12 1                       | 2.33 1                       | 2.44 1                          | 5.72 1                       |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | iron<br>(   | 11400 1   | 37400 5                      | 11900 1                      | 10800 1                      | 10500 1<br>820 1 H              | 15800 1                      | •                               |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Lead<br>Magnesium                                     | 1550 1  | 841 1                        | 993 1                        | 395 1                        | 425 1                           | 1700 1                       |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Manganese   | 22.4 1  | 75 1                         | 23.4 1                       | 285 1                        | 231 1                           | 63.1 1                       |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Mercury   | 0.292 1 U   | 0.0654 1 J J<br>639 1        | 0.0138 1 J J<br>12 1         | 0.0106 1 J J<br>377 1        | 0.0196 1 J J<br>407 1           | 0.0118 1 J J<br>18.6 1       |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Potassium   | 576 1   | 430 1 JH                     | 314 1 JH                     | 234 1 JH                     | 260 1 JH                        | 501 1 JH                     |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Selenium  | 0.231 1 U   | 0.73 1                       | 0.216 1 J J                  | 0.288 1                      | 0.215 1                         | 0.246 1                      |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS<br>METALS                  | Silver<br>Sodium                                      | 1.71 T U<br>399 1   | 1.72 1 U<br>33 1             | 149 1                        | 34 1                         | 34.1 1                          | 649 t                        |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Strontium   |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Thatium   | 0.0948 t  | 0.0686 1                     | 0.0695 1                     | 0.0654 1                     | 0.0638 1                        | 0.0877 1                     |                                 |                         |                  |                  |                  |                  |                  |                  |
| METALS                            | Zinc  | 34.2 1  | 60.5 1                       | 19.6 1                       | 10.4 1                       | 10.7 1                          | 19.2 1                       |                                 |                         |                  |                  |                  |                  |                  |                  |
| PERC                              | Perchlorate   | 0.01 1 U  | 0.02 2 U                     | 0.05 5 U                     | 0.02 2 U                     | 0.02 2 U                        | 0.1 10 U                     |                                 |                         |                  |                  |                  |                  |                  |                  |
| RANGE_ORGANICS                    | Carbon Range C12-C28<br>Carbon Range C28-C35          | 58 1 U<br>58 1 U  | 55.8 1 U<br>55.8 1 U         | 56.5 1 U<br>56.5 1 U         | 527 1 U<br>527 1 U           | 52.9 1 U                        | 55.9 1 U                     |                                 |                         |                  |                  |                  |                  |                  |                  |
| RANGE_ORGANICS                    | Carbon Range C6-C12                                   | 58 1 U  | 55.8 1 U                     | 56.5 1 U                     | 52.7 1 U                     | 52.9 1 U                        | 55.9 1 U                     | -                               |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 1,2,4-Trichlorobenzene                                |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 1,3-Dichlorobenzene                                   |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 1,4-Dichlorobenzene                                   |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 2,4,5-Trichlorophenol<br>2.4.6-Trichlorophenol        |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 2,4-Dichlorophenol                                    |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 2,4-Dimethylphenol                                    |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 2,4-Dhirrophenoi<br>2-Chloronaphthalene               |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 2-Chlorophenol  |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 2-Methylnaphthalene<br>2-Methylnhenoi                 |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 2-Nitroaniline  |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 2-Nitrophenol   |   |                              |                              |                              |                                 |                              |                                 | -                       |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 3,3-Dichlorobenzibine<br>3-Nitroaniline               |   |                              |                              |                              |                                 |                              |                                 | -                       |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 4,6-Dinitro-2-methylphenol                            | ·   |                              |                              |                              | ·                               |                              |                                 |                         |                  |                  | -                |                  |                  |                  |
| SEMIVOLATILES                     | 4-Bromophenyl phenyl ether<br>4-Chloro-3-methylobenol |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 4-Chloroaniline                                       |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 4-Chlorophenyl phenyl ether                           |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 4-Methylphenol<br>4-Nitroaniline                      |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | 4-Nitrophenol   |   |                              | -                            |                              |                                 |                              |                                 | -                       |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | Acenaphthene  |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | Anthracene  |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  | ÷                |                  |
| SEMIVOLATILES                     | Benzo(a)anthracene                                    |   |                              |                              |                              |                                 |                              |                                 | -                       |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES<br>SEMIVOLATILES    | Benzo(a)pyrene<br>Benzo(b)fluoranthene                | u and a second se |                              |                              |                              |                                 |                              |                                 | -                       |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | Benzo(ghi)perylene                                    |   |                              |                              |                              |                                 |                              |                                 |                         | -                |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | Benzo(k)fluoranthene                                  | 1   |                              |                              |                              |                                 | -                            |                                 |                         |                  |                  | · .              |                  |                  |                  |
| SEMIVOLATILES                     | Benzok Acid<br>Benzyl Alcohol                         |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | bis(2-Chloroethoxy)methane                            |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | bis(2-Chloroethyl)ether                               |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                     | bis(2-Ethylhexyl)phthalate                            |   |                              |                              |                              |                                 |                              |                                 |                         |                  |                  |                  |                  |                  |                  |

Shaw Environmental, Inc.
Table 3-16 Concentrations of Chemicals in Soil Samples Associated with Sump 016

| [SUMP] ≈ SUMP016<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |  | 35SUMP015-SB01<br>35-SMP15-SB01-02<br>9/11/2005<br>6 - 6 Ft<br>REG | 355UMP015-5802<br>35-5MP15-5802-01<br>9/8/2006<br>0 - 0.5 Ft<br>REG | 355UMP015-5802<br>35-SMP15-5802-02<br>9/8/2006<br>6 - 6 Ft<br>REG | 35SUMP016-S801<br>35-SMP16-S801-01<br>9/8/2006<br>0 - 0.5 Ft<br>REG | 35SUMP016-SB01<br>35-SMP16-SB01-01-QC<br>9/8/2006<br>0 - 0.5 Ft<br>FD | 35SUMP016-SB01<br>35-SMP16-SB01-02<br>9/8/2006<br>5 - 5 Ft<br>REG | 35SUMP016-SB01<br>35-SMP16-SB01-02-QC<br>9/8/2006<br>5 - 5 Ft<br>FD | HOSB01<br>HOSB01(0-0.5)<br>12/4/2000<br>0 - 0.5 Ft<br>REG | HOSB01<br>HOSB01(3-5)<br>12/4/2000<br>3 - 5 Ft<br>REG | HOSB01<br>HOSB01{3-5}QC<br>12/4/2000<br>3 - 5 Pt<br>FD | HOSB01<br>HOSB01(8-10)<br>12/4/2000<br>8 - 10 Ft<br>REG | HOS802<br>HOS802(0-0.5)<br>12/4/2000<br>0 - 0.5 Ft<br>REG | HOSB02<br>HOSB02(3-5)<br>12/4/2000<br>3 - 5 Ft<br>REG | HOSB02<br>HOSB02(8-10)<br>12/4/2000<br>8 - 10 Ft<br>REG<br>Pontit Dit, LO, VO |
|--|--|--|---|---|---|---|---|---|---|---|--|---|---|---|---|
| Test Group   | Parameter (Units = mg/kg)<br>Bobyt benzed obticalate | Result DIL LO VO   | RESULT UIL LO VO  | Result dil LQ VQ  | Result Dil EQ VQ  | Kesut dil LQ VQ   | Result Dal Lot Vo   | RESUL DIL LU VU   | Result DIL EQ YQ  | Result DIE EQ VQ                                      | NOSUL DIE LOZ VOL                                      |   | ACOULDIE EQ VQ  |   | Augure of the   |
| SEMIVOLATILES  | Chrysene   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene                               |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Dibenzofaran   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Diethyl phthalate                                    |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Dimethyl phthalate                                   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | di-n-Butyl phthalate<br>di-n-Cetyl phthalate         |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Fluoranthene   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Fluorene   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Hexachlorobenzene                                    |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Hexachlorobutadiene                                  |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Hexachlorocyclopentadiene                            |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Indepo(1.2.3-cd)symmetry                             |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Isophorone   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Naphthalene  |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Nitrobenzene   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine                           |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | n-Nerosodiphenylamine                                |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Phenaothrepe   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Phenol   | :  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| SEMIVOLATILES  | Pyrene   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| TPH  | Hydrocarbons as Diesel Fuel                          |  |   |   |   |   |   |   | 493 1 C   | 58.6 1 < U  | 58 1 < U   | 65 1 < U  | 1150 1 C  | 57.7 1 < 0  | 54.9 1 < U  |
| TPH  | Hydrocarbons as Gasoline                             |  |   |   |   |   |   |   | 50 1 < U  | 586 1 < U   | 58 I < U   | 65 1 < U  | 55.0 I ~ U<br>1150 I C                                    | 577 1 < 1   | 64.9 1 < U  |
| VOLATILES  | 1112-Tetrachlomethane                                | 0.0049 1 1   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  | 400 1 0   | 55.0 1 4 6  |  |   |   | ••••  |   |
| VOLATILES  | 1,1,1-Trichloroethane                                | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 1,1,2,2-Tetrachloroethane                            | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 1,1,2-Trichloroethane                                | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 1,1-Dichloroethane                                   | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 1,1-Dichlorontoneze                                  | 0.0049 1 0   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 1,2,3-Trichlorobenzene                               | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 1,2,3-Trichloropropane                               | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 1,2,4-Trichlorobenzene                               | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 t U  |   |   |  |   |   |   |   |
| VOLATILES  | 1,2,4-Trimethylbenzene                               | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 0   | 0.0049 1 0  |   |   |  |   |   |   |   |
| VOLATILES<br>VOLATILES   | 1,2-Dibromo-3-Chioropropane<br>1 2-Dibromoethane     | 0.0049 1 0   |   | 0.00474 1 0   |   |   | 0.00455 1 0   | 0.0049 1 0  |   |   |  |   |   |   |   |
| VOLATILES  | 1.2-Dicklorobenzene                                  | 0.00137 1 J J  |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 1,2-Dichloroethane                                   | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 1,2-Dichloroethene                                   | 1  |   |   |   |   |   |   |   |   |  |   |   |   |   |
| VOLATILES  | 1,2-Dichloropropane                                  | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylene)                       | 0.0049 1 0   |   | 0.00474 1 0   |   |   | 0.00455 1 0   | 0.0049 1 0  |   |   |  |   |   |   |   |
| VOLATILES  | 1,3,5- mineuryoenzene<br>1,3-Dichlorobenzene         | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 1,3-Dichloropropane                                  | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   | •   |   |
| VOLATILES  | 1,4-Dichlorobenzene                                  | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 2,2-Dichloropropane                                  | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 2-Butanone   | 0.0098 1 U UJ  |   | 0.00947 1 U   |   |   | 0.0091 1 U  | 0.0098 1 1  |   |   |  | <i>i</i> .  |   |   |   |
| VOLATILES  | 2-Chlomtobuese                                       | 0.0038 1 0   |   | 0.00547 1 U   |   |   | 0.00455 1 11  | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | 2-Hexanone   | 0.0098 1 U UJ  |   | 0.00947 1 U UJ  |   |   | 0.0091 1 U  | 0.0098 1 U UJ   |   |   |  |   |   |   |   |
| VOLATILES  | 4-Chiorotoluene                                      | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | Acetone  | 0.0098 1 U   |   | 0.00873 1 J J   |   |   | 0.0091 1 U  | 0.0098 1 U  |   |   |  |   |   |   |   |
| VOLATILE\$   | Benzene  | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   | 1. 1. A.   |   | 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -                   | •   |   |
| VOLATILES  | Bromochloromethane                                   |  |   | 0.00474 1 0   |   |   | 0.00435 1 1   | 0.0049 1 11   | -   |   |  |   |   |   |   |
| VOLATILES  | Bromodichloromethane                                 | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | Bromotorm  | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | Bromomethane   | 0.0098 1 U   |   | 0.00947 1 U   |   |   | 0.0091 1 U  | 0.0098 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | Carbon disulfide                                     | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | Carbon tetrachloride                                 | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 0  |   |   |  |   |   |   |   |
|  | Chlomethane  | 0.00731 1  |   | 0.00474 IU<br>0.00947 1 H   |   |   | 0.00403 1 0   | 0.0049 1 0  |   |   |  |   |   |   |   |
| VOLATILES  | Chloroform   | 0.0049 1 U   |   | 0.08474 1 U   |   |   | 0.00455 1 U   | 0.0049 1 U  |   |   |  |   | ·   |   |   |
| VOLATILES  | Chioromethane  | 0.0098 1 U   |   | 0.00947 1 U   |   |   | 0.0091 1 U  | 0.0098 1 U  |   |   |  |   |   |   |   |
| VOLATILES  | cis-1,2-Dichloroethene                               | 0.0049 1 U   |   | 0.00474 1 U   |   |   | 0.00455 1 U   | 0.0049 t U  |   |   |  |   |   |   |   |

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-16 Concentrations of Chemicals in Soil Samples Associated with Sump 016

| (SUMP) = SUMPO16 |                           |                  |                  |                  |                  |                     |                  |                     |                  |                  |                  |                  |                  | 100000           | NOCDAS           |
|------------------|---------------------------|------------------|------------------|------------------|------------------|---------------------|------------------|---------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION_CODE    |                           | 35SUMP015-SB01   | 35SUMP015-SB02   | 35SUMP015-SB02   | 35SUMP016-SB01   | 35SUMP016-SB01      | 35SUMP016-SB01   | 35SUMP016-SB01      | HOSB01           | HOSB01           | HOSBOT           | HOSBUT           | HUSBUZ           | HUSBUZ           | HUSBUZ           |
| SAMPLE_NO        |                           | 35-SMP15-SB01-02 | 35-SMP15-SB02-01 | 35-SMP15-SB02-02 | 35-SMP16-SB01-01 | 35-SMP16-SB01-01-QC | 35-SMP16-SB01-02 | 35-SMP16-SB01-02-OC | HOSB01(0-0.5)    | HOSB01(3-5)      | HOSB01(3-5)QC    | HOSE01(8-10)     | HOSB02(0-0.5)    | HOSBU2(3-5)      | HUSBUZ(8-10)     |
| SAMPLE_DATE      |                           | 9/11/2006        | 9/8/2006         | 9/8/2006         | 9/8/2006         | 9/8/2006            | 9/8/2005         | 9/8/2006            | 12/4/2000        | 12/4/2000        | 12/4/2000        | 12/4/2000        | 12/4/2000        | 12/4/2000        | 12/4/2000        |
| DEPTH            |                           | 6 - 6 Ft         | 0 - 0.5 Ft       | 6-6Ft            | 0 - 0.5 Ft       | 0 - 0.5 Ft          | 5-5Ft            | 5-5Ft               | 0-0.5 Ft         | 3-5Ft            | 3-5Ft            | 8 - 10 Ft        | 0+0.5 H          | 3-5Ht            | 8-1011           |
| SAMPLE_PURPOSE   |                           | REG              | REG              | REG              | REG              | FD                  | REG              | FD                  | REG              | REG              | FD               | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg) | Result DIL LQ VQ | Result OIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ    | Result DIL LQ VQ | Result DIL LQ VQ    | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| VOLATILES        | cis-1,3-Dichloropropene   | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Dibromochloromethane      | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Dibromomethane            | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Dichlorodifluoromethane   | 0.0098 1 U       |                  | 0.00947 t U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Ethylbenzene              | 0.0049 1 U       |                  | 0.00474 t U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Hexachlorobutadiene       | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | isopropylbenzene          | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | m,p-Xylenes               | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 t U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Methyl isobutyl ketone    | 0.0098 1 U       |                  | 0.00947 1 U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Methylene chloride        | 0.0049 1 U       |                  | 0.00474 t U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Naphthalene               | 0.0098 1 U       |                  | 0.00947 1 U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | n-BUTYLBENZENE            | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | n-PROPYLBENZENE           | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | p-ISOPROPYLTOLUENE        | 0.0049 1 U       |                  | 0.00474 t U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | sec-BUTYLBENZENE          | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Styrene                   | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | tert-BUTYLBENZENE         | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Tetrachloroethene         | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Toluene                   | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | trans-1,2-Dichloroethene  | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | trans-1,3-Dichloropropene | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Trichloroethene           | 0.0049 1 U       |                  | 0.00474 1 U      |                  |                     | 0.00455 1 U      | 0.0049 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Trichlorofluoromethane    | 0.0098 t U       |                  | 0.00947 t U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Vinyl acetate             | 0.0098 1 U       |                  | 0.00947 1 U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Vinyt chloride            | 0.0098 1 U       |                  | 0.00947 t U      |                  |                     | 0.0091 1 U       | 0.0098 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Xylenes, Total            |                  |                  |                  |                  |                     |                  |                     |                  |                  |                  |                  |                  |                  |                  |

Shaw Environmental, Inc.



Table 3-16 Concentrations of Chemicals in Soil Samples Associated with Sump 016

| [SUMP] ≃ SUMP016 |                             |                  |                  |                  |                  |                  |                  |               |
|------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------------|
| LOCATION_CODE    |                             | LH-S15-01        | LH-S15-01        | LH-\$15-02       | LH-\$15-02       | LH-S16-01        | LH-S16-01        | LH-S16-01     |
| SAMPLE_NO        |                             | LH-S15-01_1      | LH-\$15-01_2     | LH-S15-02_1      | LH-S15-02_2      | LH-S16-01_1      | LH-S16-01_2      | LH-S16-01_3   |
| SAMPLE_DATE      |                             | 7/8/1993         | 7/8/1993         | 7/8/1993         | 7/8/1993         | 7/8/1993         | 7/8/1993         | 7/8/1993      |
| DEPTH            |                             | 0.5 - 1.5 Ft     | 5.2 - 6 Ft       | 0.5 - 1.5 Ft     | 5-5.8Ft          | 0.5 - 1.5 Ft     | 4.2 - 4.8 Ft     | 8-8.6 Ft      |
| SAMPLE PURPOSE   |                             | REG              | REG              | REG              | REG              | REG              | REG              | REG           |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ |
| EXPLOSIVES       | 2,4-Dinitrotoluene          | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <      |
| EXPLOSIVES       | 2.6-Dinitrotoluene          | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <      |
| METALS           | Alussinum                   | 3890 1           | 9270 1           | 3990 1           | 15400 1          | 7010 1           | 8190 1           | 12300 1       |
| METALS           | Antimoay                    | 5.9 1            | 3 1 < U          | 3.1 1            | 3 1 < U          | 3 1 < U          | 31 < U           | 31<           |
| METALS           | Arsenir                     | 37 1             | 19 1             | 2.4 1            | 1 1 < U          | 27 1 < U         | 2.3 1 < U        | 11<           |
| METALS           | Bacium                      | 454 1            | 492 1            | 366 1            | 594 1            | 67 1 < U         | 935 1 < U        | 105 1 <       |
| METALS           | Bendium                     |                  | 102 1            |                  |                  | -,               |                  |               |
|                  | Codmium                     | 1 1 4 11         | 1 1 2 11         | 1160             | 1141             | 1 1 < 1          | 11 < 1           | 11<           |
|                  | Coloium                     | 200 4            | 029 4            | 424 1            | 1700 1           | 555 1            | 1890 1           | 3630 1        |
| METALO           | Charalian                   | 303 1            | 330 1            | 404 1            | 150 1            | 176 1 2 15       | 02 1 C H         | 22.0 1 4      |
| METALS           | Caball                      |                  | 1.0 I<br>E 4 4   | 20.4 5           | 73 1             | 12.0 1 - 0       | 73 1             | 160 1         |
| METALS           | Cobart                      | 1 1 < U          | 5.1 1            | 1.3 1            | 1.2 1            | 1.2 1            | 1.0 1            | 20.7 1        |
| METALS           | Copper                      | 5.4 1            | 5./ 1            | 4.2 1            | 4.1 1            | 4.0 1            | 10000 1          | 20.1 1        |
| METALS           | Iron                        | 19500 1          | 18000 1          | 21300 1          | 16000 1          | 12200 1          | 12800            | 23800 1       |
| METALS           | Lead                        | 11.2 1           | 10.7 1           | 7 1              | 8 7              | 4.5 1            | 5 1              | 7.0 1         |
| METALS           | Magnesium                   | 585 1            | 982 1            | 274 1            | 1700 1           | 304 1            | 1450 1           | 5080 1        |
| METAL\$          | Manganese                   | 8.6 1            | 53.5 1           | 12.5 1           | 37.2 1           | 20.8 1           | 75 1             | 5/4 1         |
| METALS           | Mercury                     | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < 0        | 0.1 1 < U        | 0.1 1 < 0        | 0.1 1 < 0        | 0,1 1 <       |
| METAL\$          | Nickel                      |                  |                  |                  |                  |                  |                  |               |
| METALS           | Potassium                   | 150 1            | 350 1            | 151 1            | 848 1            | 386 1            | 429 1            | 885 1         |
| METALS           | Selenium                    | 11< U            | 11< U            | 11< 0            | 1 t < ⊍          | 11< U            | 11< U            | 11<           |
| METALS           | Silver                      | 11< U            | 11< U            | 11< U            | 11< U            | 1 1 < ย          | 11< U            | 11<           |
| METALS           | Sodium                      |                  |                  |                  |                  |                  |                  |               |
| METALS           | Strontium                   | 5.2 1            | 27.2 1           | 5.2 1            | 29.7 1           | 6.1 1            | 29.5 1           | 51.7 1        |
| METALS           | Thallium                    |                  |                  |                  |                  |                  |                  |               |
| METALS           | Vanadium                    |                  |                  |                  |                  |                  |                  |               |
| METALS           | Zinc                        | 16.5 1           | 25.8 1           | 12 1             | 34.8 1           | 16 1             | 23.1 1           | 119 f         |
| PERC             | Perchlorate                 |                  |                  |                  |                  |                  |                  |               |
| RANGE ORGANICS   | Carbon Range C12-C28        |                  |                  |                  |                  |                  |                  |               |
| RANGE ORGANICS   | Carbon Range C28-C35        |                  |                  |                  |                  |                  |                  |               |
| RANGE ORGANICS   | Carbon Range C6-C12         |                  |                  |                  |                  | -                |                  |               |
| SEMIVOLATILES    | 124 Trichlombenzene         | 0.33 1 < U       | 0.33 1 < 1/      | 0.35 1 < U       | 0.33 1 < 11      | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <      |
| SEMIVOLATILES    | 1 2-Dichlombenzene          | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < 1       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <      |
| SEMINOLATILES    | 1 3 Dichornhenzene          | 0.33 1 < 11      | 033 1 < U        | 0.35 1 < U       | 0.33 1 < 11      | 33 t < UD        | 0.33 1 < U       | 0.33 1 <      |
| SEMINOLATILES    | t d-Dichkynhenzene          | £1.33 t < ₩      | 0.33 1 < U       | 0.35 1 ≺ U       | 0.33 1 < 1       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <      |
| SEMBIOLATILES    | 3 & 5 Trichlorophonol       | 165 1 < 1        | 165 1 4 11       | 175 1 < 11       | 165 1 < 1        | 165 1 < 110      | 165 1 < 1        | 165 1 <       |
|                  | 2,4,5 Trisblerophenel       | 0.02 1 < 1       |                  | 0.35 1 2 1       | 0.23 f c ti      | 33 1 < 10        | 033 f < U        | 033 t <       |
| SEMIVOLATILES    | 2,4,0- Michlorophenol       |                  | 0.33 1 < 0       |                  | 0.33 1 < 11      | 32 1 4 10        | 0.33 1 < 1       | 033 1 4       |
| SEMIVOLATILES    | 2,4-Dicatolophenol          |                  | 0.33 1 < 0       | 0.35 1 < 0       |                  | 3.3 1 < 00       |                  | 0.33 1 4      |
| SEMINULATILES    | 2,4-Dintegryphenol          |                  | 165 1 < 1        | 675 1 4 1        | 165 1 4 10       | 165 1 4 100      |                  | 165 1 4       |
| SEMIVULATILES    | 2,4-Dinirophenoi            |                  |                  | 1.75 F C         |                  | 33 4 - 175       |                  | 0.22 1 4      |
| SEMIVOLATILES    | 2-Childronaphthalene        | 0.33 1 < 0       | 0.33 1 4 0       | 0.35 1 4 0       |                  | 3.3 1 < 00       | 0.33 1 < 0       | 0.03 1 4      |
| SEMIVOLATILES    | 2-Chiorophenol              | 0.33 1 < 0       | 0.33 1 4 0       | 0.35 1 < 0       | 0.33 1 4 0       | 3.3 1 4 00       |                  | 0.33 1 1      |
| SEMIVOLATILES    | 2-Methylnaphtbalene         | 0.33 1 < 0       | 0.33 1 < 0       | 0.35 1 < 0       | 0.33 1 < 0       | 3.3 1 < UD       |                  | 0.33 1 4      |
| SEMIVOLATILES    | Z-Methylphenol              | 0.33 1 < U       | 0.33 1 < 0       | 0.35 1 < 0       | 0.33 1 < 0       | 3.3 1 < UD       |                  | 0.33 1 4      |
| SEMIVOLATILES    | 2-Nitroaniline              | 1.65 1 < U       | 1.65 1 < U       | 1.75 1 < U       | 1.65 1 < U       | 16.5 1 < 00      | 1.05 1 < 0       | 1.65 1 <      |
| SEMIVOLATILES    | 2-Nitrophenol               | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 t < U       | 0.33 1 <      |
| SEMIVOLATILES    | 3,3'-Dichlorobenzidine      | 0.65 1 < U       | 0.65 1 < U       | 0.689 1 < U      | 0.65 1 < U       | 6.5 1 < UD       | 0.65 1 < U       | 0.65 1 <      |
| SEMIVOLATILES    | 3-Nitroaniline              | 1.65 1 < U       | 1.65 1 < U       | 1.75 1 < U       | 1.65 1 < U       | 16.5 1 < UD      | 1.65 1 < U       | 1.65 1 <      |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol  | 1.65 1 < U       | 1.65 1 < U       | 1.75 1 < U       | 1.65 1 < U       | 16.5 1 < UD      | 1.65 1 < U       | 1.65 1 <      |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <      |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     | 0.65 1 < U       | 0.65 1 < U       | 0.689 1 < U      | 0.65 1 < U       | 6.5 t < UD       | 0.65 1 < U       | 0.65 1 <      |
| SEMIVOLATILES    | 4-Chloroaniline             | 0.65 1 < U       | 0.65 1 < U       | 0.689 1 < U      | 0.65 1 < U       | 6.5 1 < UD       | 0.65 1 < U       | 0.65 1 <      |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <      |
| SEMIVOLATILES    | 4-Methylphenol              | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <      |
| SEMIVOLATILES    | 4-Nitroaniline              | 1.65 1 < U       | 1.65 1 < U       | 1.75 1 < U       | 1.65 1 < U       | 16.5 t < UD      | 1.65 1 < U       | 1.65 1 <      |
| SEMIVOLATILES    | 4-Nitrophenol               | 1.65 1 < U       | 1.65 1 < U       | 1,75 1 < U       | 1.65 1 < U       | 16.5 1 < UD      | 1.65 1 < U       | 1.65 1 <      |
| SEMIVOLATILES    | Acenaphthene                | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <      |
| SEMINO! ATHES    | Acenaphthylene              | 0.33 1 < 1       | 033 1 < 1        | 0.35 1 < 11      | 0.33 1 < 11      | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <      |
| SEMIL/OI ATHES   | Anthracene                  | 033 1 < 11       | 0.33 1 < 11      | 035 1 < 1        | 033 1 < 11       | 33 1 < 10        | 033 1 < 11       | 0.33 1 <      |
| SEMIN()) ATH FS  | Reprofalanthracene          | 0.33 1 < 11      | 033 1 < 1/       | 0.35 1 < 12      | 0.33 1 < 11      | 3.3 1 < 10       | 0.33 1 < 11      | 0.33 1 <      |
|                  |                             | 0.00 1 2 10      | 0.33 1 - 11      | 0.00 1 1 0       | 633 1 - 11       | 33 1 2 10        | 033 1 < 1        | 033 1 <       |
|                  | Poppo (b) fluoroothese      | 0.00 1 - 11      |                  | 0.30 1 1 1       |                  | 12 1 - 00        |                  | 033 1 4       |
| OCMINULATILES    | eesizojojiiuoxantrene       | 0.33 1 4 0       | U.JJ I K U       | 0.30 1 4 10      | 0.00 I K U       | 3.3 F ≦ UU       |                  | 1 22 1 -      |
| SEMIVOLATILES    | benzo(ghi)perylene          | 0.33 1 < 0       | 0.33 I < U       | 0.35 1 < 1       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 I < U       | 0.33 1 <      |
| SEMIVOLATILES    | Benzo(k)fluoranthene        | 0.33 1 < 0       | U.33 1 < U       | 0.35 1 < 0       | 0.33 1 < U       | 3.3 1 < UD       | U.33 1 < U       | 0.33   <      |
| SEMIVOLATILES    | Benzoic Acid                | 1.65 1 < U       | 1.65 1 < U       | 1.749 1 < U      | 1.65 1 < U       | 16.5 1 < UD      | 1.65 1 < 0       | 1.05 1 <      |
| SEMIVOLATILES    | Benzyl Alcohol              | 0.65 1 < U       | 0.65 1 < U       | 0.689 1 < U      | 0.65 1 < U       | 5.5 1 < UD       | 0.65 1 < U       | 0.65 1 <      |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  | 0.33 1 < U       | 0,33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 t < UD       | 0.33 1 < U       | 0.33 1 <      |
| SEMIVOLATILES    | bis{2-Chloroethyl}ether     | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < LI      | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <      |
| SEMIVOLATILES    | bis{2-Chloroisopropy()ether | 0.33 t < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <      |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  | 0.33 1 < U       | 0.33 1 < U       | 0.35 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <      |

Shaw Environmental, Inc.





Data Evaluation Report Chemical Concentrations in Soit Associated with LHAAP-35/36 Sumps

Table 3-16 Concentrations of Chemicals in Soil Samples Associated with Sump 016

| SUMP] = SUMP016  |                                |              |            |         |              |                  |                  |                  |                |
|------------------|--------------------------------|--------------|------------|---------|--------------|------------------|------------------|------------------|----------------|
| OCATION _CODE    |                                | LH-\$15-01   | LH-S15-    | Dt      | LH-\$15-02   | LH-\$15-02       | LH-S16-01        | LH-S16-01        | LH-S16-01      |
| AMPLE NO         |                                | LH-S15-01_1  | LH-S15-0   | 1_2     | LH-\$15-02_1 | LH-S15-02_2      | LH-\$16-01_1     | LH-S16-01_2      | LH-S16-01_3    |
| AMPLE DATE       |                                | 7/8/1993     | 7/8/199    | 3       | 7/8/1993     | 7/8/1993         | 7/8/1993         | 7/8/1993         | 7/8/1993       |
| NEPTH            |                                | 05-15Ft      | 52-61      | 7       | 0.5 - 1.5 Ft | 5-5.8Ft          | 0.5 - 1.5 Ft     | 4.2 - 4.8 Ft     | 8 - 8.6 Ft     |
|                  |                                | PEG          | REG        |         | REG          | REG              | REG              | REG              | REG            |
|                  |                                | Desuk Dil 10 |            |         |              | Result DII IO VO | Result DII LO VO | Result Dil 10 VO | Result Dill 10 |
| est Group        | Parameter (Usus = Ing/kg)      | RESULUE LU   |            | <u></u> | 0.26 \$ < 11 | 0.22 1 4 11      | 33 1 4 10        | 033 1 < II       | 033 1 <        |
| EMIVOLATILES     | Butyl benzyl primalate         | 0.33 1 <     | 0 0.33 1   | < U     | 0.35 1 4 0   | 0.33 1 4 0       | 3.3 1 < 00       |                  | 0.00 1 4       |
| SEMIVOLATILES    | Chrysene                       | 0.33 1 <     | U 0.33 1   | < 0     | 0.35 1 < U   | 0.33 1 4 0       | 3.3 1 4 00       | 0.35 1 4 0       | 0.33 1 ~       |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene         | 0.33 1 <     | U 0.33 1   | < U     | 0.35 1 < U   | 0.33 t < U       | 3.3 1 < UD       | 0.33 1 < 0       | 0.33 1 <       |
| EMIVOLATILE\$    | Dibenzofuran                   | 0.33 1 <     | U 0.33 1   | < U     | 0.35 1 < U   | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <       |
| EMIVOLATILES     | Diethyl phthalate              | 0.33 1 <     | U 0.33 1   | < U >   | 0.35 1 < U   | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <       |
| EMINOLATILES     | Dimethyl ohtbalate             | 0.33 1 <     | บ 0.33 1   | < U     | 0.35 1 < U   | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <       |
| EMIVOLATILES     | di-n-Buth onthalate            | 0.33 1 <     | U 033 1    | < U     | 0.35 1 < U   | 0.33 1 < U       | 3.3 1 < U        | 0.33 1 < U       | 0.33 1 <       |
|                  | di n Ostri abthelete           | 0 23 1 4     | 13 0.33 1  | < 11    | 035 1 < 11   | 033 1 < 8        | 33 1 < UD        | 0.33 1 < L1      | 0.33 1 <       |
|                  | urir-ooyi pilotaate            | 0.33 1 <     | 0 0.00 1   | 2 11    | 0.35 1 < 8   | 0.23 1 4 11      | 33 1 < 10        | 033 1 < 1        | 033 1 <        |
| EMIVULATILES     | Flooranmene                    | 0.33         | 0 0.33 1   |         |              | 0.33 1 4 0       | 22 1 4 10        | 0.22 1 4 1       | 0.33 1 4       |
| SEMIVOLAHLES     | Fluorene                       | 0.33 1 <     | 0 0.33 1   | < 0     | 0.35 1 < 0   |                  | 33 1 4 00        |                  | 0.33 1 -       |
| SEMIVOLATILES    | Hexachlorobenzene              | 0.33 1 <     | U 0.33 1   | < 0     | 0.35 1 < 0   | 0.33 1 < 0       | 3.3 1 < 00       | 0.33 1 1 0       | 0.33 + ~       |
| SEMIVOLATILES    | Hexachlorobutadiene            | 0.33 1 <     | U 0.33 1   | < ()    | 0.35 1 < U   | 0.33 1 < 0       | 3.3 1 < 00       | 0.33 1 < 0       | 0.33 1 4       |
| SEMIVOLATILES    | Hexachlorocyclopentadiene      | 0.33 1 <     | U 0.33 1   | < U     | 0.35 1 < U   | 0.33 1 < U       | 3.3 1 < UD       | $0.33 \ 1 < 0$   | 0.33 1 <       |
| SEMIVOLATILES    | Hexachioroethane               | 0.33 1 <     | U 0.33 1   | < U     | 0.35 1 < U   | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <       |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene         | 0.33 1 <     | U 0.33 1   | < ប     | 0.35 1 < U   | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <       |
| SEMIVOLATILES    | Isophorone                     | 0.33 1 <     | U 0.33 1   | < 8     | 0.35 1 < U   | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <       |
| SEMINOLATILES    | Nachthaiene                    | 0.33 1 <     | U 0.33 1   | < U     | 0.35 1 < U   | 0.33 t < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <       |
|                  | Nitrohenzene                   | 0.33 4       | 11 0.22 4  | < 11    | 035 1 < 11   | 0.33 1 < 11      | 3.3 1 < 10       | 0.33 1 < U       | 0.33 1 <       |
|                  |                                | 0.00 1 -     | 11 0.00 1  | 2 11    | 035 1 2 11   | 033 1 2 11       | 33 1 < UD        | 0.33 1 c H       | 0.33 1 <       |
| DEMINULATILES    | перивизо-и-периоругалле        | 0.33 1 4     | 0 0.00 1   |         |              | 0.00 1 2 1       | 22 1 2 10        | 033 1 2 12       | 033 4 -        |
| SEMIVOLATILES    | n-Nirrosodiphenylamine         | 0.33 1 <     | U U.33 1   | < U     | 0.30 1 < 0   |                  | 0.0 I NUU        | 466 4 - 11       | 1.00 I ~       |
| SEMIVOLATILES    | Pentachlorophenol              | 1.65 1 <     | U 1.65 1   | < U     | 1./5 1 < U   | 1.05 1 < U       | 10.5 1 < UU      | 1.00 I < U       | > 1 60.1       |
| Semivolatiles    | Phenanthrene                   | 0.33 1 <     | U 0.33 1   | < ป     | 0.35 1 < U   | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < 0       | 0.33 1 <       |
| SEMIVOLATILES    | Phenol                         | 0.33 1 <     | U 0.33 1   | < U     | 0.35 1 < U   | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <       |
| SEMIVOLATILES    | Pyrene                         | 0.33 1 <     | U 0.33 1   | < U     | 0.35 1 < U   | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 <       |
| PH               | Hydrocarbons as Diesel Fuel    |              |            |         |              |                  |                  |                  |                |
| TPH              | Hydrocarbons as Gasoline       |              |            |         |              |                  |                  |                  |                |
| ndul             | TOTAL HYDROCARBONS             |              |            |         |              |                  |                  |                  |                |
|                  | 1112 Tetrachlorpothana         |              |            |         |              |                  |                  |                  |                |
| OLATILES         |                                | 0.000        | 11 0.005 4 | ~ II    | 0.005 4 4 11 | 0.005 1 2 11     | 0.005 1 2 11     | 0.005 1 < U      | 0.005 1 <      |
| OLAIILES         | 1,1,1-Inchloroethane           | 0.005 1 <    | 0 0.005 1  | < U     | 0.005 1 4 0  | 0.005 1 1 0      |                  |                  | 0.005 1 -      |
| /OLATILES        | 1,1,2,2-Tetrachloroethane      | 0.005 1 <    | 0 0.005 1  | < 0     | 0.005 1 < 0  | 0.005 1 < 0      |                  | 0.005 1 4 0      | 0.005          |
| /OLATILES        | 1,1,2-Trichloroethane          | 0.005 1 <    | U 0.005 1  | < U     | 0.005 t < U  | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 <      |
| /OLATILES        | 1,1-Dichloroethane             | 0.005 1 <    | U 0.005 1  | < U     | 0.005 1 < U  | 0.005 1 < U      | 0.605 1 < U      | 0.005 1 < U      | 0.005 1 <      |
| /OLATILES        | 1,1-Dichloroethene             | 0.005 1 <    | U 0.005 1  | < U     | 0.005 1 < U  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 <      |
| /OLATILES        | 1,1-Dichloropropene            |              |            |         |              |                  |                  |                  |                |
| /OLATILES        | 1.2.3-Trichlorobenzene         |              |            |         |              |                  |                  |                  |                |
|                  | 1 2 3 Trichlorononane          |              |            |         |              |                  |                  |                  |                |
| INI ATILES       | 1.2.4 Trichlarahanzana         |              |            |         |              |                  |                  |                  |                |
| VOLATILES        | 1,2,4-Thereadule access        |              |            |         |              |                  |                  |                  |                |
| VULAIILES        | 1,2,4- truneutywenzesie        |              |            |         |              |                  |                  |                  |                |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    |              |            |         |              |                  |                  |                  |                |
| VOLATILES        | 1,2-Dibromoethane              |              |            |         |              |                  |                  |                  |                |
| /OLATILES        | 1,2-Dichlorobenzene            |              |            |         |              |                  |                  |                  |                |
| VOLATILES        | 1,2-Dichloroethane             | 0.005 1 <    | U 0.005 1  | < U     | 0.005 t < U  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 <      |
| <b>VOLATILES</b> | 1,2-Dichloroethene             | 0.005 1 <    | U 0.005 1  | < U     | 0.005 1 < U  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 <      |
| VOLATILES        | 1.2-Dichloropropane            | 0.005 1 <    | U 0.005 1  | < U     | 0.005 1 < U  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 <      |
| VOLATILES        | 1 2-Dimethylbenzene (o-Xylene) |              |            |         |              |                  |                  |                  |                |
|                  | 125 Trimethylocazono           |              |            |         |              |                  |                  |                  |                |
| VULATILES        |                                |              |            |         |              |                  |                  |                  |                |
| VOLATILES        | 1,3-CHCRIOTODERZENE            |              |            |         |              |                  |                  |                  |                |
| VULATILES        | 1,3-Dichioropropane            |              |            |         |              |                  |                  |                  |                |
| VOLATILES        | 1,4-Dichlorobenzene            |              |            |         |              |                  |                  |                  |                |
| VOLATILES        | 2,2-Dichloropropane            |              |            |         |              |                  |                  |                  |                |
| VOLATILES        | 2-Butanone                     | 0.0666 1     | 0.05 1     | < U     | 0.05 1 < U   | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 <       |
| VOLATILES        | 2-Chioroethyl vinyl ether      | 0.01 1 <     | U 0.01 1   | < U     | 0.01 1 < U   | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 <       |
| VOLATILES        | 2-Chicrotoluene                |              |            |         |              |                  |                  |                  |                |
| UCE ATHES        | 2-Heranone                     | 0.05 1 <     | 1F 0:05 1  | < 11    | 0.05 1 < 11  | 0.05 1 < 1       | 0.05 t < U       | 0.05 1 < U       | 0.05 1 <       |
| IOI ATILES       | A Chimeteluone                 |              |            | Ť       |              |                  |                  |                  |                |
| VULATILES        | 4-CI303 010/Delite             |              |            | 4 U     | 0.4 4 4 11   | 01 1 4 11        | 01 1 - 11        | 01 1 2 11        | 01 1 c         |
| VULATILES        | AGEIDINE                       | 0.1 1 <      | 0 0.1 1    |         |              | 0.1 1 5 0        |                  |                  | 0.005 11 -     |
| VOLATILES        | Benzene                        | 0.005 1 <    | U 0.005 1  | < U     | 0.005 1 < U  | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 4      |
| VOLATILES        | Bromobenzene                   |              |            |         |              |                  |                  |                  |                |
| VOLATILES        | Bromochloromethane             | I            |            |         |              |                  |                  |                  |                |
| VOLATILES        | Bromodichloromethane           | 0.005 1 <    | U 0.005 1  | < U     | 0.005 1 < U  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t <      |
| VOLATILES        | Bromoform                      | 0.005 1 <    | U 0.005 1  | < 13    | 0.005 1 < U  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 <      |
|                  | Brozomethane                   | 001 1 <      | 11 0.01 1  | < 11    | 0.01 1 < II  | 0.01 1 < 1       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 <       |
|                  | Carbon diculture               | 0.005 1 2    | 1 0.005 1  | < 11    | 0.005 1 < 12 | 0.005 1 < 11     | 0.005 1 < 11     | 0.005 1 < 11     | 0.005 1 <      |
|                  |                                | 0.000        | U 0.000 1  | ~ 0     | 0.005 1 - 0  | 0.005 1 - 11     |                  | 0.005 1 < 11     | 0.005 1        |
| VULAIILES        | Cardon terachioride            |              | 0 0.000 1  |         |              |                  | 0.003 1 \ 0      |                  | 0.000 1 4      |
| VOLATILES        | Ghlorobenzene                  | 0.005 1 <    | U 0.005 1  | < U     | 0.005 1 < U  | U.UUS 1 < U      | 0.0000 1         | 0.000 1 × U      | 0.0422         |
| VOLATILES        | Chloroethane                   | 0.01 1 <     | U 0.01 1   | < U     | 0.01 1 < U   | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 <       |
| VOLATILES        | Chloroform                     | 0.005 1 <    | U 0.005 1  | < U     | 0.005 t < U  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 <      |
| VOLATILES        | Chloromethane                  | 0.01 1 <     | U 0.01 1   | < U     | 0.01 1 < U   | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 <       |
| VOLATILES        | cis-1,2-Dichloroethene         |              |            |         |              |                  |                  |                  |                |
| -                |                                | •            |            |         |              |                  |                  | -                |                |





Table 3-16 Concentrations of Chemicals in Soil Samples Associated with Sump 016

| (SUMP] = SUMP016 |                           |           |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
|------------------|---------------------------|-----------|--------|----|----------|------|-----|----|--------|-------|-----|----|--------|-------|------|----|----------|------|-----|----|--------|-------|------|----|----|---------|-------|---|
| LOCATION_CODE    |                           | LH-S1     | 5-01   |    | LH-S     | 515- | 01  |    | LH-    | S15   | -02 |    | LH     | -S15  | i-02 |    | LHS      | 516- | Q1  |    | LH     | -S16  | -01  |    |    | LH-S1   | 16-01 |   |
| SAMPLE_NO        |                           | LH-S15    | i-01_1 |    | LH-S     | 15-0 | 1_2 |    | LH-S   | 15-0  | 2_1 |    | LH-S   | 515-  | 02_2 |    | LH-S     | 16-0 | 1_1 |    | LH-S   | 316-( | 11_2 |    |    | LH-S16  | i-01_ | 3 |
| SAMPLE_DATE      |                           | 7/8/1     | 993    |    | 7/8      | /199 | 3   |    | 7/     | V19   | 3   |    | 74     | 8/19  | 93   |    | 7/8      | /199 | 3   |    | 7)     | 8/19  | 93   |    |    | 7/8/1   | 993   |   |
| DEPTH            |                           | 0.5 - 1   | .5 Ft  |    | 5.2      | -61  | Ft  |    | 0.5    | - 1.5 | Ft  |    | 5.     | - 5.8 | Ft   |    | 0.5      | 1.5  | Ft  |    | 4.2    | -4.8  | 3 Ft |    |    | 8-8     | .6 Ft |   |
| SAMPLE_PURPOSE   |                           | RE        | G      |    | F        | EG   |     |    | 1      | REG   |     |    | I      | REG   | 3    |    | R        | REG  | -   |    |        | REG   | ;    |    |    | RE      | G     |   |
| Test Group       | Parameter (Units = mg/kg) | Result DI | L LC   | VQ | Result I | )IL  | LQ  | VQ | Result | DIL   | LQ  | VQ | Result | D£L   | LQ   | VQ | Result [ | AL.  | LQ  | VQ | Result | DIL   | ŧQ   | VQ | Re | sult DI | LL    | 0 |
| VOLATILES        | cis-1,3-Dichloropropene   | 0.005     | 1 <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <   | U  | 0.005  | 1     | <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <    | U  | 0. | 005     | 1 <   |   |
| VOLATILES        | Dibromochloromethane      | 0.005     | 1 <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <   | U  | 0.005  | 1     | <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <    | U  | 0. | 005     | 1 <   |   |
| VOLATILES        | Dibromomethane            |           |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
| VOLATILES        | Dichlorodifluoromethane   |           |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
| VOLATILES        | Ethylbenzene              | 0.005     | 1 <    | Ų  | 0.005    | 1    | <   | U  | 0.005  | 1     | <   | U  | 0.005  | 1     | <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <    | U  | 0. | 005     | 1 <   |   |
| VOLATILES        | Hexachlorobutadiene       |           |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
| VOLATILES        | tsopropylbenzene          |           |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
| VOLATILES        | m,p-Xylenes               | ļ         |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
| VOLATILES        | Methyl isobutyl ketone    | 0.05      | 1 <    | U  | 0.05     | 1    | <   | U  | 0.05   | 1     | <   | U  | 0.05   | 1     | <    | U  | 0.05     | 1    | <   | U  | 0.05   | 1     | <    | U  | (  | ).05    | 1 <   |   |
| VOLATILES        | Methylene chloride        | 0.005     | 1 <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <   | U  | 0.005  | 1     | <    | บ  | 0.005    | 1    | <   | U  | 0.005  | 1     | <    | U  | 0. | 005     | 1 <   |   |
| VOLATILES        | Naphthalene               |           |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
| VOLATILES        | n-BUTYLBENZENE            |           |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
| VOLATILES        | n-PROPYLBENZENE           |           |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
| VOLATILES        | p-ISOPROPYLTOLUENE        |           |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
| VOLATILES        | sec-BUTYLBENZENE          | [         |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
| VOLATILES        | Styrene                   | 0.005     | 1 <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <   | U  | 0.005  | 1     | <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <    | ย  | 0. | 005     | 1 <   |   |
| VOLATILES        | tert-BUTYLBENZENE         | 1         |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
| VOLATILES        | Tetrachloroethene         | 0.005     | 1 <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <   | U  | 0.005  | 1     | <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <    | U  | 0. | 005     | 1 <   |   |
| VOLATILES        | Toluene                   | 0.005     | 1 <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <   | U  | 0.005  | 1     | <    | U  | 0.0224   | 1    |     |    | 0.005  | 1     | <    | U  | 0. | 005     | 1 <   |   |
| VOLATILES        | trans-1,2-Dichloroethene  |           |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
| VOLATILES        | trans-1,3-Dichloropropene | 0.005     | 1 <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <   | U  | 0.005  | 1     | <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <    | U  | 0. | 005     | 1 <   | £ |
| VOLATILES        | Trichloroethene           | 0.005     | 1 <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <   | U  | 0.005  | 1     | <    | U  | 0.005    | 1    | ۲   | U  | 0.005  | 1     | <    | U  | 0. | 005     | 1 <   |   |
| VOLATILES        | Trichlorofluoromethane    |           |        |    |          |      |     |    |        |       |     |    |        |       |      |    |          |      |     |    |        |       |      |    |    |         |       |   |
| VOLATILES        | Vinyl acetate             | 0.05      | 1 <    | U  | 0.05     | 1    | <   | U  | 0.05   | 1     | <   | U  | 0.05   | 1     | <    | U  | 0.05     | 1    | <   | U  | 0.05   | 1     | <    | U  |    | ).05    | 1 <   | : |
| VOLATILES        | Vinyt chloride            | 0.01      | 1 <    | U  | 0.01     | 1    | <   | U  | 0.01   | 1     | <   | ប  | 0.01   | 1     | <    | U  | 0.01     | 1    | <   | U  | 0.01   | 1     | <    | U  | •  | J.01    | 1 <   | 2 |
| VOLATILES        | Xylenes, Total            | 0.005     | 1 <    | U  | 0.005    | 1    | <   | U  | 0.005  | 1     | <   | ម  | 0.005  | 1     | <    | U  | 0.0997   | 1    |     |    | 0.005  | 1     | <    | U  | 0. | 005     | 1 <   | : |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.





## Table 3-17 Concentrations of Chemicals in Soil Samples Associated with Sump 017

| [SUMP] = SUMP017 |   |                                    | arctititDo.t≓ 00.0+                | 400000                 | 062334                         | 465802   | 18.5017.01           | LH-S017-01             | LH-S017-01         | LH-S017-02       | LH-S017-02       | STEP-46SS03          | STEP-46SS03            |
|------------------|---|------------------------------------|------------------------------------|------------------------|--------------------------------|--|----------------------|------------------------|--------------------|------------------|------------------|----------------------|------------------------|
| LOCATION CODE    |   | 3550MP017-5801<br>35-SMP17-SR01-01 | 355UMP017-5801<br>35-SMP17-S801-02 | 46SB02(0-0 5)          | 46SB02(1-3)                    | 46SB02(3-5)  | LH-S017-01 QC        | LH-S017-01_1           | LH-S017-01_2       | LH-S017-02_1     | LH-S017-02_2     | 465S03(0-0_5)-020312 | 46SS03(1-2)-020312     |
| SAMPLE_NO        |   | 9/11/2006                          | 9/11/2006                          | 7/27/1998              | 7/27/1998                      | 7/27/1998  | 8/8/1993             | 8/8/1993               | 8/8/1993           | 8/8/1993         | 8/8/1993         | 3/12/2002            | 3/12/2002              |
| DEPTH            |   | 0-0.5 Ft                           | 3.5 - 3.5 Ft                       | 0 - 0.5 Ft             | 1-3Ft                          | 3 - 5 Ft   | 05 - 1.5 Ft          | 0.5 - 1.5 Ft           | 25-3Ft             | 0.5 - 1 Ft       | 2.5 - 3 Fi       | 0 - 0.5 Ft           | 1-2Ft                  |
| SAMPLE_PURPOSE   |   | REG                                | REG                                | REG                    | REG                            | REG  | FD                   | REG                    | REG                | REG              | REG              | REG                  | HEG<br>Decut Dii LO VO |
| Test Group       | Parameter (Units = mg/kg)                 | Result DIL LQ VC                   | Q Result DIL LQ VQ                 | Result DIL LQ VQ       | Result DIL LO VO               | Result DIL LO V  | Q Result DIL LQ VQ   | Result DIL LQ VQ       | Result DIL LO VO   | Hesult Die LQ VQ | Heslar dil Lu Vu | HESONE DIE LOU VO    | RESEAL DIE LO VO       |
| DIOXINS_FURANS   | 1,2,3,4,6,7,8-Heptachtorodibenzofuran     |                                    |                                    | 0.000002665 1 < UJ     | 0.000000172 1 < U              | 0:000000434 1 < 0  | J                    |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | 1,2,3,4,6,7,8-HpCDD                       |                                    |                                    | 0.000018771            | 0.0000018                      | 0.00001721 7   | J                    |                        |                    |                  |                  |                      |                        |
| DIOXINS_FUHANS   | 1,2,3,4,7,8,9 Heptachiorodibenzofuran     |                                    |                                    | 0.000007748 1 < UJ     | 0.000000197 1 < U              | 0.00000066 1 < U   | ม                    |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | 1 2 3.4.7.8-Hexachlorodibenzo-o-dioxin    | 1                                  |                                    | 0.000000343 1 < U      | 0.000000268 1 < U              | 0.000000319 1 < l  | ز                    |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | 1,2,3,6,7,8-Hexachlordibenzo-p-dioxin     |                                    |                                    | 0.000000257 1 < U      | 0.00000201 1 < U               | 0.000000239 1 < l  | )                    |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | 1,2,3,6,7,8-Hexachlorodibenzofuran        |                                    |                                    | 0.000000339 1 < U      | 0.00000017 1 < U               | 0.000000247 1 < U  | t.                   |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | 1,2,3,7,8,9-Hexachlordibenzo-p-dioxin     |                                    |                                    | 0.000000615 1 < UJ     | 0.000000211 1 < U              | 0.000000251 1 < 0  | j                    |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | 1,2,3,7,8,9-Hexachlorodibenzofuran        | ł                                  |                                    | 0.000000447 1 < U      | 0.000000224 1 < U              | 0.00000325 1 < 3   |                      |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | 1,2,3,7,8-Pentachlordibenzo-p-dioxin      |                                    |                                    | 0.000000302 1 < 0      | 0.000000336 1 < 0              | 0.000000257 1 < 1  | 9                    |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | 1,2,3,7,8-7 entactic/outpenzoturan        |                                    |                                    | 0.000002987 1          | 0.000000216 1 < U              | 0.000000313 t < 1  | -<br>J               |                        |                    |                  |                  |                      |                        |
| DIOXINS FURANS   | 2.3.4.7.8-Pertachtorodibenzoturan         |                                    |                                    | 0.000000294 1 < U      | 0.000000177 t < U              | 0.000000248 1 < 0  | J                    |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | 2,3,7,8-TCDD                              | ł                                  |                                    | 0.000000367 1 < U      | 0.000000243 1 < U              | 0.00000185 1 < 0   | U                    |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | 2,3,7,8-TCDF                              |                                    |                                    | 0.000000443 1 < U      | 0.000000189 1 < U              | 0.0000063 1 < 0  | J                    |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | Heptachlorodiberzofuran                   |                                    |                                    | 0.000000357 t < U      | 0.000000172 1 < U              | 0.00000221 1 <   | J                    |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | Heptachlorodibenzo-p-dioxin               |                                    |                                    | 0.000051005 1          | 0.000004109 1                  | 0.000023067 1  |                      |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | Hexachiondibenzo-p-dioxin                 |                                    |                                    | 0.000034927 1          | 0.000000201 1 < U              | 0.000001118 1  |                      |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | Actachlorodibenzois van                   |                                    |                                    | 0.000005968 1          | 0.00000022 1 < U               | 0.00000238 1 <   | U                    |                        |                    |                  |                  |                      |                        |
| DIOXINS FURANS   | Octachlorodibenzo-p-dioxin                |                                    |                                    | 0.000611392 1          | 0.000189168 1                  | 0.000198582 1  |                      |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | Pentachlorodibenzofuran                   |                                    |                                    | 0.000036565 1          | 0.000000177 1 < U              | 0.000001595 1  |                      |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | Pentachlorodibenzo-p-dioxin               |                                    |                                    | 0.000000352 1 < U      | 0.000000338 1 < U              | 0.000000412 1 <  | U                    |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | Tetrachlorodibenzofuran, Total            |                                    |                                    | 0.000001317 1          | 0.000000189 1 < U              | 0.0000003 1 <  | U<br>U               |                        |                    |                  |                  |                      |                        |
| DIOXINS_FURANS   | Tetrachlorodibenzo-p-dioxin               | 0.040 1 11                         | 0.242 1 14                         | 0.00000367 1 < 0       | 0.00000243 1 < 0<br>0.15 1 < 1 | 0.00000005 1 < 0.00000005 1 < 0.000000005 1 < 0.000000005 1 < 0.000000005 1 < 0.000000005 1 < 0.000000005 1 < 0.000000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.00000005 1 < 0.000000000000000000000000000000000 | U                    |                        |                    |                  |                  |                      |                        |
| EXPLOSIVES       | 1,3,5-1 mandberzene<br>1,3-Dinitroberzene | 0.249 1 U                          | 0.242 1 U                          | 0.05 1 < U             | 0.05 1 < U                     | 0.05 1 <   | U                    |                        |                    |                  |                  |                      |                        |
| EXPLOSIVES       | 2.4.6-Trinitrotoluene                     | 0.249 1 U                          | 0.242 1 U                          | 0.1 1 < Ŭ              | 0.1 1 < U                      | 0.1 1 <  | U                    |                        |                    |                  |                  |                      |                        |
| EXPLOSIVES       | 2,4-Dinitrotoluene                        | 0.249 1 U                          | 0.242 1 U                          | 0.1 1 < U              | 0.1 1 < U                      | 0.1 1 <  | U 0.33 t < U         | 0.33 1 < U             | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       |                      |                        |
| EXPLOSIVES       | 2,6-Dinitrotoluene                        | 0.259 1 U                          | 0.251 t U                          | 0.1 1 < U              | 0.1 1 < U                      | 0.1 1 <  | U 0.33 1 < U         | 0.33 1 < U             | 0.33 1 < U         | 0.33 1 < 9       | 0.33 1 < U       |                      |                        |
| EXPLOSIVES       | 2-Amino-4,6-dinitrotoluene                | 0.259 t U                          | 0.251 1 U                          | 0.05 1 < U             | 0.05 1 < U                     | 0.05 1 <   | บ                    |                        |                    |                  |                  |                      |                        |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene                | 0.259 1 U                          | 0.251 1 U                          |                        | 0.05 1 < 0                     | 011 <  | 0<br> }              |                        |                    |                  |                  |                      |                        |
| EXPLOSIVES       | HMX                                       | 0.249 1 11                         | 1242 1 1                           | 0.1 1 < U              | 0.1 t < U                      | 0.1 1 <  | ۰<br>لا              |                        |                    |                  |                  |                      |                        |
| EXPLOSIVES       | Nitrobenzene                              | 0.259 1 U                          | 0.251 1 U                          | 0.1 1 < U              | 0.1 t < U                      | 0.1 1 <  | U                    |                        |                    |                  |                  |                      |                        |
| EXPLOSIVES       | o-Nitrotoluene                            | 0.249 1 U                          | 0.242 1 U                          | 0.1 1 < U              | 0.1 1 < U                      | 0.1 1 <  | U                    |                        |                    |                  |                  |                      |                        |
| EXPLOSIVES       | p-Nitrotoluene                            | 0.249 1 U                          | 0.242 1 U                          | 0.1 f < U              | 0.1 1 < U                      | 0.1 1 <  | U                    |                        |                    |                  |                  |                      |                        |
| EXPLOSIVES       | RDX                                       | 0.995 1 U                          | 0.966 1 U                          | 0.1 1 < U              | 0.1 1 < U                      | 0.1 1 <  | ប្<br>រ              |                        |                    |                  |                  |                      |                        |
| EXPLOSIVES       | Tetryi                                    | 0.647 1 U                          | 0.628 1 0                          | 0.1 1 < H<br>2700. t . |                                | 5000 1   | n<br>J 730 1         | 1240 1 D               | 1060 1 D           | 1710 t           | 1740 1           |                      |                        |
| METALS           | Aluminum                                  | 0109 1 11                          | 0.122 1 13                         | 6.26 1 < R             | 6.71 1 < R                     | 6.73 1 <   | R 51 < U             | 5 1 < 0                | 51 < U             | 5 1 < U          | 5 1 < U          |                      |                        |
| METALS           | Arsenic                                   | 227 1                              | 1.12 1                             | 2.82 1                 | 2.88 1                         | 3.19 1   | 0.5 1                | 0.5 1                  | 0.6 1              | 1 1              | t.14 1           |                      |                        |
| METALS           | Barium                                    | 24 1                               | 58.5 1                             | 39 1 J                 | 28 î J                         | 45 1   | J 23.5 1             | 29.9 1                 | 38.5 1             | 68.4 1           | 64 1             |                      |                        |
| METALS           | Beryllium                                 | 0.13 1 J .                         | J 0.575 1                          | 0.522 1 < U            | 0.559 1 < U                    | 0.561 1 <  | U                    |                        |                    |                  | • • • • •        |                      |                        |
| METALS           | Cadmium                                   | 0.0949 1 J                         | J 0.107 1 J J                      | 0.522 1 < U            | 0.559 1 < 0                    | 0.561 1 <  | U 11 < U             | 13 < U<br>115 1        | i Li<∪<br>2021     | 252 1            | 177 1            |                      |                        |
| METALS           | Calcium                                   | .143 1                             | j 894 t J                          | 530 1 J                | 560 1 < 0<br>10 1 1            | 300 1 <  | U 124 I<br>I 13 K II | 1131<br>[ 11 < 1]      | 1 1 < 1            | 7 1              | 11 < U           |                      |                        |
| METALS           | Cabal                                     |                                    | 21.8 I                             | 52 1 < 1               | 5.6 1 < U                      | 5.6 1 <  | U 21 < U             | 21 < 1                 | 2 1 < 0            | 2 1 < U          | 2 t < U          |                      |                        |
| METALS           | Conner                                    | 2.55 1                             | 6.43 1                             | 3.77 1 J               | 4.04 1 J                       | 3.33 1   | J 11 < U             | i i i < U              | 1.3 1              | 1.5 1            | t.9 1            |                      |                        |
| METALS           | iron                                      | 10600 1                            | 21200 1                            | 5900 1 J               | 11000 1 J                      | 8200 1   | J 1200 1 D           | ) 16500 1 D            | 2150 1 D           | 3060 1           | 3120 1 D         |                      |                        |
| METALS           | Lead                                      | 4.15 1 .                           | j 21.4 1 J                         | 8.03 1                 | 5.17 1                         | 6.26 1   | 1.6 1                | 1.7 1                  | 1.9 1              | 2.3 1            | 1.5 1<br>⇒rr 1   |                      |                        |
| METALS           | Magnesium                                 | 275 1                              | 1740 1                             | 520 1 < U              | 560 1 < U                      | 560 1 <  | U 39.5 1             | 48.7 1                 | 88.4 1             | 90.5 1           | /1.5             |                      |                        |
| METALS           | Manganese                                 | 17.9 1                             | 24.9 1                             | 48.7 1 J               | 23.4 1 J                       | 51.9 1   | J 44.9/I             | -87.4 I<br>I 0.1 1 - 1 | 20:<br>1 01 1 2 11 | 57.4 T           | 0.1 1 < U        |                      |                        |
| METALS           | Mercury                                   | 0.0233 1 J                         | J 0.029 T J J                      | 42 1 4 1               | 451 < 0                        | 4.5 1 <  | 0 0.1 1 2 0          | / 0.1 1 < 0            |                    |                  |                  |                      |                        |
| METALS           | Nickel                                    | 342 1                              | . 773 1                            | 4.2 1 < U<br>520 1 < U | 560 1 < U                      | 560 1 <  | U 100 1 < U          | 127 1                  | 100 1 < U          | 113 1            | 110 1            |                      |                        |
| METALS           | Selenium                                  | 0.224 1                            | 0.245 1 U                          | 1.27 t                 | 1.4 i                          | 1.12 1 <   | U 0.5 t < U          | ) 0.5 1 < U            | ) 0.5 1 < U        | 0.5 1 < U        | 0.5 t < U        |                      |                        |
| METALS           | Silver                                    | 1.64 1 U                           | 1.81 1 U                           | 1.2 1 J                | 1.1 1 < U                      | 1.1 1 <  | U 11. < U            | া  ব  ব  ব             | ) 11<0             | 1 t < U          | 1 1 < Ų          |                      |                        |
| METALS           | Sodium                                    | 15.6 1 J                           | J 325 i                            | 520 1 < U              | 560 1 < U                      | 560 1 <  | U                    |                        |                    |                  | 24 1             |                      |                        |
| METALS           | Strontium                                 | ]                                  |                                    | 5.2 1 < U              | 5.6 1 < U                      | 5.6 1 <  | U 2.1 1              | 3.5 1                  | 2.9 1              | 3./ 1            | 3.4 I            |                      |                        |
| METALS           | Thaflium                                  | 0.0386 1                           | 0.0988 1                           | 0.522 1 < U            | 0.559 1 < U                    | U.563 ī <<br>19 1  | U<br>.t              |                        |                    |                  |                  |                      |                        |
| METALS           | Vanadium<br>Zion                          | 19./ 1                             | 302.9 I<br>3047 1                  | 11 J<br>12 1 J         | 961 1                          | 12 1   | j 7.4 1              | 3 1 < L                | J 8.1 t            | 14.3 t           | 44.8 1           |                      |                        |
| METALS<br>PCRS   | ∠ars<br>Aroclo: 1016                      | 1 U.HC                             | J. 1                               | 0.035 1 < U            | 0.037 1 < U                    | 0.037 1 <  | U                    | _ *                    |                    |                  |                  |                      |                        |
| 1000             |   | 1                                  |                                    | -                      |                                |  |                      |                        |                    |                  |                  |                      |                        |

Shaw Environmental, Inc.

Table 3-17 Concentrations of Chemicals in Soil Samples Associated with Sump 017

| [SUMP] = SUMP017 |                             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                       |                        |                    |
|------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|------------------------|--------------------|
| LOCATION _CODE   |                             | 35SUMP017-SB01   | 35SUMP017-SB01   | 46SB02           | 46SB02           | 46SB02           | LH-S017-01       | LH-S017-01       | LH-S017-01       | LH-S017-02       | LH-S017-02            | STEP-46SS03            | STEP-46SS03        |
| SAMPLE_NO        |                             | 35-SMP17-SB01-01 | 35-SMP17-SB01-02 | 46SB02(0-0_5)    | 46SB02(1-3)      | 46SB02(3-5)      | LH-\$017-01 QC   | LH-S017-01_1     | LH-S017-01_2     | LH-\$017-02_1    | LH-S017-02_2          | 46\$\$03(0-0_5)-020312 | 46SS03(1-2)-020312 |
| SAMPLE_DATE      |                             | 9/11/2006        | 9/11/2006        | 7/27/1998        | 7/27/1998        | 7/27/1998        | 8/8/1993         | 8/8/1993         | 8/8/1993         | 8/8/1993         | 8/8/1993              | 3/12/2002              | 3/12/2002          |
| DEPTH            |                             | 0 - 0.5 Ft       | 3.5 - 3.5 Ft     | 0 - 0.5 Ft       | 1-3Ft            | 3-5Ft            | 05 - 1.5 Ft      | 0.5 - 1.5 Ft     | 2.5 - 3 F1       | 0.5 - 1 Ft       | 2.5-3Ft               | 0 - 0.5 Ft             | 1 - 2 Ft           |
| SAMPLE_PURPOSE   |                             | REG              | REG              | REG              | REG              | REG              | FÐ               | REG              | REG              | REG              | REG                   | REG                    | REG                |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DiL LQ VQ | Result DIL LQ VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DiL LQ VQ | Result DIL LQ VQ      | Result DIL LQ VQ       | Result DiL LQ VQ   |
| PCBS             | Aroclor 1221                | [                |                  | 0.07 1 < U       | 0.075 1 < U      | 0.075 1 < U      |                  |                  |                  |                  |                       |                        |                    |
| PCBS             | Aroclor 1232                |                  |                  | 0.035 1 < U      | 0.037 1 < U      | 0.037 1 < U      |                  |                  |                  |                  |                       |                        |                    |
| PCBS             | Aroclor 1242                | ļ                |                  | 0.035 t < U      | 0.037 1 < U      | 0.037 1 < U      |                  |                  |                  |                  |                       |                        |                    |
| PCBS             | Aroclor 1248                |                  |                  | 0.035 1 < U      | 0.037 1 < U      | 0.037 1 < U      |                  |                  |                  |                  |                       |                        |                    |
| PCBS             | Aroclor 1254                |                  |                  | 0.035 1 < U      | 0.037 1 < U      | 0.037 1 < U      |                  |                  |                  |                  |                       |                        |                    |
| PCBS             | Aroclor 1260                |                  |                  | 0.035 1 < U      | 0.037 1 < U      | 0.037 1 < U      |                  |                  |                  |                  |                       |                        |                    |
| PERC             | Perchlorate                 | · ·              |                  |                  |                  |                  |                  |                  |                  |                  |                       | 0.059 1 U U            | 0.047 1 U U        |
| PESTICIDES       | 4,4'-DDD                    | 1                |                  | 0.0035 t < U     | 0.0037 1 < U     | 0.0037 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | 4,4'-DDE                    |                  |                  | 0.0035 1 < U     | 0.0037 1 < U     | 0.0037 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | 4,4'-DDT                    |                  |                  | 0.0035 1 < U     | 0.0037 1 < U     | 0.0037 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | Aldrin                      |                  |                  | 0.0017 1 < U     | 0.0019 1 < U     | 0,0019 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | alpha-BHC                   |                  |                  | 0.01 1           | 0.0019 1 < U     | 0.0019 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | beta-BHC                    | ł                |                  | 0.0017 t < U     | 0.0019 1 < U     | 0.0019 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | Chlordane                   |                  |                  | 0.035 1 < U      | 0.037 1 < U      | 0.037 1 < U      |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | delta-BHC                   |                  |                  | 0.0017 1 < U     | 0.0019 1 < U     | 0.0019 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | Dieldrin                    |                  |                  | 0.0035 1 < U     | 0.0037 1 < U     | 0.0037 1 < ()    |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | Endosulfan i                |                  |                  | 0.0017 1 < U     | 0.0019 1 < U     | 0.0019 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | Endosulfan II               |                  |                  | 0.0035 1 < U     | 0.0037 1 < U     | 0.0037 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | Endosulfan Sulfate          |                  |                  | 0.0035 1 < U     | 0.0037 1 < U     | 0.0037 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | Endrin                      |                  |                  | 0.0035 1 < U     | 0.0037 1 < U     | 0.0037 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | Endrin aldehvde             | }                |                  | 0.0035 1 < U     | 0.0037 1 < U     | 0.0037 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | Endrin ketone               |                  |                  | 0.0035 1 < U     | 0.0037 1 < U     | 0.0037 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | gamma-BHC (Lindane)         |                  |                  | 0.008 1 J        | 0.0019 1 < U     | 0.0019 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | Heptachlor                  |                  |                  | 0.0017 1 < U     | 0.0019 1 < U     | 0.0019 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | Heptachlor epoxide          |                  |                  | 0.0017 1 < U     | 0.0019 1 < U     | 0.0019 1 < U     |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | METHOXYCHLOR                |                  |                  | 0.017 1 < U      | 0.019 1 < U      | 0.019 1 < U      |                  |                  |                  |                  |                       |                        |                    |
| PESTICIDES       | Toxaphene                   | · ·              |                  | 0.035 1 < U      | 0.037 1 < U      | 0.037 1 < U      |                  | ,                |                  |                  |                       |                        |                    |
| RANGE_ORGANICS   | Carbon Range C12-C28        | 27.9 1 J B       | 30.7 1 J B       |                  |                  |                  |                  |                  |                  |                  |                       |                        |                    |
| RANGE ORGANICS   | Carbon Range C28-C35        | 53.4 1 U         | 61.2 1 U         |                  |                  |                  |                  |                  |                  |                  |                       |                        |                    |
| RANGE ORGANICS   | Carbon Range C6-C12         | 53.4 1 U         | 61.2 1 U         |                  |                  |                  |                  |                  |                  |                  |                       |                        |                    |
| SEMIVOLATILES    | 1.2.4-Trichlorobenzene      |                  |                  | 0.35 1 < U       | 0.37 1 < U       | 0.37 1 < U       | 0.33 t < U       | 0.33 t < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 1.2-Dichlorobenzene         |                  |                  | 0.35 t < U       | 0.37 t < U       | 0.37 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 1.3-Dichlorobenzene         |                  |                  | 0.35 t < 1J      | 0.37 t < U       | 0.37 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 t < U            |                        |                    |
| SEMIVOLATILES    | 1,4-Dichlorobenzene         |                  |                  | 0.35 1 < U       | 9.37 1 < U       | 0.37 i < U       | 0.33 t < U       | 0.3,3 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol       |                  |                  | 0.87 t < U       | 0.93 1 < U       | 0.93 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U            |                        |                    |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol       |                  |                  | 0.35 1 < U       | 0.37 1 < U       | 0.37 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t·< U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 2,4-Dichlarophenol          |                  |                  | 0.35 t < U       | 0.37 1 < U       | 0.37 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < Ŭ       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 2,4-Dimethylphenol          |                  |                  | 0.35 t < U       | 0.37 1 < U       | 0.37 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 2,4-Dinitrophenol           |                  |                  | 0.87 1 < U       | 0.93 1 < U       | 0.93 1 < U       | 1.65 î < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U            |                        |                    |
| SEMIVOLATILES    | 2,4-Dinitrotoluene          |                  |                  | 0.35 i < U       | 0.37 1 < U       | 0.37 1 < U       |                  |                  |                  |                  |                       |                        |                    |
| SEMIVOLATILES    | 2,6-Dinitrotoluene          |                  |                  | 0.35 1 < U       | 0.37 1 < U       | 0.37 1 < U       |                  |                  |                  |                  |                       |                        |                    |
| SEMIVOLATILES    | 2-Chioronaphthalene         | 1                |                  | 0.35 1 < U       | 0.37 1 < U       | 0.37 1 < U       | 0.33 t < U       | . 0.33 1 < U     | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 2-Chiorophenol              |                  |                  | 0.35 1 < U       | 0.37 1 < U       | 0.37 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 2-Methylnaphthalene         |                  |                  | 0.35 1 < U       | 0.37 t < U       | 0.37 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 2-Methylphenol              |                  |                  | 0.35 1 < U       | 0.37 t < U       | 0.37 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 2-Nitroanitine              | 1                |                  | 0.87 1 < U       | 0.93 1 < U       | 0.93 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U            |                        |                    |
| SEMIVOLATILES    | 2-Nitrophenol               | 1                |                  | 0.35 t < U       | 0.37 1 < U       | 0.37 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 3,3'-Dichtorobenzidine      |                  |                  | 0.35 1 < U       | €.37 1 < U       | 0.37 1 < U       | 0.65 ‡ < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U            |                        |                    |
| SEMIVOLATILES    | 3-Nitroaniline              |                  |                  | 0.87 t < U       | 0.93 1 < U       | 0.93 1 < V       | 1.65 t < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | t.65 1 < U            |                        |                    |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol  |                  |                  | 0.87 t < U       | 0.93 t < U       | 0.93 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U            |                        |                    |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  |                  |                  | 0.35 1 < U       | 0.37 1 < U       | 0.37 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < ⊎       | 0.33 t < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     |                  |                  | 0.35 t < U       | 0.37 1 < U       | 0.37 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 t < U       | 0.65 <del>1</del> < U |                        |                    |
| SEMIVOLATILES    | 4-Chloroaniline             |                  |                  | 0.35 t < U       | 0.37 1 < U       | 0.37 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U            |                        |                    |
| SEMIVOLATILES    | 4-Chlorophenyl ohenyl ether |                  |                  | 0.35 t < U       | 0.37 1 < U       | 0.37 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 4-Methylphenol              | 1                |                  | 0.35 1 < U       | 0.37 1 < U       | .0.37 1 < U      | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | 4-Nitroaniline              |                  |                  | 0.87 1 < U       | 0.93 1 < U       | 0.93 1 < U       | 1.65 1 < 13      | 1.65 1 < U            |                        |                    |
| SEMIVOLATILES    | 4-Nitrophenol               | 1                |                  | 0.87 1 < R       | 0.93 1 < U       | 0.93 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U            |                        |                    |
| SEMIVOLATILES    | Acenaphthene                | 1                |                  | 0.35 1 < U       | 0.37 1 < U       | 0.37 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | Acenaphthylene              |                  |                  | 0.35 1 < U       | 0.37 1 < U       | 0.37 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < Ŭ       | 0.33 1 < U       | 0.33 t < U            |                        |                    |
| SEMIVOLATILES    | Anthracene                  | 1                |                  | 0.35 1 < U       | 0.37 1 < U       | 0.37 t < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | Benzo(a)anthracene          |                  |                  | 0.35 t < U       | 0.37 1 < U       | 0.37 t < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | Berzo(a)pyrene              | 1                |                  | 0.17 1 < U       | 0.19 1 < U       | 0.19 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | Benzo(b)Auoranthene         | <b>.</b>         |                  | 0.43 1           | 0.37 1 < 1       | 0.37 1 < U       | 0.33 1 < V       | 0.33 1 < U       | +0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U            |                        |                    |
| SEMIVOLATILES    | Benzo(ahi)pervlene          |                  |                  | 0.19 1           | 0.37 1 < U       | 0.37 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            | -                      |                    |
|                  | NV 11 21-11-                | 1                |                  | -                |                  | •                | ÷                | =                |                  |                  |                       |                        |                    |

í.

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-17 Concentrations of Chemicals in Soil Samples Associated with Sump 017

| [SUMP] = SUMP017               |                                |                  |   |                             |               |                           |                        |                 |                                 | 110 0047 00      | 111 0047 00                     | OTED #00000          | CTTD 466600        |
|--------------------------------|--------------------------------|------------------|---|-----------------------------|---------------|---------------------------|------------------------|-----------------|---------------------------------|------------------|---------------------------------|----------------------|--------------------|
| LOCATION_CODE                  |                                | 35SUMP017-SB01   | 35SUMP017-SB01                          | 46SB02                      | 46SB02        | 46SB02                    | LH-S017-01             | LH-S017-01      | LH-S017-01                      | LH-S017-02       | LH-S017-02                      | 51EP-465503          | 51EP-405503        |
| SAMPLE_NO                      |                                | 35-SMP17-SB01-01 | 35-SMP17-SB01-02                        | 46\$B02(0-0_5)              | 46SB02(1-3)   | 46SB02(3-5)               | LH-S017-01 QC          | EH-S017-01_1    | UH-SU17-01_2                    | LH-5017-02_1     | L11-3017-02_2<br>p/p/1002       | 405503(040_3)+020512 | 403303(1-2)-020312 |
| SAMPLE_DATE                    |                                | 9/11/2006        | 9/11/2006                               | 7/27/1998                   | 7/27/1998     | //2//1998                 | 8/8/1993               | 8/8/1993        | 919 1993                        | 0.5 - 1.5        | 0/0/1993<br>2.5 - 2.5t          | 0-05EL               | 1-2 Ft             |
| DEPTH                          |                                | 0-0.5 Ft         | 3.5 - 3.5 Ft                            | 0-0.5 H                     | 1-3Ft         | 3-576                     | VO- 1.5 FL<br>ED       | 0.5 - 1.5 FL    | 2,3-3 1                         | REG              | REG                             | REG                  | BEG                |
| SAMPLE_PURPOSE                 |                                | REG              |   | HEG<br>Direction Diff (O MO |               | REG<br>Provide Off 10 1/0 | FD<br>Recult OII IO VO | Result 01 10 V/ | NEO<br>Result Dil IO VO         | Result DIL 10 VC | Result Dil 10 VO                | Result DIL LO VO     | Result Dill LO VO  |
| Test Group                     | Parameter (Units = mg/kg)      | Result DIL LU V  | y Hesuli Dir. Lu Vu                     | MESUR DIL LO VO             | A 37 t < I    |                           | 0.33 1 < 11            | 133 1 < U       | 0.33 1 < U                      | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | Benzo(K)auoranmene             |                  |   |                             | 0.93 1 < 1    | 0.93 1 < 1                | 1.65 1 < 1             | 1.65 1 < 1      | 1.65 1 < U                      | 1.65 1 < U       | 1.65 1 < 0                      |                      |                    |
| SEMIVULATILES                  | Benzuk Alcohol                 |                  |   | 0.87 1 < 1                  | 0.93 1 < U    | 0.93 1 < U                | 0.65 1 < U             | 0.65 1 < 1      | 0.65 1 < U                      | 0.65 1 < U       | 0.65 1 < U                      |                      |                    |
| SEMINOLATILES                  | berzy hitoration)methate       |                  |   | 0.35 t < U                  | 0.37 1 < U    | 0.37 1 < U                | 0.33 1 < U             | 0.33 1 < U      | 0.33 t < U                      | 0.33 1 < U       | 0.33 t < U                      |                      |                    |
| SEMIVOLATILES                  | bis/2-Chloroethyllether        | [ ·              |   | 0.35 1 < U                  | 0.37 1 < U    | 0.37 1 < U                | 0.33 1 < U             | 0.33 t < U      | 0.33 1 < U                      | 0.33 1 < U       | 0.33 t < U                      |                      |                    |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether    |                  |   | 0.35 t < U                  | 0.37 1 < U    | 0.37 1 < U                | 0.33 1 < U             | 0.33 t < U      | 0.33 1 < U                      | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | bis(2-EBylhexyl)phthalate      | 1                |   | 0.35 1 < U                  | 0.37 1 < U    | 0.37 t < U                | 0.33 1 < U             | 0.33 1 < 0      | 0.33 1 < U                      | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | Butyl benzyl phthalate         | 1                |   | 0.35 1 < U                  | 0.37 1 < U    | 0.37 1 < U                | 0.33 1 < U             | 0.33 1 < L      | 0.33 t < U                      | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | Carbazole                      | ł                |   | 0.35 1 < U                  | 0.37 t < U    | 0.37 1 < U                |                        |                 |                                 |                  |                                 |                      |                    |
| SEMIVOLATILES                  | Chrysene                       |                  |   | 0.28 1 J                    | 0.37 1 < U    | 0.37 1 < U                | 0.33 1 < U             | 0.33 1 < Li     | 0.33 1 < U                      | 0.33 t < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | Dibenzo(a,h)anthracene         |                  |   | 0.35 t < ∛                  | 0.37 t < U    | 0.37 1 < U                | 0.33 1 < U             | 0.33 1 < U      | 0.33 1 < U                      | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | Dibenzofuran                   | · ·              |   | 0.35 1 < U                  | 0.37 t < U    | 0.37 1 < 0                | 0.33 1 < U             | 0.33 1 < U      | 0.33 1 < U                      | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | Diethyl phthalate              |                  |   | 0.35 1 < U                  | 0.37 1 < U    | 0.37 1 < U                | 0.33 1 < U             | 0.33 1 < U      | 0.33 1 < U                      | 0.33 1 < 0       | 0.33 1 < 0                      |                      |                    |
| SEMIVOLATILES                  | Dimethyl phthalate             | -                |   | 0.35 1 < U                  | 0.3/ 1 < 0    | 0.3/1 < 0                 | 0.33 1 < 0             | 0.33 1 < £      | 0.33   < 0                      | 0.22 1 4 11      | 0.33 1 < 0                      |                      |                    |
| SEMIVOLATILES                  | di-n-Butyl phthalate           |                  |   | 9.35 i < U                  | 0.37 1 < 0    | 0.3/ 1 < 0                | 9.33 1 < U             | 0.00 1 < 0      |                                 | 0.33 1 < 0       |                                 |                      |                    |
| SEMIVOLATILES                  | di-n-Octyl phthalate           |                  |   | 0.35 1 < 0                  | 0.37 1 < 0    | 0.37 1 < 0                | 0.33 1 < 0             | 0.33 1 < 0      |                                 | 0.33 1 < 11      | 0.33 1 < 1                      |                      |                    |
| SEMIVOLATILES                  | Fluoranthene                   |                  |   | 0,24 i J                    | 0.37 1 < 15   | 0.37 t < U                | 0.33 1 < 0             |                 | 133 t < 1                       | 0.33 1 < 11      | 0.33 1 < 1                      |                      |                    |
| SEMIVOLATILES                  | Fluorene                       |                  |   | 0.35 1 < 0                  | 0.57 1 < 0    | 0.57 7 4 6                | 0.33 1 4 1             | 0.33 1 < 1      | 0.33 1 < 1                      | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | Hexachlorobenzene              |                  |   |                             | 0.13 1 2 0    | 0.37 1 < 1                | 0.33 1 < 1             | 0.33 1 < 1      | 0.33 1 < U                      | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES<br>SEMIVOLATILES | Revachlorocyclopentadiage      |                  |   | 0.35 1 < 0                  | 0.37 t < U    | 0.37 1 < U                | 0.33 1 < U             | 0.33 1 < 1      | 0.33 t < U                      | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | Hevachlomethane                |                  |   | 0.35 1 < U                  | 0.37 1 < U    | 0.37 1 < U                | 0.33 t < U             | 0.33 1 < 0      | 0.33 1 < U                      | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMINOLATILES                  | Indepp(1.2.3-cd)nyrepe         |                  |   | 0.29 1 J                    | 0.37 1 < U    | 0.37 t < U                | 0.33 1 < U             | 0.33 1 < t      | 0.33 1 < U                      | 0.33 1 < 0       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | Isophorone                     |                  |   | 0.35 1 < U                  | 0.37 1 < U    | 0.37 1 < U                | 0.33 1 < U             | 0.33 1 < 0      | 0.33 1 < U                      | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | Naphthalene                    |                  |   | 0.35 1 < U                  | 0.37 1 < U    | 0.37 1 < U                | 0.33 1 < U             | 0.33 1 < U      | i 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | Nitrobenzene                   |                  |   | 0.35 t < U                  | 0.37 1 < U    | 0.37 1 < U                | 0.33 1 < U             | 0.33 1 < L      | 0.33 1 < U                      | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | n-Nitrosodimethylamine         |                  |   | 0.35 1 < U                  | 0.37 1 < U    | 0.37 1 < U                |                        |                 |                                 |                  |                                 |                      |                    |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine     |                  |   | 0.35 1 < U                  | 0.37 1 < U    | 0.37 1 < U                | 0.33 t < U             | 0.33 1 < L      | 0.33 1 < U                      | 0.33 1 < U       | 0.33 1 < U                      |                      |                    |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine.        |                  |   | 0.35 1 < U                  | 0.37 1 < U    | 0.37 1 < U                | 0.33 1 < U             | 0.33 1 < 1      | 0.33 1 < U                      | 0.33 1 < U       | 0.33 1 < 0                      |                      |                    |
| SEMIVOLATILES                  | Pentachlorophenol              |                  |   | 0.17 1 < U                  | 0.19 1 < U    | 0.19 1 < U                | 1.65 1 < U             | 1.65 1 < L      | 1.65 1 < U                      | 1.65 1 < U       | 1.65 1 < 1                      |                      |                    |
| SEMIVOLATILES                  | Phenanthrene                   | ļ                |   | 0.35 1 < 0                  | 0.37 1 < U    | 0.37 1 < U                | 0.33 1 < U             | 0.33 1 < 0      | 0.33 1 < U                      | 0.33 1 < 0       | 0.33 1 < 0                      |                      |                    |
| SEMIVOLATILES                  | Phenol                         | F                |   | 0.35 1 < U                  | 0.37 1 < 0    | 0.37 1 < 0                | 10.33 1 < U            | 0.33 1 < 1      | / 1/23312 < U                   | 0.33 1 < 0       |                                 |                      |                    |
| SEMIVOLATILES                  | Pyrene                         |                  | A A A C A A A A A A A A A A A A A A A A | 0.22 1 J                    | 0.37 T < U    | 0.37 1 < 12               | 0.33 1 < 0             | 0.55 1 < 1      | 0.331 C 0                       | 0.35 7 4 0       | 0.00 1 2 0                      |                      |                    |
| VOLATILES                      | 1,1,1,2-i etrachioroethane     |                  | 0.0055 1 0                              | 0.0052 1 < 0                | 0.0056 t < U  | 0.0056 1 2 1              | 0.005 1 - 11           | 0.005 1 < 1     | I 0+005 1 ∠ U                   | 0.005 t < 11     | 1 0.005 1 < L                   |                      |                    |
| VOLATILES                      | 1,1,1-1 Tichtoroemane          |                  | 0.0055 1 1                              | 0.0052 1 < 0                | 0.0056 1 < U  | 0.0056 1 < 1              | 0.005 1 < 1            | 0.005 1 < 1     | 0.005 1 < U                     | 0.005 1 < U      | 0.005 1 < U                     |                      |                    |
| VOLATILES                      | 1,1,2,2-reliación della ne     |                  | 0.0055 1 11                             | 0.0052 1 < U                | 0.0056 1 < U  | 0.0056 1 < U              | 0.005 1 < U            | 0.005 1 < ù     | J 0.005 1 < U                   | 0.005 1 < U      | 0.005 t < U                     |                      |                    |
| VOLATILES                      | 1 1-Dichlomethane              |                  | 0.0055 1 U                              | 0.0052 1 < U                | 0.0056 1 < U  | 0.0056 1 < U              | 0.005 1 < 빈            | 0.005 1 < L     | J 0.005 1 < IJ                  | 0.005 1 < 1      | 0.005 t < U                     |                      |                    |
| VOLATILES                      | 1.1-Dichloroethene             |                  | 0.0055 1 U                              | 0.0052 1 < U                | 0.0056 1 < U  | 0.0056 1 < U              | 0.005 1 < U            | 0.005 1 < l     | J 0.005 1 < 1J                  | 0.005 1 < U      | 0.005 t < U                     |                      |                    |
| VOLATILES                      | 1.1-Dichloropropene            |                  | 0.0055 t U                              | 0.0052 1 < U                | 0.0056 1 < U  | 0.0056 1 < U              |                        |                 | -                               |                  |                                 |                      |                    |
| VOLATILES                      | 1,2,3-Trichlorobenzene         |                  | 0.0055 1 U                              | 0.0052 1 < U                | 0.0056 1 < U  | 0.0056 1 < Ü              |                        |                 |                                 |                  |                                 |                      |                    |
| VOLATILES                      | 1,2,3-Trichloropropane         |                  | 0.0055 1 U                              | 0.016 1 < U                 | 0.017 1 < U   | 0.017 t < U               |                        |                 |                                 |                  |                                 |                      |                    |
| VOLATILES                      | 1,2,4-Trichlorobenzene         |                  | 0.0055 t U                              | 0.0052 1 < U                | 0.0056 1 < U  | 0.0056 1 < U              |                        |                 |                                 |                  |                                 |                      |                    |
| VOLATILES                      | t,2,4-Trimethylbenzene         |                  | 0.0055 1 U                              | 0.0052 1 < U                | 0.0056 1 < U  | 0.0056 \$ < U             |                        |                 |                                 |                  |                                 |                      |                    |
| VOLATILES                      | 1,2-Dibromo-3-chloropropane    |                  | 0.0055 t U                              | 0.01 1 < U                  | 0.011 1 < U   | 0.011 1 < U               |                        |                 |                                 |                  |                                 |                      |                    |
| VOLATILES                      | 1,2-Dibromoethane              |                  | 0.0055 1 U                              | 0.0052 1 < U                | 0.0056 1 < U  | 0.0056 1 < U              |                        |                 |                                 |                  |                                 |                      |                    |
| VOLATILES                      | 1,2-Dichlorobenzene            |                  | 0.0055 1 U                              | 0.0052 1 < U                | 0.0056 1 < U  | 0.0056 1 < U              |                        |                 | 0.005 1 . 11                    | 0.005 1          |                                 |                      |                    |
| VOLATILES                      | 1,2-Dichloroethane             |                  | 0.0055 1 U                              | 0.0052 1 < U                | 0.0056 1 < U  | 0.0056 t < U              | 0.005 1 < U            | 0.005 1 < 1     | ) 0.005 1 < 0<br>I 0.005 1 ∠ 11 | 0.005 1 < 0      | 1 0.005 1 < 0                   |                      |                    |
| VOLATILES                      | 1,2-Dichloroethene             |                  | 0.0055 1                                | 0.0000 1                    | D.0056 4      | 0.0056 t                  | 0.005 1 < 0            | 0.005 1 < 1     | 0.005 1 < 0                     | 0.005 1 < 0      | / 0.005 1 < 0<br>/ 0.005 1 < 1/ |                      |                    |
| VOLATILES                      | 1,2-Dichloropropane            |                  | 0.0055 1 1                              | 0.0052 1 < 0                | 0.0000 1 4 0  | 1.0000 1 < 0              | 0.003 1 C D            | 0.000 1 1 1     | 0.000 1 2 0                     | 0.003            |                                 |                      |                    |
| VOLATILES                      | 3,2-Dimethylbenzene (0-Xylene) |                  | 0.0055 1 1                              | 0.0052 1                    | 0.0056 t < 11 | 0.0056 1 < 13             |                        |                 |                                 |                  |                                 |                      |                    |
| VOLAHLES                       | 1,3,3-1 Hueury Derizerie       |                  | 0.0055 1 11                             | 0.002 1 < 0                 | 0.0056 1 < 1  | 0.0056 1 < U              |                        |                 |                                 |                  |                                 |                      |                    |
| VOLATILES                      | 1.3-Dichlozononane             | 1                | 0.0055 1 11                             | 0.0052 1 < 1                | 0.0056 1 < U  | 0.0056 1 < U              |                        |                 |                                 |                  |                                 |                      |                    |
| VOLATILES                      | 1 4-Dichloro-2-bateo           |                  | 0.0000 1 0                              | 0.0052 1 < 1                | 0.0056 1 < U  | 0.0056 1 < U              |                        |                 |                                 |                  |                                 |                      |                    |
| VOLATILES                      | 1.4-Dichlorobenzene            |                  | 0.0055 1 1/                             | 0.0052 1 < U                | 0.0056 1 < U  | 0.0056 1 < U              |                        |                 |                                 |                  |                                 |                      |                    |
| VOLATILES                      | 1.4-Dioxane                    | 1                | · · ·                                   | 11 < U                      | 1.1 1 < U     | 1.1 1 < U                 |                        |                 |                                 |                  |                                 |                      |                    |
| VOLATILES                      | 2.2-Dichloropropane            |                  | 0.0055 1 U                              | 0.016 t < U                 | 0.017 1 < U   | 0.017 1 < U               |                        |                 |                                 |                  |                                 |                      |                    |
| VOLATILES                      | 2-Butanone                     |                  | 0.011 1 U UJ                            | 0.021 1 < U                 | 0.022 1 < U   | 0.022 1 < U               | 0.05 1 < U             | 0.05 1 < 1      | J 0.05 1 ≺ Ü                    | 0.05 1 < U       | J 0.05 1 < U                    |                      |                    |
| VOLATILES                      | 2-Chloroethyl vinyl ether      |                  | 0.011 1 U                               |                             |               |                           | 0.01 1 < U             | 0.01 1 < 0      | J 0.01 1 < U                    | 0.01 1 < U       | J 0.01 1 < U                    |                      |                    |
| VOLATILES                      | 2-Chlorotoiuene                | 1                | 0.0055 1 U                              | 0.0052 1 < U                | 0.0056 t < U  | 0.0056 1 < U              |                        |                 |                                 |                  |                                 |                      |                    |
| VOLATILES                      | 2-Hexanone                     |                  | 0.011 1 U UJ                            | 0.021 t < U                 | 0.022 1 < U   | 0.022 1 < U               | 0.05 1 < U             | 0.05 1 < l      | J 0.05 1 < U                    | 0.05 1 < L       | J 0.05 1 < U                    |                      |                    |
| VOLATILES                      | 2-Propenal                     | 1.               |   | 0.1 1 < U                   | 0.11 1 < U    | 0.11 1 < U                |                        | -               |                                 |                  |                                 |                      |                    |
| VOLATILES                      | 4-Chlorotoluene                | 1                | 0.0055 1 U                              | 0.0052 1 < U                | 0.0056 1 < U  | 0.0056 1 < U              |                        |                 |                                 |                  |                                 |                      |                    |

Shaw Environmental, Inc.

 $\left( \begin{array}{c} & \\ & \\ & \end{array} \right)$ 

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-17 Concentrations of Chemicals in Soil Samples Associated with Sump 017

| [SUMP] = SUMP017 |                                 |                  |                  |                  |                  |                      |                |                          |                         | ( ) · · · · · · · · · · · · · · · · · · |                  | 0750 400000          | ATTO 400000        |
|------------------|---------------------------------|------------------|------------------|------------------|------------------|----------------------|----------------|--------------------------|-------------------------|---|------------------|----------------------|--------------------|
| LOCATION _CODE   |                                 | 35SUMP017-SB01   | 35SUMP017-SB01   | 46SB02           | 46SB02           | 46SB02               | LH-S017-01     | LH-S017-01               | LH-5017-01              | LH-\$017-02                             | LH-SU17-02       | 51EP-465503          | 51CP-405503        |
| SAMPLE_NO        |                                 | 35-SMP17-SB01-01 | 35-SMP17-SB01-02 | 46S802(0-0_5)    | 46SB02(1-3)      | 46\$802(3-5)         | LH-S017-01 QC  | LH-S017-01_1             | UH-S017-01_2            | EH-S017-02_1                            | CM-S017-02_2     | 465503(0+0_5)-020312 | 465503(1-2)-020312 |
| SAMPLE_DATE      |                                 | 9/11/2006        | 9/11/2006        | 7/27/1998        | 7/27/1998        | 7/27/1998            | 8/8/1993       | 8/8/1993                 | 8/8/1993                | 8/8/1993                                | 8/8/1993         | 3/12/2002            | 3/12/2002          |
| DEPTH            |                                 | 0 - 0.5 Ft       | 3.5 - 3.5 Ft     | 0-0.5 Ft         | 1-3Ft            | 3-5FI                | 05-1.5H        | 0.5 - 1.5 Ht             | 2.5-3Ft                 | 0.5 - 1 - 1                             | 2.5-311          | 0-0.5 FL             | DEC                |
| SAMPLE_PURPOSE   |                                 | REG              | REG              | REG              | HEG              | HEG<br>Back DI LO MO | 70 US 10 10    | HEG<br>Droubt (D)I (O VO | HEG<br>Result Dil LO VO | Receile Dill to 1/0                     | Becult DIL LO MO | Deput DII (A VA      | Regult Dit 10 VO   |
| Test Group       | Parameter (Units = mg/kg)       | Result DIL LQ VQ | Hesuat DIL LQ VQ | Hesuit DIL LU VU | Result DAL LU VU | Hesuit UIL LQ VU     | A1 1 CIL LO VO |                          |                         |   |                  | HESON DAL CO VO      | HICODA DIL LA TA   |
| VOLATILES        | Acetone                         |                  | 0.011 1 0        | 0.021 1 < 0      |                  | 0.022 1 < 0          | 0.1 1 4 0      | 0.7 7 1 0                |                         |   | 0.1 1 2 0        |                      |                    |
| VOLATILES        | Acrylonitrie                    |                  | 0.0055 + 11      |                  |                  |                      | 0.005 t < 11   | A-005 1 2 11             | 0.005 1 c 11            | 0.005 1 × H                             | 0.005 1 c li     |                      |                    |
| VOLATILES        | Benzene                         |                  | 5 1 CCUUU        | 0.0052 1 < 0     | 0.0056 1 < 1     | 0.0056 1 < 11        | 0.000 1 < 0    | 0.000 1 < 0              | 0.005 1 4 0             | 0.000 1 1 0                             | 0.000 / 0        |                      |                    |
| VULAIRES         | Bromobenzene                    |                  | 0.0055 1 11      | 0.0052 1 < 0     | 0.0056 1 < 11    | 0.0056 1 < 0         |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | Bromochiohomethana              |                  | 0.0055 1 11      | 0.0052 1 < 1     | 0.0056 1 < 11    | 0.0056 1 < 0         | 0.005 t < U    | 0.005 1 < U              | 0.005 1 < U             | 0.005 1 < U                             | .0.005 1 < U     |                      |                    |
| VOLATILES        | Bromotorm                       |                  | 0.0055 1 U       | 0.0052 1 < U     | 0.0056 1 < U     | 0.0056 1 < U         | 0.005 1 < U    | 0.005 1 < U              | 0.005 1 < U             | 0.005 1 < U                             | 0.005 1 < U      |                      |                    |
| VOLATILES        | Bromomethane                    |                  | 0.011 1 11       | 001 1 < U        | 0011 1 < U       | 0.011 1 < U          | 0.01 1 < U     | 0.01 t < U               | 0.01 f < U              | 0.01 1 < U                              | 0.01 1 < U       |                      |                    |
| VOLATILES        | Carbon disulfine                |                  | 0.0055 1 U       | 0.0052 1 < U     | 0.0056 1 < U     | 0.0056 1 < U         | 0.005 1 < U    | 0.005 1 < U              | 0.005 1 < U             | 0.005 1 < U                             | 0.005 1 < U      |                      |                    |
| VOLATILES        | Carboo tetrachloride            |                  | 0.0055 1 U       | 0.01 1 < U       | 0.011 1 < U      | 0.011 1 < U          | 0.005 t < U    | 0.005 1 < U              | 0.005 1 < U             | 0.005 1 < U                             | 0.005 1 < U      |                      |                    |
| VOLATILES        | Chlorobenzene                   |                  | 0.0055 1 U       | 0.0052 1 < U     | 0.0056 1 < U     | 0.0056 1 < U         | 0.005 1 < U    | 0.005 1 < U              | 0.005 1 < U             | 0.005 1 < U                             | 0.005 1 < U      |                      |                    |
| VOLATILES        | Chlomethane                     |                  | 0.011 1 U        | 0.01 1 < U       | 0.911 1 < U      | 0.011 1 < U          | 0.01 t < U     | 0.01 1 < U               | 0.01 1 < U              | 0.01 t < U                              | 0.01 1 < U       |                      |                    |
| VOLATILES        | Chleroform                      |                  | 0.0055 1 U       | 0.0052 1 < U     | 0.0056 t < U     | 0.0056 1 < U         | 0.005 1 < U    | 0.005 1 < U              | 0.005 1 < U             | 0.005 1 < U                             | 0.005 1 < U      |                      |                    |
| VOLATILES        | Chloromethane                   |                  | 0.011 1 U        | 0.01 1 < U       | 0.011 1 < U      | 0.011 1 < U          | 0.01 1 < U     | 0.01 1 < U               | 0.01 1 < U              | 0.01 1 < U                              | 0.01 1 < U       |                      |                    |
| VOLATILES        | cis-1,2-Dichloroethene          |                  | 0.0055 1 U       | 0.0052 1 < U     | 0.0056 t < U     | 0.0056 1 < U         |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | cis-1,3-Dichloropropene         |                  | 0.0055 1 U       | 0.0052 1 < U     | 0.0655 1 < U     | 0.0056 1 < U         | 0.005 1 < U    | 0.005 1 < U              | 0.005 1 < U             | 0.005 1 < U                             | 0.005 1 < U      |                      |                    |
| VOLATILES        | Dibromochloromethane            |                  | 0.0055 1 U       | 0.0052 1 < U     | 0.0056 t < U     | 0.0056 1 < U         | 0.005 1 < U    | 0.005 t < U              | 0.005 1 < U             | 0.005 1 < U                             | 0.005 1 < U      |                      |                    |
| VOLATILES        | Dibromomethane                  |                  | 0.0055 1 U       | 0.01 1 < U       | 0.011 1 < U      | 0.011 1 < U          |                |                          |                         |   |                  |                      | · · · · ·          |
| VOLATILES        | Dichlorodifluoromethane         |                  | 0.011 1 U        | 0.016 1 < U      | 0.017 1 < U      | 0.017 1 < U          |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | Ethyl methacrylate              |                  |                  | 0.0052 1 < U     | 0.0056 1 < U     | 0.0056 i < U         | i              |                          |                         |   |                  |                      |                    |
| VOLATILES        | Ethylbenzene                    |                  | 0.0055 t U       | 0.0052 1 < U     | 0.0056 1 < U     | 0.0056 1 < U         | 0.005 1 < U    | 0.005 t < U              | 0.005 t < U             | 0.005 1 < U                             | 0.005 1 < U      |                      |                    |
| VOLATILES        | Hexachlorobutadiene             |                  | 0.0055 1 U       | 0.0052 1 < U     | 0.0056 1 < U     | 0.0056 1 < U         | I              |                          |                         |   |                  |                      |                    |
| VOLATILES        | IODOMETHANE                     |                  |                  | 0.0052 1 < U     | 0.0056 1 < U     | 0.0056 1 < U         |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | ISOBUTYL ALCOHOL                |                  |                  | 11 < U           | 1.1 1 < U        | 1.1 1 < U            |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | Isopropyibenzene                |                  | 0.0055 1 U       | 0.0052 1 < U     | 0.0056 1 < U     | 0.0056 1 < U         | ł              |                          |                         |   |                  |                      |                    |
| VOLATILES        | m,p-Xylenes                     |                  | 0.0055 1 U       |                  |                  |                      |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | Methacryloniale                 |                  |                  | 0.1 1 < U        | 0.11 1 < U       | 0.11 1 < U           |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | Methyl isobutyl ketone          |                  | 0.011 1 U        | 0.021 1 < U      | 0.022 1 < U      | 0.022 1 < U          | 0.05 1 < U     | 0.05 1 < U               | 0.05 1 < U              | 0.05 1 < 0                              | 0.05 1 < U       |                      |                    |
| VOLATILES        | METHYL METHACRYLATE             |                  |                  | 0.052 1 < U      | 0.056 1 < U      | 0.056 1 < U          |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | Methylene chloride              |                  | 0.0055 1 U       | 0.0052 1 < U     | 0.0056 1 < U     | 0.0056 1 < U         | 0.005 1 < U    | 0.005 1 < U              | 0.005 1 < U             | 0.005 1 < U                             | 0.005 1 < 0      |                      |                    |
| VOLATILES        | Naphthalene                     |                  | 0.011 1 U        | 0.0052 1 < U     | 0.0056 1 < U     | 0.0056 1 < U         |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | n-BUTYLBENZENE                  |                  | 0.0055 1 U       | 0.0052 1 < U     | 0.0056 t < U     | 0.0056 1 < U         |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | n-PROPYLBENZENE                 |                  | 0.0055 1 U       | 0.0052 1 < U     | 0.0056 1 < 0     | 0.0056 1 < 0         |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | Pentachloroethane               |                  |                  | 0.01 1 < U       | 0.011 1 < 0      | 0,011 1 < 0          |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | P-ISOPROPYLTOLUENE              |                  | 0.0055 1 U       | 0.0052 1 < 0     | 40.0056 1 < 0    | 0.0056 1 < 0         |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | Propionitnie                    |                  |                  | 0.1 1 < 0        | U.11 1 < U       | 0.11 1 < 0           |                |                          |                         |   |                  |                      |                    |
| VOLATILES        | SEC-BUTYLBENZENE                |                  | 0.0055 1 0       | 0.0052 1 < 0     | 0.0056 1 < 0     | 0.0050 1 < 0         | 0.005 4 . H    | 0.007 4                  | 0.005 t / 13            | 0.005 1 4 11                            | 0.005 1 / 11     |                      |                    |
| VOLATILES        | Styrene                         |                  | 0.0055 1 0       | 0.0052 1 < 0     | U > 1 0000.0     | 0.0056 1 < 0         | 0.005 1 < 0    | 0.005 1 < 0              | 0.000 1 < 0             | 0.003 1 < 0                             | 0.003   < 0      |                      |                    |
| VOLATILES        | tert-BUTYLBENZENE               |                  | 0.0055 1 0       | 0.0052 1 < 0     | 0.0056 1 < 0     | 0.0056 1 < 1         | 0.005 1 / 1    | 1.005 t < 1              | 0.005 1 2 1             | 0.005 1 2 1                             | 0.005 1 2 12     |                      |                    |
| VOLATILES        | i etrachioroethene              |                  | 0.0055 1 0       | 0.0052 1 < 0     | 0.0056 1 < 1     | 0.0000 1 < 0         |                | 0.000 1 < 0              | 0.005 1 < 0             | 0.005 t < 0                             | 0.005 1 < 0      |                      |                    |
| VOLATILES        | soluene                         |                  | 0.0055 1 0       | 0.0052 1 < 0     | 0.0055 1 < 1     | 0.0056 1 < 1         |                |                          | 0.003 1 1 0             | 0.005 1 4 0                             | 0.000 1 1 0      |                      |                    |
| VOLATILES        |                                 |                  | 0.0035 1 0       | 0.002 1 < 0      | 0.0000 1 < 0     | 0.0056 1 - 11        | 0.005 1 - 11   | 0.005 1 2 11             | 0.005 1 2 11            | 0.005 1 < 11                            | 0.005 1 < H      |                      |                    |
| VULATILES        | uans-1,3-Dichloropropene        |                  | 0.0055 1 11      |                  | 0.0000 1 4 0     | 0.000 1 4 0          |                | 0.005 1 2 1              | 0.005 1 < 11            | 0.005 1 < 11                            | 0.005 t < 1      |                      |                    |
| VULATILES        | Trichloreffuerenethana          | ł                | 0.011 1 11       |                  |                  | 0.011 1 - 11         |                | 0.000 1 1 1              | 0.000 1 1 0             |   |                  |                      |                    |
| VOLATILES        | Incraroutoromeutane             |                  |                  | 0.021 1 - 11     | 0.022 1 2 11     | 0.022 1 - 11         | 0.05 1 2 11    | 0.05 1 < 11              | 0.05 1 < H              | 0.05 t < 11                             | 0.05 1 < U       |                      |                    |
| VOLATILES        | vinyi ductate<br>Vini oblogida  |                  |                  |                  |                  |                      |                | 001 1 < 1                | 0.01 1 < U              | 0.01 1 < U                              | 0.01 1 < U       |                      |                    |
|                  | vanys Grigande<br>Videose Total |                  | 0.011 1 0        | 0.0052 ( < 1)    | 0.0056 1 < 11    | 0.0056 1 - 11        |                | 0.005 1 < 11             | 0.005 1 < 1             | 9.005 1 < 1                             | 0.005 1 < 0      |                      |                    |
| VULATILES        | AJIGHER, I VIA:                 | 1                |                  |                  | 0,0000 1 < 0     | 0.0000 ( < 0         |                |                          |                         |   |                  |                      |                    |

Footnotes are shown on cover page to Tables Section.

• . --

Shaw Environmental, Inc.

Table 3-18

Concentrations of Chemicals in Soil Samples Associated with Sump 018

| [SUMP] = SUMP018<br>LOCATION _CODE |  | 35SUMP018-SB02   | 35SUMP037-SB01         | LH-S018-01               | LH-S018-01               | LH-S018-01               | LH-S37-01                | EH-S37-01                | LH-WRS10-01              | LH-WRS10-01      | WRS10-SB02                 | WRS10-SB02               |
|------------------------------------|--|------------------|------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------|----------------------------|--------------------------|
| SAMPLE_NO                          |  | 35-SMP18-SB02-02 | 35-SMP37-SB01-02       | LH-S018-01_1<br>9/9/1002 | LH-S018-01_2<br>9/8/1003 | LH-S018-01_3<br>8/8/1993 | LH-S37-01_1<br>7/25/1993 | 2/25/1993                | 8/8/1993                 | 8/8/1993         | 9/25/2006                  | 9/25/2006                |
| DEPTH                              |  | 6-6Ft            | 4 - 4 Ft               | 0.5 - 1.1 Ft             | 1.1 - 1.6 Ft             | 5-6Ft                    | 0.5 - 1 Ft               | 3-4.5 Ft                 | 0.5 - 1 Ft               | 3.5 - 4 Ft       | 0.5 - 0.5 Ft               | 4.5 - 4.5 Ft             |
| SAMPLE_PURPOSE                     |  | REG              | REG                    | REG                      | REG                      | REG                      | REG                      | REG                      | REG                      | REG .            | REG                        | REG<br>Result Dit 10, VO |
| Test Group                         | Parameter (Units = mg/kg)                                | Result DIL LO VQ | Result DIL LQ VQ       | Result DIL LQ VQ         | Result DIL LO VO         | Result DIL LO VO         | Result DIL LO VQ         | Result DIL LQ VQ         | Hesult Dil LQ VQ         | Hesuit Dil LQ VU | 0.245 1 U U                | 0.249 1 U U              |
| EXPLOSIVES                         | 1,3,5-Tranitrobenzene<br>1 3-Dinitrobenzene              | 0.238 1 U        | 0.246 1 U<br>0.246 1 U |                          |                          |                          |                          |                          | -                        | -                | 0.245 I U U                | 0.249 t U U              |
| EXPLOSIVES                         | 2,4,6 Trinstrotoluene                                    | 0.238 1 U        | 0.246 1 U              |                          |                          |                          |                          |                          |                          |                  | 0.245 1 U U                | 0.249 1 U U              |
| EXPLOSIVES                         | 2,4-Dinitrotoluene                                       | 0.238 1 U        | 0.246 1 U              | 0.33 1 < U               | .0.33 1 < U              | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U       | 0.245 1 U U                | 0.249 1 U U              |
| EXPLOSIVES                         | 2,6-Dinitrotoluene                                       | 0.248 1 U        | 0.256 1 U              | 0.33 1 < U               | 0.33 1 < ⊍               | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 ( < 0       | 0.255 1 U U                | 0.259 1 U U              |
| EXPLOSIVES<br>EXPLOSIVES           | 2-Amino-4,6-omitrotouene<br>4-Amino-2,6-dinitrotoluene   | 0.248 1 U        | 0.256 1 U              |                          |                          |                          |                          |                          |                          |                  | 0.255 1 U U                | 0.259 1 U U              |
| EXPLOSIVES                         | HMX  | 2.1 I U          | 2.17 1 U               |                          |                          |                          |                          |                          |                          |                  | 2.16 1 U U                 | 2.19 1 U U               |
| EXPLOSIVES                         | m-Nitrotoluene   | 0.238 t U        | 0.246 1 U              |                          |                          |                          |                          |                          |                          |                  | 0.245 1 0 0                | 0.249 1 0 0              |
| EXPLOSIVES                         | Nitrobenzene   | 0.248 1 U        | 0.256 1 U              |                          |                          |                          |                          |                          |                          |                  | 0.245 1 U UJ               | 0.249 1 U UJ             |
| EXPLUSIVES<br>EXPLOSIVES           | n-Nitrotoluene   | 0.238 1 U        | 0.246 1 U              |                          |                          |                          |                          |                          |                          |                  | 0.245 1 U U                | 0.249 t U U              |
| EXPLOSIVES                         | RDX  | 0.952 1 U        | 0.985 t U              |                          |                          |                          |                          |                          |                          |                  | 0.98 1 U U                 | 0.995 1 U U              |
| EXPLOSIVES                         | Tetyl  | 0.619 1 U        | 0.64 1 U               |                          |                          |                          |                          | 00000 t                  | CC00 1 D                 | C 1 0003         | 0.637 1 U U<br>8760 1      | 10.647 1 0 0             |
| METALS                             | Aluminum   | 15200 1          |                        | 7220 1 U                 | 10100 1 D                | 7950 1 U                 | 3 1 < 1                  | 3 t < lì                 | 5 1 < U                  | 5 1 < U          | 0.112 1 U UJL              | 0.123 1 U UJL            |
| METALS<br>METALS                   | Anamony<br>Arsenic                                       | 1.12 1           |                        | 3.31 1                   | 2.8 1                    | 2.9 1                    | 5.1 t                    | 4.3 1                    | 3.25 1                   | 2 1              | 1.29 1 JL                  | 1.06 1 JL                |
| METALS                             | Barium   | 78.4 1           |                        | 55.3 1                   | 45.8 1                   | 24.2 t                   | 67.8 1                   | 74 1                     | 88.3 1                   | 70.1 1           | 76.5 1                     | 63.3 1                   |
| METALS                             | Beryllium  | 0.631 1          |                        |                          |                          | · · · ·                  |                          |                          |                          | 1 <b>1</b> - 11  | 0.375 1 J J                | 0.757 1                  |
| METALS                             | Cadmium  | 0.114 1 J J      |                        | 1 1 < U                  | 1 1 < U                  | 1 1 < U                  | 1 1 < U<br>1290 1        | 1 1 < ⊍<br>1 100 1       | 1210 1                   | 1490 1           | 51000 10                   | 828 1                    |
| METALS<br>METALS                   | Carcelan   | 1250 1 J         |                        | 569 I<br>18.9 1          | 14.3 1                   | 7 1                      | 19.7 1                   | 22.6 1                   | 7.9 1                    | 7.3 1            | 24.1 1                     | 23.3 1                   |
| METALS                             | Cobalt   | 7.29 1 J         |                        | 21 < U                   | 21 < U                   | 21 < U                   | 3.3 1                    | 3.9 t                    | 2 1 < U                  | 2 1 < Ü          | 2.79 1                     | 4.6 1                    |
| METALS                             | Copper   | 5.2 1            |                        | 3 1                      | 3.4 1                    | 2.6 1                    | 6.8 1                    | 4.3 t                    | 3.6 1                    | 3.1 1            | 5.37 1                     | 6.78 1<br>21700 t        |
| METALS                             | kon  | 14900 1          |                        | 17800 1 D                | 18900 1 D                | 12000 1 D                | 22900 1 < U              | 21000 1 < 0              | 8410 I D<br>81 1 D       | 6.4 1 D          | 9.75 1                     | 9.09 1                   |
| METALS                             | Lead   | 6.17 T J         |                        | 598 t                    | 674 1                    | 570 1                    | 538 1                    | £190 1                   | 431 1                    | 364 1            | 981 1 JH                   | 1610 1 JH                |
| METALS                             | Manganese  | 21.7 1           |                        | 152 1                    | 65.4 1                   | 15.1 1                   | 154 1                    | 127 1                    | 58 f                     | 58.6 1           | 134 1 J                    | 21.9 1 J                 |
| METALS                             | Mercury  | 0.0184 1 J J     |                        | 0.1 1 < U                | 0.1 1 < U                | 0.1 1 < U                | 0.1 1 < 9                | 0.1 1 < U                | 0.1 1 < U                | 0.1 1 < U        | 0.0294 1 J J               | 0.0843 1 J J             |
| METALS                             | Nickel   | 19.1 1           |                        | 001 1                    | 000 1                    | 147 1                    | 335 1                    | 1070 1                   | 209 1                    | 182 1            | 0.02 P<br>346 1            | 772 1                    |
| METALS                             | Potassium<br>Selenium                                    | 0218 1 U         |                        | 0.5 1 < U                | 200 I<br>0.5 1 < U       | 0.5 1 < U                | 1 1 < U                  | 1 1 < U                  | 0.5 1 < U                | 0.5 1 < U        | 0.142 t J JL               | 0.128 1 J JL             |
| METALS                             | Silver   | 1.7 t U          |                        | 1 1 < U                  | 11 < U                   | 11 < U                   | 11 < U                   | 1 t < U                  | 11 < U                   | 1 † < U          | 1.68 1 U U                 | 1.87 1 U U               |
| METALS                             | Sodium   | 322 1            |                        |                          |                          |                          |                          |                          |                          | *2.4 1           | 54.3 1                     | 218 1                    |
| METALS                             | Strontium  | 0.0000           |                        | 9.2 1                    | 12.7 1                   | 11.6 1                   | 12,8 1                   | 16.2 1                   | 10.1 1                   | 12.4             | 0.0446 1                   | 0.108 1                  |
| METALS                             | l Azikum<br>Varadārum                                    | 23.2 1           |                        |                          |                          |                          |                          |                          |                          |                  | 34.4 1                     | 40.2 1                   |
| METALS                             | Zinc   | 41.4 1           |                        | 15.6 1                   | 22.3 1                   | 16.1 1                   | 18 t                     | 26.9 1                   | 22.1 1                   | 17.8 1           | 31.6 1                     | 32.9 1                   |
| RANGE_ORGANICS                     | Carbon Range C12-C28                                     | 54.6 1 U         |                        |                          |                          |                          |                          |                          |                          |                  |                            |                          |
| RANGE_ORGANICS                     | Carbon Range C28-C35                                     | 54.6 1 U         |                        |                          |                          |                          |                          |                          |                          |                  |                            |                          |
| RANGE_URGANIUS                     | 1.2.4-Techlomhenzene                                     | 1 04.0 I U       |                        | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U       | 1.87 10 U U                | 0.201 1 U U              |
| SEMIVOLATILES                      | t,2-Dichlorobenzene                                      |                  |                        | 0.33 1 < U               | 0.33 1 < U       | 1.87 10 U U                | 0.201 1 U U              |
| SEMIVOLATILES                      | 1,3-Dichlorobenzene                                      |                  |                        | 0.33 I < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U       | 1.87 10 U U                | 0.201 1 U U              |
| SEMIVOLATILES                      | 1.4-Dichlorobenzene                                      |                  |                        | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 0               | 1.33 T < U               | 1.65 1 < 13              | 1.65 1 < U               | 1.65 t < U       | 1.87 10 U U                | 0.201 1 U U              |
| SEMIVOLATILES                      | 2,4,5-Trichlorophenol                                    | · · ·            |                        | 0.33 1 < 0               | 0.33 1 < U               | 0.33 1 < U       | 1.87 10 U U                | 0.201 1 U U              |
| SEMIVOLATILES                      | 2,4-Dichlorophenol                                       |                  |                        | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U       | 1.87 10 U U                | 0.201 1 U U              |
| SEMIVOLATILES                      | 2,4-Dimethylphenol                                       |                  |                        | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 0               | 0.33 1 < U       | 1.87 10 U U                | 1 1 1 1                  |
| SEMIVOLATILES                      | 2,4-Dinitrophenol  |                  |                        | 1,65 1 < U               | 1.05 1 < 0               | 1.05 1 < 0               | 1.05 1 < 0               | 1.00 1 2 0               | 1.05 1 4 0               | 1.50 1 4 0       | 1.87 10 U U                | 0.201 1 U U              |
| SEMIVOLATILES                      | 2,4-Dinitrotoluene                                       |                  |                        |                          | -                        |                          |                          |                          |                          |                  | 1.87 10 U U                | 0.201 1 U U              |
| SEMIVOLATILES                      | 2-Chloronaphthalene                                      |                  |                        | 0.33 1 < Ŭ               | 0.33 î < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U               | 0.33 t < U       | 1.87 10 U U                | 0.201 1 U U              |
| SEMIVOLATILES                      | 2-Chtorophenol   |                  |                        | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U       | 1.87 10 U_U<br>1.87 10 U_U | 0.201 1 0 0              |
| SEMIVOLATILES                      | 2-Methylnaphthalene                                      |                  | •                      | - 0.33 1 < U             | 0.33 1 < 0               | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < 0       | 1.87 10 U U                | 0.201 1 U U              |
| SEMIVOLATILES<br>SEMIVOLATILES     | 2-Metrylphenol<br>2-Nitroaniline                         |                  |                        | 1.65 1 < U               | 1.65 1 < U       | 9.33 10 U U                | 1 I U U                  |
| SEMIVOLATILES                      | 2-Nitrophenoi  |                  |                        | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U       | 1.87 10 U U                | 0.201 1 U U              |
| SEMIVOLATILES                      | 3,3-Dichlorobenzidine                                    |                  |                        | 0.65 1 < U               | 0.65 1 < U               | 0.65.1 < U               | 0.65 t < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U       | 3.73 10 U U                | 0.403 1 U U              |
| SEMIVOLATILES                      | 3-Nitroaniline   |                  |                        | 1.65 1 < U               | 1.65 1 < U<br>1.65 1 - U | 1.00 1 < U<br>1,65 1 < U | 1.65 1 < 1       | 9.33 10 U U                | 1 1 V ប                  |
| SEMIVOLATILES                      | 4,6-Dinitto-2-methyiphenol<br>4-Bromonheovi pheovi ether | 1                |                        | ≀.૦૦ા < U<br>0.33 1 < રી | 0.33 t < Li              | 0.33 1 < U               | 0.33 1 < 0               | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U       | 1.87 10 U U                | 0.201 1 U U              |
| SEMIVOLATILES                      | 4-Chloro-3-methylphenol                                  |                  |                        | 0.65 t < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U       | 1.87 10 U U                | 0.201 1 U U              |
| SEMIVOLATILES                      | 4-Chloroaniline  |                  |                        | 0.65 1 < Ŭ               | 0.65 t < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 t < U               | 0.65 1 < U       | 1.87 10 U U                | 0.201 1 U U              |
|                                    |  |                  |                        |                          |                          |                          |                          |                          |                          |                  |                            |                          |



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-18

## Concentrations of Chemicals in Soil Samples Associated with Sump 018

| [SUMP] = SUMP018                        |                                       |                  |                  | Concentrations             | of chemicals if  | 1 Son Samples A  | SSOCIALEU WILLI  | Sump v to        |                   |                        |                       |  |
|---|---------------------------------------|------------------|------------------|----------------------------|------------------|------------------|------------------|------------------|-------------------|------------------------|-----------------------|--|
| LOCATION _CODE                          |                                       | 35SUMP018-SB02   | 35SUMP037-SB01   | LH-S018-01                 | LH-S018-01       | LH-S018-01       | LH-S37-01        | LH-S37-01        | LH-WRS10-01       | LH-WRS10-01            | WRS10-SB02            | WRS10-SB02                             |
| SAMPLE_NO                               |                                       | 35-SMP18-SB02-02 | 35-SMP37-SB01-02 | LH-S018-01_1               | LH-S018-01_2     | LH-S018-01_3     | LH-S37-01_1      | LH-S37-01_2      | LH-WRS10-01_1     | LH-WRS10-01_2          | WRS10-SB02-01         | WRS10-S802-02                          |
| SAMPLE_DATE                             |                                       | 9/11/2006        | 9/9/2006         | 8/8/1993                   | 8/8/1993         | 8/8/1993         | 7/25/1993        | 7/25/1993        | 8/8/1993          | 8/8/1993               | 9/25/2006             | 9/25/2006                              |
| DEPTH                                   |                                       | 6-6Ft            | 4-4Ft            | 0.5-1.1 Ft                 | 1.1 - 1.6 Ft     | 5-6Ft            | 0.5 - 1 Ft       | 3 - 4.5 Ft       | 0.5 - 1 Ft        | 3.5-4 Ft               | 0.5 - 0.5 Ft          | 4.5 - 4.5 Ft                           |
| SAMPLE_PURPOSE                          |                                       | REG              | REG              | REG                        | REG              | REG              | REG              | HEG              | REG               | REG<br>Decult DR 10 VO | HEG<br>Donut Di LO VO | Regi IO VO                             |
| Lest Group                              | Parameter (Units = mg/kg)             | Hesuit dil LQ VU | Hesuit Dil Lu Vu | Result DIL LU VU           | Hesult Dil LO VU | HESUIT DIL LO VU | Hesuit Dil LU VU | Hesuit UIL LU VU | Nestar DAL LOU VO | nesole DIL LQ VQ       | 197 10 11 H           | 0.201 1 1 1                            |
| SEMIVOLADLES                            | 4-Ciricophenyi prenyi euler           |                  |                  |                            | 0.33 1 < 0       | 0.33 1 < 0       | 0.23 1 < 1/      |                  |                   | 0.33 1 < 11            | 1.87 10 11 11         | 0.201 1 11 11                          |
| SEMIVOLATILES                           | 4-Methylateros<br>A Nitropolino       |                  |                  | 165 1 < 1                  | 165 1 < 1        | 165 1 4 11       | 1.65 1 2 1       | 165 1 < 1        | 165 1 < 11        | 165 1 < 1              | 933 10 11 11          | 1 1 1 1                                |
| SEMIVOLATILES                           | 4-Nitronhenol                         | 1                |                  | 1.65 1 < 1                 | 1.65 1 < U       | 1.65 1 < 1       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 1        | 1.65 1 < U             | 9.33 10 U U           | 1100                                   |
| SEMIVOLATILES                           | Aceaaphthene                          |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Acenaphthylene                        | }                |                  | 0.33 1 < U                 | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Anthracene                            |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < ∛        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Berizo(a)antitxacene                  |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Benzo(a)pyrene                        |                  |                  | 0.33 t < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 t < U        | 0.33 1 < V             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Benzo(b)fluoranthene                  |                  |                  | 0.33 1 < U                 | 0.33 1 < ∜       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Benzo(ghi)perylene                    |                  |                  | 0.33 1 < U                 | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | -0.33 1 < U       | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Benzo(k)fluoranthene                  |                  |                  | 0.33 1 < U                 | 9.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 \$ < U       | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Benzoic Acid                          |                  |                  | 1.65 1 < U                 | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < U             | 9.33 10 U UJ          | 1 1 0 00                               |
| SEMIVOLATILES                           | Benzyl Alcohol                        |                  |                  | 0.65 1 < U                 | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < 0       | 0.65 1 < U        | 0.65 1 < 0             | 1.87 10 0 0           | 0.201 1 0 0                            |
| SEMIVOLATILES                           | bis(2-Chloroethoxy)methane            |                  |                  | 0.33 1 < 0                 | 0.33 1 < U       | 0.33 3 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 < 0             | 1.87 10 0 0           |  |
| SEMIVOLATILES                           | bis(2-Chioroelhyi)elher               |                  |                  | 0.33 1 < 0                 | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 9.33 1 < 0        | 0.33   < 0             | 1.67 10 0 0           | 0.201 1 10 0                           |
| SEMIVOLATILES                           | bis(2-Cinioroisopropyl)euter          |                  |                  | 0.33 1 < 0                 | 0.33 1 < 1       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 11      | 0.33 1 < 1        | 0.33 1 < 0             | 1.87 10 11 11         | 0.201 1 1 1                            |
| SEMIVOLATILES                           | Butul honnal ohthatate                |                  |                  | 0.33 1 2 31                |                  |                  | 0.33 1 < 1       | 0.33 1 < 1       | 0.33 1 < 1        |                        | 1.87 10 U U           | 0.201 1 1 1                            |
| SEMIVOLATILES                           | Christene                             |                  |                  | 0.33 1 < 0                 | 0.33 1 < 1       |                  | 0.33 1 < 1       | 0.33 t < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Oibenzo(a h)anthracene                |                  |                  | 0.33 1 < 8                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Dibenzohran                           |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Diethyl phthalate                     |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Dimethyl phthalate                    |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | di-n-Butyt philtralate                |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | - 0.33 1 < U           | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | di-n-Octyl phthalate                  |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Fluoranthene                          |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Fluorene                              |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | €.33 1 < U       | 0.33 1 < U       | 0.33 t < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Hexachiorobenzene                     |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 0 0                            |
| SEMIVOLATILES                           | Hexachtorobutadiene                   |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 0 0                            |
| SEMIVOLATILES                           | Hexachiorocyclopentadiene             | ]                |                  | 0.33 1 < 1                 | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33   < 0        | 0.33 1 < 0             | 1.87 10 0 0           | 0.201 1 0 0                            |
| SEMIVULATILES                           | Hexachioroemane                       |                  |                  | 0.33 1 < 0                 | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 I < U       | 0.33 1 < 0       |                   | 0.33 1 < 0             | 1.07 10 0 0           | 0.201 1 0 0                            |
| SEMBVOLATILES                           | indeno(-1,2,3-cu)pytene               |                  |                  |                            | 0.33 1 < 0       |                  | 0.33 1 < 1       |                  | 0.33 1 < 1        | 0.33 1 < 1             | 1.87 10 13 19         | 0201 1 1 1                             |
| SEMIVOLATILES                           | Naphthalene                           |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U        | 0.33 t < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Nitrobenzene                          |                  |                  | 0.33 t < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 t U U                            |
| SEMIVOLATILES                           | n-Nitroso-di-n-propylamine            |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 t U U                            |
| SEMIVOLATILES                           | n-Nitrosodiphenylamine                |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Pentachlorophenol                     |                  |                  | 1.65 1 < V                 | 1.65 1 < U       | 1.65 1 ≺ U        | 1.65 1 < U             | 9.33 10 U U           | 1 1 U U                                |
| SEMIVOLATILES                           | Phenanthrene                          |                  |                  | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Phenol                                |                  |                  | 0.33 t < U                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < ⊍             | 1.87 10 U U           | 0.201 1 U U                            |
| SEMIVOLATILES                           | Pyrene                                | 1                |                  | 0.33 1 < U                 | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < ⊍       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U             | 1.87 10 U U           | 0.201 1 U U                            |
| VOLATILES                               | 1,1,1,2-Tetrachlomethane              | 0.00501 1 U      |                  |                            |                  |                  |                  |                  |                   |                        |                       | 0.00614 1 U U                          |
| VOLATILES                               | 1,1,1-Trichloroethane                 | 0.00501 1 U      |                  | 0.005 1 < U                | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U       | 0.005 1 < U            |                       | 0.00614 1 U U                          |
| VOLATILES                               | 1,1,2,2-1 etrachloroethane            | 0.00501 1 0      |                  | 0.005 1 < U                | 9.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | U.U05 1 < U       | 0.005 1 < 0            |                       | 0.00014 1 0 0                          |
| VOLATILES                               | 1,1,2-1 INCINOTOCITAINE               |                  |                  | 0.003 I < U<br>0.00∈ + - + | 0.005 1 < U      | 0.005 t < U      | 0.000 I < U      | 0.005 I < U      | 0.005 1 < 0       | 0.00.0 1 < U           |                       | 0.00014 E U U<br>0.00614 E U U         |
|   | 1,+-Dichloroethane                    |                  |                  | U > 1 CUUU                 | 0.005 1 < U      | 0.005 1 < 0      | 0.000 t < U      | 0.005 1 < 0      | 0.005 1 < 0       | 0.005 1 - 11           |                       | 0.00014 1 0 0                          |
|   |                                       | 0.00501 1 0      |                  | 0.000 1 < U                | 1.000 I < U      | 0.00J I < U      |                  | 0.000 1 < 0      | 0.000 1 < 0       |                        |                       | 0.00614 1 1 1                          |
| VOLATILES                               | 1.2.3-Techiorobenzene                 | 0.00501 1 U      |                  |                            |                  |                  |                  |                  |                   |                        |                       | 0.00614 1 U U                          |
| VOLATILES                               | 1.2.3-Trichloropropane                | 0.00501 1 U      |                  |                            |                  |                  |                  |                  |                   |                        |                       | 0.00614 1 U U                          |
| VOLATILES                               | 1,2,4-Trichlorobenzene                | 0.00501 1 U      |                  |                            |                  |                  |                  |                  |                   |                        |                       | 0.00614 1 U U                          |
| VOLATILES                               | 1.2.4-Trimethylbenzene                | 0.00501 1 U      | -                |                            |                  |                  |                  |                  |                   |                        |                       | 0.00614 1 U U                          |
| VOLATILES                               | 1,2-Dibromo-3-chloropropane           | 0.00501 1 U      |                  |                            |                  |                  |                  |                  |                   |                        |                       | 0.00614 1 U U                          |
| VOLATILES                               | 1,2-Dibromoethane                     | 0.00501 1 U      |                  |                            |                  |                  |                  |                  |                   |                        |                       | 0.00614 1 U U                          |
| VOLATILES                               | 1,2-Dichlorobenzene                   | 0.00501 1 U      |                  |                            |                  |                  |                  |                  |                   |                        | •                     | 0.00614 1 U U                          |
| VOLATILES                               | 1,2-Dichloroethane                    | 0.00501 1 U      |                  | 0.005 1 < U                | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U       | 0.005 t < U            |                       | 0.00614 1 U U                          |
| VOLATILES                               | 1,2-Dichloroethene                    | 1                |                  | 0.005 1 < U                | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 t < U            |                       | 0.0004                                 |
| VOLATILES                               | 1,2-Dichloropropane                   | 0.00501 1 U      |                  | 0.005 t < U                | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U       | 0.005 1 < U            |                       | 0.00614 1 U U                          |
| VOLATILES                               | 1,2-Dimethylbenzene (o-Xylene)        | 0.00501 1 U      |                  |                            |                  |                  |                  |                  |                   |                        |                       | 0.00614 1 0 0                          |
| VOLATILES                               | 1,3,5-ITIMEUTyDenzene                 |                  |                  |                            | -                |                  |                  |                  |                   |                        |                       | 0.00014 1 0 0                          |
|   | 1.3-Dichiorogene                      | 0.00001 1 0      |                  | •                          |                  |                  |                  |                  |                   |                        |                       | 0.00614 1 11 11                        |
| VOLATILES                               | 1.4-Dichtombenzene                    | 0.00501 1 11     |                  |                            |                  |                  | -                |                  |                   |                        |                       | 0.00614 1 1 1                          |
| · • • • • • • • • • • • • • • • • • • • | · · · · · · · · · · · · · · · · · · · |                  |                  |                            |                  |                  |                  |                  |                   |                        |                       | ······································ |

| Shaw | Envir | onmental. | Inc |
|------|-------|-----------|-----|
|      |       |           |     |



5

Data Evaluation Report Chemical Concentrations in Soil Associated

|                  |   |                   |                         | Concentrations          | of Chemicals in  | n Soil Samples A         | ssociated with      | Sump 018                 |                 |                     |                  |                          |
|------------------|---|-------------------|-------------------------|-------------------------|------------------|--------------------------|---------------------|--------------------------|-----------------|---------------------|------------------|--------------------------|
| [SUMP] = SUMP018 |   |                   |                         |                         |                  |                          |                     | 111.007.04               | 11110040.01     |                     | 1400040 0000     | MOC10 CD00               |
| LOCATION_CODE    |   | 35SUMP018-SB02    | 35SUMP037-SB01          | LH-S018-01              | LH-S018-01       | LH-S018-01               | LH-S37-01           | LH-S37-01                | LH-WRSTU-UI     | LH-WHS10-01         | WHS10-5802       | WHS10-SB02               |
| SAMPLE_NO        |   | 35-SMP18-SB02-02  | 35-SMP37-SB01-02        | LH-S918-01_1            | LH-S018-01_2     | LH-S018-01_3             | LH-S3/-U1_1         | LH-53/-01_2              | LH-WH510-01_1   | 0/0/1002            | 0/05/0002-07     | 0/25/2006                |
| SAMPLE_DATE      |   | 9/11/2006         | 9/9/2006                | B/8/1993                | 8/8/1993         | 8/8/1993                 | 7/25/1993           | 7/25/1993                | 8/8/1993        | 8/6/1993            | 9/20/2000        | 9/20/2000<br>A.E. A.E.Et |
| DEPTH            |   | 6-6Ft             | 4-4F1                   | 0.5 - 1.1 H             | 1.1 - 1.6 Ft     | 5-6+1                    | 0.5-1 Ft            | 3÷4.5 FL                 | 0.5-1 F(        | 3.3-4-1             | 0.5-0.5 m        | 4.5-4.3 FL               |
| SAMPLE_PURPOSE   | Development of the second second                    | HEG NO. 10        | REG<br>Decide DIL LO MO | HEG<br>Derwith DB LO VO | HEG              | REG<br>Result Dill LO WO | Popult Dil I.A. 1/0 | ΠΕΟ<br>1 Ροομέ Βιέ ΙΟ ΙΟ | Recult DN LO VO | Recut DH to VO      | Result DI/ LO VO | Result DIE LO VO         |
| Test Group       | Parameter (Units = mg/kg)                           | HESLIA DAL LUI VU | Hesuit Dil LQ VU        | Result dil LQ VQ        | Hesuri Dil Lu Vu | HESUIT DIL LO2 VO2       | Result DAL EQ VU    | I THESUN UNL CUI VOI     | NESUR DE LO VO  |                     | ACSUN DIE EQ VQ  | 0.00614 1 11 11          |
| WULATILES        | 2,2-Dictiolog#upate                                 |                   |                         | nnst c li               | 0.05 t < li      | 0.05 1 2 1               |                     | 486 1 < I                | -0.05 1 < 11    | 1105 1 < U          |                  | 0.0123 1 11 11           |
| VOLATILES        | 2-Dukatione<br>3. Obtaroathyl wind ather            |                   |                         |                         |                  | 0.00 1 < 0               | 0.03 1 < 11         | 0.00 1 < U               | 0.01 1 < U      | 0.01 1 < U          |                  | 0.0123 1 U U             |
| VOLATILES        | 2-Chlorotoluono                                     | 0.01110           |                         | 0.01 1 4 0              | 0.05 1 4 0       | 0.01 1 1 1 0             |                     |                          |                 |                     |                  | 0.00614 1 U U            |
| VOLATILES        | 2-Herange   | 0.00001 1 11 11   |                         | 0.05 t < 11             | 0.05 1 < 18      | 0-05 1 c U               | 0.05 1 < 1/         | 0.05 1 < U               | 0.05 t < U      | 0.05 1 < U          |                  | 0.0123 1 U U             |
| VOLATILES        | 4-Chlorotoluene                                     | 0.01 1 0 00       |                         | 0.00 / 0                |                  |                          |                     |                          |                 |                     |                  | 0.00614 1 U U            |
| VOLATILES        | Acetone   | 0.01 1 1          |                         | 0.1 t < U               | 0.1 1 < U        | 0.1 1 < ⊎                | 0.1 1 < ⊎           | 0.1 1 < U                | 0,1 i < U       | 0.1 1 < U           |                  | 0.0123 1 U U             |
| VOLATILES        | Benzene   | 0.00501 1 U       |                         | 0.005 t < U             | 0.005 1 < U      | 0.005 1 < U              | 0.005 t < U         | 0.005 t < U              | 0.005 1 < U     | 0.005 1 < U         |                  | 0.00614 1 U U            |
| VOLATILES        | Bromobenzene  | 0.00501 1 U       |                         |                         |                  |                          |                     |                          |                 |                     |                  | 0.00614 1 U U            |
| VOLATILES        | Bromochloromethane                                  | 0.00501 1 U       |                         |                         |                  |                          |                     |                          |                 |                     |                  | 0.00614 1 U U            |
| VOLATILES        | Bromodichloromethane                                | 0.00501 t U       |                         | 0.005 1 < U             | 0.005 t < U      | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U              | 0.005 1 < U     | 0.005 1 < U         |                  | 0.00614 1 U U            |
| VOLATILES        | Bromoform   | 0.00501 t U       |                         | 0.005 1 < U             | 0.005 1 < U      | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U              | 0.005 1 < U     | 0.005 1 < U         |                  | 0.00614 1 U U            |
| VOLATILES        | Bromomethane  | 0.01 1 U          |                         | 0.01 1 < U              | 0.01 1 < U       | 0.01 1 < U               | 0.01 t < U          | 0.01 1 < U               | 0.01 1 < U      | 0.01 1 < U          |                  | 0.0123 1 U U             |
| VOLATILES        | Carbon disulfide                                    | 0.00501 I U       |                         | 0.005 1 < U             | 0.005 t < U      | 0.005 t < U              | 0.005 1 < U         | 0.005 1 < U              | 0.005 1 < U     | 0.005 1 < U         |                  | 0.00614 1 U U            |
| VOLATILES        | Carbon tetrachloride                                | 0.00501 1 U       |                         | 0.005 1 < U             | 0.005 1 < U      | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U              | 0.005 1 < U     | 0.005 1 < U         |                  | 0.00614 1 U U            |
| VOLATILES        | Chlorobenzene                                       | 0.00501 1 U       |                         | 0.005 t < U             | 0.005 t < U      | 0.005 1 < U              | 0.005 1 < U         | 0.005 t < U              | 0.005 1 < U     | 0.005 1 < U         |                  | 0.00614 1 U U            |
| VOLATILES        | Chloroethane  | 0.01 1 U          |                         | 0.01 1 < U              | 0.01 1 < U       | 0.01 1 < U               | 0.01 1 < U          | 0.01 1 < U               | 0.01 1 < U      | 0.01 1 < U          |                  | 0.0123 1 U U             |
| VOLATILES        | Chloroform  | 0.00501 1 U       |                         | 0.005 1 < U             | 0.005 1 < U      | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U              | 0.005 1 < U     | 0.005 1 < U         |                  | 0.00614 1 U U            |
| VOLATILES        | Chloromethane                                       | 0.01 1 U          |                         | 0.01 1 < U              | 0.01 1 < U       | 0.01 1 < U               | 0.01 1 < U          | 0.01 1 < U               | 0.01 1 < U      | 0.01 1 < U          |                  | 0.0123 1 U U             |
| VOLATILES        | cis-1,2-Dichloroethene                              | 0.00501 1 U       |                         |                         |                  |                          |                     |                          |                 |                     |                  | 0.00614 1 U U            |
| VOLATILES        | cis-1,3-Dichloropropene                             | 0.00501 1 U       |                         | 0.005 1 < U             | 0.005 1 < U      | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U              | 0.005 1 < U     | 0.005 1 < U         |                  | 0.00614 1 U U            |
| VOLATILES        | Dibromochloromethane                                | 0.00501 1 U       |                         | `0.005 1 < U            | 0.005 1 < U      | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U              | 0.005 1 < U     | 0.005 1 < U         |                  | 0.00614 1 U U            |
| VOLATILES        | Dibromomethane                                      | 0.00501 1 U       |                         |                         |                  |                          |                     |                          |                 |                     |                  | 0.00614 1 U U            |
| VOLATILES        | Dichlorodifluoromethane                             | 0.01 1 U          |                         |                         |                  |                          |                     |                          |                 |                     |                  | 0.0123 1 U U             |
| VOLATILES        | Ethylbenzene  | 0.00501 1 U       |                         | 0.005 1 < U             | 0.005 1 < U      | 0.005 1 < U              | 0.005 t < U         | 0.005 1 < U              | 0.005 1 < U     | $0.005 \ 1 \ < \ 0$ |                  | 0.00614 1 U U            |
| VOLATILES        | Hexachlorobutaciene                                 | 0.00501 1 U       |                         |                         |                  |                          |                     |                          |                 |                     |                  | 0.00614 1 U U            |
| VOLATILES        | Isopropylbenzene                                    | 0.00501 1 U       |                         |                         |                  |                          |                     |                          |                 |                     |                  | 0.00614 1 0 0            |
| VOLATILES        | m,p-Xylenes   | 0.00501 1 U       |                         |                         |                  |                          |                     |                          | 0.05 4 1        |                     |                  | 0.00614 1 U U            |
| VOLATILES        | Methyl isobutyl ketone                              | 0.01 1 U          |                         | 0.05 1 < U              | 0.05 1 < 0       | 0.05 1 < 0               | 0.05 1 < 0          | 0.05 1 < 0               | 0.05 1 < 0      | 0.05 1 < 0          |                  | 0.0123 1 0 0             |
| VOLATILES        | Methylene chlaride                                  | 0.00501 1 U       |                         | 0.005 1 < U             | 0.005 1 < U      | 0.005 1 < 0              | 0.005 1 < 0         | 0.005 T < 0              | 0.005 1 < 0     | 0.005 1 < 0         |                  | 0.00014 1 0 0            |
| VOLATILES        | Naphthalene   | 0.01 1 U          |                         |                         |                  |                          |                     |                          |                 |                     |                  | 0.0123 1 0 0             |
| VOLATILES        | n-BUTYLBENZENE                                      | 0.00501 1 U       |                         |                         |                  |                          |                     |                          |                 |                     |                  | 0.00014 1 0 0            |
| VOLATILES        | A-PROPYLBENZENE                                     | 0.00501 1 U       |                         |                         |                  |                          |                     |                          |                 |                     |                  | 0.00614 1 0 0            |
| VOLATILES        | P-ISOPROPYLIOLUENE                                  | 0.00501 1 U       |                         |                         |                  |                          |                     |                          |                 |                     |                  | 0.00614 1 11 11          |
| VOLATILES        | SEC-BUTYLBENZENE                                    | 0.00501 1 0       |                         | 0.005 1                 | 0.005 1 4 17     | 0.005 1 / 1              | 0.005 1 4 14        | 14 × 1 200.0             | 0.005 1 < 1     | 0.005 t < 11        |                  | 0.00614 1 11 11          |
| VOLATILES        | Stytene   | 0.00001 1 0       |                         | 9.000 1 < 0             | 0.005 1 < 0      |                          | 0.005 1 < 0         | 0.003                    | 2.003 1 C U     | 0.000 1 1 0         |                  | 0.00614 1 11 11          |
| VOLATILES        | Tetrables ethere                                    | 0.00001 1 1       |                         | 0.005 t . 11            | 0.005 t < 11     | 0.005 1 / N              | 0.005 1 2 11        | 0.005 1 - 11             | 0.0307 t        | 0.0272 1            |                  | 0.00614 1 1/ 1/          |
| VOLATILES        | Tetraca   | 0.00501 1 1       |                         | 0.005 1 < 0             | 0.005 1 < 1      | 0.005 1 < 0              | 0.005 1 < 0         | 0.005 1 < 0              | 0.005 1 < 1     | 0.005 1             |                  | 0.00614 1 If II          |
|                  | routene<br>trans 1 2 Bishlaraathana                 | 0.00501 1 0       |                         | 0.000 1 < U             |                  | 0.000 1 1 1 0            | 0.000 1 1 0         | 0.000 / 1 1 0            | 0.000 1 1 1     | 0.000 1 1 0         |                  | 0.00614 1 U U            |
|                  | trans-1,2-0301000000000                             | 0.00501 1 0       |                         | 0.005 1 - 1             | 0.005 t 2 t      | 0.005 1 2 1              | 0.005 1 < 11        | 0-005 1 < H              | 0.005 1 < 11    | 0.005 1 < 13        |                  | 0.00614 1 U U            |
|                  | varishi, shuruni un upi upi cinc<br>Trichlanaethene | 0.00501 1 0       |                         | 0.005 1 2 31            | 0.005 1 - 11     | 6.605 1 2 1              | 1005 t < 1          | 0.005 1 < 1              | 0.005 1 < 11    | 0.005 1 < 1         |                  | 0.00614 1 U U            |
|                  | Techicrofivoromethano                               |                   |                         |                         | 0.000 1 1 1 0    | 0.000 1 1 0              |                     |                          |                 |                     |                  | 0.0123 1 U U             |
| VOLATILES        | Vinsi acetata                                       |                   |                         | 0.05 1 2 11             | 0.05 1 2 11      | 0.05 t 📿 D               | 0.05 t < 1          | 0.05 1 < 1               | 0.05 t < U      | 0.05 1 < 11         |                  | 0.0123 1 U U             |
| VOLATILES        | Viny accure   |                   |                         | 0.01 1 2 11             | 0.01 1 2 11      |                          |                     | 0.01 1 < 11              | 0.01 1 < 1      | 0.01 1 < 1          |                  | 0.0123 1 U U             |
| VOLATILE         | Yudonae Tatal                                       | 0.01 1 0          |                         | 0.05 1 2 1              | 0.005 1 < 11     | 0.005 1 2 1              | 0.005 t < H         | 0.005 1 < 1              | 0.005 t < U     | 0.005 1 < U         |                  | ····· · · ·              |

VOLATILES VOLATILES Xylenes, Total Footnotes are shown on cover page to Tables Section. Shaw Environmental, Inc.





| Table 3-19   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 019 |

| [SUMP] = SUMP019               |                            |         |       |       |     |        |       |     |      |         |       |    |           |       |                  | ~ 4    |         | 10       | e ( n n |    |      | 11.0   | 210.0  | ,            |     |
|--------------------------------|----------------------------|---------|-------|-------|-----|--------|-------|-----|------|---------|-------|----|-----------|-------|------------------|--------|---------|----------|---------|----|------|--------|--------|--------------|-----|
| LOCATION _CODE                 | 35SUM                      | 2019    | -\$80 |       | (H- | S19-0  | )1    |     | LH-S | 19-01   | _     |    | LH        | 519   | 01               |        | 101     | 019-0    | 2       |    | 10.0 | 10-02  | ÷<br>, |              |     |
| SAMPLE_NO                      |                            | 35-SMP1 | 9-S   | B01-0 | 2   | LH-S   | 19-01 | 1_1 |      | LH-S1   | 9-01_ | ,2 |           | LH-   | 519-             | Q1<br> |         | UT-3     | 2/1002  | -  |      | 8/6    | /1007  | - <u>-</u> - |     |
| SAMPLE_DATE                    |                            | 9/9     | /200  | 6     |     | 8/6    | /1993 | 3   |      | 8/6/    | 993   |    |           | 8/    | 6199             | 3      |         | 6/1<br>2 | 1990    |    |      | 6.     | E 6 C  |              |     |
| DEPTH                          |                            | 5.5     | - 6   | t     |     | 1.5    | • 2 F | ł   |      | 5-5     | 5 Ft  |    |           | 1     | • 1.5  <br>===== | -1     |         | 1        |         | 1  |      |        | 3.9 Fi |              |     |
| SAMPLE_PURPOSE                 |                            | F       | IEG   |       |     | F      | REG   |     |      | R       | EG    |    |           |       | REG              |        |         | Decide   |         | 10 | vo   | Docult | nit    | · O ·        | VO  |
| Test Group                     | Parameter (Units = mg/kg)  | Result  | DIL   | LQ    | VQ  | Result | DIL   | ιa  | VQ   | Result  | DIL   | LQ | <u>vq</u> | Hesun | DR               |        | - 10    | Hesun    |         |    | 11   | 0.33   | 1      |              |     |
| EXPLOSIVES                     | 2,4-Dinitrotoluene         |         |       |       |     | 0.33   | 1     | <   | U    | 0.33    | 1     | <  | 0         | 3.3   | 1                | ۲      | 00      | 0.33     |         | 5  |      | 0.00   |        | 2            | ů.  |
| EXPLOSIVES                     | 2.6-Dinitrotoluene         |         |       |       |     | 0.33   | ١     | <   | U    | 0.33    | 1     | <  | Ų         | 3.3   | 1                | <      | υp      | 0.33     | 1       | <  | U    | 1600   | 1      | •            | Û   |
| METALS                         | Aluminum                   | 8670    | 1     |       |     | 1540   | 1     |     |      | 17000   | 1     |    |           | 970   | 1                |        |         | 1590     | 1       |    |      | 1530   |        |              | D   |
| METALS                         | Antimony                   | 0.0653  | 1     | Ч     | J   | 3      | 1     | <   | U    | 3       | 1     | <  | U         | 3     | 1                | <      | U       | 3        | 1       | <  |      | 3      |        | <            | U   |
| METALS                         | Arsenic                    | 1.58    | 1     |       |     | 1      | 1     | <   | U    | 3.4     | 1     |    |           | 1     | 1                | <      | U       | 1        | 1       | <  | u    | 4.6    | 2      |              |     |
| METALS                         | Barium                     | 123     | 1     |       |     | 130    | 1     |     |      | 1110    | 1     |    |           | 63.6  | 1                |        |         | 196      | 1       |    |      | 393    | 1      |              |     |
| METALS                         | Beryllium                  | 0.673   | 1     |       |     |        |       |     |      |         |       |    |           |       |                  |        |         |          |         |    |      |        |        |              |     |
| METALS                         | Cadmium                    | 0.131   | 1     | J     | J   | 1      | 1.1   | <   | U    | 1       | វ     | <  | U         | 1     | 1                | <      | U       | 1        | 1       | <  | U    | 1      | 1      | <            | 0   |
| METALS                         | Calcium                    | 945     | 1     |       | J   | 918    | 1     |     |      | 1710    | 1     |    |           | 176   | 1                |        |         | 1190     | 1       |    |      | 1720   | 1      |              |     |
| METALS                         | Chromium                   | 10.6    | ٢     |       |     | 21.5   | 1     |     |      | 19.2    | 1     |    |           | 2.3   | 1                |        |         | 4.3      | 1       |    |      | 17     | ١      |              |     |
| METALS                         | Cobalt                     | 7.98    | 1     |       | ل   | 1,1    | 1     |     |      | 10.B    | 1     |    |           | 1     | 1                |        |         | 1        | 1       |    |      | 7.4    | 1      |              |     |
| METALO                         | Copper                     | 5.01    | 1     |       |     | 3.2    | 1     |     |      | 7,1     | 1     |    |           | 2.1   | 1                |        |         | 3.1      | 1       |    |      | 6      | 1      |              |     |
|                                | licen                      | 14900   | 1     |       |     | 3630   | 1     |     |      | 20800   | 1     |    |           | 844   | 1                |        |         | 1930     | 1       |    |      | 19200  | 1      |              |     |
| NETALO                         |                            | 7 47    | í     |       | а   | 3      | 1     |     |      | 9,4     | i     |    |           | 1,7   | 1                |        |         | 1.9      | 1       |    |      | 10     | 1      |              |     |
| METALS                         | Ledo                       | 1290    | 1     |       | 2   | 92.6   | 1     |     |      | 2100    | 1     |    |           | 53.9  | 1                |        |         | 123      | 1       |    |      | 1580   | 1      |              |     |
| METALS                         | Magnesium                  | 00.2    | ÷     |       |     | 26.4   | ;     |     |      | 149     | 1     |    |           | 8.3   | 1                |        |         | 20       | 1       |    |      | 153    | 1      |              |     |
| METALS                         | Manganese                  | 0.294   | ÷     | 11    |     | 0.1    | ÷     |     | ч    | 01      | 1     | ~  | Ð         | 0.1   | t                | <      | U       | 0.1      | 1       | <  | U    | 0.1    | 1      | <            | U   |
| METALS                         | Mercury                    | 0.204   | ÷     | U     |     | 0.1    |       |     | Ŷ    | 5       |       |    | -         |       |                  |        |         |          |         |    |      |        |        |              |     |
| METALS                         | NICKEI                     | 470     | 1     |       |     | 110    |       |     |      | 753     | 1     |    |           | 76.1  | 1                |        |         | 132      | 1       |    |      | 657    | 1      |              |     |
| METALS                         | Polassium                  | 473     | 1     |       |     | 110    | 4     |     | н    | 700     | ÷     | ,  | Ħ         | 1     | 1                |        | в       | 1        | 1       | <  | U    | 1      | 1      | <            | Ų   |
| METALS                         | Selenium                   | 0.177   | 1     | J     | J   |        | 1     | ۲.  | 0    |         | ÷     | 2  |           | į     | i                | 2      | ы.<br>П |          | 1       | <  | Ű    | 1      | 1      | <            | U   |
| METALS                         | Silver                     | 1.71    | 1     | Ų     |     | •      | ł     | <   | υ.   | 1       | '     | •  | v         | •     |                  | `      | J       |          |         |    | -    |        |        |              |     |
| METALS                         | Sodium                     | 338     | 1     |       |     |        |       |     |      | 40.0    |       |    |           | •     | 4                |        |         | 4 8      | 1       |    |      | 29.6   | 1      |              |     |
| METALS                         | Strontium                  |         |       |       |     | 4.9    | 1     |     |      | 32.0    | 1     |    |           | د     |                  |        |         | 4.0      | ,       |    |      |        |        |              |     |
| METALS                         | Thailium                   | 0.0886  | 1     |       |     |        |       |     |      |         |       |    |           |       |                  |        |         |          |         |    |      |        |        |              |     |
| METALS                         | Vanadium                   | 17.1    | 1     |       |     |        |       |     |      |         |       |    |           |       |                  |        |         | 24.5     | 4       |    |      | 285    | 1      |              |     |
| METALS                         | Zinc                       | 39.2    | 1     |       |     | 9      | 1     |     |      | 35.7    | 1     |    |           | 6.0   |                  |        | 00      | 0.92     | •       |    | ы    | 0.93   | 1      |              | в   |
| SEMIVOLATILES                  | 1,2.4-Trichlorobenzene     | 1       |       |       |     | 0.33   | 1     | ۲   | U    | 0.33    | 1     | <  | 0         | 3.3   |                  | <      | 00      | 0.00     | -       |    |      | 0.00   | ÷      | 2            | ŭ   |
| SEMIVOLATILES                  | 1,2-Dichiorobenzene        |         |       |       |     | 0.33   | 1     | <   | U    | 0.33    | 1     | <  | U<br>U    | 3,3   | 1                | <      | 00      | 0.33     | -       | 5  |      | 0.00   | 4      | 2            | 11  |
| SEMIVOLATILES                  | 1,3-Dichlorobenzene        |         |       |       |     | 0.33   | 1     | <   | U    | 0.33    | 1     | <  | U         | 3.3   | 1                | <      | 00      | 0.33     | }       | •  |      | 0.00   | ł      | 2            | ŭ   |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene        |         |       |       |     | 0.33   | 1     | <   | U    | 0.33    | 1     | <  | U         | 3.3   | 1                | <      | 00      | 0.33     | 1       | <  | 0    | 0.33   | 2      |              |     |
| SEMIVOLATILES                  | 2.4.5-Trichlorophenol      | ļ       |       |       |     | 1.65   | 1     | <   | U    | 1.65    | 1     | <  | U         | 16.5  | 1                | <      | 00      | 1.65     | 1       | <  |      | 1.00   |        |              |     |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol      |         |       |       |     | 0.33   | 1     | <   | U    | 0.33    | 1     | <  | U         | 3.3   | 1                | <      | UD      | 0.33     | 1       | <  | 0    | 0.33   | 1      | <            |     |
| SEMIVOLATILES                  | 2,4-Dichlorophenol         |         |       |       |     | 0.33   | 1     | <   | U    | 0.33    | 1     | <  | U         | 3.3   | 1 1              | <      | υο      | 0.33     | 3       | <  | U.   | 0.33   | 1      | <            | 0   |
| SEMIVOLATILES                  | 2.4-Dimethylphenol         |         |       |       |     | 0.33   | 1     | <   | U    | 0.33    | 1     | <  | U         | 3.3   | 1                | <      | ŲC      | 0.33     | 1       | <  | 0    | 0.33   | 1      | <            | U.  |
| SEMIVOLATILES                  | 2.4-Dinitrophenol          | l       |       |       |     | 1.65   | 1     | <   | IJ   | 1.65    | 1     | <  | Ų         | 16.5  | 1                | <      | UC      | 1.65     | 1       | <  | U    | 1,65   | 1      | <            | U U |
| SEMIVOLATILES                  | 2-Chloronaphthaiene        |         |       |       |     | 0.33   | 1     | ۲   | U    | 0.33    | 1     | <  | U         | 3.3   | 1 1              | 4      | UC      | 0.33     | 1       | <  | U    | 0.33   | 1      | <            | U.  |
| SEMIVOLATILES                  | 2-Chlorophenol             |         |       |       |     | 0.33   | 1     | <   | U    | 0.33    | 1     | <  | υ         | 3.3   | 3 1              | <      | UD      | 0.33     | 1       | <  | U    | 0.33   | 1      | <            | Ų   |
| SEMIVOLATILES                  | 2-Methylnanhthalene        |         |       |       |     | 0.33   | 1     | <   | U    | 0.33    | 1.    | <  | U         | 3,3   | 1                | ~      | . UC    | ) Q.33   | 1       | <  | ŋ    | 0.33   | 1      | <            | U   |
| SEMIVOLATILES                  | 2-Methylohenol             | ļ       |       |       |     | 0.33   | 1     | <   | U    | 0.33    | 1     | <  | U         | 3.3   | 3 1              |        | UT      | 0.33     | 1       | <  | U    | 0.33   | 1      | <            | U   |
| SEMINOLATILES                  | 2-Nitroapilina             |         |       |       |     | 1.65   | 1     | <   | U    | 1.65    | 1     | <  | ម         | 16.5  | 51               |        | : UE    | 1.65     | i 1     | <  | U    | 1,65   | 1      | <            | U   |
| SEMINOLATILES                  | 2-Nitrophenol              |         |       |       |     | 0,33   | 1     | <   | υ    | 0.33    | 1     | <  | U         | 3.3   | 3 1              | •      | : UÉ    | ) 0.33   | 1       | <  | υ    | 0.33   | 1      | <            | U   |
| SEMIVOLATILES                  | 3.3"-Olchlorobeozidine     | ļ       |       |       |     | 0.65   | 1     | <   | U    | 0.65    | 1     | <  | U         | 6.5   | 5 1              |        | : VC    | 0.65     | i 1     | <  | U    | 0.65   | 1      | <            | U   |
| CENTROLATE EC                  | 3.Nitroaniline             | 1       |       |       |     | 1.65   | ť     | <   | U    | 1.65    | 1     | <  | U         | 16.8  | 51               | •      | : UE    | ) 1.68   | ; 1     | <  | U    | 1.65   | 1      | <            | Ð   |
| CEMINOLATILES                  | 4 6.Dinitro-2-methylaberol |         |       |       |     | 1.65   | 1     | <   | U    | 1.65    | 1     | <  | U         | 16.   | 51               |        |         | ) 1.69   | 5 1     | <  | . U  | 1.65   | 1      | ۲            | U   |
| SEMINOLATILES<br>SEMINOLATILES | d-Bromonbanul oberul ether | Į       |       |       |     | 0.33   | 1     | <   | Ű    | 0.33    | 1     | <  | U         | 3.    | 3 1              |        | : ប     | 0.3      | 3 1     | <  | บ    | 0.33   | 1      | <            | U   |
| CONTRUCT ATTER                 | 4-Chloro-3-mothylphonel    |         |       |       |     | 0.65   | 1     | ~   | Ū    | 0.65    | 1     | <  | Ű         | 6.    | 51               |        | < U     | 0.6      | i 1     | <  | U    | 0.65   | 1      | <            | U   |
| OEMIYULATILEO                  | 4-Onioro-o-meanyphend(     | 1       |       |       |     | 0.65   | ÷     | è   | Ū    | 0.65    | 1     | <  | ປ         | 6.    | 51               |        | < UI    | 0.6      | 5 1     | <  | U    | 0.65   | 1      | <            | U   |
| SEMIVOLATILES                  | 4*U18010a310018            | 1       |       |       |     | 0.00   |       | •   |      | <b></b> | -     |    |           |       |                  |        |         |          |         |    |      |        |        |              |     |

Data Evaluation Report

Chemical Concentrations In Soil Associated with LHAAP-35/36 Sumps



| Table 3-19   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 019 |

| [SUMP] = SUMP019 |                               |                  |                  |                  |                  |                  | 111 040 00       |
|------------------|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                               | 35SUMP019-SB01   | LH-S19-01        | LH-S19-01        | LH-S19-01        | LH-S19-02        | LH-ST9-02        |
| SAMPLE_NO        |                               | 35-SMP19-SB01-02 | LH-S19-01_1      | LH-S19-01_2      | LH-S19-01        | LH-S19-02_1      | CH-519-02_2      |
| SAMPLE_DATE      |                               | 9/9/2006         | 8/6/1993         | 8/6/1993         | 8/6/1993         | 8/6/1993         | 8/6/1993         |
| DEPTH            |                               | 5.5 - 6 Ft       | 1.5 - 2 Ft       | 5 - 5.5 Ft       | 1 - 1.5 Ft       | 1 • 1.5 Ft       | 5+5.5Ft          |
| SAMPLE_PURPOSE   |                               | REG              | REG              | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)     | Result DIL LQ VO | Result DIL LO VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VO |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether   |                  | 0.33 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | -0.33 1 < U      | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Methylphenol                |                  | 0,33 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | 4-Nitroaniline                |                  | 1.65 1 < U       | 1.65 1 < U       | 16.5 1 < UD      | 1.65 1 < U       | 1.65 1 < 0       |
| SEMIVOLATILES    | 4-Nitrophenol                 |                  | 1,65 1 < U       | 1.65 1 < U       | 16.5 1 < UD      | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | Acenaphthene                  | 1                | 0.33 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Acenaphthylene                |                  | 0.33 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Anthracene                    |                  | 0.33 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(a)anthracene            |                  | 0.33 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(a)pyrene                |                  | 0.33 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(b)fluoranthene          |                  | 0.33 1 < U       | 0,33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(ghi)perviene            |                  | 0.33 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(k)fluoranthene          |                  | 0.33 1 < U       | 0,33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzoic Acid                  |                  | 1.65 1 < U       | 1.65 1 < U       | 16.5 1 < UD      | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | Benzyl Alcohol                | ļ                | 0.65 1 < U       | 0.65 1 < U       | 6.5 1 < UD       | 0.65 i < U       | 0.65 1 < U       |
| SEMIVOLATILES    | his (2, Chloroethoxy) methane |                  | 0.33 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 < U       |
| SCHIVOLATILES    | his/2-Chioroethyliether       | 1                | 0.33 1 < 0       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 < U       |
| SEMINOLATILES    | his (2-Chloroisonrond) ather  |                  | 033 1 < U        | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Sthuthows0abtbalate     |                  | 0.33 1 < 1       | 0.33 1 < U       | 3.3 1 < U        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Dist2*Calignexy(photalate     |                  | 0.33 1 < 15      | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 < U       |
| SEMINOLATILES    | Character Character           |                  | 0.33 1 < 11      | 0.33 1 4 1       | 33 1 < UD        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Disassa (s. k) anih (s. ani)  |                  | 0.33 1 < 0       | 0.33 1 < 11      | 33 1 < UD        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Dibenzola,njaninracene        |                  | 0.03 1 4 0       | 0.22 1 4 11      | 33 1 < UD        | 0.33. 1 ¢ U      | 0.33 1 < U       |
| SEMIVOLATILES    | Dipenzoturan                  |                  | 0.00 1 4 0       | 0.33 1 < 1       | 33 1 4 10        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Diethyl primalate             |                  |                  | 0.03 1 4 1       | 33 1 4 10        | 0.33 1 × U       | 0.33 1 < U       |
| SEMIVOLATILES    | Ulmetnyi phinalate            |                  | 0.00 1 < 0       | 0.30 1 4 11      | 13 1 4 11        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | di-n-Butyi phinalate          |                  | 0.33 1 4 1       | 0.00 1 2 1       | 33 1 × UD        | 0.33 1 < 1       | 0.33 1 < U       |
| SEMIVOLATLES     | di-n-Octyl potnalate          |                  | 0.33 1 4 0       | 0.03 1 < 0       | 33 1 < 10        | 0.33 1 < 1       | 0.33 1 < U       |
| SEMIVOLATILES    | Fluoranthene                  |                  | 0,33 1 < 0       | 0.00 1 < 0       | 33 1 400         | 0.33 1 < 1       | 0.33 1 < U       |
| SEMIVOLATILES    | Fluorene                      |                  | 0.33 1 < 0       | 0.00 1 4 12      | 22 1 4 10        | 0.33 1 < 11      | 0.33 1 < 1       |
| SEMIVOLATILES    | Hexachlorobenzene             |                  | 0,33 1 < U       | 0.03 1 < 0       | 3.3 1 < 00       | 0.33 1 < 13      | 0.33 1 < 11      |
| SEMIVOLATILES    | Hexachlorobutadiene           |                  | 0.33 1 < 0       | 0.00 1 - 1       | 33 1 < 00        | 0.93 1 < 1       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachiorocyclopentadrene     |                  | 0.33 1 < 0       |                  | 0.0 1 < UD       | 0.00 1 4 1       | 033 1 4 1        |
| SEMIVOLATILES    | Hexachioroethane              |                  | 0.33 1 < 0       | 0.03 1 2 0       | 3,3 1 4 00       |                  | 0.33 1 4 1       |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene        |                  | 0,33 1 < 0       | 0.33 1 < 0       | 0.0 1 × UD       | 0.00 1 < 0       | 0.93 1 < 1       |
| SEMIVOLATILES    | isophorone                    |                  | 0.33 1 < 0       | 0.33 1 < 0       | 3.3 1 < UD       | 0.00 1 < 0       |                  |
| SEMIVOLATILES    | Naphthalene                   |                  | 0.33 1 < 0       | 0.33 1 < 0       | 3.3 1 < 00       | 0.33 1 < 0       |                  |
| SEMIVOLATILES    | Nitrobanzene                  |                  | 0.33 1 < U       | 0.33 1 < 0       | 3.3 1 < 00       | 0.33 1 2 0       |                  |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine    |                  | 0.33 1 < 0       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine        |                  | 0.33 1 < U       | 0.33 1 < 0       | 3.3 1 < 00       | 0,33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Pentachlorophenol             |                  | 1,65 1 < U       | 1,65 1 < U       | 16.5 1 < UD      | 1,65 1 < 0       | 1.65 1 < 0       |
| SEMIVOLATILES    | Phenanthrene                  |                  | 0.33 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | Phenol                        |                  | 0.33 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES    | Pyrene                        |                  | 0:33 1 < U       | 0.33 1 < U       | 3.3 1 < UD       | 0.33 1 < 0       | 0.33 1 < U       |
| VOLATILES        | 1.1.1-Trichloroelhane         |                  | 0.005 1 < U      | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,1,2,2 Tetrachloroethane     | 1                | 0.005 1 < U      | 0,005 1 < U      | 0.025 1 < UD     | .0.005 1 < U     | 0.005 1 < U      |
| VOLATILES        | 1,1.2-Trichloroethane         | 1                | 0.005 1 < U      | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U      | 0.005 1 < V      |
| VOLATILES        | 1.1 Dichloroethane            |                  | 0.005 1 < 0      | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichloroethene            |                  | 0.005 1 < L      | 0.005 1 < U      | 0.025 1 < UD     | • 0.005 1 < U    | 0.005 1 < U      |
|                  |                               |                  |                  |                  |                  |                  |                  |



## Table 3-19 Concentrations of Chemicals in Soil Samples Associated with Sump 019

| (SUMP) = SUMP019 |                           |        |            |      |        |        |      |    |        |       |     |    |        |       |    |    |        |       |     |    |        |        |     |    |
|------------------|---------------------------|--------|------------|------|--------|--------|------|----|--------|-------|-----|----|--------|-------|----|----|--------|-------|-----|----|--------|--------|-----|----|
| LOCATION _CODE   |                           | 35SL   | IMP019-S   | B01  | LH:    | I-S19  | -01  |    | ξH-3   | S19-0 | 1   |    | LH     | -\$19 | 01 |    | LH     | -S19  | -02 |    | LH     | -\$19- | 02  |    |
| SAMPLE_NO        |                           | 35-SM  | AP19-SBC   | 1-02 | LH-    | S19-0  | )1_1 |    | LH-S   | 19-01 | _2  |    | LH     | -S19  | 01 |    | ιH-    | 519-( | 2_1 |    | LH-    | S19-0  | 2_2 |    |
| SAMPLE_DATE      |                           |        | 9/9/2006   |      | 8      | /6/199 | 93   |    | 8/6    | V1993 | 3   |    | 8      | 6/199 | 3  |    | 8/     | 6/199 | 33  |    | 8      | 6/199  | 3   |    |
| DEPTH            |                           |        | 5.5 - 6 Ft |      | 1      | .5 • 2 | Ft   |    | 5.     | 5.5 F | t   |    | 1      | - 1,5 | Ft |    | 1      | 1.5   | Ft  |    | 5      | 5.5    | -t  |    |
| SAMPLE_PURPOSE   |                           |        | REG        |      |        | REG    |      |    | F      | REG   |     |    |        | REG   |    |    |        | REG   |     |    |        | REG    |     |    |
| Test Group       | Parameter (Units = mg/kg) | Result | DIL L      | Q VQ | Result | DIL    | LQ   | VQ | Result | DIL   | LQ  | VQ | Result | DIL   | LQ | VQ | Result | DIL   | LQ  | VQ | Result | DIL    | LQ  | VQ |
| VOLATILES        | 1.2-Dichloroethane        |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | Ų  | 0,025  | 1     | <  | UD | 0.005  | 1     | <   | Ų٠ | 0.005  | 1      | <   | U  |
| VOLATILES        | 1.2-Dichloroethene        |        |            |      | 0.005  | 1      | <    | Ų  | 0.005  | 1     | <   | U  | 0,025  | 1     | <  | UD | 0.005  | 1     | <   | U  | 0.005  | 1      | <   | U  |
| VOLATILES        | 1.2-Dichloropropane       |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  | 0.025  | ۱     | <  | UD | 0.005  | 1     | <   | U  | 0.005  | 1      | <   | U  |
| VOLATILES        | 2-Butanone                |        |            |      | 0.05   | 1      | <    | Ų  | 0.05   | 1     | <   | U  | 0.25   | 1     | <  | UD | 0.05   | 1     | <   | U  | 0.05   | 1      | <   | U  |
| VOLATILES        | 2-Chloraethyl vinyl ether |        |            |      | 0.01   | 1      | <    | U  | 0.01   | 1     | <   | U  | 0.05   | 1     | <  | UD | 0.01   | 1     | <   | u  | 0.01   | 1      | <   | U  |
| VOLATILES        | 2-Hexanone                |        |            |      | 0.05   | 1      | <    | U  | 0.05   | វ     | <   | U  | 0.25   | 1     | <  | UD | 0.05   | 1     | <   | U  | 0.05   | 1      | ۲   | U  |
| VOLATILES        | Acetone                   |        |            |      | 0.1    | 1      | <    | U  | 0,1    | 1     | <   | U  | 0,5    | 1     | <  | UD | 0.1    | 1     | <   | U  | 0.1    | 1      | <   | U  |
| VOLATILES        | Benzene                   |        |            |      | 0.005  | 1      | <    | Ų  | 0.005  | i     | <   | Ų  | 0.025  | 1     | <  | UD | 0.005  | 1     | <   | U  | 0.005  | 1      | <   | U  |
| VOLATILES        | Bromodichloromethane      |        |            |      | 0.005  | 1      | <    | ប  | 0.005  | 1     | <   | U  | 0.025  | 1     | <  | UD | 0.005  | 1     | <   | U  | 0.005  | 1      | <   | U  |
| VOLATILES        | Bromoform                 |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  | 0.025  | 1     | <  | UÐ | 0.005  | 1     | <   | U  | 0.005  | 1      | <   | U  |
| VOLATILES        | Bromomethane              |        |            |      | 0.01   | 1      | <    | U  | 0.01   | 1     | <   | U  | 0.05   | 1     | <  | UD | 0,01   | 1     | <   | U  | 0.01   | 1      | <   | U  |
| VOLATILES        | Carbon disulfide          |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  | 0.025  | 1     | <  | UD | 0.005  | 1     | <   | υ  | 0.005  | 1      | <   | U  |
| VOLATILES        | Carbon tetrachloride      |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  | 0,025  | 1     | <  | UD | 0.005  | i     | <   | ម  | 0.005  | 1      | <   | U  |
| VOLATILES        | Chlorobenzene             |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | ۲   | U  | 0.0264 | 1     |    | D  | 0.005  | 1     | <   | U  | 0.005  | 1      | <   | U  |
| VOLATILES        | Chloroethane              |        |            |      | 0.01   | 1      | <    | U  | 0.01   | 1     | <   | υ  | 0.05   | 1     | <  | UD | 0.01   | 1     | <   | U  | 0.01   | 1      | <   | U  |
| VOLATILES        | Chioroform                |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  | 0.025  | 1     | <  | UD | 0.005  | 1     | <   | U  | 0.005  | 1      | <   | U  |
| VOLATILES        | Chioromethans             | 1      |            |      | 0.01   | 1      | <    | U  | 0.01   | 1     | <   | U  | 0.05   | 1     | <  | UD | 0.01   | 1     | <   | Ų  | 0.01   | 1      | <   | Ų  |
| VOLATILES        | cis-1,3-Dichloropropena   |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  | 0.025  | 1     | <  | UD | 0.005  | 1     | <   | U  | 0.005  | 1      | <   | U  |
| VOLATILES        | Dibromochloromethane      |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  | 0.025  | 1     | <  | UD | 0.005  | 1     | <   | Ų  | 0.005  | 1      | <   | U  |
| VOLATILES        | Ethylbenzene              |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  | 0.025  | 1     | <  | UD | 0.005  | 1     | <   | U  | 0.005  | 1      | <   | U  |
| VOLATILES        | Methyl isobutyl ketone    |        |            |      | 0.05   | 1      | <    | U  | 0.05   | 1     | <   | υ  | 0.25   | 1     | <  | UD | 0.05   | 1     | <   | U  | 0.05   | 1      | <   | U  |
| VOLATILES        | Methylene chloride        |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | IJ | 0.025  | 1     | <  | UD | 0,005  | 1     | <   | U  | 0.005  | 1      | <   | ป  |
| VOLATILES        | Styrene                   |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  | 0.025  | 1     | <  | UD | 0.005  | 1     | <   | U  | 0.005  | ١      | <   | U  |
| VOLATILES        | Tetrachloroethene         |        |            |      | 0.005  | 1      | <    | IJ | 0.005  | 1     | <   | Ų  | 0.025  | 1     | <  | UD | 0.005  | 1     | <   | U  | 0.005  | 1      | <   | U  |
| VOLATILES        | Toluene                   |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  | 0.025  | 1     | <  | UD | 0.005  | ۱     | <   | U  | 0.005  | 1      | <   | U  |
| VOLATILES        | frans-1,3-Dichloropropene | Į      |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  | 0.025  | 1     | <  | ŲD | 0.005  | 1     | <   | U  | 0.005  | 1      | <   | U  |
| VOLATILES        | Trichlorosthene           | · ]    |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  | 0.025  | 1     | <  | ŲÐ | 0.005  | 1     | <   | U  | 0.005  | 1      | <   | Ų  |
| VOLATILES        | Vinyl acetate             | 1      |            |      | 0.05   | 1      | <    | U  | 0.05   | 1     | <   | U  | 0.25   | 1     | <  | ŲD | 0,05   | 1     | <   | U  | 0.05   | 1      | <   | ΞU |
| VOLATILES        | Vinyl chloride            |        |            |      | 0.01   | 1      | <    | U  | 0.01   | 1     | <   | U  | 0.05   | 1     | <  | UD | 0.01   | 1     | <   | U  | 0.01   | 1      | <   | U  |
| VOLATILES        | Xylenes, Total            |        |            |      | 0.005  | 1      | <    | U  | 0.005  | 1     | · < | U  | 0.025  | 1     | <  | UD | 0.005  | 1     | <   | U  | 0.005  | 1      | <   | Ų  |

Footnotes are shown on cover page to Tables Section.



# Table 3-20 Concentrations of Chemicals in Soil Samples Associated with Sump 020

| [SUMP] = SUMP020 |   |        |          |      |        |          |      |             |         |            |        |          |          |         |             |          |      |        |          |          |      |                      |                    |
|------------------|---|--------|----------|------|--------|----------|------|-------------|---------|------------|--------|----------|----------|---------|-------------|----------|------|--------|----------|----------|------|----------------------|--------------------|
| LOCATION _CODE   |   | 35SUM  | IP020-SE | 101  | 35SUM  | P020-S8  | 01   | EH-         | S20-01  |            | LH     | -S20-0   | 1        |         | LH          | -\$20-02 |      |        | LH-S20   | -02      |      | STEP-46SS04          | STEP-46SS04        |
| SAMPLE_NO        |   | 35-SMP | 20-5801  | -01  | 35-SMP | 20-SB01  | -02  | Լℍ-Տ        | 20-01_1 | 1          | LH-    | S20-01   | _2       |         | LH-8        | 520-02_1 |      |        | LH-S20-  | 02_2     |      | 46SS04(0-0_5)-020312 | 465504(1-2)-020312 |
| SAMPLE_DATE      |   | 9/1    | 1/2006   |      | 9/1    | 1/2006   |      | 6/2         | 5/1993  |            | 6/3    | 25/1993  | 1        |         | 6/2         | 25/1993  |      |        | 6/25/19  | 993      |      | 3/12/2002            | 3/12/2002          |
| DEPTH            |   | 0.     | - 0.5 FI |      | 6.5    | • 6.5 Ft |      | 0.5         | - 2 Ft  |            | 2      | ! • 4 Ft |          |         | 0.          | 5 - 2 Ft |      |        | 5 - 6    | Ft       |      | 0 - 0.5 Ft           | 1 - 2 Ft           |
| SAMPLE_PURPOSE   |   |        | REG      |      |        | REG      |      | F           | REG     |            |        | REG      |          |         |             | REG      |      |        | REG      | i        |      | REG                  | REG                |
| Tesl Group       | Parameter (Units = mg/kg)               | Result | DIL LO   | a va | Result | DILL     | a va | Result      | DIL L   | o vo       | Result | DIL      | ιQ V     | Q .     | Result      | DIL      | LQ V | íQ –   | Result D | ίια      | a va | Result DIL LO VO     | Result DIL LQ VQ   |
| EXPLOSIVES       | 2,4-Dinitrotoluene                      |        |          |      |        |          |      | 0.15        | 1 .     | < U        | 0.15   | 1        | < (      | U       | 0.15        | 1        | <    | U      | 0.15 1   | <        | υ    |                      |                    |
| EXPLOSIVES       | 2,6-Dinitrotoluene                      |        |          |      |        |          |      | 0.15        | 1 .     | < U        | 0.15   | 1        | < (      | U       | 0.15        | 1        | <    | U      | 0.15 1   | <        | υ    |                      |                    |
| METALS           | Aluminum                                | 9290   | 1        |      | 12200  | 1        |      | 1930        | 1       |            | 2500   | ٢        |          |         | 7990        | 1        |      |        | 24900    |          |      |                      |                    |
| METALS           | Antimony                                | 0.0675 | 1 3      | J    | 0.117  | 1 1      |      | 3           | 1       | < U        | 3      | 1        | < 1      | U       | 3           | 1        | <    | U      | 3 1      | <        | U    |                      |                    |
| METALS           | Arsenic                                 | 2.3    | 1        |      | 1.3    | 1        |      | 1           | 1       | < U        | 1      | 1        | < 1      | U       | 1.5         | 1        | <    | U      | 3.4      |          |      |                      |                    |
| METALS           | Barium                                  | 147    | 1        |      | 159    | 1        |      | 25.6        | 1       |            | 148    | 1        |          |         | 115         | 1        |      |        | 86.5     |          |      |                      |                    |
| METALS           | Beryllium                               | 0.763  | 1        |      | 0.496  | 1        |      |             |         |            |        |          |          |         |             |          |      |        |          |          |      |                      |                    |
| METALS           | Cadmium                                 | 0.146  | 1 .      | J    | 0.145  | 1 J      | J    | 1           | 1       | < U        | 10     | 1        | < 1      | U       | 1           | 1        | <    | U .    | 1 1      | <        | U    |                      |                    |
| METALS           | Calcium                                 | 544    | 1        | J    | 753    | 1        | J    | 253         | 1       |            | 550    | 1        |          |         | 493         | 1        |      |        | 972      |          |      |                      |                    |
| METALS           | Chromium                                | 10.7   | 1        |      | 13.8   | 1        |      | 1.8         | 1       |            | 1.3    | 1        |          |         | 5.7         | 1        |      |        | 19.3     |          |      |                      |                    |
| METALS           | Cobalt                                  | 3.82   | 1        | J    | 5.65   | 1        | J    | 1           | 1       | < U        | 1      | 1        | < (      | U       | 2.4         | 1        |      |        | 3.9      |          |      |                      |                    |
| METALS           | Copper                                  | 3.82   | 1        |      | 5.74   | 1        |      | 1           | 1       | < U        | 2      | 1        |          |         | 2           | 1        |      |        | 4.7      |          |      |                      |                    |
| METALS           | Iron                                    | 8850   | 1        |      | 14200  | 1        |      | 4420        | 1       | < U        | 3440   | 1        |          |         | 8910        | 1        |      |        | 26600    |          |      |                      |                    |
| METALS           | Lead                                    | 9.39   | 1        | J    | 6.23   | 1        | J    | 1.9         | 1       |            | 10.9   | 1        |          |         | 1.3         | ſ        |      |        | 11.4     | Ļ        |      |                      |                    |
| METALS           | Magnesium                               | 803    | 1        |      | 1190   | 1        |      | 226         | 1       |            | 588    | 1        |          |         | 568         | 1        |      |        | 1890     | 1        |      |                      |                    |
| METALS           | Manganese                               | 123    | 1        |      | 36.9   | 1        |      | 22.7        | 1       |            | 25.4   | 1        |          |         | 90.3        | t        |      |        | 45.3     | i        |      |                      |                    |
| METALS           | Mercury                                 | 0.0529 | 1,       | t J  | 0.0351 | 1 .      | J    | 1           | 1       | < U        | 1      | 1        | < 1      | U       | 1           | 1        | ۲    | U      | 1        | i <      | υ    |                      |                    |
| METALS           | Nickel                                  | 5.71   | 1        |      | 15.4   | 1        |      |             |         |            |        |          |          |         |             |          |      |        |          |          |      |                      |                    |
| METALS           | Polassium                               | 408    | 1        |      | 617    | 1        |      | 128         | 1       |            | 715    | 1        |          |         | 551         | 1        |      |        | 1460     | 1        |      |                      |                    |
| METALS           | Selenium                                | 0.437  | 1        |      | 0.234  | 1 L      | ,    | 1           | 1       | < U        | 1      | 1        | < 1      | U       | 1           | 1        | <    | u      | 1        | <        | U :  |                      |                    |
| METALS           | Silver                                  | 1.69   | 1 1      | J.   | 1.64   | i i      | 1    | 1           | 1       | < U        | 10     | 1        | < 1      | Ū.      | 1           | 1        | <    | U      | 1        | <        | : U  |                      |                    |
| METALS           | Sodium                                  | 40.8   | 1        |      | 172    | 1        |      |             |         |            |        |          |          | •       |             |          |      |        |          |          |      |                      |                    |
| METALS           | Strontium                               |        | ,        |      |        |          |      | 38.1        | 1       |            | 52.2   | 1        |          |         | 23.9        | 1        |      |        | 16.3     | 1        |      |                      |                    |
| METALS           | Thallium                                | 0.0712 | 1        |      | 0.107  | 1        |      |             |         |            |        |          |          |         |             |          |      |        |          |          |      |                      |                    |
| METALS           | Vanadium                                | 22.7   | 1        |      | 20.9   | 1        |      |             |         |            |        |          |          |         |             |          |      |        |          |          |      |                      |                    |
| METALS           | Zinc                                    | 19.1   | 1        |      | 32.6   | 1        |      | 5.2         | 1       |            | 33.8   | 1        |          |         | 19.4        | 1        |      |        | 33.6     | ١        |      |                      |                    |
| PERC             | Perchiorate                             | 0.01   | 1 1      | J    | 0.01   | 1 1      | 1    |             |         |            |        |          |          |         |             |          |      |        |          |          |      | 0.0541 1 U U         | 0.0475 1 U U       |
| BANGE OBGANICS   | Carbon Banga C12-C28                    | 56.8   | 1 1      | -    | 58     | 1 1      | }    |             |         |            |        |          |          |         |             |          |      |        |          |          |      |                      |                    |
| BANGE OBGANICS   | Carbon Banne C28-C35                    | 56.8   | 1 1      |      | 58     | 1 1      | 1    |             |         |            |        |          |          |         |             |          |      |        |          |          |      |                      |                    |
| BANGE OBGANICS   | Carbon Banna CR-C12                     | 56.8   | 1 1      | 1    | 58     | 1 1      |      |             |         |            |        |          |          |         |             |          |      |        |          |          |      |                      |                    |
| SEMIVOLATILES    | 1.2.4-Trichlorobenzene                  | 50.9   | • •      | ,    | 00     |          |      | 0.15        | 1       | - 11       | 0.15   | 1        | <i>c</i> | н       | 0.15        | í        | ~    | 11     | 0.15     | 1 <      | . U  |                      |                    |
| SEMIVOLATILES    | 1.2-Dichlorobenzene                     |        |          |      |        |          |      | 0.15        | í       | - 11       | 0.15   | i        |          | U U     | 0.15        | 1        | è    | Ū.     | 0.15     | 1 <      | . Ū  |                      |                    |
| SEMIVOLATILES    | 1.3-Dichlorobenzene                     |        |          |      |        |          |      | 0.15        | 1       | - U        | 0.15   | 1        | è        | ŭ       | 0.15        | 1        | č    | ū      | 0.15     | 1 4      | : บ  |                      |                    |
| SEMIVOLATILES    | 1 4-Dichlorobenzene                     |        |          |      |        |          |      | 0.15        | 1       | - E        | 0.15   | •        |          | U.      | 0.15        | 1        | ć    | Ē      | 0.15     | 1 4      |      |                      |                    |
| SEMIVOLATILES    | 2.4.5-Trichlorophenol                   |        |          |      |        |          |      | 0.10        | ì       | 2 Î        | 0.8    | ÷        | 2        | Б.      | 0.8         | 1        | ż    | -<br>U | 0.8      | 1 4      |      |                      |                    |
| SEMIVOLATILES    | 2.4.6-Trichlorophenol                   |        |          |      |        |          |      | 0.15        |         | 2 II       | 0.15   | 1        | 2        | ŭ       | 0.15        | 1        | ć    | Ū.     | 0.15     | 1 <      | c Ū. |                      |                    |
| SEMINOLATILES    | 2.4-Dichlorophonol                      |        |          |      |        |          |      | 0.10        |         | - U        | 0.15   | ÷        | 2        | я<br>П  | 0.15        | 1        | 2    | ō      | 0.15     | 1 2      | e H  |                      |                    |
| SEMIVOLATILES    | 2 4-Dimethylohenol                      |        |          |      |        |          |      | 0.10        | ì       | 2 11       | 0.15   | 1        | 2        | ă.      | 0.15        | 1        |      | ŭ      | 0.15     | 1 e      | e U  |                      |                    |
| SEMIVOLATILES    | 2 4-Dinitrophenol                       |        |          |      |        |          |      | 0.10<br>D 8 | 1       | 2 11       | 0.00   | i        | 2        | ŭ       | 0.8         | 1        | è    | ŭ      | 0.8      | 1 4      | εŪ   |                      |                    |
| SEMIVOLATILES    | 2. Chloropaphibaiane                    |        |          |      |        |          |      | 0.15        |         | 2 11       | 0.0    | 1        | 2        | Ň       | 0.15        | 1        | 2    | ŭ      | 0.15     | ,<br>1 a | - U  |                      |                    |
| SEMIVOLATILES    | 2. Chloraphanal                         |        |          |      |        |          |      | 0.15        | ł       | 2 11       | 0.15   | ÷        | 2        | й       | 0.15        |          | 2    | ŭ      | 0.15     |          | , Ű  |                      |                    |
| SEMIVOLATILES    | 2. Ghidiophenor<br>2. Mathulanahthalana |        |          |      |        |          |      | 0.13        | •       | - 0        | 0,10   | 1        | 2        | ,<br>II | 0.15        | 1        | è    | й<br>П | 0.15     | 1        | 2 U  |                      |                    |
| CENTREATILES     | ∠-meanysraphmaene<br>2-Mathylabaaai     |        |          |      |        |          |      | 0.10        | 1       | ~ 0        | 0.10   | 4        | 2        |         | 0,13        | 1        | 2    | н      | 0.15     | 1 2      |      |                      |                    |
| SEMINOLATILES    | 2-Nitroaniline                          |        |          |      |        |          |      | 0,13<br>A B | 1       | ~ 11       | 0.10   | 1        | 2        | й       | 0.13<br>П 9 | 1        | 2    | й<br>П | 0.10     | 1        | . U  |                      |                    |
| SEMMOLATILES     | 2-modeland                              |        |          |      |        |          |      | 0.0         | 1       | - U<br>- H | 0.0    | 1        | 2        | ň       | 0.0         | ,        | 2    | й<br>П | 0.5      | 1        | - U  |                      |                    |
| acminulancea     | s-waohueuor                             | }      |          |      |        |          |      | 0.15        |         | < U        | 0,15   | 1        | ¢        | v       | 0.10        | 1        | •    | 0      | 0,10     |          |      |                      |                    |



Table 3-20

## Concentrations of Chemicals in Soil Samples Associated with Sump 020

| (SUMP) = SUMP020 |                             |                  |                  |                  |                  |                  |                  |   |
|------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|
| LOCATION _CODE   |                             | 35SUMP020-SB01   | 35SUMP020-SB01   | LH-S20-01        | LH-S20-01        | LH-S20-02        | LH-S20-02        | STEP-46SS04 STEP-46SS04                 |
| SAMPLE_NO        |                             | 35-SMP20-SB01-01 | 35-SMP20-SB01-02 | LH-S20-01_1      | LH-S20-01_2      | LH+S20+02_1      | LH-\$20-02_2     | 46SS04(0-0_5)-020312 46SS04(1-2)-020312 |
| SAMPLE_DATE      |                             | 9/11/2006        | 9/11/2006        | 6/25/1993        | 6/25/1993        | 6/25/1993        | 6/25/1993        | 3/12/2002 3/12/2002                     |
| DEPTH            |                             | 0 • 0.5 Ft       | 6.5 - 6.5 Ft     | 0.5 - 2 Ft       | 2 - 4 Ft         | 0.5 - 2 Ft       | 5 - 6 Ft         | 0 - 0.5 Ft 1 - 2 Ft                     |
| SAMPLE_PURPOSE   |                             | REG              | REG              | REG              | REG              | REG              | REG              | REG REG                                 |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO Result DIL LO VO       |
| SEMIVOLATILES    | 3,3'-Dichlorobenzidine      | 1                |                  | 0.15 1 < U       | 0,15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |   |
| SEMIVOLATILES    | 3-Nitroaniline              |                  |                  | 0.8 1 < 번        | 0.8 1 < U        | 0.8 1 < U        | 0.8 1 < U        |   |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol  |                  |                  | 0.8 1 < U        |   |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  | 1                |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     | 1                |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | 4-Chloroaniline.            |                  |                  | 0.15 1 < U       | 0.15 î < U       | 0.15 1 < U       | 0.15 1 < U       |   |
| SEMIVOLATILES    | 4-Chiorophenyl phenyl ether |                  |                  | 0,15 1 < U       | 0.15 1 < U       | 0.15 f < U       | 0.15 1 < U       |   |
| SEMIVOLATILES    | 4-Methylphenol              |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | 4-Nitroaniline              |                  |                  | 0.8 1 < U        |   |
| SEMIVOLATILES    | 4-Nitrophenol               |                  |                  | 0.8 1 < U        |   |
| SEMIVOLATILES    | Acenaphthene                |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Acenaphihylene              |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Anthracene                  |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Benzo(a)anthracene          |                  |                  | 0.15 1 < U       | 0,15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |   |
| SEMIVOLATILES    | Benzo(a)pyrene              |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Benzo(b)lluoranthene        |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Benzo(ghi)perylene          |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Benzoic Acid                |                  |                  | 0.8 1 < U        |   |
| SEMIVOLATILES    | Benzyl Alcohol              |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0,15 1 < U       | 0.15 1 < V       |   |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | bls(2-Chloroethyl)ether     |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | bis(2-Chloroisopropyi)ether |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0,15 1 < U       |   |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |                  |                  | 1 1 < U          | 11 < U           | 11<              | t t∘ < U         |   |
| SEMIVOLATILES    | Butyl benzyl phthalate      |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Carbazole                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.15 t < U       | 0.15 1 < U       |   |
| SEMIVOLATILES    | Chrysene                    |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Dibenzo(a.h)anthracene      |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0,15 1 < U       |   |
| SEMIVOLATILES    | Dibenzofuran                |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Diethyl phthalate           |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Dimethyl phthalate          |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < 0       |   |
| SEMIVOLATILES    | di-n-Butyl phthalate        |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | di-n-Octyl phthalate        |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.298 1          |   |
| SEMIVOLATILES    | Fluoranthene                |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.168 1          | 0.15 1 < 0       |   |
| SEMIVOLATILES    | Fluorene                    |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < 0       |   |
| SEMIVOLATILES    | Hexachlorobenzene           |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0,15 1 < U       | 0.15 1 < U       |   |
| SEMIVOLATILES    | Hexachlorobutadiene         |                  |                  | 0,15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < 0       |   |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Hexachloroethane            |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < 0       |   |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrena      |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < 0       |   |
| SEMIVOLATILES    | Isophorone                  |                  |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Naphthalene                 | 1                |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | Nitrobenzene                |                  |                  | 0,15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |   |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  | 1                |                  | 0.15 1 < U       |   |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      |                  |                  | 0.3 1 < U        |   |

## Data Evaluation Report

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



| Table 3-20   |  |
|--|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 020 |  |

| [SUMP] = SUMP020 |                                |          |           |         |            |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
|------------------|--------------------------------|----------|-----------|---------|------------|--------|-----------|-------|--------|----------|-----|----|--------|----------|----|----|---------|--------|------|--------|----------------|--------|----------------|
| LOCATION _CODE   |                                | 35SUMP   | 020-\$801 | 35SUM   | P020-SB01  | UH     | I-S20-01  | 1     | LH     | I-S20-(  | 01  |    | LH     | -\$20-02 |    |    | LH-52   | 0-02   |      | STE    | P-46SS04       | ST     | EP-46SS04      |
| SAMPLE_NO        |                                | 35-SMP2( | 0-SB01-01 | 35-SMP  | 20-SB01-02 | ٤H•    | 520-01_   | 1     | LH-    | S20-01   | L_2 |    | LH-    | S20-02_1 |    |    | LH-\$20 | -02_2  |      | 46SS04 | (0-0_5)-020312 | 46SS0  | J4(1-2)+020312 |
| SAMPLE_DATE      |                                | 9/11/    | 2008      | 9/1     | 1/2006     | 6/     | 25/1993   | I     | 6/     | 25/199   | 3   |    | 6/3    | 25/1993  |    |    | 6/25/   | 1993   |      | 3      | /12/2002       | 3      | 1/12/2002      |
| DEPTH            |                                | 0-0      | ).5 Ft    | 8.5     | - 6.5 Ft   | 0.     | .5 - 2 Ft |       |        | 2 - 4 Ft |     |    | 0.     | 5 - 2 Ft |    |    | 5-6     | 5 Ft   |      | C      | + 0.5 Ft       |        | 1 - 2 Ft       |
| SAMPLE_PURPOSE   |                                | R        | EG        | ş       | REG        |        | REG       |       |        | REG      |     |    |        | REG      |    |    | RE      | G      |      |        | REG            |        | REG            |
| Test Group       | Parameter (Units = mg/kg)      | Result D | IL LO VO  | Result  | DIL LO VO  | Result | DIL I     | ια να | Result | DIL      | LQ  | VQ | Result | DIL      | LQ | VQ | Result  | DIL LO | Q VQ | Result | DIL LO VO      | Result | DIL LQ VQ      |
| SEMIVOLATILES    | Pentachlorophenol              |          |           |         |            | 0.15   | 1         | < U   | 0.15   | 1        | <   | U  | 0.15   | 1        | <  | υ  | 0.15    | 1 <    | U    |        |                |        |                |
| SEMIVOLATILES    | Phenanthrene                   |          |           |         |            | 0.15   | 1         | < U   | 0.15   | 1        | <   | U  | 0.15   | 1        | <  | U  | 0.15    | 1 <    | U    |        |                |        |                |
| SEMIVOLATILES    | Phenol                         |          |           |         |            | 0.15   | 1         | < U   | 0.15   | 1        | <   | U  | 0.15   | 1        | ۲  | U  | 0.15    | 1 <    | U    |        |                |        |                |
| SEMIVOLATILES    | Pyrene                         |          |           |         |            | 0.15   | 1         | < U   | 0.15   | 1        | <   | U  | 0.15   | 1        | <  | U  | 0.15    | 1 <    | υ    |        |                |        |                |
| VOLATILES        | 1,1,1,2-Tetrachloroethane      |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 1.1,1-Trichloroethane          |          |           | 0.00474 | 1 U        | 0.005  | 1         | < U   | 0.005  | 1        | <   | U  | 0.005  | 1        | <  | U  | 0.005   | 1 <    | U    |        |                |        |                |
| VOLATILES        | 1,1,2,2-Tetrachloroethane      |          |           | 0.00474 | 1 U        | 0.005  | 1         | < U   | 0.005  | 1        | ~   | U  | 0.005  | 1        | <  | U  | 0.005   | 1 <    | U    |        |                |        |                |
| VOLATILES        | 1.1.2-Trichloroethane          |          |           | 0.00474 | 1 U        | 0.005  | 1         | < U   | 0.005  | 1        | <   | U  | 0.005  | 1        | ۲. | U  | 0.005   | 1 <    | U    |        |                |        |                |
| VOLATILES        | 1,1-Dichloroethane             | 1        |           | 0.00474 | 1 U        | 0.005  | 1         | < U   | 0.005  | 1        | <   | U  | 0.005  | 1        | ٠  | U  | 0.005   | 1 <    | U    |        |                |        |                |
| VOLATILES        | 1,1-Dichloraethene             |          |           | 0.00474 | 1 U        | 0.005  | 1         | < U   | 0.005  | 1        | <   | U  | 0.005  | 1        | <  | U  | 0.005   | 1 <    | U    |        |                |        |                |
| VOLATILES        | 1,1-Dichloropropene            |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        | ~    |        |                |        |                |
| VOLATILES        | 1,2,3-Trichlorobenzene         | 1        |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 1,2,3-Trichioropropane         |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 1.2,4-Trichlorobenzene         | 1        |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 1.2,4-Trimethylbenzene         |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 1,2-Dibromoethane              |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 1,2-Dichlorobenzene            |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 1,2-Dichloroethane             |          |           | 0.00474 | 1 U        | 0.005  | 1         | < U   | 0.005  | 1        | <   | U  | 0.005  | 1        | ۲  | υ  | 0.005   | 1 <    | U    |        |                |        |                |
| VOLATILES        | 1,2-Dichloroethene             |          |           |         |            | 0.005  | 1         | < U   | 0.005  | 1        | <   | U  | 0.005  | 1        | <  | υ  | 0.005   | 1 <    | U    |        |                |        |                |
| VOLATILES        | 1,2-Dichloropropane            |          |           | 0.00474 | 1 U        | 0.005  | 1         | < U   | 0.005  | 1        | <   | Ų  | 0.005  | 1        | <  | U  | 0.005   | 1 <    | U    |        |                |        |                |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) |          |           | 0.00474 | 1 U        | 0.005  | 1         | < U   | 0.005  | 1        | <   | ป  | 0.005  | 1        | ۲  | U  | 0.005   | 1 <    | U    |        |                |        |                |
| VOLATILES        | 1,3.5-Trimethylbenzene         |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 1.3-Dichlorobenzene            |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 1,3-Dichloropropane            |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 1,4-Dichlorobenzene            |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 2.2-Dichloropropane            |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 2-Bulanone                     |          |           | 0.00949 | 1 U UJ     | 0.005  | 1         | < U   | 0.005  | 1        | <   | U  | 0,005  | 1        | <  | Ų  | 0.005   | 1 <    | υ    |        |                |        |                |
| VOLATILES        | 2-Chloroethyl vinyl ether      |          |           | 0.00949 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 2-Chlorotoluene                |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | 2-Hexanone                     |          |           | 0.00949 | 1 U UJ     | 0.005  | 1         | < U   | 0.005  | 1        | <   | U  | 0.005  | 1        | <  | U  | 0.005   | 1 <    | : U  |        |                |        |                |
| VOLATILES        | 4-Chlorotoluene                |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | Acetone                        |          |           | 0.00505 | 1 J        | 0.01   | 1         | < U   | 0.01   | 1        | <   | υ  | 0.016  | 1        |    |    | 0.013   | 1      |      |        |                |        |                |
| VOLATILES        | Benzene                        |          |           | 0,00474 | 1 U        | 0.005  | 1         | < U   | 0.005  | 1        | <   | U  | 0.005  | 1        | <  | U  | 0.005   | 1 <    | U    |        |                |        |                |
| VOLATILES        | Bromobenzene                   |          |           | 0.00474 | ιU         |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | Bromochloromethane             |          |           | 0.00474 | 1 U        |        |           |       |        |          |     |    |        |          |    |    |         |        |      |        |                |        |                |
| VOLATILES        | Bromodichloromethane           |          |           | 0.00474 | 1 U        | 0.005  | 1         | < U   | 0.005  | 1        | <   | U  | 0.005  | 1        | <  | U  | 0.005   | 1 <    | . บ  |        |                |        |                |
| VOLATILES        | Bromotorm                      |          |           | 0.00474 | 1 1/       | 0.005  | 1         | < Ų   | 0.005  | 1        | <   | U  | 0.005  | 1        | <  | U  | 0.005   | 1 <    | บ    |        |                |        |                |
| VOLATILES        | Bromomethane                   |          |           | 0.00949 | 1 U        | 0.01   | 1         | < U   | 0.01   | 1        | <   | υ  | 0.01   | 1        | <  | U  | 0.01    | 1 <    | U    |        |                |        |                |
| VOLATILES        | Carbon disulfide               |          |           | 0.00474 | 1 U        | 0.005  | 1         | < Ü   | 0.005  | 1        | <   | U  | 0.005  | 1        | <  | U  | 0.005   | 1 4    | U    |        |                |        |                |
| VOLATILES        | Carbon letrachloride           |          |           | 0.00474 | 1 U        | 0.005  | 1         | < U   | 0.005  | 1        | ۲   | U  | 0.005  | 1        | <  | U  | 0.005   | 1 <    | U    |        |                |        |                |
| VOLATILES        | Chlorobenzene                  |          |           | 0.00474 | 1 Ų        | 0.005  | 1         | < U   | 0.005  | ۲        | <   | U  | 0.005  | 1        | <  | U  | 0.005   | 1 <    | U U  |        |                |        |                |
| VOLATILES        | Chloroethane                   |          |           | 0.00949 | 1 U        | 0.01   | 1         | < V   | 0.01   | 1        | <   | U  | 0.01   | 1        | <  | U  | 0.01    | 1 4    | ម    |        |                |        |                |
| VOLATILES        | Chloroform                     |          |           | 0.00474 | 1 U        | 0.005  | 1         | < U   | 0.005  | ١        | <   | U  | 0.005  | 1        | <  | υ  | 0.005   | 1 <    | : U  |        |                |        |                |
| VOLATILES        | Chioromethane                  | 1        |           | 0.00949 | 1 U        | 0.01   | 1         | < U   | 0,01   | ١        | <   | U  | 0.01   | 1        | <  | U  | 0.01    | 1 4    | : U  |        |                |        |                |



 Table 3-20

 Concentrations of Chemicals in Soil Samples Associated with Sump 020

| [SUMP] ≈ SUMP020<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE PURPOSE |                           | 35SUMP020-S<br>35-SMP20-SB0<br>9/11/2006<br>0 - 0.5 Ft<br>REG | 801<br>1-01 | 35SUM<br>35-SMF<br>9/1<br>6.5 | P020-S<br>20-SB(<br>1/2006<br>- 6.5 F<br>REG | 8801<br>01-02<br>t | LH<br>LH4<br>8/3<br>0. | -S20-0<br>S20-01<br>25/199<br>5 - 2 F<br>REG | 1<br>_1<br>3<br>t |    | ԼԻ<br>ԼԻ-<br>6/ | I-S20-<br>S20-0<br>25/199<br>2 - 4 F<br>REG | 01<br>1_2<br>33<br>1 |    |     | LH-<br>LH-S<br>6/2<br>0.5 | -S20-02<br>520-02_1<br>5/1993<br>5 - 2 Ft<br>REG |    |    | LH-S<br>LH-S<br>6/25<br>5 -<br>R | i20-02<br>20-02,<br>/1993<br>8 Ft<br>EG | 2    |    | STEF<br>46SS04(0<br>3/1<br>0 • | -46SS04<br>+0_5)-020312<br>2/2002<br>0.5 Ft<br>7EG | 2   | STEP<br>46SS04(<br>3/1<br>1<br>F | 46SS04<br>(-2)-020312<br>2/2002<br>2 Ft<br>EG |   |
|---|---------------------------|---|-------------|-------------------------------|--|--------------------|------------------------|--|-------------------|----|-----------------|---|----------------------|----|-----|---------------------------|--|----|----|----------------------------------|---|------|----|--------------------------------|--|-----|----------------------------------|---|---|
| Test Group  | Parameter (Units = mg/kg) | Result DIL L  | .o vo       | Result                        | DIL  | LQ VQ              | Result                 | DIL  | LQ                | VQ | Result          | DIL   | ĻQ                   | VQ | Res | ult                       | DIL  | LQ | va | Result                           | DIL                                     | LQ 1 | VQ | Result                         | DIL LQ V   | Q R | lesult                           | DIL LO VO                                     | 2 |
| VOLATILES   | cis-1,2-Dichloroethene    |   |             | 0.00474                       | 1  | Ű                  | 0.005                  | ٢  | <                 | U  | 0.005           | 1   | <                    | U  |     | 0.005                     | 1  | <  | U  | 0.005                            | 1                                       | <    | U  |                                |  |     |                                  |   |   |
| VOLATILES   | cis-1.3-Dichloropropene   |   |             | 0.00474                       | 1  | U                  | 0.005                  | 1  | <                 | U  | 0.005           | 1   | <                    | U  |     | 0.005                     | 1  | <  | U  | 0.005                            | 1                                       | <    | U  |                                |  |     |                                  |   |   |
| VOLATILES   | Dibromochloromethane      |   |             | 0.00474                       | 1  | U                  | 0.005                  | 1  | <                 | U  | 0.005           | 1   | <                    | U  |     | 0.005                     | 1  | <  | U  | 0.005                            | 1                                       | <    | Ų. |                                |  |     |                                  |   |   |
| VOLATILES   | Díbromomethane            |   |             | 0.00474                       | 1  | U                  |                        |  |                   |    |                 |   |                      |    |     |                           |  |    |    |                                  |   |      |    |                                |  |     |                                  |   |   |
| VOLATILES   | Dichlorodifluoromethane   |   |             | 0.00949                       | 1  | U                  |                        |  |                   |    |                 |   |                      |    |     |                           |  |    |    |                                  |   |      |    |                                |  |     |                                  |   |   |
| VOLATILES   | Ethylbenzene              |   |             | 0.00474                       | 1  | U                  | 0.005                  | 1  | <                 | U  | 0.005           | 1   | <                    | U  |     | 0.005                     | 1  | <  | U  | 0.005                            | 1                                       | <    | U  |                                |  |     |                                  |   |   |
| VOLATILES   | Hexachlorobutadiene       |   |             | 0.00474                       | 1  | U                  |                        |  |                   |    |                 |   |                      |    |     |                           |  |    |    |                                  |   |      |    |                                |  |     |                                  |   |   |
| VOLATILES   | isopropylbenzene          |   |             | 0.00474                       | 1  | U                  |                        |  |                   |    |                 |   |                      |    |     |                           |  |    |    |                                  |   |      |    |                                |  |     |                                  |   |   |
| VOLATILES   | m,p-Cresol                |   |             |                               |  |                    | 0.15                   | 1  | <                 | U  | 0.15            | 1   | <                    | U  |     | 0.15                      | 1  | <  | U  | 0.15                             | 1                                       | <    | U  |                                |  |     |                                  |   |   |
| VOLATILES   | m,p-Xylenes               |   |             | 0.00474                       | 1  | ប                  | 0.005                  | 1  | <                 | U  | 0.005           | 1   | <                    | Ų  |     | 0.005                     | 1  | ۲  | U  | 0.005                            | 1                                       | <    | U  |                                |  |     |                                  |   |   |
| VOLATILES   | Methyl isobutyl ketone    |   |             | 0.00949                       | 1  | U                  | 0.005                  | t  | <                 | U  | 0.005           | 1   | <                    | U  |     | 0.005                     | 1  | <  | U  | 0.005                            | 1                                       | <    | U  |                                |  |     |                                  |   |   |
| VOLATILES   | Methylene chloride        |   |             | 0.00474                       | 1  | U                  | 0.027                  | 1  |                   |    | 0.01            | 1   | <                    | U  |     | 0.011                     | 1  |    |    | 0.01                             | 1                                       | <    | υ  |                                |  |     |                                  |   |   |
| VOLATILES   | Naphthalene               |   |             | 0.00949                       | 1  | U                  |                        |  |                   |    |                 |   |                      |    |     |                           |  |    |    |                                  |   |      |    |                                |  |     |                                  |   |   |
| VOLATILES   | n-BUTYLBENZENE            |   |             | 0.00474                       | 1  | U                  |                        |  |                   |    |                 |   |                      |    |     |                           |  |    |    |                                  |   |      |    |                                |  |     |                                  |   |   |
| VOLATILES   | n-PROPYLBENZENE           |   |             | 0.00474                       | 1  | U                  |                        |  |                   |    |                 |   |                      |    |     |                           |  |    |    |                                  |   |      |    |                                |  |     |                                  |   |   |
| VOLATILES   | p-ISOPROPYLTOLUENE        |   |             | 0.00474                       | 1  | U                  |                        |  |                   |    |                 |   |                      |    |     |                           |  |    |    |                                  |   |      |    |                                |  |     |                                  |   |   |
| VOLATILES   | sec-BUTYLBENZENE          |   |             | 0.00474                       | 1  | U                  |                        |  |                   |    |                 |   |                      |    |     |                           |  |    |    |                                  |   |      |    |                                |  |     |                                  |   |   |
| VOLATILES   | Styrene                   |   |             | 0.00474                       | 1  | U                  | 0.005                  | 1  | <                 | υ  | 0.005           | 1   | <                    | U  |     | 0.005                     | 1  | <  | Ų  | 0.005                            | 1                                       | <    | U  |                                |  |     |                                  |   |   |
| VOLATILES   | tert-BUTYLBENZENE         |   |             | 0.00474                       | 1  | U                  |                        |  |                   |    |                 |   |                      |    |     |                           |  |    |    |                                  |   |      |    |                                |  |     |                                  |   |   |
| VOLATILES   | Tetrachloroethene         |   |             | 0.00474                       | 1  | U                  | 0.005                  | 1  | <                 | U  | 0.005           | 1   | <                    | U  |     | 0.005                     | 1  | <  | U  | 0.005                            | 1                                       |      |    |                                |  |     |                                  |   |   |
| VOLATILES   | Toluene                   |   |             | 0.00474                       | 1  | U                  | 0.005                  | ۱  | <                 | U  | 0.005           | 1   | <                    | U  |     | 0.005                     | 1  | <  | U  | 0,005                            | 1                                       | ۲    | U  |                                |  |     |                                  |   |   |
| VOLATILES   | trans-1.2-Dichloroethene  |   |             | 0.00474                       | 1  | U                  | 0.005                  | 1  | <                 | U  | 0.005           | 1   | <                    | U  |     | 0.005                     | 1  | <  | U  | 0.005                            | 1                                       | ۲    | U  |                                |  |     |                                  |   |   |
| VOLATILES   | trans-1,3-Dichloropropene |   |             | 0.00474                       | 1  | U                  | 0.005                  | 1  | <                 | U  | 0,005           | 1   | <                    | U  |     | 0.005                     | 1  | <  | U  | 0.005                            | 1                                       | <    | U  |                                |  |     |                                  |   |   |
| VOLATILES   | Trichloroethene           |   |             | 0.00474                       | 1  | U                  | 0.005                  | 1  | <                 | U  | 0.005           | 1   | <                    | U  |     | 0.005                     | 1  | <  | U  | 0.005                            | 1                                       | <    | U  |                                |  |     |                                  |   |   |
| VOLATILES   | Trichlorofluoromethane    |   |             | 0.00949                       | 1  | U                  |                        |  |                   |    |                 |   |                      |    |     |                           |  |    |    |                                  |   |      |    |                                |  |     |                                  |   |   |
| VOLATILES   | Vinyl acetate             |   |             | 0.00949                       | 1  | U                  | 0.005                  | 1  | <                 | U  | 0.005           | 1   | <                    | Ų  |     | 0.005                     | 1  | <  | U  | 0.005                            | 1                                       | <    | U  |                                |  |     |                                  |   |   |
| VOLATILES   | Vinyl chloride            |   |             | 0.00949                       | 1  | U                  | 0.01                   | 1  | <                 | U  | 0.01            | 1   | <                    | U  |     | 0.01                      | 1  | <  | U  | 0.01                             | 1                                       | <    | U  |                                |  |     |                                  |   |   |
| VOLATILES   | Xylenes, Total            |   |             |                               |  |                    | 0.005                  | 1  | ۲                 | U  | 0.005           | 1   | <                    | U  |     | 0.005                     | 1  | ٢  | U  | 0.005                            | 1                                       | <    | U  |                                |  |     |                                  |   |   |

Footnotes are shown on cover page to Tables Section.

### Data Evaluation Report

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



1

Table 3-21 Concentrations of Chemicals in Soil Samples Associated with Sump 021

| (SUMP] = SUMP021 |                           |                  |                  |                  |                         | 111 0001 04                         | 111 6001 00      | 1 1 6031 03      | 18.5021.02       | HS-2-08          |
|------------------|---------------------------|------------------|------------------|------------------|-------------------------|-------------------------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                           | 35SUMP021-SB01   | 35SUMP021-SB02   | LH-S021-01       | LH-S021-01              | LH-5021-01                          | LH-3021-02       | L(1-5021-02 2    | 18-5021-02 3     | LHS-2-08         |
| SAMPLE_NO        |                           | 35-SMP21-SB01-02 | 35-SMP21-SB02-02 | LH-S021-01 QC    | LH-5021-01_1            | CH-SU21-01_2                        | LN-QU2 MV2_1     | 8/6/1003         | 8/6/1993         | 1/10/1995        |
| SAMPLE_DATE      |                           | 9/11/2006        | 9/11/2006        | 8/6/1993         | 8/6/1993                | 8/6/1993                            | 0.5.1.5          | 2.25 FI          | 3.4 - 3.9 Ft     | 0 - 0.5 FI       |
| DEPTH            |                           | 4.5 • 4.5 Fi     | 4.5 - 4.5 Ft     | 1 + 1,5 Ft       | 1-1.5 FI                | 3.3 + 4 71                          | BEG              | BEG              | REG              | REG              |
| SAMPLE_PURPOSE   |                           | REG              | REG              | FD               | HEU<br>Developite LO MO | Real Dife (O. VO                    | Result Dil 10 VO | Result Dil LO VO | Result DIL LO VO | Result DIL LO VQ |
| Test Group       | Parameter (Units = mg/kg) | Result DIL LO VQ | Result DIL LO VQ | Result UIL LO VO | Result UIL LQ VQ        | Hesuit Dic LO VO                    |                  |                  |                  | 0.23 1 < U       |
| EXPLOSIVES       | 1.3,5-Tnnitrobenzena      |                  |                  |                  |                         |                                     |                  |                  |                  | 0.23 t < U       |
| EXPLOSIVES       | 1,3-Dinifrobanzene        |                  |                  |                  |                         |                                     |                  |                  |                  | 0.23 1 < U       |
| EXPLOSIVES       | 2,4,5 Frinkrololuene      |                  |                  | 0.22 1 - 11      | 033 1 4 11              | 0.33 1 < H                          | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       | 0.23 1 < U       |
| EXPLOSIVES       | 2.4-Diritratoluese        |                  |                  | 0.00 1 4 1       | 0.33 1 ≤ U              | 0.33 1 < U                          | 0,33 i < U       | 0.33 1 < U       | 0.33 1 < U       | 0.24 1 < U       |
| EXPLOSIVES       | 2,5-California            |                  |                  | 2.00             |                         |                                     |                  |                  |                  | 0.47 1 < U       |
| EXPLOSIVES       | LINA                      |                  |                  |                  |                         |                                     |                  |                  |                  | 2.1 1 < U        |
| EXPLOSIVES       | m-Nitrotokiene            |                  |                  |                  |                         |                                     |                  |                  |                  | 0.94 i < U       |
| EXPLOSIVES       | Nitrobenzene              |                  |                  |                  |                         |                                     |                  |                  |                  | 0.24 1 < U       |
| EXPLOSIVES       | o-Nitrotoluene            |                  |                  |                  |                         |                                     |                  |                  |                  | 0.94 1 < U       |
| EXPLOSIVES       | p-Nitrotolueze            |                  |                  |                  |                         |                                     |                  |                  |                  | 2.8 1 < U        |
| EXPLOSIVES       | BDX                       |                  |                  |                  |                         |                                     |                  |                  |                  | 11 < 0           |
| EXPLOSIVES       | Tetrvi                    |                  |                  |                  |                         |                                     |                  |                  |                  | 0.69 ( < U       |
| METALS           | Aluminum                  | 27500 1          | 26700 1          | 1000 1           | 1190 1                  | 1510 1                              | 2070 1           | 1950 1           | 1700 1           | 7480 1           |
| METALS           | Antimaoy                  | 0.129 1 U        | 0.12 1 U         | 3 1 < U          | 31 < U                  | 3 1 < 11                            | 31 < 0           | 31 < U           | 4,5              | 9.2 1 < UJ       |
| METALS           | Arsenic                   | 1,41 J           | 2.53 S J         | 1 3 < U          | 11 < U                  | 11 < U                              | 11 < V           | 11 < U           | 1 5 < U          | 16.8 1 J         |
| METALS           | Barium                    | 203 \$           | 154 1            | 53.6 1           | <b>51.6</b> 1           | 61.5 1                              | 79 1             | 69.8 1           | 48.4 1           | 1470 1           |
| METALS           | Beryllium                 | 0.869 1          | 0.883 1          |                  |                         |                                     |                  |                  |                  | 000 ( ) N        |
| METALS           | Cadmium                   | 0,188 1 J J      | 0.123 1 J J      | 1 1 < U          | 11 < U                  | 11 < U                              | 11 < 0           | 11 < 0           | 1 1 < 0          | 0.92 1 < 0       |
| METALS           | Calcium                   | 2620 1           | 307 1            | 179 1            | 181 1                   | 203 1                               | 21B 1            | 242              | 170              | 1010 1           |
| METALS           | Chromium                  | 23.4 1           | 25.5 1           | 2.5              | 2.1 1                   | 3.9 1                               | 33.5 1           | 11,3 1           | 4,8              | 13.0             |
| METALS           | Cobali                    | 5.77 1           | 8.29 1           | 1 1              | 1 1                     | 1 1                                 | 11 < 0           | 11 < 0           | 1 1 K U          | 4.1 F            |
| METALS           | Copper                    | 7.02 \$          | 6.45 1           | 3.1 1            | 1.9 1                   | 2.5 1                               | 6.7 1            | 7,3 1            | 1000 (           | (120) 1          |
| METALS           | fron                      | 21200 1          | 24100 1          | 1240 1           | 1310 1                  | 1900 1                              | 1540 1           | 2030 1           | 1300 1           | 148 1            |
| METALS           | Lead                      | 9.98 1 J         | 13,4 1 J         | 1,8 1            | 1.8 1                   | 1,9 1                               | 17.7 1           | 9.9              | 454 1            | 452 1            |
| METALS           | Magnesium                 | 2140 1           | 1370 1           | 89.6             | 96.5 1                  | 113 1                               | 94.4 1           | 129 1            | 110 1            | 227 1            |
| METALS           | Mançanese                 | 287 1            | 107 1            | 9.5 1            | 13.B 1                  | 10.9 1                              | 0.0 1            | 13.5             |                  | 0.1 S < U        |
| METALS           | Mercury                   | 0.0363 1 J J     | 0.0212 1 J J     | 0.1 1 < U        | 0.1 1 < U               | 0.1 1 < 0                           | V.I I < U        | 0.0 1 2 0        |                  | 1                |
| METALS           | Nickel                    | 10.4 \$          | 10.1 1           |                  | 00 I                    | (1n - 1                             | 50.2 1           | 126 1            | 127 (            | 297 1            |
| METALS           | Polassium                 | 680 1            | 680 1            | 94.3 1           | 98                      | 1 1 - 1                             | 1 1 < 1          | 11 < 1           | 1 1 < U          | 1,1 1 < V        |
| METALS           | Selenium                  | 0.217 · 1 J J    | 0.206 1 J J      | 3 F < U          |                         | 11 < 1                              | 11 < 0           | 11 < 0           | 11 < U           | 0.92 1 < U       |
| METALS           | Silver                    | 1,94 1 0         | 1,71 1 0         |                  |                         |                                     |                  |                  |                  |                  |
| METALS           | Sooium                    | 243              | 934 1            | a ( 1            | 9 1                     | 16.7 1                              | 5.5 1            | 7,3 1            | 5.2 1            | 11.4 1           |
| METALS           | Strone Lim<br>The live    | 1 2003           | 0.14 1           | 0,1              | 5                       |                                     |                  |                  |                  | 46.2 t < U       |
| METALS           | Vapadum                   | 0.0338 ,         | 475 1            |                  |                         |                                     |                  |                  |                  |                  |
|                  | Zing                      | 36.6 1           | 32.8 1           | 18.9 1           | 3.8                     | 5 1                                 | 46.2 1           | 36.7 1           | 24.3 1           | 35.2 1           |
| PERC             | Parchiorate               | 0.01 1 U         | 0.01 f U         |                  |                         |                                     |                  |                  |                  |                  |
| SEMIVOLATILES    | 1.2.4-Tricbiornhenzene    |                  |                  | 0.33 t < U       | 0.33 1 < U              | 0.33 î < U                          | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.45 1 < U       |
| SEMIVOLATILES    | 1.2-Dichlorobenzepe       |                  |                  | 0,33 1 < U       | 0.33 1 < U              | 0.33 1 < U                          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.45 t < U       |
| SEMIVOLATILES    | 1.3-Dichlorobenzene       |                  |                  | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U                          | 0.33 1 < U       | 0.33 f < U       | 0.33 1 < U       | 0.45 { < U       |
| SEMIVOLATILES    | 1,4-Dichlorobanzene       |                  |                  | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U                          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.45 1 < U       |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol     |                  |                  | 1.65 1 < U       | 1.65 I < U              | 1.65 1 < U                          | 1.65 1 < U       | 1.65 I < U       | 1.65 1 < U       | 2.2 1 < U        |
| SEMIVOLATILES    | 2,4,6-Trichloropheno      |                  |                  | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U                          | 0.33 f < U       | 0.33 1 < U       | 0.33 1 < U       | 0,45 1 < U       |
| SEMIVOLATILES    | 2,4-Dichlerophenol        |                  |                  | 0.33 t < U       | 0.33 1 < U              | 0.33 1 < U                          | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.45 1. < U      |
| SEMIVOLATILES    | 2,4-Dimethylphenol        |                  |                  | 0.33 t < U       | 0.33 1 < U              | 0.33 1 < U                          | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 20 1 4 1         |
| SEMIVOLATILES    | 2.4-Dinitrophenol         |                  |                  | 1.65 1 < U       | 1.65 1 < 0              | 1.65 1 < U                          | 1.55 1 < U       | 1,65 1 < 0       | 1.00 0           | 046 1 4 1        |
| SEMIVOLATILES    | 2,4-Dinitratoluene        |                  |                  |                  |                         |                                     |                  |                  |                  | 0.45 1 < 0       |
| SEMIVOLATILES    | 2,6-Dinitrotoluena        |                  |                  |                  |                         |                                     | n sa 🖌 🗸 👘       |                  | 0.39 1 - 11      | 0.45 1 e H       |
| SEMIVOLATILES    | 2-Chioronaphihalene       |                  |                  | 0.33 1 < U       | 0.33 1 < 0              | 0,33 1 < U                          | 0,33 1 < U       | 0.00 1 < 0       | 0.33 1 2 1       | 0.45 1 < U <     |
| SEMIVOLATILES    | 2-Chlorophenol            |                  |                  | 0.33 i < U       | 0.33 1 < U              | 0,33 i < U<br>0.33 i < <sup>U</sup> | 0.00 1 4 0       | 0.33 1 2 11      | 0.33 1 < 1       | 0.45 1 < 1       |
| SEMIVOLATILES    | 2-Melbyinaphihaleno       |                  | •                | 0.33 1 < U       | U > 1 50.0              | 0.33 1 4 1                          | 0.33 1 2 11      | 0.33 1 < U       | 0.33 1 < U       | 0.45 1 < U       |
| SEMIVOLATILES    | 2-Methylphenol            |                  |                  | 0.33 i < U       | U > 1 66.0              | 185 1 - 1                           | 1.65 1 2 1       | 1.65 1 < 11      | 1.65 1 < U       | 2.2 1 < U        |
| SEMIVOLATILES    | Z+Nilróantiné             |                  |                  | 100 × C          | 1.00 i < U              | ,                                   |                  |                  |                  | -                |

### Data Evaluation Report

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



 Table 3-21

 Concentrations of Chemicals in Soil Samples Associated with Sump 021

| (SUMP) = SUMP021  |                             |                  |                  |                  | 111 6001 01      | 11.0001.01       | 18-9021-02       | LH-S021-02    | LH-S021-02      | LHS-2-08          |
|---|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------------|-----------------|-------------------|
| LOCATION _CODE  |                             | 35SUMP021-SB01   | 35SUMP021-5B02   | LH-S021-01       |                  |                  | 1H-5021-02 1     | 1H-S021-02_2  | LH-S021-02 3    | LHS-2-08          |
| SAMPLE_NO   |                             | 35-SMP21-SB01-02 | 35-SMP21-SB02-02 | LH-S021-01 UC    | UN-5021-01_1     | LIN302101_2      | 0/6/1002         | 8/6/1993      | 8/6/1993        | 1/10/1995         |
| SAMPLE_DATE   |                             | 9/11/2005        | 9/11/2006        | 8/6/1993         | 8/6/1993         | 8/0/1993         |                  | 2.25 Ft       | 34-39FI         | 0 - 0.5 Ft        |
| DEPTH   |                             | 4.5 - 4.5 Ft     | 4.5 - 4.5 Ft     | 1 - 1,5 Ft       | 1 - 1.5 Ft       | 3.5 - 4 Ft       | 0.3 - 1 - 1      | 050           | BEG             | REG               |
| SAMPLE_PURPOSE  |                             | REG              | REG              | FD               | REG              | REG              |                  |               | Result DN 10 VO | Besult Dill LQ VQ |
| Test Group  | Parameter (Units = mg/kg)   | Result DIL LO VO | Result DiL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Hestil DIL LO VO | A 10 11 CO VO |                 | 0.45 1 < U        |
| SEMIVOLATILES   | 2-Nitrophenol               |                  |                  | 0.33 1 < U       | 0.33 î < U       | 0.33 1 < U       | 0.33   < 0       | 0,33 1 < 0    |                 | 09 1 4 1          |
| SEMIVOLATILES   | 3,3'+Dichlorobenzidine      |                  |                  | 0.55 1 < U       | 0.65 1 < U       | 0.55 1 < 0       | 0.65 1 < 0       | 0.65 1 < U    | (45 1 4 1)      | 22 1 - 11         |
| SEMIVOLATILES   | 3-Nitroaniline              |                  |                  | 1.65 t < U       | 1.65 1 ≮ U       | 1.65 1 < U       | 1,65 1 < 0       | 1.55 1 < 0    | 1,00 1 K U      |                   |
| SEMIVOLATILES   | 4.6-Dinitro-2-methylphenol  |                  |                  | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 0       | 1.55 1 < U    |                 | 2,2 1 < 0         |
| SEMIVOLATILES   | 4-Bromophenyl ohegyl ether  |                  |                  | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0    | 0.33 1 2 0      | 0.45 1 - 1        |
| SEMIVOLATILES   | 4-Chlorn-3-methylphenol     |                  |                  | 0.65 t < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 i < U       | 0.65 1 < U    | 0,65 1 < U      | 0.40 1 4 0        |
| SEMIVOLATILES   | 4-Chloroaniline             |                  |                  | 0.65 t < U       | 0.65 1 < U       | 0.65 î < U       | 0.65 1 < U       | 0.65 1 < 0    | 0.65 1 < 0      | 0.45 1 4 0        |
| SEMINOLATILES   | 4-Chlorophenyl phenyl ether |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0    | 0.33 1 < 0      | 0,45 1 < 0        |
| SEMINOLATILES   | 4-Methylpheool              |                  |                  | 0.33 1 < U       | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U    | 0,33 1 < U      | Ų,45 1 < U        |
| SEMIVOLATH ES   | 4-Nitmaniine                |                  |                  | 1.65 1 < U       | 1.85 1 < Ü       | 1.65 1 < U       | 1.65 1 < U       | 1,65 1 < U    | 1,65 1 < U      | 2,2 1 < 0         |
| SEMINOLATILES   | 4-Nitrophenol               |                  |                  | 1.65 1 < 0       | 1.65 1 ≺ U       | 1.65 i < U       | 1.65 1 < U       | 1,85 1 < U    | 1.65 1 < U      | 2.2 1 < 0         |
| SEMINOLATILES   | àcenanbiherie               |                  |                  | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U    | 0.33 1 < U      | 0,45 1 < 0        |
| CENHUOLATILES   | Aconsphihidane              |                  |                  | 0.33 1 < U       | 0.33 1 < U    | 0.33 1 < U      | 0.45 î < U        |
| CEMINOLATILES   | Asibracana                  |                  |                  | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U    | 0.33 1 < U      | 0.45 1 < 0        |
| SEMIVOLATILES   | Pages (a) splitted app      |                  |                  | 033 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 í < U       | 0.33 1 < U    | 0,33 1 < U      | 0.45 1 < U        |
| SEMIVOLATILES   | Benzo(a)antoracens          |                  |                  | 0.33 1 < 1       | 0.33 1 < U       | 0.33 1 < U       | 0.33 î < U       | 0.33 1 < U    | 0,33 1 < U      | 0.45 1 < U        |
| SEMIVOLATILES   | Berizo(a) pyrane            |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 I < U       | 0.33 1 < U       | 0.33 1 < U    | 0.33 1 < U      | 0.45 1 < U        |
| SEMIVOLATILES   | Benzolojnuoranulena         |                  |                  | 0.33 1 < U       | 0.33 1 < U    | 0.33 1 < U      | 0,45 1 < U        |
| SEMIVOLATILES   | Benzolgni)perviene          |                  |                  | 0.00 1 < 0       | 0.33 1 < 11      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U    | 0.33 1 < U      | 0.45 1 < U        |
| SEMIVOLATICES   | Benzo(k)iluoraninene        |                  |                  | 166 1 - 11       | 165 1 < 11       | 1.65 1 < U       | 1,65 1 < U       | 1.65 1 < U    | 1.65 1 < U      | 2.2 1 < U         |
| SEMIVOLATILES   | Benzoic Acid                |                  |                  | 065 1 < 11       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U    | 0.65 1 < U      | 0.45 1 < U        |
| SEMIVOLATILES   | Benzył Alcohol              |                  |                  |                  | 0.33 1 - 11      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U    | 0.33 1 < U      | 0.45 1 < U        |
| SEMIVOLATILES   | bis(2-Chloroethoxy)methane  |                  |                  | 0.33 ( < 0       | 0.33 1 < 1       | 0.33 1 c U       | 0.33 1 < U       | 0.33 î < U    | 0.33 1 < U      | 0.45 1 < U        |
| SEMIVOLATILES   | bis(2-Chloroathy)ether      |                  |                  | 0.33 1 2 0       | 0.33 t < 0       | 0.00 1 4 1       | 0.33 1 < U       | 0.33 1 < U    | 0.33 i < U      | 0.45 1 < U        |
| SEMIVOLATILES   | bis(2-Chloroisopropyl)ether |                  |                  | 0.33 1 < 0       |                  | 0.22 1 4 11      | 0.33 1 < U       | 0.33 1 < U    | 0.33 i < U      | 0,45 1 < U        |
| SEMIVOLATILES   | bis(2-Elhylhexyl)phthalate  |                  |                  | 0.33   < 0       | 0.33 1 < 0       | 0.00 1 1         | 0.33 1 < 1       | 0.33 1 < U    | 0.33 1 < U      | 0.45 1 < U        |
| SEMIVOLATILES   | Bulyi benzyi phihalate      |                  |                  | 0.33 1 < 0       | 0.33 < 0         | 0.33 1 4 1       | 0.33 1 < 11      | 0.33 1 < U    | 0.33 1 < U      | 0.45 1 < U        |
| SEMIVOLATILES   | Chrysene                    |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.03 1 < 0       | 0.33 1 4 1       | 0.33 1 < U    | 0.33 1 < U      | 0,45 1 < U        |
| SEMIVOLATILES   | Dibenzo(a.h)anthracene      |                  |                  | 0.33 * < 0       | 0.33 1 2 0       | 0.00 1 4 0       | 0.33 1 < 11      | 0.33 i < U    | 0.33 1 < U      | 0.45 1 K U        |
| SEMIVOLATILES   | Dibenzoluran                |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.00 1 - 1       | 0.32 1 2 0       | 0.33 1 < U    | 0.33 f < U      | 0.45 1 < U        |
| SEMIVOLATILES   | Diethyl phthalale           |                  |                  | 0.33 I < U       | 0.33 1 < 0       | 0.33   < U       | 0.33 1 2 0       | 0.33 1 4 1    | 1.33 1 < U      | 0.45 1 < U        |
| SEMIVOLATILES   | Dimethyl phihalale          |                  |                  | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 4 0       | 0.97 1 4 1    | 033 1 e U       | 0.45 1 < U        |
| SEMIVOLATILES   | di+n-Butyl phthalate        |                  |                  | 0.33 t < U       | 0.33 1 < 0       | 0.33 1 < U       |                  | 0.00 1 - 1    | 0.33 1 × U      | 0.45 1 < U        |
| SEMIVOLATILES   | di-n-Octyl phthalate        |                  |                  | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |                  | 0.00 1 < 0    | 0.33 1 < 1      | 0.45 1 < U        |
| SEMIVOLATILES   | Fluoranthane                |                  |                  | 0,33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 4 0    | 0.33 1 2 1      | 0.45 1 < U        |
| SEMIVOLATILES   | Fluorene                    |                  |                  | 0.33 1 < U       | 0.33 + < 0       | 0,33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0    | 0.00 1 4 11     | 0.45 1 c U        |
| SEMIVOLATILES   | Hexachtorobenzene           |                  |                  | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0,33 1 < 0    | 033 ( < 1)      | 0.45 1 c U        |
| SEMIVOLATILES   | Hexachlorobutacliene        |                  |                  | 0.33 t < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33   < U    | 0.33 1 < 0      | 0.45 1 4 1        |
| SEMIVOLATILES   | Hexachlorocyclopentadiene   |                  |                  | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U    | 0,331 < 0       | 0.45 1 2 1        |
| SEMIVOLATILES   | Hexachloroethane            |                  |                  | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0    | 0.33 4 4 0      | 0.45 1 4 11       |
| SEMIVOLATILES   | Indeno(1.2.3-cd)pyrene      |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0    | 0.33 1 < 0      | 0,45 1 < 0        |
| SEMIVOLATILES   | Isophérone                  |                  |                  | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0    | 0.33 1 < 0      | 0.45 ( < 0        |
| SEMIVOLATILES   | Naphthalene                 |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 t ≺ U       | 0.33 1 < U    | 0.33 1 < 0      | U.45 1 < U        |
| SEMIVOLATILES   | Nilrobenzenie               |                  |                  | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < 0    | 0.33 1 < U      | U.45 1 < U        |
| SEMIVOLATILES   | n-Nitroso-di-n-propylamine  |                  |                  | 0.33 i < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U    | 0.33 1 < U      | 0.45 1 < U        |
| SEMIVOLATILES   | n-Nitrosodiphenylamine      |                  |                  | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U    | 0.33 1 < 0      | U.45 1 < U        |
| SEMIVOLATILES   | Pentachiorophenol           |                  |                  | 1.65 1 < U       | 1.65 1 < U       | 1.85 1 < U       | 1.65 1 < U       | 1.85 1 < U    | 1,65 1 < U      | 2.2 1 < U         |
| SEMIVOLATILES   | Phenaothrene                |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,414 1          | 0.33 1 < U    | 0.465           | 0.45 1 < U        |
| SEMIVOLATILES   | Phenol                      |                  |                  | 0.33 1 < U       | 0.33 1 < U    | 0.33 1 < U      | 0.45 1 < U        |
| SEMIVOLATILES   | Pyrana                      |                  |                  | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U    | 0.33 1 < U      | 0.45 i < U        |
| VOLATILES   | 1 1 1 2-Telrachlomethane    | 0.00568 1 1      | 0.00688 1 U      |                  |                  |                  |                  |               |                 | 0,014 1 < U       |
| VOLATILES   | t i STrichlomethane         | 0.00568 1 U      | 0.00688 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U   | 0.005 1 < U     | 0.007 1 < U       |
| VOLATILES   | 1 1 2 2.Teirarbhroolhane    | 0.00558 1 U      | 0.00588 1 U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U     | 0.007 1 < U       |
| VOLATILES   | 1 1 2.Techanelbane          | 0.00568 1 1      | 0.00688 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U     | 0.007 î < U       |
| VOLATILEE   | 1 L.Dichlamethade           | 0.00559 1 11     | 0.00688 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U     | 0.007 1 < U       |
| A CONTRACTOR OF A CONTRACTOR OF A CONTRACTOR OF A CONTRACTOR OF A CONTRACTOR OF A CONTRACTOR OF A CONTRACTOR OF | I, I DIVINUOSENDING         |                  |                  |                  |                  |                  |                  |               |                 |                   |



 Table 3-21

 Concentrations of Chemicals in Soil Samples Associated with Sump 021

| [SUMP] = SUMP021 |                                |                  |                  | ILL COOL OF      | H-5021-01                | LH-S021-01       | LH-5021-02       | LH-S021-02       | LH-\$021-02      | 1HS-2-08         |
|------------------|--------------------------------|------------------|------------------|------------------|--------------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                                | 35SUMP021-SB01   | 35SUMP021-SB02   | 14 6001 01 00    | 14.5021-01 1             | LH-S021-01 2     | LH-S021-02_1     | LH-\$021-02_2    | LH-S021-02_3     | LHS-2-08         |
| SAMPLE_NO        |                                | 35-SMP21-SB01-02 | 35-SMP21-SB02-02 | LH-5021-01-00    | 6///002                  | 100010101        | 8/6/1993         | 8/6/1993         | 8/6/1993         | 1/10/1995        |
| SAMPLE_DATE      |                                | 9/11/2006        | 9/11/2006        | 8/5/1993         | 81011893                 | 35-45            | 0.5 - 1 Fi       | 2 - 2.5 Ft       | 3.4 - 3.9 Ft     | 0 - 0.5 Ft       |
| DEPTH            |                                | 4.5 - 4.5 F1     | 4.5 - 4.5 Fl     | 1-1.5 M          | 151,54                   | PEG              | BEG              | REG              | REG              | REG              |
| SAMPLE_PURPOSE   |                                | REG              | REG              |                  | Red<br>Brouth Dill LO VO | Result Dil 10 VO | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Hesuit Dil LO VG         |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |
| VOLATILES        | t,t-Dichloroelhane             | 0.00568 1 U      | 0.00588 1 U      | 0.005 1 < 0      | 0.005 1 < 0              | 0.000 1 4 0      |                  |                  |                  |                  |
| VOLATILES        | 1,1-Dichloropropene            | 0.00568 1 U      | 0.00688 1 U      |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2,3-Trichlorobenzene         | 0.00568 1 U      | 0.00688 1 U      |                  |                          |                  |                  |                  |                  | 0.014 1 < U      |
| VOLATILES        | 1,2,3-Trichloropropane         | 0.00568 1 U      | 0.00688 U        |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2,4 Trichtarobenzene         | 0.00568 1 U      | 0.00588 U        |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2,4-Trimethylbenzene         | 0.00568 \$ U     | 0.00688 1 U      |                  |                          |                  |                  |                  |                  | 0.027 t < U      |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    | 0.00568 1 U      | 0.00686 1 U      |                  |                          |                  |                  |                  |                  | 0.027 1 < U      |
| VOLATILES        | 1,2-Dibromosthane              | 0.00568 1 U      | 0.00688 1 U      |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | 1.2-Dichlorobenzene            | 0.00568 1 U      | 0.00688 1 0      |                  |                          | 0.005 t < 1      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 t < U      |
| VOLATILES        | 1,2-Dichloroethane             | 0.00568 1 U      | 0.00688 1 U      | 0.005 1 < U      | 0.005 1 2 0              | 0.005 1 < 1      | 0.005 1 < 11     | 0.005 1 < U      | 0.005 i < U      | 0.007 1 < U      |
| VOLATILES        | 1,2-Dichloroethene             |                  |                  | 0.005 1 < U      | 0.005 1 < 0              | 0.005            | 0.005 1 < 1      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |
| VOLATILES        | 1.2-Dichloropropane            | 0.00568 1 U      | 0.00688 1 U      | 0.005 t < U      | 0,005 1 < 0              | 0.008 1 2 0      | 0.000            |                  |                  |                  |
| VOLATILES        | 1.2-Dimethylbenzene (o-Xylene) | 0.00568 1 U      | 0.00688 t U      |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | 1,3.5-Trimethylbenzene         | 0.00568 I U      | 0.00686 1 U      |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | 1,3-Dichlorobenzene            | 0.00568 1 U      | 0.00588 1 U      |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | 1,3-Dichloropropane            | 0.00568 1 U      | 0.00688 1 U      |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | 1.4-Dichlorobenzene            | 0.00568 1 U      | 0.00688 1 U      |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | 2,2-Dichloropropane            | 0.00568 1 U      | 0.00688 1 U      |                  |                          |                  | 0.05 t - 11      | 0.05 1 e U       | 0.05 1 < U       | 0.014 1 < U      |
| VOLATILES        | 2-Bulanone                     | 0.0114 1 U       | 0.0138 1 U       | Q.05 1 < U       | 0,05 1 < U               | 0.05 1 < 0       | 0.05 1 < 0       | 0.00 1 < 0       | 001 1 < U        | 0.014 1 < U      |
| VOLATILES        | 2-Chloroethyl vinyl ether      | 0.0114 1 U       | 0.0138 f U       | 0.01 i < U       | 0.01 1 < U               | 0.01 1 < U       | 0.01 1 < 0       |                  |                  |                  |
| VOLATILES        | 2-Chiorotoluene                | 0.00568 t U      | 0.00688 1 U      |                  |                          |                  |                  | 0.05 1 - 11      | 0.05 1 < U       | 0.014 1 < U      |
| VOLATILES        | 2-Hexanone                     | 0.0114 I U       | 0.0138 1 U       | 0.05 1 < U       | 0.05 f < U               | 0.05 1 < U       | 0.05 1 < 0       | 0.00             |                  | 0.68 1 < U       |
| VOLATILES        | 2-Propenal                     |                  |                  |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | 4-Chiarololuene                | 0.00568 1 U      | 0.00688 1 U      |                  |                          |                  |                  | D1 1 4 11        | 0114             | 0.014 i < U      |
| VOLATILES        | Acetone                        | 0.0108 1 J B     | 0.00704 1 J B    | 0.1 1 < U        | 0.1 1 < U                | 0.1 1 < U        | 0,1 1 < 0        | <b>U.I.I.K.U</b> |                  | 0.14 1 < U       |
| VOLATILES        | Acetonitrile                   |                  |                  |                  |                          |                  |                  |                  |                  | 0.14 1 e U       |
| VOLATILES        | Acrylonitrile                  | 1                |                  |                  |                          |                  |                  |                  |                  | 0014 1 × U       |
| VOLATILES        | Allyi chinde                   |                  |                  |                  |                          |                  |                  |                  |                  | 0.007 1 4 11     |
| VOLATILES        | Renzena                        | 0.00568 1 U      | 0,00688 1 U      | 0.005 1 < U      | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0,003 1 6 0      | 0.001            |
| VOLATILES        | Bromobeozene                   | 0.00568 1 U      | 0.00688 1 U      |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | Bromochloromethana             | 0.00568 1 U      | 0,00688 1 U      |                  |                          |                  |                  |                  |                  | 0.007 5 2 11     |
| VOLATILES        | Bromodichloramethane           | 0.00568 1 U      | 0.00688 1 U      | 0,005 1 < U      | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      |                  | 0.007 1 < 11     |
| VOLATILES        | Bromolorm                      | 0.00568 I U      | 0.00588 1 U      | 0.005 I < U      | 0.005 t < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      |                  | 0.007 1 4 1      |
| VOLATILES        | Bromomethaae                   | 0.0114 1 U       | 0.0138 1 U       | 0.01 1 < U       | 0.01 1 < U               | 0,01 1 < U       | 0.01 t < U       | 0,01 1 < 0       | 0.01 1 < 0       | 0.007 1 - 11     |
| VOLATILES        | Carbon disulfide               | 0.00568 1 U      | 0.00688 1 U      | 0.005 t < U      | 0.005 1 < U              | 0.005 î < U      | 0.005 1 < U      | 0.005 < U        | 0.005 1 2 0      | 0,007 1 4 0      |
| VOLATIES         | Carbon tetrachlarida           | 0.00568 1 11     | 0.00688 1 U      | 0.005 1 < U      | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0,005 1 2 0      | 0.007 1 1        |
| VOLATILES        | Chlorabor 2000                 | 0.00568 1 11     | 0.00688 1 U      | 0.005 1 < U      | 0.005 t < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      |                  |
| VOLATICES        | Chicrophyse                    | 0.0114 1 11      | 0.0138 1 11      | 0.01 1 < U       | 0.01 1 < U               | 0.01 i < U       | 0,01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.014 1 4 0      |
| VULATICES        | Chloroform                     | 0.00568 1 11     | 0.00688 1 U      | 0.005 t < U      | 0,005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < 0      |
| VOLATILES        | Character                      | 0.00365 1 0      | n 0138 1 U       | 0.01 1 < U       | 0.01 1 < U               | 0.01 1 < U       | 0.01 1 < U       | 0.01 I < U       | 0.01 1 < U       | 0.014 1 < 0      |
| VOLATILES        | Chloromeinane                  | 0.0114 7 0       | 0.0135 1 0       |                  |                          |                  |                  |                  |                  | 0,14 1 < 0       |
| VOLATILES        | Unioroprene                    | D DOLED 1 11     | 0.00698 1 11     |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | cis-1,2-Dichloroethene         | 0.00368 1 0      |                  | 0.005 1 < U      | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |
| VOLATILE5        | cis-1.3-Dichlorapropene        | 0.00568 1 0      | 0.00000 1 0      | 0.005 1 < U      | 0.005 i < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 t < U      | 0.007 1 < U      |
| VOLATILES        | Dibromochlorsmethane           |                  | 0.000000 1 0     |                  |                          |                  |                  |                  |                  | 0,027 1 < 0      |
| VOLATILES        | Dibramomethane                 | 0,00588 1 0      | 0 1 8800.0       |                  |                          |                  |                  |                  |                  | 0.027 1 < U      |
| VOLATILES        | Dichlorodifluoromethane        | 0.0114 1 0       | 0.0138           |                  |                          |                  |                  |                  |                  | 0.027 1 < 0      |
| VOLATILES        | Elhyi melhaciylale             |                  | 0.00600 ( )      | 0.005 1 - 11     | 0.005 1 < 11             | 0.005 i < U      | 0,005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |
| VOLATILES        | Ethylbenzene                   | 0.00558 1 U      | 0.00088 1 0      | 0.000 F K U      | 0.000 1 - 0              |                  |                  |                  |                  |                  |
| VOLATILES        | Hexachlorobuladiene            | 0.00558 1 U      | 0.00688 1 U      | 1                |                          |                  |                  |                  |                  | 0.014 i < U      |
| VOLATILES        | IODOMETHANE                    |                  |                  |                  |                          |                  |                  |                  |                  | 2.7 1 < L        |
| VOLATILES        | ISOBUTY'L ALCOHOL              |                  |                  |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | Isopropylbenzene               | 0.00568 1 U      | 0.00688 1 U      |                  |                          |                  |                  |                  |                  |                  |
| VOLATILES        | m,p-Xylenes                    | 0.00568 1 U      | 0.00588 1 U      |                  |                          |                  |                  |                  |                  | 0.027 1 < L      |
| VOLATILES        | Melhacrylonitrile              | l l              |                  |                  |                          |                  |                  |                  |                  |                  |





 Table 3-21

 Concentrations of Chemicals in Soil Samples Associated with Sump 021

| (SUMP) = SUMP021 |                             |                  |                  |                  | 11 0001 01       | LH CODI GI       | 11-5031-02       | 1.H-5021-02       | LH-S021-02       | LHS-2-08         |
|------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|------------------|
| LOCATION _CODE   |                             | 35SUMP021-SB01   | 35SUMP021-SB02   | LH-S021-01       | LH-5021-01       | LINGOL OL D      | 1 1.601.02       | 1H-S021-02 2      | LH-S021-02_3     | LH5-2-08         |
| SAMPLE_NO        |                             | 35-SMP21-SB01-02 | 35-SMP21-SB02-02 | LH-5021-01 QC    | LH-5021-01_1     | 0021-01_2        | e/c/1002         | R/6/1993          | 8/6/1993         | 1/10/1995        |
| SAMPLE_DATE      |                             | 9/11/2006        | 9/11/2006        | 8/6/1993         | 8/6/1993         | B/0/1393         | 0.5 - 1.5        | 2.25 Ft           | 3.4 - 3.9 Ft     | 0 - 0.5 Ft       |
| DEPTH            |                             | 4.5 - 4.5 Ft     | 4.5 - 4.5 FI     | 1 - 1,5 FI       | 1 - 1.5 Ft       | 3.9 - 4 F1       | 0.3-111          | REG               | BEG              | REG              |
| SAMPLE_PURPOSE   |                             | REG              | REG              | FD               | REG              |                  | Basult Dit LO VO | Basult Dill 10 VO | Besult DIL LO VQ | Result DIL LO VO |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Hesuil DIL LU VO |                  | 0.05 1 < 11       | 0.05 1 < U       | 0.014 1 < U      |
| VOLATILES        | Methyl isobutyl ketone      | 0.0114 1 U       | 0.0138 I U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < 0       | 0.05 1 4 0       | 0,00 1 4 0        |                  | 0.027 i < U      |
| VOLATILES        | METHYL METHACRYLATE         |                  |                  |                  |                  |                  | 6.607 1 - U      | onne t z ti       | 0.005 t < U      | 0.007 1 < U      |
| VOLATILES        | Methylene chloride          | 0.00568 1 U      | 0.00588 1 U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 4 0      | 0.000 / 0 0       |                  |                  |
| VOLATILES        | Naphihalene                 | 0.0114 1 U       | 0.0138 1 U       |                  |                  |                  |                  |                   |                  |                  |
| VOLATILES        | n-BUTYLBENZENE              | 0.00568 1 U      | 0.00688 1 U      |                  |                  |                  |                  |                   |                  |                  |
| VOLATILES        | n-PROPYLBENZENE             | 0.00568 i U      | 0.00688 1 U      |                  |                  |                  |                  |                   |                  | 0.027 1 < U      |
| VOLATILES        | Penlachioroethane           | ļ                |                  |                  |                  |                  |                  |                   |                  |                  |
| VOLATILES        | p-ISOPROPYLTOLUENE          | 0.00568 1 U      | 0.00688 1 U      |                  |                  |                  |                  |                   |                  | 0.058 1 < U      |
| VOLATILES        | Propionitrile               | ]                |                  |                  |                  |                  |                  |                   |                  |                  |
| VOLATILES        | sec-BUTYLBENZENE            | 0.0056B 1 U      | 0.00688 1 U      |                  |                  |                  | ( )I             | 0.007 H - 11      | 0.005 1 4 11     | 0.007 1 < U      |
| VOLATILES        | Styrene                     | 0.00568 t U      | 0.00688 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | u,uuo i < O       | 0.003 1 4 5      |                  |
| VOLATILES        | tert-BUTYLBENZENE           | 0.00568 1 U      | U 1 88300.0      |                  |                  |                  |                  | 6 607 A           | 0.005 1 - 11     | 0.007 1 < 0      |
| VOLATILES        | Tetrachloroethene           | 0.00568 1 U      | 0.00688 U        | 0,005 i < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < 0       | 0.005 1 < 1      | 0.007 1 < U      |
| VOLATILES        | Toluene                     | 0.00568 1 U      | 0.0068B 1 U      | 0.005 1 < U      | 0.005 i < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.000 1 2 0       | 0.000 1 2 0      |                  |
| VOLATILES        | irans-1,2-Dichloroathana    | 0.00566 1 U      | 0.00688 1 U      |                  |                  |                  |                  | 0.005 1           | 0.005 1 - 11     | 0.007 1 ⊰ U      |
| VOLATILES        | trans-1,3-Dichloropropene   | 0.00568 1 U      | 0.00688 1 U      | 0.005 1 < U      | 0.005 i < U      | 0.005 1 < U      | 0.005 1 < 0      | 0,000 1 4 0       | 0.000 1 0 0      | 0.027 1 < U      |
| VOLATILES        | trans-1,4-Dichloro-2-buiene |                  |                  |                  |                  |                  |                  | 0.005 t           | 0.005 1 4 11     | 0.007 1 < U      |
| VOLATILES        | Trichlorosihena             | 0.00568 1 U      | 0.00688 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0       | 0.000 1 4 0      | 0.0t4 1 e U      |
| VOLATILES        | Trichlorofluoromethane      | 0.0114 1 U       | 0.0138 1 U       |                  |                  |                  |                  | 0.07 1 · · · · ·  |                  | 0.014 1 2 0      |
| VOLATILES        | Vinvi acetate               | 0.0114 1 U       | 0.0138 1 U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < 0       | 0.05 1 < 0       | 0.05 1 < 0        | 0.05 1 < 0       | 0.014 1 < 1      |
| VOLATILES        | Vinyl chloride              | 0.0114 1 U       | 0.0138 1 U       | 0.01 1 < U       | 0,01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0,01 1 < U        |                  | 0.007 1 < 11     |
| VOLATILES        | Xylenes, Total              |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0       |                  | v,vv.            |

Footnotes are shown on cover page to Tables Section.

5. 1. ..... Data Evaluation Report

.

## Chemical Concentrations in Soil Associated with LHAAP-35/35 Sumps

-----

مستقد والمتحد والمتعالية المراجع والمتحصص



Table 3-22 Concentrations of Chemicals in Soil Samples Associated with Sump 022

| (SUMP) = SUMP022  |                  |                   | 11.000.04        | 111 000 01       | 14.000.00        | H-S22-02         | STEP-46SS05          | STEP-46S\$05       |
|---|------------------|-------------------|------------------|------------------|------------------|------------------|----------------------|--------------------|
| LOCATION CODE   | 35SUMP022-S801   | 35SUMP022-5801    | 10.522-01        | 18,522-01 2      | LH-S22-02 1      | LH-S22-02_2      | 465505(0-0_5)-020312 | 46SS05(1-2)-020312 |
| SAMPLE_NO   | 35-5MP22-5001-01 | 03-344P22-3001-02 | 6/25/1993        | 6/25/1993        | 6/25/1993        | 6/25/1993        | 3/12/2002            | 3/12/2002          |
| SAMPLE_DATE   | 971372006        | B-95)             | 5.2 5 Ft         | 5 7 Ft           | 5 - 2_5 Ft       | 5 - 7 Ft         | 05 FI                | 1 - 2 Ft           |
| DEPTR   | 23-2371          | BEG               | REG              | REG              | REG              | REG              | REG                  | REG                |
| SAMPLE_PURPOSE  | Result Dil LO VO | Reput DIL LO VO   | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO     | Result DIL LO VO   |
| Test Group Parameter (Units = mg/kg)                              | Headit Oft Ed Vd |                   | 0.15 1 < U       | 0.15 1 < U       | 0,15 1 < U       | 0.15 1 < U       |                      |                    |
| EXPLOSIVES 26-Dinimologing  |                  |                   | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 i < U       |                      |                    |
| METALS Alumioum   | 7240 1           | 6320 (            | 8130 1           | 20800 1          | 39200 1          | 12000 1          |                      |                    |
| METALS Antimony   | 0.149 1          | 0.112 1 U         | 2 1              | 5.5 1            | 1.2 1            | 31 < U           |                      |                    |
| METALS Arsenic  | 25.8 1           | 3.3 1             | 3.5 1            | 2.4 1            | 2.7              | 1,5 1            |                      |                    |
| METALS Barium   | 88.6 1 J         | 43,6 1 J          | 146 1            | 75.1 1           | 117 1            | 40.6             |                      |                    |
| METALS Beryllium  | 0.402 1 J J      | 1.03              |                  | 1                | 1 1 - 11         | 1120             |                      |                    |
| METALS Cadmium  | 0.163 1 J J      | 0.119 1 J J       | 1 2 2 1 1        | 729 1            | 8770 1           | 873 1            |                      |                    |
| METALS Calcium  | 2650 1           | 534 1             | 10400 1          | 17.3 1           | 29.3             | 11,4 1           |                      |                    |
| METALS Chromium   | 13.5 1 0         | 575 1             | 1.7 1            | 4.5 1            | 5.5 1            | 5.6 1            |                      |                    |
| METALS GODAN  | 5.47 1           | 7.69 1            | 8.6 1            | 5.9 1            | 8.4 1            | 7.6 1            |                      |                    |
|   | 14700 1          | 56000 10          | 14100 1          | 23100 1          | 27500 1          | 17000 1          |                      |                    |
| METALS Lead   | 11.7 1           | 12.9 1            | 63 1             | 8.3 1            | 7 1              | 6 1              |                      |                    |
| METALS Magnesium  | 508 1 J          | 585 ł J           | 1260 1           | 1150 1           | 1490 1           | 1330 1           |                      |                    |
| METALS Manganese  | 168 1            | 103 1             | 76.6 1           | 59.4 1           | 43.4 1           | 33.1 1           |                      |                    |
| METALS Mercury  | 0.0314 1 J J     | 0.0229 1 J J      | 11 < U           | 11 < U           | 11 < U           | F 1 < U          |                      |                    |
| METALS Nickel   | 4.24 1           | 17,5 1            |                  |                  | 2500 1           | 928 1            |                      |                    |
| METALS Polassium  | 239 1            | 168 t             | 416 1            |                  | 11 4 1           | 11 < 1           |                      |                    |
| METALS Selenium   | 0.371 1          | 0.224 1 U         | 11 < 0           |                  | 5 1 e U          | 1 1 < U          |                      |                    |
| METALS Silver   | 1.68 1 0         | 1,75 1 0          | ,, , ,           |                  |                  |                  |                      |                    |
| METALS Sodium   | 123              | 37.0 1            | 86.7 1           | 16.3 1           | 37.3 1           | 14,1 1           |                      |                    |
| METALS SUDJUDA  | 0.0635 1         | 0.0965 1          |                  |                  |                  |                  |                      |                    |
| METALS Vanadium   | 26.6 1 J         | 60 1 J            |                  |                  |                  |                  |                      |                    |
| METALS Zinc   | 80 1 J           | 29.5 1 J          | 68 1             | 39.6 i           | 40 1             | 36.5 1           | 0.0511 1 11 11       | 0.0494 1 U U       |
| PERC Perchlorate  |                  |                   | • · • • • •      | A15 1 4 11       | 0.15 1 2 11      | 015 1 < U        |                      |                    |
| SEMIVOLATILES 1,2,4-Trichlorobenzene                              | 0.361 2 U        | 0.181 1 U         | 0.15 1 < 0       | 0.15 1 < 1       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES 1.2-Dichlorobenzene                                 | 0.361 2 U        | 0.161 1 1         | 0.15 1 < U       | 0.15 1 < U       | 0,15 1 < U       | 0,15 1 < U       |                      |                    |
| SEMIVOLATILES 1.3-Dichlorobenzene                                 | 0.361 2 0        | 0.181 1 1         | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES 1,440ic/literophenol                                | 0.351 Z U        | 0.181 I U         | 0.8 1 < U        | 0.8 1 < U        | 0.8 1 < U        | 0.8 1 < U        |                      |                    |
| SEMIVOLATILES 2,4,6-Trichlorophenol                               | 0.361 2 U        | 0.161 1 U         | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 t < U       |                      |                    |
| SEMIVOLATILES 2,4-Dichlorophenol                                  | 0.361 2 U        | 0.181 t U         | 0,15 1 < U       | 0.15 1 < U       | 0.15 1 < 0       | 0.15 1 < 0       |                      |                    |
| SEMIVOLATILES 2,4-Dimethylphenol                                  | 0.361 2 U        | 0,181 t U         | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < 0       | 0.15 1 < 0       |                      |                    |
| SEMIVOLATILES 2,4-Dinitrophenol                                   | 1.8 2 U          | 0.903 1 0         | 0.4 : < 0        | 0.0 1 4 4        |                  |                  |                      |                    |
| SEMIVOLATILES 2.4 Dinitratoluane                                  | 0.361 2 0        | 0.101 1 0         |                  |                  |                  |                  |                      |                    |
| SEMIVOLATILES 2,6-DIPITORODERE<br>CENTIVOLATILES 2,6-DIPITORODERE | 0.361 2 1        | 0.181 1 U         | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0,15 1 < U       |                      |                    |
| SPMINOLATILES 2-Chloronhenol                                      | 0.361 2 U        | 0.181 i U         | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES 2-Methylnaphthalane                                 | 0.361 Z U        | 0.181 i U         | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES 2-Methylohenol                                      | 0.361 2 U        | 0.181 1 U         | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES 2-Nitrognifine                                      | 1.8 2 U          | 0.903 1 U         | 0.8 t < U        | 0.8 1 × U        | 0.8 1 < ♥        | 0.6 1 < 0        |                      |                    |
| SEMIVOLATILES 2-Nitrophenol                                       | 0.361 2 U        | 0.181 1 U         | 0.15 1 < U       | 0.15 1 < 0       |                  |                  |                      |                    |
| SEMIVOLATILES 3.3'-Dichlorobenzidine                              | 0.721 2 U        | 0.361 t U         | 0.15 1 < 0       | 0.15 1 < 0       |                  | 0.8 1 < U        |                      |                    |
| SEMIVOLATILES 3-Niroaniline                                       | 1.8 Z U          | 0,903 1 0         | 0.0 1 < 0        | 0.0 1 < U        | 0.8 1 < U        | 0.8 1 < U        |                      |                    |
| SEMIVOLATILES 4.6-Dimitro-2-methylphenol                          | 0.261 2 11       | 0.503 1 1         | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 f < U       |                      |                    |
| SEMIVOLATILES 4-Stornopriety presy error                          | 0.361 2 1        | 0.181 5 U         | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES 4-Chlomanilina                                      | 0.361 2 U        | 0,181 t U         | 0.15 1 < 번       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES 4-Chlorophenyl phenyl ether                         | 0.361 2 U        | 0.181 I U         | 0.15 1 < U       | 0.15 t < U       | 0.15 1 < U       | 0.15 1 < U       | · · · · · ·          |                    |
| SEMIVOLATILES 4-Methylphenol                                      | 0.361 2 U        | 0.181 1 U         | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES 4-Nitroaniline                                      | 1,8 Z U          | 0.903 1 U         | 0.8 1 < U        | 0.8 1 < U        | 0.8 1 < U        | 08 1 - 11        |                      |                    |
| SEMIVOLATILES 4-Nitrophenol                                       | 1,8 2 U          | 0.903 1 U         | 0.8 1 < 0        |                  | 015 1 2 1        | 0.15 1 < 1       |                      |                    |
| SEMIVOLATILES Acenaphihene  | 0.361 Z U        | 0,181 1 0         | 0.15 1 2 11      | 0.15 1 c U       | 0.15 1 < U       | 0,15 1 < U       |                      |                    |
| SEMIVOLATILES Acenaphthylene                                      | U S (66.0        | 0.181 1 U         | 0.15 1 < U       | 0,15 1 < U       | 0.15 1 < U       | 0.15 t < U       |                      |                    |
| SEMIVULANLES ANIMAGENE<br>SEMIVOLANLES Bonzo/atanthracane         | 0.361 2 U        | 0.181 1 U         | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES Benzo(a)pyrene                                      | 0 361 2 U        | 0,181 1 U         | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
|   | -                |                   |                  |                  |                  |                  |                      |                    |

 Table 3-22

 Concentrations of Chemicals in Soil Samples Associated with Sump 022

| [SUMP] = SUMP02      | 2                              |                  |                  |   |                  |                  |                  | CTED ACCOC           | CTCD. ACCCOS       |
|----------------------|--------------------------------|------------------|------------------|---|------------------|------------------|------------------|----------------------|--------------------|
| LOCATION _CODE       |                                | 35SUMP022-SB01   | 35SUMP022-5801   | LH-S22-01                               | LH-S22-01        | LH-S22-02        | LM-522-02        | 485505/0-0 51-020312 | 465505(1-2)-020312 |
| SAMPLE_NO            |                                | 35-SMP22-SB01-01 | 35-5MP22-5801-02 | LM-522-01_1                             | 6/05/4002        | 6/25/1993        | 6/25/1993        | 3/12/2002            | 3/12/2002          |
| SAMPLE_DATE          |                                | 9/13/2006        | 9/13/2006        | 6-20 (303<br>6 - 2 6 E)                 | \$ . 7 El        | 5 - 2 5 Fl       | 5 - 7 Ft         | 0-5FI                | 1-28               |
|                      | -                              | _3 · _3 · 1      | PPG              | BEG                                     | REG              | REG              | REG              | REG                  | REG                |
| Tast Group           | Parameter (Linits = mn/kn)     | Result OIL LO VO | Result DIL LO VO | Result Dit LQ VQ                        | Result Dil LO VO | Result DIL LO VQ | Result DIL LO VO | Result OIL LO VO     | Result DIL LO VO   |
| SEMIVOLATILES        | Benzo(b)(lupranitiens          | 0.361 2 U        | 0,181 1 U        | 0.157 1                                 | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES        | Benzo(ghi)parylens             | 0.361 2 U        | 0.581 1 U        | 0.15 1 < U                              | 0.15 î < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES        | Benzo(k)fluoranthene           | 0361 2 U         | 0.181 1 U        | 0.15 1 < U                              | 0.15 1 < U       | 0.15 f < U       | 0.15 i < U       |                      |                    |
| <b>SEMIVOLATILES</b> | Benzoic Acid                   | 1.8 2 U          | 0.903 1 U        | 0.8 1 < U                               | 0,8 1 < U        | 0.8 t < U        | 0.8 t < U        |                      |                    |
| SEMIVOLATILES        | Benzyl Alcohol                 | 0.361 2 U        | 0.181 I U        | 0.15 1 < 0                              | 0.15 1 < U       | 0.15 I < U       | 0.15 1 < 0       |                      |                    |
| SEMIVOLATILES        | bis(2+Chloroethoxy)methane     | 0.361 2 U        | 0,181 1 U        | 0.15 1 < U                              | 0,15 1 < U       | 0.15 1 < U       | 0.15 1 < 0       |                      |                    |
| SEMIVOLATILES        | bis(2-Chloroethyl)ether        | 0,361 2 0        | 0,181 1 U        | U.15 1 < U                              | 0,15 1 4 1       | 0.15 1 < 1       | 0.15 1 < 1       |                      |                    |
| SEMIVOLATILES        | bis(2-Chloroisopropyl)ether    | 0.361 2 0        | 0.181 1 U        | 9.15 1 < 0                              |                  | 114              | 1140             |                      |                    |
| SEMIVOLATILES        | Dis{2-Envinexyi)phthalate      |                  | 0.101 1 1        | 015 1 - 1                               | 0.15 1 < 0       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMINOLATILES        | Carbozsio                      | 0.301 2 0        | 0.101 1 0        | 0.15 1 < U                              | 0.15 1 < U       | 0,15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMBOLATILES         | Chrusene                       | 0.361 2 10       | 0.181 1 U        | 0.15 1 < U                              | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES        | Dibepzo(a,h)anthracene         | 0.361 2 U        | 0,181 1 U        | 0.15 i < U                              | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES        | Dibenzoluran                   | 0.361 2 U        | 0.181 1 U        | 0.15 i < U                              | 0.15 1 < U       | 0,15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES        | Diethyl phihafale              | 0.351 2 U        | 0.181 1 U        | 0.15 1 < U                              | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < 만       |                      |                    |
| <b>SEMIVOLATILES</b> | Dimethyl phthalate             | 0.361 2 U        | 0.181 1 U        | 0.15 1 < U                              | 0,15 1 < U       | 0.15 1 < U       | 0.15 f < U       |                      |                    |
| SEMIVOLATILES        | di-n-Butyl phthalate           | 0.361 2 U        | 0.181 1 U        | 0.15 1 < U                              | 0,15 1 < U       | 0,15 1 < 0       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES        | di-n-Octyl phthalate           | 0.351 2 U        | 0.181 1 U        | 0.15 1 < U                              | 0.15 1 < U       | 0.19 1           | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES        | Fluoranthane                   | 0.361 Z U        | 0,181 1 U        | 0,15 1 < U                              | 0,15 t < U       | U.15 1 < U       | 0.15 1 < 0       |                      |                    |
| SEMIVOLATILES        | Fluorens                       | 0.361 2 U        | 0.181 1 U        | 0.15 1 < U                              | 0.15 t < U       | 0.15 1 4 0       | 0.15 1 2 10      |                      |                    |
| SEMIVOLATILES        | Hexachlorobenzene              | 0.361 2 0        | 0.181 1 0        | 0.244 1                                 | 0.15 1 < 1       | 0.15 1 C U       | 0.15 1 < 0       |                      |                    |
| SEMIVOLATILES        | Hexachiorobuladiene            | 0.361 2 0        | 0.181 1 0        | 0.15 1 2 1                              | 0.15 1 < 0       | 0.15 1 < U       | 0,15 1 < U       |                      |                    |
| SEMIVOLATILES        | Нехафиотосусторникаления       | 0.361 2 U        | 0.181 1 1        | 0.15 1 < U                              | 0.15 1 < U       | 0,15 1 < U       | 0,15 t < U       |                      |                    |
| SEMIVOLATILES        | Indepoil 2.3.cdinyene          | 0.361 2 U        | 0.181 L U        | 0.15 1 < U                              | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES        | Isophorone                     | 0.361 2 U        | 0,161 1 U        | 0.15 1 < U                              | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES        | Naphthalena                    | 0,361 2 U        | 0,181 1 U        | 0,15 1 < U                              | 0,15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES        | Nitrobenzene                   | 0.361 2 U        | 0.181 1 U        | 0.15 1 < U                              | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES        | n-Nitroso-di-n-propylamine     | 0.361 2 U        | 0.181 1 U        | 0.15 t < U                              | 0.15 t < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| SEMIVOLATILES        | n-Nitrosodiphenylamine         | 0.361 2 U        | 0.181 1 U        | 0.3 1 < U                               | 0.3 1 < U        | 0.3 1 < U        | 0.3 1 < 0        |                      |                    |
| SEMIVOLATILES        | Penlachlorophenol              | 1.8 2 U          | 0.903 1 0        | 0.15 1 < 0                              | 0.15 1 < 0       | 0.13 1 4 0       | 0.15 1 2 1       |                      |                    |
| SEMIVOLATILES        | Phananihirana                  | 0.361 2 U        | 0.181 1 U        | 0.15 1 < 0                              | 0.15 1 < 0       | 0.15 1 4 1       | 0.15 / C         |                      |                    |
| SEMINOLATILES        | Preso                          | 0.361 2 1/       | 0.181 ( 1)       | 0.15 1 < 0                              | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                      |                    |
| VOLATILES            | 1 1 1 2-Tetrachiomethage       | 0.001 2 0        | 0.0511 1 U       |   |                  |                  |                  |                      |                    |
| VOLATILES            | 1.1.1-Trichtoroethane          |                  | 0.00511 1 U      | 0,005 1 < U                             | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |
| VOLATILES            | 1,1,2,2-Tetrachioroethane      |                  | 0.00511 1 U      | 0.005 1 < U                             | 0.005 1 < U      | 0.005 1 < V      | 0.005 1 < U      |                      |                    |
| VOLATILES            | 1,1,2-Trichlomethane           |                  | 0.00511 1 U      | 0.005 i < U                             | 0.005 f < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |
| VOLATILES            | 1,1-Dichlorpelhane             |                  | 0.00511 1 U      | 0.005 1 < U                             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |
| VOLATILES            | 1,1-Dichioroethene             |                  | 0.00511 I U      | 0,005 1 < U                             | 0.005 1 < U      | 0.005 t < U      | 0,005 4 < 0      |                      |                    |
| VOLATILES            | 1,1-Dichloropropene            |                  | 0,00511 1 U      |   |                  |                  |                  |                      |                    |
| VOLATILES            | 1,2,3-Trichlorobenzene         |                  | 0.00511 1 U      | 1 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( |                  |                  |                  |                      |                    |
| VOLATILES            | 1.2.3-Techloropane             |                  | 0.00511 1 U      |   |                  |                  |                  |                      |                    |
| VOLAHLES             | 1.2.4-Phonorobenzene           |                  | 0.00511 1 0      |   |                  |                  |                  |                      |                    |
| VOLATILES            | 1.2. Dibromo-3. chiomorgane    |                  | 0.00511 1 0      |   |                  |                  |                  |                      |                    |
| VOLATILES            | 1.2-Dibromoethane              |                  | 0.00511 1 U      |   |                  |                  |                  |                      |                    |
| VOLATILES            | 1,2-Dichlorobenzene            |                  | 0.00511 1 U      |   |                  |                  |                  |                      |                    |
| VOLATILES            | 1.2-Dichloroethane             |                  | 0.00511 1 U      | 0.005 î < U                             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |
| VOLATILES            | 1,2-Dichloroethene             |                  |                  | 0.005 1 < U                             | 0.005 1 < U      | 0.005 1 < U      | 0.005 i < U      |                      |                    |
| VOLATILES            | t,2-Dichloropropane            | 1                | 0.00511 1 U      | 0.005 1 < U                             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |
| VOLATILES            | 1,2-Dimethylbenzene (o-Xylene) |                  | 0.00511 1 U      | 0.005 1 < U                             | 0.005 1 < U      | 0.005 1 < 0      | 0,000 i < 0      |                      |                    |
| VOLATILES            | 1,3,5-Trimethylbenzene         | 1                | 0.00511 E U      |   |                  |                  |                  |                      |                    |
| VOLATILES            | 1.3-Dichlorobenzene            |                  |                  |   |                  |                  |                  |                      |                    |
| VOLATILES            | La-Dichloroboszoze             |                  | 0.00511 1 11     |   |                  |                  |                  |                      |                    |
| VOLATILES            | 2 2-Dichloropologing           | 1                | 0.00511 1 U      |   |                  |                  |                  |                      |                    |
| VOLATILES            | 2-Bulanone                     | 1                | 0.0102 i U       | 0.005 1 < U                             | 0.005 1 < U      | 0.006 1          | 0,005 1 < U      |                      |                    |
| VOLATILES            | 2-Chloroethyl vinyl ethor      |                  | 0.0102 1 U       |   |                  |                  |                  |                      |                    |





Table 3-22 Concentrations of Chemicals In Soil Samples Associated with Sump 022

| LOCATION_CODE 335UMP022-5801 35UMP022-5901 Um522-01 Um522-01 Um522-01 Um522-01 Um522-01 Um522-01 Um522-01 Um522-01 Um522-02 4655050-0.5  | 020312 465505(1-2)-020312 |
|--|---------------------------|
| SAMPLE IN 3000 2500 00 00 00 00 00 00 00 00 00 00 00 00  | 2 3/12/2002               |
| GANG C_UNIC C. SFI 3.4FI 5.25FI 5.7FI _5.25FI 5.7FI 0.5FI  | 1 + 2 Ft                  |
| CALINE DIDDOCE REG REG REG REG REG REG REG REG REG RE  | REG                       |
| American Parameter (Inita - maker) Result DIL LO VO Result DIL LO VO Result DIL LO VO Result DIL LO VO Result DIL LO VO Result DIL   | LO VO Result DIL LO VO    |
| rear block reference in the second seco   |                           |
| 0,0162 1 U 0,005 1 < U 0,005 1 < U 0,005 1 < U 0,005 1 < U   |                           |
| Vict 411 ES 4.//Silverbiliene 0.00511 f U  |                           |
| VCIATIES Accione 0,012 1 0,026 1 0,01 1 < U  |                           |
| 0.00511 1 U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U  |                           |
| VCLATUES Bromobergane 0.00511 1 U  |                           |
| VOLATILES Bromochloromelhane 0.00311 1 U   |                           |
| VOLATILES Bromodichloromethane0.00511 U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U  |                           |
| VOLATILES Brandom 0.00511 / U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U  |                           |
| VOLATILES Bromomethane 0.010 2 U 0.01 1 < U 0.01 1 < U 0.01 1 < U 0.01 1 < U   |                           |
| VOLATILES Carbon disulfide 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U   |                           |
| VOLATILES Carbon tetrachionide 0.00511 1 U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U   |                           |
| VOLATILES Chlorobenzane 0.00511 1 U 0.005 1 < U 0.005 1 < U 0.005 1  |                           |
| VOLATILES Chloroeihane 0.0102 1 U 0.01 1 < U 0.01 1 < U 0.01 1 < U 0.01 1 < U  |                           |
| VOLATILES Chlaroform 0.005 1 4 U 0.019 1 0.005 1 4 U   |                           |
| VOLATILES Chicomethane 0.0102 1 U 0.01 1 < U 0.01 1 < U 0.01 1 < U   |                           |
| VOLATILES dis-1,2-0ichloroelhene 0.00511 U 0.0051 < U 0.0051 < U 0.0051 < U 0.0051 < U   |                           |
| VOLATILES dis-1,3-Dichloropropene 0.0005 1 1 U 0.005 1 < U 0.005 1 < U 0.005 1 < U   |                           |
| VOLATILES Dibromochioromethane 0.0051 1 U 0.0051 < U 0.0051 < U 0.0051 < U 0.0051 < U  |                           |
| VOLATILES Dibromomelhane D.00511 1 U   |                           |
| VOLATILES Dichlorodrilluoromethane 0.0102 1 U  |                           |
| VOLATILES Ethylbenzene 0.0051 1 U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U  |                           |
| VOLATILES HexadVordbutadiene 0.00511 1 U   |                           |
| VOLATILES Isopropylbenzene 0.00511 1 U   |                           |
| VOLATILES m.p. Cresol 0.15 1 < U 0.15 1 < U 0.15 1 < U 0.15 1 < U  |                           |
| VOLATILES m.p./xylenas 0.00511 / U 0.0051 / U 0.0051 / U 0.0051 / U 0.0051 / U   |                           |
| VOLATILES Methyl Isoburyk ketone 0,0102 1 U 0,005 1 < U 0,005 1 < U 0,005 1 < U 0,005 1 < U 0,005 1 < U  |                           |
| VOLATILES Meithylene chloride 0.00511 1 U 0.01 1 < U 0.01 1 < U 0.01 1 < U   |                           |
| VOLATILES Naphthalana 0.0102 1 U   |                           |
| VOLATILES n-BUTYLBENZENE 0.00511 1 U   |                           |
| VOLATILES n-PROPYLEENZENE 0.00511 1 U  |                           |
| VOLATILES p-ISOPROPYLTOLUENE U.UUUST U   |                           |
|  |                           |
| VOLATILES Styrena 0000511 0 0.0051 C 0 0.005 C |                           |
|  |                           |
|  |                           |
| VOLATILES 10000 0 0000 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0000 1 0 0 0 0000 1 0 0 0 0000 1 0 0 0 0000 1 0 0 0 0000 1 0 0 0 0000 1 0 0 0 0000 1 0 0 0 0000 1 0 0 0 0000 1 0 0 0 0000 1 0 0 0 0000 1 0 0 0 0 0000 1 0  |                           |
| VOLATILES intansi 2,2 UCINOPERIARE 0.0001 / 0.0001 / 0.0005 / 4. U. 0.005                            |
| VUDLITLES I FARS-12-DURINGHUNDING  |                           |
|  |                           |
| VUDATILES TRANSINGUAUNINGRINNET<br>UNIATILES View senates<br>D1/12 1 1/ 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U  |                           |
| VUCKITLES VIIII declaration<br>VIIII e Minut Photode   |                           |
| VCI ATLES XV(ness Total 0.005 1 < U 0.005 1 < U 0.005 1 < U  |                           |

Footnotes are shown on cover page to Tables Section.

Dala Evaluation Report

### Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



 Table 3-23

 Concentrations of Chemicals in Soil Samples Associated with Sump 023

| [SUMP] = SUMP023 |                             | 250111         | P022-  | SROI    |    | 11     | 4.523.4 | 01       |    | 13     | 4-523-0 | 51   |    | ĿН     | ·\$23- | 01  |    | LH            | ·S23-0   | 2   |      | ĮΗ.      | S23-0  | 2  |    | STEP-4      | 5508    |    | S     | TEP-46  | 55508   |    |
|------------------|-----------------------------|----------------|--------|---------|----|--------|---------|----------|----|--------|---------|------|----|--------|--------|-----|----|---------------|----------|-----|------|----------|--------|----|----|-------------|---------|----|-------|---------|---------|----|
| CODATION_CODE    |                             | 35,940         | 23.5R  | 01-02   |    | LHR    | S23-01  | oc       |    | LH     | S23-01  | 11   |    | LH-    | 523-0  | 1_2 |    | UH            | \$23-02  | _1  |      | LH-S     | 23-02  | 2  |    | 46SS08(0-0_ | 5)-0203 | 12 | 46SS  | 508(1-2 | )-02031 | 12 |
| SAMPLE_NO        |                             | 00-01WR<br>9/1 | 20-00  | 5       |    | 7/     | 25/199  | 11       |    | 7      | /25/199 | 33   |    | 7/     | 25/19  | 93  |    | 7/            | 25/1993  | 3   |      | 7/2      | 5/1993 | 3  |    | 3/12/2      | 002     |    |       | 3/12/2  | 002     |    |
| DEATH            |                             | 45             | - 65 F | 5<br>71 |    | 0      | 15.15   | /~<br>≓} |    | ć      | 15-15   | ÷1   |    | 3      | 4.5    | FI  |    | 1             | • 1.5 Ft |     |      | 3,5      | - 4 Fi | ŧ  |    | 0 - 0.      | s Fi    |    |       | 1 - 2   | Fl      |    |
|                  |                             |                | REG    | ·       |    | v      | FD      | •        |    |        | REG     | •    |    | -      | REG    |     |    |               | RĘG      |     |      | F        | REG    |    |    | RE          | 3       |    |       | REC     | G       |    |
| SAMPLE_FURFUSE   | Parameter (i Inits → mg/kg) | Result         | กม     | 10      | VO | Result | DIE     | LΩ       | vo | Result | DIL     | LQ V | /0 | Result | DIL    | LQ  | VQ | Result I      | DR. L    | o v | ía I | Result D | IL I   | 0  | VQ | Result DIL  | LQ      | VQ | Resu  | A DIL   | LQ      | VQ |
| EVELOGIVES       | 2.4-Disitrololireze         | 1103015        |        |         | 14 | 0.33   | 1       | ~        | 11 | 0.33   | 1       | <    | Ū  | 0.33   | 1      | <   | υ  | • • • • • • • |          |     |      | 0.33     | 1      | <  | U  |             |         |    |       |         |         |    |
| EXPLOSIVES       | 2.6-Distroioluene           | 1              |        |         |    | 0.33   | 1       | <        | Ū  | 0.33   | t       | <    | u. | 0.33   | \$     | <   | U  |               |          |     |      | 0.33     | 1      | <  | υ  |             |         |    |       |         |         |    |
| MCTALC           | Aluminum                    | 6540           | 1      |         |    | 3090   | 1       | ÷        | ŭ  | 1040   | 1       | ~    | IJ | Í 1500 | 1      | <   | U  | 807           | 1        | < 1 | ប    | 1000     | 1      | <  | U  |             |         |    |       |         |         |    |
| METALS           | Antimony                    | 0 101          | 1      | Ы       | J  | 3      | 1       | <        | Ū  | 3      | 1       | <    | Ū  | 3      | 1      | <   | Ų  | 3             | 1        | < ا | U    | з        | 1      | <  | U  |             |         |    |       |         |         |    |
| METALS           | Arcanic                     | 1.58           | 1      | •       | •  | 1      | 1       | é.       | Ű  | 1      | 1       | <    | U  | 1      | 1      | <   | υ  | 1             | 1        | ۲ ا | U    | 1        | 1      | <  | U  |             |         |    |       |         |         |    |
| METALS           | Barium                      | 121            | 1      |         |    | 155    | 1       |          |    | 100    | 1       |      |    | 66.5   | 1      |     |    | 164           | ١        |     |      | 67.7     | 1      |    |    |             |         |    |       |         |         |    |
| METALS           | Bendlium                    | 0.435          | 1      |         |    |        |         |          |    |        |         |      |    |        |        |     |    |               |          |     |      |          |        |    |    |             |         |    |       |         |         |    |
| METALS           | Cadmium                     | 0.152          | i.     | J       | 3  | 1      | 1       | <        | U  | 1      | 1       | <    | u  | 1      | 1      | <   | υ  | 1             | 1        | ۲   | บ    | 1        | 1      | ٢  | Ų  |             |         |    |       |         |         |    |
| METALS           | Calcium                     | 631            | 1      |         |    | 206    | 1       |          |    | 97.1   | 1       |      |    | 476    | 1      |     |    | 140           | 1        |     |      | 112      | រ      |    |    |             |         |    |       |         |         |    |
| METALS           | Chromium                    | 12             | 1      |         |    | 5.9    | 1       |          |    | 3,4    | 1       |      |    | 14     | 1      |     |    | 2.5           | ١        |     |      | 2,4      | 1      |    |    |             |         |    |       |         |         |    |
| METALS           | Cohali                      | 4 4 4          | 1      |         |    | 2      | 1       |          |    | 1      | 1       | <    | υ  | 4.1    | 1      |     |    | 1             | 1        | <   | υ    | 1        | 1      | <  | U  |             |         |    |       |         |         |    |
| METALS           | Conter                      | 6.15           | 1      |         |    | 3.5    | 1       |          |    | 1.1    | 1       |      |    | 3.2    | 1      |     |    | 1             | 1        | <   | U    | 1.9      | \$     |    |    |             |         |    |       |         |         |    |
| METALS           | lion                        | 9620           | 1      |         |    | 4080   | 1       | <        | U  | 1430   | ĩ       | <    | U  | 12200  | 1      | <   | Ų  | 1410          | 1        | <   | U    | 1460     | 1      | <  | U  |             |         |    |       |         |         |    |
| METALS           | 1 ead                       | 7.99           | ſ      |         |    | 3.4    | 1       |          |    | 4,7    | 1       |      |    | 5.4    | 1      |     |    | 1             | 1        |     |      | 1        | 1      | ۲. | U  |             |         |    |       |         |         |    |
| METALS           | Magnacium                   | 504            | 1      |         |    | 277    | 1       |          |    | 87.9   | 1       |      |    | 801    | 1      |     |    | 245           | 1        |     |      | 142      | 1      |    |    |             |         |    |       |         |         |    |
| NETALS           | Manaaneee                   | 145            | 1      |         |    | 71     | 1       |          |    | 9,4    | 1       |      |    | 68.2   | 1      |     |    | 19.6          | 1        |     |      | 14.4     | 1      |    |    |             |         |    |       |         |         |    |
| METALS           | Marganese                   | 0.0213         | 1      | 4       | з  | 0.1    | 1       | <        | U  | 0.1    | 1       | <    | U  | 0,1    | 1      | <   | U  | 0,1           | 1        | <   | υ    | 0.1      | t      | <  | U  |             |         |    |       |         |         |    |
| METALO           | Nickel                      | 4.61           | 1      | ·       | ų  |        |         |          |    |        |         |      |    |        |        |     |    |               |          |     |      |          |        |    |    |             |         |    |       |         |         |    |
| METALO           | Potoscium                   | 234            | í      |         |    | 164    | 1       |          |    | 58.4   | 1       |      |    | 398    | 1      |     |    | 73.2          | 1        |     |      | 88.7     | 1      |    |    |             |         |    |       |         |         |    |
| METALS           | Selenium                    | 0.384          | 1      |         |    | 1      | 1       | <        | U  | 1      | 1       | <    | U  | i      | 1      | <   | U  | i             | 1        | <   | U    | 1        | 1      | <  | U  |             |         |    |       |         |         |    |
| METALD           | Cibrar                      | 1.65           | ì      | н       |    | 1      | 1       | ÷        | U. | 1      | 1       | <    | U  | 1      | ٢      | <   | υ  | 1             | 1        | <   | U    | 1        | 1      | <  | Ų  |             |         |    |       |         |         |    |
| METALS           | Sodium                      | 27             | ì      | v       |    |        |         |          | -  |        |         |      |    |        |        |     |    |               |          |     |      |          |        |    |    |             |         |    |       |         |         |    |
| METALS           | Strontium                   | -              |        |         |    | 21.4   | 1       |          |    | 15.2   | 1       |      |    | 14     | 1      |     |    | 13            | 1        |     |      | 11,4     | 1      |    |    |             |         |    |       |         |         |    |
| METALS           | Thallium                    | 0.0548         | 1      |         |    |        |         |          |    |        |         |      |    |        |        |     |    |               |          |     |      |          |        |    |    |             |         |    |       |         |         |    |
| METALS           | Vanadium                    | 19.5           | i      |         |    |        |         |          |    |        |         |      |    |        |        |     |    |               |          |     |      |          |        |    |    |             |         |    |       |         |         |    |
| METALS           | Zinc                        | 12.9           | 1      |         |    | 10.8   | 1       |          |    | 14.5   | 1       |      |    | 15.1   | 1      |     |    | 12            | 1        |     |      | 5.5      | 1      |    |    |             |         |    |       |         |         |    |
| PERC             | Perchiorate                 | 0.04           | 4      | υ       |    |        |         |          |    |        |         |      |    |        |        |     |    |               |          |     |      |          |        |    |    | 0.0492 1    | บ       | U  | 0.044 | 44 1    | U       | Ų  |
| SEMIVOLATILES    | 1.2.4-Trichlorobenzene      |                |        |         |    | 0.33   | 1       | <        | U  | 0.33   | 1       | <    | U  | 0,33   | 1      | <   | U  | 0.33          | 1        | ¢.  | U    | 0.33     | 1      | <  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 1.2-Dichlorobenzene         |                |        |         |    | 0.33   | 1       | <        | ប  | 0.33   | 1       | <    | U  | 0.33   | 1      | <   | U  | 0.33          | 1        | <   | U    | 0.33     | 1      | <  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 1.3-Dichlorobenzene         |                |        |         |    | 0.33   | 1       | <        | ປ  | 0.33   | 1       | <    | U  | 0.33   | 1      | <   | U  | 0.33          | 1        | <   | U    | 0.33     | 1      | <  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 1,4-Dichlorobenzene         |                |        |         |    | 0.33   | 1       | <        | ų  | 0.33   | 1       | <    | υ  | 0.33   | 1      | <   | U  | 0.33          | 1        | <   | U    | 0.33     | 1      | <  | υ  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 2,4.5-Trichlarophenol       |                |        |         |    | 1.65   | 1       | <        | U  | 1.65   | 1       | <    | U  | 1,65   | 1      | <   | U  | 1,65          | 1        | <   | U    | 1.65     | t      | <  | υ  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 2.4.6 Trichlarophenol       | 1              |        |         |    | 0.33   | 1       | <        | U  | 0.33   | 1       | <    | U  | 0.33   | 1      | <   | U  | 0,33          | 1        | ۲   | U    | 0.33     | 1      | <  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 2.4-Dichlorophenol          | i              |        |         |    | 0.33   | 1       | *        | U  | 0.33   | 1       | <    | U  | 0.33   | 1      | <   | U  | 0,33          | 1        | <   | U    | 0.33     | 1      | <  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 2,4-Dimethylphenol          |                |        |         |    | 0,33   | 1       | <        | U  | 0.33   | 1       | <    | U  | 0,33   | 1      | <   | Ų  | 0.33          | 1        | <   | U    | 0.33     | 1      | <  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 2,4-Dioilrophenol           |                |        |         |    | 1.65   | 1       | <        | U  | 1.65   | 1       | <    | U  | 1.65   | 1      | <   | Ų  | 1,65          | 1        | ۲.  | U    | 1.65     | 1      | <  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 2,4-Dinitrotoluene          |                |        |         |    |        |         |          |    |        |         |      |    |        |        |     |    | 0.33          | 1        | <   | U    |          |        |    |    |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 2,6-Dinitrololuene          |                |        |         |    |        |         |          |    |        |         |      |    |        |        |     |    | 0.33          | ۲        | <   | U    |          |        |    |    |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 2-Chloronaphthalene         |                |        |         |    | 0.33   | 1       | ۲        | U  | 0.33   | 1       | <    | U  | 0.33   | 1      | <   | Ų  | 0.33          | 1        | <   | U    | 0.33     | 1      | <  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 2-Chlorophenol              |                |        |         |    | 0.33   | 1       | <        | U  | 0.33   | 1       | <    | U  | 0.33   | 1      | <   | U  | 0.33          | 1        | <   | U    | 0.33     | 1      | <  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 2-Methylnaphthalene         |                |        |         |    | 0.33   | 1       | <        | U  | 0.33   | 1       | <    | υ  | 0.33   | វ      | <   | U  | 0.33          | 1        | <   | U    | 0.33     | 1      | <  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 2-Methylphenol              | 1              |        |         |    | 0.33   | 1       | <        | U  | 0.33   | 1       | <    | Ų  | 0.33   | 1      | <   | U  | 0,33          | 1        | <   | U    | 0.33     | វ      | <  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 2-Nitroanliine              |                |        |         |    | 1.65   | 1       | ~        | U  | 1.65   | 1       | <    | U  | 1.65   | 1      | <   | U  | 1.65          | 1        | ۲   | U    | 1.65     | 1      | ۲  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 2-Nitrophenol               |                |        |         |    | 0.33   | 1       | <        | υ  | 0.33   | 1       | <    | U  | 0.33   | 1      | <   | U  | 0.33          | 1        | <   | U    | 0.33     | 1      | <  | IJ |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 3,3'-Dichlorobenzidine      |                |        |         |    | 0.65   | 1       | <        | U  | 0.65   | 1       | <    | U  | 0.65   | 1      | <   | U  | 0.65          | 1        | <   | U    | 0.65     | 1      | ۲  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 3-Nitroaniline              | Į              |        |         |    | 1.65   | 1       | <        | U  | 1.65   | 1       | <    | Ų  | 1.65   | ٢      | <   | ប  | 1.65          | 1        | <   | U    | 1.65     | 1      | <  | Ų  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenöl  | 1              |        |         |    | 1.65   | 1       | <        | U  | 1.65   | 1       | <    | U  | 1.65   | 1      | ۲   | U  | 1,65          | 1        | <   | U    | 1.65     | 1      | <  | Ų  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 4-Bromophenyi phenyi elher  |                |        |         |    | 0.33   | 1       | <        | U  | 0.33   | 1       | <    | U  | 0.33   | 1      | <   | U  | 0.33          | 1        | <   | U    | 0,33     | 1      | <  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 4-Chioro-3-methylphenol     | 1              |        |         |    | 0.55   | 1       | <        | U  | 0.65   | 1       | <    | U  | 0.65   | 1      | <   | U  | 0.65          | ٢        | <   | U    | 0.65     | 1      | <  | U  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 4-Chloroanlline             | 1              |        |         |    | 0.65   | 1       | <        | U  | 0.65   | 1       | <    | U  | 0.65   | 1      | <   | U  | 0.65          | .1       | <   | U    | 0,65     | 1      | <  | Ų  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether |                |        |         |    | 0.33   | 1       | <        | U  | 0,33   | 1       | <    | V  | 0,33   | 1      | <   | υ  | 0.33          | 1        | <   | U    | 0.33     | 1      | <  | 0  |             |         |    |       |         |         |    |
| SEMIVOLATILES    | 4-Methylphenol              | 1              |        |         |    | 0.33   | 1       | <        | U  | 0.33   | 1       | <    | U  | 0.33   | 1      | <   | U  | 0.33          | 1        | <   | U    | 0.33     | 1      | <  | Ų  |             |         |    |       |         |         |    |
|                  |                             |                |        |         |    |        |         |          |    |        |         |      |    |        |        |     |    |               |          |     |      |          |        |    |    |             |         |    |       |         |         |    |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-23   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 023 |

| (SUMP) = SUMP023<br>LOCATION_CODE<br>SAMPLE_NO |                               | 355UMP023-5801<br>35-SMP23-5801-02 | LH-S23-01<br>LH-S23-01 OC | LH-S23-01<br>LH-S23-01_1 | LH-S23-01<br>LH-S23-01_2 | LH-S23-02<br>LH-S23-02_1 | LH-S23-02<br>LH-S23-02_2 | STEP-46SS08<br>46SS08(0-0_5)-020312 | STEP-465S08<br>46SS08(1-2)-020312 |
|--|-------------------------------|------------------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|-----------------------------------|
| SAMPLE DATE                                    |                               | 9/12/2006                          | 7/25/1993                 | 7/25/1993                | 7/25/1993                | 7/25/1993                | 7/25/1993                | 3/12/2002                           | 3/12/2002                         |
| DEPTH  |                               | 4.5 - 4.5 FI                       | 0.5 · 1 Ft                | 0.5 - 1 Ft               | 3 - 4.5 Fl               | 1 - 1,5 Ft               | 3,5 - 4 Fi               | 0 - 0.5 Ft                          | 1 - 2 Ft                          |
| SAMPLE PURPOSE                                 |                               | REG                                | FD                        | REG                      | REG                      | REG                      | REG                      | REG                                 | REG                               |
| Test Group                                     | Parameter (Units = mg/kg)     | Result DIL LO VQ                   | Result DIL LO VO          | Result DIL LO VO         | Result DIL LQ V          | Q Result OIL LQ VO       | Result DIL LO VO         | Result DIL LO VO                    | Result DIL LO VO                  |
| SEMIVOLATILES                                  | 4-Nitroanlline                |                                    | 1.65 1 < U                | 1.65 1 < U               | 1.65 1 < L               | ) 1.85 1 < U             | 1.65 i < U               |                                     |                                   |
| SEMIVOLATILES                                  | 4-Nitrophenol                 |                                    | 1.65 1 < U                | 1,65 1 < U               | 1.65 1 < L               | J 1.65 1 < U             | 1.65 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Acenaphihene                  |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < l               | J 0.33 1 < U             | 0.33 1 < 0               |                                     |                                   |
| SEMIVOLATILES                                  | Acenaphthylene                |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < L               | J 0.33 1 < U             | 0.33 1 < U               | 1                                   |                                   |
| SEMIVOLATILES                                  | Anthracene                    |                                    | 0.33 i < U                | 0.33 î < U               | 0.33 î < l               | J 0.33 1 < U             | 0.33 1 < 0               |                                     |                                   |
| SEMIVOLATILES                                  | Benzo(a)anihracene            |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < L               | J 0.33 1 < U             | 0,33 1 < 0               |                                     |                                   |
| SEMIVOLATILES                                  | Benzo(a)pyrene                |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < L               | J 0.33 1 < U             | .0.33 1 < U              |                                     |                                   |
| SEMIVOLATILES                                  | Benzo(b)Ruoranihene           |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < L               | ) 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Benzo(ghi)perylene            |                                    | 0.33 î < U                | 0.33 1 < U               | 0.33 1 < U               | U 0.33 1 < U             | 0.33 1 < 0               |                                     |                                   |
| SEMIVOLATILES                                  | Benzo(k)fluoranthene          |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < L               | U 0.33 1 < U             | 0.33 1 < 0               |                                     |                                   |
| SEMIVOLATILES                                  | Benzoic Acid                  |                                    | 1.65 1 e U                | 1.65 1 < U               | 1.65 1 < 1               | U 1.65 1 < U             | 1.65 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Benzyl Alcohol                |                                    | 0.65 1 < U                | 0.65 I < U               | 0.65 1 < 1               | U 0.65 1 < U             | 0.65 1 < 0               |                                     |                                   |
| SEMIVOLATILES                                  | bis(2-Chloroethoxy)methane    |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < i               | U 0.33 1 < U             | 0.33 1 < 0               |                                     |                                   |
| SEMIVOLATILES                                  | bis(2-Chloroethyl)ether       | 1                                  | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < 1               | U 0.33 1 < U             | 0.33 1 < 0               |                                     |                                   |
| SEMIVOLATILES                                  | bis(2-Chloroisopropyl)ether   |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < 3               | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | bis(2-Ethylhexyl)phthalate    |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < 1               | U 0.33 1 < U             | 0,33   < U               |                                     |                                   |
| SEMIVOLATILES                                  | Butyl benzyl phthalate        |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < 1               | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Chrysene                      |                                    | 0.33 i < U                | 0.33 1 < U               | 0.33 1 < 1               | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Dibenzo(a,h)anthracene        |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Dibenzoluran                  |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < 1               | U 0.33 t < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Diethyl phthalate             |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 < U             | 0.33 1 < 0               |                                     |                                   |
| SEMIVOLATILES                                  | Dimethyl onthalate            |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 ⊲ บ             | 0.33 1 < 0               |                                     |                                   |
| SEMIVOLATILES                                  | di n-Butyl phihalate          |                                    | 0,33 î < U                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | di-n-Octyl phihalale          |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 < U             | 0,33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Fluoranthene                  |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Fluorene                      |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 i < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Hexachlorobenzene             |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Hexachloropuladiene           |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 î <                 | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Hexachlorocyclopentadiene     |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Hexachloroelhane              |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 < U             | `0.33 1 < U              |                                     |                                   |
| SEMIVOLATILES                                  | Indeno(1,2,3-cd)pyrene        |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Isophorane                    |                                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Naphthalene                   |                                    | 0.33 1 < L                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 < U             | 0.33 f < U               |                                     |                                   |
| SEMIVOLATILES                                  | Nitrobenzene                  |                                    | 0.33 1 < L                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | n-Nitroso-di-n-propylamine    |                                    | 0.33 1 < L                | I 0.33 1 < U             | 0.33 1 <                 | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | n Nitrosodiphenvlamine        |                                    | 0.33 1 < L                | 0.33 1 < U               | 0.33 1 <                 | U 0.33 1 < U             | 0,33 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Pentachlorophenol             |                                    | 1.65 1 < L                | i 1.65 1 < U             | 1.65 1 <                 | U 1,65 1 < U             | 1.65 1 < U               |                                     |                                   |
| SEMIVOLATILES                                  | Phenapihrene                  |                                    | 0.33 1 < 0                | i 0.33 î < U             | 0,33 1 <                 | U 0.33 1 < U             | 0.33 1 < Ü               |                                     |                                   |
| SEMMOLATILES                                   | Phenol                        |                                    | 0.33 1 < U                | 0.33 i < U               | 0.33 1 <                 | U 0.33 1 < U             | 0.33 1 < U               |                                     |                                   |
| SEMMOLATILES                                   | Prinana                       |                                    | 0.33 1 < 1                | J 0.33 1 < U             | 0.33 1 <                 | U 0.33 t < U             | 0.33 1 < 0               |                                     |                                   |
| VOLATILES                                      | i 1 1 2 Tetrachlomethane      | 0.005 1 U                          |                           |                          |                          |                          |                          |                                     |                                   |
| VOLATILES                                      | 1.1.1.Trichloroethana         | 0.005 1 U                          | 0.005 i < l               | ) 0.005 1 < U            | 0.005 1 <                | U 0.005 1 < U            | 0.005 1 < U              |                                     |                                   |
| VOLATHES                                       | 1 1 2 2-Teirachinroelhane     | 0.005 1 U                          | 0.005 1 < 0               | J 0.005 1 < U            | 0.005 1 <                | U 0.005 1 < U            | 0.005 1 < 0              |                                     |                                   |
| VOLATILES                                      | t 12 Trichloroethane          | 0.005 1 11                         | 0.005 1 < 1               | J 0.005 1 < U            | 0.005 1 <                | U 0.005 1 < U            | I 0.005 1 < U            |                                     |                                   |
| VOLATILES                                      | 1 1-Dichloroethane            | 0.005 1 U                          | 0.005 1 < 1               | ) 0.005 1 < U            | 0,005 1 <                | U 0.005 1 < U            | 0.005 1 < U              |                                     |                                   |
| VOLATILES                                      | 1 1.Dichlorosibene            | 0.005 1 U                          | 0.005 1 < 1               | J 0.005 1 < U            | 0.005 1 <                | U 0.005 1 < U            | 1 0.005 1 < U            |                                     |                                   |
| VOLATILES                                      | 1.1-Dichloropropaga           | 0.005 1 U                          |                           |                          |                          |                          |                          |                                     |                                   |
| VOLATIVES                                      | 1.2.3 Trichlarahenzene        | 0.005 1 1                          |                           |                          |                          |                          |                          |                                     |                                   |
| VOLATILED                                      |                               | 0.005 1 1/                         |                           |                          |                          |                          |                          |                                     |                                   |
| VOLATILES                                      | 1 2 4-Trichhrobatzene         | 0.005 1 U                          |                           |                          |                          |                          |                          |                                     |                                   |
| VOLATILES                                      | 1.2.4.Trimethylhenzene        | 0.005 1 11                         |                           |                          |                          |                          |                          |                                     |                                   |
| VOLATIES                                       | 1.2. Dibromo.3. chioronionane | 0.005 1 11                         |                           |                          |                          |                          |                          |                                     |                                   |
| VULKTILEO                                      | erc-manana.a.a.anarahanana    | 1                                  |                           |                          |                          |                          |                          |                                     |                                   |

and a strategiest



|  |  | Table 3-23 |                     |
|--|--|------------|---------------------|
|  |  | A 11 A     | A second state of a |

|                             | 10010 0 00      |                 |          |
|-----------------------------|-----------------|-----------------|----------|
| Concentrations of Chemicals | in Soil Samples | Associated with | Sump 023 |

| (SUMP) = SUMP023<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                                | 35SUMP023-S801<br>35-SMP23-S801-02<br>9/12/2005<br>4.5 - 4.5 FI | LH-S23-01<br>LH-S23-01 QC<br>7/25/1993<br>0.5 - 1 Ft | LH-S23-01<br>LH-S23-01_1<br>7/25/1993<br>0.5 - 1 Ft | LH-S23-01<br>LH-S23-01_2<br>7/25/1993<br>3 - 4.5 Fl | LH-S23-02<br>LH-S23-02_1<br>7/25/1993<br>1 + 1.5 Fl | LH-S23-02<br>LH-S23-02_2<br>7/25/1993<br>3.5 - 4 Ft | STEP-46SS08<br>46SS08(0-0_5)-020312<br>3/12/2002<br>0 - 0.5 Fl | STEP-465S08<br>46SS08(1-2)-020312<br>3/12/2002<br>1 - 2 Ft<br>BEG |
|--|--------------------------------|---|--|---|---|---|---|--|---|
| SAMPLE_PURPOSE   |                                | REG   | FD   | REG   | REG   | REG   | REG VO  | Basult DIE 10 VO   | Result DIL LO VO  |
| Test Group   | Parameter (Units = mg/kg)      | Result DIL LO VO  | Result DIL LO VO                                     | Result DIL LO VO                                    | Result DIL LO VO                                    | Hesur Dit LO VO                                     | Result DIE LO VO                                    | ricabit Dit the fig  |   |
| VOLATILES  | 1.2-Dibromoelhane              | 0.005 1 U   |  |   |   |   |   |  |   |
| VOLATILES  | 1,2-Dichlorobenzene            | 0.005 1 U   |  |   |   |   | 0.00E 1 - 11  |  | ,   |
| VOLATILES  | 1,2-Dichloroethane             | 0.005 1 U   | 0.005 1 < U  | 0.005 1 < U   | 0.005 1 < U   | 0.005 1 < 0   | 0.005 1 < 1   |  |   |
| VOLATILES  | 1.2-Dichloroethene             |   | 0.005 1 < U  | 0.005 1 < 0   | 0.005 1 < 0   | 0.005 1 < 0   | 0.005 1 < 1   |  |   |
| VOLATILES  | 1,2-Dichloropropane            | 0.005 1 U   | 0.005 t < U  | 0.005 1 < U   | 0.005 1 < 0   | 0.003 T K O   | 0.000   |  |   |
| VOLATILES  | 1,2-Dimelhylbenzena (o-Xylena) | 0.005 t U   |  |   |   |   |   |  |   |
| VOLATILES  | 1,3,5-Trimethylbenzene         | 0.005 1 U   |  |   |   |   |   |  |   |
| VOLATILES  | 1.3-Dichlorobenzene            | 0.005 1 U   |  |   |   |   |   |  |   |
| VOLATILES  | 1,3-Dichloropropane            | 0.005 1 U   |  |   |   |   |   |  |   |
| VOLATILES  | 1.4-Dichlorobenzene            | 0.005 1 U   |  |   |   |   |   |  |   |
| VOLATILES  | 2,2-Dichloropropane            | 0.005 1 U   |  |   | 0.07 1 . 11   |   | 0.05 1 ~ 1  |  |   |
| VOLATILES  | 2-Butanone                     | 0.00999 1 U   | 0.05 1 < U   | 0.05 1 < 0  | 0.05 1 < 0  | 0.05 1 < 0  | 0.01 1 < U  |  |   |
| VOLATILES  | 2-Chloroathyl vinyl ether      | 0.00999 1 U   | 0.01 1 < U   | 0.01 1 < 0  | 0.01 7 < 0  | 0.01 1 4 0  | 0.01  |  |   |
| VOLATILES  | 2-Chloratoluene                | 0.005 1 U   |  |   | 0.05 1 J  | 0.06 1  | 0.05 1 4 11   |  |   |
| VOLATILES  | 2-Hexanone                     | 0.00999 t U U.  | 0.05 1 < 0   | 0,05 1 < 0  | 0.05 1 < 0  | 0.05 1 4 0  | 0,00 1 4 0  |  |   |
| VOLATILES  | 4-Chloroloiuene                | 0.005 1 U   |  |   |   |   | A 917 1   |  |   |
| VOLATILES  | Aceione                        | 0.0254 1 J  | 0.1 1 < U  | 0.1 1 < U   | 0.1 1 < U   |   | 0.217   |  |   |
| VOLATILES  | Benzens                        | 0.005 1 U   | 0.005 1 < U  | 0.005 1 < U   | 0.005 1 < 0   |   | 0.000   |  |   |
| VOLATILES  | Bromobenzene                   | 0.005 1 U   |  |   |   |   |   |  |   |
| VOLATILES  | Bromochloromethane             | 0.005 1 U   |  |   |   |   |   |  |   |
| VOLATILES  | Bromodichloromathane           | 0.005 1 U   | 0.005 1 < U  | 0.005 1 < U   | 0.005 1 < 0   | 0,005 1 < 0   | 0.005 1 < 0   |  |   |
| VOLATILES  | Bromolorm                      | 0.005 1 U   | 0.005 1 < U  | 0.005 1 < U   | 0,005 1 < 0   | 0.005 1 < 0   |   |  |   |
| VOLATILES  | Bromomethane                   | 0.00999 t U   | 0.01 1 < U   | 0,01 1 < U  | 0.01 1 < 0  |   |   |  |   |
| VOLATILES  | Garbon disullide               | 0.005 1 U   | 0.005 1 < U  | 0.005 1 < 0   | 0.005 1 < 0   |   | 0.005 1 4 0   |  |   |
| VOLATILES  | Carbon feirachloride           | 0.005 1 U   | 0.005 1 < U  | 0.005 1 < 0   | 0.005 1 < 0   | / 0.005 1 ₹ 0                                       |   |  |   |
| VOLATILES  | Chlorobenzana                  | 0.005 U   | 0.005 1 < U  | 0.005 1 < U   | 0.005 1 < 0   | 0.005 1 4 0   |   |  |   |
| VOLATILES  | Chlorosihane                   | 0.00999 1 U   | 0.01 1 < U   | 0.01 1 < 0  | 0.01 1 < 0  |   |   |  |   |
| VOLATILES  | Chloroform                     | 0.005 1 U   | 0.005 1 < U  | 0.005 1 < U   | 0.005 1 < 1   |   | 0.003 1 4 0   |  |   |
| VOLATILES  | Chibromethane                  | 0.00999 1 U   | 0.01 1 < U   | 0.01 1 < U  | 0.01 1 < L  |   |   |  |   |
| VOLATILES  | cis-1,2-Dichloroethene         | 0.005 1 U   |  |   |   |   | 0.005 1 - 1   |  |   |
| VOLATILES  | cis-1,3-Dichloropropene        | 0.005 1 U   | 0.005 1 < U  | 0.005 1 < 0   | 0.005 1 < 0   | 1 0.005 1 < U                                       | 0.005 1 < 1   |  |   |
| VOLATILES  | Dibromochioromethane           | 0.005 1 U   | 0.005 1 < U  | 0.005 1 < 0   | 0.005 1 < 0   | J 0.005 I < 0                                       | 0.003 1 2 0   |  |   |
| VOLATILES  | Dibromomethane                 | 0.005 1 U   |  |   |   |   |   |  |   |
| VOLATILES  | Dichlorodilluoromethane        | 0.00999 1 U   |  |   |   | 1 0.005 5 . II                                      | 0.005 1 2 11  |  |   |
| VOLATILES  | Ethylbenzene                   | 0.005 1 U   | 0.005 1 < U  | 0.005 1 < U   | 0.005 1 < 1   | J 0.005 I < 0                                       | 0.003   |  |   |
| VOLATILES  | Hexachlorobutadiene            | [ 0.005 1 ປ   |  |   |   |   |   |  |   |
| VOLATILES  | Isopropylbenzene               | 0.005 1 U   |  |   |   |   |   |  |   |
| VOLATILES  | m,p-Xylenes                    | 0.005 1 U   |  |   |   |   | A 106 1   |  |   |
| VOLATILES  | Methyl Isobutyl ketone         | 0.00999 1 U   | 0.05 1 < 1   | 0.05 1 < U  | 0.05 1 < 1  | U 0.05 I < U  | 0.120   |  |   |
| VOLATILES  | Methylens chloride             | 0.005 1 U   | 0.005 1 < L  | 0.005 1 < U   | 0.005 1 < 6   | 0 0.005 1 < 0                                       |   |  |   |
| VOLATILES  | Naphihalene                    | 0.00999 t U   |  |   |   |   |   |  |   |
| VOLATILES  | n-BUTYLBENZENE                 | 0.005 t U   |  |   |   |   |   |  |   |
| VOLATILES  | n-PROPYLBENZENE                | 0.005 1 U   |  |   |   |   |   |  |   |
| VOLATILES  | p-ISOPROPYLTOLUENE             | 0.005 1 U   |  |   |   |   |   |  |   |
| VOLATILES  | sec-BUTYLBENZENE               | 0.005 E U   |  |   |   |   |   |  |   |
| VOLATILES  | Styrene                        | 0.005 1 U   | 0.005 1 < l  | 0.005 1 < U   | 0.005 1 <   | U 0.005 1 < U                                       | 0.005 1 < 0   |  |   |
| VOLATILES  | ler-BUTYLBENZENE               | 0.005 1 U   |  |   |   |   | 0.00E (   |  |   |
| VOLATILES  | Tetrachloroethene              | 0.005 1 U   | 0.005 î < l  | 0.005 1 < U   | 0.005 1 <   | U 0,005 1 < U                                       | 0.005 1 < U   |  |   |
| VOLATILES  | Toluene                        | 0.005 1 U   | 0.005 I < U  | 0.005 1 < U   | 0.005 1 <   | 0 0.005 7 < 0                                       | u.000 i ≪ 0   |  |   |
| VOLATILES  | Irans-1,2-Dichloroethene       | 0.005 1 U   |  |   |   | 11 0.007 1 . II                                     | 0.00F 1 - 11  |  |   |
| VOLATILES  | trans 1.3-Dichloropropene      | 0.005 1 U   | 0.005 1 < l  | 0,005 1 < U   | 0.005 1 <   | U 0.005 1 < U                                       |   |  |   |
| VOLATILES  | Trichloroethene                | § 0.005 1 U   | 0.005 1 < 0  | 0.005 1 < 0   | 0.005 1 <   | 0 0.005 1 < 0                                       | 0,000 ) « 0   |  |   |
|  |                                |   |  |   |   |   |   |  |   |





 Table 3-23

 Concentrations of Chemicals in Soil Samples Associated with Sump 023

| [SUMP] = SUMP023<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                            | 35SUMP023-5B<br>35-SMP23-SB01-<br>9/12/2006<br>4.5 - 4.5 Ft | 01<br>-02   | LH-S23-0<br>LH-S23-0<br>7/25/11<br>0.5 - 1 | -01<br>1 QC<br>93<br>FI | L     | LH-S23-0<br>H-S23-01<br>7/25/199<br>0.5 • 1 F | )(<br> _1<br>3<br> ) | Lł<br>LH-<br>7/<br>3 | I-S23-01<br>S23-01<br>25/1993<br>- 4.5 Ft | 2    | և<br>Լի   | H-S23-0<br>1-S23-0<br>7/25/19<br>1 - 1.5 | -02<br>)2_1<br>93<br>Ft |    | L<br>LF | H-S23<br>(-S23-(<br>7/25/19<br>3.5 - 4 | -02<br>)2_2<br>193<br>Fl |    | STEP<br>46SS08(0<br>3/1;<br>0 - | -465508<br>-0_5)-0203<br>2/2002<br>- 0.5 FI<br>BEG | 912 | STEP-46<br>465S08(1-2<br>3/12/2i<br>1 - 2<br>BEI | SS08<br>)-020312<br>002<br>Ft |   |
|---|----------------------------|---|-------------|--|-------------------------|-------|---|----------------------|----------------------|---|------|-----------|--|-------------------------|----|---------|--|--------------------------|----|---------------------------------|--|-----|--|-------------------------------|---|
| SAMPLE_PURPOSE  | Descender (161) - medicile | REG<br>Result DI LG   | - vo        | FD<br>Reading DN                           |                         | Qorul | REG   |                      | Result               | REG<br>DII I                              | o vo | Besult    | DIL                                      | 10                      | vo | Result  | DIL                                    | ία                       | va | Result [                        | DIL LQ   | VQ  | Result DIL                                       | ίο νο                         | 1 |
| Test Group  | Parameter (Units = mg/xg)  | Result DIL LL   | <u>, vu</u> | Hestri Dil                                 | 10 10                   | nesu  |   |                      | 110301               | 010 0                                     |      | i i Galan | 014                                      |                         |    |         |  |                          |    |                                 |  |     |  |                               | - |
| VOLATILES   | Trichlorofiuoromethane     | 0.00999 1 U   |             |  |                         |       |   |                      |                      |   |      |           |  |                         |    |         |  |                          |    |                                 |  |     |  |                               |   |
| VOLATILES   | Vinyl acetale              | 0.00999 1 U   | ŧ           | 0.05 1                                     | < U                     | 0.05  | i 1   | < U                  | 0.05                 | 1 ·                                       | < U  | 0.05      | 1  | <                       | Ų  | 0.05    | 1                                      | <                        | U  |                                 |  |     |  |                               |   |
| VOLATILES   | Vinyl chloride             | 0.00999 1 U   | 1           | 0.01 1                                     | < U                     | 0.0   | 1   | < U                  | 0.01                 | 1 -                                       | < U  | 0.01      | 1  | <                       | U  | 0.01    | 1                                      | <                        | U  |                                 |  |     |  |                               |   |
| VOLATILES   | Xylenes, Total             |   |             | 0.005 1                                    | < U                     | 0.005 | 5 1   | < U                  | 0.005                | 1 .                                       | < U  | 0.005     | ٢  | ٢                       | U  | 0.005   | 1                                      | <                        | U  |                                 |  |     |  |                               | - |

Footnotes are shown on cover page to Tables Section.

.....



|                | Table 3-24  |
|----------------|---|
| Concentrations | of Chemicals in Soil Samples Associated with Sump 024 |

| [SUMP] = SUMP024 |  |                  |                  |                    |                   |                    |                  |                  |                     |
|------------------|--|------------------|------------------|--------------------|-------------------|--------------------|------------------|------------------|---------------------|
| LOCATION _CODE   |  | 35SUMP024-SB01   | 35SUMP024-SB02   | 46SB01             | 46SB01            | 46SB01             | LH-S24-01        | LH-S24-01        | LH-S24-01           |
| SAMPLE_NO        |  | 35-SMP24-SB01-02 | 35-SMP24-SB02-02 | 46SB01(0-0_5)      | 46SB01(1-3)       | 46SB01(3-5)        | LH-S24-01_1      | LH-S24-01_2      | LH-S24-01-BERA-SS01 |
| SAMPLE_DATE      |  | 9/9/2006         | 9/9/2006         | 7/27/1998          | 7/27/1998         | 7/27/1998          | 6/25/1993        | 6/25/1993        | 10/5/2006           |
| DEPTH            |  | 2 · 2.5 Ft       | 2.5 - 2.5 Fl     | 0 + .5 Fl          | 1-3 Fi            | 3 - 5 Ft           | .5 - 2 Ft        | 2 - 4 Fl         | 0 · 0 F1            |
| SAMPLE_PURPOSE   |  | REG              | REG              | REG                | REG               | REG                | REG              | REG              | REG                 |
| Tesl Group       | Parameter (Units = mg/kg)              | Resu≹ DIL LO VO  | Result DIL LO VQ | Result DIL LO VQ   | Result DIL LO VO  | Result DIL LO VO   | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO    |
| DIOXINS_FURANS   | 1.2.3,4,6,7,8-Heplachlorodibenzoluran  |                  |                  | 0.000003476 1 < UJ | 0.00000683 1      | 0.000000181 1 < U  |                  |                  |                     |
| DIOXINS_FURANS   | 1,2,3,4,6,7,8-HpCDD                    |                  |                  | 0.000062575 1      | 0.000015552 1     | 0.000002407 1      |                  |                  |                     |
| DIOXINS_FURANS   | 1,2,3,4,7,8,9 Heplachlorodibenzoluran  |                  |                  | 0.000000709 1 < U  | 0.000000537 1 < U | 0.00000213 1 < 0   |                  |                  |                     |
| DIOXINS_FURANS   | 1.2,3.4,7,8-Hexachlorodibenzoluran     |                  |                  | 0.000002694 1 < UJ | 0.000000541 1 < U | 0.000000305 1 < U  |                  |                  |                     |
| DIOXINS_FURANS   | 1.2.3.4.7.8-Hexachlorodibenzo p dioxin | i i              |                  | 0.000000512 1 < U  | 0.000000545 1 < U | 0.000000378 1 < 0  |                  |                  |                     |
| DIOXINS_FURANS   | 1,2,3,6,7,8-Hexachlordibenzo-p-dioxin  |                  |                  | 0.00002052         | 0.000000317 1 < U | 0.00000284 1 < U   |                  |                  |                     |
| DIOXINS_FURANS   | 1.2.3.6,7.8-Hexachlorodibenzoluran     |                  |                  | 0.000000154 1 < U  | 0.000000367 1 < U | 0.00000264 1 < U   |                  |                  |                     |
| DIOXINS_FURANS   | 1,2.3.7.8,9-Hexachlordibenzo-p-dioxin  |                  |                  | 0.000002312 1      | 0,00000365 1 < 0  | 0.00000298 1 < 0   |                  |                  |                     |
| DIOXINS_FURANS   | 1.2.3,7.8,9-Hexachlorodibenzofuran     |                  |                  | 0.00000202 1 < 0   | 0.000000000 1 < 0 | 0.000000348 1 < 0  |                  |                  |                     |
| DIOXINS_FURANS   | 1.2,3,7,8-Pentachiordibenzo-p-dioxin   |                  |                  | 0.00000002 1 < U   | 0.00000232 ) < 0  | 0.000000201 1 < 11 |                  |                  |                     |
| DIOXINS_FURANS   | 1,2,3,7,8 Penlachiorodibenzoluran      |                  |                  |                    |                   | 0.000000336 1 < 11 |                  |                  |                     |
| DIOXINS_FUHANS   | 2,3,4.6,7,8-Hexachiorodibenzoluran     |                  |                  |                    | 0.000000937 1 < 1 | 0.000000335 1 < 0  |                  |                  |                     |
| DIOXINS_FURANS   | 2,3,4,7,8-Pentachiorogidenzoluran      |                  |                  | 0,000000176 1 < 0  | 0.00000227 1 < 0  | 0.000000303 1 < U  |                  |                  |                     |
| DIOXINS_FURANS   | 2,3,7,8-1000                           |                  |                  | 0.000000181 1 4 11 | 0.00000031 1 4 0  | 0.000000277 1 < U  |                  |                  |                     |
| DIOXINS_FURANS   | 2,3,7,8-1 GDF                          |                  |                  | 0.000000603 1 < 1  | 0.000006883 1     | 0.000000181 1 < U  |                  |                  |                     |
| DIOXING_FURANS   | Haptachlorodibenzo-o-dioxin            |                  |                  | 0.000000000 1 2 0  | 0.000033922 1     | 0.000005369 1      |                  |                  |                     |
|                  | Hexachlaridihanzo.o.dinxin             |                  |                  | 0.000116667 1      | 0.000002654 1     | 0.000000284 1 < U  |                  |                  |                     |
|                  | Hexachloridibenzofuran                 |                  |                  | 0.000005465 1      | 0.000000367 1 < U | 0.000000264 1 < U  |                  |                  |                     |
| DIOXING FURANS   | Octachlorodiheozoluran                 |                  |                  | 0.000013768 1      | 0.000002041 1     | 0.000000307 1 < U  |                  |                  |                     |
| DIOXINS FUBANS   | Oclachlorodibenzo-n-dioxin             |                  |                  | 0.001089275 1      | 0.001068453 1 B   | 0.000306555        |                  |                  |                     |
| DIOXINS FURANS   | Pentachlorodibenzoluran                |                  |                  | 0.000001709 1      | 0.000000227 1 < U | 0.000000198 1 < U  |                  |                  |                     |
| DIOXINS FURANS   | Pentachlorodibenzo-p-dicxin            |                  |                  | 0.000000302 1 < U  | 0.000000292 1 < U | 0.00000281 1 < U   |                  |                  |                     |
| DIOXINS FURANS   | Tetrachlorodibenzoluran, Total         |                  |                  | 0.000000181 1 < U  | 0.000003834 1     | 0.000000277 1 < U  |                  |                  |                     |
| DIOXINS FURANS   | Tetrachlorodibenzo-p-dioxin            |                  |                  | 0.000000358 1 < U  | 0.000000331 1 < U | 0.000000303 1 < U  |                  |                  |                     |
| EXPLOSIVES       | 1,3.5-Trintrobenzene                   |                  |                  | 0.15 1 < U         | 0.15 1 < U        | 0.15 1 < U         |                  |                  |                     |
| EXPLOSIVES       | 1,3-Dinitrobenzene                     |                  |                  | 0.05 1 < U         | 0.05 1 < U        | 0.05 1 < U         |                  |                  |                     |
| EXPLOSIVES       | 2,4,6-Trinitrotoluene                  |                  |                  | 0,1 1 < U          | 0.1 1 < U         | 0.1 1 < U          |                  |                  |                     |
| EXPLOSIVES       | 2,4-Dinitrolaluene                     |                  |                  | 0.1 1 < U          | 0.1 1 < U         | 0.1 1 < U          | 0.15 1 < U       | 0.15 1 < U       |                     |
| EXPLOSIVES       | 2,6-Dinitrotaluene                     |                  |                  | 0.1 1 < U          | 0.1 1 < U         | 0.1 1 < U          | 0.15 1 < U       | 0.15 1 < U       |                     |
| EXPLOSIVES       | 2-Amino-4,6-dinitrotoluane             |                  |                  | 0.05 1 < U         | 0.05 1 < U        | 0.05 1 < U         |                  |                  |                     |
| EXPLOSIVES       | 4-Amino-2.6-dinitrotoluene             |                  |                  | 0.05 1 < U         | 0.05 t < U        | 0.05 1 < U         |                  |                  |                     |
| EXPLOSIVES       | Нмх                                    |                  |                  | 0,1 1 < U          | 0.1 f < U         | 0.1 1 < U          |                  |                  |                     |
| EXPLOSIVES       | m-Nitrotoluene                         |                  |                  | 0.1 1 < U          | 0,1 1 < U         | 0.1 1 < 0          |                  |                  |                     |
| EXPLOSIVES       | Nitrobenzene                           |                  |                  | 0.1 1 < U          | 0.1 1 < U         | 0.1 1 < U          |                  |                  |                     |
| EXPLOSIVES       | o-Nitrotoluene                         |                  |                  | 0.1 1 < U          | Q.1 1 < U         | 0,1 1 < 0          |                  |                  |                     |
| EXPLOSIVES       | p-Nilrotoluene                         |                  |                  | 0.1 3 < 0          | 0.1 1 < 0         | 0.1 I < U          |                  |                  |                     |
| EXPLOSIVES       | HDX                                    |                  |                  |                    |                   |                    |                  |                  |                     |
| EXPLOSIVES       | l eryi                                 | 10000 1          | 7470 1           | U.FI < 71          | 10000 1           | 1000 1             | 19200 1          | 22300 1          | 10100 1             |
| METALO           | Autoup                                 | 0.112 1 11       | A15 1 11         | 667 1 - 111        | 1 00031           | 749 1 - 11         | 3 1 < 0          | 3 1 < 1          | 0.17 1 8 J          |
| METALS           | Anomony                                | 0.0210           | 0.776 1          | 375 1              | 4.24 1            | 5.52 1             | 29 1             | 2.5 1            | 8.3 1 JL            |
| METALS           | Bacium                                 | 02.5 1           | 46 1 1           | 57 1               | 62 1              | 45 1               | 214 1            | 719 1            | 149 1 J             |
| METALS           | Bendiam                                | 0.555 1          | 0.692 t          | 0.552 t e U        | 0.552 1 < U       | 0.686 1            |                  |                  | 0.47 1              |
| METALS           | Cadmium                                | 0.155 1          | 0.0609 1         | 0.552 i d U        | 0.552 1 < U       | 0.623 1 < U        | 37.5 1           | 11 < U           | 0.45 1              |
| METALS           | Calcium                                | 4000 1 J         | 1320 1 J         | 840 1              | 550 1 < U         | 620 1 < U          | 2480 i           | 2340 1           | 1450 1 J            |
| METALS           | Chromium                               | 22.2 1           | 9.81 1           | 12 1               | 13 1              | 22 1               | 49.5 1           | 23.3 1           | 21.1 1              |
| METALS           | Cobalt                                 | 4,1 1 J          | 7.78 1 J         | 5.6 1 < U          | 5.6 1 < U         | 6.2 1 < U          | 5.5 1            | 11.9 1           | 3.2 1               |
| METALS           | Copper                                 | 6.16 1           | 1.69 1           | 3.88 1             | 5 1               | 4.54               | 5.8 1            | 6.3 1            | 19.7 1 J            |
| METALS           | Iron                                   | 26400 1          | 9910 1           | 9000 1             | 13000 1           | 20000 1            | 17300 1          | 19700 1          | 8120 1              |
| METALS           | Lead                                   | 12.4 1 J         | 5.2 1 J          | <b>9.2</b> 1       | 9.61 1            | 9.32 1             | 8.9 1            | 11.8 1           | 24.6 1 J            |
| METALS           | Magnesium                              | 1260 1           | 1110 1           | 640 1              | 790 1             | 1000 1             | 1340 1           | 3340 1           | 542 1 J J           |



| Table 3-24  |
|---|
| Concentrations of Chemicals in Soil Samples Associated with Sump 02 |

| (SUMP) = SUMP024<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE |                        | 35SUMP024-SB01<br>35-SMP24-SB01-02<br>9/9/2006 | 355UMP024-SB02<br>35-SMP24-SB02-02<br>9/9/2006 | 465801<br>465801(0-0_5)<br>7/27/1998 | 46SB01<br>46SB01(1-3)<br>7/27/1998 | 465B01<br>465B01(3-5)<br>7/27/1998 | LH-S24-01<br>LH-S24-01_1<br>8/25/1993 | LH-S24-01<br>LH-S24-01_2<br>8/25/1993 | LH-S24-01<br>LH-S24-01-BERA-SS01<br>10/5/2006 |
|--|------------------------|--|--|--------------------------------------|------------------------------------|------------------------------------|---------------------------------------|---------------------------------------|---|
| DEPTH  |                        | 2 - 2.5 Ft                                     | 2.5 - 2.5 Ft                                   | 0 • .5 FI                            | 1-3 8                              | 3 - 5 Ft                           | .5 • 2 Ft                             | 2 · 4 FL<br>BEG                       | REG   |
| SAMPLE_PURPOSE   |                        | REG  | REG<br>Recuit DB 10 VO                         | REG<br>Result DIL 10 VO              | Result Dil. LO VO                  | Result DIL LO VO                   | Result DIL LQ VQ                      | Result DIL LO VO                      | Result Dit, LO VO                             |
| Test Group   | Mannanese              | 53 1   | 62.4 1   | 108 1                                | 94,5 1                             | 31.6                               | 77.5 1                                | 147 1                                 | 36.5 1 J J                                    |
| METALS   | Mercury                | 0.0503 1 J J                                   | 0.268 1 U                                      | 0,11 t. < U                          | 0.11 1 < U                         | 0.12 1 < U                         | 0.1 1 < U                             | 0.1 1 < U                             |   |
| METALS   | Nickel                 | 10.5 1   | 9.13 1   | 6.3 1                                | 8.2 1                              | 11 1                               |                                       |                                       | 6 1   |
| METALS   | Polassium              | 648 1  | 273 1  | 970 1                                | 1100 1                             | 1200 1                             | 1030 1                                | 1250 1                                | 359 1   |
| METALS   | Selenium               | 0.3 1  | 0.207 1 J J                                    | 1.1 1 < U                            | 1.66 1                             | 1.41 1                             | 11 < 0                                | 11 < 0                                | 0.84 1 JL                                     |
| METALS   | Silver                 | 1.65 1 U                                       | 1.73 T U                                       | 1.1 1 < U                            | 1.6 1                              | 1.2 1 2 0                          | 11 < 0                                | 1 1 < 0                               | 588 1 J                                       |
| METALS   | Sedium                 | 54 1   | 383 1  | 550 1 < U                            | 550 1 < U                          | 520 1 < U                          | 1 <b>1</b> 1                          | 479 1                                 | JU.0 7 0                                      |
| METALS   | Strontium              |  |  | 5.6 1 < U                            | 5,6 1 < U                          | U > I 2.0                          | 20 1                                  | 47.0                                  | 0.13 1  |
| METALS   | Thallium               | 0.106 1  | 0.0699 1                                       | 0.552 1 < 0                          | 0.552 1 < 0                        | 45 1                               |                                       |                                       | 27.3 1 J                                      |
| METALS   | Vanadium               | 38 1   | 18 1   | 10 1                                 | 17 1                               | 20 1                               | 63.8 1                                | 42.5 1                                | 345 1 J                                       |
| METALS   | Zinc                   | 75.1   | 11.0   | 19 1<br>0.037 1 2 U                  | 0.037 1 < U                        | 0.042 1 < U                        |                                       |                                       |   |
| PC85   | Arocior 1016           |  |  | 0.074 1 < U                          | 0.074 1 < U                        | 0.083 1 < U                        |                                       |                                       |   |
| PLBS   | Arocior 1221           |  |  | 0.037 1 < U                          | 0.037 1 < U                        | 0.042 1 < U                        |                                       |                                       |   |
|  | Aradia 1232            |  |  | 0.037 1 < U                          | 0.037 1 < U                        | 0.042 1 < U                        |                                       |                                       |   |
| PCBS   | Aradiar 1248           |  |  | 0.037 1 < U                          | 0.037 1 < U                        | 0.042 1 < U                        |                                       |                                       |   |
| PCBS   | Arocior 1254           |  |  | 0.037 1 < U                          | 0.037 1 < U                        | 0.042 1 < U                        |                                       |                                       |   |
| PCBS   | Aroclor 1250           |  |  | 0.037 1 < U                          | 0.037 1 < U                        | 0.042 1 < U                        |                                       |                                       |   |
| PERC   | Perchlorate            |  |  |                                      |                                    |                                    |                                       |                                       | 0.0503 1 U U                                  |
| PESTICIDES   | 4,4'-DDD               |  |  | 0.0037 1 < UJ                        | 0.0037 1 < U                       | 0.0041 1 < U                       |                                       |                                       |   |
| PESTICIDES   | 4,4'-DDE               |  |  | 0.0037 1 < UJ                        | 0,0037 1 < U                       | 0.0041 1 < U                       |                                       |                                       |   |
| PESTICIDES   | 4,4'-DDT               |  |  | 0.0037 1 < UJ                        | 0.0037 1 < 0                       | 0.0041 1 < 0                       |                                       |                                       |   |
| PESTICIDES   | Aldrin                 |  |  | 0.0018 1 < UJ                        | 0.0018 1 < U                       | 0.0021 1 2 0                       |                                       |                                       |   |
| PESTICIDES   | alpha-BHC              |  |  | 0.0018 1 < 0.0                       | 0.0018 1 < 0                       | 0.0021 1 < U                       |                                       |                                       |   |
| PESTICIDES   | beta-BHG               |  |  | 0.0016 1 < 00                        | 0.037 1 < 11                       | 0.042 1 < U                        |                                       |                                       |   |
| PESTICIDES   |                        |  |  | 0.0018 1 < 1.0                       | 0.0018 t < U                       | 0.0021 1 < U                       |                                       |                                       |   |
| PESTICIDES   | Dialdrin               |  |  | 0.0037 i < UJ                        | 0.0037 1 < U                       | 0,0041 F < U                       |                                       |                                       |   |
| PESTICIDES   | Enricsullan            |  |  | 0.0018 1 < UJ                        | 0.0018 1 < U                       | 0.0021 1 < U                       |                                       |                                       |   |
| PESTICIDES   | Endosulian II          |  |  | 0.0037 1 < UJ                        | 0.0037 1 < U                       | 0,0041 1 < U                       |                                       |                                       |   |
| PESTICIDES   | Endosulian Suilate     |  |  | 0.0037 1 < UJ                        | 0.0037 1 < U                       | 0.0041 1 < U                       |                                       |                                       |   |
| PESTICIDES   | Endrin                 |  |  | 0.0037 1 < UJ                        | 0.0037 i < U                       | 0.0041 1 < U                       |                                       |                                       |   |
| PESTICIDES   | Endrin aldehyde        |  |  | 0.0037 f « UJ                        | 0.0037 1 < U                       | 0.0041 f < U                       |                                       |                                       |   |
| PESTICIDES   | Endrin ketone          |  |  | 0.0037 1 < UJ                        | 0.0037                             | 0.0041 1 < U                       |                                       |                                       |   |
| PESTICIDES   | gamma-BHC (Lindane)    |  |  | 0.0018 1 < UJ                        | 0,0018 1 < 0                       | 0.0021 1 < U                       |                                       |                                       |   |
| PESTICIDES   | Heptachlor             |  |  | 0.0018 1 < UJ                        | 0.0018 1 < 0                       | 0.0021 1 < 0                       |                                       |                                       |   |
| PESTICIDES   | Heplachior epoxide     |  |  | 0.0018 1 4 11                        | 0.018 1 < 1                        | 0.021 1 < U                        |                                       |                                       |   |
| PESTICIDES   | METHOXYCHLOR           |  |  | 0.037 1 < 111                        | 0.037 1 < U                        | 0.042 1 < U                        |                                       |                                       |   |
| PESHUDES<br>CENNOLATILES                                       | 1 2 4 Trinblorebonzene |  |  | 0.37 1 < U                           | 0.37 1 < U                         | 0.42 1 < U                         | 0.15 1 < U                            | 0.15 1 < L                            | ļ   |
| SEMINOLATILES  | 1 2-Dichlorobenzene    |  |  | 0.37 1 e U                           | 0.37 1 < U                         | 0.42 1 < U                         | 0.15 1 < U                            | 0.15 f < i                            | }   |
| SEMIVOLATILES  | 1.3 Dichlorobenzene    |  |  | 0.37 i < U                           | 0.37 1 < U                         | 0.42 1 < U                         | 0.15 1 < U                            | 0.15 1 < L                            | )   |
| SEMIVOLATILES  | 1,4-Dichlorobenzene    |  |  | 0.37 1 < U                           | 0,37 1 < U                         | 0.42 1 < U                         | 0.15 1 < U                            | 0.15 1 < 0                            | ן   |
| SEMIVOLATILES  | 2.4.5-Trichlorophenol  |  |  | 0,92 1 < U                           | 0.92 1 < U                         | 1 1 < U                            | 0.8 1 < U                             | 0.B 1 < U                             | J<br>,  |
| SEMIVOLATILES  | 2.4.5-Trichforophenol  |  |  | 0.37 1 < U                           | 0.37 1 < U                         | 0,42 1 < U                         | 0.15 1 < 0                            | 0,15 1 < 1                            | 1   |
| SEMIVOLATILES  | 2,4-Dichiorophenoi     |  |  | 0.37 i < U                           | 0.37 1 < U                         | 0.42 1 < U                         | 0.15 1 < 0                            | 0.15 1 < 0                            | ,<br>(  |
| SEMIVOLATILES  | 2,4-Dimethylphenol     |  |  | 0.37 1 < U                           | 0.37 1 < U                         | 0.42 1 < U                         | 0.15 i < U                            | i 0,15 i < \<br>i Apri - 1            | и<br>1  |
| SEMIVOLATILES  | 2,4-Dinitrophenol      |  |  | 0.92 I < U                           | U.92 1 < U                         | U > II<br>₩                        | 0.0 i < 0                             |                                       |   |
| SEMIVOLATILES  | 2.4-Dinitratoluene     | 1  |  | 0.37 1 < U                           | 0.3/1 < U<br>0.37 f → U            | 0.42 1 4 1                         |                                       |                                       |   |
| SEMIVOLATILES  | 2,6-Dinitrotoluene     |  |  |                                      | 0.37 1 < U                         | 0.42 1 < 11                        | 0.15 1 < 1                            | F 0.15 1 < U                          | ٤   |
| SEMIVOLATILES  | 2-Chloronaphihalene    |  |  | 0.37 1 < 0                           |                                    | 0.42 1 < 11                        | 0,15 1 < U                            | 0,15 1 < 0                            | J   |
| SEMIVULATILES  | 2-Uniorophenoi         | l.   |  | 0.01 1 2 0                           |                                    |                                    |                                       |                                       |   |



| 1              | Table 3-24                   | •                        |
|----------------|------------------------------|--------------------------|
| Concentrations | of Chemicals in Soil Samples | Associated with Sump 024 |

| [SUMP] = SUMP024 |                                     |                  |                  |                  |                  |                   |                  |                  |                     |
|------------------|-------------------------------------|------------------|------------------|------------------|------------------|-------------------|------------------|------------------|---------------------|
| LOCATION _CODE   |                                     | 35SUMP024-SB01   | 35SUMP024-SB02   | 46\$B01          | 46\$B01          | 46\$B01           | LH-S24-01        | LH-S24-01        | LH-S24-01           |
| SAMPLE_NO        |                                     | 35-SMP24-SB01-02 | 35-SMP24-SB02-02 | 46SB01(0-0_5)    | 465801(1-3)      | 46SB01(3-5)       | LH-\$24-01_1     | LH-S24-01_2      | LH-S24-01-BERA-SS01 |
| SAMPLE_DATE      |                                     | 9/9/2006         | 9/9/2006         | 7/27/1998        | 7/27/1998        | 7/27/1998         | 6/25/1993        | 6/25/1993        | 10/5/2006           |
| DEPTH            |                                     | 2 - 2.5 Ft       | 2.5 - 2.5 Ft     | 0 • .5 FI        | 1-3 FL           | 3 - 5 Ft          | .5 · 2 Ft        | 2 • 4 Ft         | 0-0Ft               |
| SAMPLE_PURPOSE   |                                     | REG              | REG              | REG              | REG              | REG               | REG              | REG              | REG                 |
| Tesl Group       | Parameter (Units = mg/kg)           | Result DIL LO VO | Result DIL LO VO | Resuli DIL LQ VQ | Result DIL LO VO | Result Dit, LQ VQ | Result DIL LQ VQ | Result DIL LO VQ | Result DRL LO VQ    |
| SEMIVOLATILES    | 2-Methylnaphthalene                 |                  |                  | 0.37 1 < U       | 0.37 1 < 0       | 0.42 1 < 0        | 0,15 1 < 0       | 0.15 1 < 0       |                     |
| SEMIVOLATILES    | 2-Meihylphenol                      |                  |                  | 0.37 1 < U       | 0.37 1 < 0       | 0.42 1 < 0        | 0.15 1 < 0       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | 2-Nitroaniline                      |                  |                  | U > 1 \$2.0      | 0.92 1 < 0       | 11 < 0            | 0.8 1 < 0        | 0.6 1 < U        |                     |
| SEMIVOLATILES    | 2-Nitrophenol                       |                  |                  | 0.37 1 < U       | 0.37 1 < U       | 0.42 1 < 0        | 0.15 1 < 0       | 0.15 1 < 0       |                     |
| SEMIVOLATILES    | 3,3' Dichlorobenzidine              |                  |                  | 0.37 1 < U       | 0,37 1 < 0       | 0.42 1 < 0        | 0.15 1 < 0       | 0,15 1 < 0       |                     |
| SEMIVOLATILES    | 3-Nitroaniline                      |                  |                  | 0.92 1 < 0       | 0,92 1 < 0       | 1 4 0             | 0.8 1 < 0        | 0.6 1 < 0        |                     |
| SEMIVOLATILES    | 4.6-Dinitro-2-methylphenol          |                  |                  | 0.92 1 < U       | 0.92 1 < 0       |                   | 0.8 4 4 0        | 0.5 1 6.0        |                     |
| SEMIVOLATILES    | 4-Bromophenyl phenyl eiher          |                  |                  | 0.37 1 < U       | 0.37 1 < 0       | 0.42 1 2 0        | 0.15 1 < U       | 0.15 1 4 0       |                     |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol             |                  |                  | 0.37 1 < 0       | 0.37 1 < 0       | 0.42 1 < 0        | 0.15 1 < U       | 0.10 ( < 0       |                     |
| SEMIVOLATILES    | 4-Chioroaniline                     |                  |                  | 0.37 1 < 0       | 0.37 1 < U       | 0.42 1 < U        | 0,15 1 < 0       | 0.15 1 < 0       |                     |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether         |                  |                  | 0.37 1 < 0       | 0.37 1 < U       | 0.42 I < U        | 0.15 1 < 0       |                  |                     |
| SEMIVOLATILES    | 4-Methylphenol                      |                  |                  | 0.37 1 < 0       | 0.37 1 < U       | 0,42 I < U        | 0.15 1 < 0       |                  |                     |
| SEMIVOLATILES    | 4-Nitroaniline                      |                  |                  | 0.92 1 < 0       | 0.92 1 < U       | 11 < 0            | 0.8 1 < 0        | 0.8 1 < 0        |                     |
| SEMIVOLATILES    | 4-Nitrophenol                       |                  |                  | 0.92 1 < R       | 0.92 1 < H       |                   | 0.5 1 < 0        |                  |                     |
| SEMIVOLATILES    | Acenaphthene                        |                  |                  | 0.37 1 < U       | 0.37 1 < 0       | 0.42 1 < 0        | 0.15 1 < 0       | 0.15 ( < 0       |                     |
| SEMIVOLATILES    | Acenaphthylene                      |                  |                  | 0.37 1 < U       | 0.37 1 < U       | 0.42 1 2 0        | 0.15 1 < 0       | 0.15 1 2 0       |                     |
| SEMIVOLATILES    | Anthracene                          |                  |                  | 0.37 1 < 0       | 0.37 1 < 0       | 0.42 1 2 0        | 0.15 1 < 0       | 0.15 1 4 0       |                     |
| SEMIVOLATILES    | Benzo(a)anthracene                  |                  |                  | 0.37 1 < 0       | 0.37 1 < U       | 0.42 1 < 0        | 0.15   < 0       | 0.15 1 2 0       |                     |
| SEMIVOLATILES    | Benzo(a)pyrene                      |                  |                  | 0.19 1 J         | 0.18 1 < U       | 0.21 1 4 0        | 0.15 1 < 0       | 0.15 1 - 11      |                     |
| SEMIVOLATILES    | Benzo(b)Ruoranihene                 |                  |                  | 0,41 1           | 0.37 1 < U       | 0.42   < U        | 0.15 1 < 0       |                  |                     |
| SEMIVOLATILES    | Benzo(ghi)perylene                  |                  |                  | 0.37 1 < 0       | 0.37 1 < 0       | 0.42 1 < 0        | 0.15 1 < 0       | 0.15 1 2 1       |                     |
| SEMIVOLATILES    | Benzo(k)fluoranthene                |                  |                  | 0.37 1 < U       | 0.37 1 < 0       | 0.42 1 < 0        | 0.15 1 < 0       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | Benzoic Acld                        |                  |                  | 0.92 1 < U       | 0.92 1 4 0       | 1 1 4 0           | 0.15 1 - 11      | 0.15 1 4 11      |                     |
| SEMIVOLATILES    | Benzyl Alcohol                      |                  |                  | 0.92 1 < 0       | 0.92 1 < 0       | 040 1 - 11        | 0.15 ( < 0       | 0.15 1 < 11      |                     |
| SEMIVOLATILES    | bis{2-Ghloroethoxy}methane          |                  |                  | 0.37 1 < 0       | 0.37 1 < 0       | 0.42 1 2 0        | 0.15 1 < 11      | 0.15 1 < 0       |                     |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether             |                  |                  | 0.37 1 < 0       | 0.37 1 < 0       | 0.42 1 4 0        | 0.15 1 - 1       | 0.15 1 - 11      |                     |
| SEMIVOLATILES    | bis(2-Chkroisopropyl)ether          |                  |                  | 0.37 1 * 0       |                  | 0.42 1 < 0        | 1 1 2 1          | 1 1 2 H          |                     |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate          |                  |                  | 0.37 1 4 0       | 0.37 1 < 0       | 0.42 1 4 0        | 015 1 - 11       | 015 1 2 1        |                     |
| SEMIVOLATILES    | Butyi penzyi potnalale<br>Cosheasta |                  |                  | 0.37 1 < 0       |                  | 0.42 1 < 0        | 015 1 - 11       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | Carpazole                           |                  |                  |                  |                  | 0.42 1 < U        | 015 1 < 11       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | Dibenag(a b)anthrasana              |                  |                  | 037 1 4 1        | 0.37 1 < 11      | 042 1 < U         | 0.15 1 < U       | 0.15 1 < U       |                     |
| SEMIYOLATILES    | Obenzólume                          |                  |                  | 0.37 1 4 1/      | 0.37 t 4 U       | ∩42 1 < U         | 0.15 1 < 0       | 0.15 1 < U       |                     |
| SEMINOLATILES    | Diathyl obthalate                   |                  |                  | 0.37 1 4 1       | 0.37 1 < U       | 0.42 1 < U        | 0.15 1 < U       | 0.15 1 < U       |                     |
| SEMMOLATILES     | Dimethyl philaiste                  |                  |                  | 0.37 1 < 0       | 0.37 1 < 1       | 0.42 1 < U        | 0.15 1 < U       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | di-n-Butyl ohthalate                |                  |                  | 0.37 1 < U       | 0.37 1 < U       | 0.42 1 < U        | 0.15 1 < U       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | di-o-Octvi obibalate                |                  |                  | 0.37 1 < U       | 0.37 1 < U       | 0.42 1 < U        | 0.15 1 < U       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | Fluoranibene                        |                  |                  | 0.29 1 J         | 0.37 1 < U       | 0.42 1 < U        | 0.15 1 < U       | 0.15 t < U       |                     |
| SEMIVOLATILES    | Flugrene                            |                  |                  | 0.37 1 < U       | 0.37 1 < U       | 0.42 1 < U        | 0.15 t < U       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | Hexachlorobenzene                   |                  |                  | 0.18 1 < U       | 0.18 1 < U       | 0.21 1 < U        | 0.15 1 < U       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | Hexachlorobuladiene                 |                  |                  | 0.37 i < U       | 0,37 1 < ∪       | 0.42 1 < U        | 0.15 1 < U       | 0.15 1 < 1/      |                     |
| SEMIVOLATILES    | Hexachiorocyclopentadiene           |                  |                  | 0.37 1 < U       | 0.37 1 < U       | 0.42 1 < U        | 0.15 1 < U       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | Hexachioroelhane                    |                  |                  | 0.37 1 < U       | 0.37 1 < U       | 0.42 1 < U        | 0.15 1 < U       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene              |                  |                  | 0.37 1 < U       | 0.37 1 < U       | 0.42 1 < U        | 0.15 1 < -U      | 0.15 1 < U       |                     |
| SEMIVOLATILES    | Isophorone                          |                  |                  | 0.37 1 < U       | 0.37 1 < U       | 0.42 1 < U        | 0.15 1 < U       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | Naphthalene                         |                  |                  | 0.37 1 < U       | 0.37 1 < U       | 0.42 1 < U        | 0.15 1 < U       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | Nitrobenzane                        |                  |                  | 0.37 1 < U       | 0.37 t < U       | 0.42 1 < U        | 0.15 1 < Ŭ       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | n-Nitrosodimethylamine              |                  |                  | 0.37 1 < U       | 0.37 1 < U       | 0.42 1 < U        |                  |                  |                     |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine          | 1                |                  | 0.37 1 < U       | 0.37 1 < U       | 0.42 1 < U        | 0.15 1 < U       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | n-Nitrosodiphenylamine              |                  |                  | 0.37 1 < U       | 0.37 1 < U       | 0,42 1 < U        | 0,3 1 < Ú        | 0.3 1 < U        |                     |
| SEMIVOLATILES    | Penlachlorophenol                   |                  |                  | 0.18 1 < U       | 0.18 1 < U       | 0.21 1 < U        | 0.15 1 < U       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | Phenanthrana                        |                  |                  | 0.37 i < U       | 0.37 1 < U       | 0.42 1 < U        | 0.15 1 < U       | 0.15 1 < U       |                     |



| Table 3-24     |              |         |         |            |      |      |     |
|----------------|--------------|---------|---------|------------|------|------|-----|
| Concentrations | of Chemicals | in Soil | Samples | Associated | with | Sump | 024 |

| [SUMP] = SUMP024 |                                |                  |                  |                  |                   |                  |                  |                  |                     |
|------------------|--------------------------------|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|---------------------|
| LOCATION _CODE   |                                | 35SUMP024-SB01   | 35SUMP024-SB02   | 46SB01           | 46SB01            | 46SB01           | LH-S24-01        | LH-\$24-01       | LH-S24-01           |
| SAMPLE_NO        |                                | 35-SMP24-SB01-02 | 35-SMP24-SB02-02 | 46SB01(0-0_5)    | 465801(1-3)       | 46SB01(3-5)      | LH-S24-01_1      | LH-S24-01_2      | LH-S24-01-BERA-SS01 |
| SAMPLE_DATE      |                                | 9/9/2006         | 9/9/2005         | 7/27/1998        | 7/27/1998         | 7/27/1998        | 6/25/1993        | 6/25/1993        | 10/5/2006           |
| DEPTH            |                                | 2 - 2.5 Ft       | 2.5 - 2.5 Ft     | 0 • ,5 FI        | 1-3 Ft            | 3 - 5 Ft         | .5 - 2 Ft        | 2 - 4 Ft         | 0 - 0 Ft            |
| SAMPLE_PURPOSE   |                                | REG              | REG              | REG              | REG               | REG              | REG              | REG              | REG                 |
| Tesl Group       | Parameter (Units = mg/kg)      | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result Dil. LO VO | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LO VO | Result DIL LO VQ    |
| SEMIVOLATILES    | Phenol                         | -                |                  | 0,37 1 < U       | 0.37 1 < U        | 0.42 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                     |
| SEMIVOLATILES    | Pyrene                         |                  |                  | 0.3 1 J          | 0.37 1 < U        | 0.42 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                     |
| TOC              | Total Organic Carbon           |                  |                  |                  |                   |                  |                  |                  | 25200 1             |
| VQLATILES        | 1.1.1.2-Tetrachloroethane      |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     |                  |                  |                     |
| VOLATILES        | 1.1.1-Trichloroethane          |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | 1.1.2.2-Tetrachloroethane      |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0,0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | 1.1.2-Trichkroelhane           |                  |                  | 0.0055 1 < U     | 0.0056 1 < U      | 0,0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | 1,1-Dichloroethane             |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | 1,1-Dichloraethene             | 1                |                  | 0.0055 1 < U     | 0.0058 1 < U      | 0.0062 1 < U     | 0.005 1 < ∛      | 0,005 1 < U      |                     |
| VOLATILES        | 1,1-Dichloroprogene            | 1                |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     |                  |                  |                     |
| VOLATILES        | 1,2,3-Trichlorobenzene         |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     |                  |                  |                     |
| VOLATILES        | 1,2,3-Trichloropropane         |                  |                  | 0.017 1 < U      | 0.017 1 < U       | 0.019 1 < U      |                  |                  |                     |
| VOLATILES        | 1,2,4-Trichlorobenzene         |                  |                  | 0.0056 i < U     | 0.0056 1 < U      | 0.0062 i < U     |                  |                  |                     |
| VOLATILES        | 1,2,4-Trimethylbenzene         |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     |                  |                  |                     |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    |                  |                  | 0.011 1 < U      | 0.011 1 < U       | 0.012 1 < U      |                  |                  |                     |
| VOLATILES        | 1.2-Dibromoethane              |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     |                  |                  |                     |
| VOLATILES        | 1,2-Dichlorobenzene            |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     |                  |                  |                     |
| VOLATILES        | 1.2-Dichloroethane             |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     | 0.005 i < U      | 0.005 1 < U      |                     |
| VOLATILES        | 1,2-Dichloroelhene             |                  |                  |                  |                   |                  | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | 1,2-Dichloropropane            |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | 1.2-Dimethylbenzene (o-Xylene) |                  |                  |                  |                   |                  | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | 1.3,5-Trimelhylbenzene         |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     |                  |                  |                     |
| VOLATILES        | 1,3-Dichlorobenzene            |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0,0062 1 < U     |                  |                  |                     |
| VOLATILES        | 1.3-Dichloropropane            |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0082 1 < U     |                  |                  |                     |
| VOLATILES        | 1,4-Dichloro-2-butene          |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     |                  |                  |                     |
| VOLATILES        | 1,4-Dichlorobenzene            |                  |                  | 0.0055 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     |                  |                  |                     |
| VOLATILES        | 1.4-Dioxane                    |                  |                  | 1,1 1 < U        | 1.1 1 < U         | 1,2 1 < U        |                  |                  |                     |
| VOLATILES        | 2.2-Dichloropropane            |                  |                  | 0,017 1 < U      | 0.017 1 < U       | 0.019 1 < U      |                  |                  |                     |
| VOLATILES        | 2-Butanone                     |                  |                  | 0.022 1 < U      | 0.022 1 < U       | 0.025 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | 2-Chlorotoluene                |                  |                  | 0.0056 1 < U     | 0.0056 t < U      | 0.0062 1 < U     |                  |                  |                     |
| VOLATILES        | 2-Hexanone                     |                  |                  | 0.022 1 < U      | 0.022 1 < U       | 0.025 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | 2-Propensi                     |                  |                  | 0.11 1 < U       | 0,11 1 < U        | 0.12 1 < U       |                  |                  |                     |
| VOLATILES        | 4-Chlorojoluene                |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     |                  |                  |                     |
| VOLATILES        | Acetone                        |                  |                  | 0.01 1 J         | 0.0061 1 J        | 0.0079 J         | 0.01 1 < U       | 0.01 1 < U       |                     |
| VOLATILES        | Acrylonitrile                  |                  |                  | 0.11 1 < U       | 0.11 1 < U        | 0.12 1 < U       |                  |                  |                     |
| VOLATILES        | Benzena                        |                  |                  | 0.0055 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     | 0.013 1          | 0.005 1 < U      |                     |
| VOLATILES        | Bromobenzene                   |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     |                  |                  |                     |
| VOLATILES        | Bromochioromethane             |                  |                  | 0.0056 1 < U     | 0,0058 1 < U      | 0.0062 1 < U     |                  |                  |                     |
| VOLATILES        | Bromodichloromethane           |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | Bromolorm                      |                  |                  | 0.0055 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | Bromomelhane                   | · ·              |                  | 0.011 1 < U      | 0.011 1 < U       | 0.012 1 < U      | 0.01 1 < U       | 0.01 1 < U       |                     |
| VOLATILES        | Carbon disulfide               |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | Carbon tetrachloride           |                  |                  | 0.011 1 < U      | 0.011 1 < U       | 0,012 i < U      | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | Chiorobenzene                  |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0052 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | Chloroethane                   |                  |                  | 0.011 1 < U      | 0.011 1 < U       | 0.012 1 < U      | 0.01 1 < U       | 0.01 1 < U       |                     |
| VOLATILES        | Chloroform                     |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     | 0.11 1           | 0.006 1          |                     |
| VOLATILES        | Chloromethane                  |                  |                  | 0.011 1 < U      | 0.011 1 < U       | 0.012 1 < U      | 0.01 1 < U       | 0.01 1 < U       |                     |
| VOLATILES        | cis-1.2-Dichloroelhene         |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | cis-1,3-Dichloropropene        |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | Dibromochloromethane           |                  |                  | 0.0056 1 < U     | 0.0056 1 < U      | 0,0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                     |
| VOLATILES        | Dibromomethane                 |                  |                  | 0.011 1 < U      | 0.011 1 < U       | 0.012 1 < U      |                  |                  |                     |
| VOLATILES        | Dichlorodifluoromethane        |                  |                  | 0.017 1 < U      | 0.017 1 < U       | 0.019 1 < U      |                  |                  |                     |



| Table 3-24   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 024 |

| [SUMP] ≃ SUMP024<br>LOCATION_CODE<br>SAMPLE_NO |                           | 35SUMP024-SB01<br>35-SMP24-SB01-02 | 35SUMP024-SB02<br>35-SMP24-SB02-02 | 46SB01<br>46SB01(0-0_5) |     |      | 46SB0<br>46SB01(<br>7/97/10 | 1<br>1-3) |               |   | 46SB01<br>46SB01(3 | -5)<br>A |             | . u   | H-52<br>1-524 | 4-01<br>-01_1<br>993 |    | ርት<br>ርት-<br>6/ | -S24-0<br>S24-01<br>25/199 | 1_2        | LH-S24-01<br>LH-S24-01-BERA-S<br>10/5/2006 | 5501 |
|--|---------------------------|------------------------------------|------------------------------------|-------------------------|-----|------|-----------------------------|-----------|---------------|---|--------------------|----------|-------------|-------|---------------|----------------------|----|-----------------|----------------------------|------------|--|------|
| SAMPLE_DATE                                    |                           | 9/9/2006                           | 9/9/2005                           | 112111996               |     |      | 12/19                       | 30        |               |   | 2.5 5              | Ŷ        |             |       | 5.2           | FI                   |    |                 | ) - 4 Ft                   | ·          | 0 · 0 FI                                   |      |
| DEPTH  |                           | 2 - 2.5 FL                         | 2.5 - 2.5 FI                       | 0+.5 Ft                 |     |      | 1.3 0                       | ્ય        |               |   | 060                |          |             |       | RE            | G                    |    |                 | SEG                        |            | REG  |      |
| SAMPLE_PURPOSE                                 |                           | REG                                | HEG                                | H¢G                     | . ^ |      | nçu<br>D-wit l              |           | 0.10          |   | ngg<br>Basult D    |          | <u>n</u> vn | Opeul | - Dil         | ັາດ                  | vo | Result          |                            | o ve       | Besult Dil. LO                             | VQ   |
| Tesl Group                                     | Parameter (Units = mg/kg) | Result DIL LQ VQ                   | Result DIL LQ VO                   | Result UIL              | LQ  | - 40 | Hesuii (                    |           |               |   | nesuli U           |          | 11          | 11030 |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      | Ethyl methacrylate        |                                    |                                    | 0.0056 1                | ۲   | U.   | 0.0055                      | 1         | < U           |   | 0.0002             |          |             | 0.000 |               |                      |    | 0.005           | 1                          | - 11       |  |      |
| VOLATILES                                      | Elhylbenzene              |                                    |                                    | 0.0056 1                | *   | U    | 0.0056                      |           | 2 11          |   | 0.0002             | 1        |             | 0.000 | ,             | •                    |    | 0.005           | •                          | •••        |  |      |
| VOLATILES                                      | Hexachlorobutadiene       |                                    |                                    | 0.0056 1                | <   | 0    | 0.0055                      | 1         | < U           |   | 0.0002             | 1<br>•   | < U         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      | IODOMETHANE               |                                    |                                    | 0.0056 1                | <   | U    | 0.0055                      | 1         | < U           |   | 0.0002             | )<br>    | < 0         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      | ISOBUTYL ALCOHOL          |                                    |                                    | 1.1 1                   | <   | U    | 1.1                         | 1         | < U           |   | 1.2                | 1        | < U         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      | isopropyloenzene          |                                    |                                    | 0.0056 1                | <   | U    | 0.0056                      | 1         | < U           |   | 0.0062             | 1        | < U         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      | m,p-Gresol                |                                    |                                    |                         |     |      |                             |           |               |   |                    |          |             | 0.1   |               | ۲                    | U  | 0.15            | 1                          | < U        |  |      |
| VOLATILES                                      | m.p-Xylenes               |                                    |                                    |                         |     |      |                             |           |               |   |                    |          |             | 0.000 | 1             | <                    | U  | 0,005           | 1                          | < 0        |  |      |
| VOLATILES                                      | Methacrylonitrile         |                                    |                                    | 0.11 1                  | <   | U    | 0.11                        | 1         | < U           |   | 0.12               | 1        | < U         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      | Methyl isobutyl ketone    |                                    |                                    | 0.022 1                 | <   | U    | 0.022                       | 1         | < U           |   | 0.025              | 1        | < ป         | 0.00  | 1             | <                    | U  | 0.005           | 1                          | < U        |  |      |
| VOLATILES                                      | METHYL METHACRYLATE       |                                    |                                    | 0.055 1                 | <   | U    | 0.055                       | 1         | < U           |   | 0.062              | 1        | < U         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      | Methylene chloride        |                                    |                                    | 0.0056 1                | <   | υ    | 0,0056                      | 1         | < U           |   | 0.0062             | 1        | < U         | 0.0   | 1             | <                    | U  | 0.01            | 1                          | < U        |  |      |
| VOLATILES                                      | Naphihalene               |                                    |                                    | 0.0056 1                | <   | U    | 0,0056                      | 1         | < U           |   | 0.0062             | 1        | < U         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      | n-BUTYLBENZENE            |                                    |                                    | 0.0056 1                | <   | U    | 0.0056                      | 1         | < U           |   | 0.0062             | 1        | < U         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      | D-PROPYL BENZENE          |                                    |                                    | 0.0056 1                | <   | U    | 0.0056                      | 1         | < U           |   | 0.0062             | 1        | < U         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      | Pentachiomethane          |                                    |                                    | 0.011 1                 | <   | U    | 0.011                       | 1         | < U           |   | 0.012              | 1        | < U         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      |                           |                                    |                                    | 0.0056 1                | <   | U    | 0.0056                      | 1         | < U           |   | 0.0062             | 1        | < U         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      | Pronionitrile             |                                    |                                    | 0.11 1                  | <   | U    | 0.11                        | 1         | < U           |   | 0.12               | 1        | < U         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      |                           |                                    |                                    | 0.0055 1                | ż   | ů    | 0.0056                      | 1         | < U           |   | 0.0062             | 1        | < U         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      | Church                    |                                    |                                    | 0.0056 1                | è   | ŭ    | 0.0056                      | 1         | < U           |   | 0.0062             | 1        | < U         | 0.00  | 51            | <                    | ប  | 0.005           | 1                          | < 1        |  |      |
| VOLATILES                                      | asyrene                   |                                    |                                    | 0.0055 1                |     | - 11 | 0.0056                      | 1         | e il          |   | 0.0062             | t        | < U         |       |               |                      |    |                 |                            |            |  |      |
| VOLATILES                                      |                           |                                    |                                    | 0.0056 t                | 2   | ň    | 0.0056                      | i         | - II          |   | 0.0062             | t        | < U         | 0.00  | 5 1           | <                    | U  | 0.005           | 1                          | < L        |  |      |
| VOLATILES                                      | Tenachoroennene           |                                    |                                    | 0.0056 1                | 2   | ň    | 0.0056                      | 1         | - 0           |   | 0.0062             | 1        | د ان        | 0.00  | 5 1           | <                    | υ  | 0.005           | 1                          | < ل        |  |      |
| VOLATILES                                      | loiuene                   |                                    |                                    | 0.0056 1                |     | ŭ    | 0.0056                      |           | - U           |   | 0.0062             | 1        | . 0         | 0.00  | 5 1           | ć                    | Ū  | 0.005           | 1                          | < 1        |  |      |
| VOLATILES                                      | trans-1,2-Dichloroethene  |                                    |                                    | 0.0056 1                |     |      | 0.0056                      | ÷         | 2 11          |   | 0.0000             | 1        | 2 10        | 0.00  | 5 5           | Ĵ                    | ŭ  | 0.005           | 1                          | 2 1        |  |      |
| VOLATILES                                      | trans-1,3-Dichloropropene |                                    |                                    | 0.0056 1                | ~   |      | 0.0030                      | -         | с ()<br>. П   | 1 | 0.0002             | ì        | 2 11        | 0.00  |               | 2                    | ũ  | 0.005           | i                          | 2 1        |  |      |
| VOLATILES                                      | Trichloraethene           |                                    |                                    | 0,011                   | <   |      | 0.011                       | 1         | ς υ<br>. Π    |   | 0.012              | 1        | 2 0         | 0.00  |               |                      | Ŷ  | 0,000           | •                          |            |  |      |
| VOLATILES                                      | Trichlorofluoromethane    |                                    |                                    | 0.011 1                 | <   | U    | 0.011                       | 1         | < 0           |   | 0.012              | 1        |             | 0.00  |               |                      | н  | 0.005           | 4                          | . 1        |  |      |
| VOLATILES                                      | Vinyl acetale             |                                    |                                    | 0.022 1                 | <   | Ų    | 0.022                       | 1         | < 0           |   | 0.025              | *        | < U         | 0.00  |               |                      |    | 0.000           | 4                          |            |  |      |
| VOLATILES                                      | Vinyl chloride            | 1                                  |                                    | 0.011 1                 | <   | U    | 0.011                       | 1         | < U           |   | 0.012              | 1        | < 10        | 0.0   |               | <                    | U  | 0.01            | 1                          | < L<br>- 1 |  |      |
| VOLATILES                                      | Xylenes, Total            |                                    |                                    | 0.0056 1                | ۲   | U    | 0,0056                      | 1         | <u>&lt; 0</u> |   | 0.0065             | 1        | < 0         | 0.00  | 1 c           | <u> </u>             |    | 0.005           |                            | <u>~ (</u> |  |      |

Footnotes are shown on cover page to Tables Section.

| Data Evaluation Report                          |                   |
|---|-------------------|
| Chemical Concentrations in Soil Associated with | LHAAP-35/36 Sumps |

Table 3-25 Concentrations of Chemicals in Soil Samples Associated with Sump 025

| SUMP] = SUMP025<br>OCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE  |  | 35SUMP025-SB01<br>35-SMP25-SB01-02<br>9/9/2006<br>5.5 - 6 Ft<br>REG            | 35SUMP025-SB02<br>35-SMP25-SB02-02<br>9/9/2006<br>5.5 - 6 Ft<br>REG                  | 355UMP026-S801<br>35-SMP26-S801-02<br>99/2006<br>4 - 4.5 Ft<br>REG          | UI-S025-01<br>LH-S025-01 QC<br>8/6/1993<br>.5 - 1 Fl<br>FD   | LH-S025-01<br>LH-S025-01_1<br>8/6/1993<br>.5-1 Fl<br>REG   | LH-S025-01<br>LH-S025-01_2<br>8/6/1993<br>5 - 5.5 Pt<br>REG        | 1.H-S025-02<br>UH-S025-02_1<br>846/1993<br>.5-1.Ft<br>REG          | LH+5025-02<br>LH+5025-02_2<br>8/6/1993<br>1.5 - 2 Ft<br>REG   | LH-S025-02<br>LH-S025-02_3<br>B/6/1993<br>3.5 - 4 Fl<br>REG       | LH-5026-01<br>LH-5026-01 QC<br>8/8/1993<br>.5 - 1 Ft<br>FD   | LH-S026-01<br>LH-S026-01_1<br>8/8/1993<br>5 - 1 Ft<br>REG  | LH-S026-01<br>LH-S026-01_2<br>8/8/1993<br>3.5 - 4 FL<br>REG   | LH-S026-02<br>LH-S026-02_1<br>8/8/1993<br>5 - 1 Fi<br>REG  | LH-S026-02<br>LH-S026-02_2<br>8/8/1993<br>1 - 1.5 Ft<br>REG  | LH-\$026-02<br>LH-\$026-02_3<br>8/8/1993<br>3.5 - 4 Ft<br>REG | LHS-2-07<br>LHS-2-07<br>1/30/1995<br>05 Pt<br>REG  |
|---|--|--|--|---|--|--|--|--|---|---|--|--|---|--|--|---|--|
| Test Group  | Parameter (Units = mg/kg)  | Result DIL LO VO   | Result DIL LO VQ   | Result Dil. LO VO   | Result DIL LQ VQ   | Result Dft. LQ VQ  | Result DIL 10 VQ   | Result DIL LQ VQ   | Result DHL LQ VQ  | Result DiL LO VQ  | Result DIL LQ VO   | Result DIL LO VO   | Result Dil LO VO  | Result DIL LO VO   | Result DIL LQ VQ   | Result Dill. LQ VO  | Result DIL LQ VQ   |
| EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES  | 1.3.5-i minitobenzene<br>1.3. Dinitrobenzene<br>2.4.6-Trinitotoluene<br>2.4-Dinitrotoluene<br>4-Amino-2,6-dinitrotokene<br>HMX<br>m-Nitrotokuene<br>Nitrotokuene<br>Nitrotokuene<br>p.Nitrotokuene<br>p.Nitrotokuene   |  |  |   | 0.33 1 < U<br>0.33 1 < U   | 033 1 < U<br>033 1 < U   | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U  | 0.33 t < U<br>0.33 t < U  | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < ≀3<br>0.33 1 < ∪  | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>0.33 1 < U                                   | 0.33 ? < U<br>0.33 ? < U   | 0.33 1 < U<br>0.33 1 < U                                      | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   |
| EXPLOSIVES<br>EXPLOSIVES<br>METALS<br>METALS<br>METALS<br>METALS  | ADX<br>Tetyl<br>Aluminum<br>Antimony<br>Arsenic<br>Barium<br>Barium  | 12700 i<br>0.112 i U<br>0.959 i<br>380 i                                       | 12600 J<br>0.112 J U<br>1.21 I<br>442 I  | 32200 t<br>0.126 t U<br>2.32 t<br>794 t                                     | 1740 7<br>3.1 1<br>4.2 f<br>148 1  | 3460 1<br>3.4 1<br>4.9 1<br>182 1  | 12700 T<br>1.6 T<br>2.7 T<br>228 J                                 | 19400 î<br>3 î < U<br>9.3 î<br>159 1                               | 20900 1<br>3 1 < U<br>7.2 1<br>134 1  | 18700 1<br>3 i < V<br>4.1 i<br>66.9 1                             | 5050 1 D<br>5 1 < U<br>2.8 1<br>174 1  | 8410 1 D<br>5 1 < V<br>3.1 T<br>230 1  | 8500 1<br>5 1 < U<br>2.3 1<br>26.9 1  | 2300 1<br>5 1 < U<br>4.8 1<br>62.5 T                       | 2360 1 D<br>5 1 < U<br>3.5 1<br>37.9 1   | 2390 1 D<br>5 1 < U<br>3.1 1<br>51.8 1                        | f f < U<br>0.71 t < U<br>9660 f<br>18.7 t < UJ<br>12.5 f J<br>290 t  |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS  | Cadmium<br>Caldium<br>Chrismium<br>Cobalt<br>Copper<br>Iron<br>Lead  | 0.314 1 J J<br>1170 1 J<br>12.8 1<br>6.46 1 J<br>3.53 1<br>12400 1<br>5.97 1 J | 0.334 i <i>s</i> J<br>1550 i J<br>1322 i<br>275 i J<br>3.76 i<br>13600 i<br>8.57 i J | 0.153 1 J<br>590 1 J<br>28.2 4<br>7.51 1 J<br>8.13 1<br>27400 1<br>10.3 1 J | 1 i < U<br>250 1 .<br>119 1<br>1 1 < U<br>9.7 1<br>10700 1<br>1708 1   | 1 1 < U<br>472 1<br>108 1<br>1.4 1<br>6.7 1<br>10400 1<br>210 1  | 1 t < U<br>1840 1<br>14.1 1<br>7.1 1<br>3.8 1<br>13200 1<br>10.6 1 | 1 1 < U<br>2070 1<br>30.1 1<br>7.2 1<br>8.4 1<br>32400 1<br>13.2 1 | 1 1 < U<br>1390 1<br>35.2 1<br>6.6 1<br>8.3 1<br>120000 1<br>13.7 1   | 1 1 < U<br>1140 1<br>17.7 1<br>4.8 1<br>5.3 1<br>17200 1<br>9.3 1 | 1     1     <     U       1770     1         81.2     1         2     1      U       7.7     1        10000     1     D       80     1     D | I I < U<br>1350 1<br>123 1<br>5 1<br>14.8 T<br>19900 1 D<br>61 F D   | 1     1     -     U       530     1     -     -       7.6     1     -     -       2     1     -     U       3     1     -       10300     1     -       370     1     D | 1 T ← U<br>1660 1<br>2 T ← U<br>4,7 T<br>4730 T<br>380 1 Đ | 1     1      U       1730     1      U       1     1      U       2     1      U       1.6     1        3070     1     D       950     1     D | 1     1     <     U       908     1                           | 1.9     t      U       2560     t       131     i       5.8     i       20.1     t       15100     1       179     1 |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS  | Magnesium<br>Manganese<br>Mercury<br>Nickel<br>Potassium<br>Selenium   | 1250 1<br>49.5 1<br>0.276 1 U<br>12.5 1<br>400 1<br>0.195 1 J J                | 1490 1<br>398 1<br>0282 1 U<br>19.5 1<br>553 1<br>0.195 1 3 J                        | 1940 1<br>89.9 1<br>0.117 1 J J<br>18.4 1<br>979 1<br>0.264 1               | 91.: 1<br>193 1<br>0.1 1 < U<br>98.3 1<br>1 1 < U  | 175 1<br>199 1<br>0.1 1 < U<br>171 1<br>1 1 < U  | 1400 1<br>145 1<br>0.1 1 < U<br>621 1<br>1 1 < U                   | 1770 1<br>195 1<br>0.3 1 < U<br>1540 1<br>1 1 < U                  | 1430 1<br>272 1<br>0.1 1 < U<br>1650 1<br>1 1 < U   | 1490 !<br>136 1<br>0.1 1 < U<br>867 1<br>1 1 < U                  | 510 t<br>112 t<br>0.1 1 < U<br>320 t<br>0.5 t < U  | 235 1<br>185 T<br>0.1 1 < U<br>100 1 < U<br>0.5 1 < U  | 638 1<br>15.2 1<br>0.1 1 < U<br>269 1<br>0.5 1 < U  | 298 1<br>245 1<br>0.1 1 < U<br>100 1 < U<br>0.5 1 < U      | 293 1<br>525 1<br>0.1 1 < U<br>100 1 < U<br>0.5 1 < U  | 303 1<br>55.7 1<br>0.1 1 < U<br>100 1 < U<br>0.5 1 < U        | 602 1<br>411 1<br>0.14 1 < U<br>563 1<br>0.8 1   |
| METALS<br>ETALS<br>METALS   | Silver<br>Sodium<br>Strontium<br>Thatilium   | 1.66 1 U<br>299 1  | 1,78 1 U<br>229 1<br>0.0825 1  | 1.92 1 U<br>218 1<br>0.115 1  | 1 1 < U<br>2.3 1   | 1 t < U<br>3.6 i   | 1 1 < U<br>33.8 1  | 1 1 < U<br>46.6 1  | 38.1 i  | 3 1 < U<br>26.7 1   | 1 F < U  | 1 1 < U<br>9 1   | 1 1 < U   | 1 1 < U<br>8.3 1   | U > 1 1<br>U > 1 0t  | t 1 < U<br>10.5 t   | 1.9 1 < 0<br>20.7 1<br>93.4 1 < 0  |
| METALS<br>METALS<br>METALS<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES                                       | Vanadium<br>Zinc<br>1,2.4-Trichlorobenzene<br>1,2-Dichlorobenzene<br>1,3-Dichlorobenzene<br>1,4-Dichlorobenzene<br>2,4.5-Trichlorophenol<br>2,4-Dichlorophenol<br>2,4-Dimethylphenol<br>2,4-Dimethylphenol<br>2,4-Dimitrophenol<br>2,4-Dimitrophenol<br>2,4-Dimitrophenol  | 0.0004 )<br>16.8 i<br>20.6 i   | 22 1<br>23.9 1   | 48.3 1<br>43.6 1  | 88.5       1         0.33       1        U         1.65       1        U | 88.6       1         0.33       1       <       U         0.33       1        U         0.33       1        U         0.33       1        U         0.33       1        U         1.65       1        U | $\begin{array}{cccccccccccccccccccccccccccccccccccc$               | $\begin{array}{cccccccccccccccccccccccccccccccccccc$               | 1770       1         0.33       1       <       U         0.33       1        U         0.56       1        U   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$              | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | 98.6       I         0.33       I        U         1.65       J        U | $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$       | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$          | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES | 2,6-Dinitratoisene<br>2-Chloronaphihalene<br>2-Chloronaphihalene<br>2-Methylphenol<br>2-Methylphenol<br>2-Mitroaniline<br>2-Mitroaniline<br>3.3*Dichlorobenzidine<br>3.3*Dichlorobenzidine<br>3.3*Dichlorobenzidine<br>3.4*Dichlorobenzidine<br>4.6*Dinitro-2-methylphenol<br>4.6*Dinitro-2-methylphenol<br>4.6*Dinitro-2-methylphenol<br>4.Chloroa-3-methylphenol<br>4-Chloroa-3-methylphenol<br>4-Chloroaphenyl phenyl ether<br>4-Chloroaphenyl phenyl ether<br>4-Chloroaphenyl phenyl ether |  |  |   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   |  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$               | $\begin{array}{cccccccccccccccccccccccccccccccccccc$               | 0.33       1        U         0.33       1        U         0.33       1        U         0.33       1        U         1.65       1        U         0.65       1        U         1.65       1        U         1.65       1        U         0.33       1        U         0.65       1        U         0.33       1        U         0.33       1        U | $\begin{array}{cccccccccccccccccccccccccccccccccccc$              | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$  |  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$          | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES | 4-Nitroaniline<br>4-Nitrophenol<br>Acenaphthylene<br>Acenaphthylene<br>Arthracene<br>Benzo(a)anthracene<br>Benzo(a)anthracene<br>Benzo(b)fluoranthene<br>Benzo(b)fluoranthene<br>Benzo(b)fluoranthene<br>Benzo(b)fluoranthene<br>Benzo(k)fluoranthene<br>Benzo(k)fluoranthene<br>Benzo(k)fluoranthene<br>Benzo(k)fluoranthene<br>Benzo(k)fluoranthene<br>Benzo(k)fluoranthene<br>Benzo(k)fluoranthene<br>bis(2-Chloroethoxy)methane<br>bis(2-Chloroethoy)flether                               |  |  |   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$               | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$              | $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$              |  | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$  |  |  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$          | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   |

MARC No. W912OR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Kamack, Texas Shaw Environmental, Inc.
| (SUMP) = SUMP025 |  |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            |                         |                          |                            |                              |                   |                    |
|------------------|--|--------------------|---------------------------------------|------------------------|-----------------------------|----------------------|--------------------|----------------------------|------------------|------------------------------|----------------------------|-------------------------|--------------------------|----------------------------|------------------------------|-------------------|--------------------|
| CATION_CODE      |  | 35SUMP025-SB01     | 35SUMP025-SB02                        | 35SUMP026-SB01         | LH-S025-01                  | LH-S025-01           | LH-S025-01         | LH-S025-02                 | LH-S025-02       | LH-\$025-02                  | LH-S026-01                 | LH-S026-01              | LH-S026-01               | LH-S026-02                 | LH-S026-02                   | LH-S026-02        | LHS-2-07           |
| AMPLE_NO         |  | 35-SMP25-SB01-02   | 35-SMP25-SB02-02                      | 35-SMP26-SB01-02       | LH-S025-01 QC               | LH-S025-01_1         | LH-S025-01_2       | LH-S025-02_1               | LH-\$025-02_2    | LH-S025-02_3                 | LH-S025-01 OC              | LH-\$026-01_1           | 1H-5026-01_2             | 1.H-S026-02_1              | UH-S026-02_2                 | LH-S026-02_3      | LHS-2-07           |
| DEPTH            |  | 9/9/2006<br>55-6FI | 55-6FI                                | 9/9/2006<br>4 - 4 5 Ft | 5,15                        | 8/0/1993<br>5 . 1 Ct | 8/6/1993           | 8/6/1993                   | 8/6/1993         | 8/6/1993                     | 8/8/1993                   | 8/8/1993                | 8/8/1993                 | 8/8/1993                   | 8/8/1993                     | 8/8/1993          | 1/10/1995          |
| SAMPLE PURPOSE   |  | BEG                | REG                                   | REG                    | -9-16                       | REG                  | 5-5.5 Ft<br>REG    | BEG                        | 1.5 · 2 Ft       | 3.5 • 4 m                    | -D-17(                     | .3-311                  | 3.5 - 4 H                | .5-117                     | 1-1011                       | 3.5 - 4 - 1       | 05FI               |
| Test Group       | Parameter (Units = mg/kg)                | Result DIL LO VO   | Result DIL LO VO                      | Result DIL LQ VQ       | Result DIŁ LQ VQ            | Result DIL LQ VQ     | Result Dill, LQ VQ | Result Dilt. LQ VQ         | Result DIL LO VO | Result DIL LO VO             | Result DIL LO VO           | Result DIL LO VO        | Besult DIL LO VO         | Result Dil LO VO           | Result DIL LO VO             | Besult Dilt 10 VO | Besult Dill, LQ VQ |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether              |                    | · · · · · · · · · · · · · · · · · · · |                        | 0.33 t < U                  | 0.33 1 < U           | 0.33 1 < U         | 0.33 1 < U                 | 0.33 t < U       | 0.33 1 < U                   | 0.33 1 < U                 | 0.33 t < U              | 0.33 1 < U               | 0.33 1 < U                 | 0.33 t < U                   | 0.33 t < U        | 0.66 1 < U         |
| SEMEVOLATILES    | bis(2-Ethylhexyi)phthalate               |                    |                                       |                        | 0.33 1 < U                  | 0.33 t < U           | 0.33 1 < U         | 0.33 1 < U                 | £0.33 1 < U      | 10.33 1 < U                  | 0.33 t < U                 | 0.33 f < U              | 0.33 1 < U               | 0.33 1 < <del>U</del>      | 0.338 f                      | 0.33 t < U        | 0.27 t J           |
| SEMIVOLATILES    | Butyi benzyi phthalate                   |                    |                                       |                        | 0.33 1 < U                  | 0.33 t < U           | 0.33 t < U         | 0.376 1                    | 0.33 1 < U       | 0.33 1 < U                   | 0.33 t < U                 | 0.33 t < U              | 0.33 I < U               | 0.33 1 < ¥                 | 0.33 t < U                   | 0.33 1 < U        | 0.66 1 < U         |
| SEMIVOLATILES    | Chrysene                                 |                    |                                       |                        | 0.33 1 < 10                 | 0.33 1 < U           | 0.33 1 < U         | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U                   | 0.33 1 < U                 | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < ⊍                 | 0.33 1 < U                   | 0.33 1 < U        | 0.66 1 < U         |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene                   |                    |                                       |                        | 0.33 t < U                  | 0.33 1 < U           | 0.33 1 < U         | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U                   | 0.33 t < U                 | 0.33 1 < U              | 0.33 t < U               | 0.33 1 < U                 | 0.33 1 < 1/                  | 0.33 1 < U        | 0.66 1 < U         |
| SEMIVULATILES    | District State                           |                    |                                       |                        | 0.33 1 < 0                  | 0.33 1 < U           | 0.33 1 < U         | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U                   | 0.33 1 < U                 | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 < U        | 0.66 1 < U         |
| SEMIVOLATILES    | Disative obtained                        |                    |                                       |                        | 0.33 1 < 0                  | . 0.33 1 < 0         | 9133 T < U         | 0.33 1 < 0                 | 9.33 1 < U       | 0.33 1 < 0                   | 0.33 1 < U                 | 0.33 1 < U              | 0.33 1 < 0               | 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 < U        | 0.66 1 < 0         |
| SEMIVOLATILES    | di-n-Butyi photesate                     |                    |                                       |                        | 033 1 2 0                   | 0.33 1 < 0           | 0.33 1 < U         | 0.33 1 < 0                 | 0.33 1 < 0       | 0.33 3 < 0                   | 0.33 F < U                 | 0.33 1 < 0              | 0.33 3 < 0               | 0.33 1 < U                 | 0.33 1 < 0                   | 0.33 1 < U        | 0.66 1 < 0         |
| SEMIVOLATILES    | di-n-Octvt phthalale                     |                    |                                       |                        | 0.33 1 < ∛                  | 0.33 1 < U           | 033 1 < 11         | 0 3 1 6 0                  | 0.33 1 < 17      | 0.33 1 C U                   | 633 1 4 1                  | 033 1 < 1               |                          | 0.33 7 2 0                 |                              | 0.33 1 < 0        | 0.06 1 < 0         |
| SEMIVOLATILES    | Fluoranihene                             |                    |                                       |                        | 0.33 1 < 0                  | 0.33 1 < 1           | 0.33 1 < U         | 0.33 1 < U                 | 0.33 1 < 0       | 0.33 t < U                   | 0.33 1 < U                 | 0.33 t < U              | 0.33 1 < 15              | 0.33 t < U                 |                              | 0.33 1 < 11       | 0.24 1 .1          |
| SEMIVOLATILES    | Fluorene                                 |                    |                                       |                        | 0.33 1 < U                  | 0.33 1 < U           | 0.33 1 < U         | 0.33 1 < U                 | 0.33 1 < U       | 0.33 t < U                   | 0.33 1 < U                 | 0.33 1 < U              | 0.33 t < U               | 0.33 t < U                 | 0.33 1 < U                   | 0.33 1 < U        | 0.66 1 < U         |
| SEMIVOLATILES    | Hexachlorobenzene                        |                    |                                       |                        | 0.33 1 < U                  | 0.33 1 < U           | 0.33 1 < U         | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U                   | 0.33 1 < U                 | 0.33 1 < U              | 0.33 1 < 13              | 0.33 t < U                 | 0.33 1 < U                   | 0.33 1 < U        | 0.66 t < U         |
| SEMIVOLATILES    | Hexachlorobutadiene                      |                    |                                       |                        | 0.33 1 < U                  | 0.33 1 < U           | 0.33 1 < U         | 0.33 t < U                 | 0.33 1 < U       | 0.33 1 < U                   | 0.33 1 < U                 | 0.33 1 < U              | 0.33 f < U               | 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 < U        | 0.66 1 < ⊍         |
| SEMIVOLATILES    | Hexachlorocyclopentadiene                |                    |                                       |                        | 0.33 1 < U                  | 0.33 1 < U           | 0.33 i < U         | 0.33 f < U                 | 0.33 1 < U       | 0.33 1 < U                   | 0.33 1 < U                 | 0.33 1 < U              | 0.33 1 < U               | 0.33 t < U                 | 0.33 1 < U                   | 0.33 I < U        | 0.56 1 < U         |
| SEMIVOLATILES    | Hexachloroethane                         |                    |                                       |                        | 0.33 1 < U                  | 0.33 1 < U           | 0.33 1 < U         | 0.33 1 < U                 | 0.33 t < U       | 0.33 1 < U                   | 0.33 1 < U                 | 0.33 1 < U              | 0.33 1 < U               | 0.33 t < U                 | 0.33 1 < U                   | 0.33 1 < U        | 0.66 t < U         |
| SEMIVOLABLES     | Indeno(1,2,3-ca)pyrene                   |                    |                                       |                        | 0.33 1 < U                  | 0.33 1 < U           | 0.33 1 < U         | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < 0                   | 0.33 1 < 12                | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U                   | 0.33 t < U        | 0.66 1 < U         |
| SEMBYOLANILES    | isoprovone<br>Nachthalana                |                    |                                       |                        | 0.33 1 < U                  | 0.33 1 < U           | 0.3311 < 0         | 0.33 1 < 0                 | 0.33 1 < U       | 0.33 1 < 0                   | 0.33 1 < 0                 | 0.33 1 < 0              | 0.33 1 < U               | 0.33 t < 0                 | 0.33 1 < U                   | 0.33 1 < U        | 0.66 1 < U         |
| SEMIVOLATILES    | Nitrobenzene                             |                    |                                       |                        | 0.33 1 4 0                  | 033 1 < 1            | 0.33 1 < 0         | 0.00 1 < 11                | 0.22 1 4 0       | 0.33 1 < 0                   | 0.33 1 < 17                | 0.33 1 < 0              | 0.33 1 < 0               | 0.33 1 < 0                 | 0.33 1 < U                   | 0.33 1 < U        | 0.66 1 < 0         |
| SEMIVOLATILES    | n-Nilroso-di-n-propylamine               |                    |                                       |                        | 0.33 1 < U                  | 0.33 1 < 1           | 0.33 1 < 11        | 0.33 1 < 11                | 0.33 1 < 11      | 0.33 1 < 11                  | 0.33 1 < 13                | 0.33 1 ~ 12             | 0.33 1 < 11              | 0.33 1 2 11                | 0.00 i < U<br>10.33 1 - JI   | 0.33 1 < 1        | 0.68 1 × 11        |
| SEMIVOLATILES    | n-Nitrosodiphenylamine                   |                    |                                       |                        | 0.33 1 < U                  | 0.33 f < U           | 0.33 i < U         | 0.33 1 < U                 | 0.33 1 < U       | 0.33 1 < U                   | 0.33 1 < 1                 | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 < U        | 0.66 1 < U         |
| SEMIVOLATILES    | Pentachiorophenol                        |                    |                                       |                        | 1.65 t < U                  | 1.65 1 < U           | 1.65 1 < U         | 1.65 1 < U                 | 1.65 t < U       | 1.65 1 < U                   | 1.65 1 < U                 | 1.65 1 < U              | 1.65 1 < U               | 1.65 T < U                 | 1.65 1 < U                   | 1.65 t < U        | 3.3 1 < U          |
| SEMIVOLATILES    | Phenanthrene                             |                    |                                       |                        | 0.33 1 < U                  | 0.356 t              | 0.49 1             | 0.356 1                    | 0.33 t < U       | 0.33 1 < V                   | 0.33 1 < U                 | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < Ŭ                 | 0.33 1 < U                   | 0.33 î < U        | 0.66 1 < U         |
| SEMIVOLATILES    | Phenol                                   |                    |                                       |                        | 0.33 1 < U.                 | 0.33 1 < U           | 0.33 t < U         | 0.33 1 < ∛                 | 0.33 I < U       | 0.33 1 < U                   | 0.33 1 < U                 | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U                   | 0.33 t < U        | 10.66 1 < U        |
| SEMIVOLATILES    | Pyrene                                   |                    |                                       |                        | 0.33 1 < √U                 | 0.33 1 < U           | 0.33 T < U         | 0.33 1 < U                 | 0.33 f < U       | 0.33 1 < U                   | 0.33 1 < U                 | 0.33 t < U              | 0.33 1 < U               | 0.33 1 < V                 | 0.33 1 < V                   | 0.33 I < U        | 0.15 1 J           |
| VOLATILES        | 1,1,1,2-Tetrachloroethane                |                    |                                       |                        | 0.000 A I/                  |                      |                    |                            |                  |                              |                            |                         |                          |                            |                              |                   | 0.02 1 < U         |
| VOLATILES        | 1, 1, 1- Inchoroemane                    |                    |                                       |                        | 0.005 1 < 0                 | 0.005 1 < 0          | 0.005 1 < U        | 0.005 1 < U                | 0.905 1 < U      | 0.025 1 < UD                 | 0.005 t < U                | 0.005 1 < U             | 0.005 1 < U              | 0.005 1 < U                | 0.005 f < U                  | 0.005 1 < U       | 0.01 1 < U         |
| VOLATILES        | 1 t 2-Trichlomethane                     |                    |                                       |                        |                             | 0.005 1 < 0          | 0.005 1 < 0        | 0.005 1 < U                | 0.005 1 < 0      | 0.025 1 < 00                 | 0.005 1 < 0                | 0.005 1 < 0             | 0.005 1 < 0              | 0.005 1 < 0                | 0.005 1 < 8                  | 0.005 1 < 0       | 0.01 1 < U         |
| VOLATILES        | 1 1-Dichloroethane                       |                    |                                       |                        | 0.005 1 < 0                 | 0.005 1 < 1          | 0.005 1 < U        | 0.005 1 < 0                | 0.005 1 < 0      | 0.025 1 < 00                 | 0.005 1 < 1                | 0.005 1 < 0             | 0.005 1 < 0              | 0.006 1 < U                | 0.005 1 < U                  | 0.005 1 < 1/      | 10.01 1 < 0        |
| VOLATILES        | 1,1-Dichloroethene                       |                    |                                       |                        | 0.005 1 < U                 | 0.005 1 < U          | 0.005 1 < U        | 0.005 1 < 1                | 0.005 1 < 13     | 0.025 1 < 10                 | 0.005 1 < 1                | 0.005 t < t             | 0.005 1 < 8              | 0.005 7 4 0                | 0.000 1 K G                  | 0.005 1 < 11      | 0.01 1 C U         |
| DIATILES         | 1,2,3-Trichlaropropane                   |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            |                         |                          |                            | 0.000                        | 0.005 1 2 0       | 0.02 1 < U         |
| JATILES .        | 1,2-Dibromo-3-chloropropane              |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            |                         |                          |                            |                              |                   | 0.04 1 < U         |
| VOLATILES        | 1,2-Dibromoethane                        |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            |                         |                          |                            |                              |                   | 0.04 1 < U         |
| VOLATILES        | 1,2-Dichioroethane                       |                    |                                       |                        | 0.005 t < U                 | 0.005 1 < U          | 0.005 1 < U        | 0.005 1 < U                | 0.005 1 < U      | 0.025 1 < UD                 | 0.005 1 < U                | 0.005 1 < U             | 0.005 t < U              | 0.005 1 < ∪U               | 0.005 1 < U                  | 0.005 1 < U       | 0.01 1 < U         |
| VOLATILES        | 1,2-Dichloroelhene                       |                    |                                       |                        | 0.005 t < U                 | 0.005 1 < U          | 0.005 1 < U        | 0.005 1 < U                | 0.965 1 < U      | 0.025 1 < UD                 | 0.005 1 < U                | 10.005 1 < U            | 0.005 1 < U              | 0.005 1 < U                | 0.005 1 < U                  | 0.005 1 < U       | 0.01 1 < U         |
| VOLATILES        | 1,2-Dichloropropane                      |                    |                                       |                        | 0.005 1 < U                 | 0.005 f < U          | 0.005 1 < 10       | 0.005 1 < U                | 0.005 1 < U      | 0.025 1 < UD                 | 0.005 1 < U                | 0.005 1 < U             | 0.005 1 < U              | 0.005 1 < U                | 0.005 1 < U                  | 0.005 1 < U       | 0.01 1 < U         |
| VOLATILES        | 2-Butanone                               |                    |                                       |                        | 0.05 1 < 0                  | 0.05 1 < U           | 0.05 1 < U         | 0.05 1 < U                 | 0.05 1 < U       | 0.25 1 < UD                  | 0.05 1 < U                 | 0.05 1 < U              | 0.05 1 < U               | 0.05 1 < U                 | 0.05 1 < U                   | 0.05 1 < U        | 0.02 t < U         |
| VOLATIEES        | 2-GROIDEDINI VILIYI ELITER<br>2-Hevanons |                    |                                       |                        | 0.01 1 < 0                  | 0.01 1 < U           |                    | 0.01 I < U                 | 0.01 3 < 0       | 0.05 1 < UD                  | 0.01 1 < 0                 | 0.01 1 < U              | 0.01 1 < U               | 0.01 1 < U                 | 0.01 1 < U                   | 0.01 1 < U        | 0.02 \$ < U        |
| VOLATILES        | 2-Propenal                               |                    |                                       |                        |                             | 0.001 < 0            | 0.03 1 4 0         |                            |                  | 0.25 1 < 00                  | 0.5 1 < 0.0                | 0.05 1 < 0              | 0.05 I < 0               | 0.05 1 < 0                 | 0.05 1 < 0                   | U.US 1 < U        | 0.02 1 < 0         |
| VOLATILES        | Acetone                                  |                    |                                       |                        | 0.1 1 < U                   | 0.1 1 < U            | 0.1 1 < 12         | 01 t < U                   | 01 t < 11        | 05 1 < HD                    | 011 < 14                   | 011 < 1                 |                          | 01 1 ~ 1                   | 01 7 2 13                    | 01 3 4 11         | 0.02 1 - 21        |
| VOLATILES        | Acetonitrie                              |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            | •/· · · •               |                          |                            |                              |                   | 0.2 1 < 1          |
| VOLATILES        | Acryionitrile                            |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            |                         |                          |                            |                              |                   | 02 1 < U           |
| VOLATILES        | Allyl chloride                           |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            |                         |                          |                            |                              |                   | 0.02 t < U         |
| VOLATILES        | Benzene                                  |                    |                                       |                        | 0.005 1 < U                 | 0.005 1 < U          | 0.005 1 < U        | 0.005 1 < U                | 0.005 1 < U      | 0.025 t < UD                 | 0.005 1 < U                | 0.005 1 < V             | 0:005 <sup>.</sup> 1 < U | 0.005 1 < U                | 0.005 1 < U                  | 0.005 1. < U      | 0.01 1 < U         |
| VOLATILES        | Bromodichkoromethane                     |                    |                                       |                        | 0.005 1 < U                 | 0.005 1 < U          | 0.005 1 < U        | 0.005 1 < ℃                | 0.005 1 < U      | 0.025 t < UD                 | 0.005 f < U                | 0.005 1 < ⊍             | 0.005 1 < U              | 0.005 1 < U                | 0.005 1 < U                  | 0.005 1 < U       | 0.01 1 < U         |
| VULATILES        | Bromotion                                |                    |                                       |                        | 0.005 1 < 0                 | 0.005 1 < 0          | 0.005 1 < U        | 0.005 1 < U                | 0.005 1 < Ŭ      | 0.025 1 < UD                 | 0.005 t < U                | 0.005 1 < U             | 0.005 1 < U              | 0.005 1 < U                | 0.005 1 < U                  | 0.005 1 < U       | 0.01 t < U         |
| VOLATILES        | Carbon dicutido                          |                    |                                       |                        | 0.00€ 1 - U                 | 0.005 1              | 10.000 1 U         | 0.01 1 < 0                 |                  | 0.05 1 < 0.0                 | 0.01 T < U                 | 0.01 1 < U              | 0.01 1 < 0               | 0.01 1 < U                 | 0.01 1 < U                   | 0.01 1 < U        | 0.02 1 < 0         |
| VOLATILES        | Carbon letrachloride                     |                    |                                       |                        | 0.005 1 < 1                 | 0.005 1 < 0          | 0.005 1 < U        | 0.005 1 < 0                | 0.005 1 < 0      | 0.025 I < 0D<br>0.035 1 < 0D | 0.005 I < U                | 0.005 1 < 0             | 0.005 I < U              | 9.905 i < U                | 0.005 1 < 0                  | 0.005 1 < U       | 0.01 1 < 0         |
| VOLATILES        | Chiorobenzene                            |                    |                                       |                        | 0.005 t < U                 | 0.005 1 < U          | 0.005 1 < 11       | 0.005 1 < U                | 0.005 1 < 1      | 1025 1 < UD                  | 0.005 1 < U                | 8005 1 < 0              | 0.005 1 < 0              | 0.005 1 < 11               | 0.005 1 < U                  | 0.005 1 C D       |                    |
| VOLATILES        | Chloroethane                             |                    |                                       |                        | 0.01 1 < U                  | 0.01 1 < U           | 0.01 1 < U         | 0.01 t < U                 | 0.01 1 < U       | 0.05 1 < UD                  | 0.01 1 < U                 | 0.01 1 < U              | 0.01 1 < U               | 0.01 1 < 1/                | 0.01 1 < U                   | 0.01 1 < U        | 6.02 1 < U         |
| VOLATILES        | Chioroform                               |                    |                                       |                        | 0.005 1 < U                 | 0.005 1 < U          | 0.005 1 < U        | 0.005 t < U                | 0.005 1 < U      | 0.025 1 < UD                 | 0.005 1 < U                | 0.005 t < U             | 0.005 t < U              | 0.005 1 < U                | 0.005 1 < U                  | 0.005 1 < U       | 0.01 1 < U         |
| VOLATILES        | Chioromethane                            |                    |                                       |                        | 0.01 1 < 1J                 | U > 1 10.0           | 0.01 1 < U         | 0.01 1 < U                 | 0.01 1 < U       | 0.05 1 < UD                  | 0.01 1 < U                 | 0.01 1 < U              | 0.01 1 < U               | 0.01 1 < V                 | 0.01 1 < U                   | 0.01 1 < U        | 0.02 1 < U         |
| VOLATILES        | Chloroprene                              |                    |                                       |                        |                             |                      |                    | •                          |                  |                              |                            |                         |                          |                            |                              |                   | 02 1 < U           |
| VOLATILES        | cis-1,3-Dichloropropene                  |                    |                                       |                        | 0.005 1 < U                 | 0.005 1 < U          | 0.005 1 < U        | 0.005 1 < U                | 0.005 1 < U      | 0.025 1 < UD                 | 0.005 1 < U                | 0.005 1 < U             | 0.005 1 < U              | 0.005 1 < U                | 0.005 1 < U                  | 0.005 1 < U       | 0.01 1 < U         |
| VOLATILES        | Dibfomochioromethane                     |                    |                                       |                        | 0.005 1 < 0                 | 0.005 1 < 0          | 0.005 7 < U        | 0.005 1 < U                | 0.005 1 < U      | 0.025 1 < UD                 | 0.005 1 < U                | 0.005 1 < U             | 0.005 1 < U              | 0.005 1 < 0                | 0.005 1 < 0                  | 0.005 1 < U       | 0.01 1 < U         |
| VOLATILES        | Dickhoromethane                          |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            |                         |                          |                            |                              |                   | 0.04 1 < U         |
| VOLATIEES        | Ethyl methacivlate                       |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            |                         |                          |                            |                              |                   | 0.04 1 < U         |
| VOLATILES        | Ethylbenzene                             |                    |                                       |                        | 0.005 1 < 11                | 0.005 1 < 13         | 0.005 1 c H        | 0:005 1 -< ₽               | 0.005 1 ·····    | 0.625 1 - 140                | 8005 1 - 11                | 0.005 1 × <sup>11</sup> | 0.095 t ∠ ⊔              | 0.005 1                    | 0805 1 × P                   | 0.005 t - U       | 0.04 i < U         |
| VOLATILES        | IODOMETHANE.                             |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            | 5,400 1 1 1             |                          | 0.000 / 1 0                |                              |                   | 0.02 1 2 11        |
| VOLATILES        | ISOBUTYL ALCOHOL                         |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            |                         |                          |                            |                              |                   | 4 1 < 1            |
| VOLATILES        | Methacrylonitrile                        |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            |                         |                          |                            |                              |                   | 0.04 t < U         |
| VOLATILES        | Methyl isobutyl ketone                   |                    |                                       |                        | 0.05 1 < U                  | 0.05 % < U           | 0.05 1 < U         | 0.05 1 < U                 | 0.65 1 < U       | 0.25 1 < UD                  | 0.05 1 < U                 | 0.05 1 < U              | 0.05 t < U               | 0.05 1 < U                 | 0.05 1 < U                   | 0.05 1 < U        | 0.02 t < U         |
| VOLATILES        | METHYL METHACRYLAYE                      |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            |                         |                          |                            |                              |                   | 0.04 t < U         |
| VOLATILES        | Methylene chloride                       |                    |                                       |                        | 0.005 t < U                 | 0.005 1 < U          | 0.005 1 < U        | 0.005 1 < U                | 0.005 1 < U      | 0.025 1 < UD                 | 0.005 1 < U                | 0.005 t < U             | 0.005 1 < U              | 0.005 1 ≺ ೮                | 0.005 I < U                  | 0.005 1 < U       | 0.01 t < U         |
| VOLATILES        | Pentachloroethane                        |                    |                                       |                        |                             |                      |                    |                            |                  |                              |                            |                         |                          |                            |                              |                   | 0.04 1 < U         |
| LAIRES           | Frapionariae                             |                    |                                       |                        |                             | 0.00F 4              | A 100 A            |                            |                  |                              |                            |                         |                          |                            |                              |                   | 0.1 1 < U          |
|                  | Tatrachlomethons                         |                    |                                       |                        | 0.000 1 < 0<br>0.005 1 - P  | 0.000 1 < U          | 0.005 1 < U        | 0.005 1 < U                | 0.005 T < 1)     | 0.025 1 < 0D                 | 0.005 1 < U                | 0.005 t < U             | 0.005 1 < U              | 9.005 1 < 0                | 0.005 1 < U                  | 0.005 1 < U       | 0.01 1 < 0         |
| VOLATILES        | Tohene                                   |                    |                                       |                        | 0.000 i < 0<br>0.005 i > 11 | 0.003 1 < 0          | 0.005 3 < 0        | 0.005 I < 0<br>0.006 1 - ₩ | 0.005 L < U      | 0.025 t < 040                | 0.005 3 < 0                | 0.005 1 < U             | 0.005 1 < 0              | 10.005 1 < U               | 0.005 1 < U                  | 0.005 1 < U       | 0.01 1 < U         |
| VOLATILES        | trans-1,3-Dichloropropene                |                    |                                       |                        | 0.005 1 ~ 11                | 0.005 1 - 1          | 0.005 1 - 11       | 0.005 1 < 0                | 8,005 t - 12     | 0.023 1 < 00/                | 0.000 I. < U<br>6605 t - H | 0.005 1 < U             | 0.005 t < U              | 0.000 I < 8<br>0.005 1 - ∺ | 0.000 I < 12<br>0.005 1 - ≭≭ | 0.005 1 < 0       | 0.01 1 - 14        |
| VOLATILES        | trans-1,4-Dichloro-2-butene              |                    |                                       |                        |                             |                      |                    | 4.999 I S U                |                  | 0.020 F <- UD                | www.r < sf                 | 0.003 I < U             | v.vv i < U               | 0.003 1 < U                | עריי עריי                    | 0.003 i < 0       | 0.04 1 < 17        |

Table 3-25

Concentrations of Chemicals in Soil Samples Associated with Sump 025

### Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

MARC No. W912QR-04-D-0027, TO No. DS02

Longhom Army Ammunition Plant, Kamack, Texas

Shaw Environmental, Inc.

Table 3-25 Concentrations of Chemicals in Soil Samples Associated with Sump 025

| , [SUMP] = SUMP025     |                           |                  | -                 |                  |                  |                  |                   |                  |                  |                  |                  |                   |                   |                  |                    |                  |                   |
|------------------------|---------------------------|------------------|-------------------|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|------------------|--------------------|------------------|-------------------|
| OCATION_CODE           |                           | 35SUMP025-SB01   | 35SUMP025-SB02    | 355UMP026-S801   | LH-S025-01       | LH-S025-01       | LH-S025-01        | LH-S025-02       | LH-\$025-02      | LH-S025-02       | LH-5026-01       | LH-S026-01        | LH-S026-01        | LH-S026-02       | LH-S026-02         | LH-S026-02       | LHS-2-07          |
| SAMPLE_NO              |                           | 35-SMP25-SB01-02 | 35-SMP25-SB02-02  | 35-SMP26-SB01-02 | LH-S025-01 QC    | LH-S025-01_1     | LH-S025-01_2      | LH-S025-02_1     | LH-S025-02_2     | LH-S025-02_3     | LH-5026-01 OC    | LH-S026-01_1      | LH-S026-01_2      | LH-\$026-02_1    | LH-S026-02_2       | LH-S026-02_3     | LHS-2-07          |
| SAMPLE_DATE            |                           | 9/9/2006         | 9/9/2006          | 9/9/2006         | 8/6/1993         | 8/5/1993         | 8/6/1993          | 8/6/1993         | 8/6/1993         | 8/5/1993         | 8/8/1993         | 8/8/1993          | 8/8/1993          | 8/8/1993         | 8/8/1993           | 8/8/1993         | 1/10/1995         |
| DEPTH                  |                           | 5.5-6Fl          | 5.5 - 6 Ft        | 4 - 4.5 Ft       | .5 - 1 F1        | .5 - 1 Ft        | 5 - 5.5 Ft        | .5 - 1 Fl        | 1.5 - 2 Ft       | 3.5 - 4 Fi       | .5 · 1 Ft        | .5-1 FI           | 3.5 - 4 Ft        | .5 - 1 Ft        | 1-1.5 Ft           | 3.5 - 4 Fl       | 05 Ft             |
| SAMPLE_PURPOSE         |                           | REG              | REG               | REG              | FD               | REG              | REG               | REG              | REG              | REG              | FD               | REG               | REG               | REG              | REG                | REG              | REG               |
| Test Group             | Parameter (Units = mg/kg) | Result DIL LQ VQ | Result DilL LQ VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL 1.0 VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL 1.Q VQ | Result Dill LQ VQ | Result DIL LO VQ | Result DIL LO. VO. | Result DIL LQ VQ | Result Dill LO VQ |
| VOLATILES              | Trichloroethene           |                  |                   |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0       | 0.005 1 < U      | 0.005 1 < U      | 0.025 1 < UD     | 0.005 t < U      | 0.005 1 < U       | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.01 1 < U        |
| VOLATILES              | Trichlorofluoromethane    | •                |                   |                  |                  |                  |                   |                  |                  |                  |                  |                   |                   |                  |                    |                  | 0.02 1 < U        |
| VOLATILES              | Vinyi acetate             |                  |                   |                  | 0.05 1 < U       | 0.05 1 < U       | 0105 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.25 1 < UD      | 0.05 t < U       | 0.05 t < 10       | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U         | 0.05 1 < U       | 0.92 1 < U        |
| VOLATILES              | Vinyi chloride            |                  |                   |                  | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.05 1 < UD      | 0.91 1 < U       | 0.01 1 < U        | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U         | 0.01 1 < U       | 0.02 1 < U        |
| VOLATILES              | Xylenes, Total            |                  |                   |                  | 0:005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 10.005 1 < U     | 0.025 1 < UD     | 0.005 1 < ℃      | 0.005 1 < U       | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.01 1 < U        |
| Contractory and shares | to Tables Cost            |                  |                   |                  |                  |                  |                   |                  |                  |                  |                  |                   |                   |                  |                    |                  |                   |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

Table 3-26 Concentrations of Chemicals in Soil Samples Associated with Sump 026

| (SUMP) = SUMP026<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE<br>Test Group  | Parameter (Units = mg/kg)  | 35SUMP025-SB01<br>35-SMP25-SB01-02<br>9/9/2006<br>5.5 - 6 Ft<br>REG<br>Result DIL LQ V | 35SUMP025-SB02<br>36-SMP25-SB02-02<br>9/9/2006<br>5.5 - 6 Ft<br>REG<br>KQ Result DIL LQ VQ       | 355UMP026-5801<br>35-5MP26-5801-02<br>9/9/2006<br>4 - 4.5 F1<br>REG<br>Result DIL LQ VQ | 1.H-S025-01<br>LH-S025-01 QC<br>8/6/1933<br>0.5 - 1 Ft<br>FD<br>Result DIL LQ VQ   | LH-S025-01<br>LH-S025-01_1<br>8/6/1993<br>0.5 - 1 Fl<br>REG<br>Result DIL LQ VQ  | LH-S025-01<br>LH-S025-01_2<br>8/6/1993<br>5 - 5.5 Ft<br>REG<br>Result DIL LQ VQ ·   | LH-S025-02<br>LH-S025-02_1<br>8/6/1993<br>0.5 - 1 Ft<br>REG<br>Result DiL LQ VQ   | LH-S025-02<br>LH-S025-02_2<br>8/6/1993<br>1.5 - 2.F1<br>REG<br>Result DIL LO VQ   | LH-S025-02<br>LH-S025-02_3<br>8/6/1993<br>3.5 - 4 Ft<br>REG<br>Result DIL LQ VQ                              | LH-S026-01<br>LH-S026-01 QC<br>8/8/1993<br>0.5 - 1 Ft<br>FD<br>Result DIL 1.0, VQ  | LH-S026-01<br>LH-S026-01_1<br>8/8/1993<br>0.5 - 1 Ft<br>REG<br>Result DIL LQ VQ   | LH-S026-01<br>LH-S026-01_2<br>8/8/1993<br>3.5 - 4 Ft<br>REG<br>Result_DIL_LQ_VQ   | LH-S026-02<br>LH-S026-02_1<br>8/8/1993<br>.5 - 1 Ft<br>REG<br>Result DIL LO VO  | LH-S026-02<br>LH-S026-02_2<br>8/8/1993<br>1 - 1.5 Ft<br>REG<br>Resut DIL LQ VQ  | LH-\$026-02<br>LH-\$026-02_3<br>&%/1993<br>3.5 - 4 F1<br>REG<br>Result DIL 1.0_VO  | LHS-2-07<br>LHS-2-07<br>1/10/1995<br>0 - 0.5 F1<br>REG<br>Result DIL LQ VQ   |
|--|--|--|--|---|--|--|---|---|---|--|--|---|---|---|---|--|--|
| EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES | 1.3,5-Trinitrobenzene<br>1.3-Dinitrobenzene<br>2.4.5-Trinitrobluene<br>2.4.5-Trinitrobluene<br>2.6-Dinitrobluene<br>4-Amino-2,6-dinitrobluene<br>HMX<br>m-Nitrobluene<br>Nitrobenzene<br>o-Nitrobluene<br>P-Nitrobluene<br>BDX |  |  |   | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>0.33 1 < U  | 0.33 3 < U<br>0.33 1 < U   | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$  |
| EXPLOSIVES<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS   | Tetryi<br>Aluminum<br>Antimony<br>Arsenic<br>Barium<br>Berufum   | 12700 1<br>0.112 1 U<br>0.959 1<br>380 1<br>1.03 1                                     | 12600 1<br>0.112 1 U<br>1.21 1<br>442 1<br>1.33 1  | 32200 t<br>0.126 t U<br>2.32 t<br>79.4 t<br>1.11 t                                      | 1740 1<br>3.1 1<br>4.2 1<br>148 1  | 3460 1<br>3.4. 1<br>4.9 1<br>182 1   | 12700 1<br>1.6 1<br>2.7 1<br>228 1  | 19400 1<br>3 1 < U<br>9.3 1<br>159 1  | 20900 1<br>3 1 < U<br>72 1<br>134 1   | 18700 1<br>3 1 < U<br>4.1 1<br>66.9 1  | 5050 1 D<br>5 1 < U<br>2.8 1<br>174 1  | 8410 1 D<br>5 1 < V<br>3.1 1<br>230 1   | 8500 1<br>5 1 < U<br>2.3 1<br>26.9 1  | 2300 1<br>5 1 < U<br>4.8 1<br>62.6 1  | 2360 t D<br>5 t < U<br>3.5 t<br>37.9 t  | 2390 1 D<br>5 1 < U<br>3.1 1<br>51.8 1   | 0.71 1 < U<br>9660 1<br>18.7 1 < UJ<br>12.6 1 J<br>290 1   |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS   | Cadmium<br>Calcium<br>Chromium<br>Cobalt<br>Copper<br>Iron<br>Lead<br>Magnesium  | 0.314 1 J<br>1170 1<br>12.8 1<br>6.46 1<br>3.53 1<br>12400 1<br>5.97 1<br>1250 1       | J 0.334 1 J J<br>J 1550 1 J<br>13.2 1<br>J 27.5 1 J<br>3.76 1<br>13600 1<br>J 8.57 1 J<br>1490 1 | 0.153 1 J J<br>590 1 J<br>28.2 1<br>7.51 1 J<br>8.13 1<br>27400 1<br>10.3 1 J<br>1940 1 | 1 1 < U<br>250 1<br>119 1<br>1 1 < U<br>9.7 1<br>10700 1<br>170.8 1<br>91.1 1  | 1         1          U           472         1 | 1     1     <     U       1840     1       14.1     1       7.1     1       3.8     1       13200     1       10.5     1       1400     1   | 1     1     <     U       2070     1       30.1     1       7.2     1       8.4     1       32400     1       13.2     1       1770     1   | 1         1         <         U           1390         1             35.2         1             6.6         1             120000         1             13.7         1   | 1 1 < U<br>1140 1<br>17.7 1<br>4.8 1<br>5.3 1<br>17200 1<br>9.3 1<br>1490 1                                  | 1         1         <         U           1770         1   | 1         1         <         U           1350         1         1         1           123         1         1         1           5         1         1         1           14.8         1         1         1           0900         1         D         61         1           235         1         1         1         1 | 1         1         <         U           530         1         .         .           7.6         1         .         .           2         1         <         U           3         1         .         .           10390         1         .         .           370         1         D         .           638         1         .         . | 1         1         <         U           1660         1  | 1 1 < U<br>1730 1<br>1 1 < U<br>2 1 < U<br>1.6 1<br>3070 1 D<br>950 1 D<br>293 1  | 1         1         <         U           908         1  | 1.9         1         <  |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS   | Manganese<br>Mercury<br>Nickel<br>Potassium<br>Selenium<br>Silver<br>Silver<br>Sodium  | 49.5 1<br>0.276 1 U<br>12.5 1<br>400 1<br>0.196 1 J<br>1.66 1 U<br>299 1               | 398 1<br>0.282 1 U<br>19.5 1<br>553 1<br>J 0.195 1 J J<br>1.78 1 U<br>229 1                      | 89.9 1<br>0.117 1 J J<br>18.4 1<br>979 1<br>0.264 1<br>1.92 1 U<br>218 1                | 193 1<br>0.1 1 < U<br>983 1<br>1 1 < U<br>1 1 < U<br>1 1 < U   | 199 1<br>0.1 1 < U<br>171 1<br>1 1 < U<br>1 1 < U<br>1 1 < U   | 145 1<br>0,3 1 < U<br>621 1<br>1 1 < U<br>3 1 < U   | 195 1<br>0.1 1 < U<br>1540 1<br>1 1 < U<br>1 1 < U<br>1 1 < U   | 272 1<br>0.1 1 < U<br>1650 1<br>t 1 < U<br>J 1 < U  | 136 1<br>0.1 1 < U<br>867 1<br>1 1 < U<br>1 1 < U<br>1 1 < U   | 112 1<br>0.1 1 < U<br>320 1<br>0.5 1 < U<br>1 1 < U  | 185 1<br>0.1 1 < U<br>100 1 < U<br>0.5 1 < U<br>1 1 < U   | 15.2 1<br>0.1 1 < U<br>269 1<br>0.5 1 < U<br>1 1 < U  | 246 1<br>0.1 1 < U<br>100 1 < U<br>0.5 1 < U<br>1 1 < U   | 625 1<br>0.1 1 < U<br>100 1 < U<br>0.5 1 < U<br>1 1 < U   | 55.7 1<br>0.1 1 < U<br>100 1 < U<br>0.5 1 < U<br>1 1 < U   | 411 t<br>0.14 t < U<br>563 1<br>0.8 1<br>1.9 1 < U   |
| METALS<br>METALS<br>METALS<br>METALS<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES   | Strontium<br>Thattium<br>Vanadium<br>Zinc<br>1.2,4-Trichlorobenzene<br>1.2-Dichlorobenzene<br>1.3-Dichlorobenzene<br>1.4-Dichlorobenzene   | 0.0684 1<br>16.8 1<br>20.6 1   | 0.0825 1<br>22 1<br>23.9 1   | 0.115 1<br>48.3 1<br>43.6 1   | 2.3 1<br>88.5 1<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U  | 3.6         1           0.33         1            0.33         1          U           0.33         1          U           0.33         1          U           0.33         1          U  | 22 1<br>0.33 1 < U<br>0.33 t < U<br>0.33 t < U<br>0.33 1 < U<br>0.33 1 < U  | 46.6 1<br>130 1<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U   | 38.1 1<br>1770 1<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U  | 26.7 1<br>2.9.7 1<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U                                    | 12.8 1<br>47.7 1<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U   | 9 1<br>98.6 1<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U   | 12.9 1<br>18.8 1<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U  | 8.3 i<br>29.3 i<br>0.33 f < U<br>0.33 f < U<br>0.33 f < U<br>0.33 f < U<br>0.33 f < U   | 10 1 < U<br>122 1<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U   | 10.5 1<br>10.3 1<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U   | 20.7 1<br>93.4 1 < U<br>118 1<br>0.66 1 < U<br>0.66 1 < U<br>0.66 1 < U<br>0.66 1 < U  |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES  | 2,4,5-Trichlorophenol<br>2,4,6-Trichlorophenol<br>2,4-Dichlorophenol<br>2,4-Dimethylphenol<br>2,4-Dimitrophenol<br>2,4-Dimitrophenol<br>2,6-Dimitrophene   |  | ·  |   | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$   | 1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U   | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$  | 1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U  | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$  | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$   | 1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U   | 1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U  | 1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U  | 1.65 t < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U  | 1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U  | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES  | 2-Choronaptimaiene<br>2-Chorophenol<br>2-Methylaphthalene<br>2-Methylaphthalene<br>2-Nitroaniline<br>2-Nitroaniline<br>3-Nitroaniline<br>3-Nitroaniline  |  |  |   | 0.33 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>1.65 1 < 0<br>0.33 1 < 0<br>1.65 1 < 0<br>0.65 1 < 0<br>1.65 1 < 0 | 0.33         1         <         U           0.33         1         <         U           0.33         1          U           0.33         1          U           0.33         1          U           0.55         1          U           0.65         1          U           1.65         1          U  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.66 1 < U  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>1.65 1 < U | 0.33 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>1.65 1 < 0<br>0.33 1 < 0<br>1.65 1 < 0<br>0.65 1 < 0<br>1.65 1 < 0<br>0.65 1 < 0   | 0.33 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>1.65 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>1.65 1 < 0<br>0.65 1 < 0<br>1.65 1 < 0  | 0.33 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>1.65 1 < 0<br>0.33 1 < 0<br>1.65 1 < 0<br>0.33 1 < 0<br>1.65 1 < 0<br>0.55 1 < 0<br>1.65 1 < 0  | 0.33         1         <         U           0.33         1         <         U           0.33         1         <         U           0.33         1         <         U           0.65         1          U           0.65         1          U           0.65         1          U           0.65         1          U | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>1.65 1 < U  | 0.33 i < 0<br>0.33 i < 0<br>0.33 1 < 0<br>0.33 i < 0<br>1.65 i < 0<br>0.33 i < 0<br>0.33 i < 0<br>1.65 i < 0<br>0.55 i < 0<br>1.65 i < 0<br>1.65 i < 0 | 0.66 1 < U<br>0.66 1 < U<br>0.17 1 J<br>3.3 1 < U<br>0.66 1 < U<br>1.3 1 < U<br>3.3 1 < U  |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES   | 4.6-Dinitro-2-methylphenol<br>4-Bromophenyl phenyl ether<br>4-Chloro-3-methylphenol<br>4-Chloro-anilime<br>4-Chlorophenyl phenyl ether<br>4-Methylphenol<br>4-Nitroaniline   |  |  | . *   | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$   | 1.65       1       <       U         0.33       1       <       U         0.65       1        U         0.65       1        U         0.33       1        U         0.33       1        U         0.55       1        U         0.55       1        U         0.55       1        U         0.55       1        U         1.65       1        U  | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$  | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$  | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$  | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$   | 1.65     1     <     U       0.33     1     <     U       0.65     1     <     U       0.65     1     <     U       0.33     1     <     U       0.33     1     <     U       0.55     1     <     U       0.55     1     <     U       0.55     1     <     U | 1.65     1     <  | 1.65     1     <     U       0.33     1      U       0.65     1      U       0.65     1      U       0.33     1      U       0.33     1      U       0.55     1      U  | 1.65     1     <     U       0.33     1     <     U       0.65     1      U       0.33     1      U       0.33     1      U       0.33     1      U       0.33     1      U       1.65     1      U   | 1.65       1        U         0.33       1        U         0.65       1        U         0.65       1        U         0.33       1        U         0.33       1        U         0.55       1        U         0.53       1        U         1.65       1        U         1.65       1        U | 1.65         1         <   | 3.3         1         <         U           0.66         1         <         U           0.66         1          U           0.68         1          U           0.18         1         J         J           3.3         1          U |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES   | 4-Nitrophenol<br>Acenaphithene<br>Acenaphithylene<br>Antbracene<br>Benzo(a)antbracene<br>Benzo(a)pyrene  |  |  |   | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$   | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$   | 1.65       t        U         0.33       1        U | 1.65       t        U         0.33       t        U         0.33       1        U         0.33       t        U | 1.65       1        U         0.33       1        U | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$   | 1.65       1        U         0.33       1        U  | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$  | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$  | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$  | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$  | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$   | 3.3     1     <     U       0.66     1     <     U       0.66     1     <     U       0.66     1     <     U       0.66     1      U       0.66     1      U   |

Shaw Environmental, Inc.

Table 3-26 Concentrations of Chemicals in Soil Samples Associated with Sump 026

| (SUMP) = SUMP026 |                             |                  |                  |                  |                   |                   |                  |                    |                  |                  |                  |                  |                  |                  |                  |                  | 1112 0.07        |
|------------------|-----------------------------|------------------|------------------|------------------|-------------------|-------------------|------------------|--------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                             | 35SUMP025-SB01   | 35SUMP025-SB02   | 35SUMP026-SB01   | LH-S025-01        | LH-\$025-01       | LH-\$025-01      | LH-S025-02         | LH-S025-02       | LH-S025-02       | LH-S026-01       | LH-S026-01       | LH-S026-01       | LH-S026-02       | LH-S026-02       | 2H-S026-02       | LHS-2-07         |
| Sample_NO        |                             | 35-SMP25-SB01-02 | 35-SMP25-SB02-02 | 35-SMP26-S801-02 | 1.H-S025-01 QC    | LH-S025-01_1      | LH-S025-01_2     | LH-S025-02_1       | LH-S025-02_2     | LH-S025-02_3     | LH-5026-01 QC    | LH-S026-01_1     | 1H-S026-01_2     | LH-SU26-02_1     | Lit-SU20-02_2    | LH-SUZD-UZ_3     | 1/10/1005        |
| SAMPLE_DATE      |                             | 9/9/2006         | 9/9/2006         | 9/9/2006         | 8/6/1993          | 8/6/1993          | 8/6/1993         | 8/6/1993           | 8/6/1993         | 8/6/1993         | 8/8/1993         | 8/8/1993         | 8/8/1993         | 8/8/1993         | 8/8/1993         | 8/8/1993         | 1/10/1992        |
| Depth            |                             | 5.5 - 6 Ft       | 5.5 - 6 Ft       | 4 - 4.5 Ft       | 0.5 - 1 Ft        | 0.5 - 1 Ft        | 5 - 5.5 Ft       | 0.5 - 1 Ft         | 1.5-2.Ft         | 3.5 - 4 Ft       | 0.5 - 1 Ft       | 0.5 · 1 Ft       | 3.5 - 4 Ht       | .5-1H            | 1-1.5+1          | 3.5 - 4 FT       | 0-0.5 H          |
| SAMPLE_PURPOSE   |                             | REG              | REG              | REG              | FD                | REG               | REG              | REG                | REG              | REG              | FD               | REG              | REG              | REG              | HEG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL 1.Q VQ | Result DIL 1.Q VQ | Result DIL LO VO | Result DIL 1.Q. VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Hesult Dil LO VO | Result DIL LO VO | Result DIL LU VU | Hestur DIE EU VO |
| SEMIVOLATILES    | Benzo(b)fluoranthene        |                  |                  |                  | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.66 1 < 0       |
| SEMIVOLATILES    | Benzo(ghi)perylene          | 1                |                  |                  | 0.33 1 < U        | 0.33 t < U        | 0.33 1 < U       | 0.33 t < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.66 1 < 0       |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                  |                  |                  | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.06 1 < 0       |
| SEMIVOLATILES    | Benzoic Acid                | 1                |                  |                  | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 t < U       | 1.65 1 < U       | 1.65 1 < 0       | 1.65 1 < 0       | 1.65 < 0         | 3.3 1 < 0        |
| SEMIVOLATILES    | Benzyl Alcohol              |                  |                  |                  | 0.65 1 < U        | 0.65 1 < U        | 0.65 1 < U       | 0.65 1 < U         | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < 0       | 0.65 t < U       | 0.65 1 < U       | 0.65 1 < 0       | 0.65 1 < 0       | 0.65 1 < 0       | 0.06 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  | 1                |                  |                  | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.66 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |                  |                  |                  | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.66 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether | ļ                |                  |                  | .0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 10      | 0.33 1 < 0       | 0.33 1 < U       | 0.66 1 < U       |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |                  |                  |                  | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 10      | 0.338 1          | 0.33 1 < U       | 0.27 1 J         |
| SEMIVOLATILES    | Butyl benzyl phthalate      |                  |                  |                  | 0.33 t < U        | 0.33 1 < U        | 0.33 1 < U       | 0.376 1            | 0.33 1 < U       | €0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0,66 1 < U       |
| SEMIVOLATILES    | Chrysene                    |                  |                  |                  | 0.33 t < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.66 1 < U       |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      |                  |                  |                  | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.66 1 < U       |
| SEMIVOLATILES    | Dibenzoluran                | ]                |                  |                  | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1· < U        | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.66 1 < U       |
| SEMIVOLATILES    | Diethvl ohthalate           |                  |                  |                  | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.66 1 < U       |
| SEMIVOLATILES    | Dimethyl obthalate          | ł                |                  |                  | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 † < U       | 0.33 1 < Ù       | 0.66 1 < ⊍       |
| SEMIVOLATILES    | di-n-Butvl nbthalate        |                  |                  |                  | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < 0       | 0.33 1 < U         | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.66 1 < ⊎       |
| SEMMON ATHES     | di-o-Octvi obthalate        |                  |                  |                  | 0.33 1 < 1        | 0.33 1 < 11       | 033 1 < 0        | 0.33 1 < U         | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < Ü       | 0.33 1 < U       | 0.33 1 < U       | 0.66 1 < U       |
| SEMAICH ATHES    | Ekoranthene                 | [                |                  |                  | 033 1 < 1         | 033 1 2 11        | 0.33 1 < 8       | 033 1 < U          | 033 1 < U        | 0.33 1 < 0       | 0.33 1 < U       | 0.24 1 J         |
| CEMA/OF ATTLES   | Floorange                   |                  |                  |                  | 033 1 4 1         | 0.33 1 < 11       | 033 1 2 1        | 0.33 1 < 1]        | 0.33 1 < 1       | 033 1 < 1        | 633 1 < U        | 0.33 1 < 1       | 033 1 < 0        | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.66 1 < U       |
| SCHWOLATHES      | Househowhoover              |                  |                  |                  | 0.00 1 < 0        | 0.00 1 < 0        | 0.00 1 < 0       | 0.00 1 C U         | 0.33 1 4 11      | 033 1 4 1        | 0.33 1 - 14      | 0.33 1 2 11      | 0.33 1 < 11      | 033 1 < 1        | 0.33 1 < U       | 0.33 1 < U       | 0.66 t < U       |
| SEMIVOLANLES     | nexactionobelizene          |                  |                  |                  | 0.00 1 4 0        | 0.00 1 < 0        |                  | 0.20 1 4 1         | 0.23 1 < 11      | 0.00 1 < 0       | 0.33 1 4 13      | 033 1 4 1        | 0.00 1 4 0       | 0.33 1 2 11      | 0.33 1 < 1       | 033 1 < U        | 0.66 t < U       |
| SEMIVOLABLES     | Hexachioropulatiene         |                  |                  |                  |                   | 0.33 1 < 0        | 0.33 1 4 0       | 0.33 1 4 0         | 0.00 1 4 1       | 0.30 1 < 0       | 0.03 1 < 0       | 0.00 1 < 0       | 0.22 \$ < 11     | 0.00 1 4 0       | 0.33 1 × 11      | 033 1 < U        | 0.66 1 < 0       |
| SEMIVOLABLES     | Hexachiorocyciopentadiene   |                  |                  |                  | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0       | 0.33 1 < 0         | 0.00 1 4 0       |                  |                  | 0.00 1 4 1       | 0.00 1 < 0       | 0.00 1. < 0      | 0.00 1 4 0       | 039 1 4 1        | 0.66 1 2 11      |
| SEMIVOLAIRLES    | Hexachioroethane            | 1                |                  |                  | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0,00 1 4 0       | 0.03 1 4 0       | 0.00 1 < 0       | 0.00 1 < 0       | 0.00 I < U       | 0.66 1 2 11      |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene      |                  |                  |                  | 9.33 1 < 0        | 10.33 I < U       | 0.33 1 < 0       | 0.33 F < U         | 0.35 1 < 0       | 0.00 1 4 0       | 0.33 1 < 0       |                  | 0.33 1 4 0       | 0.00 1 4 1       | 0.00 1 < 0       | 0.23 1 < 0       | 0.65 1 40.0      |
| SEMIVOLATILES    | Isophorone                  |                  |                  |                  | 0.33 1 < 0        | 0.33 1 < U        | 0.33 1 < 1       | 0.33 1 < 0         | 0.33 1 < 0       | 10.33 T < U      | 0.33 3 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.03 1 < 0       | 0.03 1 4 1       | 0.00 1 00.0      |
| SEMIVOLATILES    | Naphthalene                 |                  |                  |                  | 0.33 1 < 0        | 0.33 1 < U        | 0.33 1 < 0       | 0.33 1 < 0         | 8.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 9.33 I < U       | 0.33 1 2 0       |                  | 0.03 1 < U       | 0.00 1 4 0       |
| SEMIVOLATILES    | Nirobenzene                 |                  |                  |                  | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.03 1 < 0       | 0.00 1 < 0       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |                  |                  |                  | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.06 1 < 0       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      |                  |                  |                  | 0.33 1 < U        | 0.33 t < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.05 1 < 0       |
| SEMIVOLATILES    | Pentachlorophenof           |                  |                  |                  | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 ≺ U         | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 0       | 1.65 1 < 0       | 1.65 1 < 0       | 1.65 1 < 0       | 3.3 1 < 0        |
| SEMIVOLATILES    | Phenanthrene                |                  |                  |                  | 0.33 1 < U        | 0.356 1           | 0.49             | 0.356 1            | 0.33 1 < 0       | 0.33 1 < U       | 0.33 I < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       | 0.66 1 < 0       |
| SEMIVOLATILES    | Phenol                      |                  |                  |                  | 0.33 1 < U        | 10.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | -0.33 1 < U      | 0.66 1 < 0       |
| SEMIVOLATILES    | Pyrene                      |                  |                  |                  | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 î < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.15 1 J         |
| VOLATILES        | 1,1,1,2-Tetrachioroethane   | 1                |                  |                  |                   |                   |                  |                    |                  |                  |                  |                  |                  |                  |                  |                  | 0.02 1 < U       |
| VOLATILES        | 1.1,1-Trichloroethane       | 1                |                  |                  | 0.005 1 < U       | 0.005 t < U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES        | 1,1,2,2-Tetrachloroethane   |                  |                  |                  | 0.005 1 < U       | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES        | 1,1,2-Trichloroethane       | 1                |                  |                  | 0.005 1 < U       | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U      | 9.005 1 < U      | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES        | 1,1-Dichloroethane          |                  |                  |                  | 0.005 1 < U       | 0.005 t < U       | 0.095 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.025 1 < UD     | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES        | 1,1-Dichloroethene          | 1                |                  |                  | 0.005 1 < U       | 0.005 t < U       | 0.005 1 < U      | 0.005 t < U        | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES        | 1,2,3-Trichloropropane      |                  |                  |                  |                   |                   |                  |                    |                  |                  |                  |                  |                  |                  |                  |                  | 0.02 1 < U       |
| VOLATILES        | 1.2-Dibromo-3-chloropropane |                  |                  |                  |                   |                   |                  |                    |                  |                  |                  |                  |                  |                  |                  |                  | 0.04 1 < U       |
| VOLATILES        | 1,2-Dibromoethane           |                  |                  |                  |                   |                   |                  |                    |                  |                  |                  |                  |                  |                  |                  |                  | 0.04 1 < U       |
| VOLATILES        | 1,2-Dichloroethane          |                  |                  |                  | 0.005 1 < U       | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 t < U      | 0.025 t < UD     | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES        | 1.2-Dichlomethene           | •                |                  |                  | 0.005 t < U       | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.025 t < UD     | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES        | 1.2-Dichloropropane         |                  |                  |                  | 0.005 1 < U       | 0.005 t < U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U      | 0.005 t < U      | 0.01 1 < U       |
| VOLATILES        | 2-Butanone                  | 1                |                  |                  | 0.05 1 < U        | 0.05 1 < U        | 0.05 1 < 0       | 0.05 1 < U         | 0.05 t < U       | 0.25 1 < UD      | 0.05 1 < U       | 0.02 t < U       |
| VOLATILES        | 2-Chloroethyl vinyl ether   |                  |                  |                  | 0.01 1 < U        | 001 1 < 1         | 001 1 < U        | 0.01 1 < U         | 0.01 1 < U       | 0.05 1 < UD      | 0.01 1 < U       | 0.02 1 < U       |
| VOLATILES        | 2 Hexanone                  | 1                |                  |                  | 005 1 < U         | 005 1 < U         | 005 1 < U        | 0.05 1 < 9         | 0.05 t < U       | 0.25 t < UD      | 0.05 1 < U       | 0.02 t < U       |
| VOLATILES        | 2-Propenal                  |                  |                  |                  |                   |                   |                  |                    |                  |                  |                  |                  |                  |                  |                  |                  | 11 < U           |
| VOLATILES        | Acetone                     |                  |                  |                  | 011 < li          | 01 1 < 1          | 01 1 < 1         | 01 1 < U           | 0.1 1 < U        | 0.5 1 < UD       | 0.1 1 < U        | 0.02 1 < U       |
| VOLATILES        | Acetonitrile                | 1                |                  |                  |                   | •••••••           |                  |                    |                  |                  |                  |                  |                  |                  |                  |                  | 0.2 1 < U        |
| VOLATILES        | Accelentatio                |                  |                  |                  |                   |                   |                  |                    |                  |                  |                  |                  |                  |                  |                  | ÷                | 0.2 t < U        |
| VOLATELES        | Act y consume               |                  |                  |                  |                   |                   |                  |                    |                  |                  |                  |                  |                  |                  |                  |                  | 002 1 < 9        |
| VOLNDLED         | Rigitination                |                  |                  |                  | 0.000 •           | A 000 t           | 0.005 1          | 0.005 1 / !!       | A 000 1 . 11     | AA25 t . 11D     | 0.005 1          | 0.005 1 4 11     | 0.005 t / lt     | 0.005 1 2 11     | 0.005 1 < lt     | 0.005 1 c il     | 0.01 1 < 0       |
| VOLABLES         | Delizene                    |                  |                  |                  |                   | 0.000 1 K U       |                  | 0.005 1            | 0.005 1 4 0      | 0.025 1 00       | 0.005 1 1        | 0.000 1 < 0      | 0.005 1 4 1      | 0.005 1 4 1      | 0.005 1 4 11     | 0.005 1 4 31     | 0.01 1 2 11      |
| VOLANLES         | Bromodicinoromemane         |                  |                  |                  |                   | 0.000 1 < 0       | 0.005 1 < 0      |                    | 0.000 F < U      | 0.025 \$ 00      | 0.005 1 < 1      | 0.005 1 < 1      | 0.005 1 < 1      | 0.005 1 < 0      | 0.005 1 4 11     | 0.005 1 < 1      | 0.01 t < 11      |
| VOLABLES         | Bromotorm                   | 1                |                  |                  | 0.005 1 < 0       | 0.005 1 < 0       | 0.005 1 < 0      | 0.005 1 < 0        | 0.005 1 < 0      | 0.025 : < 00     | 0.005 1 < 0      |                  |                  | 0.003 1 4 0      |                  | 0.003 1 < 0      |                  |
| VOLATILES        | Bromomethane                |                  |                  |                  | 0.01 1 < 0        | 0.01 1 < 0        | 9.01 1 < 9       | 0.01 1 < 0         | 0.01 1 < 0       | 10.05 \$ < 00    | 0.01 1 < 0       | 0.01 1 < 0       | 0.01 1 < 0       | 0.01 1 200       |                  | 0.000 1 - 10.0   | 0.02 1 4 0       |
| VOLATILES        | Carbon disulfide            | 1                |                  |                  | 0.005 1 < U       | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < 0        | 0.005 1 < U      | 0.025 1 < UD     | U.UU5 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.003 / < 0      | 0.005 t < U      |                  | 0.01 1           |
| VOLATILES        | Carbon tetrachloride        |                  |                  |                  | 0.005 1 < U       | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U      | 0.005 1 < 0      | 10.005 1 < U     | 0.005 1 < 0      | U.UUS 1 < U      | 0.005 1 < 0      | 0.01 1 4         |
| VOLATILES        | Chlorobertzene              | 1                |                  |                  | 0.005 1 < U       | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U      | 0.005 1 < 0      | 0.005 i < U      | 0.01 1 < 0       |
| VOLATILES        | Chloroethane                | 1                |                  |                  | 0.01 1 < U        | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U         | 0.01 1 < U       | 0.05 t < UD      | 0.01 1 < U       | 0.01:1 < U       | 0.01 1 < U       | 0.02 1 < U       |
| VOLATILES        | Chlorotorm                  | 1                |                  |                  | 0.005 1 < U       | 0.005 1 < U       | 0.005 1 < 0      | 0.005 1 < U        | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES        | Chloromethane               |                  |                  |                  | 0.01 1 < U        | 0.01 t < U        | 0.01 1 < U       | 0.01 1 < U         | 0.01 t < U       | 0.05 1 < UD      | 0.01 1 < U       | 0.02 1 < U       |
| VOLATILES        | Chioroprene                 | 1                |                  |                  |                   |                   |                  |                    |                  |                  |                  |                  |                  |                  |                  |                  | 0.2 1 < U        |
| VOLATILES        | cis-1,3-Dichloropropene     | 1                |                  |                  | 0.005 1 < U       | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.025 t < UD     | 0.005 1 < U      | 0.005 t < U      | 0.01 1 < U       |
| VOLATILES        | Dibromochloromethane        | 1                |                  |                  | 0.005 1 < U       | 0.005 1 < U       | 0.005 1 < ∛      | 0.005 1 < U        | 0.005 1 < U      | 0.025 t < UD     | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES        | Dibromomethane              | 1                |                  |                  |                   |                   |                  |                    |                  |                  |                  |                  |                  |                  |                  |                  | 0.04 1 < U       |
| VOLATILES        | Dichlorodifluoromethane     |                  |                  |                  |                   |                   |                  |                    |                  |                  |                  |                  |                  |                  |                  |                  | 0.04 1 < U       |
| VOLATE ES        | Fiftyl methaciylate         | 1                |                  |                  |                   |                   |                  |                    |                  |                  |                  |                  |                  | -                |                  |                  | 0.04 1 < U       |
|                  |                             | 1                |                  |                  |                   |                   |                  |                    |                  |                  |                  |                  |                  |                  | -                |                  |                  |

Table 3-26 Concentrations of Chemicals in Soil Samples Associated with Sump 026

| [SUMP] = SUMP026  |                             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                   |               |                     |                 |                    |                  |                  |
|-------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|---------------|---------------------|-----------------|--------------------|------------------|------------------|
| LOCATION _CODE    |                             | 35SUMP025-SB01   | 35SUMP025-SB02   | 35SUMP026-SB01   | LH-\$025-01      | LH-\$025-01      | LH-S025-01       | LH-S025-02       | LH-S025-02       | LH-S025-02       | LH-S026-01        | LH-S026-01    | LH-S026-01          | LH-S026-02      | LH-S026-02         | LH-S026-02       | LHS-2-07         |
| SAMPLE_NO         |                             | 35-SMP25-SB01-02 | 35-SMP25-SB02-02 | 35-SMP26-SB01-02 | LH-S025-01 QC    | LH-S025-01_1     | LH-\$025-01_2    | LH-S025-02_1     | LH-S025-02_2     | LH-\$025-02_3    | LH-S026-01 QC     | LH-S026-01_1  | 1.H-S026-01_2       | 1H-S026-02_1    | LH-S026-02_2       | LH-S026-02_3     | LHS-2-07         |
| SAMPLE_DATE       |                             | 9/9/2006         | 9/9/2006         | 9/9/2006         | 8/6/1993         | 8/6/1993         | 8/6/1993         | 8/6/1993         | 8/6/1993         | 8/6/1993         | 8/8/1993          | 8/8/1993      | 8/8/1993            | 8/8/1993        | 8/8/1993           | 8/8/1993         | 1/10/1995        |
| DEPTH             |                             | 5.5-6Ft          | 5.5 - 6 Ft       | 4 - 4.5 Ft       | 0.5 - 1 Ft       | 0.5 - 1 Ft       | 5 - 5.5 Ft       | 0.5 - 1 Ft       | 1.5 · 2 Ft       | 3.5 - 4 Ft       | 0.5 - 1 Ft        | 0.5 - 1 Ft    | 3.5 - 4 Ft          | .5 - 1 Ft       | 1-1.5 Ft           | 3.5 - 4 Ft       | 0 - 0.5 Ft       |
| SAMPLE_PURPOSE    |                             | REG              | REG              | REG              | FD               | REG              | REG              | REG              | REG              | REG              | FD                | REG           | REG                 | REG             | REG                | REG              | REG              |
| Test Group        | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DHL LQ VQ | Result DiL LQ VO | Result DiL LQ VQ | Result DIL LQ VQ | Result DiL LQ VQ | Result DIL 1.0 VQ | Result DIL 10 | VQ Result DIL LQ VQ | Result DIL LQ V | O Result DIL LO VQ | Result DIL LQ VQ | Result DIL LO VQ |
| VOLATILES         | Ethylicenzene               |                  |                  |                  | -0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U       | 0.005 1 <     | U 0.005 1 < U       | 0.005 1 < l     | U 0.005 1 < U      | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES         | IODOMETHANE                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                   |               |                     |                 |                    |                  | −0.02 1 < U      |
| VOLATILES         | ISOBUTYL ALCOHOL            |                  |                  |                  |                  |                  |                  |                  |                  |                  |                   |               |                     |                 |                    |                  | 41 < U           |
| VOLATILES         | Methacrylonitrile           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                   |               |                     |                 |                    |                  | 0.04 1 < U       |
| VOLATILES         | Methyl isobutyl ketone      |                  |                  |                  | 0.05 1 < U       | 0.25 1 < UD      | 0.05 1 < U        | 0.05 1 <      | U 0.05 1 < U        | 0.05 1 < l      | U 0.05 1 < U       | 0.05 1 < U       | 0.02 1 < U       |
| VOLATILES         | METHYL METHACRYLATE         |                  |                  |                  |                  |                  |                  |                  |                  |                  |                   |               |                     |                 |                    |                  | 0.04 1 < U       |
| VOLATILES         | Methylene chloride          |                  |                  |                  | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U       | 0.005 1 <     | U 0.005 1 < U       | 0.005 1 < l     | U 0.005 1 < U      | 0.005 1 < U      | 0.01 t < U       |
| VOLATILES         | Pentachloroethane           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                   |               |                     |                 |                    |                  | 0.04 1 < U       |
| VOLATILES         | Propionitrile               | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                   |               |                     |                 |                    |                  | 0.1 1 < U        |
| VOLATILES         | Styrene                     |                  |                  |                  | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U       | 0.005 t <     | U 0.005 1 < U       | 0.005 1 < L     | U 0.005 1 < U      | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES         | Tetrachioroethene           |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 t < U      | 0.025 1 < UD     | 0.005 1 < U       | 0.005 t <     | U 0.005 1 < U       | 0.005 1 < t     | U 0.005 1 < U      | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES         | Toluene                     |                  |                  |                  | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U       | 0.005 1 <     | U 0:005 1 < U       | 0.005 t < t     | U 0.005 1 < U      | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES         | trans-1,3-Dichloropropene   |                  |                  |                  | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U       | 0.005 1 <     | U 0.005 1 < U       | 0.005 1 < 0     | U 0.005 1 < U      | 0.005 1 < U      | 0.01 1 < U       |
| VOLATILES         | trans-1,4-Dichloro-2-butene | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                   |               |                     |                 |                    |                  | 0.04 1 < U       |
| VOLATILES         | Trichlomethene              |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.025 1 < UD     | 0.005 1 < U       | 0.005 1 <     | U 0.005 1 < U       | 0.005 1 < 1     | U 0.005 1 < U      | 0.005 ti < U     | 0.01 1 < U       |
| VOLATILES         | Trichlorofluoromethane      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                   |               |                     |                 |                    |                  | 0.02 1 < U       |
| VOLATILES         | Vinyl acetate               |                  |                  |                  | 0.05 1 < U       | 0.25 1 < UD      | 0.05 1 < U        | 0.05 1 <      | U 0.05 1 < U        | 0.05 1 < 0      | U 0.05 1 < U       | 0.05 1 < U       | 0.02 1 < U       |
| VOLATILES         | Vinyl chloride              |                  |                  |                  | 0.01 1 < U       | 0.05 1 < UD      | 0.01 1 < U        | 0.01 1 <      | U 0.01 1 < U        | Q.01 1 < ł      | U 0.01 1 < U       | 0.01 1 < U       | 0.02 1 < 19      |
| VOLATILES         | Xylenes, Total              |                  |                  |                  | 0.005 1 < U      | 0.005 t < U      | 0.025 1 < UD     | 0.005 1 < U       | 0.005 1 <     | U 0.005 1 < U       | 0.005 1 < 4     | U 0.005 1 < U      | 0.005 t < U      | 0.01 1 < U       |
| Fastantes and the | to Tables Co                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                   |               |                     |                 |                    |                  |                  |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

Table 3-27 ociated with Sump 827 of Ch omicals in Soil Sa nlac Ac

| ISUMP} = SUMP027 |                             | Cor              | icentrations of C | nemicais in son s | amples Associat  | iea with on the o | 21                   |                   |                  |                  |
|------------------|-----------------------------|------------------|-------------------|-------------------|------------------|-------------------|----------------------|-------------------|------------------|------------------|
| LOCATION CODE    |                             | 35SUMP027-SB01   | 35SUMP027-S801    | 47SB31            | 47SB31           | LH-DL27-01        | LH-S27-01            | LH-S27-01         | LH-S27-02        | LH-S27-02        |
| SAMPLE NO        |                             | 35-SMP27-SB01-01 | 35-SMP27-SB01-02  | 47\$B31(0-0 5)    | 47SB31(1-2)      | LH-DL27-01        | LH-S27-01_1          | LH-S27-01_2       | LH-S27-02_1      | LH-S27-02_2      |
| SAMPLE DATE      |                             | 9/12/2006        | 9/12/2006         | 6/5/2000          | 6/5/2000         | 6/24/1993         | 6/24/1993            | 6/24/1993         | 6/24/1993        | 6/24/1993        |
|                  |                             | 0-05 FI          | 55-69             | 0-05F             | 1-2Ft            | 15-25E            | 0.5 - 2 Ft           | 2-5Ft             | 0.5 - 1.5 Ft     | 2-5Ft            |
| SAMPLE DUDDOSE   |                             | BEG              | 8FG               | REG               | BEG              | BEG               | BEG                  | REG               | REG              | REG              |
| Tart Grown       | Parameter () inite - mo(ka) | Beerit DIL LO VO | Result Dil 10 VO  | Result Dit 10 VO  | Result DIE LO VO | Besult Dit 10 VO  | Result DIL LO VO     | Result Dit. LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| EVELOPEREE       | 2.4 Dinitratekiene          |                  | FICALLY DIE EG VO |                   |                  | 033 1 < 11        | 033 1 < 11           | 033 1 < 1         | 033 1 < 1        | 0.33 1 < U       |
| CALENDIAES       | 2,4-Districtioner           |                  |                   |                   |                  | 0.23 1 4 11       | 0.33 t < 11          | 033 t < 1         | 033 t < U        | 0.33 t < 1       |
| EAPLUSIVES       | 2,0-Diradicouene            | 10000 1          | 0000 1            |                   |                  | 16200 1           | 2170 1               | 4010 1            | 8570 1           | 2330 1           |
| METALS           | Alumaum                     | 12200 1          | 8000 1            |                   |                  | 0.4.              | 51/0 2<br>5 1 - H    |                   | 3 1 4 11         | 2 1 / 1          |
| METALS           | Antimony                    | 1 0.115 1 U      | 0.124 1 0         |                   |                  | 3 1 < 0           | 3 1 < 0              | 3 7 4 0           | 31 < 0           | 31 < 6           |
| METALS           | Arsenic                     | 8.42 1           | 2.66 1            |                   |                  | 11 < U            | 1.1                  | 100 1             | 1.7 5            | 1 1 4 10         |
| METALS           | Barium                      | 101 1            | 135 1             |                   |                  | 1330 1            | 29.8                 | 129 1             | 44.5 t           | 19.0 1           |
| METALS           | Beryllium                   | 0.496 1          | 0.489 1           |                   |                  |                   |                      |                   |                  |                  |
| METALS           | Cadmium                     | 0.0901 1 J J     | 0.173 1 J J       |                   |                  | 11 < 0            | 11 < 0               | 1.58              | 2.31             | 1 T < V          |
| METALS           | Calcium                     | 2330 1           | 4080 1            |                   |                  | 1230 1            | 1230 1               | 459 1             | 1070 1           | 183 1            |
| METALS           | Chromium                    | 15.2 1           | 10.2 1            |                   |                  | 13.2 1            | 4.08 1               | 5.05 1            | 14.3 1           | 5.24 1           |
| METALS           | Cobalt                      | 4,14 1           | 10.3 1            |                   |                  | 12.5 1            | 11 < U               | 6.85 1            | 11 < U           | 11 < U           |
| METALS           | Copper                      | . 5.05 t         | 3.08 1            |                   |                  | 4.44 1            | 2.74 1               | 2.96 1            | 4.68 1           | 1.49 1           |
| METALS           | Iron                        | 18300 t          | 12400 1           |                   |                  | 12600 1           | 4180 1               | 5150 1            | 10200 1          | 2030 1           |
| METALS           | Lead                        | 13.3 1           | 16.8 1            |                   |                  | 6.9 1             | 2 1                  | 2.3 1             | 3.54 1           | 2.26 1           |
| METALS           | Magnesium                   | 745 1            | 2480 1            |                   |                  | 1510 1            | 150 1                | 418 1             | 247 1            | 122 1            |
| METALS           | Manganese                   | 204 1            | 520 1             |                   |                  | 111 1             | 23.1 1               | 62.1 1            | 21 1             | 32.2 1           |
| METALS           | Mercury                     | 0.0217 1 J J     | 0.287 1 U         |                   |                  | 0.17 1            | 0.1 1 < U            | 0.1 1 < U         | 0.1 1 < U        | 0.1 1 < Ú        |
| METALS           | Nickel                      | 6.38 1           | 10.9 1            |                   |                  |                   |                      |                   |                  |                  |
| METALS           | Potassium                   | 357 1            | 319 1             |                   |                  | 898 1             | 229 1                | 268 1             | 487 1            | 154 1            |
| METALO           | Salasium                    | 0.941 5          | 0.218 1 1 1       |                   |                  | 11 41             | 114                  | 1140              | 11 < 0           | 11 < 1           |
| WETALS           | Seleisum                    | 4.70 4 11        | 170 1 15          |                   |                  |                   | 1 1 4 11             | 11 4 1            | 1120             | 1 1 2 1          |
| METALO           | Silver                      | 1.52 1 0         | 000 1             |                   |                  | 1110              |                      |                   |                  |                  |
| METALS           | Sector                      | 46.9 1           | 00.0 1            |                   |                  | 40.4 1            | 2.02 1               | 0.09 +            | 20.7 4           | 3 36 1           |
| METALS           | Stontum                     |                  |                   |                   |                  | 40.1 1            | 3.93 1               | 3.06 1            | 20.1             | J.30 I           |
| METALS           | Thallium                    | 0.0602 1         | 0.0462 1          |                   |                  |                   |                      |                   |                  |                  |
| METALS           | Vanadium                    | 28.6 1           | 17.8 1            |                   |                  |                   |                      |                   |                  |                  |
| METALS           | Zinc                        | 36 1             | 15.7 1            |                   |                  | 42.7 1            | 9.71 1               | 12.8 1            | 44.5 I           | 14.4 1           |
| PERC             | Perchlorate                 | *                |                   | 0.00592 1 < U     | 0.00576 t < U    |                   |                      |                   |                  |                  |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene      |                  |                   |                   |                  | 0.33 t < U        | 0.33 1 < U           | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 1,2-Dichiorobenzene         | 1                |                   |                   |                  | 0.33 1 < U        | 0.33 t < ⊎           | 0.33 1 < U        | 0.33 t < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 1,3-Dichtorobenzene         | ł                |                   |                   |                  | 0.33 1 < U        | 0.33 1 < U           | 0.33 1 < U        | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES    | 1,4-Dichlorobenzene         |                  |                   |                   |                  | 0.33 1 < U        | 0.33 1 < U           | 0.33 t < U        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol       |                  |                   |                   |                  | 1.65 1 < U        | 1.65 1 < U           | 1.65 1 < U        | 1.65 t < U       | 1.65 1 < U       |
| SEMIVOLATILES    | 2,4,6-Trichlorophene!       | 1                |                   |                   |                  | 0.33 1 < U        | 0.33 1 < U           | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2.4-Dichlorophenol          |                  |                   |                   |                  | 0.33 1 < U        | 0.33 1 < U           | 0.33 1 < U        | 0.33 1 < ป       | 0.33 1 < U       |
| SEMIVOLATILES    | 2.4-Dimethylphenot          |                  |                   |                   |                  | 0.33 1 < U        | 0.33 1 < U           | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2 4-Dinitroobenot           |                  |                   |                   |                  | 1.65 1 < U        | 1.65 1 < U           | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | 2-Chloronachthalene         |                  |                   |                   |                  | 0.33 1 < U        | 0.33 1 < ปั          | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Chloronhenol              |                  |                   |                   |                  | 0.33 1 < U        | 0.33 1 < U           | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       |
| SEMBIOLIATH ES   | 2-Methylaanbthalene         |                  |                   |                   |                  | 0.33 1 < U        | 0.33 1 < 1J          | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       |
| CEMINOL ATHECO   | 2 Motivisiapianacine        |                  |                   |                   |                  | 0.33 1 < 11       | 0.33 1 < 11          | 0.33 1 < 1        | 0.33 1 < V       | 0.33 1 < U       |
| OCMINOLATILES    | 2 hiteration                |                  |                   |                   |                  | 165 1 4 1         | 165 1 4 1            | 1.65 1 < 1        | 165 1 < 1        | 165 1 c H        |
| SEMIVOLATILES    |                             |                  |                   |                   |                  | 0.22 1 4 11       | 0.22 1 2 1           | 0.33 1 4 8        | A 33 1 C 11      | 033 1 4 1        |
| SEMIVULATILES    | 2-tvittophenol              |                  |                   |                   |                  |                   |                      | 0.001 < 0         | 0.55 1 4 8       | 0.65 1 4 4       |
| SEMIVOLATILES    | 3,3-Dichtorobenzioine       |                  |                   |                   |                  | 0.05 1 < 0        |                      | 1.05 1 1          | 165 1 4 17       | 165 1 4 1        |
| SEMIVOLATILES    | 3-Nitroaniline              |                  |                   |                   |                  | 1.05 1 < 0        |                      | 1.00 1 < U        | 1.00 1 0 0       | 1.00 + < 0       |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol  | 1                |                   |                   |                  | 1.65 1 < U        | 1.65 1 < U           | 1.65 1 < U        | 1.65 I < U       | 1.05 1 < 0       |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  |                  |                   |                   |                  | 0.33 1 < 0        | 0.33 1 < 0           | 0.33 1 < 0        | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     |                  |                   |                   |                  | 0.65 1 < U        | 0.65 t < U           | 0.65 1 < U        | 0.65 1 < 0       | 0.65 1 < 0       |
| SEMIVOLATILES    | 4-Chloroaniline             |                  |                   |                   |                  | 0.65 1 < U        | 0.65 1 < U           | 0.65 1 < V        | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether |                  |                   |                   |                  | 0.33 t < U        | 0.33 1 < U           | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Methylphenol              |                  |                   |                   |                  | 0.33 1 < U        | 0.33 1 < U           | 0.33 1 < U        | 0.33 t < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Nitroaniline              |                  |                   |                   |                  | ·1.65 1 < U       | 1.65 1 < U           | 1.65 1 < U        | 1.65 1 < V       | 1.65 1 < U       |
| SEMIVOLATILES    | 4-Nitropheno!               |                  |                   |                   |                  | 1.65 1 < U        | 1.65 1 < U           | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | Acenanhthene                |                  |                   |                   |                  | 0.33 1 < U        | 0.33 1 < U           | 0.33 t < U        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Acenanbitiv/ene             |                  |                   |                   |                  | 0.33 1 < U        | 0.33 1 < U           | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Anthracene                  |                  |                   |                   |                  | 0.33 1 < U        | 0.33 1 < U           | 0.33 t < U        | 0.33 1 < U       | 0.33 t < U       |
| SCHINOL ATHES    | Banzo(a)anthracana          |                  |                   |                   |                  | 0.33 1 < 1        | ⊕133 1 < U           | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < 1       |
|                  | Bonzolajaveroo              | 1                |                   |                   |                  | 0.33 1 2 1        | 0.33 1 - 12          | 0.33 1 2 18       | 0.33 1 < 11      | 0.33 1 < 11      |
| SEMIVOLATILES    | Desizo(a)pyrene             |                  |                   |                   |                  | 0.00 1 < 0        | 0.32 1 < 1           | 0.33 1 < 1        | 033 t < 11       | 0.33 1 2 11      |
| SEMIVULATILES    | Derzyciajiworzammene        |                  |                   |                   |                  | 0.00 1 5 0        | 0.33 1 2 1           | 0.33 1 - 11       | 0.33 1 - 11      | 033 1 - 11       |
| SEMIVOLATILES    | Benzo(ghi)perylene          | 1                |                   |                   |                  | U.33 I < U        | <u>ນ.ວວ ເ &lt; ປ</u> | 0.00 t            | 0.00 1 < 0       | 0.00 1 < 0       |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                  |                   |                   |                  | 0.33 1 < U        | 0.33 1 < U           | U.33 F < U        | 0.33 T < U       | 9.33 i < U       |
| SEMIVOLATILES    | Benzoic Acid                | 1                |                   |                   |                  | 1.65 1 < U        | 1.65 1 < U           | 1.05 1 < U        | 1.00 1 < U       | 1.05 1 < U       |
| SEMIVOLATILES    | Benzyl Alcohol              |                  |                   |                   |                  | 0.65 1 < U        | 0.65 1 < U           | 0.65 1 < U        | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  | ł                |                   |                   |                  | 0.33 1 < U        | 0.33 1 < U           | 0.33 t < U        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     | 1                |                   |                   |                  | 0.33 1 < Ü        | 0.33 1 < U           | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       |
|                  | -                           |                  |                   |                   |                  |                   |                      |                   |                  |                  |



Table 3-27 . . -

| Concentrations of Chemicals ir | Soil Samples | Associated with | Sump 027 |
|--------------------------------|--------------|-----------------|----------|

| [SUMP] = SUMP027 |  | COL               | icentiations of on   | emicais in our o | ampies Associat  | ea waa sump v    |                  |                  |                  |                  |
|------------------|--|-------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |  | 35SUMP027-SE01    | 35SUMP027-SB01       | 47SB31           | 47SB31           | LH-DL27-01       | LH-S27-01        | LH-\$27-01       | LH-S27-02        | LH-S27-02        |
| SAMPLE NO        |  | 35-SMP27-SB01-01  | 35-SMP27-SB01-02     | 47SB31(0-0_5)    | 47SB31(1-2)      | LH-DL27-01       | LH-S27-01_1      | LH-S27-01_2      | LH-\$27-02_1     | LH-S27-02_2      |
| SAMPLE DATE      |  | 9/12/2006         | 9/12/2006            | 6/5/2000         | 6/5/2000         | 6/24/1993        | 6/24/1993        | 6/24/1993        | 6/24/1993        | 6/24/1993        |
|                  |  | 0-05 Ft           | 55-65                | 0-055            | 1 - 2 Ft         | 15-25Ft          | 0.5-2Ft          | 2-5Ft            | 0.5 - 1.5 Ft     | 2-5 Ft           |
|                  |  | REG               | REG                  | REG              | REG              | REG              | AFG              | BEG              | BEG              | REG              |
| SAWFCE_FORFUSE   | Decemptor (Linita - mailea)  | Popult Dt LO VO   |                      |                  | Result DII 10 VO | Result Oli 10 VD | Result OII IO VO | Result DIL 10 VO | Result Dit 10 VO | Besult DIL LO VO |
| Test Group       | Parameter (onits = mykg)   | nesuli Dil, EV VV |                      |                  |                  | 0.23 1 / 11      | 039 1 2 11       | 033 1 4 11       | 0.33 t < 11      | 0.33 1 < 11      |
| SEMIVOLATILES    | Uss(2-Criteriosopropy),euser   |                   |                      |                  |                  | 0.33 1 < 0       | 0.30 1 < 0       | 0.23 1 4 1       | 0.00 1 2 0       | 0.33 1 4 11      |
| SEMIVOLATILES    | bis(2-Enylhexyl)phinalate  |                   |                      |                  |                  |                  |                  | 0.33 1 1         | 0.922 1          | 0.33 1 < 8       |
| SEMIVOLATILES    | Butyl benzyl phthalate   |                   |                      |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.00 1 < 1       | 0.03 1 < 0       |
| SEMIVOLATILES    | Chrysene   |                   |                      |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene   |                   |                      |                  |                  | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < D       | 0.33 1 < 0       |
| SEMIVOLATILES    | Dibenzofuran   |                   |                      |                  |                  | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Diethyl phthalate  |                   |                      |                  |                  | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES    | Dimethyl phthalate   |                   |                      |                  |                  | 0.33 1 < U       |
| SEMIVOLATILES    | di-n-Butyl phthalate   |                   |                      |                  |                  | 0.33 1 < U       |
| SEMIVOLATILES    | di-n-Octyl phthalate   |                   |                      |                  |                  | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Fluoranthene   |                   |                      |                  |                  | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES    | Fluorene   |                   |                      |                  |                  | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES    | Hexachtorobenzene  |                   |                      |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 ≺ U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorobutadiene  |                   |                      |                  |                  | 0.33 1 < U       |
| SEMIVOLATILES    | Hexacelorocyclopentadiene  |                   |                      |                  |                  | 0.33 1 < U       |
| SEMIVOLATILES    | Heyachloroethane   |                   |                      |                  |                  | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Indexn/1.2.3.crl)nurene  |                   |                      |                  |                  | 0.33 1 < U       |
|                  | REASE TO THE POINT AND A CONTRACT AN |                   |                      |                  |                  | 033 1 - 1        | 0.33 1 < 11      | 0.33 1 < 11      | 0.33 1 < 11      | 0.33 1 < U       |
| SEMIVOLATILES    | Isophorone   |                   |                      |                  |                  | 0.22 1 4 14      | 0.33 1 < 11      | 0.33 1 4 1       |                  | 033 1 < 1        |
| SEMIVOLATILES    | Naphinaiene  |                   |                      |                  |                  | 0.00 1 4 1       | 0.00 1 < 1       |                  |                  | 033 1 < 1        |
| SEMIVOLATILES    | Nitrobenzené   |                   |                      |                  |                  | 0.00 1 . //      | 0.00 1 < 0       | 0.00 1 4 11      |                  |                  |
| SEMIVOLATILES    | n-Naroso-di-n-propylamine  |                   |                      |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.00 1 4 0       | 0.33 1 < 0       |                  |
| SEMIVOLATILES    | n-Nitrosodiphenylamine   |                   |                      |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Pentachlorophenol  |                   |                      |                  |                  | 1.65 1 < 0       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 0       | 1.05 1 < U       |
| SEMIVOLATILES    | Phenanthrene   |                   |                      |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 9.33 1 < 0       |
| SEMIVOLATILES    | Phenol   |                   |                      |                  |                  | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Pyrene   |                   |                      |                  |                  | 0.33 1 < Ü       | 0.33 1 < U       |
| VOLATILES        | 1,1,1,2-Tetrachloroethane  |                   | 0.00561 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1,1,1-Trichioroethane  |                   | 0.00561 1 U          |                  |                  | 0.005 1 < U      |
| VOLATILES        | 1,1,2,2-Tetrachkoroethane  |                   | 0.00561 t U          |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | 1,1,2-Trichloroethane  |                   | 0.00561 1 U          |                  |                  | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichloroethane   |                   | 0.00561 1 U          |                  |                  | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | 1.1-Dichloroethene   |                   | 0.00561 1 U          |                  |                  | 0.005 1 < U      |
| VOLATILES        | 1.1-Dichloropropene  |                   | 0.00561 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1 2 3-Trichlorobenzene   |                   | 0.00561 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1.2.3-Tochloropropage  |                   | 0.00561 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1.2.4-Tricblombenzene  |                   | 0.00561 1 11         |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1.2.4-Trimetty/benzene   |                   | 0.00561 1 12         |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1.2 Dibromo 2 chloropropana  |                   | 0.00561 1 11         |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | t 2 Dibromosthano  |                   | 0.00561 1 11         |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2-Obioindenane   |                   | 0.00501 1 11         |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        |  |                   | 0 00000              |                  |                  | 0.005 1 / 1      | 0.005 1 2 11     | 0.005 1 × H      | 0.005 1 < 11     | 0.005 1 < B      |
| VOLATILES        | 1,2-Dichloroethane   |                   | 0.00001 1 0          |                  |                  | 0.005 1 < 1      | 0.005 1 < 0      | 0.005 1 < 1      | 0.005 1 < 1      | 0.005 1 < 11     |
| VULATILES        | r,2-Oxchioroeuxene   |                   | 0.00 <b>000</b> 4 11 |                  |                  | 0.000 1 1 10     | 0.005 1 < 0      | 0.005 1 < 1/     | 0.005 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | 1,2-Dichtoropropane  |                   | 0.00561 1 0          |                  |                  | U.000 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.003 1 1 1 0    | 0.000 1 1 0      |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene)   |                   | 0.00561 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1,3,5-Trimethylbenzene   |                   | 0.00561 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1,3-Dichlorobenzene  |                   | 0.00561 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1,3-Dichloropropane  |                   | 0.00561 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1,4-Dichlorobenzene  |                   | 0.00561 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 2,2-Dichtoropropane  |                   | 0.00561 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 2-Butanone   |                   | 0.0112 1 8           |                  |                  | 0.05 1 < 1       | 0.05 1 < 0       | 0.05 1 < Ŭ       | 0.05 t < U       | 0.05 1 < 0       |
| VOLATILES        | 2-Chloroethyl vinyl ether  |                   | 0.0112 1 U           |                  |                  | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < Ü       | 0.01 1 < U       | 0.01 t < U       |
| VOLATILES        | 2-Chlorotoluene  |                   | 0.00561 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 2-Hexanone   |                   | 0.0t12 1 U UJ        |                  |                  | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U       | 0.05 1 < U       |
| VOLATILES        | 4-Chiorotoluene  |                   | 0.00561 1 U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Acetone  |                   | 0.0141 1 J           |                  |                  | 0.1 1 < U        |
| VOLATILES        | Beozene  |                   | 0.00561 1 U          |                  |                  | 0.005 1 < U      |
| VOLATILES        | Bromobenzene   |                   | 0.00561 t U          |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Bromochioromethane   | 1                 | 0.00561 1 11         |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Bromodichloromethane   |                   | 0.00561 1 1          |                  |                  | 0.005 1 < 11     | 0.005 1 < 11     | 0.005 1 < 12     | 0.005 t < (t     | 0.005 1 < U      |
| VOLATILES        | Bromologits  |                   | 0.00581 1 1          |                  |                  | 0.005 1 - 13     | 0.005 1 2 1      | 0.005 1 2 11     | 0.005 t < 1      | 0.005 1 < 1      |
|                  | Dismonothana   | 1                 | 0.00001 1 0          |                  |                  |                  |                  | 0.01 1 2 11      | 0.01 1 2 11      | 001 1 2 1        |
| VOLATILES        | oronioniestane   |                   | 0.0012 1 U           |                  |                  |                  | 0.05 1 - 11      | 0.005 1 2 19     | 0.005 1 - 1      | 0.005 1 - 1      |
| VOLAHLES         |  |                   | U.UUDDI I U          |                  |                  |                  | 0.000 1 < U      |                  | 0.000 : < U      | 0.005 1 - 11     |
| VOLATILES        | Carbon tetrachioride   |                   | U.UU561 1 U          |                  |                  | 0.000 i < U      | 0.005 1 < 0      | 0.003 i < U      | U > 1            | . u.u.u.u i < U  |
| VOLATILES        | Chlorobenzene  | 1                 | 0.00561 1 U          |                  |                  | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < 0      | ປ.⊍ບວ ∔ < ປ      | 0.005 I < U      |
|                  |  |                   |                      |                  |                  |                  |                  |                  |                  |                  |

Table 3-27

Concentrations of Chemicals in Soil Samples Associated with Sump 027

| LOCATION_CODE       35SUMPE27-501-0       35SUMPE27-501-0       475831 <th>27-01<br/>7-01_2<br/>1993<br/>5 Ft<br/>:G<br/>L_LQ_1<br/>&lt;<br/>&lt;<br/>&lt;</th> <th>VQ<br/>U<br/>U<br/>U<br/>U<br/>U</th>   | 27-01<br>7-01_2<br>1993<br>5 Ft<br>:G<br>L_LQ_1<br><<br><<br><                | VQ<br>U<br>U<br>U<br>U<br>U   |
|--|---|-------------------------------|
| SAMPLE_DATE       35-SMP27-S801-02       472531(0-2)       472531(0-2)       U+D27471       U+D2701       U <d2011< td="">       U<d201< td="">       U<d2001< td="">       U<d201< td="">       U<d201< td=""><td>7-01_2<br/>1993<br/>5 Ft<br/>:G<br/>L LQ 1<br/>&lt;<br/>&lt;<br/>&lt;</td><td><u>VQ</u><br/>ບ<br/>ບ<br/>ບ</td></d201<></d201<></d2001<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d201<></d2011<> | 7-01_2<br>1993<br>5 Ft<br>:G<br>L LQ 1<br><<br><<br><                         | <u>VQ</u><br>ບ<br>ບ<br>ບ      |
| SAMPLE_DATE       9/12/2006       9/12/2006       6/5/2000       6/5/2000       6/6/2/033       6/24/1933  | 1993<br>5 Ft<br>3G<br>L LQ 1<br><<br><<br><                                   | VQ<br>ບ<br>ບ<br>ບ<br>ບ        |
| DEPTM       0 - 0.5 <sup>-</sup> FI       0 - 0.5 <sup>-</sup> FI       1 - 2 <sup>-</sup> FI       1 - 2 <sup>-</sup> FI       1 - 2 <sup>-</sup> FI       1 - 2 <sup>-</sup> FI       0 - 5 <sup>-</sup> - 2 <sup>-</sup> FI       FIE       FIE <td>5Ft<br/>5G<br/>L LQ 1<br/>&lt;<br/>&lt;<br/>&lt;</td> <td><u>VQ</u><br/>บ<br/>บ<br/>บ<br/>บ</td>  | 5Ft<br>5G<br>L LQ 1<br><<br><<br><  | <u>VQ</u><br>บ<br>บ<br>บ<br>บ |
| SAMPLE_PURPOSE       REG   | EG<br>L LQ \<br><<br><<br><<br><<br><<br><<br><<br><<br><<br><<br><<br><<br>< | <u>VQ</u><br>ປ<br>ປ<br>ປ<br>ປ |
| Test coup       Parameter (funds = mg/kg)       Result DIL       LQ       VQ       Result DIL       L  | L LQ<br><<br><<br><<br><  | <u>VQ</u><br>ປ<br>ປ<br>ປ<br>ປ |
| VOLATLES         Caroneltane         0.011         1         V         0.01         1         V         0.005         1   | <<br><<br><<br><  | ប<br>ប<br>ប<br>ប<br>ប         |
| VOLATILES       Chordorm       0.006       1       V       0.006       1       V       0.006       1       V       0.006         VOLATILES       Chordormethane       0.00112       1       V       0.001       1       V       0.01       VOLATILES       Cisi-1.2:0:folloromethane       0.0051       1       U       0.005       1       V       0.005       0.005       1       V       0.005       0.005       1       <  | <<br><<br><   | ប<br>ប<br>ប<br>ប              |
| VOLATLES       Chiromethane       0.011       1       V       0.01       1       V       0.01         VOLATLES       cis-1.3-Dichloroptopene       0.00561       1       U       0.005       1       V       0.005       V       0.005 </td <td>&lt;     &lt;         &lt;         &lt;         &lt;</td> <td>U<br/>U<br/>U</td>   | <     <         <         <         <   | U<br>U<br>U                   |
| VOLATILES       cis-12-Dichlorogenen       0.0058       1       V       V       0.0058       1       <   | < <   | ប<br>ប                        |
| VOLATILES       cis-1,3-Dichloropropene       0.005       1       v       0.005       1 <td>&lt; &lt;</td> <td>U<br/>U</td>  | < <   | U<br>U                        |
| VOLATILES       Dibromoditormethane       0.005i       1       V       0.005       1   | <   | U                             |
| VOLATILES       Dibromomethane       0.00561       1       U         VOLATILES       Dichlorodiluoromethane       0.0112       1       U         VOLATILES       Ethylbenzene       0.00561       1       U         VOLATILES       Hexachtorobutadiene       0.00561       1       U         VOLATILES       Isopropylbenzene       0.00561       1       U         VOLATILES       m.p.Xytenes       0.00561       1       U         VOLATILES       Methyl isobudyl ketone       0.00561       1       U         VOLATILES       Methyl isobudyl ketone       0.00561       1       U         VOLATILES       Methyl isobudyl ketone       0.0112       1       U         VOLATILES       Methyl isobudyl ketone       0.0112       1       U         VOLATILES       Naphthalene       0.0112       1       U         VOLATILES       Naphthalene       0.0112       1       U         VOLATILES       Naphthalene       0.0051       1       U         VOLATILES       Naphthalene       0.0051       1       U         VOLATILES       PHOPYLBENZENE       0.00561       1       U         VOLATILES       Sty   |   |                               |
| VOLATILES       Dichlorodiiluoromethane       0.0112       1       0         VOLATILES       Ethylbenzene       0.00561       1       0       0.005       1       <  |   |                               |
| VOLATILES       Ethylbenzene       0.0055       1       0       0.005       1       <       U       0.005       1  |   |                               |
| VOLATILES       Hexachlorobutadéene       0.00561       1       0         VOLATILES       Isopropylbenzene       0.00561       1       0         VOLATILES       m.p-Xylenes       0.00561       1       0         VOLATILES       Methyl isobudyl ketone       0.0112       1       0         VOLATILES       Methylene chloride       0.0112       1       0         VOLATILES       Methylene chloride       0.005       1       <  | <   | U                             |
| VOLATILES       Isopropribenzene       0.00561       1       V         VOLATILES       m.p-Xylenes       0.00561       1       V         VOLATILES       Methyl isobudyl ketone       0.0112       1       V         VOLATILES       Methylene chloride       0.0112       1       V         VOLATILES       Methylene chloride       0.005       1       <  |   |                               |
| VOLATILES       m.p. Xylenes       0.00561       1       V         VOLATILES       Methyl isobutyl ketone       0.0112       1       V       0.05       1       <  |   |                               |
| VOLATILES       Methyl isobulyl ketone       0.0112       1       U       0.05       1       <       U       0.005       U       U<   |   |                               |
| VOLATILES       Methylene chloride       0.0051       1       U       0.0051       <       U       0.0051       1        U       0.0051       1        U       0.0051       1       U       0.0051       U       U       0.0051 <t< td=""><td>&lt; '</td><td>U</td></t<>   | < '   | U                             |
| VOLATILES         Naphthalene         0.0112         1         U           VOLATILES         n-BUTYLBENZENE         0.00561         1         U           VOLATILES         n-PROPYLBENZENE         0.00561         1         U           VOLATILES         p-ISOPROPYLTOLUENE         0.00561         1         U           VOLATILES         p-ISOPROPYLTOLUENE         0.00561         1         U           VOLATILES         sec-BUTYLBENZENE         0.00551         1         U           VOLATILES         sec-BUTYLBENZENE         0.00561         1         U           VOLATILES         Styrene         0.00561         1         U           VOLATILES         threfBUTYLBENZENE         0.00561         1         U  | <   | υ                             |
| VOLATILES         n-BUTYLBENZENE         0.00561         1         U           VOLATILES         n-PROPYLBENZENE         0.00561         1         U           VOLATILES         p-ISOPROPYLTOLUENE         0.00561         1         U           VOLATILES         sec-BUTYLBENZENE         0.00561         1         U           VOLATILES         sec-BUTYLBENZENE         0.00561         1         U           VOLATILES         styrene         0.00561         1         U           VOLATILES         tert-BUTYL BENZENE         0.00561         1         U   |   |                               |
| VOLATILES         n-PROPYLBENZENE         0.00561         1         U           VOLATILES         p-ISOPROPYLTOLUENE         0.00561         1         U           VOLATILES         sec-BUTYLBENZENE         0.00561         1         U           VOLATILES         styrene         0.00561         1         U           VOLATILES         styrene         0.00561         1         U           VOLATILES         tert-BUTYLBENZENE         0.00561         1         U  |   |                               |
| VOLATILES         p-ISOPROPYLTOLUENE         0.00561         1         U           VOLATILES         sec-BUTYLBENZENE         0.00561         1         U           VOLATILES         Styrene         0.00561         1         U           VOLATILES         Intr-BUTYLBENZENE         0.0051         1         U           VOLATILES         Intr-BUTYLBENZENE         0.00561         1         U   |   |                               |
| VOLATILES         sec-BUTYLBENZENE         0.00561         1         U           VOLATILES         Styrene         0.00561         1         U         0.005         1 <td></td> <td></td>   |   |                               |
| VOLATILES         Styrene         0.00561         U         0.005         <         U         0.005         I         U         0.005         I          U         0.005         I         U         0.005         I         U         0.005         I         U         0.005         I         U         0.005         I         U         0.005         I         U         0.005         I         U         0.005         I         U         0.005         I         U         0.005         I         U         0.005         I         U         0.005         I         U         0.005         I         U         0.005         I         U         0.005         I         U         0.005         I         U         I   |   |                               |
| VOLATILES tert-BUTYLBENZENE 0.00561 1 U  | <   | U                             |
|  |   |                               |
| VOLATILES Tetrachtoroethene 0.00561 1 U 0.005 1 < U 0.005 1 < U 0.005  | < '   | U                             |
| VOLATILES Toluene 0.00561 1 U 0.005 1 < U 0.005 1 < U 0.005  | <   | υ                             |
| VOLATILES trans-1,2-Dichloroethene 0.00561 1 U   |   |                               |
| VOLATILES trans-1,3-Dichteropropene 0.00561 1 U 0.005 1 < U 0.005 1 < U 0.005  | <   | U                             |
| VOLATILES Trichloroethene 0.00561 1 U 0.005 1 < U 0.005 1 < U 0.005  | <   | U                             |
| VOLATILES Trichlorofluoromethane 0.0112 1 U  |   |                               |
| VOLATILES Vinyl acetate 0.0112 1 U 0.05 1 < U 0.05 1 < U 0.05  | <   | Ð                             |
| VOLATILES Vinyl chloride 0.0112 1 U 0.01 1 < U 0.01 1 < U 0.01   |   | U                             |
| VOLATILES Xylenes, Total 0.005 1 < U 0.005 1 < U 0.005   | <   | U                             |

Footnotes are shown on cover page to Tables Section.



| 1)<br>LH:4 | 1-S27-0 | -02<br>2_1 |         | LH-<br>EH- | -S27-<br>S27-( | -02<br>)2_2 |     |  |
|------------|---------|------------|---------|------------|----------------|-------------|-----|--|
|            |         | 33<br>101  |         | u u        | 24810<br>) E C | 30<br>34    |     |  |
| 0.:        | DEC     | FL         |         |            | 050            | ·F          |     |  |
| Denult     | 0       | 10         | vo      | Deadt      | DI             |             | 100 |  |
| nesul      |         | Ļu         | VQ      | HESUN      | 1/11           | Ļų.         |     |  |
| 0.01       | т:<br>- | <          | U<br>11 | 0.01       |                | <u>د</u>    | 11  |  |
| 0.003      |         | <          | 0       | 0.005      | 1              | ۲           |     |  |
| 0.01       | I       | <          | U       | 0.01       | 1              | <           | U   |  |
| 0.005      | 4       | ,          | н       | 0.005      | 1              | ,           | 11  |  |
| 0.000      | 1       | 2          |         | 0.000      | 4              | Ì           | ŭ.  |  |
| 0.005      | ł       | <          | U       | 0.005      | 1              | <           | U   |  |
|            |         |            |         |            |                |             |     |  |
| 0.005      | 1       | ~          | 0       | 0.005      | 1              | <           | н   |  |
| 0.000      | •       | •          | •       | 0.000      | •              | •           | č   |  |
|            |         |            |         |            |                |             |     |  |
|            |         |            |         |            |                |             |     |  |
| 0.05       | 1       | <          | U       | 0.05       | 1              | <           | U   |  |
| 0.005      | 1       | <          | U       | 0.005      | 1              | <           | Ű   |  |
|            |         |            | -       | 0.002      | •              |             | •   |  |
|            | -       |            |         |            |                |             |     |  |
|            |         |            |         |            |                |             |     |  |
|            |         |            |         |            |                |             |     |  |
|            |         |            |         |            |                |             |     |  |
| 0.005      | 1       | ,          | 12      | 0.005      | 1              |             | н   |  |
| 0.005      | •       |            | U       | 0.003      | ,              | `           | U   |  |
| 0.005      | 1       | <          | U       | 0.005      | 1              | <           | U   |  |
| 0.005      | 1       | <          | Ű       | 0.005      | 1              | <           | U   |  |
|            | •       | -          | -       |            |                | -           | -   |  |
| 0.005      | 1       | <          | U       | 0.005      | 1              | <           | U   |  |
| 0.005      | 1       | <          | Ū       | 0.005      | t              | <           | Ū   |  |
|            | ·       | •          | ·       | 0.000      | •              | -           | Ť   |  |
| 0.05       | 1       | <          | U       | 0.05       | 1              | <           | U   |  |
| 0.01       | 1       | <          | U       | 0.01       | 1              | < -         | U   |  |
| 0.005      | 1       | <          | U       | 0.005      | 1              | <           | . U |  |

### Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



# Table 3-28 Concentrations of Chemicals in Soil Samples Associated with Sump 028

| (SUMP) = SUMP028 |                             |                  |                  |                  |                  |
|------------------|-----------------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                             | 35SUMP036-SB01   | 35SUMP036-SB02   | 35SUMP036-SB02   |                  |
| SAMPLE NO        |                             | 35-SMP36-SB01-01 | 35-SMP36-SB01-02 | 35-SMP36-SB02-01 | 35-SMP36-SB02-02 |
| SAMPLE DATE      |                             | 9/12/2006        | 9/12/2006        | 9/12/2008        | 9/12/2006        |
| DEPTH            |                             | 5 - 5 Ft         | 10 - 10 Ft       | 5 - 5 Ft         | 10 - 10 Ft       |
| SAMPLE PURPOSE   |                             | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units ≈ mo/kg)   | Result DIL LO VQ | Result DIL LO VQ | Result DIL LQ VO | Result DIL LQ VQ |
| METALS           | Aluminum                    | 7140 1           | 8930 1           | 8580 1           | 11800 1          |
| METALS           | Antimony                    | 0.109 1 U        | 0.121 1 U        | 0.105 1 U        | 0.0705 1 J J     |
| METALS           | Arsenic                     | 2.51 1           | 0.188 1 J J      | 2.29 1           | 2.14 1           |
| METALS           | Barium                      | 119 1            | 51.1 1           | 53.1 1           | 60.8 1           |
| METALS           | Beryllium                   | 0.285 1 J J      | 1,99 1           | 0.46 1           | 1.92 1           |
| METALS           | Cadmium                     | 0.135 1 J J      | 0,141 1 J J      | 0.0648 1 J J     | 0.136 1 J J      |
| METALS           | Calcium                     | 1000 1           | 1950 1           | 547 1            | 2440 1           |
| METALS           | Chromlum                    | 9,63 1           | 13.9 1           | 18.1 1           | 18.4 1           |
| METALS           | Cobalt                      | 2.12 1           | 38 1             | 4.09 1           | 32.5 1           |
| METALS           | Copper                      | 1.45 1           | 14.2 1           | 2.62 1           | 15.1 1           |
| METALS           | iron                        | 11000 1          | 13600 1          | 13100 1          | 17500 1          |
| METALS           | Lead                        | 5.99 1           | 7.83 1           | 8.05 1           | 15 1             |
| METALS           | Magnesium                   | 288 1            | 3200 1           | 409 1            | 4690 1           |
| METALS           | Manganese                   | 69.6 1           | 325 1            | 204 1            | 214 1            |
| METALS           | Mercury                     | 0.022 1 J J      | 0.0153 1 J J     | 0.0178 1 J J     | 0.278 1 U        |
| METALS           | Nickel                      | 2.92 1           | 39.4 1           | 4.33 1           | 45.4 1           |
| METALS           | Potassium                   | 236 1            | 726 1            | 253 1            | 816 1            |
| METALS           | Selenium                    | 0.444 1          | 0.447 1          | 0.397 1          | 1,1 1            |
| METALS           | Silver                      | 1.75 1 U         | 1.7 1 U          | 1.53 1 U         | 1.6 1 U          |
| METALS           | Sodium                      | 26.8 1           | 682 1            | 17.3 1 J J       | 822 1            |
| METALS           | Thallium                    | 0,0442 1         | 0.129 1          | 0.0733 1         | 0.233 1          |
| METALS           | Vanadium                    | 19.5 1           | 18.7 1           | 25.6 1           | 18.3 1           |
| METALS           | Zinc                        | 8.95 1           | 46.5 1           | 10.7 1           | 69.8 1           |
| SEMIVOLATILES    | 1,2.4-Trichlorobenzene      | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 1,2-Dichlorobenzene         | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 1.3-Dichlorobenzene         | 0.168 1 U        | 0.195 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 1,4-Dichlorobenzene         | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 2,4.5-Trichlorophenol       | 0.188 1 U        | 0.196 1 U UJL    | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 2,4,6-Trichlorophenal       | 0.188 1 U        | 0.196 1 U UJL    | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 2.4-Dichlorophenol          | 0.188 1 U        | 0,196 1 U UJL    | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 2,4-Dimethylphenol          | 0.188 1 U        | 0.196 1 U UJL    | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 2.4-Dinitrophenol           | 0.939 1 U        | 0.982 1 U UJL    | 0.857 1 U        | 0.959 1 U        |
| SEMIVOLATILES    | 2.4-Dinitrotoluene          | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 2,6-Dinitrotoluene          | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 2-Chloronaphthalene         | 0.168 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 2-Chlorophenol              | 0.188 1 U        | 0.196 1 U UJL    | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 2-Methylnaphthalene         | 0,188 1 U        | 0.196 1 Ų        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 2-Methylphenol              | 0.188 1 U        | 0.196 1 U UJL    | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 2-Nitroaniline              | 0.939 1 U        | 0.982 1 U        | 0.857 1 U        | 0.959 1 U        |
| SEMIVOLATILES    | 2-Nitrophenol               | 0.188 1 U        | 0.196 1 U UJL    | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 3,3'-Dichlorobenzidine      | 0.376 1 U        | 0.393 1 U        | 0.343 1 U        | 0.384 1 U        |
| SEMIVOLATILES    | 3-Nitroaniline              | 0.939 1 U        | 0.982 1 U        | 0.857 1 U        | 0.959 1 U        |
| SEMIVOLATILES    | 4.6-Dinitro-2-methylphenol  | 0.939 1 U        | 0.982 1 U UJL    | 0.857 1 U        | 0.959 1 U        |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     | 0.188 1 U        | 0.196 1 U UJL    | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 4-Chloroaniline             | 0.188 1 U        | 0.196 1 U        | 0,171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 4-Chlorophenyl phonyl ether | 0.188 1 U        | 0.196 1 U        | 0,171 1 U        | 0.192 1 U        |
| SEMIVOLATILES    | 4-Methylphenol              | 0.188 1 U        | 0.196 1 U UJL    | 0.171 1 U        | 0.192 1 U        |

### Data Evaluation Report

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



# Table 3-28 Concentrations of Chemicals in Soil Samples Associated with Sump 028

| (SUMP) = SUMP028     |                             |                  | •                | •                |                  |
|----------------------|-----------------------------|------------------|------------------|------------------|------------------|
| LOCATION CODE        |                             | 35SUMP036-SB01   | 35SUMP036-SB01   | 35SUMP036-S802   | 35SUMP036-SB02   |
| SAMPLE NO            |                             | 35-SMP36-SB01-01 | 35-SMP36-SB01-02 | 35-SMP36-SB02-01 | 35-SMP36-SB02-02 |
| SAMPLE DATE          |                             | 9/12/2006        | 9/12/2006        | 9/12/2006        | 9/12/2006        |
| DEPTH                |                             | 5 - 5Ft          | 10 • 10 Ft       | _55 Ft           | 10 - 10 Ft       |
| SAMPLE, PURPOSE      |                             | REG              | REG              | REG              | REG              |
| Test Group           | Parameter (Units = mg/kg)   | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LQ VQ |
| SEMIVOLATILES        | 4-Nitroaniline              | 0.939 1 U        | 0.982 1 U        | 0.857 1 U        | 0.959 1 U        |
| SEMIVOLATILES        | 4-Nitrophenol               | 0.939 1 U        | 0.982 1 U UJL    | 0.857 1 U        | 0.959 1 U        |
| SEMIVOLATILES        | Acenaphthene                | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Acenaphthylene              | 0.168 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Anthracene                  | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Benzo(a)anthracene          | 0.168 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Benzo(a)pyrene              | 0.186 1 U        | 0,196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Benzo(b)fluoranthene        | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Benzo(ghi)perylene          | 0.188 1 U        | 0.198 1 U        | 0.171 1 U        | 0.192 1 U        |
| <b>SEMIVOLATILES</b> | Benzo(k)fluoranthene        | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 년        |
| SEMIVOLATILES        | Benzoic Acld                | 0.939 1 U        | 0.982 1 U        | 0.857 1 U        | 0.959 1 U        |
| SEMIVOLATILES        | Benzyl Alcohol              | 0.1BB 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | bis(2-Chloroethoxy)methane  | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0,192 1 U        |
| SEMIVOLATILES        | bis(2-Chloroelhyl)ether     | 0.168 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | bis(2-Chloroisopropyl)ether | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | bis(2-Ethylnexyl)phthalate  | 0.18B 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Butyl benzyl phthalate      | 0.188 1 U        | 0,196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Chrysene                    | 0.18B 1 U        | 0,196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Dibenzo(a,h)anthracene      | 0.188 1 U        | 0,196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Dibenzofuran                | 0.188 1 U        | 0,196 1 U        | 0.171 1 U        | 0,192 1 U        |
| SEMIVOLATILES        | Diethyl phthalate           | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Dimethyl phthalate          | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | di-n-Butyl phthalate        | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | di-n-Octyl phthalate        | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Fluoranthene                | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Fluorene                    | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Hexachlorobenzene           | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Hexachlorobutadiene         | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Hexachiorocyclopentadiene   | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Hexachloroethane            | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Indeno(1.2,3-cd)pyrene      | 0.188 1 U        | 0,196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Isophorone                  | 0.188 1 U        | 0,196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Naphthaiene                 | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Nitrobenzene                | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | n-Nitroso-di-n-propylamine  | 0.188 1 U        | 0.196 t U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | n-Nitrosodiphenylamine      | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Pentachiorophenol           | 0,939 1 U        | 0.982 1 U UJL    | 0.857 1 U        | 0.959 1 U        |
| SEMIVOLATILES        | Phenanthrene                | 0.158 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Phenol                      | 0.188 1 U        | 0,196 1 U UJL    | 0.171 1 U        | 0.192 1 U        |
| SEMIVOLATILES        | Pyrene                      | 0.168 1 U        | 0.196 1 U        | 0.171 t U        | 0.192 1 U        |
| VOLATILES            | 1,1,1,2-Tetrachloroethane   |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES            | 1,1,1-Trichloroethane       |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES            | 1.1.2.2-Tetrachloroethane   |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES            | 1,1,2-Trichloroethane       |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES            | 1.1-Dichloroethane          | }                | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES            | 1,1-Dichlorgethene          |                  | 0.0056B 1 U      |                  | 0.00519 1 U      |
| VOLATILES            | 1,1-Dichloropropene         | l                | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES            | 1.2.3-Trichlombenzene       |                  | 0.00568 1 U      |                  | 0.00519 1 U      |

Same Contraction

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-28 Concentrations of Chemicals in Soil Samples Associated with Sump 028

| [SUMP] = SUMP028 |                                |                  |                  |                  |                  |
|------------------|--------------------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                                | 35SUMP036-SB01   | 35SUMP036-SB01   | 35SUMP036-SB02   | 355UMP036-5802   |
| SAMPLE_NO        |                                | 35-SMP36-SB01-01 | 35-SMP36-SB01-02 | 35-SMP36-SB02-01 | 35-SMP36-SB02-02 |
| SAMPLE_DATE      |                                | 9/12/2006        | 9/12/2006        | 9/12/2006        | 9/12/2006        |
| DEPTH            |                                | _5 • _5 Ft       | 10 - 10 Ft       | _55 F1           | 10 + 10 Ft       |
| SAMPLE_PURPOSE   |                                | REG              | REG              | REG              | HEG              |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Hesult DIL LQ VQ |
| VOLATILES        | 1,2,3-Trichloropropane         |                  | 0,00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 1.2.4-Trichlorobenzene         |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 1,2,4-Trimethylbenzene         |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 1.2-Dibromo-3-chioropropane    |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 1.2-Dibromoethane              |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 1,2-Dichlorobenzene            |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 1,2-Dichloroethane             |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 1,2-Dichloropropane            |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 1.2-Dimethylbenzene (o-Xylene) |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 1.3.5-Trimethylbenzene         |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 1,3-Dichlorobenzene            |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 1,3-Dichloropropane            |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 1,4-Dichlorobenzene            |                  | 0.00568 1 U      |                  | 0,00519 1 U      |
| VOLATILES        | 2,2-Dichloropropane            |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 2-Butanone                     |                  | 0.0114 1 U       |                  | 0.0104 1 U       |
| VOLATILES        | 2-Chloroethyl vinyl ether      |                  | 0.0114 1 U       |                  | 0.0104 i U       |
| VOLATILES        | 2-Chlorotoluene                | 8                | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | 2-Hexanone                     |                  | 0.0114 1 U       |                  | 0.0104 1 U       |
| VOLATILES        | 4-Chlorotaluene                |                  | 0,00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Acetone                        |                  | 0.0114 1 U       |                  | 0.0104 1 U       |
| VOLATILES        | Benzene                        | ļ                | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Bromobenzene                   |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Bromochloromethane             |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Bromodichloromethane           |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Bromoform                      |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Bromomethane                   | 1                | 0.0114 1 U       |                  | 0,0104 1 U       |
| VOLATILES        | Carbon disulfide               |                  | 0.00568 1 U      |                  | 0.00519 t U      |
| VOLATILES        | Carbon tetrachloride           |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Chlorobenzene                  | ļ                | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Chloroethane                   |                  | 0.0114 1 U       |                  | 0.0104 1 U       |
| VOLATILES        | Chloroform                     |                  | 0,00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Chloromethane                  |                  | 0.0114 1 U       |                  | 0.0104 1 U       |
| VOLATILES        | cis-1,2-Dichloroethene         |                  | 0.00568 1 U      |                  | 0,00519 1 U      |
| VOLATILES        | cis-1,3-Dichloropropene        |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Dibromochloromethane           | 1                | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Dibromomethane                 |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Dichlorodifluoromethane        |                  | 0.0114 1 U       |                  | 0.0104 1 U       |
| VOLATILES        | Ethylbenzene                   |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Hexachlorobutadiene            |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | isopropyibenzene               |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | m.p-Xylenes                    | 1                | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Methyl isobutyl ketone         |                  | 0.0114 1 U       |                  | 0.0104 1 U       |
| VOLATILES        | Methylene chloride             |                  | 0,00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Naphihalene                    |                  | 0.0114 1 U       |                  | 0.0104 1 U       |
| VOLATILES        | n-BUTYLBENZENE                 |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | n-PROPYLBENZENE                | 1                | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | p-ISOPROPYLTOLUENE             |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | sec-BUTYLBENZENE               |                  | 0,00568 1 U      |                  | 0.00519 1 U      |
|                  |                                |                  |                  |                  |                  |

Shaw Environmental, Inc.



### Table 3-28 Concentrations of Chemicals in Soil Samples Associated with Sump 028

| (SUMP) = SUMP028 |                           |                  |                  |                  |                  |
|------------------|---------------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                           | 35SUMP036-SB01   | 35SUMP036-SB01   | 35SUMP036-SB02   | 35SUMP036-S802   |
| SAMPLE_NO        |                           | 35-SMP36-SB01-01 | 35-SMP36-SB01-02 | 35-SMP36-SB02-01 | 35-SMP36-SB02-02 |
| SAMPLE_DATE      |                           | 9/12/2006        | 9/12/2008        | 9/12/2006        | 9/12/2006        |
| DEPTH            |                           | _55 Ft           | 10 - 10 Ft       | _55 Fi           | 10 - 10 Ft       |
| SAMPLE_PURPOSE   |                           | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg) | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LQ VQ |
| VOLATILES        | Styrene                   |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | tert-BUTYLBENZENE         |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Tetrachioroethene         |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Toluene                   |                  | 0,00568 1 U      |                  | 0.00519 t U      |
| VOLATILES        | trans+1,2-Dichloroethene  |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | trans-1,3-Dichloropropene |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Trichloroethene           |                  | 0.00568 1 U      |                  | 0.00519 1 U      |
| VOLATILES        | Trichlorofluoromethane    |                  | 0.0114 1 U       |                  | 0.0104 1 U       |
| VOLATILES        | Vinyl acetate             |                  | 0.0114 1 U       |                  | 0.0104 1 U       |
| VOLATILES        | Vinyl chloride            |                  | 0.0114 1 U       |                  | 0.0104 1 U       |

Footnotes are shown on cover page to Tables Section.

(4, 4))

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-29 Concentrations of Chemicals in Soil Samples Associated with Sump 029

| [SUMP] = SUMP029 |                              |                   |                  |             |             |                  |                  |                   |                 |
|------------------|------------------------------|-------------------|------------------|-------------|-------------|------------------|------------------|-------------------|-----------------|
| LOCATION _CODE   |                              | 35SUMP029-SB01    | 35SUMP029-SB02   | LH-DL29-01  | LH-\$29-01  | LH-S29-01        | LH-\$29-02       | LH-S29-02         | LH-S29-02       |
| SAMPLE_NO        |                              | 35-SMP29-SB01-02  | 35-SMP29-SB02-02 | LH-DL29-01  | LH-S29-01_1 | LH-S29-01_2      | LH-S29-02_1      | LH-S29-02_2       | LH-S29-02_3     |
| SAMPLE DATE      |                              | 9/12/2006         | 9/12/2006        | 6/25/1993   | 6/25/1993   | 6/25/1993        | 6/25/1993        | 6/25/1993         | 6/25/1993       |
| DEPTH            |                              | 12 - 12 Ft        | 12 - 12 Ft       | 2-3Et       | 05-25Et     | 25-4Ft           | 0-251            | 2 - 4 Ft          | 10 - 12 Ft      |
| SAMPLE PURPOSE   |                              | BEG               | 866              | REG         | REG         | BEG              | REG              | REG               | REG             |
| Tost Group       | Paramatar // loits - mo/kg)  | Pacift Dit LO VO  |                  |             |             | Result Dit LO VO | Regult Dil LO VO | Reputt DII I O VO | Deput Dit 10 VO |
| rest cloup       | Parameter (Onics = myny)     | Result Die EQ VQ  | Hesoli DIL LQ VQ |             |             |                  |                  |                   |                 |
| EXPLOSIVES       |                              |                   |                  | 0.33 1 < 0  | 0.15 1 < 0  |                  | 0.15 1 < 0       | 0.13 1 < 0        | 0.15 1 < 0      |
| EXPLOSIVES       | 2,6-Dinitrotoxuene           |                   |                  | 0.33 1 < 0  | 0.15 1 < 0  | 0.15 1 < 0       | 0.15 1 < 0       | 0.15 1 < 0        | 10.15 I < U     |
| METALS           | Aluminum                     | 10600 1           | 11800 1          | 30700 1     | 20600 1     | 25900 1          | 10400 1          | 16400 1           | 16000 1         |
| METALS           | Antimony                     | 0.122 1 U UJL     | 0.12 1 U UJL     | 3 1 < U     | 16.2 1      | 31 < U           | 6.8 1            | 31 < U            | 3.2 1           |
| METALS           | Arsenic                      | 1.01 1            | 2.35 1           | 4.6 1       | 3.4 1       | 3.5 1            | 2.6 1            | 2.8 1             | 2.7 1           |
| METALS           | Bankum                       | 75.9 1 JH         | 161 1 Jit        | 58 1        | 84.8 1      | 81.9 1           | 67.3 1           | 68.3 1            | 69.1 1          |
| METALS           | Beryilium                    | 1.08 1            | 1.79 1           |             |             |                  |                  |                   |                 |
| METALS           | Cadmium                      | 0.0924 1 J J      | 0.172 1 J J      | 1.52 1      | 1.2 1       | 1.8 1            | 11 < U           | 1.1 1             | 1.1 1           |
| METALS           | Calcium                      | 1980 1            | 2150 1           | 853 1       | 1750 1      | 1960 1           | 860 1            | 683 1             | 765 1           |
| METALS           | Chromium                     | 34,6 1 JH         | 17.2 J JH        | 23.5 1      | 18.9 1      | 23.9 1           | 13.6 1           | 16.1 1            | 16.2 1          |
| METALS           | Cohalt                       | 33 1              | 412 1            | 300 1       | 4.1 1       | 45 1             | 36 1             | 35 1              | <u>4</u> 9 1    |
| METALO           | Concer                       | 9.60 1            | 14.4 1           | 4.04 1      | - R.C. 1    | 9.9 1            | 37 1             | 5.5 F             | 71 1            |
| METALO           |                              | 0.03 1<br>10500 t | 14,4 L           | 4.04        | 0.00        | 84400 1          | 2.4 1            | 3.0 1             | 10100 1         |
| METALS           | ION                          | 12500             | 10900 1          | 29300 1     | 21400       | 24100 1          | 12000            | 18100             | 19400 1         |
| METALS           | Lead                         | 4.81 1            | 15.4 1           | 6./ 1       | 8.6 1       | 82 1             | 6.1 1            | 8.8 1             | 9.4 1           |
| METALS           | Magnesium                    | 3770 1            | 4410 1           | 1410 1      | 1950 1      | 1860 1           | 821 1            | 1100 1            | 1090 1          |
| METALS           | Manganese                    | 215 1 JL          | 195 1 JL         | 29.9 1      | 98.8 1      | 73.6 1           | 316 1            | 159 1             | 122 1           |
| METALS           | Mercury                      | 0.021 1 J J       | 0.298 1 U        | 0.1 1 < U   | 0.1 1 < U   | 0.1 1 < U        | 0.1 1 < U        | 0.1; 1; < U       | 0.1 1 < U       |
| METALS           | Nickel                       | 27.6 1 JH         | 29 1 JH          |             |             |                  |                  |                   |                 |
| METALS           | Potassium                    | 929 1 JH          | 976 1 JH         | 1780 1      | 1940 1      | 1700 1           | 1010 1           | 966 1             | 1030 1          |
| METALS           | Selenium                     | 0.528 1 JL        | 0.539 1 JL       | 11 < U      | 11 < U      | 11 < U           | 11 < U           | 11 < U            | 11 < U          |
| METALS           | Silver                       | 1.83 1 U          | 1.8 1 U          | 11 < 4      | 11 < 1      | 11 < U           | ŧ1 < ⊎           | 3 1 < U           | 11 < 0          |
| METALS           | Sodium                       | 417 1             | 539 1            | .,          | •••••       |                  |                  |                   |                 |
| METALS           | Stractium                    |                   | 000 1            | 19.5 1      | 12.0 1      | 107 1            | P.O. 1           | 10 1              | 96 1            |
| METRES           | The Sur                      | 0.045             | 0.010 1          | 12.3        | 12.9        | 13.7             | 0.3 1            | 10 7              | 0.0 1           |
| METALS           |                              | 0.243             | 0.216 1          |             |             |                  |                  |                   |                 |
| METALS           | vanadium                     | 1 13.6 1 JH       | 20.5 1 JH        |             |             |                  |                  |                   |                 |
| METALS           | Zinc                         | 59.9 1            | 84.6 1           | 31.5 1      | 28.5 1      | 34.9 1           | 36 1             | 27 1              | 25.9 1          |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene       | 0.193 1 U         | 0.198 1 U        | 0.33 1 < U  | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | 1,2-Dichlorobenzene          | 0.193 1 U         | 0.198 1 U        | 0.33 1 < U  | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | 1,3-Dichlorobenzene          | 0.193 1 U         | 0.198 1 U        | 0.33 1 < U  | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 I < U        | 0.15 1 < U      |
| SEMIVOLATILES    | 1,4-Dichlorobenzene          | 0.193 1 U         | 0.198 1 U        | 0.33 1 < U  | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | 2,4,5 Trichlorophenol        | 0.193 เป          | 0.198 1 U        | 1.65 1 < U  | 0.8 1 < U   | 0.8 1 < U        | 0.8 1 < U        | 0.8 1 < U         | 0.8 1 < U       |
| SEMIVOLATILES    | 2.4.6-Trichloronhenol        | 0.193 1 1/        | 0.198 1 U        | 0.33 1 < 11 | 0.15 1 < 11 | 0.15 1 < ⊍       | 0.15 1 < U       | 0.15 t < U        | 0.15 1 < U      |
| SEMIVOLATILES    | 2 4-Dicblorophenol           | 0.193 1 11        | 0 198 1 IF       | 0.33 1 < 1  | 015 1 < 1   | 015 1 < U        | 015 1 < 0        | 015 1 c H         | 0.15 1 < U      |
| SEMIVOLATUES     | 2.4-Dimethylaborol           | 0.102 1 21        | 0.108 1 1/       |             | 0.15 1 - 11 | 0.15 1 < 11      | 0.15 1 < U       | 0.15 1 4 11       | 0.15 1 4 1      |
| SEMINOLATI CO    | 2,4-Dimensiphenoi            | 0.135 7 0         | 0.130 1 0        |             |             |                  |                  |                   |                 |
| SEMIVOLATILES    | 2,4-Distructoria             | 0.905 0           | 0.99 1 0         | 1.103 i < U | 0.8 1 < 0   | 0.8 1 < 0        | 0.8 1 < 0        | 0.8 + < 0         | 0.8 1 < 0       |
| SEMIVOLATILES    | 2,4-Uinitrotokuene           | 0.193 1 0         | 0.198 1 U        |             |             |                  |                  |                   |                 |
| SEMIVOLATILES    | 2,6-Dinitrotoluene           | 0.193 1 U         | 0.198 1 U        |             |             |                  |                  |                   |                 |
| SEMIVOLATILES    | 2-Chloronaphthalene          | 0.193 1 U         | 0.198 1 U        | 0.33 1 < U  | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | 2-Chloropheno?               | 0.193 1 U         | 0.198 1 U        | 0.33 1 < U  | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | 2-Methylnaphthalene          | 0.193 1 U         | 0.198 1 U        | 0.33 1 < U  | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | 2-Methylphenol               | 0.193 1 U         | 0.198 1 U        | 0.33 1 < 1J | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | 2-Nitroaniline               | 0.965 1 U         | 0.99 t U         | 1.65 1 < U  | 0.8 1 < U   | 0.8 1 < U        | 0.8 1 < U        | U > 1 8.0         | 0.8 1 < ∜       |
| SEMIVOLATILES    | 2-Nitronhend                 | 0.193 1 11        | 0.198 \$ 1/      | 033 1 4 1   | 0.15 1 < 11 | 0.15 1 < 11      | 015 1 < 13       | 015 1 < 11        | Ω15 1 < U       |
| SEMINOLATILES    | 3 2 Dichlorobenzizine        | 0.100 1 0         | 0.306 1 11       | 0.65 1 4 1  | 0.15 1 4 1  |                  | 015 1 4 15       | 0.15 1 4 1        | 0.15 1 4 1      |
| SEMINOL ATHES    | 2.Nitroanilina               | 0.000 1 0         | A00 1 11         | 165 1 - 31  | 18 1 - 11   | 0.10 1 1 0       | 08 1 - 11        | 09 1 - 11         | 19 t - 11       |
| CENINOLATILEO    | A C Dinitro O moltada basal  | 0.000 1 0         | 0.00 • *         | 1.03 F < U  | 0.0 4 11    | 0.0 i C U        | 0.0 i C U        | 0,0 i < U         |                 |
| SEMIVULATILES    | 4,6-Dinitro-2-methyphenol    | 0.965 1 U         | 0.99 1 0         | 1.65 1 < 0  | 0.8 1 < 0   | U.8 1 < U        | 0.8 1 < 0        | U > 1 8.0         | 0.8 1 < 0       |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether   | 0.193 T U         | 0.198 i U        | 0.33 1 < U  | 0.15 1 < 0  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < 0        | 0.15 1 < U      |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol      | 0.193 1 U         | 0.198 1 U        | 0.65 1 < U  | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | 4-Chloroanitine              | 0.193 1 U         | 0.198 1 U        | 0.65 1 < U  | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 t < U        | 0.15 1 < U      |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether  | 0.193 1 U         | 0.198 1 U        | 0.33 1 < U  | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 t < U        | 0.15 1 < U      |
| SEMIVOLATILES    | 4-Methylphenol               | 0.193 1 U         | 0.198 1 U        | 0.33 1 < U  | 0.15 1 < U  | 0.15 1 < U       | 0.15 t < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | 4-Nitroaniline               | 0.965 1 U         | 0.99-1 U         | 1.65 1 < Ư  | 0.8 1 < U   | 0:8 1 < U        | 0.8 t < U        | 0.8 t < U         | 0.8 1 < U       |
| SEMIVOLATILES    | 4-Nitrophenol                | 0.965 1 11        | 0.99 1 1/        | 165 1 2 19  | 08 1 < Ič   |                  | 08 1 < 11        | 08 1 c U          | 08 1 < Ü        |
| SEMINOLATILES    | åronanbihane                 | 0.103 1 15        | 0.108 1 11       |             | 0.15 1      | 0.15 1 4 11      | 0.15 1 < 1       | 0.15 1 4          | 0.15 1 2 11     |
| SEMINOLATILES    | Acconstitutions              | 1 501.0           | A 100 1 11       | 0.00 1 5 0  | 0.15 1 - 17 | 0.15 1 - 11      |                  | 0.15 1 - 17       | 0.10 1 1        |
|                  | Anthrono .                   | 0.195 1 U         | 0.130 1 U        | 0.00 1 < U  | 0.10 1 < U  | 0.10 / K U       |                  | 0.10 I < U        | 0.10 F < U      |
| SEMIVOLATILES    | Annracene                    | U.193 7 U         | U.198 1 U        | U.33 1 < U  | U.15 1 < U  | U > 1 CI.U       | 0.15 1 < 0       | U.H3 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | Benzo(a)anthracene           | 0.193 1 U         | 0.198 1 U        | 0.33 1 < U  | 0.15 1 < 0  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | Benzo(a)pyrene               | 0.193 1 U         | 0.198 1 U        | 0.33 1 < U  | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | Benzo(b)fluoranthene         | 0.193 1 U         | 0.198 1 U        | .0.33 1 < U | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | Benzo(ghi)perylene           | 0.193 T U         | 0.198 1 U        | 0.33 t < U  | 0.15 1 < U  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | Benzo(k)lluoranthene         | 0.193 1 U         | 0.198 1 U        | 0.33 1 < U  | 0.15 1 < U  | 0.15 t < U       | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U      |
| SEMIVOLATILES    | Benzoic Acid                 | 0.965 1 U         | 0.99 1 U         | 1.65 1 < U  | 0.8 t < U   | 0.8 1 < U        | 0.8 1 < U        | 0.8 1 < U         | 0.8 1 < U       |
| SEMIVOLATILES    | Benzvi Alcohol               | 0.193 1 11        | 0.198 1 11       | 0.65 1 < 11 | 0.15 1 < 11 | 0.15 1 < 11      | 0.15 1 < II      | 0.15 1 < 1/       | 0.15 1 < 13     |
| SEMINOR ATHES    | his/2 Chloraethans/methana   | 0.103 1 11        | 0.198 1 11       | 010 1 2 1   | 015 1 - 1   | 015 1 2 11       | 0.15 1 - 11      | 0 15 1 2 1        | 015 1 2 1       |
| OLIM VOLATILES   | DISTE CONTRACTORY BRICHARDIC | 9 U.133 I U       | V.120 1 V        | v.∞ + < U   | a.10 1 < U  | V.IJ I < U       | U > 1 CIU        | U.IJ J < U        | v.ru i K V      |

Table 3-29 Concentrations of Chemicals in Soil Samples Associated with Sump 029

| [SUMP] = SUMP029 |                                |                  |                  |                  |                             |                  |                            |                  |                  |
|------------------|--------------------------------|------------------|------------------|------------------|-----------------------------|------------------|----------------------------|------------------|------------------|
| LOCATION _CODE   |                                | 35SUMP029-SB01   | 35SUMP029-SB02   | LH-DL29-01       | LHI-S29-01                  | LH-S29-01        | LH-S29-02                  | LH-\$29-02       | LH-S29-02        |
| SAMPLE_NO        |                                | 35-SMP29-SB01-02 | 35-SMP29-SB02-02 | LH-DL29-01       | LH-S29-01_1                 | LH-S29-01_2      | LH-S29-02_1                | LH-S29-02_2      | LH-\$29-02_3     |
| SAMPLE_DATE      |                                | 9/12/2006        | 9/12/2006        | 6/25/1993        | 6/25/1993                   | 6/25/1993        | 6/25/1993                  | 6/25/1993        | 6/25/1993        |
| DEPTH            |                                | 12 - 12 Ft       | 12-12 Ft         | 2-3Ft            | 0.5 - 2.5 Ft                | 2.5 - 4 Ft       | 0-2Ft                      | 2 - 4 Ft         | 10 - 12 Ft       |
| SAMPLE_PURPOSE   |                                | REG              | REG              | REG              | REG                         | REG              | REG                        | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ            | Result DIL LQ VQ | Result DIL LQ VQ           | Result DIL LQ VQ | Result DIL LQ VQ |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether        | 0.193 1 U        | 0.198 1 U        | 0.33 1 < U       | 0.15 1 < U                  | 0.15 1 < U       | 0.15 1 < U                 | 0.15 1 < U       | 0.15 1 < 0       |
| SEMIVOLATILES    | bis(2-Choroisopropyl)emer      | 0.193 1 0        | 0.198 1 U        | 0.33 T < 0       | 0.15 t < U                  | 0.15 1 < U       | 0.15 1 < 0                 | U.15 1 < V       | 0.15 1 < 0       |
| SEMIVOLATILES    | bis(2-Ethylnexyl)phthalale     | 0.193 1 U        | 0.198 1 U        | 0.33 1 < U       | 11 < U                      | 11 < 0           | 11 < 0                     |                  |                  |
| SEMIVOLATILES    | Butyl benzyl pritralate        | 0.193 1 U        | 0.198 1 0        | 0.33 1 < Q       | 0.15 1 < 0                  | 0.15 1 < 0       | 0.15 1 < 0                 | 0.15 1 < 0       | 0.15 1 < U       |
| SEMIVOLATILES    | Carbazole                      | 0.102 1 11       | 0.400 1 11       | 0.00 1           | 0.15 1 < 0                  | 0.12 1 < U       | 0.15 1 < 0                 | 0.15 1 < 0       | 0.15 1 < 0       |
| SEMINOLATILES    | Dibaaza/a blaattuacana         | 0.103 1 1        | 0.100 1 0        | 0.22 1 < 11      | · · · · · · · · · · · · · · | 0.15 1 C U       | 0.40 1 < 0                 | 0.13 1 < 0       | 0.15 3 < 0       |
| SEMINOLATILES    |                                | 0.102 1 10       | 0.190 1 0        | 0.22 1 4 13      | 0.15 1 4 1                  |                  |                            | 0.10 1 < 0       | 0.13 1 < 0       |
|                  | Distwi chtholota               | 0.103 1 1        | 0.195 1 0        | 0.30 1 < 0       |                             | 0.15 1 < 0       | 0.15 1 < 0                 |                  | 0.15 1 < 0       |
| SEMIVOLATILES    | Dimethyl ohtipalate            | 0.133 1 16       | 0.130 1 U        | 0.33 1 < 12      | 0.15 1 < 11                 | 0.15 1 2 13      |                            | 0.15 1 < 0       |                  |
| SEMINOLATILES    | di-n-Butyl phthatate           | 0.193 1 1        | 0.198 1 13       | 0.33 1 < 15      | 0.15 1 2 11                 | A 289 1          | 0.101 1<br>0.101 1         | 0.15 1 < 0       | 0.15 1 < 1/      |
| SEMIVOLATILES    | di-n-Octyl phthalate           | 0.193 1 LJ       | 0.198 1 1/       | 0.33 1 4 1       | 015 1 < 1                   | 0151 < 1         | 015 1 < 1                  | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | Ekoranthene                    | 0.193 1 U        | -0.198 1 U       | 0.33 1 < 11      | 0.15 1 < 1/                 | 0.15 1 < 1       | 0.15 1 < . U               | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | Fluorene                       | 0.193 1 U        | 0.198 1 U        | 0.33 1 < 1/      | 0.15 1 < U                  | 0.15 1 < U       | 0.15 1 < U                 | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | Hexachlorobenzene              | 0.193 1 U        | 0.198 1 U        | 0.33 1 < U       | 0.15 1 < U                  | 0.15 1 < U       | 0.15 1 < U                 | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | Hexachlorobutadiene            | 0.193 1 U        | 0.196 1 U        | 0.33 1 < U       | 0.15 1 < U                  | 0.15 1 < U       | 0.15 1 < U                 | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | Hexachlorocyclopentadiene      | 0.193 1 U        | 0.198 1 U        | 0.33 1 < U       | 0.15 1 < U                  | 0.15 1 < U       | 0.15 t < U                 | 0.15 t < U       | 0.15 1 < U       |
| SEMIVOLATILES    | Hexachloroethane               | 0.193 1 U        | 0.198 1 U        | 0.33 1 < U       | 0.15 1 < U                  | 0.15 t < U       | 0.15 1 < U                 | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene         | 0.193 1 U        | 0.198 1 U        | 0.33 1 < U       | 0.15 1 < U                  | 0.15 t < U       | 0.15 1 < U                 | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | Isophorone                     | 0.193 1 U        | 0.198 1 U        | 0.33 f < U       | 0.15 1 < U                  | 0.15 1 < U       | 0.15 1 < U                 | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | Naphthalene                    | 0.193 1 U        | 0.198 1 U        | 0.33 1 < U       | 0.15 1 < U                  | 0.15 1 < U       | 0.15 1 < U                 | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | Nitrobenzene                   | 0.193 1 U        | 0.198 1 U        | 0.33 1 < U       | 0.15 1 < U                  | 0.15 1 < U       | 0.15 1 < U                 | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine     | 0.193 1 U        | 0.198 1 U        | 0.33 1 < U       | 0.15 1 < U                  | 0.15 1 < U       | 0.15 1 < U                 | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine         | 0.193 1 U        | 0.198 1 U        | 0.33 1 < U       | 0.3 1 < U                   | 0.3 i < U        | 0.3 1 < U                  | 0.3 1 < U        | 0.3 1 < U        |
| SEMIVOLATILES    | Pentachlorophenot              | 0.965 1 U        | 0.99 1 U         | 1.65 1 < U       | 0.15 1 < U                  | 0.15 1 < U       | 0.15 1 < U                 | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | Phenanthrene                   | 0.193 1 ป        | 0.198 1 U        | 0.33 1 < U       | 0.15 1 < U                  | 0.15 t < U       | 0.15 1 < U                 | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | Phenol                         | 0.193 1 U        | 0.198 1 U        | 0.33 t < U       | 0.15 1 < U                  | 0.15 1 < U       | 0.15 1 < U                 | 0.15 1 < U       | 0.15 1 < U       |
| SEMIVOLATILES    | Pyrene                         | 0.193 T U        | 0.198 1 U        | 0.33 1 < U       | 0.15 1 < U                  | 0.15 1 < U       | 0.15 t < U                 | 0.15 1 < U       | 0.15 1 < U       |
| VOLATILES        | 1,1,1,2-Tetrachloroethane      | 0.00558 1 U      | 0.00485 i U      |                  |                             | ·                |                            |                  |                  |
| VOLATILES        | 1,1,1-Trichloroethane          | 0.00558 1 U      | 0.00485 1 U      | 0.005 1 < U      | 0.005 1 < U                 | 0.005 t < U      | 9.005 1 < U                | 0.005 1 < U      | 0.005 1 < U      |
| VOLAHLES         | 1,1,2,2-1 etrachtoroethane     | 0.00558 1 U      | 0.00485 1 U      | 0.005 1 < 0      | 0.005 1 < U                 | 0.005 f < U      | 0.005 1 < U                | 0.005 1 < 0      | 0.005 1 < U      |
| VULATILES        | 1,1,2-1 nchioroeinane          | 0.00558 1 0      | 0.00485 1 0      | 0.005 1 < U      | 0.005 1 < U                 | 0.005 1 < 0      | 0.005 1 < 0                | 0.005 T < 0      | 0.005 1 < 0      |
| VOLATILES        | 1,1-Dichloroethane             | 0.00558 1 0      | 0.00485 1 0      | 0.005 1 < 0      | 0.005 1 < 0                 | 0.005 1 < 0      | 0.005 7 < 0                | 0.005 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | 1,1-Dichlorostene              | 0.00559 1 11     | 0.00485 1 0      | 0.005 1 < 0      | 0.005 1 < 0                 | 0.005 1 < 0      | 0.005 i < 0                | U.U.CO I < U     | 0.005 1 < 0      |
|                  | 1, Porticoproperte             | 0.00558 1 U      | 0.00485 1 11     |                  |                             |                  |                            |                  |                  |
| VOLATE ES        | 1,2,3-Trictiononanana          | 0.00558 1 11     | 0.00485 1 11     |                  |                             |                  |                            |                  |                  |
| VOLATILES        | 1.2.4-Trichlorobenzene         | 0.00558 1 U      | 0.00485 1 1      |                  |                             |                  |                            |                  |                  |
| VOLATILES        | 1.2.4-Trimethylhenzene         | 0.00558 1 U      | 0.00485 1 11     |                  |                             |                  |                            |                  |                  |
| VOLATILES        | 1.2-Dibromo-3-chloropropane    | 0.00558 1 U      | 0.00485 1 U      |                  |                             |                  |                            |                  |                  |
| VOLATILES        | 1.2-Dibromoethane              | 0.00558 1 U      | 0.00485 t U      |                  |                             |                  |                            |                  |                  |
| VOLATILES        | 1,2-Dichlorobenzene            | 0.00558 1 U      | 0.00485 I U      |                  |                             |                  |                            |                  |                  |
| VOLATILES        | 1,2-Dichloroethane             | 0.00558 1 U      | 0.00485 1 U      | 0.005 1 < U      | 0.005 1 < U                 | 0.005 1 < U      | 0.005 1 < U                | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichloroethene             |                  |                  | 0.005 1 < U      | 0.005 t < U                 | 0.005 1 < U      | 0.005 1 < U                | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichloropropane            | 0.00558 1 U      | 0.00485 t U      | 0.005 1 < U      | 0.005 t < U                 | 0.005 1 < U      | 0.005 1 < U                | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) | 0.00558 1 U      | 0.00485 1 U      |                  | 0.005 t < U                 | 0.005 1 < U      | 0.905 1 < U                | 0.005 1 < V      | 0.005 i < U      |
| VOLATILES        | 1,3,5-Trimethylbenzene         | 0.00558 1 U      | 0.00485 1 U      |                  |                             |                  |                            |                  |                  |
| VOLATILES        | 1,3-Dichlorobenzene            | 0.00558 1 U      | 0.00485 t U      |                  |                             |                  |                            |                  |                  |
| VOLATILES        | 1,3-Dichloropropane            | 0.00558 1 U      | 0.00485 1 U      |                  |                             |                  |                            |                  |                  |
| VOLATILES        | 1,4-Dichlorobenzene            | 0.00558 1 U      | 0.00485 1 U      |                  |                             |                  |                            |                  |                  |
| VOLATILES        | 2,2-Dichloropropane            | 0.00558 1 U      | 0.00485 1 U      |                  |                             |                  |                            |                  |                  |
| VOLATILES        | 2-Butanone                     | 0.0112 1 U       | 0.0097 1 U       | 0.05 1 < U       | 0.005 1 < U                 | 0.005 1 < U      | 0.005 1 < U                | 0.005 1 < U      | _0.005 1 < U     |
| VOLATILES        | 2-Chloroethyl vinyl ether      | 0.0112 1 U       | 0.0097 1 U       | 0.01 1 < U       |                             |                  |                            |                  |                  |
| VOLATILES        | 2-Chlorotoluene                | 0.00558 1 U      | 0.00485 1 0      |                  |                             |                  |                            | · · ·            |                  |
| VOLATILES        | 2-riexanone                    | 0.0112 1 U       | 0.0097 1 U UJ    | 0.05 1 < 0       | 0.005 1 < 0                 | 0.005 1 < U      | 0.005 1 < U                | 9.005 1 < 0      | 0.005 1 < Ü      |
| VOLATILES        |                                | 0.00558 1 U      | 0.00485 1 U      | 0.1 1 11         |                             |                  | 0.01 1 1                   | 0.000            | 0.04C /          |
|                  | AGEIONE                        | 0.0112 1 U       | 0.0037 1 0 03    | 0.11 < 0         | 0.01 1                      | 0.019 1          | U.U 1 < U                  | 0.032            | 0.035 1          |
|                  | Bremebeezee                    | U I 800000       | 0.00405 1 1      | 0.000 F < U      | U > 1 CUU.U                 | U.UUS 1 < U      | U > ( CUU.U                | U > ( CUU.V      | 0.005 i < U      |
| VOLATILES        | Bromochloromethana             | 0.00000 1 U      | 0.00463 1 0      |                  |                             |                  |                            |                  |                  |
| VOLATILES        | Bromovicoloromethane           | 0.00558 1 11     | 0.00403 1 1      | 0.005 1 - 13     | 0.005 t - U                 | 0.005 1 - 1      | 0.005 1 - 0                | 0.005 1 - 11     | 0.005 1 2 14     |
| VOI ATILES       | Bromoform                      | 0.00558 1 18     | 0.00485 1 31     | 0.005 1 < 0      | 0.005 t - 11                | 0.005 1 2 11     | 0.003 i < U<br>0.005 1 - U | 0.005 1 ~ 1      | 0.005 1 - 1      |
| VOLATILES        | Bromomethane                   | 0.0000 1 1/      | 0.00197 1 11     | 0.000 1 2 1)     |                             | 0.003 1 < 0      |                            |                  | 0.001 1 2 11     |
| VOLATILES        | Carbon disulfide               | 0.00558 1 11     | 0.00485 1 11     | 0.005 1 2 13     | 0.005 t - it                | 1005 t - ti      |                            | 0.005 1 - 11     | 0.005 1 2 1      |
|                  |                                | 1                |                  | 51050 IT 1 0     | 0.000 1 1 0                 |                  |                            |                  |                  |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas

## Table 3-29 Concentrations of Chemicals in Soil Samples Associated with Sump 029

| [SUMP] = SUMP029 |                           |                     |                  |                          |                  |                  |                  |                  |                  |
|------------------|---------------------------|---------------------|------------------|--------------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                           | 35SUMP029-SB01      | 35SUMP029-SB02   | LH-DL29-01               | LH-S29-01        | LH-\$29-01       | LH-S29-02        | LH-S29-02        | LH-S29-02        |
| SAMPLE_NO        |                           | 35-SMP29-SB01-02    | 35-SMP29-SB02-02 | LH-DL29-01               | LH-S29-01_1      | LH-S29-01_2      | LH-S29-02_1      | LH-S29-02_2      | LH-S29-02_3      |
| SAMPLE_DATE      |                           | 9/12/2006           | 9/12/2006        | 6/25/1993                | 6/25/1993        | 6/25/1993        | 6/25/1993        | 6/25/1993        | 6/25/1993        |
| DEPTH            |                           | 12 - 12 Ft          | 12 - 12 Ft       | 2 - 3 Ft                 | 0.5 - 2.5 Ft     | 2.5 - 4 Ft       | 0-2 Ft           | 2-4 Ft           | 10 - 12 Ft       |
| SAMPLE_PURPOSE   |                           | REG                 | REG              | REG                      | REG              | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg) | Result Dit. I.Q. VQ | Result DIL LQ VQ | Result DIL LQ VQ         | Résult DIL LQ VQ | Result DIL LO VO |
| VOLATILES        | Carbon tetrachloride      | 0.00558 1 U         | 0.00485 1 U      | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chlorobenzene             | 0.00558 1 U         | 0.00485 1 U      | 0.005 t < U              | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloroethane              | 0.0112 1 U          | 0.0097 1 U       | <del>0.01 1 &lt; U</del> | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 t < U       |
| VOLATILES        | Chłoroform                | 0.00558 1 U         | 0.00485 1 U      | 0.005 t < 1J             | 0.005 1 < U      | 0.167 1          | 0.006 1          | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloromethane             | 0.0112 1 U          | 0.0097 1 U       | 0.01 1 < U               | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 t < U       |
| VOLATILES        | cis-1,2-Dichloroethene    | 0.00558 1 U         | 0.00485 1 U      |                          | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | cis-1,3-Dichloropropene   | 0.00558 1 U         | 0.00485 1 U      | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | Dibromochloromethane      | 0.00558 1 U         | 0.00485 1 U      | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromomethane            | 0.00558 1 U         | 0.00485 1 U      |                          |                  |                  |                  |                  |                  |
| VOLATILES        | Dichlorodifluoromethane   | 0.0112 1 U          | 0.0097 1 U       |                          |                  |                  |                  |                  |                  |
| VOLATILES        | Ethylbenzene              | 0.00558 1 U         | 0.00485 1 U      | 0.005 t < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Hexachlorobutadiene       | 0.00558 1 U         | 0.00485 1 U      |                          |                  |                  |                  |                  |                  |
| VOLATILES        | Isopropylbenzene          | 0.00558 t U         | 0.00485 1 U      |                          |                  |                  |                  |                  |                  |
| VOLATILES        | m,p-Cresol                |                     |                  |                          | 0.15 1 < U       | 0.15 1 < U       | 0.15 t < U       | 0.15 1 < U       | 0.15 t < U       |
| VOLATILES        | m,p-Xylenes               | 0.00558 t U         | 0.00485 1 U      |                          | 0.005 1 < U      |
| VOLATILES        | Methyl isobutyl ketone    | 0.0112 1 U          | 0.0097 1 U       | 0.05 1 < U               | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | Methylene chloride        | 0.00558 1 U         | 0.00485 1 U      | 0.005 1 < ⊍              | 0.01 1 < U       | 0.01 1 < U       | 0.01 t < U       | 0.023 1          | 0.01 1 < U       |
| VOLATILES        | Naphthalene               | 0.0112 1 U          | 0.0097 1 U       |                          |                  |                  |                  |                  |                  |
| VOLATILES        | n-BUTYLBENZENE            | 0.00558 1 U         | 0.00485 1 U      |                          |                  |                  |                  |                  |                  |
| VOLATILES        | n-PROPYLBENZENE           | 0.00558 1 U         | 0.00485 1 U      |                          |                  |                  |                  |                  |                  |
| VOLATILES        | p-ISOPROPYLTOLUENE        | 0.00558 1 U         | 0.00485 1 U      |                          |                  |                  |                  |                  |                  |
| VOLATILES        | sec-BUTYLBENZENE          | 0.00558 1 U         | 0.00485 1 U      |                          |                  |                  |                  |                  |                  |
| VOLATILES        | Styrene                   | 0.00558 1 U         | 0.00485 1 U      | 0.005 1 < U              | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | tert-BUTYLBENZENE         | 0.00558 1 U         | 0.00485 1 U      |                          |                  |                  |                  |                  |                  |
| VOLATILES        | Tetrachloroethene         | 0.00558 1 U         | 0.00485 1 U      | 0.005 1 < U              | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Toluene                   | 0.00558 1 U         | 0.00485 1 U      | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.905 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | trans-1,2-Dichloroethene  | 0.00558 1 U         | 0.00485 1 U      |                          | 9.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | trans-1,3-Dichloropropene | 0.00558 1 U         | 0.00485 1 U      | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | Trichloroethene           | 0.00558 1 U         | 0.00485 1 U      | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | Trichlorofluoromethane    | 0.0112 1 U          | 0.0097 1 U       |                          |                  |                  |                  |                  |                  |
| VOLATILES        | Vinyl acetate             | 0.0112 1 U          | 0.0097 1 U       | 0.05 1 < U               | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | Vinyl chloride            | 0.0112 1 U          | 0.0097 1 U       | 0.01 1 < U               | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Xylenes, Totai            | 1                   |                  | 0.005 1 < U              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| I I I            |                           |                     |                  |                          |                  |                  |                  |                  |                  |

Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas

### Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



 Table 3-30

 Concentrations of Chemicals in Soil Samples Associated with Sump 030

| BALME   | {SUMP] = SUMP030<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                             | 35SUMP030-SB01<br>35-SMP30-SB01-02<br>9/9/2006<br>3.5 - 4 Ft | 35SUMP030-SB02<br>35-SMP30-SE02-02<br>9/9/2006<br>4 - 4 Ft | 35SUMP031-SB01<br>35-SMP31-SB01-02<br>9/12/2006<br>3.5 - 4 Ft | LH-S30-01<br>LH-S30-01_1<br>8/25/1993<br>0.5 - 2.5 Ft | LH-530-01<br>LH-530-01_2<br>6/25/1993<br>2.5 - 4.5 Ft | LH-S31-01<br>LH-S31-01_1<br>7/21/1993<br>0.5 - 1 FL | LH-S31-01<br>LH-S31-01_2<br>7/21/1993<br>3 - 3.5 Fl |
|---|--|-----------------------------|--|--|---|---|---|---|---|
| Tuti Course         Permute gains regist         Reade Dit (a) Vo         Read Dit (b) Vo         Permute Dit (b) V | SAMPLE_PURPOSE   |                             | REG  | REG  | REG   | REG   | REG   | REG   | REG   |
| BPACEMES         2-Composing         2-Composing         2-Composing         0         0.0000         0         0.0000         0         0.0000         0         0.0000         0         0.0000         0         0.0000         0         0.0000         0         0         0.0000         0         0.0000         0         0         0.0000         0        0        0 <th0< th=""><th>Test Group</th><th>Parameter (Units = mg/kg)</th><th>Result DIL LQ VQ</th><th>Result DIL LQ VQ</th><th>Result DIL LQ VQ</th><th>Result DIL LO VO</th><th>Result DIL LO VO</th><th>Result DIL LO VO</th><th>Hesuit DIL LO VO</th></th0<>  | Test Group   | Parameter (Units = mg/kg)   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LO VO                                      | Result DIL LO VO                                      | Result DIL LO VO                                    | Hesuit DIL LO VO                                    |
| DPACINGNS         2.600 million         2.000 million         2.000 million         2.000 million         2.000 million         2.000 million         0.000 millio  | EXPLOSIVES   | 2.4-Dinitrotoluene          |  |  |   | 0.15 1 < 0  | 0.15 1 < 0  | 0.33 1 < 0  | 0.33 1 < 0  |
| Mart AS       Annum       D200       I       B200       I       I       B200       I       <   | EXPLOSIVES   | 2,6 Dinitrotoluene          |  |  |   | 0,15 1 < 0  | 0.15 1 < 0  | 0.33 / < 0  | 17204 1   |
| Materials       Antensis       D <thd< th="">       D       <thd< th=""></thd<></thd<>  | METALS   | Aluminum                    | 12000 1  | 28800 1  | 19500 1   | 9890 1  | 31000 1   | 7 5   | 3 1 - 11  |
| Matrix       Massis       Zas       I       <   | METALS   | Antimony                    | 0.112 1 U  | 0.12 1 U   | 0.113 1 U   | 15,7 1  | 13.2  | 18 1  | -17 1   |
| Matrix       Buyim       Lig 1       Lig 1 <thlig 1<="" th=""> <t <="" td=""><td>METALS</td><td>Arsenic</td><td>2.66 1</td><td>1,6</td><td>3.93 1</td><td>1 2</td><td>4,0 F</td><td>827 1 / II</td><td>72 1 &lt; 1</td></t></thlig>   | METALS   | Arsenic                     | 2.66 1   | 1,6  | 3.93 1  | 1 2   | 4,0 F   | 827 1 / II  | 72 1 < 1  |
| JEPAS       Berginn       Likal       I       Likal       I       Likal       I       Likal       I <thi< td=""><td>METALS</td><td>Barium</td><td>429 1</td><td>121 1</td><td>78.1</td><td>70.2 (</td><td>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</td><td>Q4,7 1 4 0</td><td></td></thi<>   | METALS   | Barium                      | 429 1  | 121 1  | 78.1  | 70.2 (  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,               | Q4,7 1 4 0  |   |
| Matrix         Caddom         Usas         I         Usas         Usas <td>METALS</td> <td>Beryllium</td> <td>0.528</td> <td>0.779</td> <td>0.031 1 1 1</td> <td>1 1 1 1</td> <td>19 1</td> <td>11 &lt; 11</td> <td>11 &lt; U</td>   | METALS   | Beryllium                   | 0.528  | 0.779  | 0.031 1 1 1   | 1 1 1 1   | 19 1  | 11 < 11   | 11 < U  |
| Main Lab.       Lotation       Main       a       a.g.  | METALS   | Cadmium                     | 10.098   | 0.129 I J J  | 0,110 1 0 0   | 1440 1  | 410 1   | 545 1   | 274 1   |
| Method       Constrain       198       J       Good       J       137       1       44       1       44       1       44       1       44       1       44       1       44       1       45       1       45       1       5       1       5       1       5       1       5       1       5       1       5       1       5       1       5       1       5       1       5       1       5       1       5       1       5       1       5       1       5       1       5       1       5       1       5       1 <t< td=""><td>METALS</td><td>Carcium</td><td>150 1 5</td><td>246 1</td><td>196 1</td><td>128 1</td><td>25.7 1</td><td>11.3 1 &lt; U</td><td>12.3 1 &lt; U</td></t<>   | METALS   | Carcium                     | 150 1 5  | 246 1  | 196 1   | 128 1   | 25.7 1  | 11.3 1 < U  | 12.3 1 < U  |
| Inde IA-3       Constr       Lass       I       Sas       I <td>METALS</td> <td>Critomium</td> <td>2.01 1</td> <td>24.0 I</td> <td>251 1</td> <td>42 1</td> <td>3.4 1</td> <td>4.9 1</td> <td>3.4 1</td>  | METALS   | Critomium                   | 2.01 1   | 24.0 I   | 251 1   | 42 1  | 3.4 1   | 4.9 1   | 3.4 1   |
| Marting       Output       2170       1       2000       1       2700       1       7000  | METALO   | Connor                      | 5 57 1   | 4 34 1   | 475 1   | 3.9 1   | 8.2 1   | 4 1   | 5 1   |
| Name         Mary         Mary <th< td=""><td>METALO</td><td>Copper</td><td>28100 1</td><td>23300 1</td><td>30100 1</td><td>8640 1</td><td>27600 1</td><td>16500 1</td><td>14800 1</td></th<>  | METALO   | Copper                      | 28100 1  | 23300 1  | 30100 1   | 8640 1  | 27600 1   | 16500 1   | 14800 1   |
| History       Typ       <   | METALS   | load                        | 117 1  | 99 1   | 10.3 1  | 6.7 1   | 10.4 1  | 12.8 1  | 6.6 1   |
| Instruction       Magnetics       Object       J       J       O       D       J       J       D       D       J       D       D       J       D       D       J       D       D       J       D       D       J       D       D       J       D       D       J       D       D       J       D       D       J       D       D       J       D </td <td>NETALO</td> <td>Magnachum</td> <td>737 1</td> <td>1290 1</td> <td>916 1</td> <td>1290 1</td> <td>1730 1</td> <td>402 1</td> <td>968 1</td>  | NETALO   | Magnachum                   | 737 1  | 1290 1   | 916 1   | 1290 1  | 1730 1  | 402 1   | 968 1   |
| Internal       Datis       I       J       Datis       I       J       Datis       I       C       U       0.1       I       C       U       1.1       C       U  | METALS   | Maggappse                   | 138 1  | 23.4 1   | 29.2 1  | 287 1   | 40.2 1  | 275 1   | 21.8 1  |
| NERTALS       Network       742       8.88       1       5.21         METALS       Pelasium       400       6.55       1       646       1       1500       1       1       4       U       1       1       4       U       1       1       4       U       1       1       4       U       1       1       4       U       1       1       4       U       1       1       4       U       1       1       4       U       1       1       4       U       1       1       4       U       1       1       4       U       1       1       4       U       1       1       4       U       1       1       4       U       1       1       4       U       1       1       4       U       1 <td< td=""><td>METALS</td><td>Mercury</td><td>0.0351 1 J J</td><td>0.105 J J</td><td>0.0197 1 J J</td><td>0,1 1 &lt; U</td><td>0,1 1 &lt; U</td><td>0.1 1 &lt; U</td><td>0.1 1 &lt; U</td></td<>  | METALS   | Mercury                     | 0.0351 1 J J   | 0.105 J J  | 0.0197 1 J J  | 0,1 1 < U   | 0,1 1 < U   | 0.1 1 < U   | 0.1 1 < U   |
| METALS         Passion         440         1         635         1         1         640         1         150         1         4         1         1         1         4         1         1         1         4         1         1         4         1         1         4         1         1         1         4         1         1         4         1         1         4         1         1         4         1         1         4         1         1         4         1         1         4         1         1         4         1         1         1         4         1         1         4         1  | METALS   | Nickel                      | 7.42 1   | 8.38 1   | 5.2 1   |   |   |   |   |
| ULTRUS       Determine       0.265       1       0.15       1       J       0.015       1<  | METALS   | Polassium                   | 490 1  | 635 1  | 446 i   | 1830 1  | 1670 1  | 365 1   | 597 1   |
| Untrails       Sweet       172       1  | METALS   | Selenium                    | 0.245 1  | 0.185 1 J J  | 0.513 1   | 11 < U  | 11 < U  | 11 < U  | 11 < 1  |
| Martus         Sodum         65         1         239         1         18         1         3.5         7.1         7.1         1.6         1           METALS         Thailum         0.69         1         0.17         1         0.18         1         7.1         1         0.68         1           METALS         Thailum         48         1         0         117         1         3.5         1         1.4   | METALS   | Silver                      | 1.72 1 U   | 1.84 1 U   | 1.61 1 U  | 11 < U  | 11 < U  | 11 × U  | tt < U  |
| METALS       Thuim       0.069       0.127       0.18       417       1       7.1       1       7.  | METALS   | Sodium                      | 65 1   | 329 1  | 158 1   |   |   |   |   |
| METALS       Daily       Daily <thdaily< th=""> <th< td=""><td>METALS</td><td>Stronlium</td><td></td><td></td><td></td><td>3.5 1</td><td>10,1 1</td><td>7.1 1</td><td>10.8 1</td></th<></thdaily<>  | METALS   | Stronlium                   |  |  |   | 3.5 1   | 10,1 1  | 7.1 1   | 10.8 1  |
| METALS       Vanadium       46       1       40       1       11.7       1       31.7       1       30.1       1       11.7       1       11.7       1       11.7       1       11.7       1       11.7       1       11.7       1       31.7       1       30.1       1       11.7       11.7       11.7  | METALS   | Thallum                     | 0.069 1  | 0.127 1  | 0.18 1  |   |   |   |   |
| METAS       2% 0       31.7       30.1       18.7       1.7.7       3.5       1       1.4       2.1.9       1         SEMUOLATLES       1.2.020100300000000000000000000000000000  | METALS   | Vanadium                    | 4B 1   | 40 1   | 41.7 1  |   |   |   |   |
| SEMPOLATILES       1.2.4-Trohlocobarane       0.15       1       c       U       0.35       1       <   | METALS   | Zinc                        | 31.7 1   | 30.1 1   | 18.7 1  | 11.7 1  | 35 1  | 14 1  | 21.9 1  |
| SEMPOLATILES       1.2 Oblorsophenol       0.15       1       c       U       0.03       1  | SEMIVOLATILES  | 1,2.4-Trichlorobenzene      |  |  |   | 0.15 1 < U  | 0.15 1 < U  | 0.33 1 < U  | 0.33 1 < 0  |
| SEMUCLATILES       1.3-Déhisobenzene       0.15       1       C       U       0.33       1  | SEMIVOLATILES  | 1.2-Dichlorobenzene         |  |  |   | 0.15 1 < U  | 0.15 1 < U  | 0.33 1 < U  | 0.33 1 < 0  |
| SEMVOLATILES       1.4. Dohonoomanon       0.15       1       0       0.15       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0  | SEMIVOLATILES  | 1,3-Dichlorobenzene         | ţ  |  |   | 0.15 1 < U  | 0.15 1 < U  | 0.33 1 < 0  | 0.33 1 < U  |
| SEMVOLATILES       2.4.5 Trichtorophenol       0.8       1       0       0.8       1       0       0.85 <td>SEMIVOLATILES</td> <td>1.4-Dichlorobenzene</td> <td></td> <td></td> <td></td> <td>0.15 t &lt; U</td> <td>0.15 1 &lt; 0</td> <td>0.33 1 &lt; U</td> <td>0.33 1 &lt; 0</td>   | SEMIVOLATILES  | 1.4-Dichlorobenzene         |  |  |   | 0.15 t < U  | 0.15 1 < 0  | 0.33 1 < U  | 0.33 1 < 0  |
| SEMVOLATLES       2.4.6.Trickhrophenol       0.15       1       <   | SEMIVOLATILES  | 2.4.5 Trichlorophenol       |  |  |   | 0.8 1 < U   | 0.8 1 < U   | 1.65 1 < U  | 1.03 F < U  |
| SEMIVOLATILES       2.4-Olchorophenol       0.15       1       2       0       0.15       1       2       0       0.33       1 <td< td=""><td>SEMIVOLATILES</td><td>2,4,6-Trichiorophenol</td><td></td><td></td><td></td><td>0.15 1 &lt; 0</td><td>0.15 1 &lt; 0</td><td></td><td></td></td<>  | SEMIVOLATILES  | 2,4,6-Trichiorophenol       |  |  |   | 0.15 1 < 0  | 0.15 1 < 0  |   |   |
| SEMIVOLATILES       2.4-Dimethylophenol       0.15       1       2       0       0.05       1       2       0       0.05       1       2       0       0.05       1       2       0       0.05       1       2       0       0.05       1       2       0       0.05       1       2       0       0.05       1       2       0       0.05       1       2       0       0.05       1       2       0       0.05       1       2       0       0.05       1       2       0       0.05       1       2       0       0.03       1       2       0       0.03       1       2       0       0.03       1       2       0       0.03       1       2       0       0.03       1       2       0       0.03       1       2       0       0.03       1       2       0       0.03       1       2       0       0.03       1       2       0       0.03       1       2       0       0.03       1       2       0       0.03       1       2       0       0.03       1       2       0       0.03       1       2       0       0.03       1       <   | SEMIVOLATILES  | 2,4-Dichlorophenol          |  |  |   | 0.15 1 < 0  | 0.15 1 < 0  | 0.33 1 < 0  | 0.13 1 < 1  |
| SEM/YOLATILES       2.4-Chiracphenal       0.03       1       4       0       0.03       1  | SEMIVOLATILES  | 2.4-Dimelhylphenol          |  |  |   | 0.15 1 < 0  | 0.5 1 < 0   | 165 1 < 11  | 185 1 < 0   |
| SEMI/OLATILES       2-Chicrosphinaline       0.15       1       c       0       0.03       1       c       0       0.05       1       c       0       0.05       1       c       0       0.05       1 <t< td=""><td>SEMIVOLATILES</td><td>2,4-Dinitrophenol</td><td></td><td></td><td></td><td></td><td></td><td>033 1 - 11</td><td>0.33 1 &lt; 11</td></t<>   | SEMIVOLATILES  | 2,4-Dinitrophenol           |  |  |   |   |   | 033 1 - 11  | 0.33 1 < 11   |
| SEM/YOLATILES       2-Mathylpaphihalme       0.15       1       C       0       0.15       1       C       0       0.33       1       C       0       0.5       1       C       0       0.5       1  | SEMIVOLATILES  | 2-Chloronaphthalene         |  |  |   | 0.15 1 4 1  | 015 1 2 11  | 0.33 t < U  | 0.33 1 < U  |
| SEMIVOLATILES       2-Methylphenol       0.15       1       4       U       0.33       1       4       U         SEMIVOLATILES       2-Mitrophenol       0.15       1       4       U       0.33       1       4       U       0.35       1       4       U       0.33       1       4       U       0.33       1       4       U       0.35       1       4       U       0.35       1       4       U       0.35       1   | SEMIVOLATILES  | 2-Chiorophenol              |  |  |   | 0.15 1 < U  | 015 1 < U   | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES       2-Nitroaniline       0.8       1       C       U       0.33       1       C       U       0.8       1       C       U       0.85       1       C   | SEMIVOLATILES  | 2-Mathyinaphthalene         |  |  |   | 0.15 1 < U  | 0.15 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES       2-Nitrophine       0.15       1       C       U       0.33       1       C       U       0.35       1       C <td>SEMIVOLATILES</td> <td>2-Methylpherio:</td> <td></td> <td></td> <td></td> <td>0.8 1 &lt; U</td> <td>0.8 1 &lt; U</td> <td>1.65 1 &lt; U</td> <td>1.65 1 &lt; U</td>  | SEMIVOLATILES  | 2-Methylpherio:             |  |  |   | 0.8 1 < U   | 0.8 1 < U   | 1.65 1 < U  | 1.65 1 < U  |
| SEMIVOLATILES       3.3'-Dichlorobarzidine       0.15       1       -       U       0.65       1  | SEMIVOLATILES  | 2-Niliconbacai              |  |  |   | 0.15 1 < 0  | 0.15 1 < U  | 0,33 1 < U  | 0.33 1 < U  |
| SEMMOCIATILES       3-Nitroganiline       0.8       1       -       U       1.65       1       -       U       0.15       1       -<   | SENN/OLATILES  | 3 2 Dichlorohanzidine       |  |  |   | 0.15 1 < U  | 0.15 1 < U  | 0,65 1 < U  | 0.65 1 < U  |
| SEMIVOLATILES       4.6:Dinitro 2-methylphenol       0.8       1       V       0.15       1       V       0.15       1       V       0.03       1       V       0.03       1       V       0.03       1       V       0.03       1       V       0.05       1       V       0.03 <td>SEMIVOLATILES</td> <td>3-Nitroanilina</td> <td></td> <td></td> <td></td> <td>0.8 1 &lt; U</td> <td>0.8 1 &lt; U</td> <td>1.65 1 &lt; U</td> <td>1.65 1 &lt; U</td>   | SEMIVOLATILES  | 3-Nitroanilina              |  |  |   | 0.8 1 < U   | 0.8 1 < U   | 1.65 1 < U  | 1.65 1 < U  |
| SEMIVOLATILES       4-Bromophenyl phenyl ether         SEMIVOLATILES       4-Chloro-3-methylphenol         SEMIVOLATILES       4-Chlorophenyl phenyl ether         SEMIVOLATILES       4-Chlorophenyl phenyl ether         SEMIVOLATILES       4-Chlorophenyl phenyl ether         SEMIVOLATILES       4-Chlorophenyl phenyl ether         SEMIVOLATILES       4-Methylphenol         SEMIVOLATILES       4-Methylphenol         SEMIVOLATILES       4-Methylphenol         SEMIVOLATILES       4-Methylphenol         SEMIVOLATILES       4-Methylphenol         SEMIVOLATILES       4-Nitroanjäne         SEMIVOLATILES       4-Nitroanjäne         SEMIVOLATILES       A-cenaphihylene         SEMIVOLATILES       Acenaphihylene         SEMIVOLATILES       Acenaphihylene         SEMIVOLATILES       Acenaphihylene         SEMIVOLA   | SEMIVOLATILES  | 4.6-Dinitro-2-methylohenol  |  |  |   | 0.8 1 < U   | 0.8 1 < U   | 1.65 1 < U  | 1.65 1 < U  |
| SEMIVOLATILES       4.Chloro3-methylphenol       0.15       1       V       0.65       1       V       0       3       1       V       0       0.5       1       V       0.65       1       V       0       0       3       1       V       0       0       3       1       V       0       3       1       V       0   | SEMIVOLATILES  | 4-Bromophenyl phenyl ether  |  |  |   | 0.15 1 < U  | 0.15 1 < U  | 0,33 1 < U  | 0,33 1 < U  |
| SEMIVOLATILES       4-Chloraniline       0.15       1       U       0.65       1       U       0.33       1       C       U       0.35       1       C       U       0.35       1       C       U       0.35       1       C       U       0.35   | SEMIVOLATILES  | 4-Chlora-3-methylphenol     |  |  |   | 0.15 1 < U  | 0.15 1 < U  | 0.65 1 < U  | 0.65 1 < U  |
| SEMIVOLATILES       4-Chiorophenyl phenyl ether       0.15       1       0       0.15       1       0       0.33       1       0 <td< td=""><td>SEMIVOLATILES</td><td>4-Chloroaniline</td><td></td><td></td><td></td><td>0.15 1 &lt; U</td><td>0.15 1 &lt; U</td><td>0.65 1 &lt; U</td><td>0.65 1 &lt; U</td></td<>  | SEMIVOLATILES  | 4-Chloroaniline             |  |  |   | 0.15 1 < U  | 0.15 1 < U  | 0.65 1 < U  | 0.65 1 < U  |
| SEMIVOLATILES       4-Methylphenol         SEMIVOLATILES       4-Mitroanikine         SEMIVOLATILES       Acenaphthylene         SEMIVOLATILES       Acenaphthylene         0.15       1         SEMIVOLATILES       Acenaphthylene         0.15       1         SEMIVOLATILES       Acenaphthylene         0.15       1         0.15       1       U       0.33       1       U       0.33       1       U   | SEMIVOLATILES  | 4-Chlorophenyl phenyl ether |  |  |   | 0.15 1 < U  | 0.15 1 < U  | 0.33 1 < U  | 0,33 1 < U  |
| SEMIVOLATILES       4-Nitroanikine       0.8 1 < U  | SEMIVOLATILES  | 4-Methylphenol              |  |  |   | 0.15 1 < U  | 0.15 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES         4-Nitrophenal         0.8         1         U         1.65         1         U         1.65         1         U         1.65         1         C         U         0.8         1         C         U         1.65         1         C         U         0.8         1         C         U         0.85         1         C         U         0.8         1         C         U         0.33         1         C         U         0.33 <th1< th="">         C</th1<>   | SEMIVOLATILES  | 4-Nitroaniline              |  |  |   | 0.8 1 < U   | 0.8 1 < U   | 1.65 1 < U  | 1.65 1 < U  |
| SEMIVOLATILES         Acenaphihene         0.15         1         U         0.33         1          U         0.33         1<   | SEMIVOLATILES  | 4-Nitrophenol               |  |  |   | 0.8 1 < U   | 0.8 1 < U   | 1.65 1 < U  | 1.65 1 < U  |
| SEMIVOLATILES Acenaphilylene 0.15 1 < U 0.33 1 < U 0.33 1 < U 0.33 1 < U  | SEMIVOLATILES  | Acenaphihene                |  |  |   | 0.15 1 < U  | 0,15 1 < U  | 0.33 1 < 0  | 0,33 1 < U  |
|   | SEMIVOLATILES  | Acenaphthylene              |  |  |   | 0.15 1 < U  | 0.15 1 < U  | 0.33 1 < U  | 0,33 1 < U  |

Data Eveluation Report

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



|                |   | Concentratio     | ns of Chemicals ir | Soil Samples As  | sociated with Su | mp 030           |                  |                  |
|----------------|---|------------------|--------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION CODE  |   | 35SUMP030-S801   | 35SUMP030-SB02     | 35SUMP031-SB01   | LH-S30-01        | LH-S30-01        | LH-S31-01        | LH-S31-01        |
| SAMPLE NO      |   | 35-SMP30-SB01-02 | 35-SMP30-SB02-02   | 35-SMP31-SB01-02 | LH-S30-01_1      | LH-S30-01_2      | LH-\$31-01_1     | LH-\$31-01_2     |
| SAMPLE DATE    |   | 9/9/2006         | 9/9/2006           | 9/12/2006        | 6/25/1993        | 6/25/1993        | 7/21/1993        | 7/21/1993        |
| DEPTH          |   | 3.5 - 4 Ft       | 4 - 4 Ft           | 3.5 - 4 Ft       | 0.5 - 2.5 FI     | 2.5 - 4.5 Ft     | 0.5 - 1 Ft       | 3 - 3.5 Ft       |
| SAMPLE PURPOSE |   | REG              | REG                | REG              | REG              | REG              | REG              | REG              |
| Test Group     | Parameter (Units = mo/ko)                 | Result DIL LO VO | Result DIL LO VO   | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO |
| SEMIVOLATILES  | Anthracene                                | 1                |                    |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES  | Benzo(a)anthracene                        |                  |                    |                  | 0,15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES  | Benzo(a)pyrene                            |                  |                    |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES  | Benzo(b)livoranihana                      |                  |                    |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES  | Benzo(ohi)perviene                        | ]                |                    |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES  | Benzo(k)/luoran/hene                      |                  |                    |                  | 0.15 1 < U       | 0,15 1 < U       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES  | Benzoic Acid                              |                  |                    |                  | 0,8 1 < U        | 0.8 1 < U        | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES  | Benzyl Alcohol                            |                  |                    |                  | 0.15 1 < U       | 0.15 1 < U       | 0.65 1 < U       | 0,65 1 < U       |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane                |                  |                    |                  | 0.15 1 < U       | 0,15 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES  | bis(2-Chloroelhyl)elher                   |                  |                    |                  | 0.15 1 < U       | 0.15 1 < U       | 0,33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES  | bis(2-Chlorolsopropyl)ether               |                  |                    |                  | 0.15 1 < U       | 0,15 1 < U       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES  | bis(2-Elhylhexyl)phthalale                | 1                |                    |                  | 11 < U           | 11 < U           | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES  | Butyl benzyl phihalale                    |                  |                    |                  | 0.15 1 < U       | 0.15 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES  | Carbazole                                 |                  |                    |                  | 0.15 1 < U       | 0.15 1 < U       | b 00 4 11        | 0.00 1 . 11      |
| SEMIVOLATILES  | Chrysene                                  | }                |                    |                  | 0.15 1 < 0       | 0.15 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES  | Dibenzo(a,h)anihracene                    | 1                |                    |                  | 0.15 1 < U       | 0,15 1 < 0       | 0.33 1 2 0       | 0.33 1 < 0       |
| SEMIVOLATILES  | Dibenzoluran                              |                  |                    |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < 0       |                  |
| SEMIVOLATILES  | Dielnyl phthalate                         |                  |                    |                  | 0.15 1 < U       | 0.15 1 < 0       |                  |                  |
| SEMIVOLATILES  | Dimethyl onthalate                        |                  |                    |                  | 0.15 1 < U       | 0.15 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES  | di-n-Butyl phihalate                      |                  |                    |                  | 0.15 1 < U       | 0,15 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES  | di-n-Octyl phihalate                      |                  |                    |                  | 0.15 1 < U       | 0.15 1 < 0       | 0.33 1 < 0       |                  |
| SEMIVOLATILES  | Fluoranihene                              |                  |                    |                  | 0.15 1 < 0       | 0,15 1 < 0       | 0.03 1 < U       | 0.00 1 < 11      |
| SEMIVOLATILES  | Fluorene                                  | 1                |                    |                  | 0.15 1 < U       | 0.15 1 < 0       | 0.33 1 < 0       |                  |
| SEMIVOLATILES  | Hexachlorobenzene                         |                  |                    |                  | 0.15 1 < U       | 0.15 1 < 0       | 0.33 1 < 0       | 0.33 1 < 11      |
| SEMIVOLATILES  | Hexachloroputadiene                       | 1                |                    |                  | 0.15 1 < 0       | 0.15 1 < 0       |                  | 0.33 1 < 11      |
| SEMIVOLATILES  | Hexachlorocyclopentadiene                 |                  |                    |                  | 0.15 1 < 0       | 0.15 1 < 0       | 0.33 1 4 1       | 0.33 1 4 11      |
| SEMIVOLATILES  | Hexachloroelhane                          |                  |                    |                  | 0.15 1 < 0       |                  | 0.33 1 4 11      | 0.33 1 < U       |
| SEMIVOLATILES  | indeno(1,2,3-cd)pyrene                    |                  |                    |                  | 0.15 1 < 0       |                  |                  | 0.33 1 4 U       |
| SEMIVOLATILES  | Isophorane                                |                  |                    |                  | 0.15 1 < 0       | 0.15 1 - 11      | 033 1 4 11       | 0.33 1 < U       |
| SEMIVOLATILES  | Naphthalene                               |                  |                    |                  |                  | 0.15 1 2 31      | 0.33 t < U       | 0.33 1 < U       |
| SEMIVOLATILES  | Nitrobenzene                              |                  |                    |                  | 0.15 1 4 1       | 015 1 4 1        | 0.33 t < U       | 0.33 1 < U       |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine                | }                |                    |                  |                  | 03 1 4 8         | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES  | n-Nitrosociphenyiamine                    |                  |                    |                  | 0.15 1 . < 1     | 015 1 < 0        | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES  | Penlachiorophenol                         |                  |                    |                  | 0.15 1 < 1       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES  | Phenaninirene                             |                  |                    |                  | 0.15 1 < 0       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES  | Phenoi                                    |                  |                    |                  | 0.15 1 < 0       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES  | Pytene                                    |                  |                    |                  | 0.005 1 < U      |
| VOLANLES       | 1,1,2,3 Tetrashlarashana                  |                  |                    |                  | 0.005 1 < U      |
| VOLATILES      | 1,1,2,2,7 retracrourgemente               |                  |                    |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES      | 1, r.z- monordenskie                      |                  |                    |                  | 0.005 1 < U      |
| VOLATILES      | 1.1 Dichloroethane                        |                  |                    |                  | 0.005 1 < U      |
| VOLATILES      | 1.2.Disbiorosibana                        |                  |                    |                  | 0.005 1 < U      |
| VOLATILES      | 1.2 Dishlarastana                         |                  |                    |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      |
| VOLATILES      | 1.2 Dishlerepresses                       |                  |                    |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | • 0,005 t < U    |
| VOLATILES      | 1.2-Distribution proprietation (n-Yulena) |                  |                    |                  | 0.005 1 < U      | 0.005 i < U      |                  |                  |
| VOLATILES      | 3-Bulancea                                |                  |                    |                  | 0.005 1 < U      | 0.005 1 < U      | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES      | anouranune<br>3. Chiaroathul vinul athar  |                  |                    |                  |                  |                  | 0.01 1 < U       | 0.01 1 < U       |
| VOLATIES       | 2-Mevanone                                |                  |                    |                  | 0.005 1 < U      | 0.005 1 < U      | 0.05 1 < U       | 0.05 1 < U       |
| VOLATIES       |   |                  |                    |                  | 0.01 1 < Ū       | 0.01 1           | 0.1 1 < U        | 0.1 1 < U        |
| VOLATIES       | Benzege                                   |                  |                    |                  | 0.005 1 < U      |
| VOLATILES      | Bromodichioromethane                      |                  |                    |                  | 0.005 1 < U      |
| VOLATILES      | Bromolorm                                 |                  |                    |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 i < U      |
| VOLATILES      | Bromornelhane                             |                  |                    |                  | 0.01 1 < U       |
|                |   | 1                |                    |                  |                  |                  |                  |                  |

Table 3-30

Data Evaluation Report

Chemical Concentrations In Soil Associated with LHAAP-35/35 Sumps

|                             |  | Concentration                      | ns of Chemicals i                  | n Soll Samples As                  | sociated with Sui          | πρυου                    |                          |                          |
|-----------------------------|--|------------------------------------|------------------------------------|------------------------------------|----------------------------|--------------------------|--------------------------|--------------------------|
| LOCATION _CODE<br>SAMPLE_NO |  | 355UMP030-5B01<br>35-SMP30-5B01-02 | 355UMP030-SB02<br>35-SMP30-SB02-02 | 35SUMP031-SB01<br>35-SMP31-SB01-02 | LH-\$30-01<br>LH-\$30-01_1 | LH-S30-01<br>LH-S30-01_2 | LH-S31-01<br>LH-S31-01_1 | LH-S31-01<br>LH-S31-01_2 |
| SAMPLE DATE                 |  | 9/9/2006                           | 9/9/2006                           | 9/12/2006                          | 6/25/1993                  | 6/25/1993                | 7/21/1993                | 7/21/1993                |
| DEPTH                       |  | 3.5 - 4 Ft                         | 4 - 4 Ft                           | 3.5 + 4 FI                         | 0.5 - 2.5 Ft               | 2.5 • 4.5 Ft             | 0.5 - 1 Ft               | 3 - 3.5 Ft               |
| SAMPLE PURPOSE              |  | REG                                | REG                                | REG                                | REG                        | REG                      | REG                      | REG                      |
| Test Group                  | Parameter (Units = mo/kg)              | Result Dil, LQ VQ                  | Result DIL LQ VQ                   | Result DIL LQ VQ                   | Result DIL LO VO           | Result DIL LO VQ         | Result DIL LO VO         | Result DIL LQ VQ         |
| VOLATILES                   | Carbon disulide                        |                                    |                                    |                                    | 0.005 1 < V                | 0.005 1 < U              | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                   | Carbon tetrachloride                   | l.                                 |                                    |                                    | 0.005 1 < U                | 0:00\$ 1 < U             | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                   | Chlorobenzene                          | 1                                  |                                    |                                    | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U              | 0.005 1 < U              |
| VOLATEES                    | Chloroethane                           |                                    |                                    |                                    | 0.01 1 < U                 | 0.01 1 < U               | 0,01 1 < U               | 0.01 1 < U               |
| VOLATILES                   | Chloroform                             |                                    |                                    |                                    | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U              | 0,005 1 < U              |
| VOLATILES                   | Chloromelhane                          |                                    |                                    |                                    | 0.01 1 < U                 | 0.01 1 < U               | 0.01 1 < U               | 0.01 1 < U               |
| VOLATILES                   | cis-12-Dichlorosthene                  |                                    |                                    |                                    | 0.005 1 < U                | 0.005 1 < U              |                          |                          |
| VOLATILES                   | cis-13-Dichloropropene                 |                                    |                                    |                                    | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U              | 0,005 1 < U              |
| VOLATILES                   | Ditromorbioromethane                   |                                    |                                    |                                    | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U              | 0,005 1 < U              |
| VOLATILES                   | Ethylhaozana                           |                                    |                                    |                                    | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                   | m o. Crasol                            |                                    |                                    |                                    | 0.15 1 < U                 | 0.15 1 < U               |                          |                          |
| VOLATILES                   | m a Vulaciat                           |                                    |                                    |                                    | 0.005 1 < U                | 0.005 1 < U              |                          |                          |
| VOLATILES                   | n,p-Ayienes<br>Maihai isahaini kalensa |                                    |                                    |                                    | 0.005 1 < U                | 0.005 1 < U              | 0,05 1 < U               | 0,05 1 < U               |
| VOLATILES                   | Metry ISODIY Kelbre                    |                                    |                                    |                                    | 0.01 1 < 1                 | 0.01 1 < U               | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                   | Melnylene chionale                     |                                    |                                    |                                    | 0.005 t < U                | 0.005 1 < U              | 0.005 1 < U              | 0.005 1 < U              |
| VOLARILES                   | Styrene                                | ļ                                  |                                    |                                    | 0.005 1 4 1                | 0.005 1 < U              | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                   | Tetrachloroethene                      |                                    |                                    |                                    | 0.005 1 < 1                | 0.005 1 < U              | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                   | Toluene                                |                                    |                                    |                                    | 0.005 1 < 11               | 0.005 1 < U              |                          |                          |
| VOLATILES                   | Irans-1,2-Dichloroethene               |                                    |                                    |                                    | 0.005 1 2 11               |                          | 0.005 1 🖌 🛙              | 0.005 t < U              |
| VOLATILES                   | trans-1,3-Dichloropropene              |                                    |                                    |                                    |                            | 0.005 1 - 1              | 0.005 1 - 11             | 0.005 1 2 11             |
| VOLATILES                   | Trichloroethene                        | }                                  |                                    |                                    | 0.005 1 < 0                | 0.005 1 < 0              | 0.05 1 4 11              | 0.05 1 < 11              |
| VOLATILES                   | Vinyl acetate                          |                                    |                                    |                                    | 0.005 1 < 0                | 0.000 i < U              |                          |                          |
| VOLATILES                   | Vinyl chloride                         |                                    |                                    |                                    | 0.01 1 < U                 |                          |                          |                          |
|                             | Million Total                          |                                    |                                    |                                    | 0005 1 < U                 | 0.005 1 < 0              | 0.003 I < V              | 0.000 1 < 0              |

Table 3-30

VOLATILES Xylenes, Total Footnotes are shown on cover page to Tables Section. Shaw Environmental, Inc. 00066014



| Table 3-31   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 031 |

| (SUMP) = SUMP031   |                             |         |          |      |        |          |    |          |         |       |   |          |        |      |    |        |        |    |         |          |          |     |         |           |                |          |        |
|--------------------|-----------------------------|---------|----------|------|--------|----------|----|----------|---------|-------|---|----------|--------|------|----|--------|--------|----|---------|----------|----------|-----|---------|-----------|----------------|----------|--------|
| LOCATION CODE      |                             | 35SUM   | IP030-SI | 301  | 35SUM  | P030-SB0 | 2  | 35SUMF   | 2031-   | SB01  |   | LH       | 4-830- | -01  |    | LH     | -530-0 | 1  |         | LH       | -531-0   | 01  |         | LH-S      | <b>331-0</b> 1 |          |        |
| SAMPLE NO          |                             | 35-SME  | 30-SB0   | 1-02 | 35-SMP | 30-SB02- | 02 | 35-SMP3  | 31-SB   | 01-02 |   | LH-      | S30-0  | 11   |    | LH-S   | 530-01 | 2  |         | LH-S     | 531-01   | 1_1 |         | LH-S.     | 31-01_         | 2        |        |
| SAMPLE DATE        |                             | 90.00   | 9/2006   |      | 9/     | 9/20/16  |    | 9/1      | 2/2006  | 5     |   | 6/       | 25/19  | 93   |    | 6/2    | 25/199 | 3  |         | 7/       | 21/199   | 3   |         | 7/21      | /1993          |          |        |
| DEPTH              |                             | ž       | 5.4Ft    |      | 4      | - 4 Ft   |    | 3.5      | . 4 FI  |       |   | 5        | . 2.5  | FI   |    | 2.5    | 4.5    |    |         |          | 5 - 1 FI | t   |         | 3.        | 3.5 Ft         |          |        |
|                    |                             | 0.      | REG      |      | -      | REG      |    | F        | REG     | •     |   |          | REG    |      |    |        | REG    |    |         |          | REG      |     |         | F         | EG             |          |        |
| Test Group         | Parameter / Inits - molko)  | Result  |          | ov c | Result |          | vo | Result D | 20      | 10 V  | 0 | Besult i | 메      | ιa   | vo | Result | DIL    | ιÓ | VQ      | Result D | ιυ       | a v | O.      | Result Di | ιια            | a ve     | 0      |
| EVOLOSIVES         | 2 & Dinitrotoluege          | 110,101 |          |      |        |          |    |          |         |       |   | 0.15     | 1      | ~~~~ | U  | 0.15   | 1      | <  | U       | 0.33     | 1        | ۲.  | U       | 0.33      | 1              | ۲.       | Ū      |
| EVPLOSIVES         | 2.6-Dinificiolucity         |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | ć    | ū  | 0.15   | 1      | <  | U       | 0.33     | 1        | <   | υ       | 0.33      | 1 .            | <        | U      |
| METALS             | Aluminum                    | 12000   | 4        |      | 28800  | ĩ        |    | 19500    | 1       |       |   | 9890     | 1      |      | •  | 31600  | 1      |    |         | 6620     | 1        |     |         | 17300     | \$             |          |        |
| METRES             | Antimany                    | 0 112   |          | ;    | A 12   |          |    | 0 113    | 1       | 11    |   | 15.7     | 1      |      |    | 13.2   | 1      |    |         | 7        | 1        |     |         | Э         | 1              | <        | U      |
| METRED             | Arenaia                     | 2.66    | 1        |      | 1.5    | 1 0      |    | 3 03     | 1       | 0     |   | ,        |        |      |    | 36     | i      |    |         | 3.8      | i        |     |         | 1.7       | 1              |          |        |
| METALS             | Alseite.<br>Barium          | 420     | 4        |      | 121    | 1        |    | 78 1     | •       |       |   | 70.5     | í      |      |    | 111    | 1      |    |         | B2.7     | 1        | ٠   | Ð       | 72        | 1              | <        | υ      |
| METALO             | Bandhum                     | n 538   | ł        |      | 0 770  | 1        |    | 0.631    | i       |       |   | / 0.0    | •      |      |    |        |        |    |         |          |          |     | •       | -         |                |          | -      |
| NETALO             | Cadelus                     | 0.020   | ÷        |      | 0 120  | 1 .1     | .1 | 0.001    | '.<br>t | з     | 3 | 1        | 1      |      | п  | 1.9    | 1      |    |         | 1        | 1        | <   | υ       | 1         | 1              | <        | U      |
| MG FALO<br>NETAL C | Calation                    | 0.030   | 4        | 1    | 320    |          |    | 281      |         | 5     | 4 | 1440     | ÷      | •    | v  | A10    | ÷      |    |         | 545      | 1        | •   | •       | 274       | ÷              |          | •      |
| METALD             | Characteria                 | 100     | -        | J    | 216    | •        | ŭ  | 10 5     |         |       |   | 12.0     |        |      |    | 25.7   | ÷      |    |         | 11.3     | 1        |     | 11      | 12.3      | 1              | ~        | U.     |
| METALO             | Cabali                      | 100     | -        | ,    | 5.03   |          |    | 2 51     |         |       |   | 12.0     | 1      |      |    | 3.4    | 1      |    |         | 49       | ì        |     | -       | 3.4       | 1              |          | -      |
| METALS             | Copan                       | 2,30    |          | 4    | 4.94   |          |    | 4.75     |         |       |   | 3.0      | 4      |      |    | 8.2    |        |    |         | 4        | i        |     |         | 5         | i              |          |        |
| METALS             | Copper                      | 10.5    | 1        |      | 4,34   |          |    | 9,70     | 4       |       |   | 4640     | ÷      |      |    | 27600  | ÷      |    |         | 16500    | i        |     |         | 14800     | í              |          |        |
| METALS             | nou                         | 28100   |          |      | 20000  |          |    | 10.0     |         |       |   | 67       | ÷      |      |    | 10.4   | \$     |    |         | 10.00    | ÷        |     |         | 86        | ÷              |          |        |
| METALS             | Lead                        | 11.7    | 1        | J    | 9.9    |          | J  | 10.3     | 1       |       |   | 1000     |        |      |    | 10.4   |        |    |         | 403      | ÷        |     |         | 0.0       | ÷              |          |        |
| METALS             | Magnesium                   | 737     | 1        |      | 1290   | 1        |    | 915      | 1       |       |   | 1290     | -      |      |    | 100    | 4      |    |         | 402      | 1        |     |         | 21.9      | 1              |          |        |
| METALS             | Manganese                   | 138     | 2        |      | 23.4   | 1        |    | 29.2     | 1       |       |   | 267      | 2      |      | 'n | 40.2   | -      |    |         | 2/3      | ;        |     |         | ¢1.0      | 1              |          | 11     |
| METALS             | Mercury                     | 0.0351  | 1,       | łJ   | 0.105  | 1 J      | J  | 0,0197   | 1       | J     | 2 | - U, I   | '      | <    | Ų  | Q.1    | '      | <  | 0       | 0.1      |          | e.  | v       | V.1       | F.             | `        | Ŷ      |
| METALS             | Ničkel                      | 7.42    | 1        |      | 8.38   | 1        |    | 5.2      | 1       |       |   |          |        |      |    | 1070   |        |    |         | 405      |          |     |         | 607       |                |          |        |
| METALS             | Polassium                   | 490     | 1        |      | 635    | 1        |    | 446      | 1       |       |   | 1830     | 1      |      |    | 10/0   | 1      |    |         | 385      | 1        |     |         | 03/       |                |          |        |
| METALS             | Selenium                    | 0.245   | 1        |      | 0,185  | 1 J      | 1  | 0,513    | 1       |       |   | 1        | 1      | <    | U  | 1      | 1      | <  | U<br>Li |          | 1        | ٢.  | ч<br>11 |           | 1              | \$       | u u    |
| METALS             | Silver                      | 1.72    | 1 1      | }    | 1.84   | 1 0      |    | 1,61     | 1       | U     |   | 1        | ;      | <    | U  | 1      | 1      | <  | U       | 1        | 1        | <   | u       |           | 1              | <        | U      |
| METALS             | Sodium                      | · 65    | 1        |      | 329    | 1        |    | 158      | 1       |       |   |          |        |      |    |        |        |    |         |          |          |     |         | 10.0      |                |          |        |
| METALS             | Strontium                   |         |          |      |        |          |    |          |         |       |   | 3.5      | 1      |      |    | 10.1   | 1      |    |         | 7.1      | 1        |     |         | 10.8      | 1              |          |        |
| METALS             | Thallium                    | 0.069   | 1        |      | 0.127  | 1        |    | 0.18     | 1       |       |   |          |        |      |    |        |        |    |         |          |          |     |         |           |                |          |        |
| METALS             | Vanadium                    | 48      | 1        |      | 40     | 1        |    | 41,7     | t       |       |   |          |        | ·    |    |        |        |    |         |          |          |     |         |           |                |          |        |
| METALS             | Zinc                        | 31,7    | 1        |      | 30.1   | 1        |    | 18.7     | 1       |       |   | 11,7     | 1      |      |    | 35     | 1      |    |         | 14       | 1        |     |         | 21.9      | ;              |          |        |
| SEMIVOLATILES      | 1,2,4-Trichlorobenzene      |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | ۲    | 0  | 0,15   | 1      | 4  |         | 0.33     | 1        | <   | U<br>11 | 0.33      | -              | •        | 0      |
| SEMIVOLATILES      | 1,2-Dichlorobenzene         |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | ۲    | 0  | 0.15   | 1      | ۲  | u<br>   | 0.33     | 1        | <   | ц<br>Ъ. | 0.30      | 1              | <u>ڊ</u> |        |
| SEMIVOLATILES      | 1,3-Dichlarøbenzene         |         |          |      |        |          |    |          |         |       |   | 0.15     | }      | <    | 0  | 0,15   | 1      | <  | U<br>   | 0.33     | 1        | <   | ų<br>,, | 0,33      |                | •        |        |
| SEMIVOLATILES      | 1.4-Dichlorobanzene         |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | U  | 0.15   | 1      | <  |         | 0.33     | 1        | <   |         | 0.33      | 1              | <        |        |
| SEMIVOLATILES      | 2,4,5-Trichlorophenol       |         |          |      |        |          |    |          |         |       |   | 8.0      | 1      | <    | U  | Q.8    | 1      | <  |         | 1,65     | 1        | <   |         | 1.55      | 1              | <        | U      |
| SEMIVOLATILES      | 2,4,6-Trichlorophenol       |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | U  | 0.15   | 1      | <  | 0       | 0.33     | 1        | ۲   |         | 0.33      | 1              | <        | u      |
| SEMIVOLATILES      | 2,4-Dichlorophenol          |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | U  | 0.15   | 1      | <  | U       | 0.33     | 1        | <   | Ů.      | 0.33      | 1              | <        | U<br>L |
| SEMIVOLATILES      | 2,4-Dimethylphenol          |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | ų  | 0.15   | 1      | <  | 0       | 0.33     | 1        | ۲   |         | 0.33      | •              | <        |        |
| SEMIVOLATILES      | 2,4-Dinitrophenol           |         |          |      |        |          |    |          |         |       |   | 8.0      | 1      | 4    | บ  | 8.0    | 1      | <  | 0       | 1.65     | 1        | <   | 0       | 1.05      | 1              | <        |        |
| SEMIVOLATILES      | 2-Chloronaphthalene         |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | 0  | 0,15   | 1      | <  | U       | 0.33     | 1        | <   | ų.      | 0.33      |                | <        | 0      |
| SEMIVOLATILES      | 2-Chlorophenol              |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | U  | 0.15   | 1      | <  | U       | 0.33     | 1        | <   | U       | 0.33      | 1              | <        | ų<br>u |
| SEMIVOLATILES      | 2-Mathyinaphihalene         |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | U  | 0,15   | 1      | <  | U       | 0.33     | 1        | ۲   | U<br>   | 0.33      | 1              | <        | 0      |
| SEMIVOLATILES      | 2-Methylphenöl              |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | U  | 0.15   | 1      | <  | 0       | 0.33     | 1        | <   | 0       | 0.33      | 1              | <        | 0      |
| SEMIVOLATILES      | 2-Nitroaniline              |         |          |      |        |          |    |          |         |       |   | 0.8      | 1      | <    | U  | 0.8    | 1      | <  | U       | 1.65     | 1        | <   | U       | 1.65      | 1              | <        | 0      |
| SEMIVOLATILES      | 2-Nitrophenol               |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | U  | 0.15   | 1      | ۲  | U       | 0.33     | 1        | <   | U.      | 0.33      | 1              | ~        | U.     |
| SEMIVOLATILES      | 3,3'-Dichlorobenzidine      |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | U  | 0.15   | 1      | <  | υ       | 0.65     | 1        | <   | U       | 0,65      | 1              | <        | U      |
| SEMIVOLATILES      | 3-Nitroanitine              | }       |          |      |        |          |    |          |         |       |   | 0.8      | 1      | <    | U  | 0.8    | 1      | <  | U       | 1.65     | 1        | ۲   | U       | 1.65      | 1              | <        | U      |
| SEMIVOLATILES      | 4.6-Dinitro-2-methylphenol  | 1       |          |      |        |          |    |          |         |       |   | 0.8      | 1      | <    | Ų  | 0.8    | 1      | ۲  | U       | 1.65     | 1        | <   | U       | 1.65      | 1              | ۲        | Ų.     |
| SEMIVOLATILES      | 4-Bromophenyl phenyl ether  |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | U  | 0.15   | 1      | ۲  | Ų       | 0.33     | 1        | ۲   | U       | 0,33      | 1              | <        | U      |
| SEMIVOLATILES      | 4-Chioro-3-methylphenol     |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | U  | 0.15   | 1      | ۲  | U       | 0.65     | 1        | <   | Ų       | 0.65      | 1              | <        | U      |
| SEMIVOLATILES      | 4-Chloroaniline             |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | Ų  | 0.15   | 1      | <  | U       | 0.65     | 1        | ۲   | U       | 0.65      | 1              | <        | U      |
| SEMIVOLATILES      | 4-Chlorophenyl phenyl ether |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | ٠    | U  | 0,15   | 1      | <  | U       | 0.33     | 1        | <   | U       | 0.33      | 1              | <        | υ      |
| SEMIVOLATILES      | 4-Methylphenol              |         |          |      |        |          |    |          |         |       |   | 0.15     | 1      | <    | U  | 0.15   | 1      | <  | U       | 0.33     | 1        | <   | U       | 0.33      | 1              | 4        | Ų      |
| SEMIVOLATILES      | 4-Nitroaniline              |         |          |      |        |          |    |          |         |       |   | 8.0      | 1      | <    | U  | 8.0    | 1      | <  | U       | 1.65     | 1        | <   | U       | 1.65      | 1              | <        | U      |
| SEMIVOLATILES      | 4-Nitrophenol               |         |          |      |        |          |    |          |         |       |   | 6.8      | 1      | ۲    | U  | 8.0    | 1      | <  | U       | 1,65     | 1        | <   | U       | 1.65      | 1              | ۲        | U      |
|                    |                             |         |          |      |        |          |    |          |         |       |   |          |        |      |    |        |        |    |         |          |          |     |         |           |                |          |        |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-31  |       |
|---|-------|
| Concentrations of Chemicals in Soil Samples Associated with Sum | p 031 |

| [SUMP] = SUMP031 |                                |                                       |                  |                  |            |          |       |              |             |          |          |             |          |          |             |          |
|------------------|--------------------------------|---------------------------------------|------------------|------------------|------------|----------|-------|--------------|-------------|----------|----------|-------------|----------|----------|-------------|----------|
| LOCATION _CODE   |                                | 35SUMP030-SB01                        | 35SUMP030-SB02   | 35SUMP031-SB01   | LH-S       | 30-01    |       | LH-S30-0     | f           | 0        | I-S31-01 |             | CH-3     | 531-01   |             |          |
| SAMPLE_NO        | · · ·                          | 35-SMP30-SB01-02                      | 35-SMP30-SB02-02 | 35-SMP31-SB01-02 | LH-\$3     | 0-01_1   |       | LH-\$30-01   | _2          | LΗ-      | S31-01_  | 1           | LH-S     | 31-01_   | 2           |          |
| SAMPLE_DATE      |                                | 9/9/2006                              | 9/9/2006         | 9/12/2006        | 6/25       | /1993    |       | 6/25/1993    | 1           | 7/       | 21/1993  |             | 7/2      | 1/1993   |             |          |
| DEPTH            |                                | 3.5 - 4 Ft                            | 4 · 4 FI         | 3.5 - 4 Ft       | .5 •       | 2.5 Ft   |       | 2.5 - 4.5 F  | 3           |          | 5 - 1 FI |             | 3.       | 3.5 FI   |             |          |
| SAMPLE PURPOSE   |                                | REG                                   | REG              | <b>REG</b>       | R          | ξG       |       | REG          |             |          | REG      |             | F        | ₹EG      |             |          |
| Test Group       | Paramater (Units = mo/kg)      | Result DIL LO VO                      | Result DIL LO VO | Result DIL LQ VO | Result Dil | L LO     | ٧Q    | Result DIL I | LQ VQ       | Result D | HL LQ    | VQ          | Result D | A LC     | V(          | 3        |
| SEMIVOLATILES    | Acenaphthene                   | · · · · · · · · · · · · · · · · · · · |                  |                  | 0.15 1     | <        | U     | 0.15 1       | e U         | 0.33     | 1 <      | U           | 0.33     | 1        | <           | Û        |
| SEMIVOLATILES    | Acenaphthylene                 |                                       |                  |                  | 0.15 1     | <        | U     | 0.15 1       | < U         | 0.33     | 1 <      | . U         | 0.33     | 1        | ا >         | U        |
| SEMINOLATILES    | Anthracene                     |                                       |                  |                  | 0,15 1     | <        | U     | 0.15 1       | < U         | 0.33     | 1 <      | υ           | 0,33     | 1 -      | < 1         | U        |
| SEMINOLATIO ES   | Benzo/s)anibracena             |                                       |                  |                  | 0.15 1     | <        | Ŭ     | 0.15 1       | < U         | 0.33     | 1 <      | U           | 0.33     | 1        | <           | υ        |
| SEMIVOLATILES    | Bento(a)ovrene                 |                                       |                  |                  | 0.15 1     | ×.       | Ū     | 0.15 1       | ح U         | 0.33     | 1 <      | Ų           | 0.33     | 1        | د :         | U        |
| SENIVOLATILES    | Benze/b)Ruorapibono            |                                       |                  |                  | 0.15 1     | ż        | ŭ     | 0.15 1       | < U         | 0.33     | 1 <      | U           | 0.33     | 1        | <           | U        |
| SEMIVOLATILES    | Benze (ebitectulene            |                                       |                  |                  | 0.15 1     | è        | ů     | 0.15 1       | ς Ŭ         | 0.33     | 1 <      | U           | 0.33     | 1        | <           | U        |
| SEMIVOLATILES    | Benzo((difueranthene           | }                                     |                  |                  | 015 1      | ż        | 11    | 0.15 1       | < U         | 0.33     | 1 4      | : U         | 0.33     | 1        | <           | U        |
| SEMIVOLATILES    | Benzolkjilooranniene           |                                       |                  |                  | 08 1       |          | ŭ     | 08 1         | e U         | 1.65     | 1 <      | : 0         | 1.65     | 1        | <           | υ        |
| SEMIVOLATILES    | Benzaic Acia                   |                                       |                  |                  | 0.15 1     | Ì        | ň     | 0.15 1       | - 11        | 0.65     | 1        | u u         | 0.65     | 1        | <           | U        |
| SEMIVOLATILES    | Benzyi Alconol                 |                                       |                  |                  | 0.15 1     | Ĵ        | ű     | 0.15 1       | - 0         | 0.33     | 1        | , D         | 0.33     | 1        | <           | ü        |
| SEMIVOLATILES    | bis(2-Unioroeinoxy)meinane     |                                       |                  |                  | 0.15 1     | 2        |       | 0.15 1       | 2 11        | 0.33     | 1        | - U         | 0.33     | 1        | ć           | u –      |
| SEMIVOLATILES    | bis(2-Chloroeinyi)einer        |                                       |                  |                  | 0,10 1     | 5        |       | 0.15 1       | ~ 11        | 0.33     | i .      | , v         | 0.33     | 1        | è           | -<br>Ц   |
| SEMIVOLATILES    | bis(2-Chloroisopropyi)einer    |                                       |                  |                  | 0,15 1     | 2        | 12    | 0,13 1       | - 11        | 0.33     | ì        | , i         | 0.33     | 1        | Ż           | Ū.       |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate     |                                       |                  |                  |            | ٩        |       | A15 1        | ς μ.<br>- Η | 0.00     | i i      |             | 0.00     | 1        | 2           | ñ        |
| SEMIVOLATILES    | Bulyi benzyi phihalate         |                                       |                  |                  | 0,15       | ۲        |       | 0.10 1       | - U         | 0.35     |          |             | 0.00     |          | •           | Ŭ.       |
| SEMIVOLATILES    | Carbazole                      |                                       |                  |                  | 0.15 1     | <        |       | 0.15 1       | < V         | 0.22     |          |             | 0.22     |          |             | н        |
| SEMIVOLATILES    | Chrysene                       |                                       |                  |                  | 0.15 1     | <        |       | 0.15 1       | < 0         | 0.33     |          | : U         | 0.23     | 1        |             | Ч<br>Н   |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene         |                                       |                  |                  | 0.15 1     | <        | Ų     | 0.15 1       | < 0         | 0.33     |          | : V         | 0.00     | с<br>- с | ۰.          | 0        |
| SEMIVOLATILES    | Dibenzoluran                   |                                       |                  |                  | 0.15 1     | <        | U     | 0.15 1       | < U         | 0.33     | 1 4      | * U         | 0.33     | 1        | <           | 0        |
| SEMIVOLATILES    | Diethyl phthalate              |                                       |                  |                  | 0.15 1     | <        | U     | 0.15 1       | < ۲<br>     | 0.33     | 1 1      | ε Ο<br>     | 0.33     | 1        | <           | 0        |
| SEMIVOLATILES    | Dimethyl phthalate             |                                       |                  |                  | 0.15 1     | < <      | U     | 0.15 1       | < 0         | 0,33     | 1 4      | . 0         | 0,33     | 1        | <           | 0        |
| SEMIVOLATILES    | di-n-Butyl phthalate           |                                       |                  |                  | 0,15 1     | i <      | U     | 0.15 1       | < U         | 0.33     | 1 •      | د U         | 0.33     | 1        | <           | 0        |
| SEMIVOLATILES    | dl-n-Oclyl phthalate           |                                       |                  |                  | 0,15 1     | <        | U     | 0.15 1       | < 0         | 0,33     | 1 •      | 4 U         | 0.33     | 1        | <           | U        |
| SEMIVOLATILES    | Fluoranthene                   | }                                     |                  |                  | 0.15 1     | < <      | U     | 0.15 1       | < U         | 0,33     | 1 •      | × ۹         | 0.33     | 1        | <           | U        |
| SEMIVOLATILES    | Fluorene                       |                                       |                  |                  | 0.15       | < <      | ប     | 0.15 1       | < U         | 0.33     | 1 .      | e U         | 0.33     | 1        | <           | U        |
| SEMIVOLATILES    | Hexachlorobenzene              |                                       |                  |                  | 0.15 1     | × ۱      | U     | 0.15 1       | < U         | 0.33     | 1 .      | < U         | 0.33     | 1        | <           | U        |
| SEMIVOLATILES    | Hexachlorobuladiene            |                                       |                  |                  | 0.15 1     | > ۱      | Ų     | 0.15 1       | < V         | 0.33     | 1 .      | < U         | 0.33     | 1        | <           | U        |
| SEMIVOLATILES    | Hexachlorocyclopentadiene      |                                       |                  |                  | 0,15 1     | <        | Ų     | 0,15 1       | < U         | 0.33     | 1.       | د Ų         | 0.33     | 1        | ۲           | U        |
| SEMIVOLATILES    | Hexachloroelhane               |                                       |                  |                  | 0.15 1     | > ۱      | U     | 0.15 1       | < U         | 0.33     | 1        | < U         | 0.33     | 1        | <           | U        |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrane         |                                       |                  |                  | 0.15       | > ا      | U     | 0.15 1       | < U         | 0.33     | 1 -      | < U         | 0.33     | 1        | <           | U        |
| SEMIVOLATILES    | Isophorone                     |                                       |                  |                  | 0.15       | ۲ (      | υ     | 0.15 1       | < U         | 0.33     | 1 -      | < U         | 0.33     | 1        | <           | U        |
| SEMIVOLATILES    | Naphthalene                    |                                       |                  |                  | 0.15       | 1 <      | U ·   | 0.15 1       | < U         | 0.33     | 1        | < Ų         | 0.33     | 1        | <b>&lt;</b> | U        |
| SEMIVOLATILES    | Nitrobepzene                   |                                       |                  |                  | 0.15       | ۲ (      | U     | 0.15 1       | < U         | 0.33     | 1        | < Ų         | 0.33     | 1        | <           | U        |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine     |                                       |                  |                  | 0.15       | 1 <      | U     | 0.15 1       | < Ü         | 0.33     | 1        | < U         | 0.33     | 1        | <           | U        |
| SEMIVOLATILES    | n-Nitrosodiobenvlamine         |                                       |                  |                  | 0.3        | 1 <      | υ     | 0.3 1        | < U         | 0.33     | 1        | < U         | 0.33     | 1        | <           | υ        |
| SEMIVOLATILES    | Pentachlorophenol              |                                       |                  |                  | 0,15       | 1 <      | U     | 0.15 1       | < U         | 1.65     | 1        | < U         | 1.65     | 1        | <           | υ        |
| SEMINOLATILES    | Phananthrana                   |                                       |                  |                  | 0.15       | 1 <      | U     | 0.15 1       | < U         | 0.33     | 1 .      | ۷Ų          | 0.33     | 1        | <           | U        |
| SEMINOLATILES    | Phanol                         | · · · · ·                             |                  |                  | 0.15       | 1 <      | Ú     | 0.15 1       | < U         | 0,33     | 1        | ۷V          | 0.33     | 1        | ۲           | u        |
| CELINIOLATILEC   | Burana                         |                                       |                  |                  | 0.15       | 1 e      | 11    | 0.15 1       | < U         | 0.33     | 1 .      | < U         | 0.33     | 1        | <           | Ų        |
| VOLATILES        | 1 1 5 Trichloroothane          |                                       |                  |                  | 0.005      | 1 2      | ŭ     | 0.005 1      | e U         | 0.005    | 1        | < Ü         | 0.005    | 1        | ۲           | Û.       |
| VOLANLES         | 1, 1, P Trichordenade          | İ                                     |                  |                  | 0.005      | 1        | ŭ     | 0.005 1      | e U         | 0.005    | 1.       | < U         | 0.005    | í        | <           | Ú.       |
| VOLATILES        |                                |                                       |                  |                  | 0.005      |          | ŭ     | 0.005 1      | 2 11        | 0.005    | ť        | 2 11        | 0.005    | i        | é           | ŭ        |
| VOLATILES        | 1,1,2- I richloroeinane        |                                       |                  |                  | 0.005      |          |       | 0.005 1      | - 11        | 0.005    | ÷        | 2 11        | 0.005    | ÷        | Ż           | ŭ        |
| VOLATILES        | 1,1-Dichloroelhane             |                                       |                  |                  | 0.005      | 1 5      | ű     | 0.000 1      |             | 0.000    | ÷        | 2 11        | 0.005    | -        | 2           | ÷.       |
| VOLATILES        | 1,1-Dichloroelhene             |                                       |                  |                  | 0.005      |          |       | 0.005 1      | - U         | 0.005    |          |             | 0.000    | ł        | 2           | 13       |
| VOLATILES        | 1,2-Dichloroethane             |                                       |                  |                  | 0.005      | , ∢<br>, | U<br> | 0.005 1      | < U         | 0.003    | -        | - V<br>- II | 0.003    | •        | 2           | <b>v</b> |
| VOLATILES        | 1,2-Dichloroethene             | ł                                     |                  |                  | 0.005      | 1 <      | U<br> | 0.005 1      | < U         | 0.005    | -        | - U         | 0.005    | •        | 5           | и<br>Н   |
| VOLATILES        | 1,2-Dichloropropane            | Ì                                     |                  |                  | 0.005      | 1 <      | ¥     | 0.005 1      | < U         | 0.005    | 1        | < U         | 0.000    | ,        | ٢           | J        |
| VOLATILES        | 1.2-Dimethylbenzene (o-Xylene) |                                       |                  |                  | 0.005      | <u>۲</u> | U     | 0,005 1      | < U         |          |          |             | 0.07     |          |             |          |
| VOLATILES        | 2-Butanone                     |                                       |                  |                  | 0.005      | 1 <      | U     | 0.005 1      | < U         | 0.05     | 1        | < 0         | 0.05     | 1        | <           |          |
| VOLATILES        | 2-Chloroethyl vinyl ether      |                                       |                  |                  |            |          |       |              |             | 0.01     | 1        | < V         | 0.01     | 1        | <           | U        |
| VOLATILES        | 2-Hexanone                     |                                       |                  |                  | 0.005      | 1 <      | U     | 0.005 1      | < U         | 0.05     | 1        | < Ų         | 0.05     | 1        | ۲           | u        |
|                  |                                |                                       |                  |                  |            |          |       |              |             |          |          |             |          |          |             |          |



| Table 3-31   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 031 |

| (SUMP) = SUMP031         |                           |        |          |       |      |          |       |    |            |        |    |        |        |         |    |        |        |     |    |        |              |      |    |        |         |    |    |
|--------------------------|---------------------------|--------|----------|-------|------|----------|-------|----|------------|--------|----|--------|--------|---------|----|--------|--------|-----|----|--------|--------------|------|----|--------|---------|----|----|
| LOCATION CODE            |                           | 3550   | MP030-5  | SBOI  | 355  | UMP030-  | SB02  |    | 355UMP0    | 31-SB0 | 1  | 1      | H-\$3( | 0-01    |    | U      | H-S30- | -01 |    |        | H-S31        | -01  |    | u      | 4-531-/ | 10 |    |
| SAMPLE NO                |                           | 35-Sk  | (P30-S8) | 01-02 | 35-5 | MP30-SB  | 02-02 |    | 35-SMP31   | -SB01- |    |        | H-530- | 01 1    |    | LH     | -530-0 | 1 2 |    | Li Li  | 1-531-       | 51.1 |    | LH     | -S31-0  | 12 |    |
| SAMPLE DATE              |                           | 00 0.0 | 9/9/2006 |       |      | 9/9/2006 | ~~ ~~ |    | 9/12/      | 2006   | ~  | ĩ      | 6/25/1 | 993     |    | 6      | /25/19 | 93  |    | -      | 7/21/19      | 193  |    | 7      | /21/195 | 10 |    |
| OEPTH                    |                           |        | 15-4F)   |       |      | 4 4 Ft   |       |    | 35.        | 4 51   |    |        | 5.25   | 151     |    | 2      | 5-45   | FI  |    |        | 5-1          | Ft   |    |        | - 3.5 F | ÷t |    |
| SAMPLE PURPOSE           |                           |        | REG      |       |      | REG      |       |    | BF         | G      |    |        | BE     |         |    | -      | BEG    |     |    |        | BEG          | 1    |    |        | REG     | -  |    |
| Test Group               | Parameter (Units = mo/kg) | Result | DILLI    | ο νο  | Besu | N DIL    | LO V  | 'n | Result Dil | ີເດ    | vo | Result | DIL    | -<br>LO | vo | Result | DiL    | LO  | vo | Result | DIL          | La   | vo | Result | DIL     | 0  | vo |
| VOLATILES                | Acetone                   |        |          |       |      |          |       |    |            |        |    | 0.01   | 1      | ~       | U  | 0.01   | 1      |     |    | 0.1    | 1            | <    | U  | 0.1    | 1       | <  | U  |
| VOLATILES                | Senzene                   |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | U  | 0.005  | 1      | <   | U  | 0.005  | 1            | ۲    | U  | 0.005  | í       | <  | U  |
| VOLATILES                | Bramodichloromelhane      |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | U  | 0.005  | 1      | <   | U  | 0.005  | 1            | <    | υ  | 0.005  | 1       | <  | U  |
| VOLATILES                | Bromoform                 |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | Ū  | 0.005  | 1      | <   | U  | 0.005  | 1            | <    | U  | 0.005  | 1       | <  | U  |
| VOLATILES                | Bromomethane              |        |          |       |      |          |       |    |            |        |    | 0.01   | 1      | ×       | υ  | 0.01   | 1      | <   | U  | 0.01   | 1            | <    | υ  | 0.01   | 1       | ۲  | U  |
| VOLATILES                | Carbon disullide          |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | υ  | 0.005  | 1      | ~   | υ  | 0.005  | 1            | <    | U  | 0.005  | 1       | <  | U  |
| VOLATILES                | Carbon tetrachloride      |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | Ú  | 0.005  | ١      | <   | U  | 0.005  | 1            | <    | Ū. | 0.005  | .1      | ۲  | U  |
| VOLATILES                | Chlorobenzene             |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | U  | 0.005  | 1      | ح   | U  | 0.005  | 1            | <    | U  | 0.005  | 1       | <  | U  |
| VOLATILES                | Chloroethane              |        |          |       |      |          |       |    |            |        |    | 0.01   | 1      | <       | U  | 0.01   | 1      | <   | U  | 0.01   | 1            | <    | υ  | 0.01   | 1       | <  | U  |
| VOLATILES                | Chloraform                | }      |          |       |      |          |       |    |            |        |    | 0,005  | 1      | ٠       | υ  | 0.005  | 1      | <   | U  | 0.005  | 1            | <    | Ų  | 0.005  | 1       | <  | U  |
| VOLATILES                | Chloromethana             | 1      |          |       |      |          |       |    |            |        |    | 0.01   | 1      | <       | U  | 0.01   | 1      | ح   | U  | 0.01   | 1            | ۲    | U  | 0.01   | 1       | <  | U  |
| VOLATILES                | cis-1,2-Dichloroethene    | ł      |          |       |      |          |       |    |            |        |    | 0.005  | 1      | ۲       | U  | 0.005  | 1      | <   | U  |        |              |      |    |        |         |    |    |
| VOLATILES                | cis 1.3-Dichloropropene   | İ.     |          |       |      |          |       |    |            |        |    | 0.005  | ٢      | <       | U  | 0.005  | 1      | e e | U  | 0.005  | 1            | <    | U  | 0.005  | í       | <  | U  |
| VOLATILES                | Dibromochloromethane      |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | ម  | 0.005  | 1      | <   | IJ | 0.005  | 1            | <    | U  | 0.005  | 1       | <  | Ų  |
| VOLATILES                | Ethvibenzene              |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | U  | 0.005  | 1      | ۲.  | U  | 0.005  | 1            | <    | U  | 0.005  | 1       | <  | U  |
| VOLATILES                | m.p-Gresol                |        |          |       |      |          |       |    |            |        |    | 0.15   | 1      | <       | υ  | 0,15   | 1      | <   | U  |        |              |      |    |        |         |    |    |
| VOLATILES                | m.p-Xylenes               |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | Ų  | 0.005  | 1      | ×   | U  |        |              |      |    |        |         |    |    |
| VOLATILES                | Methyl isobutyl ketone    |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | U  | 0.005  | 1      | <   | U  | 0.05   | 1            | <    | U  | 0.05   | 1       | <  | Ų  |
| VOLATILES                | Methylene chloride        |        |          |       |      |          |       |    |            |        |    | 0.01   | 1      | <       | U  | 0.01   | 1      | <   | U  | 0.005  | 1            | <    | υ  | 0.005  | 1       | <  | U  |
| VOLATILES                | Styrene                   |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | Ų  | 0.005  | 1      | <   | U  | 0.005  | 1            | <    | U  | 0.005  | 1       | <  | U  |
| VOLATILES                | Tetrachloroelhene         | {      |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | U  | 0.005  | 1      | <   | U  | 0.005  | 1 <b>1</b> - | <    | U  | 0.005  | 1       | <  | U  |
| VOLATILES                | Toluene                   |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | ~       | U  | 0.005  | 1      | <   | U  | 0.005  | 1            | <    | Ų  | 0.005  | 1       | <  | U  |
| VOLATILES                | trans-1.2-Dichloroethene  |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | U  | 0.005  | 1      | <   | U  |        |              |      |    |        |         |    |    |
| VOLATILES                | trans-1.3-Dichloropropene |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | U  | 0.005  | 1      | <   | υ  | 0,005  | 1            | <    | U  | 0.005  | 1       | <  | U  |
| VOLATILES                | Trichlorosthene           |        |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | U  | 0.005  | 1      | <   | U  | 0,005  | 1            | <    | U  | 0.005  | 1       | <  | U  |
| VOLATILES                | Vinyl acelate             | 1      |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | U  | 0.005  | 1      | e   | ບ  | 0.05   | 1            | <    | U  | 0.05   | t       | <  | U  |
| VOLATILES                | Viny! chloride            | 1      |          |       |      |          |       |    |            |        |    | 0.01   | 1      | <       | U  | 0,01   | 1      | c   | U  | 0.01   | 1            | <    | U  | 0.01   | 1       | <  | Ų  |
| VOLATILES                | Xylenes, Total            | 1      |          |       |      |          |       |    |            |        |    | 0.005  | 1      | <       | U  | 0,005  | 1      | <   | U  | 0.005  | 1            | <    | U  | .0.005 | 1       | ۲  | U  |
| Footo stand state shares |                           | ·      |          |       |      |          |       |    |            |        |    |        |        |         |    |        |        |     |    |        | ·····        |      |    |        | •       |    |    |

Footnotes are shown on cover page to Tables Section.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-32 -

## alated with Curren 022

| ISLIMPL - SLIMPARD |                             |                  | Concentr         | ations of Chemica | als in Soil Sampl | es Associated w    | ith Sump 032      |              |               |                  |                   |
|--------------------|-----------------------------|------------------|------------------|-------------------|-------------------|--------------------|-------------------|--------------|---------------|------------------|-------------------|
|                    |                             | 355ELMP032-SB01  | 355UMP033-5801   | 35SL/MP033-SB01   | HOSB03            | HOSB03             | HOSB03            | LH-\$32-01   | LH-S32-01     | LH-S33-01        | LH-S33-01         |
|                    |                             | 35 SHE22-SB01.01 | 25-SMP22-SP01.01 | 35.514033.5001.02 | HOSB03/0-0 5)     | H()\$803(3-5)      | HOSB03(8-10)      | (H-\$32-01_1 | (H-S32-01_2   | 1H-S33-01_1      | LH-S33-01_2       |
|                    |                             | 0/10/2006        | 0/11/2006        | 0/11/20/06        | 12/4/2000         | 12///2000          | 12/4/2000         | 6/25/1993    | 6/25/1993     | 7/21/1093        | 7/21/1993         |
| SAMPLE_DATE        |                             | 05 05 C          | 0.055            | A.E. E.C.         | 0.055             | 3-5 5              | 8 t0 Ft           | 05.25 Et     | 3-5 Ft        | 05-15            | 3-34F             |
| DEPTH              |                             | 0.5-0.511        | 0-0.51           | 4.3-371           | DCA               | PEC                | REG               | REG          | REG           | BEG              | BEG               |
| SAMPLE_PURPUSE     | P ( 01/2,                   |                  |                  |                   |                   | Popult Dit I O 1/O | Paevat DII 10 1/0 |              |               | Result Dit 10 VO | Bestilt DIL LO VO |
| Lest Group         | Parameter (Units = mg/kg)   | Hesuit OIL LO VO | RESULTAL LO VU   | Resole Dil. LU VU | HESUIL DIL LU VU  |                    | ISCOULDIE EQ VQ   |              | 0.15 1 ~ 11   | 0.22 1 < 11      | 0.23 1 < H        |
| EXPLOSIVES         | 2,4-Dinitrotoidene          | 1                |                  |                   |                   |                    |                   |              |               |                  | 0.33 1 < 0        |
| EXPLOSIVES         | 2,6-Dinitrotoluene          |                  |                  |                   |                   |                    |                   | 41900 1      | 10,13 1 1 0   | 10.00 1 1 0      | 11900 1           |
| METALS             | Aluminum                    | 6700 1           | 6020 1           | 12100 1           |                   |                    |                   | 11200 1      | 10100 1       | 2 1 4 1          | 2 5 2 11          |
| METALS             | Antimony                    | 0.109 1 0        | 0.104 1 U        | 0.115 1 0         |                   |                    |                   | 0.0 I        | 0,1 I<br>47 1 | 3 1 < 0          |                   |
| METALS             | Arsenic                     | 5.6 1            | 1,54 1 J         | 2.13 1 J          |                   |                    |                   | 3.6 1        | 1.7 1         | 4,4 F            | 2.0 1             |
| METALS             | Barium                      | 80.1 1           | 63.3 1           | 67.4 1            |                   |                    |                   | /4.9 1       | 83.5 1        | n2 1 < 0         | 65.1 I < U        |
| METALS             | Beryllium                   | 0.39 1           | 0.314 1 J J      | 0.97 1            |                   |                    |                   |              |               |                  |                   |
| METALS             | Cadmium                     | 0.444 1          | 0.13 1 J J       | 0.0793 1 J J      |                   |                    |                   | 1.9 1        | 11 < 0        | 11<0             | 11<0              |
| METALS             | Catcium                     | 3090 1           | 620 1            | 915 1             |                   |                    |                   | 647 1        | 650 1         | 1690 1           | 1900 1            |
| METALS             | Chromium                    | 26.2 1           | 11.8 1           | 13 1              |                   |                    |                   | 19.1 1       | <b>17.7</b> t | 16.5 1 < U       | 15.9 1 < U        |
| METALS             | Cobalt                      | 2.68 1           | 3.16 1           | 8.43 1            |                   |                    |                   | 2.8 1        | 3.5 1         | 3.6 1            | 4.2 1             |
| METALS             | Copper                      | 7.36 1           | 2.5 1            | 9.06 1            |                   |                    |                   | 4.9 1        | 4.6 1         | 8.7 1            | 8 1               |
| METALS             | iron                        | 19300 1          | 8570 1           | 20600 1           |                   |                    |                   | 18900 1      | 12500 1       | 23700 1          | 22300 1           |
| METALS             | Lead                        | 22.8 1           | 8.63 1 J         | 7.37 1 J          |                   |                    |                   | 6.4 1        | 6.6 1         | 12.3 1           | 8.3 1             |
| METALS             | Magnesium                   | 333 1            | 293 1            | 1890 1            |                   |                    |                   | 706 1        | 850 1         | 898 1            | 704 1             |
| METALS             | Manganese                   | 156 1            | 170 1            | 20.5 1            |                   |                    |                   | 293 1        | 275 1         | 142 1            | 189 1             |
| METALS             | Mercury                     | 0,109 1 J J      | 0.0265 1 J J     | 0.0198 1 J J      |                   |                    |                   | 0.1 1 < U    | 0.1 1 < U     | 0.1 1 < U        | 0.1 1 < U         |
| METALS             | Nickel                      | 4.19 1           | 2.71 1           | 16.1 1            |                   |                    |                   |              |               |                  |                   |
| METALS             | Potassium                   | 236 1            | 196 1            | 360 1             |                   |                    |                   | 762 1        | 1030 1        | 722 1            | 618 1             |
| METALS             | Selenium                    | 0.358 1          | 0.35 1           | 0.268 1           |                   |                    |                   | 11< 0        | 11 < U        | 11< 1            | 11 < 0            |
| METALS             | Silver                      | 1.47 1 U         | 1.54 1 1         | 1.66 1 U          |                   |                    |                   | 11< 1        | 11 < U        | t 1 < U          | 11 < U            |
| METALS             | Sodium                      | 212 1            | 19.9 1           | 478 1             |                   |                    |                   |              |               |                  |                   |
| METALS             | Stroptium                   |                  |                  |                   |                   |                    |                   | 3.8 1        | 5.6 1         | 12.3 1           | 14.8 1            |
| METALS             | Thalling                    | 0.0441 1         | A 0596 1         | 0.133 1           |                   |                    |                   |              |               |                  |                   |
| METALO             | Manadium                    | 22.2 1           | 10.3 1           | 227 1             |                   |                    |                   |              |               |                  |                   |
| METALS             | Zice                        | 68.4 1           | 10.3 1           | 31 1              |                   |                    |                   | 19.3 1       | 19.4 1        | 42.5 1           | 28.9 1            |
|                    | Carbon Borron C1/2 C/28     | 421118           | 51.5 1 H         | 25.9 1 E B        |                   |                    |                   |              |               |                  |                   |
| HANGE_UNGANICS     | Carbon Range C12-C28        | 42.1 5 5         | 51.5 1 0         | 33.0 I 3 U        |                   |                    |                   |              |               |                  |                   |
| HANGE_UHGANICS     | Carbon Hange C28-C35        | 53.1 1 0         | 51.5 1 U         | 57.3 1 0          |                   |                    |                   |              |               |                  |                   |
| HANGE_URGANICS     | Carbon Hange Co-C 12        | 1 53.1 1 0       | 31.5 1 0         | 57.5 1 0          |                   |                    |                   | 015 1 - 11   | 0.15 1 2 1    | 033 1 2 11       | 039 1 2 11        |
| SEMIVOLATILES      | 1,2,4-1 nchlorobenzene      |                  |                  |                   |                   |                    |                   |              |               |                  | 0.33 1 < 1        |
| SEMIVOLATILES      | 1,2-Dichkrobenzene          |                  |                  |                   |                   |                    |                   |              |               |                  |                   |
| SEMIVOLATILES      | 1,3-Dichlorobenzene         | 1                |                  |                   |                   |                    |                   |              | 0.15 1 1      |                  | 0.22 1 4 11       |
| SEMIVOLATILES      | 1,4-Uichiorobenzene         |                  |                  |                   |                   |                    |                   |              |               |                  |                   |
| SEMIVOLATILES      | 2,4,5-1 richlerophenol      | 1                |                  |                   |                   |                    |                   |              | 0.6 / < 0     |                  | 0.32 1 < 11       |
| SEMIVOLATILES      | 2,4,6-Trichtorophenol       |                  |                  |                   |                   |                    |                   | 0.15 1 < 0   |               | 0.33 1 < 0       | 0.00 1 < 0        |
| SEMIVOLATILES      | 2,4-Dichlozophenol          |                  |                  |                   |                   |                    |                   | 0.15 1 < U   |               |                  |                   |
| SEMIVOLATILES      | 2,4-Dimethylphenol          | 1                |                  |                   |                   |                    |                   | 0.15 1 < 0   |               |                  | 155 1 < 1         |
| SEMIVOLATILES      | 2,4-Dintrophenol            |                  |                  |                   |                   |                    |                   | 10.8 I < U   |               |                  | 7.00 1 < 0        |
| SEMIVOLATILES      | 2-Chloronaphthalene         |                  |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < 0    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | 2-Chlorophenol              | · ·              |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < 0    | 0.33 1 < 0       | 0.00 1 . 11       |
| SEMIVOLATILES      | 2-Methylnaphthalene         | 1                |                  |                   |                   |                    |                   | 0.15 1 < 0   | 0.15 1 < 0    | 10.33 1 < U      | 0.33 1 < 0        |
| SEMIVOLATILES      | 2-Methylphenol              | 1                |                  |                   |                   |                    |                   | 0.15 1 < 0   | 0.15 1 < 0    | (0.33 1 < U      | 0.33 1 < 0        |
| SEMIVOLATILES      | 2-Nitroaniline              |                  |                  |                   |                   |                    |                   | 0.8 1 < 0    | 0.8 1 < 0     | 1.65 1 < U       | 1.65 1 < 0        |
| SEMIVOLATILES      | 2-Nitrophenol               |                  |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < 0    | 0.33 1 < 0       | 0.33 1 < U        |
| SEMIVOLATILES      | 3,3'-Dichlorobenzidine      | ]                |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < U    | 0.65 1 < 0       | 0.65 1 < 0        |
| SEMIVOLATILES      | 3-Nitroaniline              |                  |                  |                   |                   |                    |                   | 0.8 1 < U    | 0.8 1 < 0     | 1.65 1 < 0       | 1.65 1 < 0        |
| SEMIVOLATILES      | 4,6-Dinitro-2-methylphenol  | · ·              |                  |                   |                   |                    |                   | 0.8 1 < U    | 0.8 1 < U     | 1.65 1 < 0       | 1.65 1 < 0        |
| SEMIVOLATILES      | 4-Bromophenyl phenyl ether  |                  |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < U    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | 4-Chloro-3-methylphenol     | 1                |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < U    | 0.65 1 < U       | 0.65 1 < 0        |
| SEMIVOLATILES      | 4-Chloroaniline             |                  |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < U    | ∙0.65 1 < U      | 0.65 1 < 0        |
| SEMIVOLATILES      | 4-Chlorophenyl phenyl ether |                  |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < U    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | 4-Methylphenol              |                  |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < U    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | 4-Nitroaniline              |                  |                  | ·.                |                   |                    | · · · · · ·       | 0.8 1 < U    | 0.8 1 < U     | 1.65 1 < U       | 1.65 1 < U        |
| SEMIVOLATILES      | 4-Nitropheno!               | 1                |                  |                   |                   |                    |                   | 0.8 1 < U    | 0.8 1 < U     | 1.65 1 < U       | 1.65 1 < U        |
| SEMIVOLATILES      | Acesaphthene                |                  |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < U    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Acenaphthylene              |                  |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < U    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Anthracene                  |                  |                  |                   |                   |                    | · ·               | 0.15 1 < U   | 0.15 1 < U    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Benzo(a)anthracene          | 1                |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < U    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Benzolajovrene              | ł                |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < U    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Benzo(b)fluoranthene        | 1                |                  |                   |                   |                    |                   | 0.15 1 < V   | 0.15 1 < U    | 0.33 1 < U       | 0.33 t < U        |
| SEMIVOLATILES      | Benzolahilpervlene          |                  |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < U    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Benzo(k)filisoranihene      |                  |                  |                   |                   |                    |                   | 0.15 1 < U   | 0.15 1 < U    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Benzoic Acid                | -                |                  |                   |                   |                    |                   | 0.8 1 < U    | 0.8 1 < ¥     | 1.65 1 < U       | 1.65 1 < U        |
| SEMIVOLATIKES      | Benzyl Alcohol              |                  |                  |                   |                   |                    |                   | 0.15 1 < Ü   | 0.15 1 < U    | 0.65 1 < U       | 0.65 1 < U        |
| CENTROLITIEED      | - Sizji i Novila            | ł                |                  |                   |                   |                    |                   |              | ,<br>,        | -                |                   |



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-32

|                  |                                      |                  | Concenti         | rations of Chemic | als in Soil Sampl | es Associated w  | ith Sump 032     |                  |                  |                  |                  |
|------------------|--------------------------------------|------------------|------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| [SUMP] = SUMP032 |                                      | 250100022 0001   | 25S11140022-SB01 | 2551 M/D032_SR01  | HOSB03            | HOSE03           | HOSBO3           | 114-532-01       | 18-532-01        | LH-S33-01        | LH-S33-01        |
| CANNOLE NO       |                                      | 3550WP032-5801   | 35-SMP33-SB01-01 | 35.SMP33-SR01-02  | HOSB03(0-0-5)     | HOSB03(3-5)      | HOSE03(8-10)     | 1.H-S32-01 1     | LH-S32-01 2      | LH-S33-01 1      | LH-S33-01 2      |
| SAMPLE_NO        |                                      | 9/12/2006        | 9/11/2006        | 9/11/2005         | 12/4/2000         | 12/4/2000        | 12/4/2000        | 6/25/1993        | 6/25/1993        | 7/21/1993        | 7/21/1993        |
| DEPTH            |                                      | 0.5 - 0.5 Ft     | 0-0.5Ft          | 4.5-5 Ft          | 0-0.5 Ft          | 3-5Ft            | 8 - 10 Ft        | 0.5-2.5 Ft       | 3 - 5 F1         | 0.5 - 1 Ft       | 3 - 3.4 Ft       |
| SAMPLE PURPOSE   |                                      | REG              | REG              | REG               | REG               | REG              | REG              | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)            | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VQ  | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LO VQ | Result DIL LQ VQ |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane           | 1                |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether              |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether          |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate           | 1                |                  |                   |                   |                  |                  | 11 < U           | 11< U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Butyi benzyi phthalate               |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Carbazole                            |                  |                  |                   |                   |                  |                  | U.15 1 < U       | 0.15 1 < 0       | 0.00 t - U       | 090 f 4 U        |
| SEMIVOLATILES    | Chrysene                             |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 L < U       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene               | 1                |                  |                   |                   |                  |                  | 0.15 1 < 0       | 0.15 1 < 0       | 0.33 1 < 0       | 0.33 1 < 1       |
| SEMIVOLATILES    | Didenzoruran<br>Diathad abtheviate   |                  |                  |                   |                   |                  |                  | 0.15 1 < 11      | 0.15 1 < 0       | 0.33 1 < 11      | 0.33 1 < 1       |
| SEMIVOLATILES    | Diegry provate<br>Dimothyl obtholoto |                  |                  |                   |                   |                  |                  | 0.15 t < U       | 0.15 t < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMINOLATILES    | dine Bind phthalate                  | ]                |                  |                   |                   |                  |                  | 0.15 t < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMILIOLATILES   | di-n-Octy princiale                  | · ·              |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Eluoranthene                         |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Fluorene                             |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 t < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorobenzene                    |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorobutadiene                  | -                |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorocyclopentadiene            |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 t < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachloroethane                     | 1                |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene               |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Isophorone                           |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Naphthalene                          |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Nitrobenzene                         |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine           |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.15 T < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | n-Nitrosociphenyiamine               |                  |                  |                   |                   |                  |                  | 0.3 1 < 0        | 0.3 I < U        | 9.33 I < U       | 165 1 < U        |
| SEMIVOLATILES    | Pentachloropheno                     |                  |                  |                   |                   |                  |                  | 0.15 1 < U       | 0.13 1 < 0       | 1.00 I < U       |                  |
| SEMIVOLATILES    | Phenanthrene                         |                  |                  |                   |                   |                  |                  | 0.15 3 < 0       |                  | 0.33 1 < 11      |                  |
| SEMIVOLATILES    | Phenoi                               |                  |                  |                   |                   |                  |                  | 6151 < 1         | 0.15 1 < 1       | 0.33 1 < 1       | 0.33 1 < U       |
| 2EMINOLATILES    | Hydroparboog as Diesel Evel          |                  |                  |                   | 60 1 < 11         | 576 t < ti       | 64.1.< ∐         | 0.10             |                  |                  |                  |
| трн              | Hydrocarbons as Gasolina             |                  |                  |                   | 60 1 < U          | 57.6 1 < U       | 64 1 < U         |                  |                  |                  |                  |
| ТРН              | TOTAL HYDBOCABBONS                   |                  |                  |                   | 60 1 < U          | 57.6 1 < U       | 64 1 < U         |                  |                  |                  |                  |
| VOLATILES        | 1.1.1.2-Tetrachioroethane            |                  |                  | 0.00529 t U       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1,1,1-Trichioroethane                |                  |                  | 0.00529 t U       |                   |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | 1,1,2,2-Tetrachloroethane            |                  |                  | 0.00529 1 U       |                   |                  |                  | 0.005 1 < ป      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U.     |
| VOLATILES        | 1,1,2-Trichtoroethane                |                  |                  | 0.00529 1 U       |                   |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 t < U      |
| VOLATILES        | 1,1-Dichloroethane                   |                  |                  | 0.00529 1 U       |                   |                  |                  | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichloroethene                   |                  |                  | 0.00529 1 U       |                   |                  |                  | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichtoropropene                  |                  |                  | 0.00529 1 U       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2,3-Trichlorobenzene               |                  |                  | 0.00529 1 U       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2,3-Trichloropropane               |                  |                  | 0.00529 1 U       |                   | -                |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2,4-Trichlorobenzene               | ł                |                  | 0.00529 1 U       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2,4-Trimethylbenzene               |                  |                  | 0.00529 1 U       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2-Dibromo-3-chloropropane          |                  |                  | 0.00529 1 U       |                   |                  | -                |                  |                  |                  |                  |
| VOLATILES        | 1,2-Dibromoethane                    |                  |                  | 0.00529 1 0       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2-Dichlorobenzene                  |                  |                  | 0.00529 1 0       |                   |                  |                  | 0.005 1 2 11     | 0.005 1 c H      | 0.005 1 < 12     | 0.005 1 < 11     |
| VOLATILES        | 1,2-Dichloroethane                   |                  |                  | 0.00529 1 0       |                   |                  |                  | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < 0      |
| VOLATILES        | 1,2-Dichioroemene                    |                  |                  | 0.00520 1 13      |                   |                  |                  | 0.005 1 < 11     | 0.005 1 < 1      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | 1.2-Dictionopage                     |                  |                  | 0.00529 1 17      |                   |                  |                  | 0.005 t < U      | 0.005 t < U      |                  |                  |
| VOLATILES        | 1.3 5. Trimetovihenzene              |                  |                  | 0.00529 1 1       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1.3-Dichlorobenzene                  |                  |                  | 0.00529 1 U       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1 3-Dicbloropropage                  |                  |                  | 0.60529 1 U       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 1.4-Dichlorobenzene                  |                  |                  | 0.00529 1 U       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 2,2-Dichloropropane                  |                  |                  | 0.00529 1 U       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 2-Butanone                           |                  |                  | 0.0106 1 U        |                   |                  |                  | 0.005 1 < U      | 0.005 t < U      | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | 2-Chloroethyl visyl ether            | }                |                  | 0.0106 1 U        | *                 |                  |                  |                  |                  | 0.01 1 < U       | 0.01 t < U       |
| VOLATILES        | 2-Chlorotoluene                      |                  |                  | 0.00529 1 U       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 2-Hexanone                           | 1                |                  | 0.0106 1 U        |                   |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.05 1 < U       | 0.05 t < U       |
| VOLATILES        | 4-Chlorotoluene                      | 1                |                  | 0.00529 1 U       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Acetone                              |                  |                  | 0.0106 1 U        |                   |                  |                  | 0.013 1          | 0.022 1          | 0.1 1 < Ü        | 0.1 1 < U        |
| VOLATILES        | Benzene                              | -                |                  | 0.00529 1 U       |                   |                  |                  | 0.005 1 < U      | 0.005 1 < V      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromobenzene                         |                  |                  | 0.00529 1 U       |                   |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Bromochioromethane                   | 1                |                  | 0.00529 1 U       |                   |                  |                  |                  |                  |                  |                  |
|                  |                                      |                  |                  |                   |                   |                  |                  |                  |                  |                  |                  |

Shaw Environmental, Inc.

Table 3-32 Concentrations of Chemicals in Soil Samples Associated with Sump 032

| [SUMP] = SUMP032 |                           |                  |                  |                  | •                |                  | •                |                  |                  |                  |                  |
|------------------|---------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                           | 35SUMP032-SB01   | 35SUMP033-SB01   | 35SUMP033-SB01   | HOSB03           | HOSB03           | HOSB03           | LH-\$32-01       | LH-S32-01        | LH-S33-01        | LH-S33-01        |
| SAMPLE_NO        |                           | 35-SMP32-SB01-01 | 35-SMP33-SB01-01 | 35-SMP33-SB01-02 | HOSB03(0-0_5)    | HOSB03(3-5)      | HOSB03(8-10)     | LH-S32-01_1      | LH-S32-01_2      | LH-S33-01_1      | LH-S33-01_2      |
| SAMPLE_DATE      |                           | 9/12/2006        | 9/11/2006        | 9/11/2006        | 12/4/2000        | 12/4/2000        | 12/4/2000        | 6/25/1993        | 6/25/1993        | 7/21/1993        | 7/21/1993        |
| DEPTH            |                           | 0.5 - 0.5 Ft     | 0 - 0.5 Ft       | 4.5 - 5 Ft       | 0 - 0.5 Ft       | 3 - 5 Ft         | 8-10Ft           | 0.5 - 2.5 Ft     | 3 - 5 Ft         | 0.5 - 1 Ft       | 3 - 3.4 Ft       |
| SAMPLE_PURPOSE   |                           | REG              |
| Test Group       | Parameter (Units = mg/kg) | Result DIL LQ VQ | Result DIL LQ VQ | Result DHL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| VOLATILES        | Bromodichloromethane      |                  |                  | 0.00529 1 U      | · · · ·          |                  |                  | 0.005 1 < U      |
| VOLATILES        | Bromoform                 |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      |
| VOLATILES        | Bromomethane              |                  |                  | 0.0106 1 U       |                  |                  |                  | 0.01 1 < U       |
| VOLATILES        | Carbon disulfide          |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      |
| VOLATILES        | Carbon tetrachloride      |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      |
| VOLATILES        | Chlorobenzene             |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | Chioroethane              |                  |                  | 0.0106 1 U       |                  |                  |                  | 0.01 1 < U       |
| VOLATILES        | Chloroform                |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      |
| VOLATILES        | Chloromethane             |                  |                  | 0.0106 1 U       |                  |                  |                  | 0.01 1 < U       |
| VOLATILES        | cis-1,2-Dichloroethene    |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 t < U      | 0.005 1 < U      |                  |                  |
| VOLATILES        | cis-1,3-Dichloropropene   |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      |
| VOLATILES        | Dibromochloromethane      |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < V      | 0.005 1 < U      |
| VOLATILES        | Dibromomethane            |                  |                  | 0.00529 1 U      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Dichlorodifluoromethane   |                  |                  | 0.0106 1 U       |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Ethylbenzene              |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      |
| VOLATILES        | Hexachlorobutadiene       |                  |                  | 0.00529 1 U      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Isopropylbenzene          |                  |                  | 0.00529 1 U      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | m,p-Cresol                |                  |                  |                  |                  |                  |                  | 0.15 1 < U       | 0.15 1 < U       |                  |                  |
| VOLATILES        | m,p-Xylenes               |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      |                  |                  |
| VOLATILES        | Methyl isobutyl ketone    |                  |                  | 0.0105 1 U       |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | Methylene chloride        |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.01 1 < U       | 0.01 1 < U       | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Naphthalene               |                  |                  | 0.0106 1 U       |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | n-BUTYLBENZENE            |                  |                  | 0.00529 1 U      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | n-PROPYLBENZENE           |                  |                  | 0.00529 1 U      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | p-ISOPROPYLTOLUENE        |                  |                  | 0.00529 1 U      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | sec-BUTYLBENZENE          |                  |                  | 0.00529 1 U      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Styrene                   |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | tert-BUTYLBENZENE         |                  |                  | - 0.00529 1 U    |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Tetrachloroethene         |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      |
| VOLATILES        | Toluene                   |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      |
| VOLATILES        | trans-1,2-Dichloroethene  |                  |                  | 0.00529 1 U      | -                |                  |                  | 0.005 1 < U      | 0.005 1 < U      |                  |                  |
| VOLATILES        | trans-1,3-Dichloropropene |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      |
| VOLATILES        | Trichloroethene           |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | Trichlorofluoromethane    |                  |                  | 0.0106 1 U       |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Vinyl acetate             |                  |                  | 0.0106 1 U       |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | Vinyl chloride            |                  |                  | 0.0106 1 U       |                  |                  |                  | 0.01 1 < U       |
| VOLATILES        | Xylenes, Total            |                  |                  |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |
|                  |                           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Footnotes are shown on cover page to Tables Section.



| <ul> <li>Data Evaluation Re</li> </ul> |
|--|
|--|

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-33 Concentrations of Chemicals in Soil Samples Associated with Sump 033

| [SUMP] = SUMP033               |                             |                  |                  |                  |                  |                  | •                |                   | •                 |                         |                         |                  |                   |                            |                  |
|--------------------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------------|-------------------------|------------------|-------------------|----------------------------|------------------|
| LOCATION _CODE                 |                             | 35SUMP032-SB01   | 35SUMP033-S801   | 35SUMP033-SB01   | HOSB03           | HOSB03           | HOSB03           | LH-S32-01         | LH-S32-01         | LH-\$33-01              | LH-S33-01               | WRS015-SB01      | WRS015-SB01       | WRS015-SB02                | WRS015-SB02      |
| SAMPLE_NO                      |                             | 35-SMP32-SB01-01 | 35-SMP33-SB01-01 | 35-SMP33-SB01-02 | HOSB03(0-0_5)    | HOSB03(3-5)      | HOSB03(8-10)     | LH-S32-01_1       | LH-S32-01_2       | LH-\$33-01_1            | LH-S33-01_2             | WRS-015-SB01-01  | WRS-015-SB01-02   | WRS-15-SB02-01             | WRS-15-S802-02   |
| SAMPLE_DATE                    |                             | 9/12/2006        | 9/11/2006        | 9/11/2006        | 12/4/2000        | 12/4/2000        | 12/4/2000        | 6/25/1993         | 6/25/1993         | 7/21/1993               | 7/21/1993               | 9/15/2006        | 9/15/2005         | 9/15/2006                  | 9/15/2006        |
| DEPTH                          |                             | 0.5 - 0.5 Ft     | 0-0.5 Ft         | 4.5 - 5 Ft       | 0-0.5 Ft         | 3 - 5 Ft         | 8 - 10 Ft        | .5 - 2.5 Ft       | 3-5 Ft            | 0.5 - 1 Ft              | 3 - 3.4 Ft              | 0.5 - 0.5 Ft     | 4 - 4 Ft          | 1 - 1 Ft                   | 4 - 4 Ft         |
| SAMPLE PURPOSE                 |                             | REG               | RÉG               | REG                     | REG                     | REG              | REG               | REG                        | REG              |
| Test Group                     | Parameter (Units = mo/ko)   | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL: LO VO | Result Dil. LQ VQ | Result DIL LQ VQ        | Result DIL LQ VQ        | Result DIL LO VQ | Result DIL 1.Q VQ | Result DIL LO VO           | Result DIL LQ VQ |
| EXPLOSIVES                     | 2 4-Dinitrotoluepe          |                  |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 1 < U              | 0.33 1 < U              |                  |                   |                            |                  |
| EXPLOSIVES                     | 2 6-Dinitroiniuene          |                  |                  |                  |                  |                  |                  | 015 1 < U         | 015 1 < 1         | 0.33 1 < 1              | 0.33 1 < U              |                  |                   |                            |                  |
| METALS                         | Akuninum                    | 6700 1           | 6020 1           | 12100 1          |                  |                  |                  | 11200 1           | 16100 1           | 12500 1                 | 11300 1                 | <b>624</b> 0 1   | 22200 t           | 6340 1                     | 13500 1          |
| METALC                         | Antimony                    | 0.100 1 11       | 0.104 1 11       | 0.115 1 11       |                  |                  |                  | 8R 1              | 51 1              | 3 1 4 1                 | 3 1 < 11                | 0.105 1 31 17    | 0116 1 11         | 1. 1. 1 9900               | 0.11 1 U U       |
| METALO                         | Agiuntorsy                  | 0.105 1 0        | 1.104 1 0        | 0.110 1 0        |                  |                  |                  | 0.0 I<br>3 0 1    | 17 1              | 44 1                    | 261                     | 5.04 1           | 436 1             | 551 1                      | 2711             |
| METALS                         | Arsenc                      | 5.0 1            | 1.34 1 3         | Z13 I J          |                  |                  |                  | 3.6 I             | 1.7 1             | 4.4 J<br>21.5 1 - 11    | 2.0 1                   | 0.34 F           | 4.00 1            | J.J.1 1<br>AG 1            | 422 t            |
| METALS                         | Banum                       | 8U.1 3           | 03.3             | 0/.4             |                  |                  |                  | (4.9 1            | 69.0 1            | 11.2 I K U              | 100.II < U              | 0.107            | 0.40              | 90 1                       | 72.2 1           |
| METALS                         | Beryllium                   | 0.39 3           | 0.314 1 J J      | 0.97 1           |                  |                  |                  |                   |                   |                         |                         | 0.400            | 0.001 1           | 0.417 1                    | 0.412            |
| METALS                         | Cadmium                     | 0.444 1          | 0.13 1 J J       | 0.0793 1 J J     |                  |                  |                  | 1.9 1             | 11 < 0            | · 11 < U                | 11 < U                  | 926 1 J J        | U.0804 3 J        | 0.917 1                    | 0.047 E J J      |
| METALS                         | Calcium                     | 3090 1           | 620 1            | 915 1            |                  |                  |                  | 647 1             | 650 1             | 1690 1                  | 1900 1                  | 44100 10         | 2020              | 7080 3                     | 289 1            |
| METALS                         | Chromiem                    | 26.2 1           | 11.8 1           | 13 1             |                  |                  |                  | 19.1 1            | 17.7 1            | 1 <del>6</del> .5 1 < U | 15.9 1 < U              | 15.9 1           | 28.7 1            | 18.1 1                     | 14.4             |
| METALS                         | Cobalt                      | 2.68 1           | 3.16 1           | 8.43 1           |                  |                  |                  | 2.8 1             | 3.5 1             | 3.6 1                   | 4.2 1                   | 3.42 1           | 4.27 1            | 3.01 1                     | 1.73 1           |
| METALS                         | Copper                      | 7.36 1           | 25 1             | 9.06 1           |                  |                  |                  | 4.9 1             | 4.6 1             | 8.7 1                   | 8 1                     | 5.11 1           | 6.56              | 5.74 1                     | 3.35 1           |
| METALS                         | Iran                        | 19300 1          | 8570 1           | 20600 t          |                  |                  |                  | 18900 1           | 12500 1           | 23700 1                 | 22300 t                 | 29900 1          | 27700 1           | 27400 1                    | 14600 1          |
| METALS                         | Lead                        | 22.8 1           | 8.63 1 J         | 7.37 t J         |                  |                  |                  | 6.4 1             | 6.6 1             | 12.3 1                  | 8.3 1                   | 20.3 1           | 16.4 1            | 19.2 1                     | 7.59 1           |
| METALS                         | Magnesium                   | 333 1            | 293 1            | 1890 1           |                  |                  |                  | 706 t             | 850 1             | 898 1                   | 704 1                   | 897 1            | 1130 1            | 504 1                      | 546 1            |
| METALS                         | Manganese                   | 156 1            | 170 1            | 20.5 1           |                  |                  |                  | 293 1             | 275 1             | 142 1                   | 189 1                   | 251 \$           | 57.1 1            | 153 1                      | 30.5 1           |
| METALS                         | Mercury                     | 0.109 1 J J      | 0.0265 1 J J     | 0.0198 t J .I    |                  |                  |                  | 0.1 1 < U         | 0.1 t < U         | 0.1 1 < U               | 0.1 1 < U               | 0.0462 t J J     | 0.0465 1 J J      | 0.0298 1 J J               | 0.0194 1 J J     |
| METALS                         | Nicket                      | 419 1            | 271 1            | 161 t            |                  |                  |                  |                   |                   |                         |                         | 5.39 1           | 8.54 1            | 5.66 1                     | 4.45 1           |
| METALS                         | Patascium                   | 236 1            | 196 1            | 360 1            |                  |                  |                  | 762 1             | 1630 1            | 722 1                   | 618 1                   | 222 1            | 554 1             | 335 1                      | 380 1            |
| METAIS                         | Salaanin                    | 0358 1           | A 35 1           | 0.268 1          |                  |                  |                  | 11 - 11           | 1 1 - 11          | 11 - 12                 | 1 1 2 11                | 0.409 1          | 0.653 1           | 0.289 1                    | 0.315 1          |
| METALO                         | Citer                       | 147 1 11         | 154 1 11         | 1.00 1 18        |                  |                  |                  | 11.0              | 1 1 2 1           | 1 1 4 1                 |                         | 16 1 11 11       | 3.57 1 11 1)      | 0233 1 1 1                 | 150 1 11 11      |
| METALO                         | Surger<br>Conditioner       | 1.47 1 0         | 100 1            | 7.00 1 0         |                  |                  |                  |                   |                   |                         | 11.0                    | 40.4 t           | 642 1             | 217 1                      | 24 1             |
| METALS                         | Sociality                   | 21.2             | 19.9 1           | 4/0 1            |                  |                  |                  | 40.5              | re 1              | 10.2 1                  | 14.0 1                  | 40.4             | 04.2 1            | £1.1 I                     | 23 .             |
| METALS                         | STORIUR                     |                  |                  |                  |                  |                  |                  | 3.0 1             | 3.0 1             | 12.0 1                  | 14.0 1                  | 0.000 1          | A 17 1            | 0.0495 1                   | 0.001 1          |
| METALS                         | Inakum                      | 0.0441 1         | 0.0596 1         | 0.133 1          |                  |                  |                  |                   |                   |                         |                         | 0.020 F          | V.17 1            | 0.0420 1                   | 10.201           |
| METALS                         | Vanadium                    | 32.3 1           | 19.3 1           | 22.1             |                  |                  |                  |                   |                   |                         |                         | 32.9 1           | 49.1              | 41.0 1                     | 30.3 1           |
| METALS                         | Zinc                        | 68.4 1           | 10.3 1           | 31 1             |                  |                  |                  | 19.3 3            | 19.4 1            | 42.5 1                  | 28.9                    | 43.4 !           | 24.3              | 102 1                      | 12.8 1           |
| RANGE_ORGANICS                 | Carbon Range C12-C28        | 42.1 1 J B       | 51.5 1 U         | 35.8 1 J B       |                  |                  |                  |                   |                   |                         |                         | 31.3 I J J       | 34.9 1 3 3        | 00 1                       | 55 1 0 0         |
| RANGE_ORGANICS                 | Carbon Range C28-C35        | 53.1 1 U         | 51.5 1 U         | 57.3 1 U         |                  |                  |                  |                   |                   |                         |                         | 33.5 1 J J       | 33.9 1 J J        | 56 1                       | 55 1 0 0         |
| RANGE_ORGANICS                 | Carbon Range C6-C12         | 53.1 1 U         | 51.5 1 U         | 57.3 1 U         |                  |                  |                  |                   |                   |                         |                         | 51.7 1 U U       | 57.8 1 U U        | 52.4 1 U U                 | 55 1 0 0         |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene      | .1               |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 1 < U              | 0.33 1 < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 1.2-Dichlorobenzene         |                  |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 1 < U              | 0.33 1 < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46_20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 1,3-Dichlorobenzene         | ]                |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 1 < U              | 0.33 ! < U              | 1.7 10 U U       | 0.187 1 V V       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene         |                  |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 1 < U              | 0.33 1 < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 2,4,5-Trichloropheno)       | 1                |                  |                  |                  |                  |                  | 0.8 1 < U         | 0.8 1 < U         | 1.65 1 < U              | 1.65 1 < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol       |                  |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 1 < U              | 0.33 1 < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 2.4-Dichloropheno!          |                  |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 1 < U              | 0.33 1 < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 2.4-Dimethylphenol          |                  |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 1 < U              | 0.33 1 < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 2.4-Dinitrophenol           |                  |                  |                  |                  |                  |                  | 0.8 1 < U         | 0.8 1 < U         | 1.65 1 < U              | 1.65 t < U              | 8.5 10 U U       | 0.937 1 U U       | 17.3 20 U U                | 0.899 1 U U      |
| SEMIVOLATILES                  | 2 4-Dialitatione            | 1                |                  |                  |                  |                  |                  |                   |                   |                         |                         | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 2.6-Dipitrotation           |                  |                  |                  |                  |                  |                  |                   |                   |                         |                         | 17 10 11 11      | 0.187 1 10 10     | 346 20 11 11               | 018 1 1 1        |
| SENIVOLATILES                  | 2-Chiven antitalena         |                  |                  |                  |                  |                  |                  | 015 1 4 11        | 015 1 < 11        | 633 t / H               | 633 3 < II              | 17 10 11 11      | 0.187 1 12 11     | 346 20 11 11               | 018 1 U U        |
| SCHIVOLATE ES                  | 2-Chlorophanal              | 1                |                  |                  |                  |                  |                  | 0.15 1 < 11       | 0.15 1 < 1        | 0.33 1 2 11             |                         | 17 10 11 11      | 0.187 1 (4 1)     | 346 20 (1 1)               | 0.18 1 () ()     |
| SCHIVOLATILES<br>SCHIVOLATILES |                             |                  |                  |                  |                  |                  |                  | 0.15 1 < 0        | 0.15 1 < 1        |                         | 0.00 1 < 0              | 17 10 11 11      | 0.197 1 11 11     | 3.46 20 11 11              | 0.18 1 12 12     |
| SEMIVOLATILES                  | 2-meurymaphilalene          |                  |                  |                  |                  |                  |                  |                   |                   | 0.33 1 4 0              |                         | 17 10 11 11      | 0.107 1 0 0       | 3.40 20 0 0                | 0.10 1 0 0       |
| SEMIVOLATILES                  | 2-metryphenox               |                  |                  |                  |                  |                  |                  | 0.15 1 < 0        | 0.85 1 < 0        | 0.53 1 < 0              | 0.33 / < 0              | 1.7 10 0 0       | 0.187 1 0 0       | 3.40 20 0 U                |                  |
| SEMIVOLATILES                  | 2-Nitroaniune               | 1                |                  |                  |                  |                  |                  | 0.8 1 < 0         | 0.8 1 < 0         | 1.05 I < U              | 1.05 / < U              | 8.5 10 0 0       | 0.937 1 0 0       | 11.3 ZU U U                | 0.699 1 0 0      |
| SEMIVOLATILES                  | 2-Nitrophenoi               | 1                |                  |                  |                  |                  |                  | 0.15 1 < 0        | 0.15 1 < 0        | 0.33 1 < 0              | 0.33 1 < 0              | 1.7 10 0 0       | 0.18/ 1 0 0       | 3.46 20 0 0                | 0.18 1 0 0       |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzidine      | 1                |                  |                  |                  |                  |                  | 0.15 1 < 0        | 0.15 1 < U        | 0.65 t < U              | 0.65 1 < 0              | 3.4 10 0 0       | 0.375 1 0 0       | 6.92 20 0 0                | 0.359 1 0 0      |
| SEMIVOLATILES                  | 3-Nitroantine               | 1                |                  |                  |                  |                  |                  | 0.8 1 < U         | 0.8 1 < 0         | 1.65 1 < U              | 1.65 1 < U              | 8.5 10 U U       | 0.937 1 U U       | 17.3 20 U U                | 0.899 1 0 0      |
| SEMIVOLATILES                  | 4.6-Dinitro-2-methylphenol  | 1                |                  |                  |                  |                  |                  | 0.8 1 < U         | 0.8 1 < U         | 1.65 1 < U              | 1.65 <del>1</del> < U   | 8.5 10 U U       | 0.937 t U U       | 17.3 20 0 0                | 0.899 1 0 0      |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether  |                  |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 1 < U              | 0.33 t < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol     | 1                |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.65 1 < U              | 0.65 1 < U              | 1,7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 4-Chloroaniline             | 1                |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.65 1 < U              | 0.65 t < U              | 1,7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 4-Chlorophenyl phenyl ether |                  |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 1 < U              | 0.33 t < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 4-Methylphenol              |                  |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 t < U              | 0.33 t < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | 4-Nitroaniline              | 1                |                  |                  |                  | -                |                  | 0.8 t < U         | 0.8 1 < U         | 1.65 1 < U              | 1.65 1 < U              | 8.5 10 U U       | 0.937 1 U U       | 17.3 20 U U                | 0.899 1 U U      |
| SEMIVOLATILES                  | 4-Nitrophenol               | l                |                  | -                | ÷ .              |                  |                  | 0.8 1 < 0         | 0.8 1 < U         | 1.65 1 < Li             | 1.65 1 < U              | 8.5 10 U U       | 0.937 T Ü Ü       | 17.3 20 U U                | 0.899 1 U U      |
| SEMIVOLATILES                  | Acenaphinene                |                  |                  |                  |                  |                  |                  | 0.15 1 - 11       | 0.15 1 < 11       | 0.33 1 < U              | 0.33 1 < U              | 1,7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | Acenanhitwiene              | ł                |                  |                  |                  | -                |                  | 015 1 2 0         | 0.15 1 2 1        | 033 1 2 1               | 0.33 t < 11             | 17 10 U U        | 0.187 1 1 1       | 3.46 20 U U                | 0.18 1 13 11     |
| SEMILION ATH ES                | Anthracena                  |                  |                  |                  |                  |                  |                  | 015 1 - 11        | 015 1 - 1         | 033 1 2 11              | 0.33 t 2 l <sup>1</sup> | 17 10 11 11      | 0187 1 10 11      | 346 20 11 11               | 0.18 1 11 11     |
|                                | Renzo/alanthracente         |                  |                  |                  |                  |                  |                  | ч - 1 анб         | 0.15 1 - 11       | 0.33 1 - 11             | 0.33 1 - 11             | 17 fn II B       | 0187 1 19 19      | 346 20 21 11               | 018 1 17 17      |
| COMPOLATILES                   | Benno(n)nuroc -             |                  |                  |                  |                  |                  |                  |                   | 0.10 1 < 0        | 0.00 T C U              | 0.00 1 < 0              | 17 10 0 0        | 0.107 1 12 17     | 346 20 11 11               | 0.10, 000        |
| DEMIVOLATILES                  | Benzo(a)pyrene              | 1                |                  |                  |                  |                  |                  | 0.13 L < U        | v.io i < U        | 0.30 I < U              | 0.00 1 4 0              | 1,7 10 U U       | 0.107 I U U       | 0,40 20 U U<br>2,42 20 H U | 0,70 4 U U       |
| SEMIVOLATILES                  | Benzo(b)Nuoranmene          |                  |                  |                  |                  |                  |                  | 0.15 i < 0        | 0.15 1 < U        | 9.33 1 < U              | 0.33 I < U              | 1.7 10 0 0       | 0.187 1 U U       | 3.40 ZU U U                | 0.30 0 0 0       |
| SEMIVOLATILES                  | Benzo(ghi)perylene          |                  | •                |                  |                  |                  |                  | 0.15 1 < 0        | 0.15 1 < U        | 0.33 1 < U              | 0.33 t < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 0 0       |
| SEMIVOLATILES                  | Benzo(k)fluoranthene        |                  |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 1 < U              | 0.33 1 < U              | 1,7 10 U U       | 0.187 1 V U       | 3.46 20 U U                | 0.18 T U U       |
| SEMIVOLATILES                  | Benzoic Acid                | 1                |                  |                  |                  |                  |                  | 0.8 t < U         | 0.8 1 < U         | 1.65 1 < U              | 1.65 1 < U              | 8.5 10 U U       | 0.937 1 U U       | 17.3 20 U U                | 0.899 1 U U      |
| SEMIVOLATILES                  | Benzyl Alcahol              |                  |                  |                  |                  |                  |                  | -0.15 1 < Ư       | 0.15 1 < U        | 0.65 1 < U              | 0.65 t < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane  |                  |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 1 < U              | 0.33 1 < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | bis(2-Chloroethyf)ether     | 1                |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 1 < U              | 0.33 t < U              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether |                  |                  |                  |                  | -                |                  | 0.15 1 < U        | 0.15 1 < U        | 0.33 t < U              | 0.33 1 < ∛              | 1.7 10 U U       | 0.187 1 U U       | 3.46 20 U U                | 0.18 1 U U       |

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-33 Concentrations of Chemicals in Soil Samples Associated with Sump 033

| [SUMP] = SUMP033 |                                |                  |                  |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  | MERCAR COOL      | WDEASE EBAD                |
|------------------|--------------------------------|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------------|
| LOCATION _CODE   |                                | 35SUMP032-S801   | 35SUMP033-SB01   | 35SUMP033-SB01   | HOSB03            | HOSB03           | HOSB03           | LH-S32-01        | 1.H-\$32-01      | LH-S33-01        | LH-S33-01        | WHS015-SB01      | WH5015-5801      | WHOU10-0002      | 18/02-15-5002-02           |
| SAMPLE_NO        |                                | 35-SMP32-S801-01 | 35-SMP33-SB01-01 | 35-SMP33-SB01-02 | HOS863(0-0_5)     | HOSB03(3-5)      | HOSB03(8-10)     | LH-\$32-01_1     | LH-S32-01_2      | LH-\$33-01_1     | LR-S33-01_2      | WRS-015-5801-01  | WRS-075-SB01-02  | WHO-10-5002-01   | A(15/2005                  |
| SAMPLE_DATE      |                                | 9/12/2006        | 9/11/2006        | 9/11/2006        | 12/4/2000         | 12/4/2000        | 12/4/2000        | 6/25/1993        | 6/25/1993        | 7/21/1993        | //21/1993        | 9/15/2006        | 9/15/2006        | 9/10/2000        | 9/10/2000                  |
| DEPTH            |                                | 0.5 - 0.5 Ft     | 0 - 0.5 Ft       | 4.5 - 5 Ft       | 0 - 0.5 Ft        | 3 - 5 Ft         | 8 - 10 Ft        | .5 - 2.5 Ft      | 3 - 5 Ft         | 0.5 - 1 Ft       | 3 - 3.4 +t       | -0.5 - 0.5 Ht    | 4-4+1            | 1-145            | 4-41                       |
| SAMPLE_PURPOSE   |                                | REG              | REG              | REG              | REG               | REG              | REG              | REG              | REG              | REG              | REG              | REG              | REG              | HEG              | HEG                        |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LO VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL 1.Q VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO | Result DR. LQ VQ | Hesunt Dia. LO VO          |
| SEMIVOLATILES    | bis(2-Ethythexyl)phthalate     |                  |                  |                  |                   |                  |                  | 11 < ⊍           | 11 < U           | 0.33 1 < U       | 0.33 1 < U       | 1.7 10 U U       | 0.187 1 U U      | 3.46 20 U U      | 0.18 T U U                 |
| SEMIVOLATILES    | Butyl benzyl phthalate         |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 10.33 1 < U      | 1.7 10 U U       | 0.187 1 U U      | 3.46 20 U U      | 0.18 1 0 0                 |
| SEMIVOLATILES    | Carbazole                      |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       |                  |                  |                  |                  |                  |                            |
| SEMIVOLATILES    | Chrysene                       |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 1.7 10 U U       | 0.187 1 0 0      | 3.46 20 U U      | 0.16 1 0 0                 |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene         |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 1.7 10 U U       | 0.187 1 U U      | 3.46 20 U U      | 0.18 1 0 0                 |
| SEMIVOLATILES    | Dibenzofuran                   |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 1.7 10 U U       | 0.187 1 U U      | 3.46 20 U U      | 0.18 1 0 0                 |
| SEMIVOLATILES    | Diethyl phthalate              |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 1.7 10 U U       | 0.187 1 U U      | 3.46 20 U U      | 0.18 1 0 0                 |
| SEMIVOLATILES    | Dimethyl phthalate             |                  |                  | •                |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U,      | 0.33 1 < U       | 0.33 1 < U       | 1.7 10 U U       | 0.187 1 U U      | 3.46 20 U U      | 0.18 1 U U                 |
| SEMIVOLATILES    | di-n-Butyl phthalate           |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 1.7 10 U U       | 0.187 t U U      | 3.46 20 U U      | 0.18 1 U U                 |
| SEMIVOLATILES    | di-n-Octyl phthalate           |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 1.7 10 U U       | 0.187 1 U U      | 3.46 20 U U      | 0.18 1 U U                 |
| SEMIVOLATILES    | Fluoranthene                   |                  |                  |                  |                   |                  |                  | 0.15 t < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 1.7 10 U U       | 0.187 1 U U      | 3.46 20 U U      | 0.18 1 U U                 |
| SEMIVOLATILES    | Fluorene                       |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 1.7 10 U U       | 0.187 1 U U      | 3.46 20 U U      | 0.18 1 U U                 |
| SEMIVOLATILES    | Hexachlombenzene               |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 t < U       | 0.33 1 < U       | 1.7 19 U U       | 0.187 1 U U      | 3.46 20 U U      | 0.18 1 U U                 |
| SEMINON ATH ES   | Hexachlorobutadiege            |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 1.7 10 U U       | 0.187 1 U U      | 3.46 20 U U      | 0.18 1 U U                 |
| SEMIVOLATILES    | Heyachloracyclopentadiene      |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 t < U       | 1.7 10 U U       | 0.187 1 U U      | 3.46 20 U U      | 0.18 1 U U                 |
|                  | Havachionathana                |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 1.7 10 U U       | 0.187 I U U      | 3.46 20 U U      | 0.18 1 U U                 |
| SEMIVOLATILES    | Indepoid 2.2 adjuurono         |                  |                  |                  |                   |                  |                  | 0.15 1 < 1       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 1.7 10 U U       | 0.187 t U U      | 3.46 20 U U      | 0.18 1 U U                 |
| SEMIVOLATILES    | anderio(1,2,3-tar)pyrene       |                  |                  |                  |                   |                  |                  | 015 1 < 1        | 015 1 < 1        | £0.33 1 < U      | 0.33 1 < U       | 1.7 10 U U       | 0.187 1 U U      | 3.46 20 U U      | 0.18 1 U U                 |
| SEMIVOLATILES    | isophorone                     |                  |                  |                  |                   |                  |                  | 0.15 1 4 11      | 0.15 1 4 1       | 0.10 1 - 0       | 033 1 < U        | 17 10 11 11      | 0187 1 U U       | 3.46 20 U U      | 0.18 1 U U                 |
| SEMIVOLATILES    | Naphthalene                    |                  |                  |                  |                   |                  |                  |                  | 0.15 1 < 0       | 0.33 1 2 11      | 033 1 < 11       | 17 10 11 11      | 0187 1 1 1       | 346 20 11 11     | 0.18 1 U U                 |
| SEMIVOLATILES    | Nitrobenzene                   |                  |                  |                  |                   |                  |                  |                  | 0.15 1 . 15      | 0.00 1 4 1       | 0.30 1 < 0       | 17 10 11 11      | 0.187 1 U U      | 346 20 11 11     | 0.18 1 13 13               |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine     |                  |                  |                  |                   |                  |                  | 0.15 1 < 0       | 0.10 1 < 0       | 0.00 1 < 0       | 0.00 1 C U       | 17 18 11 11      | 0.107 1 11 11    | 346 20 11 11     | 0.18 1 B JI                |
| SEMIVOLATILES    | n-Nitrosodiphenylamine         |                  |                  |                  |                   |                  |                  | 0.3 1 < 0        | 0.3 1 < 0        | 0.33 1 < 0       | 100 1 < 0        | 1.7 10 U U       | 0.107 1 11 11    | 173 20 11 11     | 0.800 1 11 11              |
| SEMIVOLATILES    | Pentachlorophenol              |                  |                  |                  |                   |                  |                  | 0.15 1 < 0       | 0.15 1 < 0       | 1.05 1 < 0       | 1.00 1 < U       |                  | 0.937 7 0 0      | 2000             | A19 1 11 17                |
| SEMIVOLATILES    | Phenanthrene                   |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | · 1.7 10 U U     | 0.187 1 0 0      | 3.40 20 0 0      | 0.10 1 0 0                 |
| SEMIVOLATILES    | Phenol                         |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 1,7 10 0 0       | 0.18/ 1 0 0      | 3.46 20 0 0      | 0.18 1 U U                 |
| SEMIVOLATILES    | Pyrene                         |                  |                  |                  |                   |                  |                  | 0.15 1 < U       | 0.15 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 1.7 10 0 0       | 0.18/ 1 U U      | 3.40 20 U U      | 0.18 1 0 0                 |
| TPH              | Hydrocarbons as Diesel Fuel    |                  |                  |                  | 60 1 < U          | 57.6 1 < U       | 64 1 < U         |                  |                  |                  |                  |                  |                  |                  |                            |
| TPH              | Hydrocarbons as Gasoline       |                  |                  |                  | 60 1 < U          | 57.6 1 < U       | 64 1 ≺ U         |                  |                  |                  |                  |                  |                  |                  |                            |
| TPH              | TOTAL HYDROCARBONS             |                  |                  |                  | 60 1 < U          | 57.6 1 < U       | 64 1 < U         |                  |                  |                  |                  |                  |                  |                  |                            |
| VOLATILES        | 1,1,1,2-Tetrachloroethane      |                  |                  | 0.00529 1 U      |                   |                  |                  |                  |                  |                  |                  |                  | 0.09655 1 U U    |                  | 0.00502 t U U              |
| VOLATILES        | 1.1.1-Trichloroethane          |                  |                  | 0.00529 1 U      |                   |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        | 1.1.2.2-Tetrachloroethane      |                  |                  | 0.00529 1 U      |                   |                  |                  | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        | 1.1.2-Tricblomethane           |                  |                  | 0.00529 1 U      |                   |                  |                  | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATE ES        | 1 1-Dickinsethane              |                  |                  | 0.00529 1 U      |                   |                  |                  | 0.005 1 < U      | 0.005 t < U      | 0.005 t < U      | 0.005 t < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        | 1 1-Dichlossethene             |                  |                  | 0.00529 1 1/     |                   |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        | 1 Dichloromoone                |                  |                  | 0.00529 1 1      |                   |                  |                  |                  |                  |                  |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        | 1 2 2-Trichlambonzoon          |                  |                  | 0.00529 1 1      |                   |                  |                  |                  |                  |                  |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        | 1,2,3 Trichlaroomoono          |                  |                  | 0.00529 1 1      |                   |                  |                  |                  |                  |                  |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        | 1.2.4 Trishlambagagag          |                  |                  | 0.00520 1 11     |                   |                  |                  |                  |                  |                  |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        | 1,2,4* Inchorocenzene          |                  |                  | 0.0020 1 0       |                   |                  |                  |                  |                  |                  |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        |                                |                  |                  | 0.0023 1 0       |                   |                  |                  |                  |                  |                  |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLANLES         | 1,2-Dibitumo-3-childropiopane  |                  |                  | 0.0029 1 0       |                   |                  |                  |                  |                  |                  |                  |                  | D 00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        | 1,2-Dibromoetnane              |                  |                  | 0.00529 1 0      |                   |                  |                  |                  |                  |                  |                  |                  | 0.00655 1 11 11  |                  | 0.00502 1 U U              |
| VOLANLES         | 1,2-Dichlorobenzene            |                  |                  | 0.00529 1 0      |                   |                  |                  | 0.005 1 4 1      | 0.005 1 - 11     | A005 1 < 1       | 0.005 1 - 11     |                  | 0.00655 1 11 11  |                  | 0.00502 t 1 <del>1</del> U |
| VOLATILES        | 1,2-Dichloroethane             |                  |                  | 0.00529 1 0      |                   |                  |                  |                  | 0.005 1 < 0      |                  | 0.005 1 < 0      |                  |                  |                  |                            |
| VOLATILES        | 1,2-Dichloroethene             |                  |                  |                  |                   |                  |                  | 0.005 1 < 0      |                  |                  | 0.005 1 - 1      |                  | 0.00655 1 11 11  |                  | 0.00502 1 11 11            |
| VOLATILES        | 1,2-Dichloropropane            |                  |                  | 0.00529 1 U      |                   |                  |                  | 0.005 1 < 0      | 0.005 1 < 0      | 0.000 i < 0      |                  |                  | 0.00655 1 1 1    |                  | 0.00502 1 11 11            |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) |                  |                  | 0.00529 1 U      |                   |                  |                  | 9.005 1 < 0      | 0.0000 1 < 0     |                  |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 11 11            |
| VOLATILES        | 1,3,5-Trimethylbenzene         |                  |                  | 0.00529 1 U      |                   |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.00502 1 0 0              |
| VOLATILES        | 1,3-Dichlorobenzene            |                  |                  | 0.00529 1 U      |                   |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.00002 1 0 0              |
| VOLATILES        | 1.3-Dichloropropane            |                  |                  | 0.00529 1 U      | -                 |                  |                  |                  |                  |                  |                  |                  | 0.00655 1 0 0    |                  | 0.00502 1 0 0              |
| VOLATILES        | 1,4-Dichlorobenzene            |                  |                  | 0.00529 1 U      |                   |                  |                  |                  |                  |                  |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 0 13             |
| VOLATILES        | 2,2-Dichloropropane            |                  |                  | 0.00529 1 U      |                   |                  |                  |                  |                  |                  |                  |                  | 0.00655 1 0 0    |                  | 0.00502 1 0 0              |
| VOLATILES        | 2-Butanone                     |                  |                  | 0.0106 1 U       |                   |                  |                  | 0.005 t < b      | 0.005 1 < U      | 0.05 1 < U       | 0.05 1 < 1       |                  | 0.0131 1 0 0     |                  | 0.01 1 0 0                 |
| VOLATILES        | 2-Chioroethyl vinyl ether      |                  |                  | 0.0106 1 U       |                   |                  |                  |                  |                  | 0.01 1 < U       | 0.01 1 < U       |                  | 0.0131 1 U U     |                  | 0.01 1 0 0                 |
| VOLATILES        | 2-Chlorotoluene                |                  |                  | 0.00529 1 U      |                   |                  |                  |                  |                  |                  |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        | 2-Hexanone                     |                  |                  | 0.0106 1 U       |                   |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.05 t < U       | 0.05 1 < U       |                  | 0.0131 1 U U     |                  | 0.01 1 U U                 |
| VOLATILES        | 4-Chiorotoluene                |                  |                  | 0.00529 1 U      |                   | · · · ·          |                  |                  |                  |                  |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        | Acetone                        |                  |                  | 0.0106 1 U       |                   |                  |                  | 0.013 1          | 0.022 1          | 0.1 1 < U        | 0.1 1 < U        |                  | 0.0131 1 U U     |                  | 0.01 1 U U                 |
| VOLATILES        | Benzene                        |                  |                  | 0.00529 1 1      |                   |                  |                  | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        | Bronnhenzene                   | 1                |                  | 0.00529 1 11     |                   |                  |                  |                  |                  |                  |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATE ES        | Bromoblecom                    |                  |                  | 0.00520 1 11     |                   |                  |                  |                  |                  |                  |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
|                  | Bramadiableramathar -          | 1                |                  | 0.00022 1 0      |                   |                  |                  | 0.005 1 - 13     | 0-005 t < U      | 0.005 1 < 13     | 0.005 1 < 1I     |                  | 0.00655 1 U U    |                  | 0.00502 1 U U              |
| VOLATILES        | Dronkodkinkoromeinane          |                  |                  | 0.00029 1 0      |                   |                  |                  | 0.005 1 - 1      | 0.005 1 - 11     | 0.005 1 2 13     | 0.005 1 - 17     |                  | 0.00655 1 11 11  |                  | 0.00502 1 U U              |
| VOLABLES         | Bromotorm                      |                  |                  | 0.00529 1 0      |                   |                  |                  |                  | BAT 4 - 14       | 0.000 1 2 0      | 001 1 - U        |                  | 0.0131 1 44 11   |                  | 0.01 1 10 11               |
| VOLATILES        | Bromomethane                   |                  |                  | 0.0106 1 U       |                   |                  |                  | 0.01 1 < 0       |                  |                  | 0.01 1 < 0       |                  | 0.00555 1 21 11  | · · ·            | 0.00502 1 1 1              |
| VOLATILES        | Carbon disulfide               |                  |                  | 0.00529 1 9      |                   |                  |                  | 0.005 1 < 0      | 0.005 \$ < U     | 0.005 1 < U      | 0.005 1 < 0      |                  | 0.00000 1 0 0    |                  | 0.00002 1 0 0              |
| VOLATILES        | Carbon tetrachloride           | 1                |                  | 0.00529 1 U      |                   |                  |                  | 0.005 1 < 0      | 0.005 T < U      | 0.000 i < U      | 0.000 I < U      |                  | 0.00003 ( U U    |                  |                            |
| VOLATILES        | Chlorobenzene                  |                  |                  | 0.00529 1 U      |                   |                  |                  | 0.005 1 < 0      | 0.005 1 < Ŭ      | 0.005 1 < 0      | 0.005 1 < 0      |                  | 0.0191 * U U     |                  |                            |
| VOLATILES        | Chloroethane                   |                  |                  | 0.0106 1 U       |                   |                  |                  | 0.01 1 < 0       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 0       |                  | 0.0131 1 0 0     |                  | U U 1 10.0                 |
| VOLATILES        | Chloroform                     |                  |                  | 0.00529 1 U      |                   |                  |                  | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | ່ແຫລຍຂໍເປັບ                |
|                  |                                |                  |                  |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                            |

Shaw Environmental, Inc.

.

Table 3-33 Concentrations of Chemicals in Soil Samples Associated with Sump 033

| [SUMP] = SUMP033     |                                |                  |                  |                  |                  |                  |                  |                   |                  |                  |                  |                  |                  |                     |  |
|----------------------|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|---------------------|--|
| LOCATION _CODE       |                                | 35SUMP032-SB01   | 35SUMP033-SB01   | 35SUMP033-SB01   | HOSB03           | HOSB03           | HOSB03           | LH-S32-01         | LH-S32-01        | LH-S33-01        | LH-S33-01        | WRS015-SB01      | WRS015-SB01      | WRS015-SB02         | WRS015-SB02                            |
| SAMPLE_NO            | ·                              | 35-SMP32-SB01-01 | 35-SMP33-SB01-01 | 35-SMP33-SB01-02 | HOSB03(0-0_5)    | HOSB03(3-5)      | HOSB03(8-10)     | LH-S32-01_1       | LH-S32-01_2      | LH-\$33-01_1     | LH-S33-01_2      | WRS-015-SB01-01  | WRS-015-SB01-02  | WRS-15-SB02-01      | WRS-15-SB02-02                         |
| SAMPLE_DATE          |                                | 9/12/2005        | 9/11/2006        | 9/11/2006        | 12/4/2000        | 12/4/2000        | 12/4/2000        | 6/25/1993         | 6/25/1993        | 7/21/1993        | 7/21/1993        | 9/15/2006        | 9/15/2006        | 9/15/2006           | 9/15/2006                              |
| DEPTH                |                                | 0.5 - 0.5 Ft     | 0 - 0.5 Ft       | 4.5 - 5 Ft       | 0 • 0.5 Ft       | 3-5-Ft           | 8 - 10 Ft        | .5 - 2.5 Ft       | 3 - 5 Ft         | 0.5 - 1 Ft       | 3 - 3.4 Ft       | 0.5 - 0.5 Ft     | 4 - 4 Ft         | 1 - 1 Ft            | 4 - 4 Ft                               |
| SAMPLE_PURPOSE       |                                | REG               | REG              | REG              | REG              | REG              | REG              | REG                 | REG                                    |
| Test Group           | Parameter (Units = mg/kg)      | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL 1.Q VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DiL LQ VQ | Result Dill, LQ, VQ | Result DIL LQ VQ                       |
| VOLATILES            | Chloromethane                  | •                |                  | 0.0106 1 U       |                  |                  |                  | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |                  | 0.0131 1 U U     |                     | 0.01 t U U                             |
| VOLATILES            | cis-1,2-Dichloroethene         |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 f < U       | 0.005 1 < U      |                  |                  |                  | 0.00655 1 U U    |                     | 0.00502 t U U                          |
| VOLATILES            | cis-1,3-Dichkropropene         | 1                |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00655 1 U U    |                     | 0.00562 1 U U                          |
| VOLATILES            | Dibromochloromethane           |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U       | 0.005 1 < 9      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00655 1 U U    |                     | 0.00502 ‡ U U                          |
| VOLATILES            | Dibromomethane                 | 1                |                  | 0.00529 1 U      |                  |                  |                  |                   |                  |                  |                  |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | Dichlorodifluoromethane        |                  |                  | 0.0105 1 U       |                  |                  |                  |                   |                  |                  |                  |                  | 0.0131 1 U U     |                     | 0.01 1 U U                             |
| VOLATILES            | Ethylbenzene                   |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00655 1 U U    |                     | 0.00502 t U U                          |
| VOLATILES            | Hexachlorobutadiene            |                  |                  | 0.00529 1 U      |                  |                  |                  |                   |                  |                  |                  |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | Isopropylbenzene               |                  |                  | 0.00529 1 U      |                  |                  |                  |                   |                  |                  |                  |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | m.p-Cresol                     |                  |                  |                  |                  |                  |                  | 0.15 1 < U        | 0.15 t < U       |                  |                  |                  |                  |                     |  |
| VOLATILES            | m,p-Xylenes                    |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U       | 0.005 t < U      |                  |                  |                  | 0.00655 1 U U    |                     | 0.00502 t U U                          |
| VOLATILES            | Methyl isobutyl ketone         |                  |                  | 0.0106 f U       |                  |                  | -                | 0.005 1 < U       | 0.005 1 < U      | 0.05 1 < U       | 0.05 1 < U       |                  | 0.0131 1 U U     |                     | 0.01 1 U U                             |
| VOLATILES            | Methylene chloride             |                  |                  | 0.00529 t U      |                  |                  |                  | 0.01 1 < U        | 0.01 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00655 1 U U    |                     | 0.00502 t U U                          |
| VOLATILES            | Naphthalene                    |                  |                  | 0.0106 1 U       |                  |                  |                  |                   |                  |                  |                  |                  | 0.0131 1 U U     |                     | 0.01 1 U U                             |
| VOLATILES            | n-BUTYLBENZENE                 | 1 .              |                  | 0.00529 1 U      |                  |                  |                  |                   |                  |                  |                  |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | n-PROPYLBENZENE                |                  |                  | 0.00529 1 U      |                  |                  |                  |                   |                  |                  |                  |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | p-ISOPROPYLTOLUENE             |                  |                  | 0.00529 1 U      |                  |                  |                  |                   |                  |                  |                  |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | sec-BUTYLBENZENE               |                  |                  | 0.00529 1 U      |                  |                  |                  |                   |                  |                  |                  |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | Styrene                        |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U       | 0.005 t < 0      | 0.005 1 < U      | 0.005 t < U      |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | tert-BUTYLBENZENE              |                  |                  | 0.00529 1 U      |                  |                  |                  |                   |                  |                  |                  |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | Tetrachloroethene              | 1                |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | Toluene                        |                  |                  | 0.00529 t U      |                  |                  |                  | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | trans-1,2-Dichloroethene       |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 1 < U       | 0.005 1 < U      |                  |                  |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | trans-1,3-Dichloropropene      |                  |                  | 0.00529 1 U      |                  |                  |                  | 0.005 t < U       | 0.005 1 < V      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | Trichloroethene                |                  |                  | 0.00529 † U      |                  |                  |                  | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00655 1 U U    |                     | 0.00502 1 U U                          |
| VOLATILES            | Trichlorofluoromethane         |                  |                  | 0.9106 t U       |                  |                  |                  |                   |                  |                  |                  |                  | 0.0131 1 U U     |                     | 0.01 1 U U                             |
| VOLATILES            | Vinyl acetate                  | 1                |                  | 0.0106 1 U       |                  |                  |                  | 0.005 1 < U       | 0.005 1 < U      | 0.05 1 < U       | 0.05 1 < U       |                  | 0.0131 1 U U     |                     | 0.01 1 U U                             |
| VOLATILES            | Vinyl chloride                 |                  |                  | 0.0106 1 U       |                  |                  |                  | 0.01 t < U        | 0.01 1 < 1J      | 0.01 1 < U       | £0.01 1 < Ư      |                  | 0.0131 1 U U     |                     | 0.01 1 U U                             |
| VOLATILES            | Xylenes, Totai                 |                  |                  |                  |                  |                  |                  | 0.005 1 < U       | 0.005 t < U      | 0.005 1 < U      | 0.005 t < U      |                  |                  |                     |  |
| Endenatos am abaum a | n count page to Tables Casting |                  |                  |                  |                  |                  |                  |                   |                  |                  |                  |                  | · · · ·          |                     | ······································ |

otes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-34 Concentrations of Chemicals in Soil Samples Associated with Sump 034

| ISIMPI - SIMP034 |                             |                   |                  | Concentration       |                   | oon oumpies roe  |                 | ip ee i        |                 |                   |                |                  |
|------------------|-----------------------------|-------------------|------------------|---------------------|-------------------|------------------|-----------------|----------------|-----------------|-------------------|----------------|------------------|
| LOCATION CODE    |                             | 35SUMP034-SB01    | 35SUMP034-SB01   | 35SUMP034-SB01      | 35SUMP034-SB02    | 35SUMP034-SB02   | LH-S34-01       | LH-S34-01      | WRS015-SB01     | WRS015-SB01       | WRS015-SB02    | WRS015-SB02      |
|                  |                             | 35-SMP034-SB01-02 | 35-SMP34-SB01-01 | 35-SMP34-SB01-01-OC | 35-SMP034-SB02-02 | 35-SMP34-SB02-01 | LH-S34-01 1     | LH-S34-01 2    | WRS-015-SB01-01 | WRS-015-SB01-02   | WRS-15-SB02-01 | WRS-15-SB02-02   |
| CANOLE DATE      |                             | 0/20/2006         | D/11/2006        | 0/11/2006           | 9/20/2006         | 9/11/2005        | 6/25/1993       | 7/10/1993      | 9/15/2006       | 9/15/2006         | 9/15/2006      | 9/15/2006        |
| SAMPLE_DATE      |                             | 3/20/2000         | 2/10/2000        | 0.055               | * * 5*            | 0-05 Ft          | 35.45 5         | 05-155         | 05-055          | 4 - 4 Ft          | 1-18           | 4 - 4 Ft         |
| VEPIN            |                             | 4=411             | 0-0.570          | 0-03Ft              | 1000              | PEC              | 0.0 4.577       | PEC            | REC             | PEG               | REG            | REG              |
| SAMPLE_PURPOSE   |                             | HEG               | REG              |                     |                   | Res NO NO        |                 |                |                 |                   |                | Result Dil IO VO |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LU VQ  | Result DIL LO VO | Result DIL LQ VQ    | Hesuit Dil. LO VO | Heson DIL LU VQ  | HESER DIL LU VU | RESULUEL LQ VQ |                 | Reset Dic Lor Vor |                |                  |
| EXPLOSIVES       | 1,3,5-Trinitrobenzene       | 0.249 1 0         | 0.238 1 U        | 0.239 1 U           | 0.248 1 0         | 0.243 1 0        |                 |                |                 |                   |                |                  |
| EXPLOSIVES       | 1,3-Dinitrobenzene          | 0.249 1 0         | 0.238 f U        | 0.239 1 U           | 0.248 1 0         | 0.243 5 0        |                 |                |                 |                   |                |                  |
| EXPLOSIVES       | 2,4,6-Trinitrololuene       | 0.249 1 U         | 0.238 1 0        | 0.239 1 U           | 0.248 1 U         | 0.243 1 0        |                 |                |                 |                   |                |                  |
| EXPLOSIVES       | 2,4-Dinitrotoluene          | 0.249 1 U         | 0.238 1 U        | 0.239 1 U           | 0.248 1 U         | 0.243 1 U        | 0.33 1 < 0      | 0.33 1 < 0     |                 |                   |                |                  |
| EXPLOSIVES       | 2,6-Dinitrotoluene          | 0.259 1 U         | 0.248 1 U        | 0.249 1 U           | 0.257 1 U         | 0.252 1 U        | 0.33 1 < 0      | 0.33 1 < 17    |                 |                   |                |                  |
| EXPLOSIVES       | 2-Amino-4,6-dinitrotoluene  | 0.259 1 U         | 0.248 1 U        | 0.249 1 U           | 0.257 1 0         | 0.252 1 U        |                 |                |                 |                   |                |                  |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene  | 0.259 1 U         | 0.248 1 U        | 0.249 1 U           | 0.257 t U         | 0.252 1 U        |                 |                |                 |                   |                |                  |
| EXPLOSIVES       | HMX                         | 2.19 1 U          | 2.1 1 U          | 2.11 1 U            | 2.18 1 U          | 2.14 1 U         |                 |                |                 |                   |                |                  |
| EXPLOSIVES       | m-Nitrotoluene              | 0.249 1 U         | 0.238 1 U        | 0.239 1 U           | 0.248 t U         | 0.243 1 U        |                 |                |                 |                   |                |                  |
| EXPLOSIVES       | Nitrobenzene                | 0.259 1 U         | 0.248 1 U        | 0.249 1 U           | 0.257 1 U         | 0.252 1 U        |                 |                |                 |                   |                |                  |
| EXPLOSIVES       | o-Nitrotokuene              | 0.249 1 U         | 0.238 1 U        | 0.239 1 U           | 0.248 1 U         | 0.243 1 U        |                 |                |                 |                   |                |                  |
| EXPLOSIVES       | p-Nitrotoluene              | 0.249 1 U         | 0.238 1 U        | 0.239 1 U           | 0.248 1 U         | 0.243 1 U        |                 |                |                 |                   |                |                  |
| EXPLOSIVES       | RDX                         | 0.995 1 U         | 0.952 1 U        | 0.957 1 U           | 0.99 t U          | 0.971 1 U        |                 |                |                 |                   |                |                  |
| EXPLOSIVES       | Tetryi                      | 0.647 1 U         | 0.619 1 U        | 0.622 t U           | 0.644 1 U         | 0.631 T U        |                 |                |                 |                   |                |                  |
| METALS           | Aluminum                    | 16800 1           | 11500 1          | 9410 1              | 10700 1           | 10600 1          | 19900 1         | 9620 1         | 6240 1          | 22200 1           | 6340 1         | 13500 1          |
| METALS           | Antimony                    | 0.122 1 U         | 0.106 1 U        | 0.105 1 U           | 0.118 1 U         | 0.105 1 U        | 31 < U          | 31 < U         | 0.105 1 U U     | 0.116 1 U U       | 0.099 1 J J    | 0.11 1 U U       |
| METALS           | Arsenic                     | 1.54 1            | 8.23 t J         | 4.31 1 J            | 5 1               | 6.4 T J          | 3.7 1           | 2.9 1          | 5.94 1          | 4.36 1            | 5.51 1         | 2.31 1           |
| METALS           | Banium                      | 88.8 1            | 226 1            | 201 1               | 715 1             | 1170 10          | 95.6 1          | 778 1          | 6† 1            | 64.6 1            | 48 1           | 42.2 1           |
| METALS           | Berväum                     | 0.826 1           | 0.488 1          | 0.421 1             | 0.512 1           | 0.599 1          |                 |                | 0.466 1         | 0.661 1           | 0.417 1        | 0.412 1          |
| METALS           | Cadmium                     | 0,179 1 J J       | 0.884 1          | 1.15 1              | 0.941 1           | 0.811 1          | 11< 0           | 11 < U         | 0.26 1 J J      | 0.0801 1 J J      | 0.917 1        | 0.047 1 J J      |
| METALS           | Calcium                     | 1890 1            | 5140 1           | 8500 1              | 3420 1            | 4100 1           | 669 1           | 1620 1         | 44100 10        | 2020 1            | 7080 1         | 289 1            |
| METALS           | Chromium                    | 24.2 1            | 20.2 1           | 19.7 1              | 19.9 1            | 34.5 1           | 18.4 1          | 13.8 1         | 15.9 1          | 28.7 1            | 18.1 1         | 14,4 1           |
| METALS           | Cobatt                      | 5.42 1            | 3.31 1           | 3.38 1              | 4.05 1            | 3.61 1           | 3.29 1          | 4.3 1          | 3.42 1          | 4.27 1            | 3.01 1         | 1.73 1           |
| METALS           | Copper                      | 10.7 1            | 16.7 1           | 20.2 1              | 11.9 1            | 8.41 1           | 5.46 1          | 4.7 1          | 5.11 1          | 6.56 1            | 5.74 1         | 3.35 1           |
| METALS           | lron                        | 33100 5           | 22100 1          | 17900 1             | 21500 1           | 50000 10         | 20300 1         | 21000 t        | 29900 1         | 27700 1           | 27400 1        | 14600 1          |
| METALS           | Lead                        | 9.23 1            | 293 100 J        | 124 100 J           | 76.8 5            | 23.7 1 1         | 9.36 1          | 26 1           | 20.3 1          | 16.4 1            | 19.2 1         | 7.59 1           |
| METALS           | Magnesium                   | 1710 1            | 1140 1           | 1340 1              | 1160 1            | 1200 1           | 1020 1          | 1300 1         | 897 1           | 1130 1            | 504 1          | 546 1            |
| METALS           | Manganese                   | 101 1             | 131 1            | 144 1               | 135 1             | 196 1            | 37.3 1          | 203 1          | 251 1           | 57.1 1            | 153 1          | 30.5 1           |
| METALS           | Mercury                     | 0.0319 1 J J      | 0.0797 1 J       | 0.0778 1 J J        | 0.231 t J J       | 0.0765 1 J J     | 0.1 1 < U       | 0.1 1 < U      | 0.0462 I J J    | 0.0465 1 J J      | 0.0298 1 J J   | 0.0194 t J J     |
| METALS           | Nickel                      | 12.1 1            | 7.92 1           | 6.35 1              | 7.01 1            | 7.24 1           |                 |                | 5.39 1          | 8.54 1            | 5.66 1         | 4.45 1           |
| METALS           | Potassium                   | 694 1             | 461 1            | 434 1               | 453 1             | 402 1            | 764 1           | 438 1          | 222 1           | 554 1             | 336 1          | 380 1            |
| METALS           | Selenium                    | 0.307 1           | 0.395 1          | 0.353 1             | 0.274 1           | 0.449 1          | 11 < U          | 11 < U         | 0.409 1         | 0.653 1           | 0.289 1        | 0.315 1          |
| METALS           | Silver                      | 1.76 1 U          | 1.66 1 U         | 0.212 1 J J         | 1.65 1 U          | 1.61 1 U         | 11 < U          | 11 < U         | 1.5 1 U U       | 1.57 1 U U        | 0.233 1 J J    | 1.59 1 U U       |
| METALS           | Sodium                      | 29 1              | 48.2 1           | 42 1                | 45.9 1            | 38 1             |                 |                | 40.4 1          | 64.2 1            | 21.7 1         | 24 1             |
| METALS           | Strontium                   |                   |                  |                     |                   |                  | 8.5 1           | 10.3 1         |                 |                   |                |                  |
| METALS           | Thallium                    | 0.0987 1          | 0.0844 1         | 0.0753 1            | 0.0603 1          | 0.0704 1         |                 |                | 0.058 1         | 0.17 1            | 0.0426 1       | 0.281 1          |
| METALS           | Vanadium                    | 41.1 t            | 31.2 1           | 27.7 1              | 35.9 1            | 63.6 1           |                 |                | 32.9 1          | 49.1 1            | 41.5 1         | 30.5 1           |
| METALS           | Zinc                        | 45.8 1            | 226 1            | 268 1               | 200 t             | 54.2 1           | 22.5 1          | 52.9 1         | 43.4 1          | 24.3 t            | 102 1          | 12.8 1           |
| RANGE ORGANICS   | Carbon Range C12-C28        |                   |                  |                     |                   |                  |                 |                | 31.3 1 J J      | 34.9 1 J J        | 66 1           | 55 1 U U         |
| RANGE ORGANICS   | Carbon Range C28-C35        |                   |                  |                     |                   |                  |                 |                | 33.5 1 J J      | 33.9 1 J J        | 56 1           | 55 1 U U         |
| RANGE OBGANICS   | Carbon Range C6-C12         |                   |                  |                     |                   |                  |                 |                | 51.7 1 U U      | 57.8 1 U U        | 52.4 1 U U     | 55 1 U U         |
| SEMIVOLATILES    | 1.2.4-Trichlorobenzene      |                   |                  |                     |                   |                  | 0.33 1 < U      | 0.33 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMIVOLATH ES    | 1.2-Dichlorobenzeae         |                   |                  |                     |                   |                  | 0.33 1 < U      | 0.33 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMIVOLATILES    | 1.3-Dichlorobenzene         |                   |                  |                     |                   |                  | 0.33 1 < U      | 0.33 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMIVOLATILES    | 1.4-Dicblorobenzene         |                   |                  |                     |                   |                  | 0.33 t < U      | 0.33 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.16 1 U U       |
| SEMIVOLATILES    | 2 4 5-Trichlorophenol       |                   |                  |                     |                   |                  | 1.65 1 < U      | 1.65 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMIVOLATILES    | 2 4 6-Trichlomphenol        |                   |                  |                     |                   |                  | 0.33 1 < U      | 0.33 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMIVOLATILES    | 2.4-Dichlomohenol           |                   |                  |                     |                   |                  | 0.33 1 < U      | 0.33 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMIVOLATILES    | 2 4-Dimethylinbenol         |                   |                  |                     |                   |                  | 0.33 1 < U      | 0.33 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMIVOLATILES    | 2.4-Dinitrophenol           |                   |                  |                     |                   |                  | 1.65 1 < U      | 1.65 1 < U     | 8.5 10 U U      | 0.937 1 U U       | 17.3 20 U U    | U U t 668.0      |
| SEMIVOLATILES    | 2 4-Dinizotnatione          |                   |                  |                     |                   |                  |                 |                | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMIVOLATILES    | 2.6-Dinitrotatiene          |                   |                  |                     |                   |                  |                 |                | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMIVOLATILES    | 2-Chloronachthalepe         |                   |                  |                     |                   |                  | 0.33 1 < U      | 0.33 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMIVOLATILES    | 2-Chlorenhenol              |                   |                  |                     |                   |                  | 0.33 1 < U      | 0.33 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMINOLATILES    | 2-Mettraloanhthalene        |                   |                  |                     | 2                 |                  | 0.33 1 < U      | 0.33 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SCHWOLAHLES      | 2-Methylinaphasaiche        |                   |                  |                     |                   |                  | 0.33 1 < U      | 0.33 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMINOLATILES    | 2-Mitroaniline              |                   |                  |                     |                   |                  | 165 1 < U       | 1.65 1 < U     | 85 10 U Ú       | 0.937 t U U       | 17.3 20 U U    | 0.899 1 U U      |
| SCHRIVOLATILES   | 2-Nitrophenot               |                   |                  |                     |                   |                  | 0.33 t < U      | 0.33 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMIVOLATILES    | 3 3'-Dichlorohenzidige      |                   |                  |                     |                   |                  | 0.65 1 < U      | 0.65 1 < U     | 3.4 10 U U      | 0.375 1 U U       | 6.92 20 U U    | 0.359 1 U U      |
| SEMINOLATILES    | 3-Nitroandine               |                   |                  |                     |                   |                  | 1.65 1 < 1      | 1.65 1 < U     | 8.5 10 U U      | 0.937 1 U U       | 17.3 20 U U    | 0.899 1 U U      |
|                  | 4.6-Dinitro-2-methylohenol  |                   |                  |                     |                   |                  | 1.65 1 < U      | 1.65 1 < 0     | 8.5 10 U U      | 0.937 1 U U       | 17.3 20 U U    | 0.899 1 U U      |
| SEMIVOLATILES    | 4.Bromonhand abarul ether   |                   |                  |                     |                   |                  | 0.33 1 < 11     | 0.33 1 < 0     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
|                  | 4.Chloro-3. melbylabarol    |                   |                  |                     |                   |                  | 0.65 1 < 11     | 0.65 1 < U     | 1.7 10 U U      | 0.187 T U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMIVOLATIES     | 4-Chlomaniline              |                   |                  |                     |                   |                  | 0.65 1 < U      | 0.65 1 < U     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| SEMIVOLATILES    | 4-Chirronhenvi nhenvi ether |                   |                  |                     |                   |                  | 0.33 1 < 11     | 0.33 1 < 1     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
|                  | 4-Methylphenol              |                   |                  |                     |                   |                  | 0.33 1 < U      | 0.33 1 < 1     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | Q.18 1 U U       |
| SEMINOLATILES    | 4-Nitroapiline              |                   |                  |                     |                   |                  | 1.65 1 < U      | 1.65 1 < 1     | 8.5 10 U U      | 0.937 t U U       | 17.3 20 U U    | 0.899 1 U U      |
| SEMIVOLATILES    | 4-Nitmpbeno)                |                   |                  |                     |                   |                  | 1.65 1 < 1      | 1.65 1 < U     | 8.5 10 U U      | 0.937 1 U U       | 17.3 20 U U    | 0.899 1 U U      |
| SEMILOS ATILES   | Acenanhibene                |                   |                  | · .                 |                   |                  | 0.33 1 < 11     | 0.33 1 < 0     | 1.7 10 U U      | 0.187 1 U U       | 3.46 20 U U    | 0.18 1 U U       |
| OCTOR TO CALLED  | · warmapharana ·            |                   |                  |                     |                   |                  | · · · ·         |                | –               | · · ·             |                |                  |

Shaw Environmental, Inc.



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-34 Concentrations of Chemicals in Soil Samples Associated with Sump 034

| (SUMP] = SUMP034                |                                |                   |                  |                     |                   | •                |                       | •                |                   |                   |                  |                  |
|---------------------------------|--------------------------------|-------------------|------------------|---------------------|-------------------|------------------|-----------------------|------------------|-------------------|-------------------|------------------|------------------|
| LOCATION_CODE                   |                                | 35SUMP034-SB01    | 35SUMP034-SB01   | 35SUMP034-SB01      | 35SUMP034-SB02    | 35SUMP034-SB02   | LH-S34-01             | LH-S34-01        | WRS015-SB01       | WR5015-SB01       | WHS015-S802      | WRS015-SB02      |
| SAMPLE_NO                       |                                | 35-SMP034-SB01-02 | 35-SMP34-S801-01 | 35-SMP34-SB01-01-QC | 35-SMP034-SB02-02 | 35-SMP34-SB02-01 | LH-S34-01_1           | LH-534-01_2      | WR5-015-5801-01   | WHS-015-SB01-02   | WHS-15-SB02-01   | 0/15/2006        |
| SAMPLE_DATE                     |                                | 9/20/2006         | .9/11/2006       | 9/11/2006           | 9/20/2006         | 9/11/2006        | 6/25/1993<br>25 / 55* | 710/1993         | 9/15/2006         | 9/13/2000         | 9/10/2000        | 4 - 4 Ft         |
| DEPTH<br>CAMPLE DUDDOOFE        |                                | 4-4H              | U-0.5 ft         | 0-0.5 FI            | 4-4Fi<br>DEC      | 0-0.5 Fi         | 3.3 * 4.3 F1<br>DEC   | 0.5 - 1.5 M      | BEG               | REG               | REG              | BEG              |
| Test Grun                       | Parameter (Unite - maßen)      | Recult DVI LO VO  | Result DIL LO VO | Result DH 10 VO     | Result Dat I O VO | Result Dit IO VO | Result DIL LO VO      | Result DIL LO VO | Result DIL 1.0 VO | Result Dit. 10 VO | Result DIL LO VO | Result DIL LO VQ |
| SEMIVOLATILES                   | Acenanbitiviene                | nesul Dat Exe Vo  |                  | HOURDIE EQ TO       | TROUG ONE EN IN   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Anthracene                     |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 t U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Benzo(a)anthracene             |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Benzo(a)pyrene                 |                   |                  |                     |                   |                  | 0.33 t < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 † U U       | 3.46 20 U U      | 0.18 1 U.U       |
| SEMIVOLATILES                   | Benzo(b)iluoranthene           |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Benzo(ghi)perylene             |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 ! U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Benzo(k)fuoranthene            |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Benzoic Acid                   |                   |                  |                     |                   |                  | 1.65 1 < 1            | 1.65 1 < 0       | 8.5 10 0 0        | 0.937 1 U U       | 17.3 20 0 0      | 0.899 1 0 0      |
| SEMIVOLATILES                   | Benzyi Alcohol                 |                   |                  |                     |                   |                  | 0.65 T < 3            | 0.65 1 < 0       | 1.7 10 0 0        | 0.187 1 0 0       | 3.46 20 0 0      | 0.18 1 1 1       |
| SEMIVOLATILES                   | bis(2-Chloroethoxy)methane     |                   |                  |                     |                   |                  | 0.33 1 < 0            | 0.33 1 < 0       | 1.7 10 0 0        | 0.167 1 0 0       | 3.46 20 0 0      | 0.10 1 1 0       |
| SEMIVULATILES<br>CENTRIOLATILES | bis(2-Chloroisopropy))athor    |                   |                  |                     |                   |                  | 0.33 1 < 0            | 0.33 1 < 11      | 17 10 11 10       | 0.187 1 10 11     | 3.45 20 11 11    | 0.18 1 1/ 1/     |
| SEMBIOLICITES                   | bic(2-Ethylheyd)shthalate      |                   |                  |                     |                   |                  | 0.33 t < 1)           | 0.33 1 < 1       | 17 10 U U         | 0.187 1 14 0      | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATE ES                   | Butvi benzvi obthalate         |                   |                  |                     |                   |                  | 0.33 t < 10           | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Chrysene                       |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 to U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Dibenzo(a,h)anthracene         |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 t < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Dibenzokiran                   |                   |                  |                     |                   |                  | 0.33 t < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Diethyl phthalate              |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Oimethyl phthalate             |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | di-n-Butyl phthalate           |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | di-n-Octyl phthatate           |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Fluoranthene                   |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 0 0        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Fluorene                       |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 17 10 0 0         | 0.187 1 0 0       | 3.46 20 0 0      | 0.16 1 0 0       |
| SEMIVOLATILES                   | Hexachkorobenzene              |                   |                  |                     |                   |                  | 0.33 1 < 0            | 0.33 1 < 0       | 17 10 0 0         | 0.167 1 0 0       | 3.40 20 0 0      | 0.10 1 0 0       |
| SEMINOLATILES                   | Hexachiomovelocentadiage       |                   |                  |                     |                   |                  |                       | 0.33 1 < U       | 17 10 U U         | 0187 1 1 1        | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Hexactionnethane               |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Indeno(1.2.3-cd)avrene         |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Isophorone                     |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < Ư       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Naphthalene                    |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 t U U       |
| SEMIVOLATILES                   | Nitrobenzene                   |                   |                  |                     |                   |                  | 0.33 1 < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | n-Nitroso-di-n-propylamine     |                   |                  |                     |                   |                  | 0.33 1 < 13           | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | n-Nitrosodiphenylamine         |                   |                  |                     |                   |                  | 0.33 t < U            | 0.33 1 < U       | 1.7 10 U U        | 0.187 1 U U       | 3.46 20 U U      | 0.18 1 U U       |
| SEMIVOLATILES                   | Pentachkoropheno!              |                   |                  |                     |                   |                  | 1.65 1 < 0            | 1.65 1 < U       | 8.5 10 U U        | 0.937 1 U U       | 17.3 20 U U      | 0.899 1 U U      |
| SEMIVOLATILES                   | Phenanthrene                   |                   |                  |                     |                   |                  | 0.33 1 < 0            | 0.33 1 < 0       | 1.7 10 0 0        | 0.187 1 0 0       | 3.46 20 0 0      | 0.18 1 0 0       |
| SEMIVULATILES                   | Prience                        |                   |                  |                     |                   |                  | 0.33 1 < 0            | 0.33 1 < 0       | 17 10 11 11       | 0.187 1 11 13     | 346 20 17 11     | 0.18 1 B U       |
| VOLATILES                       | 1 1 1 2 Tetrachlomethane       | 0.00680 1 11      |                  |                     | 0.00577 1 1       |                  | 0.00 1 4 0            |                  |                   | 0.00655 1 U U     | 0.00 20 0 0      | 0.00502 1 U U    |
| VOLATILES                       | 1.1 1-Trichkmethane            | 0.00689 1 11      |                  |                     | 0.00577 1 U       |                  | 0.005 1 < U           | 0.005 1 < ⊎      |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | 1,1,2,2-Tetrachkroethane       | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 t < U           | 0.005 1 < ₩      |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | 1.1.2-Trichloroethane          | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 1 < U           | 0.005 1 < U      |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | 1,1-Dichloroethane             | 0.00689 1 U       |                  |                     | -0.00577 1 U      |                  | 0.005 1 < U           | 0.005 1 < U      |                   | 0.00655 1 U U     |                  | 0.00502 t U U    |
| VOLATILES                       | 1,1-Dichloroethene             | 0.00689 1 U       |                  |                     | 0.00577 t U       |                  | 0.005 1 < U           | ·0.005 1 < ୪     |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | 1,1-Dichloropropene            | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                       |                  |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | 1,2,3-Trichlorobenzene         | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                       |                  |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | 1,2,3-Trichloropropane         | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                       |                  |                   | 0.00655 1 0 0     |                  | 0.00502 1 U U    |
| VOLATILES                       | 1,2,4-1nchiorobenzene          | 0.00689 1 U       |                  |                     | 0.00577 1 0       |                  |                       |                  |                   | 0.00655 1 1 1     |                  | 0.00502 1 0 0    |
| VOLATILES                       | 1,2,4-mineuyoetzete            | 0.00689 1 1       | -                |                     | 0.00577 1 (1      |                  |                       |                  |                   | 0.00055 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | 1.2-Dibrozoethage              | 0.00089 1 0       |                  |                     | 0.00577 1 U       |                  |                       |                  |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATHES                        | 1 2-Dichlambenzene             | 0.00689 1 11      |                  |                     | 0.00577 1 U       |                  |                       |                  |                   | 0.00655 1 U U     |                  | 0.00502 t U U    |
| VOLATILES                       | 1.2-Dichloroethane             | 0.00689 1 U       |                  |                     | 0.00577 t U       |                  | 0.005 1 < U           | 0.005 1 < U      |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | 1,2-Dichloroethene             |                   |                  |                     |                   |                  | 0.005 1 < U           | 0.005 1 < U      |                   |                   |                  |                  |
| VOLATILES                       | 1.2-Dichloropropane            | 0.00689 t U       |                  |                     | 0.00577 1 U       |                  | 0.005 1 < U           | 0.005 t < U      |                   | 0.00655 1 U U     |                  | 0.00502 t U U    |
| VOLATILES                       | 1,2-Dimethylbenzene (o-Xylene) | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                       |                  |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | 1.3,5-Trimethytbenzene         | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                       |                  |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | 1,3-Dichlarobenzene            | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                       |                  |                   | 0.00655 1 U U     |                  | 0.00502 1 1 0    |
| VOLATILES                       | 1.3-Dichkoropropane            | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                       |                  |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATRES                        | 1,4-Dichlorobenzene            | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                       |                  |                   | 0.00055 1 0 0     |                  | 0.00502 1 1 1    |
| VOLATILES                       | 2.2-Dichloropropane            | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.05 1                | 0.05 1 - 11      |                   | 0.000000 1 0 0    |                  | 0.00302 3 0 6    |
| VOLATILES                       | 2-collanone                    | 0.0138 1 U        |                  |                     | 0.0115 1 11       |                  | 0.03 ( < 0            | 0.03 1 < 11      |                   | 0.0131 1 13 11    |                  | 0.01 1 1 1       |
| VOLATILES                       | 2-Chlorothluene                | 0.0130 1 0        |                  |                     | 0.01577 1 13      |                  | 0.01 1 1 0            |                  |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | 2-Hexanone                     | 0.0138 1 11 112   |                  |                     | 0.0115 1 U U      |                  | 0.05 1 < U            | 0.05 1 < U       |                   | 0.0131 T U U      |                  | 0.01 1 U U       |
| VOLATILES                       | 4-Chlorotoluene                | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                       |                  |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | Acetone                        | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  | 0.1 <del>1</del> < U  | 0.1 t < U        |                   | 0.0131 1 U U      |                  | 0.01 1 U U       |
| VOLATILES                       | Benzene                        | 0.00689 1 U       |                  |                     | 0.00577 t U       |                  | 0.005 t < U           | 0.005 1 < U      |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | Bromobenzene                   | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                       |                  |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |
| VOLATILES                       | Bromochioromethane             | 0.00689 t U       |                  |                     | 0.00577 t U       |                  |                       |                  |                   | 0.00655 1 U U     |                  | 0.00502 1 U U    |

Shaw Environmental, Inc.



Table 3-34 Concentrations of Chemicals in Soil Samples Associated with Sump 034

| SUMP] = SUMP034 |                           |                   |                  |                     |                   |                  |                    |                  |                  |                  |                  |                  |   |
|-----------------|---------------------------|-------------------|------------------|---------------------|-------------------|------------------|--------------------|------------------|------------------|------------------|------------------|------------------|---|
| LOCATION _CODE  |                           | 35SUMP034-SB01    | 35SUMP034-SB01   | 35SUMP034-SB01      | 35SUMP034-S802    | 35SUMP034-SB02   | LH-S34-01          | LH-\$34-01       | WRS015-SB01      | WRS015-SB01      | WHS015-5802      | WR5015-SB02      |   |
| SAMPLE_NO       |                           | 35-SMP034-SB01-02 | 35-SMP34-SB01-01 | 35-SMP34-SB01-01-QC | 35-SMP034-SB02-02 | 35-SMP34-SB02-01 | LH-S34-01_1        | LH-S34-01_2      | WRS-015-SB01-01  | WRS-015-SB01-02  | WRS-15-SB02-01   | WRS-15-5802-02   |   |
| SAMPLE_DATE     |                           | 9/20/2006         | 9/11/2005        | 9/11/2006           | 9/20/2006         | 9/11/2006        | 6/25/1993          | 7/10/1993        | 9/15/2006        | 9/15/2006        | 9/15/2006        | 9/15/2006        |   |
| DEPTH           |                           | 4 - 4 Ft          | 0 - 0.5 Ft       | 0 - 0.5 Ft          | 4 - 4 Ft          | 0-0.5 Ft         | 3.5 - 4.5 Ft       | 0.5 - 1.5 Ft     | 0.5 - 0.5 Ft     | 4 - 4 Ft         | 1-1H             | 4-4+1            |   |
| SAMPLE_PURPOSE  |                           | REG               | REG              | FD                  | REG               | REG              | REG                | REG              | REG              | REG              | REG              | REG              |   |
| Test Group      | Parameter (Units = mg/kg) | Result DIL LQ VQ  | Result DIL LO VO | Result DIL LQ VQ    | Result DIL LO VO  | Result DIL LQ VQ | Result DIL LO VO   | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VO | Hesult DIL LO VO | _ |
| VOLATILES       | Bromodichloromethane      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 1 < Ü        | 0.005 1 < 1/     |                  | 0.00655 1 U U    |                  | 0.00502 1 0 0    |   |
| VOLATILES       | Bromoform                 | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 1 < U        | 0.005 1 < U      |                  | 0.00655 t U U    |                  | 0.00502 1 0 0    |   |
| VOLATILES       | Bromomethane              | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  | 0.01 1 < U         | 0.01 1 < U       |                  | 0.0131 1 U U     |                  | 0.01 1 0 0       |   |
| VOLATILES       | Carbon disulfide          | 0.00689 t U       |                  |                     | 0.00577 1 U       |                  | 0.005 1 < U        | 0.005 t < U      |                  | 0.00655 f U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | Carbon tetrachloride      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 t < U        | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 0 0    |   |
| VOLATILES       | Chlorobenzene             | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 1 < U        | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 0 0    |   |
| VOLATILES       | Chloroethane              | 0.0138 t U        |                  |                     | 0.0115 1 U        |                  | 0.01 1 < U         | 0.01 1 < U       |                  | 0.0131 1 U U     |                  | 0.01 1 U U       |   |
| VOLATILES       | Chiloroform               | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 1 < U        | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 0 0    |   |
| VOLATILES       | Chloromethane             | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  | 0.01 1 < U         | 0.01 1 < U       |                  | 0.0131 1 U U     |                  | 0.01 1 0 0       |   |
| VOLATILES       | cis-1,2-Dichloroethene    | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 0 0    |   |
| VOLATILES       | cis-1.3-Dichloropropene   | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 1 < U        | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | Dibromochloromethane      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 ł < U        | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | Dibromomethane            | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.00655 t U U    |                  | 9.00502 1 U U    |   |
| VOLATILES       | Dichlorodifluoromethane   | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  |                    |                  |                  | 0.0131 1 U U     |                  | 0.01 1 U U       |   |
| VOLATILES       | Ethylbenzene              | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 1 < U        | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | Hexachiorobutadiene       | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | Isopropylaenzene          | 0.00689 1 U       |                  |                     | 0.00577 t U       |                  |                    |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | m.p-Xylenes               | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.00655 1 U U    |                  | 0.00502 t U U    |   |
| VOLATILES       | Methyl isobutyl ketone    | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  | 0.05 1 < U         | 0.05 1 < U       |                  | 0.0131 1 U U     |                  | 0.01 1 U U       |   |
| VOLATILES       | Methylene chioride        | 0.0036 t J B      |                  |                     | 0.0015 1 J B      |                  | 0.005 1 < U        | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | Naphthalene               | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  |                    |                  |                  | 0.0131 1 U U     |                  | 0.01 1 U U       |   |
| VOLATILES       | n-BUTYLBENZENE            | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | n-PROPYLBENZENE           | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | p-ISOPROPYLTOLUENE        | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | sec-BUTYLBENZENE          | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | Styrene                   | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 t < U        | 0.005 t < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | tent-BUTYL8ENZENE         | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | Tetrachloroethene         | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 <b>t</b> < U | 0_005 1. < U     |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | Toluene                   | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 1 < U        | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | trans-1,2-Dichloroethene  | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | trans-1,3-Dichloropropene | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 1 < U        | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | Trichtoroethene           | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  | 0.005 1 < U        | 0.005 1 < U      |                  | 0.00655 1 U U    |                  | 0.00502 1 U U    |   |
| VOLATILES       | Trichlorofluoromethane    | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  |                    |                  | · .              | 0.0131 1 U U     |                  | 0.01 1 U U       |   |
| VOLATILES       | Vinyl acetate             | 0.0138 1 U UJ     |                  |                     | 0.0115 1 U UJ     |                  | 0.05 1 < U         | 0.05 1 < U       |                  | 0.0131 1 U U     |                  | 0.01 1 U U       |   |
| VOLATILES       | Vinyl chloride            | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  | 0.01 1 < U         | 0.01 1 < U       |                  | 0.0131 1 U U     |                  | 0.01 1 U U       |   |
| VOLATILES       | Xvienes, Total            |                   |                  |                     |                   |                  | 0.005 1 < U        | 0.005 1 < U      |                  |                  |                  |                  |   |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

### Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



1 < 0

1 < U

1 < U

1 < U

0.33 1 < U

1.65 1 < U

0.33

0.33

0.33

0.33

1.65

1 <

1.65 1 < U

0.33 1 < U

0.33 1 < U

0.33 1 < U

0.33 1 < U

1.65 1 < U

0.33 1 < U

U

|                  |                            | Concentrations of Ch | ennuais in 306 3an | iples Associated wi | a Samp 055       |                  | 1               |
|------------------|----------------------------|----------------------|--------------------|---------------------|------------------|------------------|-----------------|
| (SUMP) = SUMP035 |                            |                      |                    |                     |                  |                  |                 |
| LOCATION _CODE   |                            | 35SUMP035-SB01       | 35SUMP035-SB01     | 35SUMP035-SB02      | 35SUMP035-SB02   | LH-S35-01        | LH-S35-01       |
| SAMPLE_NO        |                            | 35-SMP35-S801-01     | 35-SMP35-SB01-02   | 35-SMP35-SB02+01    | 35-SMP35-SB02-02 | LH-S35-01_1      | LH-S35-01_2     |
| SAMPLE_DATE      |                            | 9/12/2006            | 9/12/2008          | 9/12/2006           | 9/12/2006        | 6/25/1993        | 6/25/1993       |
| DEPTH            |                            | .55 F1               | 4 - 4.5 FI         | 0 - 0.5 Fl          | 4 - 4.5 Fl       | .5 - 2 Ft        | 3.5 • 5.2 Ft    |
| SAMPLE_PURPOSE   |                            | REG                  | REG                | REG                 | REG              | REG              | REG             |
| Test Group       | Parameter (Units ≈ mg/kg)  | Result DIL LO VO     | Result DIL LQ VO   | Result DIL LQ VO    | Resul DIL LO VO  | Result DR, LQ VQ | Hesur Dr. LQ VQ |
| EXPLOSIVES       | 1,3,5-Trinitrobenzene      | 0.249 1 U            | 0.243 1 U          | 0.248 1 U           | 0,245 1 U        |                  |                 |
| EXPLOSIVES       | 1,3-Dinitrobenzene         | 0.249 1 U            | 0.243 1 U          | 0.248 1 U           | 0.245 1 U        |                  |                 |
| EXPLOSIVES       | 2.4.6-Trinitrotoluene      | 0.249 1 U            | 0.243 1 U          | 0.248 1 U           | 0,245 1 U        |                  |                 |
| EXPLOSIVES       | 2.4-Dinitrololuene         | 0.249 1 U            | 0.243 1 U          | 0.248 1 U           | 0.245 1 U        | 0.33 1 < 0       | 0,33 1 2 0      |
| EXPLOSIVES       | 2.5-Dinitratoluene         | 0.259 1 U            | 0.252 1 U          | 0.257 1 U           | 0.255 1 U        | 0.33 1 < 0       | 0.33 1 < 0      |
| EXPLOSIVES       | 2-Amino-4,6-dinitratoluene | 0.259 1 0            | 0.252 1 U          | 0.257 1 U           | 0.255 U          |                  |                 |
| EXPLOSIVES       | 4-Amino-2.6-dinifrololuene | 0.259 1 U            | 0.252 1 U          | 0.257 1 U           | 0.255 1 0        |                  |                 |
| EXPLOSIVES       | НМХ                        | 2.19 I U             | 2.14 1 U           | 2.18 1 U            | 2.16 1 U         |                  |                 |
| EXPLOSIVES       | m-Nitroioluene             | 0.249 1 U            | 0.243 1 U          | 0.248 1 U           | 0.245 1 U        |                  |                 |
| EXPLOSIVES       | Nilrobenzene               | 0.259 1 U            | 0.252 1 U          | 0.257 1 U           | 0.255 1 U        |                  |                 |
| EXPLOSIVES       | a-Nitrotoluene             | 0.249 1 U            | 0.243 1 U          | 0.248 1 U           | 0.245 1 U        |                  |                 |
| EXPLOSIVES       | p-Nitrotoluene             | 0.249 1 U            | 0.243 1 U          | 0.248 1 U           | 0.245 1 U        |                  |                 |
| EXPLOSIVES       | RDX                        | 0.995 1 U            | 0.971 1 U          | 0.99 1 U            | 0.98 1 U         |                  |                 |
| EXPLOSIVES       | Tetryi                     | 0.647 1 U            | 0.631 1 U          | 0.644 1 U           | 0.637 1 U        |                  |                 |
| METALS           | Aluminum                   | 6090 1               | 3050 1             | 6430 1              | 14200 1          | 7190 1           | 10600           |
| METALS           | Antimony                   | 0.0816 1 J J         | 0.11 1 U           | 0.113 1 U           | 0.118 1 U        | 31 < 0           | 31 < 0          |
| METALS           | Arsenic                    | 6.23 1               | 1,87 1             | 7,1 1               | 2.71 1           | 3.2 1            | 2 1             |
| METALS           | Barium                     | 59.2 1               | 31.2 1             | 45.4 1              | 70.8             | 51,2 1           | 48,9 1          |
| METALS           | Beryllium                  | 0.426 1              | 0.294 1 J J        | 0,671 1             | 0.831 1          |                  |                 |
| METALS           | Cadmium                    | 0.28 1 J J           | 0,39 1 U           | 0.189 1 J J         | 0.0674 1 J J     | 11 < 0           | 11 < 0          |
| METALS           | Calcium                    | 1550 1               | 460 1              | 1630 1              | 1080 1           | 411 1            | 340 1           |
| METALS           | Chromium                   | 12.5 1               | 6.27 1             | 21.2 1              | 21.5             | 11.5 1           | 11.2 1          |
| METALS           | Cobalt                     | 3.79 1               | 2.21 1             | 3.89 1              | 3.86             | 4.83             | 5.64 1          |
| METALS           | Copper                     | 6.73 1               | 1.36 1             | 4.3 1               | 5.49             | 5.3 1            | 3.38 1          |
| METALS           | lion                       | 10200 1              | 6140 1             | 29200 1             | 24000 1          | 9700 1           | 9080 1          |
| METALS           | Lead                       | 21.6 1               | 4.66 1             | 21.6 1              | 7.44             | 14.32 1          | 7.58            |
| METALS           | Magnesium                  | 337 1                | 185 1              | 295 1               | 707              | 732 1            | 698 1           |
| METALS           | Manganese                  | 177 1                | 110 1              | 251 1               | 127 1            | 254 1            | 142 1           |
| METALS           | Mercury                    | 0.11 1 J J           | 0.0157 1 J J       | 0.75 2              | 0.0316 I J J     | 0.1 1 < U        | 0.7 } < U       |
| METALS           | Nickel                     | 4,45 1               | 2.34 1             | 6.43 1              | 8.38             |                  |                 |
| METALS           | Polassium                  | 264                  | 150 1              | 221 1               | 510 1            | 330 1            | 522 1           |
| METALS           | Selenium                   | 0.369 1              | 0.258 1            | 0.388 1             | 0.469 1          | 11 < 0           | 11 < U          |
| METALS           | Silver                     | 1.69 1 U             | 1.56 1 U           | 1.59 1 0            | 1.6 T U          | 11 < 0           | 11<             |
| METALS           | Sodium                     | 21 1 J J             | 11.4 1 J J         | 11.2 1 J J          | 18.2 1 J J       |                  |                 |
| METALS           | Strontium                  |                      |                    |                     |                  | 3.53             | 4.69 1          |
| METALS           | Thallium                   | 0.0648 1             | 0.0322 1           | 0.0488              | 0.074 1          |                  |                 |
| METALS           | Vanadium                   | 18 1                 | 12.4 1             | 35.8 1              | 40.7 1           |                  |                 |
| METALS           | Zinc                       | 59.4 1               | 5.47 1             | 38 1                | 18 1             | 19.5 1           | 15.8 1          |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene     |                      |                    |                     |                  | 0.33 1 < U       | 0.33 1 < 0      |
| SEMIVOLATILES    | 1,2-Dichlorobenzene        |                      |                    |                     |                  | 0.33 1 < U       | 0.33 1 < U      |
| SEMIVOLATILES    | 1,3-Dichlorobenzene        |                      |                    |                     |                  | 0.33 1 < U       | 0.33 1 < U      |
| SEMIVOLATILES    | 1,4-Dichlorobenzene        | l                    |                    |                     |                  | 0.33 1 < U       | 0.33 1 < U      |
| SEMIVOLATILES    | 2.4.5-Trichlorophenol      |                      |                    |                     |                  | 1.65 1 < U       | 1.65 1 < U      |
| SEMIVOLATILES    | 2.4.6-Trichlorophenol      |                      |                    |                     |                  | 0.33 1 < U       | 0.33 1 < U      |
| SEMIVOLATILES    | 2.4-Dichlorophenol         |                      |                    |                     |                  | 0.33 1 < U       | 0,33 1 < U      |
| SEMIVOLATILES    | 2,4-Dimethylphenol         |                      |                    |                     |                  | 0.33 1 < U       | 0.33 1 < U      |

Table 3-35 Concentrations of Chemicals in Soil Samples Associated with Sump 035

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

2,4-Dinitrophenol

2 Chiorophenol 2-Methylnaphthalene

2-Methylphenol

2-Nitroaniline

2-Nitrophenol

2-Chloronaphthalene

Shaw Environmental, Inc. 00066028

| (SUMP) = SUMP035 |                              |                  |                  |                  |                  |                  | 111 007 01   |
|------------------|------------------------------|------------------|------------------|------------------|------------------|------------------|--------------|
| LOCATION _CODE   |                              | 35SUMP035-SB01   | 35SUMP035-SB01   | 35SUMP035-SB02   | 35SUMP035-SB02   | LH-S35-01        | LEP-535-01   |
| SAMPLE_NO        |                              | 35-SMP35-SB01-01 | 35-SMP35-SB01-02 | 35-SMP35-SB02-01 | 35-SMP35-S802-02 | LR-S35-01_1      | LD-\$35-01_2 |
| SAMPLE_DATE      |                              | 9/12/2006        | 9/12/2006        | 9/12/2006        | 9/12/2006        | 6/25/1993        | 6/25/1993    |
| DEPTH            |                              | .5 + .5 F1       | 4 - 4.5 F1       | 0 - 0.5 FI       | 4 · 4,5 Ft       | .5 • 2 Ft        | 3.5 · 5.2 Fi |
| SAMPLE_PURPOSE   |                              | REG              | REG              | REG              | REG              | REG              |              |
| Test.Group       | Parameter (Units = mg/kg)    | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Hesult DIL LQ VO |              |
| SEMIVOLATILES    | 3,3 - Dichlarobenzidine      |                  |                  |                  |                  | 0.65 1 < U       | 0.65 1 < U   |
| SEMIVOLATILES    | 3-Nitroaniline               |                  |                  |                  |                  | 1.65 1 < U       | 1.65 F < U   |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol   |                  |                  |                  |                  | 1,65 1 < 0       |              |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether   |                  |                  |                  |                  | 0.33 1 < 0       | 0.33 1 2 0   |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol      |                  |                  |                  |                  | 0,65             | 0.65 1 < 0   |
| SEMIVOLATILES    | 4-Chloroanline               |                  |                  |                  |                  | 0.65 1 < 0       | 0.65 1 < 0   |
| SEMIVOLATILES    | 4-Chlorophanyl phanyl ather  |                  |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < 0   |
| SEMIVOLATILES    | 4-Maihyiphenoi               |                  |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < .0  |
| SEMIVOLATILES    | 4-Nitroaniline               |                  |                  |                  |                  | 1.65 1 < U       | 1.65 1 < U   |
| SEMIVOLATILES    | 4-Nilrophenol                |                  |                  |                  |                  | 1.65 1 < U       | 1.65 1 < U   |
| SEMIVOLATILES    | Acenaphihana                 |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1. < U  |
| SEMIVOLATILES    | Acenaphihylene               |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | Anthracene                   |                  |                  |                  |                  | 0.33 1 ≮ U       | 0.33 1 < U   |
| SEMIVOLATILES    | Benzo(a)anihracene           |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | Banzo/a)ovrene               |                  |                  |                  |                  | 0.33 1 < U       | 0.33 t < U   |
| SEMINOLATILES    | Benzolh)/worasihene          |                  |                  |                  |                  | 0.33 1 < U       | 0.33'1 < U   |
| SEMINOLATILES    | Benzo(chi)nerviene           |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| CENIVOLATILES    | Benzo/Willioran/bana         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| CEMIVOLATILES    | Bonzoic Ácid                 | 1                |                  |                  |                  | 1.65 1 < U       | 1.65 1 < U   |
| DEMINOLATILES    | Benzil Alechel               |                  |                  |                  |                  | 0.65 1 < U       | 0.65 1 < U   |
| SEMIVOLATICES    | biel? Chiarasthew/molhana    |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | bis(2-Griecestin-Bolber      |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | bis(2-Chiprosenty)(sitis)    |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | pis (2 - Onioroisopropynemen | 1                |                  |                  |                  | 0.33 1 < U       | 1,55 1       |
| SEMIVOLATILES    | Dis(2-ghymexy)phinalate      |                  |                  |                  |                  | 0.33 í < U       | 0.702 1      |
| SEMIVOLATILES    | Bunyi benzyi primalare       |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLANLES     | Corysens                     |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | Dioenzo(a,n)aninkacena       | 1                |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | Didenzoluran                 |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | Dialinyi phinalate           |                  |                  |                  |                  | 0.33 1 🖌 U       | 0.33 1 < U   |
| SEMIVOLATILES    | Dimetry prinalate            |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | di-n-buyy prinalate          |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | di-n-Odyi primalare          |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | Fluoraninene                 |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | rivorene                     |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLAHLES     | Hexachiorobenzene            | -                |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | Hexachiorooutablene          |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | Hexachiorocyclopeniadrene    |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | Hexachioroeinane             |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene       |                  |                  |                  |                  | 0.33 1 < U       | 0,33 1 < U   |
| SEMIVOLATILES    | isopharone                   |                  |                  |                  |                  | 0.33 1 ≼ U       | 0.33 1 < U   |
| SEMIVOLATILES    | Naphihalene                  |                  | •                |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | Nitrobenzene                 |                  |                  |                  |                  | 0.33 1 ≺ U       | 0.33 1 < U   |
| SEMIVOLATILES    | n Nitroso-di-n-propyiamine   |                  |                  |                  |                  | 0.33 1 < U       | . 0.33 1 < U |
| SEMIVOLATILES    | n Nitrosodiphenylamine       |                  |                  |                  |                  | 1.65 1 ≪ U       | 1.65 1 < U   |
| SEMIVOLATILES    | Penlachlorophenol            | 1                |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U   |
| SEMIVOLATILES    | Phananthrene                 |                  |                  |                  |                  | 0.33 1 - U       | 0.33 1 < U   |
| SEMIVOLATILES    | Phenol                       |                  |                  |                  |                  | 0.33 1 < 1       | 0.33 1 4 1   |
| SEMIVOLATILES    | Pyrene                       |                  | 5 66760 4 11     |                  | 0.00608 1        |                  |              |
| VOLATILES        | 1,1,1,2-Tetrachloroethane    | 1                | 0.00508 1 U      |                  | 0.00000 1 1      | 0.005 1 c 13     | 0.005 1 < U  |
| VOLATILES        | 1,1,1-Trichloroethane        |                  | 0.00508 1 0      |                  | 0.00000 1 0      | 0.005 1 - 1      | 0.005 1 2 0  |
| VOLATILES        | 1,1.2,2-Telrachloroathane    |                  | 0.00508 1 U      |                  | 0.00000 1 0      | 0.005 1 - 11     | 0.005 1 4 11 |
| VOLATILES        | 1,1,2-Trichloroethane        |                  | 0.00508 1 U      |                  | 0.00006 1 0      | 0.005 1 - 11     | 0.005 1 2 11 |
| VOLATILES        | 1,1-Dichloroelhane           | ł                | 0.00508 1 U      |                  | 0.00506 1 0      | 0.000 1 < 0      | 0.000        |



 $\tau = \tau + \tau$ 



 Table 3-35

 Concentrations of Chemicals in Soil Samples Associated with Sump 035

| [SUMP] ⇒ SUMP035<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                                 | 355UMP035-5801<br>35-SMP35-5801-01<br>9/12/2006<br>.55 Ft | 35SUMP035-S801<br>35-SMP35-S801-02<br>9/12/2006<br>4 + 4.5 Fl | 35SUMP035-SB02<br>35-SMP35-SB02-01<br>9/12/2006<br>0 - 0.5 Ft | 355UMP035-SB02<br>35-SMP35-SB02-02<br>9/12/2006<br>4 - 4,5 Fl | LH-S35-01<br>LH-S35-01_1<br>6/25/1993<br>.5 - 2 Ft | LH-S35-01<br>LH-S35-01_2<br>6/25/1993<br>3.5 - 5.2 Fi |
|--|---------------------------------|---|---|---|---|--|---|
| SAMPLE_PURPOSE   |                                 | REG   | REG   | REG   | REG   | REG  | REG   |
| Test Group   | Parameter (Units = mg/kg)       | Result DIL LQ VO  | Result DIL LO VO  | Result DIL LO VO  | Result DIL LQ VQ  | Result OIL LO VO                                   | Result DIL LO VO                                      |
| VOLATILES  | 1,1-Dichloroethene              |   | 0.00508 1 U   |   | 0.00508 1 U   | 0.005 1 < U  | 0.005 1 < 0   |
| VOLATILES  | 1.1-Dichloropropens             |   | 0.00508 1 U   |   | 0.00508 1 0   |  |   |
| VOLATILES  | 1,2,3-Trichlorobenzene          |   | 0.00508 1 U   |   | 0.00508 1 U   |  |   |
| VOLATILES  | 1.2.3-Trichloropropane          |   | 0.00508 1 U   |   | 0,00508 1 U   |  |   |
| VOLATILES  | 1,2.4-Trichlorobenzene          |   | 0.00508 1 U   |   | 0.00508 1 U   |  |   |
| VOLATILES  | 1,2,4-Trimelhylbenzene          |   | 0.00508 1 U   |   | 0.00508 1 U   |  |   |
| VOLATILES  | 1,2-Dibromo-3-chloropropane     |   | 0.00508 1 U   |   | 0.00508 1 0   |  |   |
| VOLATILES  | 1.2-Dibromoethane               |   | 0.00508 1 U   |   | 0.00008 1 0   |  |   |
| VOLATILES  | 1.2-Dichlorobenzene             |   | 0.00508 1 U   | •   | 0.00008 1 0   | 0.005 1 2 11                                       | 0.005 1 Z U   |
| VOLATILES  | 1.2-Dichlorosthane              |   | 0.00508   |   | 0.00000 1 0   | 0.005 1 < 11                                       | 0.005 1 < U   |
| VOLATILES  | 1,2-Dichlordethene              |   | 0.04540 4 11  |   | 0.00508 1 11  | 0.005 t < U  | 0.005 t < U   |
| VOLATILES  | 1,2-Dichloropropane             |   | 0.00508 1 0   |   | 0.00509 1 11  | 0.000 / 4 0  |   |
| VOLATILES  | 1.2-Dimethylographic (Oraylene) |   | 0.00508 1 13  |   | 0.00508 1 U   |  |   |
| VOLATILES  | 1,3,5-11imetryloenzene          |   |   |   | 0.00508 1 11  |  |   |
| VOLATILES  | 1,3-Dichlorogenzene             |   | 0.00500 1 U   |   | 0.00508 1 1   |  |   |
| VOLATILES  | 1.3-Dichloropropane             |   | 0.00508 1 11  |   | 0.00508 1 U   |  |   |
| VOLATILES  | 2.2 Dichloropenzene             |   | 0.00508 1 11  |   | 0.00508 1 U   |  |   |
| VOLATILES  | 2.Butanana                      |   | 0.0102 1 11   |   | 0.0102 1 U  | 0.05 1 < U   | 0.05 1 < U  |
| VOLATILES  | 2-Chloroolfwi vinul other       | 1   | 0.0102 1 U  |   | 0.0102 1 U  | 0.01 1 < U   | 0,01 1 < U  |
| VOLATILES  | 2-Chlorotolijene                |   | 0.00508 1 U   |   | 0.00508 I U   |  |   |
| VOLATIEES  | 2-Hevanare                      |   | 0.0102 1 U UJ   |   | 0.0102 1 U UJ   | 0.05 t < U   | 0.05 1 < U  |
| VOLATILES  | 4.Chlorotoluene                 |   | 0.00508 1 U   |   | 0.00508 1 U   |  |   |
| VOLATILES  | Aceione                         |   | 0.0102 1 U UJ   |   | 0.0102 1 U UJ   | 0.1 1 < U  | 0.1 1 < U   |
| VOLATILES  | Renzene                         |   | 0.00508 1 U   |   | 0.00508 1 U   | 0.005 1 < U  | 0.005 1 < U   |
| VOLATILES  | Bromobenzene                    |   | 0.00508 1 U   |   | 0.00508 1 U   |  |   |
| VOLATILES  | Bromochloromelhane              |   | 0.00508 U   |   | 0.00508 1 U   |  |   |
| VOLATILES  | Bromodichloromethane            |   | 0.00508 1 U   |   | 0,00508 1 U   | 0.005 1 < U  | 0,005 ! < U   |
| VOLATILES  | Bromolorm                       |   | 0.00508 I U   |   | 0.00508 1 U   | 0.005 1 < U  | 0.005 1 < U   |
| VOLATILES  | Bromomelhane                    |   | 0.0102 1 U  |   | 0.0102 1 U  | 0.01 1 < U   | 0.01 1 < U  |
| VOLATILES  | Carbon disullide                |   | 0.00508 1 U   |   | 0.00508 1 U   | 0.005 1 < U  | 0.005 t < U   |
| VOLATILES  | Carbon tetrachloride            |   | 0.00508 1 U   |   | 0.00508 1 U   | 0.005 1 < U  | 0.005 i < U   |
| VOLATILES  | Chlorobenzene                   |   | 0.00508 1 U   |   | 0.00508 1 U   | 0.005 1 < U  | 0.005 1 < U   |
| VOLATILES  | Chigroethane                    |   | 0.0102 1 U  |   | 0,0102 1 U  | 0.01 1 < U   | 0.01 1 < U  |
| VOLATILES  | Chloroform                      |   | 0.00508 1 U   |   | 0.00508 1 U   | 0.005 1 < U  | 0.005 1 < U   |
| VOLATILES  | Chloromethane                   | ł   | 0.0102 1 U  |   | 0.0102 1 U  | 0.01 1 < 0   | 0.01 1 < U  |
| VOLATILES  | cis-1,2-Dichloroethane          | 1   | 0.00508 1 U   |   | 0.00508 1 U   |  |   |
| VOLATILES  | cis-1,3-Dichloropropene         | 1   | 0.00508 1 U   |   | 0.00508 1 U   | 0.005 t < U  |   |
| VOLATILES  | Dibromochloromethane            |   | 0.00508 U   |   | 0,00508 1 U   | 0.005 1 < 0  | 0.005 1 < 0   |
| VOLATILES  | Dibromomethane                  |   | 0.00508 1 U   |   | 0.00508 1 U   |  |   |
| VOLATILES  | Dichlorodifluoromethane         |   | 0.0102 1 U  |   | 0,0102 1 U  | 0.005 1  | 0.005 1 4 11  |
| VOLATILES  | Ethylbenzene                    |   | 0.00508 1 U   |   | 0,00508 1 0   | 0.003 1 4 0  | 0.003 / 4 0   |
| VOLATILES  | Hexachlorobuladiene             |   | 0.00508 1 U   |   | 0,00006 1 0   |  |   |
| VOLATILES  | isopropyibanzene                |   | 0.00508 1 U   |   | 0.00508 1 0   |  |   |
| VOLATILES  | m.p-Xylenes                     |   | 0.00508 U   |   |   | one e a ti   | 0.05 1 c U  |
| VOLATILES  | Melhyi Isobutyi kelone          | 1   | 0.0102 1 U  |   | 0.0102 1 0  | 0.05 1 4 0   | 0.005 1 × U   |
| VOLATILES  | Melhylene chloride              |   | 0.00129 1 J J   |   |   | 0.000 4 4 0  | 44444 1 - 0   |
| VULATILES  | Naprinalene                     |   | 0.0102 1 0  |   | 0.0102 1 0  |  |   |
| VOLATILES  | R-BUTTLBENZENE                  |   |   |   | 0.00508 1 11  |  |   |
| VOLATILES  |                                 |   | 0.00000 1 0   |   | 0.00508 1 U   |  |   |
| VOLATILES  |                                 | }   | 0.00300 1 0   |   | 0.00508 1 U   |  |   |
| VOLATILES  | SECTOL I TEDENZENÇ<br>Shrana    | 1   | 0.00508 1 11  |   | 0.00508 1 U   | 0.005 1 < 1  | 0.005 1 < ⊔   |
| VULANLES   | olyrene                         | 1   | 0.00000 0   |   | 9.99999 I V   |  |   |



|   |                            | Concentrations of Che  | emicals in Soi  | il Samples Ass                                | sociated w  | lth Sump | 035  |   |       |  |   |          |  |   |          |          |
|---|----------------------------|--|---|---|---|----------|--|---|-------|--|---|----------|--|---|----------|----------|
| [SUMP] = SUMP035<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                            | 35SUMP035-S801<br>35-SMP35-SB01-01<br>9/12/2006<br>.55 Ft<br>REG | 35SUMP035-SB01<br>35-SMP35-SB01-02<br>9/12/2005<br>4 - 4.5 Ft<br>REG<br>Becuit Dit LO | 35SUMP0<br>35-SMP35<br>9/12//<br>0 • 0.<br>RE | 35SUMP035-S802<br>33-SMP35-S802-01<br>9/12/2005<br>0 < 0.5 Ft<br>REG<br>Rewit DIL 1: 0 VO |          | 35SUMP035-SB02<br>35-SMP35-SB02-02<br>9/12/2006<br>4 + 4,5 Ft<br>REG<br>Besuit Dit LO VO |   |       | LH-S35-01<br>LH-S35-01_1<br>6/25/1993<br>.5 - 2 Fi<br>REG<br>Result DL LQ VO |   |          | LH-S35-01<br>LH-S35-01_2<br>6/25/1993<br>3.5 - 5.2 Fi<br>REG<br>Result Dit, LQ V |   |          | vo       |
| Lesi Group  | Parameter (Uniks > nigrkg) | HESDI DIL LO VO  | 0.00508 1 U   |   |   | 0.00508  | 1 1  |   |       |  |   |          |  |   |          |          |
| VOLATILES   | Tairashiaraalhana          |  | 0.00508 1 U   |   |   | 0.00508  | 1 1  |   | 0.005 | 1  | < | U        | 0.005  | t | ۲        | U        |
| VOLATILES   | Toliana                    |  | 0.00508 1 U   |   |   | 0.00508  | 1 6  |   | 0.005 | 1  | < | Ų        | 0.005  | វ | <        | U        |
| VOLATILES   | kann ( ) Dichlorosthang    | 1  | 0.00508 1 U   |   |   | 0.00508  | 1 1  | I |       |  |   |          |  |   |          |          |
| VOLATILES   | kans 1.3 Dicherononana     | •  | 0.00508 1 U   |   |   | 0.00508  | 1 1  |   | 0.005 | 1  | < | U        | 0.005  | 1 | <        | υ        |
| VOLATILES   | Tricklassethese            |  | 0.00508 1 11  |   |   | 0.00508  | 1 1  | ; | 0.005 | 1  | < | U        | 0.005  | 1 | <        | U        |
| VOLATILES   | The monocentere            |  | 0.00000 1 11  |   |   | 0.0102   | 1 1  | J |       |  |   |          |  |   |          |          |
| VOLATILES   | I richiorofiuoromeinane    |  | 0.0102 1 0  |   |   | 0.0103   | 1  |   | 0.05  | ſ  | ć | н        | 0.05   | 1 | ~        | u        |
| VOLATILES   | Vinyl acetate              |  | 0.0102 1 0  |   |   | 0.0102   | 200  | , | 0.00  | ÷  | 2 | ň        | 0.01   | 4 |          | - n      |
| VOLATILES   | Vinyl chlaride             |  | 0.0102 1 U  |   |   | 0.0102   | 1 1  |   | 0.01  | 1  | ¢ |          | 0.01   |   |          |          |
| VOLATH ES   | Xvienes, Totai             | Į  |   |   |   |          |  |   | 0,005 | 1  | < | <u> </u> | 0.005  |   | <u> </u> | <u> </u> |

Table 3-35

Footnotes are shown on cover page to Tables Section,



| Table 3-36   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 036 |

| (SUMP) = SUMP036<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH | 355UMP036-SB01<br>36-SMP36-SB01-01<br>9/12/2006<br>0.5 - 0.5 Ft |        |           |         | 35SUMP<br>35-SMP3<br>9/12<br>10 - | 355UMP036-SB01<br>35-SMP36-SB01-02<br>9/12/2006<br>10 - 10 Ft |     |        | 355UMP036-SB02<br>35-SMP36-SB02-01<br>9/12/2006<br>0.5 - 0.5 Ft |        |           |     | 35SUMP036-SB02<br>35-SMP36-SB02-02<br>9/12/2006<br>10 - 10 Ft |        |     |        |    |
|---|---|--------|-----------|---------|-----------------------------------|---|-----|--------|---|--------|-----------|-----|---|--------|-----|--------|----|
| SAMPLE_PURPOSE  | Parameter (Upile – małka)                                       | Pocult | IEG<br>DI | ιn      | VO                                | Ri<br>Setult  | DII | 10     | VO  | Result | EG<br>Dil | 10  | VO  | Besult | DIL | 1.0    | vo |
| METALS  | Aluminum  | 7140   | 1         |         |                                   | 8930  | 1   |        |   | 8580   | 1         |     |   | 11800  | 1   |        |    |
| METALO  | Antimony  | 0 109  | 1         | 11      |                                   | 0.121   | 1   | ш      |   | 0 105  | 1         | U   |   | 0.0705 | 1   | J      | J  |
| METALS  | Arsonia   | 2.51   | 1         | v       |                                   | 0.188   | 1   | .1     | J   | 2.29   | 1         | -   |   | 2,14   | 1   |        |    |
| METALS  | Barium  | 119    | 1         |         |                                   | 51.1  | 1   | -      | -   | 53.1   | 1         |     |   | 60.8   | 1   |        |    |
| METALS  | Bendlum   | 0.285  | 1         | J       | J                                 | 1.99  | 1   |        |   | 0.46   | 1         |     |   | 1.92   | 1   |        |    |
| METALS  | Cadmium   | 0.135  | +         | J       | J                                 | 0.141   | 1   | J      | J   | 0.0648 | 1         | J   | J   | 0.136  | 1   | J      | J  |
| METALS  | Calcium   | 1000   | f         | •       |                                   | 1950  | 1   |        |   | 547    | 1         |     |   | 2440   | 1   |        |    |
| METALS  | Chromium  | 9.63   | í         |         |                                   | 13.9  | 1   |        |   | 18,1   | t         |     |   | 18.4   | 1   |        |    |
| METALS  | Cobalt  | 2.12   | 1         |         |                                   | 38  | 1   |        |   | 4.09   | 1         |     |   | 32.5   | 1   |        |    |
| METALS  | Copper  | 1.45   | 1         |         |                                   | 14.2  | 1   |        |   | 2.62   | 1         |     |   | 15.1   | 1   |        |    |
| METALS  | Iron  | 11000  | 1         |         |                                   | 13600   | 1   |        |   | 13100  | 1         |     |   | 17500  | 1   |        |    |
| METALS  | Lead  | 5.99   | 1         |         |                                   | 7.83  | 1   |        |   | 8.05   | 1         |     |   | 15     | 1   |        |    |
| METALS  | Magnesium   | 288    | 1         |         |                                   | 3200  | 1   |        |   | 409    | 1         |     |   | 4690   | 1   |        |    |
| METALS  | Manganese   | 69.6   | 1         |         |                                   | 325   | 1   |        |   | 204    | 1         |     |   | 214    | 1   |        |    |
| METALS  | Mercury   | 0.022  | 1         | J       | J                                 | 0.0153  | 1   | Ĵ      | J   | 0.0178 | 1         | J   | j   | 0.278  | 1   | U      |    |
| METALS  | Nickel  | 2.92   | 1         |         |                                   | 39.4  | 1   |        |   | 4,33   | 1         |     |   | 45,4   | 1   |        |    |
| METALS  | Potassium   | 236    | 1         |         |                                   | 728   | 1   |        |   | 253    | 1         |     |   | 816    | 1   |        |    |
| METALS  | Selenium  | 0.444  | 1         |         |                                   | 0.447   | 1   |        |   | 0.397  | 1         |     |   | 5.1    | 1   |        |    |
| METALS  | Silver  | 1.75   | 1         | U       |                                   | 1.7   | 1   | U      |   | 1.53   | 1         | U   |   | 1.6    | 1   | Ų      |    |
| METALS  | Sodium  | 26.8   | 1         |         |                                   | 682   | 1   |        |   | 17.3   | 1         | J   | j   | 822    | 1   |        |    |
| METALS  | Thallium  | 0.0442 | 1         |         |                                   | 0.129   | 1   |        |   | 0,0733 | 1         |     |   | 0.233  | 1   |        |    |
| METALS  | Vanadlum  | 19.5   | 1         |         |                                   | 18.7  | 1   |        |   | 25.6   | 1         |     |   | 18.3   | 1   |        |    |
| METALS  | Zinc  | 8.95   | 1         |         |                                   | 46.5  | 1   |        |   | 10.7   | 1         |     |   | 69.8   | 1   |        |    |
| SEMIVOLATILES   | 1,2,4-Trichlorobenzene  | 0.188  | 1         | U       |                                   | 0.196   | 1   | U      |   | 0.171  | 1         | U   |   | 0.192  | 1   | 0      |    |
| SEMIVOLATILES   | 1,2-Dichlorobenzene   | 0.188  | 1         | U       |                                   | 0.196   | 1   | U      |   | 0.171  | 1         | U   |   | 0.192  | 1   | U      |    |
| SEMIVOLATILES   | 1,3-Dichlorobenzene   | 0.188  | 1         | U       |                                   | 0,196   | 1   | U      |   | 0.171  | 1         | u   |   | 0.192  | 1   | U      |    |
| SEMIVOLATILES   | 1.4-Dichlorobenzene   | 0.188  | 1         | U       |                                   | 0.196   | 1   | 0      |   | 0.171  | 1         | U   |   | 0.192  | 1   | 0      |    |
| SEMIVOLATILES   | 2.4.5-Trichlorophenol   | 0.188  | 1         | U       |                                   | 0.196   | 1   | U      | UJL   | 0,171  | 1         | 0   |   | 0.192  | 1   | 0      |    |
| SEMIVOLATILES   | 2.4.6-1 richlorophenol  | 0.188  | 1         | 0       |                                   | 0.195   | 1   | 0      | UJL   | 0.171  | 1         | 0   |   | 0.192  | 1   |        |    |
| SEMIVOLATILES   |   | 0.188  |           | 0       |                                   | 0.198   |     | U U    | 0.00  | 0.171  | 1         |     |   | 0.192  |     |        |    |
| SEMIVOLATILES   | 2.4-Dimetry/phenoi  | 0.188  | 1         | U<br>IT |                                   | 0.190   | -   | 11     | 101   | 0.171  | 1         |     |   | 0.192  |     | 1      |    |
| SEMIVOLATILES   | 2.4 Dinitrophenol   | 0.939  | •         | U<br>11 |                                   | 0.902   | 4   | о<br>П | 00L   | 0.007  | 1         | , U |   | 0.505  |     | ц<br>Ц |    |
| SEMIVOLATILES   | 2.4-Dimitroioluene  | 0.100  | 1         |         |                                   | 0.190   | 4   | ц<br>Ц |   | 0.171  | ŝ         | 11  |   | 0.192  | ŝ   | ŭ      |    |
| SEMIVOLATILES   | 2.Chipropophitalene   | 0.100  | 1         | 1       |                                   | 0.180   | ł   | ii ii  |   | 0.171  | 1         | 1F  |   | 0 192  | 1   | Ŭ      |    |
| SEMIVOLATILES   | 2-Chlorophonal  | 0.105  | ,<br>1    | ŭ       |                                   | 0,196   |     | ü      | 16.11   | 0.171  | 1         | Ŭ   |   | 0.192  | 1   | Ū      |    |
| SEMIVOLATILES   | 2-Methylanhthalene  | 0.188  | i         | u U     |                                   | 0.196   | 1   | ŭ      |   | 0.171  | i         | Ũ   |   | 0.192  | 1   | Ū      |    |
| SEMIVOLATILES   | 2-Methylabenol  | 0.188  | 1         | Ŭ       |                                   | 0.196   | 1   | ŭ      | UJL   | 0.171  | 1         | Ū   |   | 0.192  | 1   | Ú      |    |
| SEMIVOLATILES   | 2-Nitroaniline  | 0.939  | 1         | Ŭ       |                                   | 0.982   | 1   | Ð      |   | 0.857  | 1         | Ū   |   | 0.959  | 1   | Ú      |    |
| SEMIVOLATILES   | 2-Nitrophenol   | 0.188  | 1         | Ū       |                                   | 0.196   | 1   | Ū      | UJL   | 0.171  | 1         | Ű   |   | 0,192  | i   | U      |    |
| SEMIVOLATILES   | 3.3'-Dichlorobenzidine  | 0.376  | 1         | Ū       |                                   | 0.393   | 1   | Ū      |   | 0.343  | 1         | Ú   |   | 0.384  | 1   | Ų      |    |
| SEMIVOLATILES   | 3-Nitroaniline  | 0.939  | 1         | Ū       |                                   | 0.982   | i   | U      |   | 0.857  | 1         | Ų   |   | 0.959  | 1   | U      |    |
| SEMIVOLATILES   | 4.6-Dinitro-2-methylphenol                                      | 0.939  | 1         | U       |                                   | 0.982   | 1   | U      | UJL   | 0.857  | 1         | U   |   | 0,959  | 1   | U      |    |
| SEMIVOLATILES   | 4-Bromophenyl phonyl ether                                      | 0.188  | 1         | Ų       |                                   | 0.196   | 1   | U      |   | 0.171  | 1         | Ų   |   | 0.192  | 1   | U      |    |
| SEMIVOLATILES   | 4-Chloro-3-methylphenol   | 0.188  | 1         | U       |                                   | 0.196   | 1   | υ      | UJL   | 0.171  | 1         | U   |   | 0.192  | 1   | U      |    |
| SEMIVOLATILES   | 4-Chloroaniline   | 0.188  | 1         | U       |                                   | 0.196   | 1   | U      |   | 0.171  | 1         | U   |   | 0.192  | . 1 | Ų      |    |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether                                     | 0.188  | 1         | U       |                                   | 0.196   | 1   | U      |   | 0.171  | 1         | Ų   |   | 0.192  | . 1 | Ų      |    |
| SEMIVOLATILES   | 4-Methylphenol  | 0.188  | 1         | U       |                                   | 0.196   | 1   | U      | UJL   | 0.171  | 1         | U   |   | 0.192  | . 1 | U      |    |

Shaw Environmental, Inc.

## Table 3-36

Concentrations of Chemicals in Soil Samples Associated with Sump 036

| [SUMP] ≈ SUMP036 |                             |                  |                  | ACOUNTIONS CROS  | 2001 IMP036-8803       |
|------------------|-----------------------------|------------------|------------------|------------------|------------------------|
| LOCATION _CODE   |                             | 35SUMP036-SB01   | 35SUMP036-SB01   | 355UMP036-5802   | 3530WF 030-3502        |
| SAMPLE_NO        |                             | 35-SMP36-SB01-01 | 35-SMP36-SB01-02 | 35-3MP30-3BU2-01 | 0/12/2006              |
| SAMPLE_DATE      |                             | 9/12/2006        | 9/12/2006        | 9/12/2006        | 9/12/2000              |
| DEPTH            |                             | 0.5 - 0.5 Fi     | 10 - 10 Ft       | 0.5 - 0.5 FT     | 10-10-FL               |
| SAMPLE_PURPOSE   |                             | REG              | REG              | HEG NO           | neu<br>Dawii Dii 10 VO |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO | Result Dit. LQ VQ      |
| SEMIVOLATILES    | 4-Nitroaniline              | 0.939 1 U        | 0.982 1 U        | 0.857 1 U        | 0.959 1 0              |
| SEMIVOLATILES    | 4-Nitrophenol               | 0.939 1 U        | 0.982 1 U UJL    | 0.857 1 U        | 0.959 1 0              |
| SEMIVOLATILES    | Acenaphthene                | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 0              |
| SEMIVOLATILES    | Acenaphthylene              | 0.168 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 0              |
| SEMIVOLATILES    | Anthracene                  | 0.188 1 U        | 0.196 1 U        | 0,171 1 U        | 0.192 1 0              |
| SEMIVOLATILES    | Benzo(a)anthracene          | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 0              |
| SEMIVOLATILES    | Benzo(a)pyrene              | 0.188 1 U        | 0.196 I U        | 0.171 1 U        | 0,192 1 0              |
| SEMIVOLATILES    | Benzo(b)fluoranthene        | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Benzo(ghi)parylene          | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Benzo(k)fluoranthene        | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Benzolc Acid                | 0.939 î U        | 0.982 1 U        | 0.857 1 U        | 0.959 1 U              |
| SEMIVOLATILES    | Benzyl Alcohol              | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | bis(2+Chloroisopropyl)ether | 0.188 1 U        | 0.196 1 U        | 0.171 I U        | 0.192 1 U              |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Butyl benzyl phthalate      | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Chrysene                    | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      | 0.188 1 U        | 0.196 1 U        | 0.171 I U        | 0.192 1 U              |
| SEMIVOLATILES    | Dibenzofuran                | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Diethyl phthalate           | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Dimethyl phthalate          | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | di-n-Butyl phthalate        | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | di-n-Octvl phthalate        | 0.188 1 Ų        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Fluoranthène                | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Fluorene                    | 0.188 1 U        | 0.196 1 U        | 0,171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Hexachlorobenzene           | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0,192 1 U              |
| SEMIVOLATILES    | Hexachlorobutadiene         | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Hexachloroethana            | 0.168 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene      | 0.186 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Isophorone                  | Q.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Naphthalene                 | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Nitrobenzene                | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  | 0.188 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | n-Nitrosodiphenviamine      | 0.186 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Pentachiorophenol           | 0.939 1 U        | 0.982 1 U UJL    | 0.857 1 U        | 0.959 1 U              |
| SEMIVOLATILES    | Phenanthrene                | 0.188 1 U        | 0,196 1 U        | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Phenol                      | 0.188 1 U        | 0.196 1 U UJL    | 0.171 1 U        | 0.192 1 U              |
| SEMIVOLATILES    | Pyrene                      | 0,168 1 U        | 0.196 1 U        | 0.171 1 U        | 0.192 1 U              |
| VOLATILES        | 1.1.1.2-Tetrachloroethane   |                  | 0.00568 1 U      |                  | 0.00519 1 U            |
| VOLATILES        | 1,1,1-Trichloroethane       |                  | 0.00568 1 U      |                  | 0.00519 1 U            |
| VOLATILES        | 1,1,2,2-Tetrachioroethane   |                  | 0.00568 1 U      |                  | 0.00519 1 U            |
| VOLATILES        | 1.1.2-Trichloroethane       |                  | 0.00568 t U      |                  | 0.00519 1 U            |
| VOLATILES        | 1,1-Dichloroethane          |                  | 0.00568 1 U      |                  | 0.00519 1 U            |
| VOLATILES        | 1.2-Dichloroethene          |                  | 0.00568 1 U      |                  | 0.00519 1 U            |
| VOLATILES        | 1.1-Dichloropropene         |                  | 0.00588 1 U      |                  | 0.00519 1 U            |
| VOLATILES        | 1,2,3-Trichlorobenzene      |                  | 0,00568 1 U      |                  | 0.00519 1 U            |
|                  |                             |                  |                  |                  |                        |
Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



| Table 3-36   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 036 |

| (SUMP) = SUMP036<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE PURPOSE |                                | 355UMP036-SB01<br>35-SMP36-SB01-01<br>9/12/2006<br>0.5 - 0.5 Ft<br>BFG | 35SUMP036-SB01<br>35-SMP36-SB01-02<br>9/12/2006<br>10 - 10 Ft<br>BEG | 35SUMP036-SB02<br>35-SMP36-SB02-01<br>9/12/2006<br>0.5 - 0.5 Ft<br>BEG | 35SUMP036-SB02<br>35-SMP36-SB02-02<br>9/12/2006<br>10 - 10 Ft<br>REG |  |  |  |
|---|--------------------------------|--|--|--|--|--|--|--|
| Test Group  | Parameter (Units = mo/kg)      | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   |  |  |  |
| VOLATILES   | 1.2.3-Trichloropropane         |  | 0.00568 1 U  | ······································                                 | 0.00519 1 U  |  |  |  |
| VOLATILES   | 1,2,4-Trichlorobenzene         |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | 1.2.4-Trimethylbenzene         |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | 1,2-Dibromo-3-chloropropane    |  | 0.00568 1 U  |  | 0,00519 1 U  |  |  |  |
| VOLATILES   | 1.2-Dibromoethane              |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | 1,2-Dichlorobenzene            |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | 1,2-Dichloroethane             |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | 1,2-Dichloropropane            |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | 1,2-Dimethylbenzene (o-Xylene) |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | 1,3.5-Trimethylbenzene         |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | 1,3-Dichlorobenzene            |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | 1.3-Dichloropropane            |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | 1.4-Dichlorobenzene            |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | 2.2-Dichloropropane            |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | 2-Butanone                     |  | 0.0114 1 U   |  | 0.0104 1 U   |  |  |  |
| VOLATILES   | 2-Chloroethyl vinvl ether      |  | 0.0114 1 U   |  | 0.0104 1 U   |  |  |  |
| VOLATILES   | 2-Chiorotoluene                |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | 2-Hexanone                     |  | 0.0114 1 U   |  | 0.0104 1 U   |  |  |  |
| VOLATILES   | 4-Chiorotoluane                |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Aceione                        |  | 0.0114 1 U   |  | 0.0104 1 U   |  |  |  |
| VOLATILES   | Benzene                        |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Bromobenzene                   |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Bromochloromethane             |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Bromodichloromethane           |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Bromoform                      |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Bromomethane                   |  | 0.0114 1 U   |  | 0.0104 1 U   |  |  |  |
| VOLATILES   | Carbon disulfide               |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Carbon tetrachloride           |  | 0.00568 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Chlorobenzene                  |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Chloroethane                   |  | 0.0114 1 U   |  | 0.0104 1 U   |  |  |  |
| VOLATILES   | Chloroform                     |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Chloromethane                  |  | 0.0114 1 U   |  | 0.0104 1 U   |  |  |  |
| VOLATILES   | cis-1,2-Dichloroethene         |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | cis-1.3-Dichloropropene        |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Dibromochloromethane           |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Dibromomethane                 |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Dichlorodifluoromethane        |  | 0.0114 1 U   |  | 0.0104 1 U   |  |  |  |
| VOLATILES   | Ethylbenzene                   |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Hexachiorobutadiene            |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | isopropyibenzene               |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | m.p-Xylenes                    |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Methyl isobutyl ketone         |  | 0.0114 1 U   |  | 0.0104 1 U   |  |  |  |
| VOLATILES   | Methylene chloride             |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | Naphthalene                    |  | 0.0114 1 U   |  | 0.0104 1 U   |  |  |  |
| VOLATILES   | n-BUTYLBENZENE                 | l  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | n-PROPYLBENZENE                |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | p-ISOPROPYLTOLUENE             |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |
| VOLATILES   | sec-BUTYLBENZENE               |  | 0.00568 1 U  |  | 0.00519 1 U  |  |  |  |

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



|               | Table 3-36                               |                 |
|---------------|--|-----------------|
| Concentration | s of Chemicals in Soil Samples Associate | d with Sump 036 |

| (SUMP) = SUMP036<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>CAMPLE _BURDOSE |                           | 35SUMP036-SB01 35SUMP036-SB01<br>35-SMP36-SB01-01 35-SMP36-SB01-02<br>9/12/2006 9/12/2006<br>0.5 • 0.5 Ft 10 - 10 Ft<br>REG REG REG |                  | 355UMP036-SB02<br>35-6MP36-SB02-01<br>9/12/2006<br>0.5 - 0.5 Ft<br>REG | 355UMP038-SB02<br>35-SMP36-SB02-02<br>9/12/2006<br>10 - 10 Ft<br>REG |
|--|---------------------------|---|------------------|--|--|
| Test Group   | Parameter (Units = mo/ko) | Result DIL LQ VQ  | Result DIL LO VO | Result DIL LQ VQ   | Result DIL LO VO   |
| VOLATILES  | Styrene                   |   | 0.00568 1 Ü      |  | 0.00519 1 U  |
| VOLATILES  | tert-BUTYLBENZENE         |   | 0.00568 1 U      |  | 0.00519 1 U  |
| VOLATILES  | Tetrachkroethene          |   | 0.00568 1 U      |  | 0,00519 1 U  |
| VOLATILES  | Toluene                   |   | 0.00568 1 U      |  | 0.00519 1 U  |
| VOLATILES  | trans-1 2-Bichloraethene  |   | 0.00568 1 U      |  | 0.00519 1 U  |
| VOLATILES  | trans-1 3-Dichloropropene |   | 0.0056B 1 U      |  | 0.00519 1 U  |
| VOLATILES  | Trichlaraethees           |   | 0.00568 1 U      |  | 0.00519 1 U  |
| VOLATILES  | TriplersBussemothere      |   | 0.0114 1 1       |  | 0.0104 1 U   |
| VOLATILES  | Manual exercise           |   | 0.0114 1 11      |  | 0.0104 1 U   |
| VOLATILES  | Vinyi aceiate             |   | 0.0114 1 11      |  | 0.0104 1 U   |
| VOLATILES  | VINVI CNIORIOS            |   | 0 1 7110         |  |  |

Footnotes are shown on cover page to Tables Section.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-37 Concentrations of Chemicals in Soil Samples Associated with Sump 037

| [SUMP] = SUMP037 |  |                  |                  |                    |                  | •                | •                |                  |                  |                    |                  |                  |
|------------------|--|------------------|------------------|--------------------|------------------|------------------|------------------|------------------|------------------|--------------------|------------------|------------------|
| LOCATION _CODE   |  | 35SUMP018-SB02   | 35SUMP037-SB01   | LH-S018-01         | LH-S018-01       | LH-S018-01       | LH-S37-01        | LH-S37-01        | LH-WRS10-01      | LH-WRS10-01        | WR\$10-SB02      | WRS10-SB02       |
| SAMPLE NO        |  | 35-SMP18-SB02-02 | 35-SMP37-SB01-02 | LH-S018-01 1       | LH-S018-01 2     | LH-S018-01_3     | LH-S37-01_1      | 1H-S37-01_2      | LH-WRS10-01_1    | LH-WRS10-01_2      | WRS10-SB02-01    | WRS10-SB02-02    |
| SAMPLE_DATE      |  | 9/11/2006        | 9/9/2006         | 8/8/1993           | 8/8/1993         | 8/8/1993         | 7/25/1993        | 7/25/1993        | 8/8/1993         | 8/8/1993           | 9/25/2006        | 9/25/2006        |
| DEPTH            |  | 5.5 - 6 Ft       | 3 - 4 Ft         | 0.5 - 1.1 Ft       | 1.1 - 1.6 Ft     | 5-6 Ft           | 0.5 - 1 F1       | 3-4.5 Ft         | 0.5 - 1 Ft       | 3.5 - 4 Ft         | 05 Ft            | 3.5 - 4.5 Ft     |
| SAMPLE_PURPOSE   |  | REG              | REG              | REG                | REG              | REG              | HEG              | HEG              | HEG              | REG                |                  |                  |
| Test Group       | Parameter (Units = mg/kg)  | Result DIL LQ VQ | Result DIL LO VO | Result DIL 1.Q VQ  | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DiL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ   | Result DIL LQ VQ | Result DIL LQ VQ |
| EXPLOSIVES       | 1,3,5-Trinitrobenzene  | 0.238 t U        | 0.246 1 U        |                    |                  |                  |                  |                  |                  |                    | 0.245 1 U U      | 0.249 1 U U      |
| EXPLOSIVES       | 1.3-Dinitmbenzene  | 0.238 1 U        | 0.246 1 U        |                    |                  |                  |                  |                  |                  | · · · · ·          | 0.245 I U U      | 0.249 1 U U      |
| EVELOSIVES       | 2.4.6.Trigitrateluona  | 0.238 1 11       | 0.246 1 11       |                    |                  |                  |                  |                  |                  |                    | 0.245 1 U U      | 0.249 1 U U      |
|                  |  | 0.200 1 0        |                  | 0.20 4             | 0.22 +           | 11               | 0.22 1 / 11      | 0.22 t < H       | 0.22 1 4 11      | 0.23 1 - 11        | 0.245 t H H      | 0.249 t ti Fi    |
| EXPLOSIVES       |  | 0.238 1 0        | 0.246 1 0        |                    | 0.33 1 < 0       | 0.35 1 < 0       |                  |                  | 0.03 1 0         |                    | 0.255 1 31 11    | 0.250 1 11 11    |
| EXPLOSIVES       | 2,6-Dinitrotoluene   | 0.248 1 U        | 0.256 1 U        | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0         | 0.255 ( 0 0      | 0.259 1 0 0      |
| EXPLOSIVES       | 2-Amino-4,6-dinitrotoluene   | 0.248 1 U        | 0.256 1 U        |                    |                  |                  |                  |                  |                  |                    | 0.255 1 U U      | 0.259 1 U U      |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene   | 0.248 1 U        | 0.256 1 U        |                    |                  |                  |                  |                  |                  |                    | 0.255 I U U      | 0.259 1 U U      |
| EXPLOSIVES       | нмх  | 2.1 1 1          | 2.17 1 U         |                    |                  |                  |                  |                  |                  |                    | 2.16 1 U U       | 2.19 1 U U       |
| EVELOSIVES       | m.Nitrotoluope   | 0.238 1 1        | 0.246 1 11       |                    |                  |                  |                  |                  |                  |                    | 0.245 1 U U      | 0.249 t U U      |
|                  |  | 0.245 1 1        | 0.240 1 0        |                    |                  |                  |                  |                  |                  |                    | 0.255 1 11 11    | 0.259 1 11 11    |
| EXPLOSIVES       | Nitropenzene   | 0.248 1 0        | 0.256 1 0        |                    |                  |                  |                  |                  |                  |                    | 0255 1 0 0       |                  |
| EXPLOSIVES       | o-Nitrotoluene   | 0.238 f U        | 0.246 1 U        |                    |                  |                  |                  |                  |                  |                    | 0.245 1 U UJ     | 0.249 1 0 03     |
| EXPLOSIVES       | p-Nitrotoluene   | 0.238 1 U        | 0.246 I U        |                    |                  |                  |                  |                  |                  |                    | 0.245 1 U U      | 0.249 i U U      |
| EXPLOSIVES       | RDX  | 0.952 t U        | 0.985 1 U        |                    |                  |                  |                  |                  |                  |                    | 0.98 1 U U       | 0.995 1 U U      |
| EXPLOSIVES       | Tetrvi   | 0.619 1 1        | 0.64 1 U         |                    |                  |                  |                  |                  |                  |                    | 0.637 1 U ป      | 0.647 1 U U      |
| METALO           | the strength of the strength o | 15000 1          |                  | 7000 1 0           | 10100 1 D        | 7050 1 D         | 11 - 1 OCH       | 22800 1 - 11     | 5500 1 5         | 6320 t D           | 8760 1           | 28700 1          |
| METALS           | ACCUMENT   | 13200 1          |                  | 7220 1 1           |                  | 730 1 0          |                  |                  | 5500 1 2         | 5 5 5              |                  | 0.102 1 21 111   |
| METALS           | Antimony   | 0.109 1 U        |                  | 5 i < U            | 51 < U           | 51 < 0           | 31 < U           | 31 < 0           | 51 < 0           | 5 1 < 0            | 0.112 1 0 0.00   | 0.123 3 0 03L    |
| METALS           | Arsenic  | 1.12 1           |                  | 3.31 1             | 2.8 1            | 2.9 1            | 5.1 1            | 4.3 1            | 3.25 1           | 2 1                | 1.29 1 JL        | 1.06 1 JL.       |
| METALS           | Barium   | 78.4 1           |                  | 55.3 1             | 45.8 1           | 24.2 1           | 67.8 1           | 74 1             | 88.3 1           | 70.1 1             | 76.5 1           | 63.3 t           |
| METALS           | Bervllium  | 0.631 1          |                  |                    |                  |                  |                  |                  |                  |                    | 0.375 1 J J      | 0.757 1          |
| METALS           | Codmium  | 0.114 1 1        |                  | 11 - 11            | 1 1 2 11         | tt z II          | 11 < 1           | 11 < 1           | 11 < 11          | 11 < 11            | 0.369 1 J J      | 0.063 1 J .I     |
| METALO           | Caunnins   |                  | -                | 500 4              |                  | F07 1            | 4000 1           | 1100 1           | 1010 3           | 1400 1             | 61000 10         | 929 1            |
| METALS           | Calcium  | 1250 i J         |                  | 369 1              | 893 1            | 507 1            | 1290 1           | 1190 1           | 1210 1           | 1490 1             | 31000 10         | 020 1            |
| METALS           | Chromium   | 16.1 1           |                  | 18 <del>.9</del> 1 | 14.3 1           | 7 1              | 19.7 1           | 22.6 1           | 7.9 1            | 7.3 1              | 24.1 1           | 23.3 1           |
| METALS           | Cobalt   | 7.29 1 J         |                  | 21 < U             | 21 < U           | 21 < U           | 3.3 1            | 3.9 1            | 21 < U           | 21 < U             | 2.79 1           | 4.6 1            |
| METALS           | Conner   | 5.2 1            |                  | 3 1                | 3.4 1            | 2.6 1            | 6.8 1            | 4.3 1            | 3.6 1            | 3.1 1              | 5.37 1           | 6.78 1           |
| METAIS           | kon  | 1/000 5          |                  | 17800 1 D          | 18000 5 D        | 12000 t D        | 22900 1 c II     | 21800 t < H      | 8410 1 D         | 12700 1 D          | 21100 1          | 21700 1          |
| METALS           | 10.1   | 14500 1          |                  | 11000 1 2          | 70 1 0           |                  | 1                | 21000 1 2 0      | 91 1 D           | 64 1 D             | 0.75 1           | 6.00 1           |
| METALS           | Lead   | 6,1/1 J          |                  | 8 i D              | 7.3 I U          | 6.4 1 0          | 1.5 1            | 0.1 1            | 8.1 D            | 0.4 1 D            | 3.13             | 3.05 1           |
| METALS           | Magnesium  | 1770 1           |                  | 598 1              | 674 1            | 570 1            | 538 1            | 1190 1           | 431 1            | 364 1              | 981 1 JH         | 1610 1 JH        |
| METALS           | Manganese  | 21.7 1           |                  | 152 1              | 65.4 1           | 15.1 1           | 154 1            | 127 1            | 58 1             | 58.6 1             | 134 1 J          | 21.9 1 J         |
| METALS           | Mercury  | 0.0184 ‡ J J     |                  | 0.1 1 < U          | 0.1 t < U        | 0.† 1 < U        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U          | 0.0294 1 J J     | 0.0843 1 J J     |
| METALS           | Nickel   | 191 1            |                  |                    |                  |                  |                  |                  |                  |                    | 6.62 1           | 11.5 1           |
| METALO           | Delessium  | 766 4            |                  | 001 1              | 000 1            | 147 1            | 295 1            | 1070 1           | 209 1            | 182 1              | 346 1            | 772 1            |
| METALS           | Potassium  | /120 1           |                  | 221 1              | 200 1            | 147 1            | 333 1            |                  | 203 1            | 102 1              |                  | 0.400 4 1 1      |
| METALS           | Selenium   | 0.218 1 U        |                  | 0.5 1 < 0          | 0.5 1 < 0        | 0.5 1 < 0        | 1 1 < 0          | 1 1 < 0          | 0.5 1 < 0        | 0.5 1 < 0          | 0.142 1 J JL     | 0.128 I J JL     |
| METALS           | Silver   | 1.7 1 U          |                  | 11 < U             | 1 <b>†</b> < U   | 11 < U           | 11 < U           | 11 < U           | 11 < U           | 11 < U             | 1.68 1 U U       | 1.87 1 0 0       |
| METALS           | Sodium   | 322 t            |                  |                    |                  |                  |                  |                  |                  |                    | 54.3 1           | 218 1            |
| METALS           | Stronburg  |                  |                  | 9.2 1              | 12.7 1           | 11.6 1           | 12.8 1           | 16.2 1           | 10.1 1           | 12.4 1             |                  |                  |
|                  | Thallium   | 0.0006 1         |                  |                    |                  |                  |                  |                  |                  |                    | 0.0446 1         | 0 108 1          |
| METALO           |  | 0.0500 1         |                  |                    |                  |                  |                  |                  |                  |                    | 24.4 1           | 40.2 1           |
| METALS           | Vanadium   | 23.2 1           |                  |                    |                  |                  |                  |                  |                  |                    | 34.4             | 40.2             |
| METALS           | Zinc   | 41.4 1           |                  | 15.6 1             | 22.3 1           | 16.1 1           | 18 1             | 26.9 1           | 22.1 1           | 17.8 1             | 31.6 1           | 32.9 1           |
| RANGE_ORGANICS   | Carbon Range C12-C28   | 54.6 1 U         |                  |                    |                  |                  |                  |                  |                  |                    |                  |                  |
| BANGE ORGANICS   | CARBON RANGE C28-C35   | 54.6 1 U         |                  |                    |                  |                  |                  |                  |                  |                    |                  |                  |
| BANGE OPCANICS   | Carbon Pange C6 C12  | 546 1 11         |                  |                    |                  |                  |                  |                  |                  |                    |                  |                  |
|                  | Calcon haige CO-C12  | 54.0 I U         |                  |                    |                  |                  | 0.00 1 . 11      | 0.00 1           | 0.22 1 . 11      | 0.20 +             | 1 97 10 13 13    | 0.001 1 11 11    |
| SEMIVOLATILES    | 1,2,4-Inchlorobenzene  |                  |                  | 0.33 1 < U         | 0.33 1 < U -     | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0         | 1.07 10 0 0      |                  |
| SEMIVOLATILES    | 1,2-Dichlorobenzene  |                  |                  | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0         | 1.87 10 0 0      | 0.201 1 0 0      |
| SEMIVOLATILES    | 1,3-Dichlorobenzene  |                  |                  | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | . 0.33 1 < U       | 1.87 10 U U      | 0.201 1 U U      |
| SEMIVOLATILES    | 1.4-Dichlorobenzene  |                  |                  | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 1.87 10 U U      | 0.201 1 U U      |
| CENTION ATTLES   | 2.4.5.Trichlerophonol  |                  |                  | 165 1 2 11         | 165 1 4 1        | 165 1 4 11       | 165 1 < 1        | 165 1 < ∐        | 165 1 < L≹       | 1.65 1 < 10        | 1.87 10 U U      | 0.201 1 U U      |
|                  |  |                  |                  |                    |                  |                  | 0.92 1 4 11      | 0.22 1 4 11      | 0.99 + - 11      | 0.29 1 <b>-</b> 11 | 1.97 10 11 11    | 0.201 1 12 13    |
| SEMIVULATILES    | 2,4,6-1 noniorophenoi  |                  |                  | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 2 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.53 1 < 0         |                  | 0.201 1 0 0      |
| SEMIVOLATILES    | 2,4-Dichlorophenol   |                  |                  | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0         | 1.87 10 0 0      | 0.201 1 0 0      |
| SEMIVOLATILES    | 2,4-Dimethylphenot   |                  |                  | 0.33 t < U         | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U         | 1.87 10 U U      | 0.201 1 U U      |
| SEMIVOLATILES    | 2.4-Dinitrophenol  |                  |                  | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U         | 9.33 10 U U      | 1100             |
| SELINOL ATH ES   | 2.4-Dinitrataluana   |                  |                  |                    |                  |                  |                  |                  |                  |                    | 1.87 10 U U      | 0.201 1 U U      |
| SEMIVOLATILES    |  |                  |                  |                    |                  |                  |                  |                  |                  |                    | 197 10 11 13     | 0.201 1 11 11    |
| SEMIVOLATILES    | 2,6-Dinitroloiuene   |                  |                  |                    |                  |                  |                  |                  |                  |                    |                  | 0.201 1 0 0      |
| SEMIVOLATILES    | 2-Chloronaphthalene  |                  |                  | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0         | 1.87 10 U U      | 0.201 1 U U      |
| SEMIVOLATILES    | 2-Chlorophenol   |                  |                  | 0.33 1 < U         | 0.33 1 < U       | . 0.33 1 < U     | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < ⊔       | 0.33 1 < U         | 1.87 10 U U      | 0.201 1 V V      |
| SEMIVOLATILES    | 2-Methylnaphthalene  |                  |                  | 0.33 1 < U         | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 1.87 10 U U      | 0.201 1 U U      |
| SENNIN ATHES     | 2 Mathylabana  |                  |                  | 039 1 - 1          | 0.33 1           | 0.39 1 1         | 033 1 - 11       | A33 1 - II       | 0.33 1 × U       | 033 1 < 11         | 187 10 11 11     | 0.201 1 13 13    |
| OCHIVOLATILEO    |  |                  |                  |                    |                  | v⊷v i < U        |                  | 105 4 1          | 1.65 4 11        | 165 1 1            | 023 10 0 0       | 4 4 11 12        |
| SEMIVULATILES    | 2-mitoaniine   |                  |                  | 1.65 } < U         | 1.05 I < U       | 3.65 1 < U       | 1.05 1 < U       | 1.05 1 < U       | 1,00 1 < U       | 1.03 F < U         | 9.33 10 0 0      | 1 1 0 0          |
| SEMIVOLATILES    | 2-Nitrophenol  |                  |                  | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | .0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 1.87 10 U U      | 0.201 1 U U      |
| SEMIVOLATILES    | 3,3'-Dichlorobenzidine   |                  |                  | 0.65 1 < U         | 0.65 f < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U         | 3.73 10 U U      | 0.401 1 U U      |
| SEMIVOLATILES    | 3-Nitroanilipe   |                  |                  | 1.65 1 < U         | 1.65 t < U       | 1.65 1 < U       | 1,65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < Ư         | 9.33 10 U U      | 11 11 11         |
| SCHRIVOLATE EC   | 4 6 Digitzo 2 moth-Johooni   |                  |                  | 1.65 1 2 11        | 165 1 2 15       | 165 1 2 11       | 165 1 - 15       | 165 1 2 11       | 165 1 - 1        | 165 1 × 11         | 933 10 11 11     | 1 1 1 1          |
| OCHINOLATICO     | +,o-pitini o-z-meonyipitenoi   |                  |                  |                    |                  | 1.UV I < U       | 5.00 · · · ·     |                  | 1.00 1 - 11      | 0.22 1             | 1.97 10 11 11    | 0.201 1 14 17    |
| SEMIVOLAHLES     | 4-bromophenyl phenyl ether   |                  |                  | 9.33 i < U         | 17.33 i < U      | 0.33 1 < 10      | U.33 1 < U       | 9.33 I < U       | 9.33 I < U       | V.33 I < U         | 101 10 0 0       | 0.201 1 0 0      |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol  | 1                |                  | 0.65 1: < U        | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 \$ < U      | 0.65 t < U       | 0.65 1 < U         | 1.87 10 U U      | 0.201 1 U U      |
| SEMIVOLATILES    | 4-Chloroaniline  |                  |                  | 0.65 1 < U         | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 t < U         | 1.87 10 U U      | 0.201 1 U U      |
|                  | 1  |                  |                  |                    |                  |                  |                  |                  |                  |                    |                  |                  |

# 00066035

4.1)

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

### Table 3-37 Concentrations of Chemicals in Soil Samples Associated with Sump 037

| [SUMP] = SUMP037               |                                |                   |                  | Concentrati      | Uns di Chemicais n        | i oui oampies Asa            | volated mital outlip        | 431                     |                   |                              |                              |                  |
|--------------------------------|--------------------------------|-------------------|------------------|------------------|---------------------------|------------------------------|-----------------------------|-------------------------|-------------------|------------------------------|------------------------------|------------------|
| LOCATION CODE                  |                                | 35SUMP018-SB02    | 35SUMP037-SB01   | LH-S018-01       | LH-S018-01                | LH-S018-01                   | LH-S37-01                   | LH-S37-01               | LH-WRS10-01       | LH-WRS10-01                  | WRS10-SB02                   | WRS10-SB02       |
| SAMPLE_NO                      |                                | 35-SMP18-SB02-02  | 35-SMP37-SB01-02 | LH-S018-01_1     | LH-S018-01_2              | LH-S018-01_3                 | LH-S37-01_1                 | LH-S37-01_2             | LH-WHS10-01_1     | UH-WHS10-01_2                | WRS10-SB02-01                | WHS10-SB02-02    |
| SAMPLE_DATE                    |                                | 9/11/2006         | 9/9/2006         | 8/8/1993         | 8/8/1993                  | 8/8/1993<br>5 6 5t           | 0.5 - 1.Et                  | 7/20/1993<br>2 - 4 5 Et | 0.5 - 1.5t        | 35-45                        | 9/20/2000<br>0.5Ft           | 35-45 Ft         |
|                                |                                | 3.3~0 FL          | 3-4 Fi<br>REG    | 0.0-1.17         | BEG                       | REG                          | BEG                         | REG                     | BEG               | BEG                          | REG                          | BFG              |
| Test Grain                     | Parameter () Inits = mn/km)    | Result DII I O VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VQ          | Result DIL LQ VQ             | Result DIL LQ VQ            | Result DIL LQ VQ        | Result Dil. LQ VQ | Result DIL LQ VQ             | Result DIL LQ VQ             | Result DIL LO VQ |
| SEMIVOLATILES                  | 4-Chlorophenyl phenyl ether    |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | 4-Methylphenol                 |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 t < U                   | 0.33 1 < U                  | 0.33 t < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | 4-Nitroaniline                 |                   |                  | 1.65 1 < U       | 1.65 1 < U                | 1.65 t < U                   | 1.65 1 < U                  | 1.65 1 < U              | 1.65 1 < U        | 1.65 1 < U                   | 9.33 10 U U                  | 1 1 U U          |
| SEMIVOLATILES                  | 4-Nitrophenol                  |                   |                  | 1.65 1 < U       | 1.65 1 < U                | 1.65 t < U                   | 1.65 1 < U                  | 1.65 1 < U              | 1.65 1 < U        | 1.65 1 < U                   | 9.33 10 U U                  | 11 U U           |
| SEMIVOLATILES                  | Acenaphthene                   |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 t < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Acenaphthylene                 |                   |                  | 0.33 1 < 0       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < 0              | 0.33 1 < 0        | 0.33 1 < U                   | 1.8/10/0/0                   | 0.201 1 0 0      |
| SEMIVOLARILES<br>CEMINOLATILES | Anthracene                     |                   |                  | 0.33   < U       | 10.33 I < U<br>0.93 t ∠ U | 0.33 1 < 11                  | 0.33 1 < 1                  |                         | 0.33 1 < 1        | 0.33 1 < 0                   | 1.87 10 11 11                | 0.201 1 U U      |
| SEMIVOLATILES                  | Delizo(a)ariurana              |                   |                  | 0.33 1 < U       | 0.33 1 < 11               | -033 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < 1        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Benzo(b)ffuoranthene           |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Benzolahi)pervlene             |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Benzo(k)fluoranthene           |                   |                  | 0.33 t < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Benzoic Acid                   |                   |                  | 1.65 1 < U       | 1.65 t < U                | 1.65 1 < U                   | 1.65 1 < U                  | 1.65 1 < U              | 1.65 1 < U        | 1.65 1 < U                   | 9.33 10 U UJ                 | 1 1 U UJ         |
| SEMIVOLATILES                  | Benzyl Alcohol                 |                   |                  | 0.65 t < U       | 0.65 1 < U                | 0.65 1 < U                   | 0.65 1 < U                  | 0.65 1 < U              | 0.65 1 < U        | 0.65 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane     |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | bis(2-Chioroethyl)ether        |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < 0        | 0.33 1 < 0                   | 1.87 10 U U                  | 0.201 1 0 0      |
| SEMIVOLATILES                  | bis(2-Chioroisopropyi)ether    |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < 0                  | 0.33 1 < 0              | 0.33 1 < 0        | 0.33 1 < 0                   | 1.8/ 10/ 0/ 0                | 0.201 E U U      |
| SEMIVOLATILES                  | Dist2-Ethylnexyljphthalate     |                   |                  | 0.382 1          | 0.33 1 < 11               | 0.33 1 < 0                   |                             | 0.33 1 < 11             | 0.33 1 < 1        | 0.33 1 < 1                   | 187 10 11 11                 | 0.201 1 1 1      |
| SEMINOLAHEES                   | Сваузере                       |                   |                  | 0.33 1 < 11      | 0.33 1 < U                | 0.33 t < U                   | 0.33 1 < 1                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Dibenzo(a h)anthracene         |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Dibenzofuran                   |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | -0.33 t < U             | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Diethyl phthalate              |                   |                  | 0.33 t < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Dimethyl phthalate             |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | di-n-Butyl phthalate           |                   |                  | 0.33 t < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 t < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | di-n-Octyl phthalate           |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Fluoranthene                   |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < 0              | 0.33 1 < 0        | 0.33 1 < 0                   | 1.87 10 U U<br>1.97 10 II II | 0.201 1 0 0      |
| SEMIVOLATILES<br>CEMBIOLATILES | Huorene                        |                   |                  | 0.33 1 < 0       | 0.33 ! < 0                | 0.33 I < U<br>0.33 I < U     | 0.33.1 < 0                  |                         | 0.33 1 < 1        | 0.33 t < U                   | 1.87 10 11 13                | 0.201 1 11 11    |
| SEMIVOLATILES                  | Hexachlorobidadiene            |                   |                  | 0.33 1 < 1       | 0.33 t < U                | 0.33 1 < U                   | 0.33 1 < 13                 | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene      |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Hexachloroethane               |                   |                  | 0.33 1 < U       | 0.33 t < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Indeno(1,2,3-cd)pyrene         |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < ≀⊔                  | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | isophorone                     |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Naphthalene                    |                   |                  | 0.33 t < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < 0                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Nitrobenzene                   |                   |                  | 0.33 t < U       | 0.33 1 < U                | 0.33 t < U                   | 0.33 1 < U                  | 0.33 1 < 0              | 0.33 1 < 0        | 0.33 t < U                   | 1.87 10 0 0                  | 0.201 1 0 0      |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine     |                   |                  | 0.33 1 < U       | 0.33 1 < 0                | 0.33 1 < 0                   | 0.33 1 < 0                  | 0.33 1 < 0              | 0.33 1 < 0        |                              | 1.87 10 0 0                  | 0.201 1 11 11    |
| SEMIVOLATILES<br>SEMIVOLATILES | Pentachlorophenol              |                   |                  | 165 1 < 11       | 165 1 < U                 | 1.65 1 < 1                   | 1.65 1 < U                  | 1.65 1 < U              | 1.65 1 < U        | 1.65 1 < U                   | 9.33 10 U U                  | 11 0 0           |
| SEMIVOLATILES                  | Phenanthrene                   |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Phenol                         |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U                   | 0.33 1 < U                  | 0.33 1 < U              | 0.33 .1 < U       | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| SEMIVOLATILES                  | Pyrene                         |                   |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < ⊍                   | 0.33 1 < U                  | 0.33 1 < U              | €.33 1 < U        | 0.33 1 < U                   | 1.87 10 U U                  | 0.201 1 U U      |
| VOLATILES                      | 1,1,1,2-Tetrachloroethane      | 0.00591 1 U       |                  |                  |                           |                              |                             |                         |                   |                              |                              | 0.00614 1 U U    |
| VOLATILES                      | 1,1,1-Trichloroethane          | 0.00501 1 U       |                  | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U                  | 0.005 1 < U                 | 0.005 t < U             | 0.005 1 < U       | 0.005 1 < U                  |                              | 0.00614 1 U U    |
| VOLATILES                      | 1, 1, 2, 2-Tetrachloroethane   | 0.00501 1 U       |                  | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U                  | 0.005 t < U                 | 0.005 1 < 0             | 0.005 1 < U       | 0.005 1 < U                  |                              | 0.00614 1 0 0    |
| VOLATILES                      | 1,1,2-Trichloroethane          | 0.00501 1 U       |                  | 0.005 1 < U      | 0.005 1 < U               | €.005 1 < U                  | 0.005 1 < 0                 | 0.005 1 < 0             | 0.005 1 < 0       | 10.005 1 < 0<br>0.005 1 < 11 |                              | 0.00514 1 0 0    |
| VOLATILES                      | 1,1-Dichloroethane             | 0.00501 1 U       |                  | 0.005 1 < 0      | 0.005 1 < 0               | 0.005 1 < 0                  | 0.005 1 < 0                 | 0.005 1 < 0             | 0.005 1 < 11      | 0.000 1 < U<br>0.005 1 < U   |                              | 0.00614 1 U U    |
| VOLATILES                      | 1,1-Dichoropopene              | 0.00501 1 11      |                  | 0.005 1 < 0      | 0.005 1 2 0               | 0.003 1 4 0                  | 0.005 1 1 0                 | 0.003 1 1 0             |                   |                              |                              | 0.00614 1 U U    |
| VOLATILES                      | 1.2.3-Trichlorobenzene         | 0.00501 1 U       |                  |                  |                           |                              |                             |                         |                   |                              |                              | 0.00614 1 U U    |
| VOLATILES                      | 1,2,3-Trichloropropane         | 0.00501 1 U       |                  |                  |                           |                              |                             |                         |                   |                              |                              | 0.00614 1 U U    |
| VOLATILES                      | 1,2,4-Trichlorobenzene         | 0.00501 1 U       |                  |                  |                           |                              |                             |                         |                   |                              |                              | 0.00614 1 U U    |
| VOLATILES                      | 1,2,4-Trimethylbenzene         | 0.00501 1 U       |                  |                  |                           |                              |                             |                         |                   |                              |                              | 0.00614 1 U U    |
| VOLATILES                      | 1,2-Dibromo-3-chloropropane    | 0.00501 1 U       |                  |                  |                           |                              |                             |                         |                   |                              |                              | 0.00614 1 U U    |
| VOLATILES                      | t,2-Dibromoethane              | 0.00501 1 1       |                  |                  |                           |                              |                             |                         |                   |                              |                              | 0.00614 1 U U    |
| VOLATILES                      | 1.2-Dichlorobenzene            | 0.00501 1 U       |                  | 0.005 1 1        | 0.005 1 - 11              | 0.005 1                      | 0.005 1                     | 0.005 1 - 11            | 0.005 1 d II      | 0.005 1 - 11                 |                              | 0.00014 1 U U    |
| VULATILES                      | 1.2-Dichloroethane             | U.UUSU1 1 U       |                  | 0:005 1 ∠ 11     | 0.005 1 < 0               | 0.003 I < U<br>£\.005 1 ∠ II | 0.003 i < 0<br>0.005 t < 11 | 0.005 1 - 11            | 0.005 1 ~ 11      | 0.005 1 < 0                  |                              | 0.00014 1 0 U    |
| VOLATILES                      | 1.2-Dichlorooropage            | 0.00-50:1 1 13    |                  | - 0.005 1 < 1    | 0.005 1 < 0               | 0.005 1 < U                  | 0.005 1 < U                 | 0.005 1 < U             | 0.005 1 < U       | 0.005 1 < U                  |                              | 0.00614 1 U U    |
| VOLATILES                      | 1.2-Dimethylbenzene (o-Xvlene) | 0.00501 1 U       |                  |                  | 5.500 - • • •             |                              |                             | ·····                   |                   | · · · · · ·                  |                              | 0.00614 1 U U    |
| VOLATILES                      | 1,3,5-Trimethylbenzene         | 0.00501 t U       |                  |                  |                           |                              |                             |                         |                   |                              |                              | 0.00614 1 U U    |
| VOLATILES                      | 1,3-Dichlorobenzene            | 0.00501 1 V       |                  |                  |                           |                              |                             |                         |                   |                              |                              | 0.00614 1 U U    |
| VOLATILES                      | 1,3-Dichloropropane            | 0.00501 t U       |                  |                  |                           |                              |                             |                         |                   |                              |                              | 0.00614 1 U U    |
| VOLATILES                      | 1,4-Dichlorobenzene            | 0.00501 1 U       |                  |                  |                           | -                            |                             |                         |                   |                              |                              | 0.00614 1 U U    |

# 00066036

Table 3-37 Concentrations of Chemicals in Soil Samples Associated with Sump 037

| [SUMP] = SUMP037 |                           |                  |                  |                  |                  |                  |                   | 111 207 04         | 11110210.01      |                        | WRC10-SR02       | WRS10-S802                    |
|------------------|---------------------------|------------------|------------------|------------------|------------------|------------------|-------------------|--------------------|------------------|------------------------|------------------|-------------------------------|
| LOCATION _CODE   |                           | 35SUMP018-SB02   | 35SUMP037-SB01   | LH-S018-01       | LH-S018-01       | LH-S018-01       | LH-S37-01         | LH-537-01          |                  |                        | WES10-5002       | WRS10.5802.02                 |
| SAMPLE_NO        |                           | 35-SMP18-SB02-02 | 35-SMP37-SB01-02 | LH-S018-01_1     | LH-S018-01_2     | LH-S018-01_3     | LH-S37-01_1       | LH-S37-01_2        | LA-WAS10-01_1    | LH-WKS10-01_2          | 0/25/2006        | 0/25/2006                     |
| SAMPLE_DATE      |                           | 9/11/2006        | 9/9/2006         | 8/8/1993         | 8/8/1993         | 8/8/1993         | 7/25/1993         | //25/1993          | 8/8/1993         | 8/8/1993               | 9/20/20/00       | 3/23/2000                     |
| DEPTH            |                           | 5.5 - 6 Ft       | 3-4 Ft           | 0.5 - 1.1 Ft     | 1,1 - 1.6 Ft     | 5-6 Ft           | 0.5 - 1 Ft        | 3-4.5 H            | 0.5-151          | 3.5-41                 | 05F(             | 0.0 - 4.5 Pt                  |
| SAMPLE_PURPOSE   |                           | REG              | REG              | REG              | REG              | REG              | REG               | HEG                | HEG              | HEG<br>Denvit DI LO VO |                  | Result Dil IO VO              |
| Test Group       | Parameter (Units = mg/kg) | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Hesuat Dal. LQ VQ | Result DIL LU VU   | RESULT DIL LO VO | Restar Dir. EQ VQ      | HESDIE DIE EG VG | 0.00614 1 11 11               |
| VOLATILES        | 2,2-Dichloropropane       | 0.00501 1 U      |                  |                  |                  |                  | ant ( 11          | AAC 4              | 0.05 1 . 11      | 0.05 t 2.11            |                  | 0.00014 1 0 0                 |
| VOLATILES        | 2-Butanone                | 0.01 1 U UJ      |                  | 0.05 1 < U       | 0.05 t < U       | 0.05 1 < U       | 0.05 1 < 0        | 0.05 1 < 0         |                  | 0.05 1 < 0             |                  | 0.0123 1 13 13                |
| VOLATILES        | 2-Chloroethyl vinyl ether | 0.01 1 U         |                  | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 0       | 0.01 T < U        | 0.01 1 < 0         | 9.01 F C U       | 0.01 + < 0             |                  | 0.00614 1 11 11               |
| VOLATILES        | 2-Chlorotoluene           | 0.00501 1 U      |                  |                  |                  |                  |                   | AAE ( 1)           | 0.05 t . H       | 0.05 1 2.05            |                  | 0.0123 1 11 11                |
| VOLATILES        | 2-Hexanone                | 0.01 1 V UJ      |                  | 0.05 t < U       | 0.05 1 < U       | 0.05 1 < 0       | 0.05 1 < 0        | 0.05 1 < U         | 0.05 1 < 0       |                        |                  | 0.00614 1 11 11               |
| VOLATILES        | 4-Chlorotoluene           | 0.00501 1 U      |                  |                  |                  |                  | <b>A A A B</b>    | 01 1 . 11          | 11 1 1           | 01 1 × 11              |                  | 0.0123 1 11 11                |
| VOLATILES        | Acetone                   | 0.01 1 U         |                  | 0.1 1 < 0        | 0.1 1 < 0        | 0.1 1 < 0        | 0.1 1 < 0         |                    |                  | 0.005 1 < 11           |                  | 0.00614 1 11 11               |
| VOLATILES        | Benzene                   | 9.00501 1 U      |                  | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0       | 0.005 1 < 0        | 0.003 1 < 0      | 0.003 1 < 0            |                  | 0.00514 1 11 11               |
| VOLATILES        | Bromobenzene              | 0.00501 1 U      |                  |                  |                  |                  |                   |                    |                  |                        |                  | 0.00514 1 11 13               |
| VOLATILES        | Bromochloromethane        | 0.00501 1 U      |                  |                  |                  |                  |                   |                    | 0.00F t          | 0.005 1 - 1            |                  | 0.00614 1 U U                 |
| VOLATILES        | Bromodichloromethane      | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < 0       | 0.005 1 < 0        | 0.005 1 < 0      |                        |                  | 0.00614 1 U U                 |
| VOLATILES        | Bromoform                 | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0       | 0.005 1 < 0        | 0.005 / < 0      | 0.003 1 < 0            |                  | B D 123 1 H H                 |
| VOLATILES        | Bromomethane              | 0.01 1 U         |                  | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 f < U        | 0.01 1 < 0         | 0.005 1          |                        |                  | 0.0023 1 0 0                  |
| VOLATILES        | Carbon disulfide          | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0       | 0.005 1 < 0        | 0.005 1 < 0      | 0.003 1 < 0            |                  | 0.00014 1 0 0                 |
| VOLATILES        | Carbon tetrachloride      | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < 0       | 0.005 1 < 0        | 0.005 1 < 0      | 0.005 1 < 0            |                  | 0.00514 1 0 0                 |
| VOLATILES        | Chlorobenzene             | 0.00501 1 U      |                  | 0.005 t < U      | 0.005 1 < U      | . 0.005 1 < U    | 0.005 1 < U       | 0.005 1 < 0        | 0.005 1 < 0      | 0.005 1 < 0            |                  | 0.00014 1 0 0                 |
| VOLATILES        | Chloroethane              | 0.01 1 U         |                  | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 0        | 0.01 1 < 0         |                  | 0.001 < 0              |                  | 0.0023 1 0 0                  |
| VOLATILES        | Chloroferm                | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0       | 0.005 1 < 0        | 0.005 1 < 0      |                        |                  | 0.00123 1 11 11               |
| VOLATILES        | Chloromethane             | 0.01 1 U         |                  | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < V       | 0.01 1 < U        | 0.01 1 < 0         | 0.01 1 < 0       | 0.01 1 < 0             |                  | 0.0123 1 0 0<br>0.00614 1 N H |
| VOLATILES        | cis-1,2-Dichloroethene    | 0.00501 1 U      |                  |                  |                  |                  |                   | 0.005 4            | 0.005 1          | 0.005 t a 15           |                  | 0.00614 1 H H                 |
| VOLATILES        | cis-1,3-Dickloropropene   | 0.00501 1 U      |                  | 0.005 1 < U       | 0.005 1 < 0        | 0.005 1 < 0      | 0.005 1 < 0            |                  | 0.00614 1 0 0                 |
| VOLATILES        | Dibromochloromethane      | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0       | 0.005 1 < 0        | 0.005 1 < 0      | 0.005 1 < 0            |                  | U U I \$1000.0                |
| VOLATILES        | Dibromomethane            | 0.00501 1 U      |                  |                  |                  |                  |                   |                    |                  |                        |                  | 0.00123 1 11 11               |
| VOLATILES        | Dichlorodifluoromethane   | 0.01 t U         |                  |                  |                  |                  |                   | 6.00 <b>5</b> 4 14 | 0.005 1 . 11     | 0.005 1 4 11           |                  | 0.0023 1 0 0                  |
| VOLATILES        | Ethylbenzene              | 0.00501 1 U      |                  | 0.005 t < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < U       | 0.005 1 < 0        | 0.005 1 < 0      | 0.005 1 < 0            |                  | 0.00614 1 11 15               |
| VOLATILES        | Hexachlorobutaciene       | 0.00501 t U      |                  |                  |                  |                  |                   |                    |                  |                        |                  | 0.00614 1 1 10 10             |
| VOLATILES        | Isopropylbenzene          | 0.00501 1 U      |                  |                  |                  |                  |                   |                    |                  |                        |                  | 0.0061/ 1 1/ 13               |
| VOLATILES        | m.p-Xylenes               | 0.00501 1 U      |                  |                  |                  |                  |                   | a 65 d             |                  | 0.05 1 . 1             |                  | 0.00014 1 0 0                 |
| VOLATILES        | Methyl isobutyl ketone    | 0.01 1 U         |                  | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < 0       | 0.05 1 < 0        | 0.05 1 < 0         | 0.05 1 < 0       | 0.05 1 < 0             |                  | 0.00614 1 1 11 11             |
| VOLATILES        | Methylene chloride        | 0.00501 1 U      |                  | 0.005 1 < U       | 0.005 1 < 0        | 0.005 1 < 0      | 0.000 1 < 0            |                  | 0.00123 1 11 11               |
| VOLATILES        | Naphthalene               | 0.01 1 U         |                  |                  |                  |                  |                   |                    |                  |                        |                  | 0.0120 1 0 0                  |
| VOLATILES        | n-BUTYLBENZENE            | 0.00501 1 U      |                  |                  |                  |                  |                   |                    |                  |                        |                  | 0.00614 1 11 11               |
| VOLATILES        | n-PROPYLBENZENE           | 0.00501 1 U      |                  |                  |                  |                  |                   |                    |                  |                        |                  | 0.0054 1 11 11                |
| VOLATILES        | p-ISOPROPYLTOLUENE        | 0.00501 1 U      |                  |                  |                  |                  |                   |                    |                  |                        |                  | 0.00614 1 11 13               |
| VOLATILES        | sec-BUTYLBENZENE          | 0.00501 1 U      |                  |                  |                  |                  |                   |                    |                  |                        |                  | 0.00014 1 12 13               |
| VOLATILES        | Styrene                   | 0.00501 1 U      |                  | 0.005 1 < U       | 0.005 1 < 0        | 0.005 1 < 0      | 0.005 1 < 0            |                  | 0.00014 1 0 0                 |
| VOLATILES        | tert-BUTYLBENZENE         | 0.00501 1 U      |                  |                  |                  |                  |                   |                    |                  | 0.0070 1               |                  | 0.00614 1 0 0                 |
| VOLATILES        | Tetrachtoroethene         | 0.00501 1 U      |                  | 0.005 1 < U       | 0.005 1 < U        | 0.0307           | 0.02/2 1               |                  | 0.00614 1 U U                 |
| VOLATILES        | Toluene                   | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < 0        | 0.005 1 < 0      | 0.005 1 < 0            |                  | 0.00014 1 0 0                 |
| VOLATILES        | trans-1,2-Dichloroethene  | 0.00501 1 U      |                  |                  |                  |                  |                   |                    |                  | 0.005 1                |                  | 0.00014 1 0 0                 |
| VOLATILES        | trans-1,3-Dichloropropene | 0.00501 1 U      |                  | 0.005 1 < U       | 0.005 t < U        | 0.005 1 < U      | 0.005 1 < 0            |                  | 0.00014 1 0 0                 |
| VOLATILES        | Trichtoroethene           | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U       | 0.005 1 < U        | 0.005 1 < 0      | 0.005 1 < 0            |                  | 0.000 1 1 0 0                 |
| VOLATILES        | Trichlorofluoromethane    | 0.01 1 U         |                  |                  |                  |                  |                   |                    | A                |                        |                  | 0.0123 1 0 0                  |
| VOLATILES        | Vinyl acetate             | 0.01 1 U         |                  | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U       | 0.05 t < U        | 0.05 1 < U         | 0.05 1 < U       | 0.05 1 < 0             |                  | 0.0123 1 0 0                  |
| VOLATILES        | Vinyt chloride            | 0.01 1 U         |                  | 0.01 t < U       | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U        | 0.01 1 < U         | 0.01 1 < U       | 0.007 1 < U            |                  |                               |
| VOLATILES        | Xylenes, Total            | 1                |                  | 0.005 t < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U       | 0.005 1 < U        | 0.005 1 < 0      | 0.005 1 < U            |                  |                               |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

# 00066037

Shaw Project No. 117591 7/11/2007



| Table 3-38   |     |
|--|-----|
| Concentrations of Chemicals in Soil Samples Associated with Sump | 038 |

| [SUMP] = SUMP038 |                             |                  |       |      |                  |        |        |             |    |              | •     |             |              |        |       |    |     |
|------------------|-----------------------------|------------------|-------|------|------------------|--------|--------|-------------|----|--------------|-------|-------------|--------------|--------|-------|----|-----|
| LOCATION _CODE   |                             | 35SUM            | 038-9 | SB01 |                  | 35SUMP | 038-5  | \$801       |    | LH-S         | 338-0 | ١           |              | LH•S   | 38-01 | I  |     |
| SAMPLE_NO        |                             | 35-SMP38-SB01-01 |       |      | 35-SMP38-SB01-02 |        |        | LH-S38-01_1 |    |              |       | LH-S38-01_2 |              |        |       |    |     |
| SAMPLE_DATE      |                             | 9/12/2006        |       | 9/12 | 9/12/2006        |        |        | 6/26/1993   |    |              | 6/26  | 6/26/1993   |              |        |       |    |     |
| DEPTH            |                             | 0.5              | 0.5 F | 1    |                  | 2.5    | - 3 Ft |             |    | 0.5 - 1.5 Ft |       |             | 3.2 - 4.1 Ft |        |       |    |     |
| SAMPLE_PURPOSE   |                             | F                | ieg   |      |                  | A      | EG     |             |    | P            | EG    |             |              | R      | EG    |    |     |
| Test Group       | Parameter (Units = mg/kg)   | Result           | DIL   | LQ   | VQ .             | Result | DIL    | LQ          | va | Result       | DIL   | ιQ          | VQ           | Result | DIL   | LQ | VQ  |
| METALS           | Aluminum                    | 8030             | 1     |      |                  | 8350   | 1      |             |    | 9520         | 1     |             |              | 11600  | 1     |    |     |
| METALS           | Antimony                    | 2.32             | 1     |      |                  | 0.115  | 1      | U           |    | 4,4          | 1     |             |              | 3      | 1     | <  | U   |
| METALS           | Arsenic                     | 3.24             | ۴     |      |                  | 3.82   | 1      |             |    | 2.7          | 1     |             |              | 4.3    | 1     |    |     |
| METALS           | Barium                      | 40.4             | 1     |      |                  | 39.7   | 1      |             |    | 62.3         | 1     |             |              | 117    | 1     |    |     |
| METALS           | Beryllium                   | 0.34             | 1     | J    | J                | 0.311  | 1      | J           | J  |              |       |             |              |        |       |    |     |
| METALS           | Cadmium                     | 0.274            | 1     | J    | Ļ                | 0.0539 | 1      | J           | J  | 1            | 1     | <           | U            | 1      | 1     | <  | U   |
| METALS           | Calcium                     | 882              | 1     |      |                  | 552    | 1      |             |    | 5.6          | 1     |             |              | 2000   | 1     |    |     |
| METALS           | Chromlum                    | 13.3             | 1     |      |                  | 12.7   | 1      |             |    | 13.2         | 1     |             |              | 29     | 1     |    |     |
| METALS           | Cobalt                      | 1.7              | 1     |      |                  | 1.43   | 1      |             |    | 4.8          | 1     |             |              | 5.5    | 1     |    |     |
| METALS           | Copper                      | 247              | 1     |      |                  | 13.1   | 1      |             |    | 3.9          | 1     |             |              | 6      | 1     |    |     |
| METALS           | Iron                        | 15000            | 1     |      |                  | 16100  | 1      |             |    | 19600        | 1     |             |              | 17400  | 1     |    |     |
| METALS           | Lead                        | 19.1             | 1     |      |                  | 7,79   | 1      |             |    | 5.6          | 1     |             |              | 5.9    | 1     |    |     |
| METALS           | Magnesium                   | 301              | 1     |      |                  | 307    | 1      |             |    | 496          | 1     |             |              | 519    | 1     |    |     |
| METALS           | Manganese                   | 70.1             | 1     |      |                  | 84.7   | 1      |             |    | 214          | 1     |             |              | 116    | 1     |    |     |
| METALS           | Mercury                     | 0.0433           | 1     | J    | J                | 0.0272 | 1      | J           | J  | 0.1          | 1     | <           | U            | 0.1    | 1     | <  | U   |
| METALS           | Nickel                      | 3.16             | 1     |      |                  | 2.45   | 1      |             |    |              |       |             |              |        |       |    |     |
| METALS           | Potassium                   | 249              | 1     |      |                  | 223    | í      |             |    | 478          | 1     |             |              | \$35   | 1     |    |     |
| METALS           | Selenium                    | 0.481            | 1     |      |                  | 0.556  | 1      |             |    | 1            | 1     | <           | U            | 1      | 1     | <  | U   |
| METALS           | Silver                      | 1.63             | 1     | U    |                  | 1.7    | 1      | U           |    | 1            | 1     | <           | U            | f      | 1     | <  | U   |
| METALS           | Sodium                      | 15.3             | 1     | J    | J                | 20,4   | 1      | J           | ل  |              |       |             |              |        |       |    |     |
| METALS           | Strantium                   |                  |       |      |                  |        |        |             |    | 7.4          | ۱     |             |              | 13.3   | ٢     |    |     |
| METALS           | Thallium                    | 0.0728           | 1     |      |                  | 0.0749 | 1      |             |    |              |       |             |              |        |       |    |     |
| METALS           | Vanadium                    | 25.9             | 1     |      |                  | 30.7   | ٢      |             |    |              |       |             |              |        |       |    |     |
| METALS           | Zinc                        | 431              | 1     |      |                  | 34.8   | 1      |             |    | 15.4         | 1     |             |              | 30     | 1     |    |     |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene      | 0.182            | 1     | U    |                  | 0.181  | 1      | U           |    | 0.33         | 1     | <           | U            | 0.33   | 1     | <  | U   |
| SEMIVOLATILES    | 1.2-Dichlorobenzene         | 0.182            | 1     | Ų    |                  | 0.181  | 1      | υ           |    | 0.33         | 1     | <           | U            | 0.33   | 1     | <  | U   |
| SEMIVOLATILES    | 1.3-Dichlorobenzene         | 0.182            | 1     | U    |                  | 0.181  | 1      | Ų           |    | 0.33         | 1     | <           | Ų            | 0.33   | 1     | <  | U   |
| SEMIVOLATILES    | 1,4-Dichlorobenzene         | 0.182            | 1     | U    |                  | 0.181  | 1      | U           |    | 0.33         | 1     | <           | ប            | 0.33   | 1     | <  | U   |
| SEMIVOLATILES    | 2,4,5-Trichlorophenal       | 0.182            | 1     | U    |                  | 0.181  | 1      | U           |    | 1.65         | 1     | <           | U            | 1.65   | 1     | <  | U   |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol       | 0.182            | 1     | U    |                  | 0.181  | 1      | U           |    | 0.33         | 1     | <           | Ų            | 0.33   | 1     | <  | U   |
| SEMIVOLATILES    | 2,4-Dichlarophenol          | 0.182            | 1     | U    |                  | 0.181  | 1      | U           |    | 0.33         | 1     | <           | U            | 0.33   | 1     | <  | U   |
| SEMIVOLATILES    | 2,4-Dimethylphenol          | 0.182            | 1     | U    |                  | 0.181  | 1      | U           |    | 0,33         | 1     | <           | U            | 0.33   | 1     | <  | υ   |
| SEMIVOLATILES    | 2.4-Dinitrophenol           | 0.908            | 1     | U    |                  | 0.905  | 1      | Ų           |    | 1.65         | 1     | <           | U            | 1.65   | 1     | <  | U   |
| SEMIVOLATILES    | 2,4-Dinitrotoluene          | 0.182            | 1     | U    |                  | 0,181  | 1      | U           |    | 0.33         | 1     | <           | U            | 0,33   | 1     | <  | U   |
| SEMIVOLATILES    | 2.6-Dinitrotoluene          | 0.182            | 1     | U    |                  | 0.181  | 1      | U           |    | 0.33         | 1     | <           | U            | 0.33   | 1     | <  | U.  |
| SEMIVOLATILES    | 2-Chloronaphthalene         | 0.182            | 1     | υ    |                  | 0.181  | 1      | U           |    | 0,33         | 1     | <           | U            | 0.33   | 1     | <  | U   |
| SEMIVOLATILES    | 2-Chlorophenol              | 0.182            | 1     | U    |                  | 0.181  | 1      | U           |    | 0.33         | 1     | <           | U            | 0.33   | 1     | <  | U - |
| SEMIVOLATILES    | 2-Methylnaphthalene         | 0.182            | 1     | U    |                  | 0.181  | 1      | บ           |    | 0.33         | 1     | <           | U            | 0.33   | 1     | <  | U   |
| SEMIVOLATILES    | 2-Methylphenol              | 0.182            | 1     | U    |                  | 0.181  | 1      | U           |    | 0.33         | 1     | <           | U            | 0.33   | 1     | <  | U   |
| SEMIVOLATILES    | 2-Nitroaniline              | 0.908            | 1     | U    |                  | 0.905  | 1      | υ           |    | 1.65         | 1     | <           | υ            | 1.65   | 1     | <  | υ   |
| SEMIVOLATILES    | 2-Nitrophenol               | 0.182            | 1     | U    |                  | 0.181  | 1      | U           |    | 0.33         | 1     | <           | U            | 0.33   | 1     | <  | U   |
| SEMIVOLATILES    | 3.3 Dichlorobenzidine       | 0.363            | 1     | υ    |                  | 0.362  | 1      | U           |    | 0.65         | 1     | <           | U            | 0.65   | 1     | <  | U   |
| SEMIVOLATILES    | 3-Nitroaniline              | 0.908            | : 1   | U    |                  | 0.905  | 1      | U           |    | 1.65         | 1     | <           | U            | 1,65   | 1     | <  | U   |
| SEMIVOLATILES    | 4.6-Dinitro-2-methylphenol  | 0.908            | 1     | U    |                  | 0.905  | 1      | υ           |    | 1.65         | 1     | <           | U            | 1.65   | 1     | <  | U   |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  | 0.182            | 1     | U    |                  | 0.181  | 1      | Ų           |    | 0.33         | 1     | <           | U            | 0.33   | 1     | <  | U   |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     | 0.182            | 1     | U    |                  | 0.181  | 1      | U           |    | 0.65         | 1     | <           | U            | 0.65   | 1     | <  | Ų   |
| SEMIVOLATILES    | 4-Ghloroanlline             | 0,18             | 1     | U    |                  | 0.181  | 1      | U           |    | 0.65         | i 1   | <           | U            | 0.65   | 1     | <  | U   |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether | 0.182            | 2 1   | Ų    |                  | 0.181  | 1      | υ           |    | 0.33         | 1 1   | <           | U            | 0.33   | 1     | <  | U   |
|                  |                             |                  |       |      |                  |        |        |             |    |              |       |             |              |        |       |    |     |

Chemical Concentrations in Soll Assoclated with LHAAP-35/36 Sumps



| Table 3-38   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 038 |

| (SUMP) = SUMP038 | 001100111011010             |                      |                  | •                |   |  |  |
|------------------|-----------------------------|----------------------|------------------|------------------|---|--|--|
| LOCATION CODE    |                             | 35SUMP038-SB01       | 35SUMP038-SB01   | LH-S38-01        | LH-S38-01                               |  |  |
| SAMPLE_NO        |                             | 35-SMP38-SB01-01     | 35-SMP38-SB01-02 | LH-538-01_1      | LH-S38-01_2                             |  |  |
| SAMPLE DATE      |                             | 9/12/2006            | 9/12/2006        | 6/26/1993        | 6/26/1993                               |  |  |
| DEPTH            |                             | 0.5 - 0.5 Ft         | 2.5 - 3 Ft       | 0.5 - 1.5 Ft     | 3.2 - 4,1 Ft                            |  |  |
| SAMPLE_PURPOSE   |                             | REG                  | REG              | REG              | REG                                     |  |  |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ     | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO                        |  |  |
| SEMIVOLATILES    | 4-Methylphenol              | 0.182 1 U            | 0.181 1 U        | 0.33 1 < U       | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | 4-Nitroan#ine               | 0.908 1 U            | 0.905 I U        | 1.65 1 < U       | 1.65 1 < 0                              |  |  |
| SEMIVOLATILES    | 4-Nitrophenol               | 0.908 1 U            | 0.905 1 U        | 1.65 1 < U       | 1.65 1 < 0                              |  |  |
| SEMIVOLATILES    | Acenaphihene                | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       |   |  |  |
| SEMIVOLATILES    | Acenaphthylene              | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 ! < U                              |  |  |
| SEMIVOLATILES    | Anthracene                  | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 < 11                             |  |  |
| SEMIVOLATILES    | Benzo(a)anthracene          | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 < U                              |  |  |
| SEMIVOLATILES    | Benzo(a)pyrene              | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.00 1 < 0                              |  |  |
| SEMIVOLATILES    | Benzo(b)fluoranthene        | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | Benzo(ghi)perylene          | 0,182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 4 0                              |  |  |
| SEMIVOLATILES    | Benzo(k)fluoranthene        | 0.182 1 U            | 0.181 1 U        | 0,33 1 < 0       |   |  |  |
| SEMIVOLATILES    | Benzoic Acld                | 0.908 1 U            | 0.905 1 U        | 1.65 1 < 0       | 1,65 1 < 0                              |  |  |
| SEMIVOLATILES    | Benzyl Alcohol              | 0.182 1 U            | 0.181 1 U        | 0,65 1 < U       | 0.00 1 < U                              |  |  |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0,33 1 < 0                              |  |  |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  | 0.182 1 U            | 0.181 1 U        | 0.33 1 < U       | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | Butyl benzyl phthalate      | 0.182 1 U            | 0,181 1 U        | 0.33 1 < 0       | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | Chrysene                    | 0.182 <sup>1</sup> U | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | Dibenzofuran                | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | Diethyl phthalate           | 0.182 1 U            | 0,181 1 U        | 0.33 1 < 0       | 0.33 1 4 0                              |  |  |
| SEMIVOLATILES    | Dimethyl phthalate          | 0.182 1 U            | 0.181 1 U        | 0,33 1 < 0       | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | di-n-Butyl phthalate        | 0.182 1 U            | 0.181 i U        | 2.51 1           | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | di-n-Octyl phthalate        | 0.182 1 U            | 0.181 t U        | 0.33 1 < 0       | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | Fluoranthene                | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | Fluorene                    | 0.182 1 U            | 0.181 1 U        | 0,33 1 < 0       |   |  |  |
| SEMIVOLATILES    | Hexachlorobenzene           | 0.182 1 U            | 0.181 1 U        | 0.33 1 2 0       | 0.33 1 4 0                              |  |  |
| SEMIVOLATILES    | Hexachlorobutadiene         | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 × 0                              |  |  |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.03 1 4 0                              |  |  |
| SEMIVOLATILES    | Hexachloroethane            | 0.182 1 U            | 0.1B1 1 U        | 0.33 1 < 0       |   |  |  |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene      | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 4 0                              |  |  |
| SEMIVOLATILES    | Isophorone                  | 0.182 1 U            | 0.181 1 U        | 0.33 1 < U       | 0.33 ( < 0                              |  |  |
| SEMIVOLATILES    | Naphthalene                 | 0.162 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.03 1 4 0                              |  |  |
| SEMIVOLATILES    | Nitrobenzene                | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.20 1 4 1                              |  |  |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      | 0.182 1 U            | 0.181 1 U        |                  | 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |  |  |
| SEMIVOLATILES    | Pentachlorophenol           | 0.908 1 U            | 0,905 1 U        | 1.65 1 < 0       | 0.02 1 < 1                              |  |  |
| SEMIVOLATILES    | Phenanthrene                | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       |   |  |  |
| SEMIVOLATILES    | Phenol                      | 0.182 1 U            | 0.181 1 U        |                  | 0.33 1 < 0                              |  |  |
| SEMIVOLATILES    | Pyrene                      | 0.182 1 U            | 0.181 1 U        | 0.33 1 < 0       | 0.33 1 4 0                              |  |  |
| VOLATILES        | 1,1,1,2-Tetrachloroethane   |                      | 0.00573 1 U      | 0.007 1 . 1      | 0.005 1 < 1                             |  |  |
| VOLATILES        | 1,1,1-Trichloroethane       |                      | 0.00573 1 U      | 0.005 1 < 0      |   |  |  |
| VOLATILES        | 1,1.2,2-Tetrachloroethane   | 1                    | 0.00573 1 U      | 0.005 1 < 0      |   |  |  |
| VOLATILES        | 1,1,2-Trichloroethane       |                      | 0,00573 1 U      | 0.005 1 < 0      |   |  |  |
| VOLATILES        | 1.1-Dichloroethane          |                      | 0.00573 1 U      | 0.005 1 < 0      |   |  |  |
| VOLATILES        | 1.1-Dichloroethene          | 1                    | 0.00573 1 0      | 0.000 i < 0      |   |  |  |
| VOLATILES        | 1,1-Dichloropropene         |                      | 0.00573 1 0      |                  |   |  |  |

Data Evaluation Report

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



| Table 3-38   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 038 |

| (SUMP] = SUMP038 |                                |                  |                  |                  | 111 000 01       |  |  |  |  |
|------------------|--------------------------------|------------------|------------------|------------------|------------------|--|--|--|--|
| LOCATION _CODE   |                                | 35SUMP038-SB01   | 35SUMP038-S801   | LH-S38-01        | LH-538-01        |  |  |  |  |
| SAMPLE_NO        |                                | 35-SMP38-SB01-01 | 35-SMP38-SB01-02 | LH-S38-01_1      | LH-S38-01_2      |  |  |  |  |
| SAMPLE_DATE      |                                | 9/12/2006        | 9/12/2006        | 6/26/1993        | 0/20/1993        |  |  |  |  |
| DEPTH            |                                | 0.5 - 0.5 Ft     | 2.5 - 3 Ft       | 0.5 • 1.5 Ft     | 0.2 • 4.1 FL     |  |  |  |  |
| SAMPLE_PURPOSE   |                                | REG              | REG              | HEG              |                  |  |  |  |  |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO |  |  |  |  |
| VOLATILES        | 1.2.3-Trichiorobenzene         |                  | 0,00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | 1,2,3-Trichloropropane         |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | 1.2.4-Trichlorobenzene         |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | 1.2,4-Trimethyibenzene         | 1                | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | 1,2-Dibromoethane              |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | 1.2-Dichlorobenzene            |                  | 0.00573 1 U      | 1                |                  |  |  |  |  |
| VOLATILES        | 1.2-Dichloroethane             |                  | 0.00573 1 U      | 0.005 1 < 0      | 0.005 1 < U      |  |  |  |  |
| VOLATILES        | 1,2-Dichloroethene             |                  |                  | 0.005 1 < 0      | 0.005 1 < U      |  |  |  |  |
| VOLATILES        | 1,2-Dichloropropane            |                  | 0.00573 1 U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |
| VOLATILES        | 1,2-Dimethylbanzene (o-Xylene) |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | 1,3,5-Trimethylbenzene         |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | 1,3-Dichlorobenzene            |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | 1,3-Dichloropropane            |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | 1.4-Dichlorobenzene            | 1                | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | 2.2-Dichloropropane            |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | 2-Butanone                     |                  | 0.0115 1 U       | 0.05 1 < U       | 0.05 1 < U       |  |  |  |  |
| VOLATILES        | 2-Chioroethyl vinyl ether      |                  | 0.0115 1 U       | 0.01 1 < U       | 0.01 1 < U       |  |  |  |  |
| VOLATILES        | 2-Chlorotoluene                | ļ                | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | 2-Hexanone                     | 1                | 0.0115 1 U       | 0.05 1 < U       | 0.05 1 < U       |  |  |  |  |
| VOLATILES        | 4-Chlorotoluene                |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | Acetone                        |                  | 0.0115 1 U       | 0.1 1 < U        | 0.1 1 < U        |  |  |  |  |
| VOLATILES        | Benzene                        |                  | 0.00573 1 U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |
| VOLATILES        | Bromobenzene                   |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | Bromochloromethane             |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | Bromodichloromethane           |                  | 0.00573 1 U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |
| VOLATILES        | Bromoform                      |                  | 0.00573 1 U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |
| VOLATILES        | Bromomethane                   |                  | 0.0115 1 U       | 0.01 1 < U       | 0.01 1 < U       |  |  |  |  |
| VOLATILES        | Carbon disulfide               |                  | 0.00573 1 U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |
| VOLATILES        | Carbon tetrachloride           |                  | 0.00573 1 U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |
| VOLATILES        | Chlorobanzene                  |                  | 0.00573 1 U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |
| VOLATILES        | Chloroethane                   | 1                | 0,0115 1 U       | 0.01 1 < U       | 0.01 1 < U       |  |  |  |  |
| VOLATILES        | Chloroform                     |                  | 0.00573 1 U      | 0.005 1 < U      | 0.005 t < U      |  |  |  |  |
| VOLATILES        | Chloromethane                  |                  | 0.0115 1 U       | 0.01 1 < U       | 0.01 1 < U       |  |  |  |  |
| VOLATILES        | cis-1,2-Dichloroethene         |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | cis-1.3-Dichloropropene        |                  | 0.00573 1 U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |
| VOLATILES        | Dibromochloromethane           |                  | 0.00573 1 U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |
| VOLATILES        | Dibromomethane                 |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | Dichlorodifluoromethane        |                  | 0.0115 1 U       |                  |                  |  |  |  |  |
| VOLATILES        | Ethylbenzene                   |                  | 0.00573 1 U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |
| VOLATILES        | Hexachiorobutadiene            |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | Isopropyibenzene               |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | m.p-Xvienes                    |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | Methyl Isobutyl ketone         |                  | 0.0115 1 U       | 0.05 1 < U       | 0.05 1 < U       |  |  |  |  |
| VOLATILES        | Methviene chloride             |                  | 0.00573 1 U      | 0.005 1 < U      | 0.005 \$ < U     |  |  |  |  |
| VOLATILES        | Naphthalene                    |                  | 0.0115 1 U       |                  |                  |  |  |  |  |
| VOLATILES        | n-BUTYLBENZENE                 | 1                | 0.00573 1 U      |                  |                  |  |  |  |  |
| VOLATILES        | n-PROPYLBENZENE                |                  | 0.00573 1 U      |                  |                  |  |  |  |  |
|                  |                                | 1                |                  |                  |                  |  |  |  |  |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

|  | Concentrationa             | or orienticals the oon ou  | inpide rice  |    |    |  |              |    |  |        |     |    |    |
|--|----------------------------|--|--|----|----|--|--------------|----|--|--------|-----|----|----|
| (SUMP) = SUMP038<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                            | 35SUMP038-SB01<br>35-SMP38-SB01-01<br>9/12/2006<br>0.5 - 0.5 Ft<br>PEC | 355UMP038-SB01<br>35-SMP38-SB01-02<br>9/12/2008<br>2.5 - 3 Ft<br>EEG |    |    | LH-S3<br>LH-S38<br>6/26/1<br>0.5 - 1<br>BE | i<br>_1<br>t |    | LH-S38-01<br>LH-S38-01_2<br>6/26/1993<br>3.2 - 4.1 Ft<br>REG |        |     |    |    |
| SAMPLE_FURPUSE   | Parameter (Linite – mo/ko) | Besuit Dii LO VO   | Result DiL   | LQ | vq | Result                                     | DIL          | LQ | VQ   | Result | DIL | LQ | VQ |
| VOLATILES  | p-ISOPBOPYI TOLUENE        |  | 0.00573 1  | U  |    |  |              |    |  |        |     |    |    |
| VOLATILES  | sec-BUTYI BENZENE          |  | 0.00573 1  | U  |    |  |              |    |  |        |     |    |    |
| VOLATILES  | Styrene                    |  | 0.00573 1  | U  |    | 0.005                                      | 1            | <  | U  | 0.005  | 1   | <  | U  |
| VOLATILES  | tert-BUTYI BENZENE         |  | 0.00573 1  | υ  |    |  |              |    |  |        |     |    |    |
| VOLATILES  | Tetrachloroethene          |  | 0.00573 1  | U  |    | 0.005                                      | 1            | <  | U  | 0.005  | 1   | <  | U  |
| VOLATILES  | Toluena                    |  | 0.00573 1  | U  |    | 0.005                                      | 1            | <  | U  | 0.005  | 1   | <  | IJ |
| VOLATILES  | trans-1.2-Dichloroethene   |  | 0.00573 1  | U  |    |  |              |    |  |        |     |    |    |
| VOLATILES  | trans-1.3-Dichloropropene  |  | 0.00573 1  | U  |    | 0.005                                      | 1            | <  | U  | 0.005  | 1   | <  | U  |
| VOLATILES  | Trichloroethene            |  | 0.00573 1  | U  |    | 0.005                                      | 1            | <  | U  | 0.005  | 1   | <  | U  |
| VOLATILES  | Trichlorofluoromethane     |  | 0.0115 1   | U  |    |  |              |    |  |        |     |    |    |
| VOLATILES  | Vinvl acetate              |  | 0.0115 1   | U  |    | 0.05                                       | 1            | <  | U  | 0.05   | 1   | <  | ų  |
| VOLATILES  | Vinyl chloride             |  | 0.0115 1   | U  |    | 0.01                                       | 1            | <  | U  | 0.01   | 1   | <  | U  |
| VOLATILES  | Xvienes, Total             | 1  |  |    |    | 0.005                                      | 1            | <  | U  | 0.005  | 1   | <  | U  |

### Table 3-38 Concentrations of Chemicals in Soil Samples Associated with Sump 038

Footnotes are shown on cover page to Tables Section.

é

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Biole P: Standard         Standard <tt>Standard</tt> <tt>Standard<!--</th--><th></th><th></th><th>Concentrations of</th><th>Chemicals in Soil S</th><th>amples Associated wit</th><th>h Sump 039</th><th></th><th></th></tt>  |  |   | Concentrations of  | Chemicals in Soil S   | amples Associated wit  | h Sump 039  |  |   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|--------|-----------|-------|-------|-------|-------|-------|-------|
| Dum Z, Dui         Bis Bis Hespender         UI-SBB (1)  | (SUMP) = SUMP039<br>LOCATION _CODE   |   | 35SUMP040-SB01   | LH-S39-01   | LH-\$39-01   | LH-839-01   | LH-\$40-01   | LH-S40-01   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| BADE_CONTE         PROVEMS         EXEMPES  | SAMPLE_NO  |   | 35-SMP40-SB01-02   | LH-539-01 QC  | LH-S39-01_1  | LH-S39-01_2   | LH-S40-01_1  | LH-\$40-01_2  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| Depth         3.3.4.6         5.3.5?         6.5.4.5.7         3.4.7.8         6.5.4.5.7         7.4.7         6.5.4.5.7         8.6.7  | SAMPLE DATE  |   | 9/14/2006  | 6/26/1993   | 6/26/1993  | 6/26/1993   | 6/26/1993  | 6/26/1993   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| LAME C. PARCE         FBG         REG         EG         REG <t< th=""><th>DEPTH</th><th></th><th>3.5 - 4 Fi</th><th>0.5 - 1.5 Ft</th><th>0.5 - 1.5 Ft</th><th>3 - 4 Ft</th><th>0.5 - 1,5 Ft</th><th>3.3 - 4.2 Ft</th></t<>   | DEPTH  |   | 3.5 - 4 Fi   | 0.5 - 1.5 Ft  | 0.5 - 1.5 Ft   | 3 - 4 Ft  | 0.5 - 1,5 Ft   | 3.3 - 4.2 Ft  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| Ter-Grow         Parter Bits         Co. Vo.         Peet/1 Bit         Co. Vo.         Pee/1 Bit         Co. Vo.<   | SAMPLE PURPOSE   |   | REG  | FD  | REG  | REG   | REG  | REG -   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| DEPCONS         2-0         120         1-0         1-0         120         1-0         120         1-0         120         1-0         120         1-0         120         1-0         120         1-0         120         1-0         120         1-0         120         1-0         120         1-0         120         1-0         120         1-0         120         1-0         120         1-0         120         1-0         120         1-0         120         1-0         110         100   | Test Group   | Parameter (Upits = mo/ko)   | Result DIL LO VO   | D Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LO VO  | Result DIL LQ VQ   | Result DIL LQ VQ  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| Derrole of the set of the s | EXPLOSIVES   | 2 4-Dinitrototuene  |  | 1.22 1 < U  | 1.22 1 < U   | 1.205 1 < U   |  |   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| Untrace         Untrace <t< td=""><td>EXPLOSIVES</td><td>2 6-Dinitrolojuene</td><td></td><td>1.22 1 &lt; U</td><td>1.22 1 &lt; V</td><td>1.205 1 &lt; U</td><td></td><td></td></t<>   | EXPLOSIVES   | 2 6-Dinitrolojuene  |  | 1.22 1 < U  | 1.22 1 < V   | 1.205 1 < U   |  |   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| Intrage       Amonge       Old       I       U       Zach       I       U       Zach       I       U       Back       I       U       I       I       U       I       I       U       I       I       U       I       I       U       I   | METALS   | Aluminum  | 14300 1  | 13200 1   | 15500 1  | 9070 1  | 13300 1  | 11900 1   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| Intras       Amoria       O.41       1       2.39       1       2.39       1       2.39       1       2.39       1       2.39       1       3.30       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       <   | METALS   | Antimony  | 0.108 1 U  | 3.46 1 < U  | 41 < U   | 3.26 1 < U  | 31 < U   | 3 1 < U   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| uppring       mom       10.1       1       8.1       1       2       U       10.1         | METALS   | Arsenic   | 0.441 1  | 2.39 1  | 2.52 1   | 4.89 1  | 2.1 1  | 3.2 1   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| ugeTags<br>METAGSDefinitionOBBIJJJMETAGS<br>METAGSCademin0388IJ111<   | METALS   | Barium  | 50,1 1   | 83.8 1 < U  | 104 1 < U  | 31.5 1 < U  | 121 1  | 119 1   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| District       Open       1       0       3       1       2       0       1       1       2       0       1 <th< td=""><td>METALS</td><td>Beryllium</td><td>0.363 1 J J</td><td></td><td></td><td></td><td></td><td></td></th<>   | METALS   | Beryllium   | 0.363 1 J J  |   |  |   |  |   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| start A.S.       Cabam       inspace  | METALS   | Cadmium   | 0.386 1 U  | 3,41 1 < U  | 3.46 1 < U   | 4,42 1 < U  | 11 < U   | 11 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| MET AS       Domain       H4 9       1       72 1       28.1 1       198 1       38.1 1       37.3 1       1       37.3 1         MET AS       Dogan       28.8 1       5.0 1       28.0 1       28.0 1       28.0 1       44.4 1       5.1 1       5.2 1 <th5.2 1<="" th=""> <th5.2 1<="" th=""> <th5.< td=""><td>METALS</td><td>Calcium</td><td>495 1</td><td>1240 1</td><td>1470 1</td><td>264 1</td><td>1530 1</td><td>1920 1</td></th5.<></th5.2></th5.2>  | METALS   | Calcium   | 495 1  | 1240 1  | 1470 1   | 264 1   | 1530 1   | 1920 1  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| matrix       Code       23.3       1       20.0       1       20.6       1       20.6       1       20.6       1       20.6       1       20.6       1       20.6       1       20.6       1 <th1< th=""> <th1< th=""> <th1< th=""></th1<></th1<></th1<>  | METALS   | Chromium  | 14,9 1   | 17.2 1  | 23.1 1   | 19.8 1  | 35.1 1   | 31.3 1  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| METAS       Opgger       258       1       52       1       c       U       100       1       400       1       500       1       600       1   | METALS   | Cebalt  | 2.33 1   | 2.63 1  | 2.98 1   | 2.85 1  | 4.4 1  | 5.1 1   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| marrial       marria       marrial       marrial  | METALS   | Copper  | 2.58 1   | 5.02 1 < U  | 10,5 1 < U   | 4,27 1 < U  | 5.1 1  | 6.2 1   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| TATAS       Magnetium       568       1       20.5       1       10       10       10       10       71 <td>METALS</td> <td>iron</td> <td>16600 1</td> <td>12900 1</td> <td>13000 1</td> <td>18900 1</td> <td>14300 1</td> <td>15100 1</td>  | METALS   | iron  | 16600 1  | 12900 1   | 13000 1  | 18900 1   | 14300 1  | 15100 1   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| Marganse       449       1       520       1       316       1       727       1       737       1         METAS       Manganse       24.4       1       26.4       1       26.6       1       21.6       1       0.040       1       4       0       0.1       1       4       0       0.1       1       4       0       0.5       1       21.6       1       0.040       1       4       0       0.01       1       4       0       0.5       1       4       0       0.040       1       4       0       0.040       1       4       0       0.041       1       4       0       0.041       1       4       0       0.041       1       4       0       0.011       1       4       0       1       1       4       0       0.11       1       4       0       1       4       0       0.11       1       4       0       1       1       4       0       0.11       1       4       0       0.11       1       4       0       0.11       1       4       0       0.11       1       4       0       0.11       1       4       0<   | METALS   | Lead  | 5.68 1   | 20.3 1  | 20.5 1   | 18,5 1  | 10 1   | 8.4 1   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| METALS       Management       24.4       1       26.1       27.6       1       C10.6       1       C       0.0       1       C       0.0.1       1       0.0.1       1       0.0.1       1       0.0.1       1       0.0.1       1       0.0.1       1       0.0.1       1       0.0.1       1       0.0.1       0.0.1  | METALS   | Magnesium   | 549 1  | 454 1   | 529 1  | 316 1   | 757 1  | 713 1   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| Marrow         0.254         I         U         0.05         I         V         0.04         I         V         0.1         I         V  | METALS   | Manganese   | 24.4 1   | 26.1 1  | 22.6 1   | 21.6 1  | 103 1  | 95.7 1  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| METALS       Nickel       4.95       1       6.44       1       0.44       1       0.032       1       6.44       1       0.032       1       6.44       1       0.032       1       6.44       1       0.032       1       6.44       1       0.032       1       6.44       1       0.032       1       4       0       0.1       1       4       0       0.1       1       4       0       0.1       1       4       0       0.1       1       4       0       0.1       1       4       0       0.1       1       4       0       0.1       1       4       0       0.1       1       4       0       0.1       1       4       0       0.1       1       4       0       0.1       1       4       0       0.1       1       4       0       0       1       4       0       0.1       1       4       0       0.0       1   | METALS   | Mercuny   | 0.254 1 U  | 0.05 1 < U  | 0.055 1 < U  | 0,049 1 < U   | 0.1 1 < U  | 0.1 1 < U   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| METALS         Passium         355         I         528         I         644         I         316         I         674         I         674         I         674         I         674         I         674         I         671         I         474         I         674         I         674         I         674         I         671         I         4         I         1         4         0         1         4         0         1         1         4         0         1         1         4         0         1         1         4         0         1         1         4         0         1         4         0         1         1         1         0         1  | METALS   | Nickel  | 4.95 1   |   |  |   |  |   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| METALS       Seewin       0.21e       1       U       0.34e       1       < <th>U       0.32e       1       &lt;<th>U       0.32e       U       1.4       1       &lt;<th>U       1.1       &lt;<th>U       U       0.32e       U       0.32e       U       1.4       1       &lt;<th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th></th></th></th></th></th></th></th></th></th></th></th></th></th>   | U       0.32e       1       < <th>U       0.32e       1       &lt;<th>U       0.32e       U       1.4       1       &lt;<th>U       1.1       &lt;<th>U       U       0.32e       U       0.32e       U       1.4       1       &lt;<th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th></th></th></th></th></th></th></th></th></th></th></th></th> | U       0.32e       1       < <th>U       0.32e       1       &lt;<th>U       0.32e       U       1.4       1       &lt;<th>U       1.1       &lt;<th>U       U       0.32e       U       0.32e       U       1.4       1       &lt;<th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th></th></th></th></th></th></th></th></th></th></th></th> | U       0.32e       1       < <th>U       0.32e       1       &lt;<th>U       0.32e       U       1.4       1       &lt;<th>U       1.1       &lt;<th>U       U       0.32e       U       0.32e       U       1.4       1       &lt;<th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th></th></th></th></th></th></th></th></th></th></th> | U       0.32e       1       < <th>U       0.32e       1       &lt;<th>U       0.32e       U       1.4       1       &lt;<th>U       1.1       &lt;<th>U       U       0.32e       U       0.32e       U       1.4       1       &lt;<th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th></th></th></th></th></th></th></th></th></th> | U       0.32e       1       < <th>U       0.32e       1       &lt;<th>U       0.32e       U       1.4       1       &lt;<th>U       1.1       &lt;<th>U       U       0.32e       U       0.32e       U       1.4       1       &lt;<th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th></th></th></th></th></th></th></th></th> | U       0.32e       1       < <th>U       0.32e       1       &lt;<th>U       0.32e       1       &lt;<th>U       0.32e       1       &lt;<th>U       0.32e       1       &lt;<th>U       0.32e       U       1.4       1       &lt;<th>U       1.1       &lt;<th>U       U       0.32e       U       0.32e       U       1.4       1       &lt;<th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th></th></th></th></th></th></th></th> | U       0.32e       1       < <th>U       0.32e       1       &lt;<th>U       0.32e       1       &lt;<th>U       0.32e       1       &lt;<th>U       0.32e       U       1.4       1       &lt;<th>U       1.1       &lt;<th>U       U       0.32e       U       0.32e       U       1.4       1       &lt;<th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th></th></th></th></th></th></th> | U       0.32e       1       < <th>U       0.32e       1       &lt;<th>U       0.32e       1       &lt;<th>U       0.32e       U       1.4       1       &lt;<th>U       1.1       &lt;<th>U       U       0.32e       U       0.32e       U       1.4       1       &lt;<th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th></th></th></th></th></th> | U       0.32e       1       < <th>U       0.32e       1       &lt;<th>U       0.32e       U       1.4       1       &lt;<th>U       1.1       &lt;<th>U       U       0.32e       U       0.32e       U       1.4       1       &lt;<th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th></th></th></th></th> | U       0.32e       1       < <th>U       0.32e       U       1.4       1       &lt;<th>U       1.1       &lt;<th>U       U       0.32e       U       0.32e       U       1.4       1       &lt;<th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th></th></th></th> | U       0.32e       U       1.4       1       < <th>U       1.1       &lt;<th>U       U       0.32e       U       0.32e       U       1.4       1       &lt;<th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th></th></th> | U       1.1       < <th>U       U       0.32e       U       0.32e       U       1.4       1       &lt;<th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th></th> | U       U       0.32e       U       0.32e       U       1.4       1       < <th>U       1.3       1       &lt;<th>U       1.3       1        U       1.3.8       U       1.3.8</th></th> | U       1.3       1       < <th>U       1.3       1        U       1.3.8       U       1.3.8</th> | U       1.3       1        U       1.3.8       U       1.3.8 | METALS | Potassium | 355 1 | 528 1 | 544 1 | 316 1 | 674 1 | 601 1 |
| METALS       Skett       1 54       1       0 002       1       c       U       0.018       1       c       U       1       c       U       1       1   | METALS   | Selenium  | 0.216 1 U  | 0.346 1 < U   | 0.4 1 < U  | 0.326 1 < U   | 1 1 < U  | 11 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| METALS       Solum       48.8 1       10.7 1 < U       10.9 1 < U       10.9 1 < U       14.8 1       13.8 1         METALS       Stonium       0.0532 1       1       10.7 1 < U       10.9 1 < U       12.9 1 < U       14.8 1       30.3 1         METALS       Trallom       0.0532 1       1       12.6 1       12.6 1       14.8 1       30.1        25.6 1         METALS       Variability       10.0 1 U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U       12.2 1 < U   | METALO   | Silver  | 1.54 1 1   | 0.022 1 < U   | 0.028 1 < U  | 0.016 1 < U   | 11 < U   | 11 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| METALS       Stornlym       Instruction       Instruction <t< td=""><td>METALS</td><td>Sodium</td><td>46.8 1</td><td></td><td></td><td></td><td></td><td></td></t<>   | METALS   | Sodium  | 46.8 1   |   |  |   |  |   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| METALS         Thalkum         0.0532         1           METALS         Vanadum         30.3         1           METALS         Zine         15.9         1         62.6         1         12.2         1         1         1         30         1         25.6         1           PERC         Perchorale         0.01         1         U         12.2         1         <  | METALS   | Strontium   |  | 10.7 1 < U  | 10.9 1 < U   | 4,34 1 < U  | 14.8 1   | 13.8 1  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| METALS         Vanadum         30.3         1         G2.6         1         1         1         1         3         1         25.6         1           METALS         Zinc         15.9         1         0.01         1         U         1   | METALS   | Thallium  | 0.0532 1   |   |  |   |  |   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| METALS         Zinc         15 % 1         62.6 %         1         16 % 1         16 % 1         10 %  | METALS   | Vanadium  | 30.3 1   |   |  |   |  |   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| Derko         Perchinate         0.01 1 U           SEMVOLATILES         1.2.4-Trichlorobenzene         1.22 1 < U  | METALS   | Zinc  | 15.9 1   | 62.6 1  | 126 1  | 14 1  | 30 1   | 25.6 1  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMVOLATILES       1.2.4 - Trichlorobenzene       1.2.4 - Trichlorobenzene       1.2.2 1 < U  | PERC   | Perchlorate   | 0.01 1 U   |   |  |   |  |   |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       1.2. Dichlorobenzene       1.2. Dichlorobenzene       1.2. 1       c       U       1.2.0       1       c       U       0.3.3       1       c       U </td <td>SEMIVOLATILES</td> <td>1.2.4-Trichlorobenzene</td> <td></td> <td>1.22 1 &lt; U</td> <td>1.22 1 &lt; U</td> <td>1.205 1 &lt; U</td> <td>0.33 1 &lt; U</td> <td>0.33 1 &lt; U</td>  | SEMIVOLATILES  | 1.2.4-Trichlorobenzene  |  | 1.22 1 < U  | 1.22 1 < U   | 1.205 1 < U   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       1.4) Dichlorobenzene       1.22       1       <   | SEMIVOLATILES  | 1.2-Dichlorobenzene   |  | 1.22 1 < U  | 1.22 1 < U   | 1.205 1 < U   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       1.4-Dichloroberzene       1.22       1       <  | SEMIVOLATILES  | 1.3-Dichlorobenzene   |  | 1.22 1 < U  | 1.22 1 < U   | 1.205 1 < U   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       2.4.5. Thichlorophenol       1.22       1       <   | SEMIVOLATILES  | 1.4-Dichlorobenzene   |  | 1,22 1 < U  | 1.22 1 < U   | 1.205 1 < U   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       2.4.6 Trichlorophenol       1.22       1       <  | SEMIVOLATILES  | 2.4.5-Trichlorophenol   |  | 1.22 1 < U  | 1.22 1 < U   | 1.205 1 < U   | 1.65 1 < U   | 1.65 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       2.4-Dickbiorophenol       1.22       1       <  | SEMIVOLATILES  | 2.4.6-Trichlorephenol   |  | 1,22 1 < U  | 1,22 1 < U   | 1.205 1 < U   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       2.4-Dimethylphanol       0.61       1       <   | SEMIVOLATILES  | 2.4-Dichlorophenol  |  | 1.22 1 < U  | 1,22 1 < U   | 1.205 1 < U   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       2,4-Dinitrophenol       12.195       1       v       U       12.195       1       v       U       12.195       1       v       U       1.65       1       v       U       1.65       1       v       U       1.65       1       v       U       0.33       1   | SEMIVOLATILES  | 2.4-Dimethylphanol  |  | 0.51 1 < U  | 0.61 1 < U   | 0.602 1 < U   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       2.4-Dinitrotoluene         SEMIVOLATILES       2.6-Dinitrotoluene         SEMIVOLATILES       2.4-Methylnaphthalene         0.61       1       V       0.61       1       V       0.602       1       V       0.33       1       V       U       0.33       1       V       U       0.361       1       V       U       0.33       1       V       U       0.361       1       V       U       0.33       1       V       U  | SEMIVOLATILES  | 2.4-Dinitrophenol   |  | 12,195 1 < U  | 12.195 1 < U   | 12,048 1 < U  | 1.65 1 < U   | 1,65 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       2.6-Dinitrotoluene       0.33       1       <   | SEMIVOLATILES  | 2.4-Dinitrotoluene  |  |   |  |   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       2-Chloronaphthalene       0.366       1       <   | SEMIVOLATILES  | 2.6-Dinitrotoluene  |  |   |  |   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       2-Chlorophenol       0.61       1       <   | SEMIVOLATILES  | 2-Chloronaphthalane   |  | 0.366 1 < U   | 0.366 1 < U  | 0.361 î < U   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       2-Methylnaphthalene       0.366       1       <   | SEMIVOLATILES  | 2-Chlorophenol  |  | 0.61 1 < U  | 0.61 1 < U   | 0.602 1 < U   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       2-Methylphenol       0.61       1       U       0.61       1       U       0.60       1       U       0.62       1       U       0.33   | SEMIVOLATILES  | 2-Methylnaphthalene   |  | 0.366 1 < U   | 0.366 1 < U  | 0,361 1 < U   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES       2-Nitroaniline       3.659       1 < U  | SEMIVOLATILES  | 2-Methylphenol  |  | 0.61 1 < U  | 0.61 1 < U   | 0.602 1 < U   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES         2-Nitrophenol         1.22         1 <         U         1.22         1 <         U         1.20         1 <         U         0.33         1 <         U         0.35         1 <         U         0.35         1 <         U         0.65         1 <         U         0.65         1 <         U         0.65         1 <         U         1.65         1 <         U         1.65         1 <         U         1.65         1 <   | SEMIVOLATILES  | 2-Nitroaniline  |  | 3.659 1 < U   | 3.659 1 < U  | 3.614 1 < U   | 1.65 1 < U   | 1.65 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES         3.3-Dichlorobenzidine         0.61         1         U         0.62         1         U         0.65         1         C         U         0.65         1  | SEMIVOLATILES  | 2-Nitrophenol   |  | 1,22 1 < U  | 1.22 1 < U   | 1,205 1 < U   | 0.33 1 < U   | 0.33 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES         3-Nitroganiline         3.659         1         U         3.614         1         U         1.65         1         U         1.65         1         U         1.65         1         C         U         3.614         1         C         U         1.65         1         C         U         3.614         1         C         U         1.65         1         C         U         3.612         U         3.614         1         C         U         1.65         1         C         U         3.612         U <td>SEMIVOLATII ES</td> <td>3.3'-Dichlorobenzidine</td> <td></td> <td>0.61 1 &lt; U</td> <td>0.61 1 &lt; U</td> <td>0.602 1 &lt; U</td> <td>0.65 1 &lt; U</td> <td>0.65 1 &lt; U</td>   | SEMIVOLATII ES   | 3.3'-Dichlorobenzidine  |  | 0.61 1 < U  | 0.61 1 < U   | 0.602 1 < U   | 0.65 1 < U   | 0.65 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
| SEMIVOLATILES 4.6-0/initro-2-methylphenol 6.098 1 < U 6.098 1 < U 6.024 1 < U 1.65 1 < U 1.65 1 < U   | SEMIVOLATILES  | 3-Nitroaniline  | 1  | 3.659 1 < U   | 3.659 1 < U  | 3.614 1 < U   | 1.65 1 < U   | 1.65 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |
|   | SEMIVOLATILES  | 4.6-Dinitro-2-methylphenol  |  | 6.098 i < U   | 6.098 1 < U  | 8.024 1 < U   | 1.65 1 < U   | 1.65 1 < U  |  |   |  |   |  |   |  |        |           |       |       |       |       |       |       |

Table 3-39

MARC No. W912OR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas



### Table 3-39 Concentrations of Chemicals In Soil Samples Associated with Sump 039

| (SUMP) = SUMP039 |                             |                  |                  |                  |                        | 14 640.01        | LH-S40-01        |
|------------------|-----------------------------|------------------|------------------|------------------|------------------------|------------------|------------------|
| LOCATION _CODE   |                             | 35SUMP040-S801   | LH-S39-01        | LH-S39-01        | CH-S39-01              | 1 4 840 01 1     | 1 H-S40-01 2     |
| SAMPLE_NO        |                             | 35-SMP40-SB01-02 | LH-S39-01 QC     | LH-\$39-01_1     | LH-539-01_2            | e/36/1902        | 8/26/1993        |
| SAMPLE_DATE      |                             | 9/14/2006        | 6/26/1993        | 6/26/1993        | 6/26/1993              | 05.155           | 33,42 Ft         |
| DEPTH            |                             | 3.5 - 4 Ft       | 0.5 - 1.5 Ft     | 0.5 - 1.5 Ft     | 3+4 FI                 | 950              | REG              |
| SAMPLE_PURPOSE   |                             | REG              | FD               | HEG              | HEG<br>Desult DILLO VO | Besult Dil LO VO | Result DIL LO VO |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LQ VQ | Hesult DIL LO VO |                        | 033 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  |                  | 1.22 1 < U       | 1.22 1 < U       | 0.602 1 4 1            | 0.65 1 < U       | 0,65 1 < U       |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     |                  | 0.61 1 < U       |                  | 3.614 1 - 1            | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES    | 4-Chioroaniline             |                  | 3.659 1 < U      |                  | 1205 1 2 11            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether |                  | 1.22 1 < U       | 1.22 1 < 0       | 0.602 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Methylphenol              | 1                | 0.61 F < U       | 4009 5 4 1       | 6024 1 4 1             | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | 4-Nitroaniline              |                  | 6.098 1 < U      |                  | 6.024 1 < 1            | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | 4-Nitrophenol               |                  | 6.098 1 < U      |                  | 0.361 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Acenaphthene                |                  | 0.366 1 < 0      |                  | 0.602 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Acenaphthylene              |                  | 0.61 1 4 1       |                  | 0.602 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Anthracene                  |                  | 0.61 < 0         | 0.368 1 < 11     | 0.361 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(a)anthracene          |                  |                  |                  | 0.602 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(a)pyrene              |                  | 0.51 1 < 0       | 0,01 1 C U       | 1205 1 < 1             | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(b)fluoranthene        |                  | 1,22 1 < U       | 2420 1 4 11      | 241 1 4                | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(ghl)perylene          |                  | 2.439 1 < U      | 122 1 4 11       | 1205 1 e U             | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(k)Iluoranthene        |                  | 1.22 1 4 0       | 1.22             | 1,200                  | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | Benzola Acid                |                  |                  |                  |                        | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES    | Benzyl Alcohol              | 1                | <b>N N N N</b>   | 0.61 1 - 11      | 0.602 1 × U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bls(2-Chloroethoxy)methane  | l                | 0.61 1 < 0       |                  | 0.602 1 < 11           | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |                  | 0.61 1 < 0       |                  | 1205 1 - 1             | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroisopropyi)ether |                  | 1.22 1 < 0       |                  | 0145 1                 | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |                  | 0.61 1 < 0       | 0.61 1 < U       | 0.143 1 - 1            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Butyl benzyl phthalate      |                  | 0.61 1 < 0       | 0.81 1 < 0       | 1205 1 - 1             |                  |                  |
| SEMIVOLATILES    | Carbazole                   | 1                | 1,22 1 < U       | 1.22 I C U       | 6.024 1 < U            | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES    | Chrysene                    |                  | 6.098 1 < 0      | 0.098 4 < 0      | 241 1 4 1              | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      |                  | 2.439 1 < 0      | 2,439 I < U      | 1205 1 2 11            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Dibenzofuran                |                  | 1.22 1 < 0       |                  | 0.602 1 < 1            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Diethyl phthalate           |                  | 0.61 1 < 0       |                  | 0.602 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Dimethyl phthalate          |                  | 0.61 1 < 0       | 1 020 1          | 4 4 22 1               | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | di-n-Butyl phthalate        |                  | 5.098            | 0.61 1 - 1       | 0.602 1 < 1            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | di-n-Octyl phthalate        |                  | 0.61 1 < 0       |                  | 0.602 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Fluoranthene                |                  | 0.61 1 < 0       |                  | 0.602 1 4 11           | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Fluorene                    |                  | 0.61 1 < U       | 100 1 4 11       | 1205 1 < 1             | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorobenzene           |                  | 1,22 1 < U       |                  | 3614 1 c U             | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachiorobutadiene         |                  | 3,659 1 < U      |                  | 3.614 1 < U            | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   |                  | 3.659 1 < 0      |                  | 1205 1 < 1             | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachloroethane            |                  | 1,22 1 < 0       |                  | 1 205 1 < 1            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | indeno(1,2,3-cd)pyrene      |                  | 1.22 1 < U       |                  | n.602 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Isophorone                  |                  |                  | 0.266 1 < 1      | 0.361 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Naphthalene                 |                  | 0.368 1 < U      | 0.300 1 < 0      | 0.602 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Nitrobenzene                |                  | 0.61 1 < 1       | 192 1 4 11       | 1205 1 < U             | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |                  | 1.22 1 < 0       |                  | 0.602 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      |                  | 0.61 1 < 0       |                  | 6.024 1 < 11           | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | Pentachiorophenol           | 1                | 6.098 1 < U      |                  | 0.602 1 < 1            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Phenanthrene                |                  | U > 1 10,0       |                  | 0.602 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Phenol                      |                  |                  |                  | 0.602 1 < U            | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Pyrene                      |                  | 0.61 7 < 0       | 0.01 1 4 0       | y.ov, , - v            |                  |                  |
| VOLATILES        | 1,1,1,2-Tetrachloroethane   | 0.0056 1 U       |                  |                  |                        |                  |                  |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



### Table 3-39

Concentrations of Chemicals in Soil Samples Associated with Sump 039

| [SUMP] = SUMP039 |                                | 1                |                  | 111 Dag at       | 111 000 01       | 111 640.01       | 19-540-01        |
|------------------|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                                | 35SUMP040-SB01   | LH-\$39-01       | LH-S39-01        | LH-539-01        |                  | LH-540-01 2      |
| SAMPLE_NO        |                                | 35-SMP40-SB01-02 | LH-S39-01 QC     | LH-S39-01_1      | LH-539-01_2      | 1000000          | 6/26/1993        |
| SAMPLE_DATE      |                                | 9/14/2006        | 6/26/1993        | 6/26/1993        | 0/20/1993        | 0/20/1993        | 33.425           |
| DEPTH            |                                | 3.5 - 4 Ft       | 0.5 - 1.5 Pt     | 0.5 - 1.5 Ft     | 3+4 Pi           | 0.5 1.5 FI       | REG              |
| SAMPLE_PURPOSE   |                                | REG              | FD               | HEG              |                  | Regult Dil LO VO | Result Dil LO VO |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VO | Result DIL LO VO |                  |                  |
| VOLATILES        | 1.1.1-Trichloroethane          | 0.0056 1 U       | 0.006 1 < U      | 0.006 1 < 0      | 0.006 1 < 0      | 0.005 1 < 1      | 0.005 1 < 1      |
| VOLATILES        | 1.1.2.2-Tetrachloroethane      | 0.0056 1 U       | 0.006 1 < U      | 0.006 1 < 0      | 0.006 1 < 0      | 0.005 1 < 0      |                  |
| VOLATILES        | 1,1,2-Trichloroethane          | 0.0056 1 U       | 0.006 1 < U      | 0.005 1 < 0      | 0.006 1 < U      | 0.005            | 0.005 1 < 1      |
| VOLATILES        | 1.1-Dichloroethane             | 0.0056 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | 1.1-Dichloroethene             | 0.0056 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0,005 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | 1,1-Dichloropropene            | { 0.0056 1 U     |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2,3-Trichlorobenzene         | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2,3-Trichloropropane         | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2,4-Trichlorobenzene         | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 1.2.4-Trimethylbenzene         | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2-Dibromoethane              | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2-Dichlorobenzene            | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2-Dichloroethane             | 0.0056 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichioroethene             |                  | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1.2-Dichloropropane            | 0.0056 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 1,3,5-Trimethylbenzene         | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 1.3-Dichlarobenzene            | 0,0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 1,3-Dichloropropane            | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 1.4-Dichlorobenzene            | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 2.2-Dichloropropane            | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 2-Butanone                     | 0.0112 1 U       | 0.11 1 < U       | 0.12 1 < U       | 0.12 1 < U       | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | 2-Chloroethyl vinyl ether      | 0.0112 1 U       |                  |                  |                  | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | 2-Chlorotoluene                | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | 2-Hexanone                     | 0.0112 1 U       | 0.055 1 < U      | 0.06 1 < U       | 0.059 1 < U      | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | 4-Chlorotoluene                | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | Acetone                        | 0.0112 1 U       | 0.11 1 < U       | 0.12 1 < U       | 0.12 1 < U       | 0.1 1 < U        | 0.1 1 < U        |
| VOLATILES        | Benzene                        | 0.0056 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromobenzene                   | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | Bromochloromethane             | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | Bromodichloromethane           | 0.0056 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromoform                      | 0.0056 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromomethane                   | 0.0112 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 t < U      | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Carbon disulfide               | 0.0056 1 U       | 0,006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Carbon tetrachloride           | 0.0056 1 U       | 0.006 t < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chlorobenzene                  | 0.0056 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloroethane                   | 0.0112 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0,006 1 < U      | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Chloroform                     | 0.0056 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloromethane                  | 0.0112 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.01 t < U       | 0.01 1 < U       |
| VOLATILES        | cis+1.2-Dichloroathena         | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | cis-1,3-Dichloropropene        | 0.0056 1 U       | 0.006 1 < U      | 0.006 t < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromochloromethane           | 0.0056 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromomethane                 | 0.0056 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | Dichlorodifluoromethane        | 0.0112 1 U       |                  |                  |                  |                  |                  |
| VOLATILES        | Ethylbenzene                   | 0.0056 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Hexachlorobutadiene            | 0.0056 1 U       |                  |                  |                  |                  |                  |
|                  |                                | 1                |                  |                  |                  |                  |                  |



| Table 3-39   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 039 |

| (SUMP) = SUMP039 |                           |                  |    |         | - • • |    |    |        |         |    |    | 1 LL R       |       |          |    | 14-5       | 40.01         |    |    | LH-S   | 40-01  |          |          |
|------------------|---------------------------|------------------|----|---------|-------|----|----|--------|---------|----|----|--------------|-------|----------|----|------------|---------------|----|----|--------|--------|----------|----------|
| LOCATION _CODE   |                           | 35SUMP040-SB01   |    | LH-S3   | 9-01  | _  |    | UH-    | 539-0   | •  |    | LING<br>LILO | 00.01 | <b>`</b> |    | 10.04      | 10 01<br>0.01 |    |    | LH-S4  | 0.01   | >        |          |
| SAMPLE_NO        |                           | 35-SMP40-SB01-02 |    | LH-S39  | -01 Q | С  |    | LH-S   | 39-01   | 1  |    | (H-S,        | 39-01 | 2        |    | C11-04     | NODA          | .' |    | 6/26   | 11007  | -        |          |
| SAMPLE_DATE      |                           | 9/14/2006        |    | 6/26/   | 1993  |    |    | 6/2    | 6/1993  |    |    | 6/20         | y1993 |          |    | 0/20       | 1995          |    |    | . 020  | 4 2 Ef |          |          |
| DEPTH            |                           | 3.5 - 4 Ft       |    | 0.5 - 1 | .5 FI |    |    | 0.5    | • 1.5 F | ł  |    | 3.           | 4 11  |          |    | 0.9 -      | 1.3 Fi        |    |    | 3.5*   | 50     |          |          |
| SAMPLE_PURPOSE   |                           | REG              |    | F       | D     |    |    | 1      | REG     |    |    | F            | REG   |          |    | н<br>Полин | 50<br>01      |    | vo | Boridi | DI     | ιA       | VO       |
| Test Group       | Parameter (Units = mg/kg) | Result DIL LO    | VQ | Result  | DIL   | 10 | VQ | Result | DIL     | LQ | VQ | Hesult       | DIL   |          | va | Hesuit     |               | LG | γų | nesui  |        |          |          |
| VOLATILES        | Isopropylbenzene          | 0.0056 1 U       |    |         |       |    |    |        |         |    |    |              |       |          |    |            |               |    |    |        |        |          |          |
| VOLATILES        | m.p-Xylenes               | 0.0056 1 U       |    |         |       |    |    |        |         |    |    |              |       |          |    | 0.07       |               |    |    | 0.05   |        |          | п        |
| VOLATILES        | Methyl isobutyl ketone    | 0.0112 1 U       |    | 0.055   | 1     | <  | U  | 0.06   | 1       | <  | U  | 0.059        | 1     | <        | U  | 0.05       | 1             | <  | 1  | 0.00   | ÷      | 2        | 11       |
| VOLATILES        | Methylene chloride        | 0.0056 1 U       |    | 0.006   | 1     | <  | U  | 0.006  | 1       | <  | U  | 0.008        | ٦     | <        | U  | 0,005      | I.            | ۲. | U  | 0,003  | 1      | `        | 0        |
| VOLATILES        | Naphthalene               | 0.0112 1 U       |    |         |       |    |    |        |         |    |    |              |       |          |    |            |               |    |    |        |        |          |          |
| VOLATILES        | n-BUTYLBENZENE            | 0.0056 1 U       |    |         |       |    |    |        |         |    |    |              |       |          |    |            |               |    |    |        |        |          |          |
| VOLATILES        | n-PROPYLBENZENE           | 0.0056 1 U       |    |         |       |    |    |        |         |    |    |              |       |          |    |            |               |    |    |        |        |          |          |
| VOLATILES        | p-ISOPROPYLTOLUENE        | 0.0056 i U       |    |         |       |    |    |        |         |    |    |              |       |          |    |            |               |    |    |        |        |          |          |
| VOLATILES        | SEC-BUTYLBENZENE          | 0.0056 1 U       |    |         |       |    |    |        |         |    |    |              |       |          |    |            |               |    |    | 0.005  |        |          | Ħ        |
| VOLATILES        | Styrene                   | 0.0056 1 U       |    | 0.006   | 1     | <  | U  | 0.006  | 1       | <  | U  | 0.006        | 1     | <        | U  | 0.005      | 1             | <  | U  | 0.005  | •      | 4        | Ŷ        |
| VOLATILES        | tert-BUTYLBENZENE         | 0.0056 1 U       |    |         |       |    |    |        |         |    |    |              |       |          |    |            |               |    |    | 0.005  | 4      |          | 11       |
| VOLATILES        | Tetrachloroethene         | 0.0056 1 U       |    | 0.006   | 1     | <  | ป  | 0.006  | 1       | <  | U  | 0.006        | 1     | <        | 0  | 0.005      | 1             | <  | 0  | 0.005  | 1      | ,        |          |
| VOLATILES        | Toluane                   | 0.0056 1 U       |    | 0.006   | 1     | <  | U  | 0.006  | 1       | <  | บ  | 0.006        | 1     | <        | U  | 0.005      | 1             | <  | Ų  | 0.005  |        | ٤.       | Ų        |
| VOLATILES        | trans-1,2-Dichloroelhene  | 0,0056 1 U       |    |         |       |    |    |        |         |    |    |              |       |          |    |            |               |    | 11 | 0.005  |        |          |          |
| VOLATILES        | trans-1,3-Dichioropropene | 0.0056 1 U       |    | 0.006   | 1     | <  | U  | 0.006  | 1       | <  | U  | 0.006        | 1     | <        | 0  | 0.005      | 1             | <  | U  | 0.005  | 1      | Ś        | U        |
| VOLATILES        | Trichloroethene           | 0.0056 1 U       |    | 0.006   | 1     | <  | U  | 0.006  | 1       | <  | U  | 0.008        | 1     | <        | U  | 0.005      | 1             | <  | U  | 0.005  | 1      | ۲        | U        |
| VOLATILES        | Trichlorofluoromethane    | 0.0112 1 U       |    |         |       |    |    |        |         |    |    |              |       |          |    |            |               |    |    | 0.05   |        |          |          |
| VOLATILES        | Vinyi acetate             | 0.0112 1 U       |    |         |       |    |    |        |         |    |    |              |       |          |    | 0.05       | ĩ             | <  | U  | 0.05   | 1      | <        | 0        |
| VOLATILES        | Vinyl chloride            | 0.0112 1 U       |    | 0.006   | 1     | <  | U  | 0.006  | 1       | <  | U  | 0.006        | 1     | <        | U  | 0.01       | 1             | <  | U  | 0,01   | 1      | <        | 0        |
| VOLATILES        | Xvienes Total             | 1                |    | 0.006   | 1     | <  | ป  | 0.006  | 1       | <  | U  | 0.006        | 1     | <        | U  | 0.005      | 1             | <  | U. | 0.005  |        | <u> </u> | <u> </u> |

Footnotes are shown on cover page to Tables Section.



## Table 3-40

Concentrations of Chemicals in Soil Samples Associated with Sump 040

| LICACHING, 2005         BBMMPH0.0807         Linspir 1         Linspir 1 <thlinspir 1<="" th=""></thlinspir>  | [SUMP] = SUMP040 |                            |                         |                        | 111 000 04    | 14 620 01    | 14-640-01         | 1H-S40-01        |
|---|------------------|----------------------------|-------------------------|------------------------|---------------|--------------|-------------------|------------------|
| SMRE_DO         Dependence   | LOCATION _CODE   |                            | 35SUMP040-SB01          | LH-S39-01              | LH-538-01     | 10.000.01 2  | 134-540-01 1      | 1H-540-01 2      |
| BMPL_DMT         BMCD         Average         BASIS         Average         BASIS   | SAMPLE_NO        |                            | 35-SMP40-SB01-02        | EH-539-01 QC           | LH-509-01_1   | E/06/1000    | £/26/1003         | 6/26/1993        |
| Bpr/H         33-4J         U         13-7         Browner (br. 100 kg / 100 kg                             | SAMPLE_DATE      |                            | 9/14/2006               | 6/26/1993              | 0/20/1955     | 2 - 4 5+     | 05-155            | 3.3 - 4 2 Ft     |
| BAME_PINTCS:         Paral DL L0         V0         Paral DL L0         V0 </td <td>DEPTH</td> <td></td> <td>3.5-4.0</td> <td>U.5 + 1,5 F1</td> <td>0.0 - 1.0 - 1</td> <td>956</td> <td>BEG</td> <td>REG</td>  | DEPTH            |                            | 3.5-4.0                 | U.5 + 1,5 F1           | 0.0 - 1.0 - 1 | 956          | BEG               | REG              |
| Tation         Part of the Project         P  | SAMPLE_PURPOSE   |                            | REG<br>Druth Bli I O VO | FU<br>Denuit Dif 10 VO | REGI LO VO    |              | Besult Dil I O VO | Result DIL LO VQ |
| BAU (3983)       2 (100)       1.100  | Test Group       | Parameter (Units = mg/kg)  | Hestilt DIL LO VO       | Hesuit DIE CO VO       |               | 1205 1 < 1   |                   |                  |
| BXACSINSS         2.6.000 burg         Husso         1         Corr         1         Corr         1000         1         1000         1         1000         1         10000         10000         10000         10000         10000         10000         10000         10000         10000         10000         10000         10000         100000         100000         1000000         100000000         1000000000000000000000000000000000000   | EXPLOSIVES       | 2,4-Dinifrotoluene         |                         | 1.22 1 < 0             | 1.22 1 0      | 1 205 1 4 1  |                   |                  |
| METAS       Autorum       Index a   | EXPLOSIVES       | 2,6-Dinitrotoluene         | 41000 4                 | 1.22 ) < U             | 1.22 1 4 0    | 9070 1       | 13300 1           | 11900 1          |
| Matrixis       Antenory       Oline i       I       O       Ass       I       I       So  | METALS           | Aluminum                   | 14300 1                 | 13200                  | 10000         | 3 26 1 4 11  | 3 1 6 11          | 3 1 < U          |
| Mart AS       Derive Mart AS       Barl Mart AS       Ba   | METALS           | Antimony                   | 0.108 1 U               | 3,40 1 < U             | 4 2 4 0       | 480 1        | 21 1              | 3.2 1            |
| Martials       Barum  | METALS           | Arsenic                    | 0.441 1                 | 2.39                   | 2.02 I        | 316 1 - 11   | 121 1             | 119 1            |
| Me HAB         Barylam         Dask         i         J <thj< th="">         J         J        &lt;</thj<>   | METALS           | Barium                     | 50.1                    | 00.0 1 4 0             |               | 010 / 1 0    |                   |                  |
| Male La,S         Captrolm         Male La         S  | METALS           | Beryllum                   |                         | 011 t . 11             | 346 1 2 11    | 442 1 < 1    | 11 < U            | 1 1 < U          |
| Me HAS       Diologin       Has   | METALS           | Cadmium                    | 0.386 / 0               | 1040 1                 | 1470 1        | 264 1        | 1530 1            | 1920 1           |
| Me HAS         Domman         Hz         I         Zas         I         Iso         Iso </td <td>METALS</td> <td>Calcium</td> <td>495 1</td> <td>17.2 1</td> <td>23 1 1</td> <td>19.8 1</td> <td>35.1 1</td> <td>31.3 1</td>   | METALS           | Calcium                    | 495 1                   | 17.2 1                 | 23 1 1        | 19.8 1       | 35.1 1            | 31.3 1           |
| MeTRALS       Cobbit       2.4.3       I       5.2.3       I       6.2.3       I       1.0.3.5       I  | METALS           | Chromium                   | 14,9 1                  | 17.2                   | 20.7 1        | 285 1        | 4.4               | 5.1 1            |
| Me EALS         Looper         2.38         I         3.02         I         1.000         I  | METALS           | Cobart                     | 2.33                    | 600 i - li             | 105 1 4 1     | 4.27 1 4 1   | 5.1 1             | 6.2 1            |
| Mic HALS       Load       1  | METALS           | Copper                     | 2.56                    | 3.02 / 4 0             | 12000 1       | 18000 1      | 14300 1           | 15100 1          |
| MeTALS       Lead       Same  | METALS           | Irop                       | 16600 1                 | 12900 1                | 00001         | 19.5 1       | 10 1              | 8.4 1            |
| MeTALS       Magnessim       Magnessim       Magnessim       Magnessim       Magnessim       Same       Same <td>METALS</td> <td>Leao</td> <td>540 1</td> <td>20.3 1</td> <td>520 1</td> <td>316 1</td> <td>757 1</td> <td>713 1</td>   | METALS           | Leao                       | 540 1                   | 20.3 1                 | 520 1         | 316 1        | 757 1             | 713 1            |
| Manual | METALS           | Magnesium                  | 549 1                   | 104                    | 016 1         | 216 1        | 103 1             | 95.7 1           |
| Metrix bit (ALS)       Metrix bit (ALS)       Metrix bit (ALS)       Metrix bit (ALS)       Metrix bit (ALS)       Solution (ALS)  | METALS           | Manganese                  | 5 24.4 I                | 20.1                   | 0.055 1 - 11  | 0.049 1 < U  | 0.1 1 < U         | 0.1 1 < U        |
| METALS       Nuclei       Name  | METALS           | Mercury                    | 4.05 1                  | 0.03 / 4 0             | 0.000         |              |                   |                  |
| METALS       Selaritim       D364       1       D364       1       D364       1       C       U       D326       1       C       U       1       1       C       U       1       1       C       U       1       1       C       U       1       1       C       U       1       1       C       U       1       1       C       U       1       C  | METALS           | NICKBI<br>Detersione       | 4.90 1                  | E20 1                  | 644 1         | 318 1        | 674 1             | 601 1            |
| METALS       Sternum       1216       0   | METALS           | Potassium                  |                         | 0.046 1                | 04 1 - 1      | 0.326 1 × U  | 11 < U            | 11 < ∪           |
| METALS       Site       Instruct       Instruct       Output       Instruct       Output       Instruct       Output       Instruct       Output       Instruct       Instru       Instruct       Instruct  | METALS           | Selenium                   | 0.216 1 0               | 0.000 1 2 1            | 0.028 1 4 1   | 0.018 1 - 11 | 11 < 0            | 1 1 < U          |
| METALS       Statuli       Max  | METALS           | Sadium                     | 1.54 1 0                | 0.022                  | 0.020 1 4 0   |              |                   |                  |
| METALS       Statulity       Constrained       Constat       Constat       Const  | METALS           | Stantive                   | 40.0                    | 107 f 🖌 H              | 100 1 × 11    | 434 1 < U    | 14.8 1            | 13.8 1           |
| METALS       Manual       CLOBA       I         METALS       Varadium       30.3       I       82.6       1       126       1       1       1       30.1       25.6         PERC       Perubicate       0.01       1       U       1.22       1       <   | METALS           | Stomula<br>The lives       | 0.0532 1                |                        |               |              |                   |                  |
| METALS       Variability       Sold I       Sold I </td <td>METALS</td> <td>(namp)</td> <td>30.3 1</td> <td></td> <td></td> <td></td> <td></td> <td></td>   | METALS           | (namp)                     | 30.3 1                  |                        |               |              |                   |                  |
| Michals       Zite       Dist interview       Dist interview <thdist interview<="" th=""> <thdis interview<="" th=""></thdis></thdist>  | METALO           | Zina                       | 15.0 1                  | 82.6 j                 | 126 1         | 14 1         | 30 1              | 25,6 1           |
| PEND       Pend of a body       Pend of a body<  | MCIALO<br>BEDA   | Parablaraté                | 0.01 1                  | 56.0                   |               |              |                   |                  |
| SEMIVOLATILES       1.20 binobarezne       122 1 < U  |                  | 1.2.4-Trichlorabenzana     |                         | 122 1 e U              | 1.22 1 < U    | 1,205 1 < U  | 0.33 1 < U        | 0.33 1 < U       |
| SEMINOLATILES       1.3-Dichlorobenzene       1.22       1       v       U       0.33       1       v       U       0.33         SEMINOLATILES       1.3-Dichlorobenzene       1.22       1       v       U       1.22       1       v       U       1.20       1       v       U       0.33       1       v       U       0.33         SEMINOLATILES       1.3-Dichlorobenzene       1.22       1       v       U       1.22       1       v       U       1.20       1       v       U       0.33       1       v <td>SEMIVOLATILES</td> <td>t 2.Dichlorobenzene</td> <td></td> <td>122 1 &lt; U</td> <td>1.22 1 &lt; U</td> <td>1.205 1 &lt; U</td> <td>0.33 1 &lt; U</td> <td>0.33 1 &lt; U</td>   | SEMIVOLATILES    | t 2.Dichlorobenzene        |                         | 122 1 < U              | 1.22 1 < U    | 1.205 1 < U  | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES       1.4-Dichloroberzene       1.22       1       -       U       1.22       1       -       U       0.33       1       -       U       0.33         SEMIVOLATILES       2.4.5-Trichlorophenol       1.22       1       -       U       1.22       1       -       U       1.22       1       -       U       1.23       1       -       U       1.65       1.62       1       -       U       1.65       1       -       U       1.65       1       -       U       1.65       1       -       U       0.33       1       -       U       1.65       1       -       U       0.33       1       -       <   | SEMIVOLATILES    | 1.2-Dichlorobenzene        |                         | 122 1 < 1              | 1.22 1 < U    | 1.205 1 < U  | 0.33 1 < Ŭ        | 0.33 1 < U       |
| SEMIVOLATILES       2.4.5 Trichlorophenol       1.22       1       <  | SEMIVOLATILES    | 1 d Dichlambenzene         |                         | 122 1 4 1              | 1.22 1 < U    | 1.205 1 < U  | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES       2.4.6 Trichlorophenol       1.22       1       v       1.22       1       v       1.20       1       v       0.33       1       v       0.33         SEMIVOLATILES       2.4.0 Initiorophenol       1.22       1       v       0       1.22       1       v       0       1.22       1       v       0       0.61       1       v       0       0.60       1       v       0       0.61       1       v       0  | SEMIVOLATILES    | 2.4.5.Trichlozophenol      |                         | 122 1 < U              | 1.22 1 < U    | 1.205 1 < U  | 1.65 1 < U        | 1.65 1 < U       |
| SEMIVOLATILES       2.4-Dichlorophenol       1.22       1       <   | SEMINOLATILES    | 2.4.6-Trichlorophenol      |                         | 1.22 1 < U             | 1.22 1 < U    | 1.205 1 < U  | 0,33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES       2.4-Dinitrophenol       0.61       1       <  | SEMIVOLATILES    | 2 4-Dichlorophenol         |                         | 1.22 1 < U             | 1,22 1 < U    | 1.205 1 < U  | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES       2.4-Dinitrophenol       12.195       1       -       U       1.65       1       -       U       1.65         SEMIVOLATILES       2.4-Dinitrophenol       0.33       1       -       U       0.33       1       -       U       0.33         SEMIVOLATILES       2.6-Dinitrophenol       0.366       1       -       U       0.366       1       -       U       0.33       1       -       U       0.33         SEMIVOLATILES       2.6-Dinitrophenol       0.366       1       -       U       0.366       1       -       U       0.33       1       -       U       0.33         SEMIVOLATILES       2.6-Dinitrophenol       0.61       1       -       U       0.661       1       -       U       0.631       1       -       U       0.33       1       -       U       0.33         SEMIVOLATILES       2-Mitrophinalene       0.366       1       -       U       0.61       1       -       U       0.33       1       -       U       0.33         SEMIVOLATILES       2-Mitrophinal       0.61       1       -       U       0.61       1       -       U  | SEMIVOLATILES    | 2 4-Dimetovinhenol         |                         | 0.61 1 < U             | 0.61 1 < U    | 0.602 1 🕹 U  | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES       2.4-Dinitrotoluene       0.33       1       <   | SEMIVOLATILES    | 2 4-Dinitrophenol          |                         | 12.195 1 < U           | 12.195 1 < U  | 12.048 1 < U | 1,65 1 < U        | 1.65 1 < U       |
| SEMIVOLATILES       2.6Dinitrotoluene       0.366       1       V       0.366       1       V       0.366       1       V       0.361       1       V       0.33       1       V       0.33         SEMIVOLATILES       2.Chloronaphthalene       0.366       1       V       0.366       1       V       0.361       1       V       0.33       1       V       0.33         SEMIVOLATILES       2.Chlorophenol       0.61       1       V       0.61       1       V       0.661       1       V  | SEMIVOLATILES    | 2.4-Dinitrotokiene         | 1                       | 1                      |               |              | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES       2-Chloronaphthalene       0.366       1       <   | SEMIVOLATILES    | 2.6-Dinitrotoluene         |                         |                        |               |              | 0.33 1 < U        | 0,33 1 < U       |
| SEMIVOLATILES       2-Chlorophenol       0.61       1       <   | SEMIVOLATILES    | 2-Chloronaphthalene        |                         | 0.366 1 < U            | 0.366 1 < U   | 0.361 1 < U  | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES       2-Methylnaphthalene       0.366       1       V       0.361       1       V       0.33       1       V       0.33       1       V       0.33         SEMIVOLATILES       2-Methylphenol       0.61       1       V       0.61       1       V       0.61       1       V       0.62       1       V       0.33       1       V       0.33         SEMIVOLATILES       2-Methylphenol       3.659       1       V       0.61       1       V       0.62       1       V       0.33       1       V       0.33         SEMIVOLATILES       2-Nitrophenol       3.659       1       V       0       3.659       1       V       0       3.614       1       V       0.633       1       V       0.63       1       V       0.65       1       V       0.65       1       V       0.65       1       V       1.65       1       V       0.65       1       V       <   | SEMIVOLATILES    | 2-Chlorophenol             |                         | 0.61 1 < U             | 0.61 1 < U    | 0.602 1 < U  | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES       2-Methylphenol       0.61       1       U       0.61       1       U       0.62       1       U       0.33       1       U       0.33         SEMIVOLATILES       2-Nitroaniline       3.659       1       U       3.659       1       U       3.614       1       U       1.65       1       U       1.65         SEMIVOLATILES       2-Nitroaniline       1.22       1       U       1.22       1       U       1.25       1       U       0.33       1       U       1.65         SEMIVOLATILES       2-Nitrophenol       1.22       1       U       1.22       1       U       1.25       1       U       0.33       1       U       0.33         SEMIVOLATILES       3.3'-Oichlorobenzidine       0.61       1       U       0.61       1       U       0.62       1       U       0.65       1       U       0.65         SEMIVOLATILES       3.3'-Oichlorobenzidine       3.659       1<   | SEMIVOLATILES    | 2-Melhvinaphthalene        |                         | 0.366 1 < U            | 0.366 1 < U   | 0.361 1 < U  | 0.33 1 < U        | 0.33 i < U       |
| SEMIVOLATILES       2-Nitroaniline       3.659       1       U       3.659       1       U       3.614       1       U       1.65       1       U       0.33       2       U       0.33       2       U       0.33       3       2       U       0.33       3       4       U       0.65       1<       U   | SEMIVOLATILES    | 2-Methylphenol             |                         | 0.81 1 < U             | 0.61 1 < U    | 0.602 1 < U  | 0.33 1 < V        | 0.33 1 < U       |
| SEMIVOLATILES       2-Nitrophenol       1.22       1       U       1.22       1       C       U       1.205       1       C       U       0.33       1       C       0.33       1       1       0       0.30       1       1       0       0.30       1       0       0.33       1       0       0.33       1       0       0.33       1       1       0       0.602       1       C       0       0.65       1       C       0       0.65       1       C       0       0.65       1       1       0       1.65 <th1< th="">       C       0       1.65</th1<>   | SEMIVOLATILES    | 2-Nitroaniline             |                         | 3.659 1 < U            | 3.659 1 < U   | 3,614 1 < U  | 1.65 1 < U        | 1.65 1 < U       |
| SEMIVOLATILES         3.3'-Dichlorobanzidine         0.61         1         U         0.61         1         U         0.62         1         U         0.65         1         U         0.65           SEMIVOLATILES         3-Nitroaniline         3.659         1         U         3.653         1         U         3.651         1         U         1.65         1         U         1.65           SEMIVOLATILES         3-Nitroaniline         3.659         1         U         3.653         1         U         1.65         1         U         1.65           SEMIVOLATILES         4.6-Dinitro-2-methylphenol         6.098         1         U         6.024         1         U         1.65         1         U         1.65  | SEMIVOLATILES    | 2-Nitrophenol              |                         | 1.22 1 < U             | 1.22 1 < U    | 1.205 1 < U  | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES         3-Nitroaniline         3.659         1         U         3.659         1         U         3.651         1         U         1.65         1  | SEMIVOLATILES    | 3.3 Dichlorobenzidine      |                         | 0.61 1 < U             | 0.61 1 < U    | 0.602 1 < U  | 0.65 1 < U        | 0.65 1 < U       |
| SEMIVOLATILES 4.6-Dinitro-2-methy/phenol 6.098 1 < U 6.098 1 < U 6.024 1 < U 1.65 1 < U 1.65  | SEMIVOLATILES    | 3-Nitroaniline             |                         | 3.659 1 < U            | 3.659 1 < U   | 3.614 1 < U  | 1.65 1 < U        | 1.65 1 < U       |
| •   | SEMIVOLATILES    | 4.6-Dinitro-2-methylphenol | 1                       | 6.098 1 < U            | 6.098 1 < U   | 6.024 1 < U  | 1,65 1 < U        | 1.65 1 < U       |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-40  |        |
|---|--------|
| Concentrations of Chemicals in Soil Samples Associated with Sur | np 040 |

| ISUMP] = SUMP040     |                             |                  |                   |                  |                  |                  |                  |
|----------------------|-----------------------------|------------------|-------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE       |                             | 35SUMP040-SB01   | LH-S39-01         | LH-S39-01        | LH-\$39-01       | LH-540-01        | LH-S40-01        |
| SAMPLE_NO            |                             | 35-SMP40-SB01-02 | LH-\$39-01 QC     | LH-S39-01_1      | LH-S39-01_2      | LH-S40-01_1      | LH-S40-01_2      |
| SAMPLE_DATE          |                             | 9/14/2006        | 6/26/1993         | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        |
| DEPTH                |                             | 3.5-4.0          | 0.5 • 1.5 Ft      | 0.5 - 1.5 Ft     | 3 - 4 Ft         | 0.5 - 1.5 Ft     | 3.3 - 4.2 Ft     |
| SAMPLE_PURPOSE       |                             | REG              | FD                | REG              | REG              | REG              | REG              |
| Test Group           | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result Dil. LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VQ |
| SEMIVOLATILES        | 4-Bromophenyl phenyl ether  |                  | 1.22 1 < U        | 1.22 1 < U       | 1.205 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 4-Chloro-3-methylphenol     |                  | 0.61 1 < U        | 0.61 1 < U       | 0.602 1 < U      | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES        | 4-Chloroaniline             |                  | 3.659 1 < U       | 3.659 1 < U      | 3.614 1 < U      | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES        | 4-Chlorophenyl phenyl ether |                  | 1.22 1 < U        | 1.22 1 < U       | 1.205 f < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 4-Methylphenol              |                  | 0.61 1 < U        | 0.61 1 < U       | 0.602 1 < U      | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES        | 4-Nitroaniline              |                  | 8.098 1 < U       | 6.098 1 < U      | 6.024 1 < U      | 1.65 1 < U       | 1.65 1 < 0       |
| SEMIVOLATILES        | 4-Nitrophenol               |                  | 6,098 1 < U       | 6.098 t < U      | 6.024 1 < U      | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES        | Acenaphthene                |                  | 0.366 1 < U       | 0.366 1 < U      | 0.361 1 < U      | 0.33 1 < Ü       | 0.33 1 < U       |
| SEMIVOLATILES        | Acenaphthylene              |                  | 0,61 1 < U        | 0.61 1 < U       | 0.602 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | Anthracene                  |                  | 0.61 1 < U        | 0.61 1 < U       | 0.602 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | Senzo(a)anthracene          |                  | 0.366 t < U       | 0.366 1 < U      | 0.361 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | Benzo(a)pyrene              |                  | 0.61 1 < U        | 0.61 1 < U       | 0.602 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | Benzo(b)fluoranthene        |                  | 1.22 1 < U        | 1.22 1 < U       | 1.205 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | Benzo(ghi)perylene          |                  | 2.439 1 < U       | 2,439 1 < U      | 2.41 1 < U       | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES        | Benzo(k)fluoranthene        |                  | 1.22 1 < U        | 1.22 1 < U       | 1.205 1 < U      | • 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES        | Benzoic Acid                |                  |                   |                  |                  | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES        | Benzyl Alcohol              |                  |                   |                  |                  | 0.65 1 < U       | 0,65 1 < U       |
| SEMIVOLATILES        | bis(2-Chloroethoxy)methane  |                  | 0.61 1 < U        | 0.61 1 < U       | 0.602 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | bis(2.Chloroethyi)ether     | 1                | 0.61 1 < U        | 0.61 1 < U       | 0.602 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | bis(2-Chloroisopropyl)ether |                  | 1.22 1 < U        | 1.22 1 < U       | 1.205 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | bis(2-Ethylhexyl)phthalate  |                  | 0.61 1 < U        | 0.61 t < U       | 0.145 1 J        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | Butyl benzyl phthalate      |                  | 0.61 1 < U        | 0.61 1 < U       | 0.602 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | Carbazole                   |                  | 1.22 1 < U        | 1.22 1 < U       | 1.205 1 < U      |                  |                  |
| SEMIVOLATILES        | Chrysene                    |                  | 6.098 1 < U       | 6.098 1 < U      | 6.024 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | Dibenzo(a.h)anthracene      |                  | 2.439 1 < U       | 2.439 1 < U      | 2.41 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | Olbenzofuran                |                  | 1.22 1 < U        | 1.22 1 < U       | 1.205 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | Diethyl phthalate           | 1                | 0.61 1 < U        | 0.61 1 < U       | 0.602 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | Dimethyl phthalate          |                  | 0,61 1 < U        | 0.61 1 < U       | 0.602 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | di-n-Butyl phthalate        |                  | 5.098 1           | 1,939 1          | 4,422 1          | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | di-n-Octyl phthalate        |                  | 0.61 1 < U        | 0.81 1 < Ü       | 0.602 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | Fluoranthene                |                  | 0.61 1 < U        | 0.61 1 < U       | 0.602 1 < U      | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES        | Fluorene                    |                  | 0.61 1 < U        | 0.61 1 < U       | 0.602 1 < U      | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES        | Hexachlorobenzene           | }                | 1.22 1 < U        | 1.22 1 < U       | 1.205 1 < U      | 0,33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES        | Hexachlorobutadiene         |                  | 3.659 1 < U       | 3.659 1 < U      | 3.614 1 < U      | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES        | Hexachlorocyclopentadiene   |                  | 3.659 1 < U       | 3.659 1 < U      | 3.614 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | Rexachloroethane            |                  | 1.22 1 < U        | 1.22 1 < U       | 1.205 1 < 0      | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES        | Indeno(1,2,3-cd)pyrene      |                  | 1.22 1 < U        | 1.22 1 < U       | 1.205 1 < U      | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES        | Isophorone                  |                  | 0.61 1 < U        | 0,61 1 < 0       | 0.602 1 < U      | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES        | Naphthalene                 |                  | 0.366 1 < U       | 0.366 1 < U      | 0.361 1 < U      | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES        | Nitrobenzene                |                  | 0.61 1 < 0        | 0.61 1 < U       | 0.602 1 < U      | 0,33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES        | n-Nitroso-di-n-propylamine  |                  | 1.22 1 < U        | 1.22 1 < U       | 1.205 1 < U      | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES        | n-Nitrosodiphenylamine      |                  | 0.61 1 < U        | 0.61 1 < U       | 0.602 1 < U      | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES        | Pentachlorophenol           |                  | 6.098 1 < U       | 6.098 1 < U      | 6.024 1 < U      | 1.65 1 < U       | 1.05 1 < U       |
| SEMIVOLATILES        | Phenanthrene                |                  | 0.61 1 < U        | 0.61 1 < U       | 0.802 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| <b>SEMIVOLATILES</b> | Phenol                      |                  | 0.61 1 < U        | 0.61 1 < U       | 0.602 1 < 0      | 0.33 1 < 0       | U,33 1 < U       |
| SEMIVOLATILES        | Pyrene                      |                  | 0.61 1 < U        | 0,61 1 < U       | 0.602 1 < 0      | Q.33 1 < U       | 0.33 i < U       |
| VOLATILES            | 1,1,1.2-Tetrachloroethane   | 0.0056 1 U       |                   |                  |                  |                  |                  |



| Table 3-40   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 040 |

| [SUMP] = SUMP040<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_DUBPOSE |                                | 35SUMP040-S801<br>35-SMP40-S801-02<br>9/14/2006<br>3.5-4.0<br>PEG | LH-S39-01<br>LH-S39-01 QC<br>8/28/1993<br>0.5 - 1.5 Ft<br>FD | LH-S39-01<br>LH-S39-01_1<br>8/26/1993<br>0.5 • 1.5 F1<br>REG | LH-S39-01<br>LH-S39-01_2<br>6/26/1993<br>3 - 4 Ft<br>REG | LH-S40-01<br>LH-S40-01_1<br>6/26/1983<br>0.5 - 1.5 Fi<br>REG | LH-S40-01<br>LH-S40-01_2<br>6/26/1993<br>3.3 - 4.2 Ft<br>REG |
|--|--------------------------------|---|--|--|--|--|--|
| Task Group   | Parameter // Inite ~ molto)    | Result OIL LO VO  | Besult Dfl 10 VQ   | Result DIL LO VQ   | Result DIL LO VQ   | Result DIL LO VO   | Result DIL LO VQ   |
| VOLATILES  | 1 1 ( Trichlargethane          | 0.0056 1 11   | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | 1 1 2 2 Totrachloroethane      | 0.0056 1 1  | 0.006 1 < U  | 0.006 t < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | 1 1 2 Trichieroathana          | 0.0056 1 1  | 0.008 1 < 1/   | 0.006 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | 1 1-Dichioroethane             | 0.0056 1 U  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | 1 1 Dichloroathane             | 0.0056 1 11   | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | 1 1-Dichloropropene            | 0.0055 1 1  | •••••  |  |  |  |  |
|  | 1 2 3-Trichlorobenzene         | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | 1.2.3 Trichloropropane         | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | 1 2 4 Trichlorobeozene         | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | 1.2.4 Trimethylbenzene         | 0.0056 1 U  |  |  |  |  |  |
| VOLATIESS  | 1.2-Dibromo-3-chloropropage    | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | 1.2-Distance sound opposite    | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | 1 2-Dichlorobenzene            | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | 1.2-Dichloroethane             | 0.0056 1 U  | 0.006 1 < U  | 0.006 t < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | 1 2-Dichloroethene             |   | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | 1 2-Dichloropropage            | 0.0056 1 U  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | 1 2-Dimethylbenzene (o-Xylene) | 0.0056 1 U  |  |  |  |  |  |
| VOLATE ES  | 1.3.5.Trimethylbenzene         | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | 1 3-Dichlorobenzene            | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | 1.3-Dichioropropana            | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | 1.4-Dichlorobenzene            | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | 2 2+Dichloropropage            | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | 2-Butanone                     | 0.0112 1 U  | 0.11 1 < U   | 0.12 1 < U   | 0,12 1 < U   | 0.05 1 < U   | 0.05 1 < U   |
| VOLATILES  | 2-Chloroethyl vinvi ether      | 0.0112 1 U  |  |  |  | 0.01 1 < U   | 0.01 1 < U   |
| VOLATILES  | 2-Chiorotoluene                | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | 2-Hexanone                     | 0.0112 1 U  | 0.055 1 < U  | 0.06 1 < U   | 0.059 1 < U  | 0.05 1 < U   | 0.05 1 < U   |
| VOLATILES  | 4-Chlorotoluene                | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | Acetone                        | 0.0112 1 U  | 0.11 1 < U   | 0.12 1 < U   | 0.12 1 < U   | 0,1 1 < U  | 0.1 1 < U  |
| VOLATILES  | Benzene                        | 0.0056 1 U  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | Bromobenzene                   | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | Bromochloromethane             | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | Bromodichloromethana           | 0.0056 1 U  | 0.006 1 < U  | 0,006 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | Bromoform                      | 0.0056 1 U  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.005, 1 < U   | 0.005 i < U  |
| VOLATILES  | Bromomethane                   | 0.0112 1 U  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.01 1 < U   | 0.01 1 < U   |
| VOLATILES  | Carbon disulfide               | 0.0056 1 U  | 0.006 1 < U  | 0,006 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | Carbon tetrachloride           | 0.0056 1 U  | 0.006 1 < 반  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | Chiorobenzene                  | 0.0056 1 U  | 0.006 1 < U  | 0.006 t < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | Chloroethane                   | 0.0112 1 U  | 0.006 t < U  | 0.006 1 < U  | 0.006 1 < U  | 0.01 1 < U   | 0.01 1 < U   |
| VOLATILES  | Ghlaroform                     | 0.0056 1 U  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | Chloromethane                  | 0.0112 1 U  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.01 1 < U   | 0.01 1 < U   |
| VOLATILES  | cis-1,2-Dichloroethene         | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | cis-1,3-Dichloropropana        | 0.0056 1 U  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | Dibromochloromethane           | 0.0056 1 U  | 0.006 1 < U  | 0,008 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | Dibromomethane                 | 0.0056 1 U  |  |  |  |  |  |
| VOLATILES  | Dichlorodifluoromethane        | 0.0112 1 U  |  |  |  |  |  |
| VOLATILES  | Ethylbenzene                   | 0.0056 1 U  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | Hexachlorobutadiene            | 0.0056 1 U  |  |  |  |  |  |

# Shaw Environmental, Inc. 00066049

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

|   |                           | Concent                               | ratio                                  | ons           | of Ch | emicals                             | s in                              | Soi              | il Sar | nples A                 | ssc                                      | cia                   | ted v | vith Sum                | p 04                                       | 0  |    |                                      |  |     |    |                                      |   |    |    |
|---|---------------------------|---------------------------------------|--|---------------|-------|-------------------------------------|-----------------------------------|------------------|--------|-------------------------|--|-----------------------|-------|-------------------------|--|----|----|--------------------------------------|--|-----|----|--------------------------------------|---|----|----|
| (SUMP) = SUMP040<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PUIRPOSE |                           | 35SUMF<br>35-SMP4<br>9/14<br>3.3<br>F | 040-S<br>0-SB0<br>/2006<br>i-4.0<br>EG | 8801<br>)1-02 |       | LH-S<br>LH-S3<br>6/26<br>0.5 -<br>F | 39-01<br>9-01 C<br>/1993<br>1.5 F | <br>20<br> <br>1 |        | נו<br>נוא-<br>6/<br>0,2 | -S39-(<br>539-01<br>26/199<br>1.5<br>REG | )1<br> _1<br> 3<br>Ft |       | LH-<br>LH-S<br>6/2<br>3 | S39-01<br>39-01<br>6/1993<br>- 4 Fi<br>REG | 2  |    | LH-S<br>LH-S4<br>6/26<br>0.5 -<br>Ri | 40-01<br>0-01_<br>1993<br>1.5 Ft<br>EG | 1   |    | LH-S<br>LH-S4<br>6/26<br>3.3 -<br>RI | 40-01<br>0-01_<br>11993<br>4.2 Fi<br>EG | 2  |    |
| Test Group  | Parameter (Units ≈ mg/kg) | Result                                | DIL                                    | LQ            | VQ    | Result                              | DIL                               | LQ               | VQ     | Result                  | DIL                                      | LQ                    | VQ    | Result                  | DIL  | LQ | VQ | Result                               | DIL                                    | LQ  | VQ | Result                               | DIL                                     | LQ | VQ |
| VOLATILES   | Isopropylbenzene          | 0.0056                                | 1                                      | U             |       |                                     |                                   |                  |        |                         |  |                       |       | ,,                      |  |    |    |                                      |  | _   |    |                                      |   |    |    |
| VOLATILES   | m.p-Xylenes               | 0.0056                                | 1                                      | U             |       |                                     |                                   |                  |        |                         |  |                       |       |                         |  |    |    |                                      |  |     |    |                                      |   |    |    |
| VOLATILES   | Methyl isobutyl ketone    | 0.0112                                | 1                                      | υ             |       | 0.055                               | 1                                 | ۲                | U      | 0.06                    | . 1                                      | <                     | U     | 0.059                   | 1  | ۲  | U  | 0.05                                 | 1                                      | <   | Ų  | 0.05                                 | 1                                       | ۲  | U  |
| VOLATILES   | Methylene chloride        | 0.0056                                | 1                                      | U             |       | 0.006                               | 1                                 | <                | U      | 0.006                   | 1  | <                     | U     | 0,006                   | 1  | <  | u  | 0.005                                | 1                                      | <   | U  | 0.005                                | 1                                       | <  | U  |
| VOLATILES   | Naphthalene               | 0.0112                                | 1                                      | U             |       |                                     |                                   |                  |        |                         |  |                       |       |                         |  |    |    |                                      |  |     |    |                                      |   |    |    |
| VOLATILES   | n-BUTYLBENZENE            | 0.0056                                | 1                                      | U             |       |                                     |                                   |                  |        |                         |  |                       |       |                         |  |    |    |                                      |  |     |    |                                      |   |    |    |
| VOLATILES   | n-PROPYLBENZENE           | 0.0056                                | 1                                      | Ų             |       |                                     |                                   |                  |        |                         |  |                       |       |                         |  |    |    |                                      |  |     |    |                                      |   |    |    |
| VOLATILES   | p-ISOPROPYLTOLUENE        | 0,0056                                | 1                                      | U             |       |                                     |                                   |                  |        |                         |  |                       |       |                         |  |    |    |                                      |  |     |    |                                      |   |    |    |
| VOLATILES   | sec-BUTYLBENZENE          | 0.0056                                | 1                                      | U             |       |                                     |                                   |                  |        |                         |  |                       |       |                         |  |    |    |                                      |  |     |    |                                      |   |    |    |
| VOLATILES   | Styrene                   | 0.0056                                | 1                                      | U             |       | 0.006                               | 1                                 | <                | U      | 0.006                   | i 1                                      | <                     | υ     | 0.006                   | 1  | <  | U  | 0.005                                | 1                                      | <   | U  | 0.005                                | 1                                       | <  | U  |
| VOLATILES   | tert-BUTYLBENZENE         | 0.0056                                | 1                                      | U             |       |                                     |                                   |                  |        |                         |  |                       |       |                         |  |    |    |                                      |  |     |    |                                      |   |    |    |
| VOLATILES   | Tetrachloroethene         | 0.0056                                | 1                                      | U             |       | 0.006                               | 1                                 | <                | U      | 0.000                   | 5 1                                      | <                     | U     | 0.006                   | 1  | <  | U  | 0.005                                | 1                                      | <   | U  | 0.005                                | 1                                       | <  | U  |
| VOLATILES   | Toluene                   | 0.0056                                | 1                                      | IJ            |       | 0.006                               | 1                                 | <                | U      | 0.00                    | 5 1                                      | <                     | U     | 0.006                   | 1  | <  | Ð  | 0.005                                | 1                                      | <   | U  | 0.005                                | 1                                       | <  | U  |
| VOLATILES   | trans-1,2-Dichloroethene  | 0.0056                                | 1                                      | U             |       |                                     |                                   |                  |        |                         |  |                       |       |                         |  |    |    |                                      |  |     |    |                                      |   |    |    |
| VOLATILES   | trans-1,3-Dichloropropene | 0.0056                                | 1                                      | U             |       | 0.006                               | 1                                 | <                | U      | 0.00                    | 51                                       | <                     | U     | 0.006                   | 1  | <  | U  | 0.005                                | 1                                      | <   | U  | 0.005                                | 1                                       | <  | U  |
| VOLATILES   | Trichloroethene           | 0.0056                                | 1                                      | U             |       | 0.006                               | 1                                 | <                | U      | 0.00                    | 31                                       | <                     | U     | 0.006                   | 1  | <  | Ų  | 0.005                                | 1                                      | <   | U  | 0.005                                | 1                                       | <  | 0  |
| VOLATILES   | Trichlorofluoromethane    | 0.0112                                | 1                                      | υ             |       |                                     |                                   |                  |        |                         |  |                       |       |                         |  |    |    |                                      |  |     |    |                                      |   |    |    |
| VOLATILES   | Vinyl acetate             | 0.0112                                | í                                      | U             |       |                                     |                                   |                  |        |                         |  |                       |       |                         |  |    |    | 0.05                                 | 1                                      | <   | Ų  | 0.05                                 | 1                                       | <  | U  |
| VOLATILES   | Vinyl chloride            | 0.0112                                | 1                                      | U             |       | 0.006                               | 1                                 | <                | U      | 0.00                    | 31                                       | <                     | U     | 0.006                   | 1  | <  | U  | 0.01                                 | 1                                      | <   | U  | 0.01                                 | 1                                       | <  | U  |
| VOLATILES   | Xvienes, Total            |                                       |  |               |       | 0.006                               | 1                                 | <                | U      | 0.00                    | 5 1                                      | <                     | υ     | 0.006                   | 1  | <  | U  | 0.005                                | 1                                      | < . | Ų  | 0.005                                | 1                                       | <  | U  |

Table 3-40

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

### Data Evaluation Report Chemical Concentrations in Solt Associated with LHAAP-35/36 Sumps

| (SUMP) = SUMP041 |                            | 25510  | 10041 5    | DOX  |     | 25611   |                  | -5801        |     | ін          | S41-01 |     |     | LH           | -S41-01 |    |     |
|------------------|----------------------------|--------|------------|------|-----|---------|------------------|--------------|-----|-------------|--------|-----|-----|--------------|---------|----|-----|
| LOCATION _CODE   |                            | 35500  | 82041-3    |      |     | 2000    | 0/1-00           | 201-01       | 5   | 194.9       | 241-01 | 1   |     | LH-          | 341-01  | 2  |     |
| SAMPLE_NO        |                            | 35-310 | 10/0000    | 1001 |     | 0,00    | 191900<br>191900 | 201-04<br>NE | ¢   | 60          | 5/1003 |     |     | 6/           | 25/1993 | -  |     |
| SAMPLE_DATE      |                            | 97     | 12/2000    |      |     | 3       | 5.45             |              |     | 0.5         | 1.5 Ft |     |     | 3.2          | -4.1 Fi |    |     |
| DEPTH            |                            | 0.     | 0 -V .0 FI |      |     | 3       | DEG              |              |     |             | AFG    |     |     |              | REG     |    |     |
| SAMPLE_PURPOSE   |                            | Develt | REG        | 10   | vo  | Docult  | 01               | 10           | vo  | Secult      |        | ΕŌ  | vo  | Result       | DIL     | LQ | vo  |
| Test Group       | Parameter (Units = mg/kg)  | Resurt | DIL        | 44   | VQ. | riesuit | DIL              | Lu           | 102 | 0.33        | 1      | ~~~ | U   | 0.33         | 1       | <  | U   |
| EXPLOSIVES       | 2,4-Dinitrololuene         |        |            |      |     |         |                  |              |     | 0.33        |        | Ż   | Ū   | 0.33         | ÷       | ح  | U   |
| EXPLOSIVES       | 2,6-Dinitrotoluene         | 11500  |            |      |     | 7420    | 4                |              |     | 8020        | 1      | •   | Ť   | 16800        | 1       |    |     |
| METALS           | Aluminum                   | 1 1500 | r<br>F     | 41   |     | 0 112   | ,<br>1           | н            |     | 3           | 1      | ć   | ŧ   | 3            | 1       | <  | U   |
| METALS           | Antimony                   | 0.11   | 1          | U    |     | 0.110   |                  | 0            |     | 1 9         | 1      |     | -   | 4.5          | 1       |    |     |
| METALS           | Arsenic                    | 2.0    |            |      |     | 14.0    |                  |              |     | 105         | 1      |     |     | 100          | í       |    |     |
| METALS           | Banum                      | 70.1   |            |      |     | 0.224   |                  | 1            | .1  | 100         | •      |     |     |              |         |    |     |
| METALS           | Beryllium                  | 0,378  | 1          |      | 1   | 0.004   |                  |              |     | 1           | *      | ,   | U   | 1            | 1       | ۲  | U   |
| METALS           | Cadmium                    | 0,116  |            | J    | J   | 0.0039  |                  | 5            | ď   | 220         | 1      | `   | Ŭ   | 632          | 1       |    | •   |
| METALS           | Calcium                    | 680    | 1          |      |     | 1200    | 4                |              |     | 170         |        |     |     | 32.4         | 1       |    |     |
| METALS           | Chromium                   | 24.2   | 1          |      |     | 7.34    |                  |              |     | E D         |        |     |     | 3 21         | 1       |    |     |
| METALS           | Cobalt                     | 2.27   | 1          |      |     | b.42    | 1                |              |     | 5.8<br>D.06 |        |     |     | 5.36         |         |    |     |
| METALS           | Copper                     | 4,1    | 1          |      |     | 3,30    | 1                |              |     | 2.80        |        |     |     | 10500        | 1       |    |     |
| METALS           | Iron                       | 15500  | 1          |      |     | 7270    | 1                |              |     | 7190        | 1      |     |     | 15500        | 1       |    |     |
| METALS           | Lead                       | 6.99   | 1          |      |     | 7.4B    | 1                |              |     | 0.40        |        |     |     | 714          | 1       |    |     |
| METALS           | Magnesium                  | 507    | 1          |      |     | 1240    | 1                |              |     | 536         | ,      |     |     | 7 14<br>01 4 | ,       |    |     |
| METALS           | Manganese                  | 82.4   | 1          |      |     | 37.3    | 1                |              |     | 350         | 1      |     |     | 01.4         |         |    | 11  |
| METALS           | Mercury                    | 0.02   | 1          | J    | J   | 0.274   | 1                | Ų            |     | 0,1         | 1      | <   | U   | 0.1          | 1       | ۲. | 0   |
| METALS           | Nickel                     | 5.81   | 1          |      |     | 10.7    | 1                |              |     |             |        |     |     | 4000         |         |    |     |
| METALS           | Potassium                  | 340    | 1          |      |     | 210     | 1                |              |     | 424         | 1      |     |     | 1090         |         |    | ы   |
| METALS           | Selenium                   | 0.9    | 1          |      |     | 0.16    | 1                | J            | 3   | 1           | 1      | <   | 0   |              |         |    |     |
| METALS           | Silver                     | 1.56   | 1          | υ    |     | 1.64    | 1                | U            |     | 1           | 1      | <   | Ų   | 1            | '       | <  | 0   |
| METALS           | Sodium                     | 18     | 1          | J    | 3   | 284     | 1                |              |     |             |        |     |     |              |         |    |     |
| METALS           | Strontium                  |        |            |      |     |         |                  |              |     | 4.31        | 1      |     |     | 7.76         | 1       |    |     |
| METALS           | Thallium                   | 0.0721 | 1          |      |     | 0.0789  | 1                |              |     |             |        |     |     |              |         |    |     |
| METALS           | Vanadium                   | 31.1   | 1          |      |     | 8.05    | 1                |              |     |             |        |     |     |              |         |    |     |
| METALS           | Zinc                       | 33.6   | ែ          |      |     | 14.9    | 1                |              |     | 83.4        | 1      |     |     | 20.9         | 1       |    |     |
| PERC             | Perchlorate                | 0.01   | 1          | U    |     | 0.05    | 5                | U            |     |             |        |     |     |              |         |    | ш   |
| SEMIVOLATILES    | 1.2,4-Trichlorobenzene     |        |            |      |     |         |                  |              |     | 0.33        | 1      | <   | U   | 0.33         |         | <  | 0   |
| SEMIVOLATILES    | 1.2-Dichlorobenzene        |        |            |      |     |         |                  |              |     | 0.33        | 1      | <   | U   | 0.33         | 1       | <  | 0   |
| SEMIVOLATILES    | 1,3-Dichlorobenzene        | 1      |            |      |     |         |                  |              |     | 0.33        | 1      | <   | U   | 0,33         | 1       | <  | 0   |
| SEMIVOLATILES    | 1,4-Dichlorobenzene        |        |            |      |     |         |                  |              |     | 0.33        | 1      | <   | U   | 0,33         | 1       | ۲  | U   |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol      |        |            |      |     |         |                  |              |     | 1.65        | 1      | <   | U   | 1.65         | 1       | <  | 0   |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol      |        |            |      |     |         |                  |              |     | 0.33        | 1      | <   | U   | 0.33         | 1       | <  | 0   |
| SEMIVOLATILES    | 2,4-Dichlorophenol         |        |            |      |     |         |                  |              |     | 0.33        | 1      | <   | U   | 0.33         | 1       | <  | 0   |
| SEMIVOLATILES    | 2,4-Dimethylphenol         |        |            |      |     |         |                  |              |     | 0.33        | 1      | <   | U   | 0.33         | 1       | <  | U   |
| SEMIVOLATILES    | 2,4-Dinitrophenol          | 1      |            |      |     |         |                  |              |     | 1.65        | 1      | <   | U   | 1.65         | 1       | <  | . U |
| SEMIVOLATILES    | 2-Chloronaphthalene        |        |            |      |     |         |                  |              |     | 0.33        | 1      | <   | U   | 0.33         | 1       | <  | · U |
| SEMIVOLATILES    | 2-Chlorophenol             |        |            |      |     |         |                  |              |     | 0.33        | ۱      | <   | U   | 0.33         | ា       | <  | : U |
| SEMIVOLATILES    | 2-Methyinaphthalene        | l      |            |      |     |         |                  |              |     | 0.33        | 1      | <   | U   | 0.33         | 1       | <  | : U |
| SEMIVOLATILES    | 2-Methylphenol             | 1      |            |      |     |         |                  |              |     | 0.33        | 1      | <   | U   | 0.33         | 1       | <  | : 0 |
| SEMIVOLATILES    | 2-Nitroaniline             |        |            |      |     |         |                  |              |     | 1.65        | 1      | <   | U   | 1.65         | 1       | <  | : U |
| SEMIVOLATILES    | 2-Nitrophenol              |        |            |      |     |         |                  |              |     | 0.33        | 1      | <   | U   | 0.33         | 1       | <  | : ប |
| SEMIVOLATILES    | 3.3' Dichlorobenzidine     |        |            |      |     |         |                  |              |     | 0.65        | 1      | <   | υ   | 0.65         | 1       | <  | : 0 |
| SEMIVOLATILES    | 3-Nitroaniline             |        |            |      |     |         |                  |              |     | 1.65        | 1      | <   | U   | 1.65         | 1       | <  | : U |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol |        |            |      |     |         |                  |              |     | 1.65        | 1      | <   | U   | 1.65         | 1       | •  | : U |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether | ļ      |            |      |     |         |                  |              |     | 0.33        | 1      | <   | U   | 0.33         | 1       | •  | e U |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol    | ĺ      |            |      |     |         |                  |              |     | 0.65        | 1      | <   | : U | 0.65         | 1       |    | : U |

Table 3-41 Concentrations of Chemicals in Soil Samples Associated with Sump 041

.



| Table 3-41   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 041 |

| (SUMP) = SUMP041 |                             |                  |         |         |       |        | • · · • • |    |    |        |          |    |    |
|------------------|-----------------------------|------------------|---------|---------|-------|--------|-----------|----|----|--------|----------|----|----|
| LOCATION _CODE   |                             | 35SUMP041-SB01   | 35SUM   | P041-   | SB01  | LH     | •S41•01   |    |    | 14     | I-S41-01 |    |    |
| SAMPLE_NO        |                             | 35-SMP41-SB01-01 | 35-SMP  | 41-SB   | 01-02 | LH-8   | S41-01_   | 1  |    | LH-    | S41-01_  | 2  |    |
| SAMPLE_DATE      |                             | 9/12/2006        | 9/1     | 2/200   | 6     | 6/2    | 25/1993   |    |    | 6/     | 25/1993  |    |    |
| DEPTH            |                             | 0.5 -0 .5 Ft     | 3,8     | 5 - 4 F | t     | 0.5    | - 1.6 FI  |    |    | 3.:    | 2-4.1 -  | t  |    |
| SAMPLE_PURPOSE   |                             | REG              | 1       | REG     |       |        | REG       |    |    |        | REG      |    |    |
| Test Group       | Parameter (Units ≠ mg/kg)   | Result DIL LO VO | Result  | DIL     | LQ VQ | Result | DIE       | LQ | VQ | Result | DIL      | EQ | VQ |
| SEMIVOLATILES    | 4-Chloroaniline             |                  |         |         |       | 0.65   | 1         | <  | U  | 0.65   | 1        | <  | U  |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether |                  |         |         |       | 0.33   | i         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | 4-Methylphenol              |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | 4-Nitroaniline              |                  |         |         |       | 1.65   | 1         | <  | U  | 1.65   | 1        | <  | U  |
| SEMIVOLATILES    | 4-Nitrophenol               |                  |         |         |       | 1.65   | 1         | <  | υ  | 1.65   | 1        | <  | U  |
| SEMIVOLATILES    | Acenaphthene                |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | ٢        | <  | U  |
| SEMIVOLATILES    | Acenaphthylene              |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Anthracene                  |                  |         |         |       | 0.33   | 1         | <  | Ų  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Benzo(a)anthracene          |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Benzo(a)pyrena              |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Benzo(b)fluoranthene        |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Benzo(ghi)perylene          |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | Ų  |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | Ų  |
| SEMIVOLATILES    | Benzoic Acid                |                  |         |         |       | 1.65   | 1         | <  | U  | 1.65   | 1        | <  | U  |
| SEMIVOLATILES    | Benzyl Alcohol              |                  |         |         |       | 0.65   | 1         | <  | U  | 0.65   | 1        | <  | U  |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  | 1                |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | bis(2-Chlaroisopropy1)ether |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | ۲  | U  |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Butyl benzyl phthalate      |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Chrysene                    | }                |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | υ  |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      |                  |         |         |       | 0.33   | 1         | <  | Ų  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Dibenzofuran                | 1                |         |         |       | 0.33   | 1         | <  | U  | 0,33   | 1        | <  | U  |
| SEMIVOLATILES    | Diethyl phthalate           |                  |         |         |       | 0.33   | ١         | <  | U  | 0.33   | វ        | <  | U  |
| SEMIVOLATILES    | Dimethyl phthalate          |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | Ų  |
| SEMIVOLATILES    | di-n-Butyl phthalate        |                  |         |         |       | 0.33   | 1         | <  | Ų  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | di-n-Octyl phthalate        |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | Ų  |
| SEMIVOLATILES    | Fluoranthene                |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Fluorene                    |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Hexachlorobenzene           |                  |         |         |       | 0,33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Hexachlorobuladiene         |                  |         |         |       | 0.33   | 1         | <  | U  | 0,33   | 1        | <  | U  |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Hexachloroethane            |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | indeno(1,2,3-cd)pyrene      |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Isophorone                  |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Naphthalene                 |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Nitrobenzene                | ł                |         |         |       | 0.33   | 1         | ۲  | υ  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      | 1                |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Pentachlorophenol           |                  |         |         |       | 1,65   | 1         | <  | U  | 1.65   | 1        | ۲  | U  |
| SEMIVOLATILES    | Phenanthrene                |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Phenol                      |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| SEMIVOLATILES    | Pyrene                      |                  |         |         |       | 0.33   | 1         | <  | U  | 0.33   | 1        | <  | U  |
| VOLATILES        | 1,1.1,2-Tetrachloroelhane   |                  | 0.00548 | 1       | U     |        |           |    |    |        |          |    |    |
| VOLATILES        | 1.1.1-Trichloroethane       |                  | 0.00548 | 1       | U     | 0.005  | 1         | <  | U  | 0.005  | 1        | ۲  | U  |
| VOLATILES        | 1,1,2,2-Tetrachloroethane   |                  | 0.00548 | 1       | U     | 0.005  | 1         | <  | U  | 0.005  | 1        | <  | U  |
| VOLATILES        | 1,1,2-Trichloroethane       |                  | 0.00548 | 1       | U     | 0.005  | 1         | <  | Ų  | 0.005  | 1        | <  | U  |

Chemical Concentrations In Soil Associated with LHAAP-35/36 Sumps



| Table 3-41   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 041 |

| [SUMP] = SUMP041 |                                |        |  |       |         |          |        |          |            |    |    |        |            |    |       |
|------------------|--------------------------------|--------|--|-------|---------|----------|--------|----------|------------|----|----|--------|------------|----|-------|
| LOCATION _CODE   |                                | 35SU   | MP041-5  | B01   | 3550    | AP041    | -\$801 | U-       | I-S41-01   |    |    | LH     | -\$41-01   |    |       |
| SAMPLE_NO        |                                | 35-SM  | IP41-SB(   | 01-01 | 35-SM   | P41-SI   | B01-02 | LH-      | 841-01_    | 1  |    | LH-:   | S41-01     | 2  |       |
| SAMPLE_DATE      |                                | 9      | /12/2006   |       | 9       | 12/200   | )6     | 6        | 25/1993    |    |    | 6/3    | 25/1993    |    |       |
| DEPTH            |                                | 0      | .5 -0 .5 F   | t     | 3       | .5 - 4 F | 7      | 0.       | 5 • 1.5 Fi | t  |    | 3.2    | 2 - 4,1 Fi |    |       |
| SAMPLE_PURPOSE   |                                |        | REG I<br>Result DiL LO VO Result<br>0.00548<br>0.00548 |       |         |          |        |          | REG        |    |    |        | REG        |    |       |
| Test Group       | Parameter (Units = mg/kg)      | Result | DIL  | La va | Result  | DIL      | LQ V   | Q Result | DIL        | LQ | VQ | Result | DIL        | LQ | VQ    |
| VOLATILES        | 1,1-Dichloroethane             |        |  |       | 0.00548 | 1        | Ų      | 0.005    | 1          | <  | Ų  | 0.005  | 1          | <  | U     |
| VOLATILES        | 1.1-Dichloroethene             | 1      |  |       | 0.00548 | 1        | U      | 0.005    | 1          | <  | U  | 0.005  | 1          | <  | U     |
| VOLATILES        | 1.1-Dichioropropene            |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | 1.2.3-Trichlorobenzene         |        |  |       | 0.00548 | 1        | υ      |          |            |    |    |        |            |    |       |
| VOLATILES        | 1,2.3-Trichloropropane         | 1      |  |       | 0.00548 | 1        | Ų      |          |            |    |    |        |            |    |       |
| VOLATILES        | 1,2.4-Trichlorobenzene         |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | 1.2.4 Trimethylbenzene         |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    | ļ      |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | 1,2-Dibromoethane              | }      |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | 1.2-Dichlorobenzene            |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | 1,2-Dichloroethane             |        |  |       | 0.00548 | 1        | U      | 0.005    | 1          | <  | υ  | 0.005  | 1          | <  | U     |
| VOLATILES        | 1,2-Dichloroelhene             |        |  |       |         |          |        | 0.005    | 1          | <  | U  | 0.005  | 1          | <  | U     |
| VOLATILES        | 1.2-Dichloropropane            |        |  |       | 0.00548 | 1        | U      | 0.005    | 1          | <  | U  | 0.005  | 1          | <  | U     |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | 1,3,5-Trimethylbenzene         |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | 1,3-Dichlorobenzene            |        |  |       | 0.00548 | 1        | ប      |          |            |    |    |        |            |    |       |
| VOLATILES        | 1,3-Dichloropropane            | 1      |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | 1,4-Dichlorobenzene            |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | 2.2-Dichloropropane            |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | 2-Butanone                     |        |  |       | 0.011   | 1        | Ų      | 0.05     | 1          | <  | U  | 0.05   | 1          | <  | U     |
| VOLATILES        | 2-Chloroethyl vinyl ether      |        |  |       | 0.011   | 1        | U      | 0.01     | 1          | <  | U  | 0.01   | 1          | <  | U     |
| VOLATILES        | 2-Chlorotoluena                |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | 2-Hexanone                     | 1      |  |       | 0.011   | 1        | U      | 0.05     | 1          | <  | U  | 0.05   | 1          | <  | U     |
| VOLATILES        | 4-Chlorotoluene                |        |  |       | 0.00548 | i        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | Acetone                        |        |  |       | 0.011   | 1        | U      | 0.1      | 1          | <  | U  | 0,1    | 1          | <  | U     |
| VOLATILES        | Benzene                        |        |  |       | 0.00548 | 1        | U      | 0.005    | 1          | <  | Ų  | 0.005  | 1          | <  | U     |
| VOLATILES        | Bromobenzene                   |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | Bromochloromethane             |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | Bromodichloromethane           |        |  |       | 0.00548 | 1        | U      | 0.005    | 1          | <  | U  | 0.005  | 1          | <  | 0     |
| VOLATILES        | Bromoform                      |        |  |       | 0.00548 | 1        | U      | 0.005    | 1          | <  | U  | 0.005  | 1          | <  | U     |
| VOLATILES        | Bromomethane                   |        |  |       | 0.011   | 1        | U      | 0.01     | 1          | <  | U  | 0.01   | 1          | <  | 0     |
| VOLATILES        | Carbon disulfide               | 1      |  |       | 0.00548 | 1        | U      | 0.005    | 1          | <  | U  | 0.005  | 1          | <  | U     |
| VOLATILES        | Carbon tetrachioride           | 1      |  |       | 0.00548 | 1        | U      | 0.005    | 1          | <  | U  | 0.005  | 1          | <  | U     |
| VOLATILES        | Chlorobenzena                  |        |  |       | 0.00548 | 1        | Û      | 0.005    | 1          | <  | 0  | 0.005  | 1          | <  | U     |
| VOLATILES        | Chloroethane                   |        |  |       | 0.011   | 1        | U      | 0.01     | 1          | <  | U  | 0.01   | 1          | <  | Ų     |
| VOLATILES        | Chloroform                     |        |  |       | 0.00548 | 1        | U      | 0.005    | 1          | <  | U  | 0.005  | 1          | <  | U<br> |
| VOLATILES        | Chloromethane                  |        |  |       | 0.011   | 1        | U      | 0.01     | 1          | <  | U  | 0.01   | 1          | ۲  | Ų     |
| VOLATILES        | cis-1,2-Dichloroelhene         |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | cis-1,3-Dichloropropene        |        |  |       | 0.00548 | 1        | Ų      | 0.005    | 1          | <  | U  | 0.005  | 1          | <  | ų.    |
| VOLATILES        | Dibromochloromethane           |        |  |       | 0.00548 | 1        | U      | 0.005    | 1          | <  | Ų  | 0.005  | 1          | <  | U     |
| VOLATILES        | Dibromomethane                 |        |  |       | 0,00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | Dichlorodifluoromethane        |        |  |       | 0.011   | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | Ethylbenzene                   |        |  |       | 0.00548 | 1        | U      | 0.005    | 1          | <  | U  | 0.005  | 1          | ۲  | U     |
| VOLATILES        | Hexachlorobutadiene            |        |  |       | 0.00548 | 1        | Ų      |          |            |    |    |        |            |    |       |
| VOLATILES        | Isopropyibenzene               |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | m.p-Xylenes                    |        |  |       | 0.00548 | 1        | U      |          |            |    |    |        |            |    |       |
| VOLATILES        | Mathyl isobutyl ketone         | 1      |  |       | 0.011   | 1        | U      | 0.05     | 1          | <  | U  | 0.05   | 1          | <  | U     |

Data Evaluation Report

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



1 < U

1 < U

1 < U

1 < 0

1 < U

1 < U

0.05

0.01

0.005

0.05

0.01

0.005

|                  | Concentrations of         | Chemica | als in      | Soil | I Si | amples  | s As   | so    | ciat | ed with | Sun      | ıp ( | 041 |        |          |    |    |
|------------------|---------------------------|---------|-------------|------|------|---------|--------|-------|------|---------|----------|------|-----|--------|----------|----|----|
| [SUMP] ≈ SUMP041 |                           |         |             |      |      |         |        |       |      |         |          |      |     |        |          |    |    |
| LOCATION _CODE   |                           | 3550    | MP041-S     | 801  |      | 35SUN   | IP041  | -580  | 1    | LH      | -\$41-01 |      |     | LH     | -841-01  |    |    |
| SAMPLE_NO        |                           | 35-SA   | IP41-SB0    | 1-01 |      | 35-SM   | 241-S  | 801-0 | 2    | LH+8    | 341-01_  | 1    |     | LH-    | \$41-01_ | ,2 |    |
| SAMPLE_DATE      |                           | £       | /12/2006    |      |      | . 9/    | 12/200 | )6    |      | 6/2     | 25/1993  |      |     | 6/     | 25/1993  |    |    |
| DEPTH            |                           | 0       | .5 -0 .5 Ft |      |      | 3.      | 5 • 4  | Ŧt    |      | 0.5     | • 1.5 FI |      |     | 3,2    | 2•4.1 F  | t  |    |
| SAMPLE_PURPOSE   |                           |         | REG         |      |      |         | REG    |       |      |         | REG      |      |     |        | REG      |    |    |
| Test Group       | Parameter (Units = mg/kg) | Result  | DIL         | LQ   | VQ   | Result  | DIL    | LQ    | VQ   | Result  | DIL      | LQ   | VQ  | Result | DIL.     | LQ | VQ |
| VOLATILES        | Methylene chloride        |         |             |      |      | 0.00548 | 1      | Ű     |      | 0.005   | 1        | <    | U   | 0.005  | 1        | <  | U  |
| VOLATILES        | Naphthalene               |         |             |      |      | 0.011   | 1      | U     |      |         |          |      |     |        |          |    |    |
| VOLATILES        | n-BUTYLBENZENE            |         |             |      |      | 0.00548 | 1      | U     |      |         |          |      |     |        |          |    |    |
| VOLATILES        | n-PROPYLBENZENE           |         |             |      |      | 0.00548 | 1      | Ų     |      |         |          |      |     |        |          |    |    |
| VOLATILES        | p-ISOPROPYLTOLUENE        |         |             |      |      | 0.00119 | 1      | J     | J    |         |          |      |     |        |          |    |    |
| VOLATILES        | sec-BUTYLBENZENE          |         |             |      |      | 0.00548 | 1      | U     |      |         |          |      |     |        |          |    |    |
| VOLATILES        | Styrene                   |         |             |      |      | 0.00548 | 1      | U     |      | 0.005   | 1        | <    | U   | 0.005  | 1        | <  | Ų  |
| VOLATILES        | tert-BUTYLBENZENE         |         |             |      |      | 0.00548 | 1      | U     |      |         |          |      |     |        |          |    |    |
| VOLATILES        | Tetrachloroethene         |         |             |      |      | 0.00548 | 1      | Ų     |      | 0.005   | 1        | <    | U   | 0.005  | 1        | <  | U  |
| VOLATILES        | Toluene                   |         |             |      |      | 0,00548 | 1      | U     |      | 0.005   | 1        | <    | U   | 0.005  | 1        | <  | U  |
| VOLATILES        | trans-1,2-Dichloroethene  |         |             |      |      | 0.00548 | 1      | U     |      |         |          |      |     |        |          |    |    |
| VOLATILES        | trans-1,3-Dichloropropene |         |             |      |      | 0.00548 | 1      | U     |      | 0.005   | 1        | <    | υ   | 0.005  | 1        | ۲  | U  |
| VOLATILES        | Trichloroethene           |         |             |      |      | 0.00548 | 1      | Ų     |      | 0.005   | 1        | <    | ប   | 0.005  | 1        | <  | U  |

0.011

0.011

0.011

1 U

1 U

1 U

Table 3-41

Vinyl chloride Xylenes, Total Footnotes are shown on cover page to Tables Section.

Vinyl acetate

Trichlorofluoromethane

VOLATILES

VOLATILES

VOLATILES

VOLATILES

(SUN



. . . . . . . .



| Table 3-42  |    |
|---|----|
| Concentrations of Chemicals in Soil Samples Associated with Sump 04 | 12 |

| (SUMP) = SUMP042<br>LOCATION_CODE | 35 <b>8</b> U              | MP042   | 2-SB01 |       | 355U) | MP042- | SB01     |       | 35SUM | 1P042-8 | 5801      |       | LH | I-\$42- | 01     |     | ម      | <b>⊰-</b> S42- | 01      |     | υH      | ·\$42· | 01      |        |         |
|-----------------------------------|----------------------------|---------|--------|-------|-------|--------|----------|-------|-------|---------|-----------|-------|----|---------|--------|-----|--------|----------------|---------|-----|---------|--------|---------|--------|---------|
| SAMPLE NO                         |                            | 35-SM   | P42-\$ | B01-0 | 1     | 35-SM  | P42-SB   | 01-02 |       | 35-SMP4 | 2-\$801   | -02-Q | С  | LH-8    | 542+01 | QC  |        | LH             | -S42-0  | 1_1 |         | LH-    | S42-0   | 1_2    |         |
| SAMPLE DATE                       |                            | 9       | /12/20 | 06    |       | 9,     | (12/200  | 6     |       | 9/      | 12/2006   | 6     |    | 6       | 25/19  | 93  |        | 6              | /25/19  | 93  |         | 6/     | 25/199  | 93     |         |
| DEPTH                             |                            |         | 55     | Ft    |       | 3      | .5 - 4 F | t     |       | 3       | .5 - 4 Ft |       |    | .5      | 1.5    | Ft  |        |                | 5 • 1.5 | Ft  |         | 2.     | 5 - 3.3 | Ft     |         |
| SAMPLE_PURPOSE                    |                            |         | REG    |       |       |        | REG      |       |       |         | FD        |       |    |         | FD     |     |        |                | REG     |     |         |        | REG     |        |         |
| Test Group                        | Parameter (Units = mg/kg)  | Result  | DiL    | ιQ    | VQ    | Result | Diff     | LQ    | VQ    | Result  | DIL       | LQ    | VQ | Result  | DIL    | ĻΩ  | VQ     | Result         | DIL     | LQ  | VQ      | Result | DIL     | LQ     | VQ      |
| EXPLOSIVES                        | 2.4-Dinitrotoluene         |         |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | ۲,  | υ      | 0.33           | 1       | <   | U       | 0.33   | 1       | <      | U       |
| EXPLOSIVES                        | 2.6-Dinitratoluene         | ł       |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | <   | U      | 0.33           | 1       | <   | U       | 0.33   | 1       | <      | U       |
| METALS                            | Aluminum                   | 7890    | 1      |       |       | 19200  | 1        |       |       | 18200   | 1         |       |    | 6760    | 1      |     |        | 6460           | 1       |     |         | 12000  | 1       |        |         |
| METALS                            | Antimony                   | 0.11    | 1      | υ     | UJL   | 0.107  | 1        | J     | J     | 0.115   | 1         | U     |    | 3       | í      | <   | U      | 3              | 1       | <   | U       | 3      | 1       | <      | U       |
| METALS                            | Arsenic                    | 5.66    | 1      |       |       | 1.34   | 1        |       |       | 2.22    | 1         |       |    | 3.9     | 1      |     |        | 2.7            | 1       |     |         | 2,6    | 1       |        |         |
| METALS                            | Barium                     | 146     | 1      |       | JН    | 38     | 1        |       | ήH    | 32.5    | 1         |       |    | 64,7    | 1      |     |        | 67             | 1       |     |         | 117    | 1       |        |         |
| METALS                            | Beryllium                  |         | 1      |       |       | 0.516  | 1        |       |       | 0.469   | 1         |       |    |         |        |     |        |                |         |     |         |        |         |        |         |
| METALS                            | Cadmium                    | 0.303   | 1      | J     | Ļ     | 0.0646 | 1        | J     | J     | 0.0581  | 1         | J     | J  | 1       | 1      | <   | Ų      | 1              | 1       | <   | U       | 1      | 4       | <      | U       |
| METALS                            | Calcium                    | 1840    | 1      |       |       | 898    | 1        |       |       | 844     | 1         |       |    | 473     | 1      |     |        | 788            | 1       |     |         | 836    | 1       |        |         |
| METALS                            | Chromium                   | 77.1    | 1      |       | JH    | 17.5   | 1        |       | JH    | 19.4    | 1         |       |    | 18.7    | 1      |     |        | 10,8           | 1       |     |         | 21.1   | 1       |        |         |
| METALS                            | Cobalt                     | 3.77    | 1      |       |       | 2.84   | 1        |       |       | 2.54    | 1         |       |    | 4.13    | 1      |     |        | 4.29           | 1       |     |         | 1.76   | 1       |        |         |
| METALS                            | Copper                     | 8.33    | 1      |       |       | 4.22   | 1        |       |       | 4,96    | 1         |       |    | 3,8     | 1      |     |        | 8,13           | 1       |     |         | 3.56   | 1       |        |         |
| METALS                            | Iron                       | 15600   | 1      |       |       | 24100  | 1        |       |       | 23200   | 1         |       |    | 20600   | 1      |     |        | 10300          | 1       |     |         | 10300  | 1       |        |         |
| METALS                            | Lead                       | 20.4    | 1      |       |       | 8.5    | 1        |       |       | 9.49    | 1         |       |    | 10.54   | 1      |     |        | 7,77           | 1       |     |         |        |         |        |         |
| METALS                            | Magnesium                  | 492     | 1      |       |       | 1030   | 1        |       |       | 1040    | 1         |       |    | 262     | 1      |     |        | 404            | 1       |     |         | 501    | 1       |        |         |
| METALS                            | Manganèse                  | 228     | 1      |       | JL    | 28.3   | 1        |       | ٦Ľ    | 12.5    | 1         |       | J  | 223     | 1      |     |        | 174            | 1       |     |         | 61.8   | 1       |        |         |
| METALS                            | Mercury                    | 0.0617  | 1      | J     | J     | 0.124  | 1        | J     | J     | 0.115   | 1         | J     | J  | 0.1     | 1      | <   | บ      | 0.1            | 1       | <   | U       | 0.1    | -1      | <      | Ų       |
| METALS                            | Nickel                     | 5.32    | 1      |       | JH    | 7.39   | 1        |       | JΗ    | 7,16    | 1         |       |    |         |        |     |        |                |         |     |         |        |         |        |         |
| METALS                            | Potassium                  | 309     | 1      |       | JH    | 429    | 1        |       | JH    | 363     | 1         |       |    | 283     | 1      |     |        | 394            | 1       |     |         | 611    | 1       |        |         |
| METALS                            | Selenium                   | 0.403   | 1      |       | JL.   | 0.213  | 1        | J     | JL    | 2.42    | 1         |       | J  | 1       | í      | <   | U      | 1              | 1       | <   | U       | 1      | 1       | <      | Ų       |
| METALS                            | Silver                     | 1.56    | 1      | U     |       | 1.65   | 1        | U     |       | 1.6     | 1         | υ     |    | 1       | 1      | <   | U      | 1              | 1       | <   | U       | 1      | 1       | <      | U       |
| METALS                            | Sodium                     | 19,7    | 1      |       |       | 93.2   | 1        |       |       | 109     | 1         |       |    |         |        |     |        |                |         |     |         |        |         |        |         |
| METALS                            | Strontium                  |         |        |       |       |        |          |       |       |         |           |       |    | 4,65    | 1      |     |        | 4,9            | 1       |     |         | 7.53   | 1       |        |         |
| METALS                            | Thattium                   | 0.0628  | 1      |       |       | 0.101  | 1        |       |       | 0.11    | 1         |       |    |         |        |     |        |                |         |     |         |        |         |        |         |
| METALS                            | Vanadium                   | 24.8    | 1      |       | JH    | 31,8   | 1        |       | JH    | 33,6    | 1         |       |    |         |        |     |        |                |         |     |         |        |         |        |         |
| METALS                            | Zinc                       | 102     | 1      |       |       | 27.1   | 1        |       |       | 20      | 1         |       |    | 24.5    | 1      |     |        | 27.2           | 1       |     |         | 15.3   | 1       |        |         |
| PERC                              | Perchlorate                | 0.00912 | 1      | J     | J     | 0.01   | 1        | U     |       | 0,01    | 1         | U     |    |         |        |     |        |                |         |     |         |        |         |        |         |
| SEMIVOLATILES                     | 1,2,4-Trichlorobenzene     | 1       |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | <   | U      | 0.33           | 1       | <   | U       | 0,33   | 3       | <      | 0       |
| SEMIVOLATILES                     | 1,2-Dichlorobenzene        |         |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | <   | U      | 0.33           | 1       | <   | 0       | 0.33   | 1       | <      | U       |
| SEMIVOLATILES                     | 1,3-Dichlorobenzene        |         |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | <   | 0      | 0.33           | 1       | <   | 0       | 0.33   | 1       | <      |         |
| SEMIVOLATILES                     | 1.4-Dichlorobenzene        |         |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | <   | U      | 0.33           | 1       | <   | 0       | 0.33   | 1       | <      | 0       |
| SEMIVOLATILES                     | 2,4,5-Trichlorophenol      |         |        |       |       |        |          |       |       |         |           |       |    | 1.65    | 1      | <   | U      | 1.65           | 1       | <   | Ų.      | 1.05   | 1       |        | 0       |
| SEMIVOLATILES                     | 2.4,6-Trichlorophenol      | 1       |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | . < | U.     | 0.33           | 1       | <   | 0       | 0.33   | 1       | <      |         |
| SEMIVOLATILES                     | 2,4-Dichlorophenol         |         |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | <   | Ų      | 0,33           |         | <   |         | 0.33   | 1       | <      | Ų       |
| SEMIVOLATILES                     | 2.4-Dimethylphenol         |         |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | <   | U      | 0.33           | 1       | <   | 0       | 0.33   | 1       | <      | 0       |
| SEMIVOLATILES                     | 2.4-Dinitrophenol          | Į       |        |       |       |        |          |       |       |         |           |       |    | 1.65    | 1      | <   | 0      | 1,65           | 1       | <   | 0       | 1.05   | 1       | <      | -0      |
| SEMIVOLATILES                     | 2-Chloronaphthalene        | 1       |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | <   | U<br>  | 0,33           | 1       | <   | 0       | 0.33   | 1       | <      |         |
| SEMIVOLATILES                     | 2-Chlorophenol             | 1       |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | <   | 0      | 0.33           | 1       | <   | U       | 0.33   | •       | <      | U<br>11 |
| SEMIVOLATILES                     | 2-Methylnaphthalene        |         |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | ۲   | 0      | 0.33           | 1       | <   | 0       | 0.33   | 1       | 5      |         |
| SEMIVOLATILES                     | 2-Mathylphenol             |         |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | <   | 0      | 0.33           | 1       | <   |         | 0.33   |         | Ś      | 0       |
| SEMIVOLATILES                     | 2-Nitroaniline             |         |        |       |       |        |          |       |       |         |           |       |    | 1.65    | 1      | <   | 0      | 1.65           | 1       | ~   | U       | 1.00   |         | Ś      | 0       |
| SEMIVOLATILES                     | 2-Nitrophenol              | 1       |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | <   | Ų.     | 0.33           | ;       | <   | 0       | 0.33   | 1       | ج<br>ر | 11      |
| SEMIVOLATILES                     | 3,3'-Dichlorobenzidine     |         |        |       |       |        |          |       |       |         |           |       |    | 0.65    | 1      | <   | U<br>  | U.05           | 1       | <   | U<br>U  | 1.00   | 1       | 5      | и<br>П  |
| SEMIVOLATILES                     | 3-Nitroaniline             |         |        |       |       |        |          |       |       |         |           |       |    | 1.65    | 1      | <   | 0      | 1.05           | 1       | < . | 0       | 1.00   | ,       | ۲<br>۲ | ii ii   |
| SEMIVOLATILES                     | 4,6-Dinitro-2-methylphenol |         |        |       |       |        |          |       |       |         |           |       |    | 1.65    | 1      | ۲   | 0      | 1.65           | 1       | × . | 0       | 1,00   | 1       | <      | и       |
| SEMIVOLATILES                     | 4-Bromophenyl phenyl ether |         |        |       |       |        |          |       |       |         |           |       |    | 0.33    | 1      | <   | U<br>U | 0.33           | 1       | < . | U<br>11 | 0,33   | 1       | \$     | 11      |
| SEMIVOLATILES                     | 4-Chloro-3-methylphenol    | 1       |        |       |       |        |          |       |       |         |           |       |    | 0.65    | 1      | <   | U      | Q.05           | •       | <   | U       | 0.00   | 1       | 4      | v       |

.

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



### Table 3-42

### Concentrations of Chemicals in Soil Samples Associated with Sump 042

| (SUMP) = SUMP042 |                             |        |   |    |         |        |       |        |         |       |      |            |         |    |        |        |         |     |             |          |          |     |         |
|------------------|-----------------------------|--------|---|----|---------|--------|-------|--------|---------|-------|------|------------|---------|----|--------|--------|---------|-----|-------------|----------|----------|-----|---------|
| LOCATION _CODE   |                             | 35SU   | 35SUMP042-SB01 35SUM<br>35-SMP42-SB01-01 35-SMP4<br>9/12/2006 9/1 |    |         | 2042-5 | 801   | 35SU   | MP042   | 2-SB( | 01   | Ա          | 1-542-  | 01 |        | Lł     | -\$42-  | 01  |             | L        | 1-S42+   | D1  |         |
| SAMPLE_NO        |                             | 35-SM  | P42-SB01-C  | 01 | 35-SMP4 | 12-580 | 1-02  | 35-SMP | 42-580  | 01-02 | 2-QC | LH-        | 542-01  | QÇ |        | LH     | 542-0   | 1_1 |             | LH       | -\$42-0  | 1_2 |         |
| SAMPLE_DATE      |                             | 9/     | 12/2006   |    | 9/1;    | 2/2008 |       | 9      | 12/20   | 06    |      | 6          | 25/19   | 93 |        | 6      | 25/19   | 93  |             | 6        | /25/19   | 3   |         |
| DEPTH            |                             |        | 55 Fl   |    | 3.5     | - 4 Ft |       |        | 3.5 - 4 | Ft    |      | .5         | 5 - 1.5 | Ft |        | .8     | 5 - 1.5 | Ft  |             | 2        | .5 - 3.3 | Ft  |         |
| SAMPLE_PURPOSE   |                             |        | REG   |    | F       | REG    |       |        | FD      |       |      | <b>.</b> . | FD      |    |        |        | REG     |     |             | <b>C</b> | REG      |     |         |
| Test Group       | Parameter (Units = mg/kg)   | Result | DIL LO  | VQ | Result  | DIL    | LQ VQ | Result | DI      |       | Q VQ | Result     | DIL     | LO | VQ     | Hesult | UIL.    | LQ  | <u>. vq</u> | Result   |          | LU  |         |
| SEMIVOLATILES    | 4-Chloroaniline             |        |   |    |         |        |       |        |         |       |      | 0.65       | 1       | ۲  | U      | 0.65   | 1       | <   | 0           | 0.05     | 1        | ٢.  | 0       |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | 0      | 0.33   | 1       | <   | U<br>U      | 0.33     | 1        | š.  | 0       |
| SEMIVOLATILES    | 4-Methylphenol              |        |   |    |         |        |       |        |         |       |      | 0.33       | }       | <  | 0      | 0.33   | 2       | < . | 0           | 1 05     | ż        | 5   |         |
| SEMIVOLATILES    | 4-Nitroaniline              |        |   |    |         |        |       |        |         |       |      | 1.65       | 1       | <  | 0      | 1.65   |         | <   |             | 1.00     | 1        | 5   | и<br>н  |
| SEMIVOLATILES    | 4-Nitrophenol               |        |   |    |         |        |       |        |         |       |      | 1.65       | 1       | <  | 0      | 1.05   |         | ~   |             | 1.00     | -        | 2   | U U     |
| SEMIVOLATILES    | Acenaphthene                |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | 0      | 0.33   | 1       | ٢.  |             | 0.00     | +        | 5   | 0       |
| SEMIVOLATILES    | Acenaphihylene              |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | 0      | 0.33   | 1       | ٢.  | 11          | 0.00     | ا<br>۲   | 2   | ŭ       |
| SEMIVOLATILES    | Anthracene                  |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | 0      | 0.33   |         | <   |             | 0.00     |          | °.  | 1       |
| SEMIVOLATILES    | Benzo(a)anthracene          |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U<br>U | 0.33   |         | <   |             | 0.33     | 1        | <   | U<br>11 |
| SEMIVOLATILES    | Benzo(a)pyrene              |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | 0      | 0.33   | 1       | <   |             | 0.33     | 1        | ۲   | ů.      |
| SEMIVOLATILES    | Benzo(o)fluoranthene        |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0,33   | 1       | <   | 0           | 0.33     | 1        | <   |         |
| SEMIVOLATILES    | Benzo(ghi)perylene          |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | 0      | 0.33   | 1       | <   | 0           | 0.33     | 1        | <   | 0       |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Benzoic Acid                | ĺ      |   |    |         |        |       |        |         |       |      | 1.65       | 1       | <  | U      | 1.65   | 1       | <   | U           | 1.65     | 1        | <   | Ų       |
| SEMIVOLATILES    | Benzyl Alcohol              |        |   |    |         |        |       |        |         |       |      | 0.65       | 1       | <  | U      | 0.65   | 1       | <   | 0           | 0.65     | 1        | <   | 0       |
| SEMIVOLATILES    | bls(2-Chloroethoxy)methane  |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | ۲  | U      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether | 1      |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | Ų      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | ١       | <   | U           | 0.33     | 1        | <   | Ų       |
| SEMIVOLATILES    | Butyl benzyl phthalate      |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | U           | 0,33     | 1        | <   | U       |
| SEMIVOLATILES    | Chrysene                    |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | Ų           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Dibenzofuran                |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | Ų           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Diethyl phthalate           |        |   |    |         |        |       |        |         |       |      | 0,33       | 1       | <  | U      | 0.33   | 1       | <   | Ų           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Dimethyl phthalate          |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | Ð      | 0,33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | di-n-Butyl phthalate        |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | di-n-Octyl phthalate        |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | Ų      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | 0       |
| SEMIVOLATILES    | Fluoranthene                |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Fluorene                    |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Hexachlorobenzene           |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | Ų           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Hexachlorobutadiene         |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | Ð           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Hexachiorocyclopentadlene   |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Hexachloroethane            |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Indeno(1.2.3-cd)pyrene      |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | Ų      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Isophorone                  |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | Ų           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Naphthalene                 |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | V      | 0.33   | 1       | <   | Ų           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Nitrobenzene                | Í      |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  | 1      |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0,33   | 1       | <   | U           | 0.33     | 1        | <   | Ų       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | Ų      | 0,33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Pentachlorophenol           |        |   |    |         |        |       |        |         |       |      | 1.65       | 1       | <  | Ų      | 1.65   | 1       | <   | U           | 1.65     | 1        | <   | Ų       |
| SEMIVOLATILES    | Phenanthrene                |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | U           | 0.33     | 1        | <   | U       |
| SEMIVOLATILES    | Phenal                      |        |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | U      | 0.33   | 1       | <   | U           | 0.33     | 1        | ۲   | U       |
| SEMIVOLATILES    | Pyrene                      | l      |   |    |         |        |       |        |         |       |      | 0.33       | 1       | <  | Ų      | 0.33   | 1       | <   | Ų           | 0.33     | 1        | <   | U       |
| VOLATILES        | 1,1,1,2-Tetrachloroethane   |        |   |    | 0.00485 | 1      | U     | 0.0059 | 7 ·     | 1     | U    |            |         |    |        |        |         |     |             |          |          |     |         |
| VOLATILES        | 1,1,1-Trichloroethane       |        |   |    | 0.00485 | 1      | U     | 0.0059 | 7 .     | i     | U    | 0.005      | 1       | <  | U      | 0.005  | 1       | <   | U           | 0.005    | 1        | <   | U       |
| VOLATILES        | 1,1,2,2-Tetrachloroethane   | 1      |   |    | 0.00485 | 1      | U     | 0.0059 | 7 .     | 1     | Ų    | 0.005      | 1       | <  | U      | 0.005  | 1       | ۲   | U           | 0.005    | 1        | <   | U       |
| VOLATILES        | 1.1.2 Trichloroethane       |        |   |    | 0.00485 | 1      | U     | 0.0059 | 7 .     | 1     | Ð    | 0.005      | 1       | <  | U      | 0.005  | 1       | <   | U           | 0.005    | 1        | <   | U       |
|                  |                             |        |   |    |         |        |       |        |         |       |      |            |         |    |        |        |         |     |             |          |          |     |         |



| Table 3-42   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 042 |

| [SUMP] = SUMP042 |                                |        |           |             |         | D             |        | 0-51    | unara      | 0.044        |          | 1 6    | 1 040              | <b>1</b> |    | 11       | 1.512.             | 01       |    |        | 4-842- | 01     |    |
|------------------|--------------------------------|--------|-----------|-------------|---------|---------------|--------|---------|------------|--------------|----------|--------|--------------------|----------|----|----------|--------------------|----------|----|--------|--------|--------|----|
| LOCATION _CODE   |                                | 35SL   | MP042-SE  | 301         | 35SUM   | P042-         | 5801   | 3550    | MPU42-     | SBUT         |          | 11     | 1-046-1            |          |    | יי<br>עו | .042-              |          |    | 19     | .642.0 | 12     |    |
| SAMPLE_NO        |                                | 35-SN  | IP42-SB01 | -01         | 35-SMP  | 42-580        | 01-02  | 35-SMP  | 42-5601    | 1-02-QU<br>- | <i>,</i> | 10.0   | 292-UI<br>107.0100 | 20       |    | - Ln     | -042-0<br>/25/10   | 02       |    |        | 125/10 | <br>22 |    |
| SAMPLE_DATE      |                                | 5      | /12/2006  |             | 9/1     | 2/2006        | i i    | 8       | 12/2000    | 5            |          | 0'     | 20/198             | 50<br>E4 |    |          | 120113-<br>5 - 1 5 | 50<br>Et |    | 2      | 5.33   | Et .   |    |
| DEPTH            |                                |        | .55 Ft    |             | 3.3     | 5-4 H<br>+ 70 |        |         | 5.5 • 4 81 | [            |          | .ε     | 0 - 1.0 I<br>CD    | r1       |    |          | DEG                | FL       |    | £.     | BEG    | ••     |    |
| SAMPLE_PURPOSE   |                                |        | REG       |             |         | REG           |        | /o      | FD         | 10           |          | Denult | PU<br>Di           | 10       | VO | Besuit   | Dii                | 10       | vo | Result | Dif    | 10     | vo |
| Test Group       | Parameter (Units = mg/kg)      | Result |           | <u>a va</u> | Result  | DIL           |        | Q Hesuk |            |              | VQ 1     | Hesun  |                    | 102      |    | 0.005    | 1                  |          | 11 | 0.005  | 1      |        | 11 |
| VOLATILES        | 1,1-Dichloroethane             |        |           |             | 0.00485 | 1             | U      | 0,00597 | 1          | U.           |          | 0.005  | 1                  | ٢.       | 0  | 0,005    | ,                  | 5        | ч  | 0.005  | ÷      | 2      | 1  |
| VOLATILES        | 1.1-Dichloroethene             |        |           |             | 0.00485 | 1             | U      | 0.00597 | 1          |              |          | 0.005  | 1<br>I             | <        | U  | 0.005    | ,                  | ٠        | U  | 0,005  | ,      | `      | Ŭ  |
| VOLATILES        | 1,1-Dichloropropene            | }      |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | 0            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 1,2,3-Trichlorobenzene         | 1      |           |             | 0.00485 | វ             | U      | 0,00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 1.2.3-Trichloropropane         |        |           |             | 0.004B5 | 1             | U      | 0.00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 1.2.4-Trichlorobenzene         |        |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 1.2.4-Trimethylbenzene         |        |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 1,2-Dibromo-3-chioropropane    | 1      |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 1,2-Dibromoethane              |        |           |             | 0.00485 | 1             | Ų      | 0.00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 1.2-Dichlorobenzene            |        |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 1.2-Dichloroethane             |        |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | U            |          | 0.005  | . 1                | <        | Ų  | 0.005    | 1                  | <        | U  | 0.005  | 1      | <      | 0  |
| VOLATILES        | 1.2-Dichloroethene             |        |           |             |         |               |        |         |            |              |          | 0.005  | 1                  | <        | U  | 0,005    | 1                  | <        | U  | 0.005  | 1      | <      | U  |
| VOLATILES        | 1.2-Dichloropropane            |        |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | Ų            |          | 0.005  | 1                  | <        | U  | 0.005    | 1                  | <        | U  | 0.005  | 1      | <      | U  |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) |        |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | Ų            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 1,3.5-Trimethylbenzene         | 1      |           |             | 0.00485 | 1             | υ      | 0,00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 1.3-Dichlorobenzene            |        |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 1.3-Dichloropropane            |        |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 1.4-Dichlorobenzene            | ļ      |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 2.2-Dichloropropane            |        |           |             | 0.00485 | t             | U      | 0.00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 2-Bulanone                     |        |           |             | 0.0097  | 1             | U      | 0.0119  | 1          | U            |          | 0.05   | 1                  | <        | U  | 0.05     | 1                  | <        | υ  | 0.05   | 1      | <      | υ  |
| VOLATILES        | 2-Chloroethyl vinyl ether      |        |           |             | 0.0097  | 1             | U      | 0.0119  | 1          | Ų            |          | 0.01   | 1                  | <        | U  | 0.01     | 1                  | <        | U  | 0,01   | 1      | <      | U  |
| VOLATILES        | 2.Chlorotoluene                |        |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | Ų            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | 2-Hevanone                     |        |           |             | 0.0097  | 1             | Ų      | 0.0119  | 1          | U            | UJ       | 0.05   | 1                  | <        | U  | 0.05     | 1                  | <        | U  | 0.05   | 1      | <      | U  |
| VOLATILES        | 4-Chlorototuene                |        |           |             | 0.00485 | 1             | ប      | 0.00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | å officielle sing              | 1      |           |             | 0.0097  | 1             | U      | 0.0119  | 1          | U            | UJ       | 0.1    | 1                  | <        | U  | 0.1      | 1                  | <        | U  | 0.1    | 1      | <      | υ  |
| VOLATILES        | Renzena                        |        |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | U            |          | 0.005  | 1                  | <        | U  | 0.005    | 1                  | <        | U  | 0.005  | 1      | <      | U  |
|                  | Bromobenzene                   |        |           |             | 0.00485 | 1             | U      | 0.00597 | ' 1        | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | Bromochloromethane             |        |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | U            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | Bronodichloramethane           | ļ      |           |             | 0.00485 | 1             | U      | 0.00597 | 1          | U            |          | 0.005  | 1                  | <        | U  | 0,005    | 1                  | <        | U  | 0.005  | 1      | <      | U  |
|                  | Bromoform                      | 1      |           |             | 0.00485 | 1             | Ū      | 0.00597 | 1          | U            |          | 0.005  | 1                  | <        | U  | 0.005    | 1                  | <        | υ  | 0.005  | 1      | <      | บ  |
| VOLATILES        | Bromomethane                   |        |           |             | 0.0097  | 1             | υ      | 0.0119  | 1          | U            |          | 0.01   | 1                  | <        | U  | 0.01     | i                  | <        | U  | 0.01   | 1      | <      | U  |
| VOLATILES        | Carbon disulfide               |        |           |             | 0.00485 | 1             | U      | 0.00597 | 7 1        | U            |          | 0.005  | 1                  | <        | U  | 0.005    | 1                  | <        | U  | 0.005  | 1      | <      | Ų  |
| VOLATILES        | Carbon tetrachloride           |        |           |             | 0.00485 | 1             | Ŭ      | 0.00597 | 1          | υ            |          | 0.005  | 1                  | <        | U  | 0.005    | 1                  | <        | U  | 0.005  | 1      | <      | U  |
| VOLATILES        | Chlorobenzene                  |        |           |             | 0.00485 | 1             | Ū      | 0.00597 | 7 1        | Ú            |          | 0.005  | 1                  | <        | U  | 0.005    | 1                  | <        | U  | 0.005  | 1      | <      | U  |
| VOLATILES        | Chloroothana                   | Į      |           |             | 0.0097  | 1             | - n    | 0.0119  | 1          | Ú            |          | 0.01   | 1                  | <        | U  | 0.01     | 1                  | <        | U  | 0.01   | 1      | <      | U  |
| VOLATILES        | Chloraform                     |        |           |             | 0.00485 | 1             | ŧ.     | 0.00597 | , 1        | Ū            |          | 0.005  | 1                  | <        | U  | 0.005    | 1                  | <        | Ų  | 0.005  | 1      | <      | ប  |
| VOLATILES        |                                |        |           |             | 0.00400 |               | ц.     | 0.0119  | 1          | Ű            |          | 0.01   | 1                  | <        | Ű  | 0.01     | 1                  | <        | U  | 0.01   | 1      | <      | U  |
| VOLATILES        | unoromenane                    |        |           |             | 0.0037  | 1             | ň      | 0.00593 | 7 1        | ม            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLATILES        | cis-1,2-Dichoroenene           | ļ      |           |             | 0.00405 | t             | ŭ      | 0.00593 | 7 1        | ŭ            |          | 0.005  | 1                  | <        | ป  | 0.005    | 1                  | <        | U  | 0.005  | 1      | <      | υ  |
| VOLANLES         | CIS-1,3-Dichloropropene        |        |           |             | 0.00405 | 1             | - Ŭ    | 0.00593 | 7 1        | ů            |          | 0.005  | 1                  | ×.       | Ū  | 0.005    | 1                  | <        | U  | 0.005  | 1      | <      | ป  |
| VOLATILES        | Dibromochioraniania            |        |           |             | 0.00485 | Ì             | н<br>Н | 0.0050  | 7 1        | Ŭ            |          |        |                    |          | -  |          |                    |          |    |        |        |        |    |
| VOLATILES        | Dibromameinane                 |        |           |             | 0.00400 | ÷             | ů.     | 0.0119  |            | ň            |          |        |                    |          |    |          |                    |          |    | •      |        |        |    |
| VULAHLES         | Digitioroditiporometriane      |        |           |             | 0.0007  | 1             | 11     | 0.0710  | 7 1        | Ŭ            |          | 0.005  | 1                  | <        | U  | 0.005    | 1                  | <        | Ų  | 0.005  | 1      | <      | Ų  |
| VOLATILES        | Environment                    |        |           |             | 0.00400 |               | ň      | 0.0009  | . ,<br>7 i | ŭ            |          |        |                    |          | -  |          |                    |          | ·  |        |        |        |    |
| VOLATILES        |                                |        |           |             | 0.00405 |               | ň      | 0.0009  | . 1<br>71  | ŭ            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLAHLES         | isopropyidenzene               |        |           |             | 0.00400 | 4             | й      | 0.0009  | <br>7 1    | ŭ            |          |        |                    |          |    |          |                    |          |    |        |        |        |    |
| VOLAHLES         | m,p-Xylenes                    | 1      |           |             | 50M000  |               | 11     | 0.0010  | · ·        | ii.          |          | 0.05   | t                  | e        | υ  | 0.05     | 1                  | <        | Ų  | 0.05   | 1      | <      | U  |
| VOLATILES        | Methyl ISODUTYl Ketone         | 1      |           |             | 0.0091  |               | U      | 0.0116  | · ·        | ~            |          | 0.00   |                    | -        | •  |          |                    |          | -  |        |        |        |    |

. . . .....

|   | Q VII                     | vontro | 0010               | 01.0   |                           |                            | <b>v</b> •                                     |                          |    |                               |  |                          |     |                        |   |                         |    |              |   |                         |    |                     |  |                       |    |
|---|---------------------------|--------|--------------------|--|---------------------------|----------------------------|--|--------------------------|----|-------------------------------|--|--------------------------|-----|------------------------|---|-------------------------|----|--------------|---|-------------------------|----|---------------------|--|-----------------------|----|
| (SUMP) = SUMP042<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PHIPPOSE |                           |        | 35SU<br>35-SM<br>9 | MP042-<br>IP42-SE<br>/12/200<br>.55 F<br>BEG | -SB01<br>301-01<br>6<br>t | 35\$UH<br>35-SM<br>9/<br>3 | //P042-<br>P42-S8<br>12/200<br>.5 - 4 F<br>9EG | 5801<br>101-01<br>6<br>1 | 2  | 35SUM<br>35-SMP4<br>9/1<br>3, | 1P042-<br>2-SB0<br>12/200<br>5 - 4 F<br>FD | SB01<br>1-02-0<br>6<br>1 | c i | ۲+<br>۲+۲+<br>6<br>. נ | 4-S42-0<br>S42-0<br>/25/19<br>5 • 1.5<br>FD | -01<br>1 QC<br>93<br>Ft |    | և<br>ԼH<br>6 | 4-S42-0<br>-S42-0<br>/25/19<br>5 - 1.5<br>REG | -01<br>)1_1<br>93<br>F1 |    | U<br>. LH<br>6<br>2 | H-S42-<br>-S42-0<br>/25/19:<br>.5 - 3.3<br>REG | 01<br>1_2<br>93<br>Ft |    |
| Test Group  | Parameter (Units = mo/kg) |        | Result             | DIL  | LO VO                     | Result                     | DIL  | ĻΩ                       | VQ | Result                        | DIL  | LQ                       | VQ  | Result                 | DIL   | LQ                      | vq | Result       | DIL   | LQ                      | VQ | Result              | DIL  | LQ                    | VQ |
| VOLATILES   | Methylene chloride        |        |                    |  |                           | 0.00485                    | 1  | U                        |    | 0.00597                       | 1  | Ų                        |     | 0.005                  | 1   | <                       | U  | 0.005        | 1   | <                       | U  | 0.005               | 1  | <                     | Ű  |
| VOLATILES   | Naphthalene               | ł      |                    |  |                           | 0.0097                     | 1  | U                        |    | 0.0119                        | 1  | U                        |     |                        |   |                         |    |              |   |                         |    |                     |  |                       |    |
| VOLATILES   | n-BUTYLBENZENE            | ].     |                    |  |                           | 0.00485                    | 1  | U                        |    | 0,00597                       | 1  | U                        |     |                        |   |                         |    |              |   |                         |    |                     |  |                       |    |
| VOLATILES   | n-PROPYLBENZENE           |        |                    |  |                           | 0.00485                    | 1  | U                        |    | 0.00597                       | 1  | Ų                        |     |                        |   |                         |    |              |   |                         |    |                     |  |                       |    |
| VOLATILES   | p-ISOPROPYLTOLUENE        |        |                    |  |                           | 0.00485                    | 1  | υ                        |    | 0.00597                       | 1  | U                        |     |                        |   |                         |    |              |   |                         |    |                     |  |                       |    |
| VOLATILES   | sec-BUTYLBENZENE          |        |                    |  |                           | 0.00485                    | 1  | U                        |    | 0.00597                       | 1  | U                        |     |                        |   |                         |    |              |   |                         |    |                     |  |                       |    |
| VOLATILES   | Styrene                   |        |                    |  |                           | 0.00485                    | 1  | U                        |    | 0,00597                       | 1  | U                        |     | 0.005                  | 1   | <                       | U  | 0.005        | 1   | <                       | U  | 0.005               | 1  | <                     | 0  |
| VOLATILES   | tert-BUTYLBENZENE         |        |                    |  |                           | 0.00485                    | 1  | U                        |    | 0.00597                       | 1  | U                        |     |                        |   |                         |    |              |   |                         |    |                     |  |                       |    |
| VOLATILES   | Tetrachloroethene         | ]      |                    |  |                           | 0.00485                    | 1  | Ų                        |    | 0.00597                       | 1  | U                        |     | 0.005                  | 1   | <                       | υ  | 0.005        | ٢   | <                       | U  | 0.005               | 1  | ۲                     | U  |
| VOLATILES   | Toluene                   |        |                    |  |                           | 0.00485                    | 1  | Ų                        |    | 0.00597                       | 1  | U                        |     | 0.005                  | 1   | <                       | Ð  | 0.005        | 1   | <                       | U  | 0.005               | 1  | <                     | Ų  |
| VOLATILES   | trans-1,2-Dichloroethene  |        |                    |  |                           | 0.00485                    | 1  | U                        |    | 0.00597                       | 1  | U                        |     |                        |   |                         |    |              |   |                         |    |                     |  |                       |    |
| VOLATILES   | trans-1,3-Dichloropropene |        |                    |  |                           | 0.00485                    | 1  | U                        |    | 0.00597                       | 1  | U                        |     | 0.005                  | 1   | <                       | U  | 0.005        | 1   | <                       | U  | 0.005               | 1  | <                     | U  |
| VOLATILES   | Trichloroethene           | ŀ      |                    |  |                           | 0.00485                    | 1  | U                        |    | 0.00597                       | 1  | U                        |     | 0.005                  | 1   | <                       | U  | 0.005        | 1   | <                       | U  | 0.005               | 1  | <                     | U  |
| VOLATILES   | Trichiorofluoromethane    |        |                    |  |                           | 0.0097                     | 1  | U                        |    | 0.0119                        | 1  | U                        |     |                        |   |                         |    |              |   |                         |    |                     |  |                       |    |
| VOLATILES   | Vinyl acetate             |        |                    |  |                           | 0.0097                     | 1  | U                        |    | 0.0119                        | 1  | Ų                        |     | 0.05                   | 1   | <                       | Ų  | 0.05         | 1   | <                       | U  | 0.05                | 1  | <                     | U  |
| VOLATILES   | Vind chloride             | - 1    |                    |  |                           | 0.0097                     | 1  | U                        |    | 0.0119                        | 1  | U                        |     | 0.01                   | 1   | <                       | Ð  | 0,01         | 1   | <                       | U  | 0.01                | 1  | <                     | U  |

### Table 3-42 Concentrations of Chemicals in Soil Samples Associated with Sump 042

VOLATILES Vinyl chloride Footnotes are shown on cover page to Tables Section.

.



|  | Т | abl | е З- | 43 |
|--|---|-----|------|----|
|--|---|-----|------|----|

| Concentrations of Cher | nicals in Soil | Samples Asso | ciated with | Sump 043 |
|------------------------|----------------|--------------|-------------|----------|
|------------------------|----------------|--------------|-------------|----------|

| (SUMP) = SUMP043 |                            |        |        |       |    |        |       |    |    |        |       |    |    |
|------------------|----------------------------|--------|--------|-------|----|--------|-------|----|----|--------|-------|----|----|
| LOCATION CODE    |                            | 35SUM  | P043-  | SB01  |    | LH-S   | 43-01 |    |    | LH-S-  | 43-01 |    |    |
| SAMPLE_NO        |                            | 35-SMP | 43-58  | 01-02 |    | LH-S4  | 3-01_ | 1  |    | LH-S4  | 3-01_ | 2  |    |
| SAMPLE_DATE      |                            | 9/1-   | 4/200( | 5     |    | 6/26   | 1993  |    |    | 6/26/  | 1993  |    |    |
| DEPTH            |                            | 2.5    | 2.5 F  | -t    |    | .5 -   | 1 Ft  |    |    | 1.5 -  | 2 Ft  |    |    |
| SAMPLE_PURPOSE   |                            | ş      | REG    |       |    | RI     | EG    |    |    | RE     | G     |    |    |
| Test Group       | Parameter (Units = mg/kg)  | Result | DIL    | LQ    | VQ | Result | DiL   | LQ | VQ | Result | DIL   | LQ | VQ |
| EXPLOSIVES       | 2,4-Dinitrotoluene         |        | .,     |       |    | 1.099  | 1     | <  | U  | 1.149  | 1     | <  | U  |
| EXPLOSIVES       | 2.8-D nitrotoluene         |        |        |       |    | 1.099  | 1     | <  | U  | 1.149  | ٢     | <  | U  |
| METALS           | Aluminum                   | 6330   | 1      |       |    | 3170   | 1     |    |    | 3530   | 1     |    |    |
| METALS           | Antimony                   | 0.0667 | 1      | J     | J  | 4.04   | 1     | <  | U  | 3.84   | ٢     | <  | U  |
| METALS           | Arsenic                    | 2.2    | 1      |       |    | 0.97   | 1     |    |    | 1.34   | 1     |    |    |
| METALS           | Barium                     | 62.7   | 1      |       |    | 50.3   | 1     | <  | U  | 75.6   | í     | <  | U  |
| METALS           | 8eryllium                  | 0.457  | 1      |       |    |        |       |    |    |        |       |    |    |
| METALS           | Cadmium                    | 0.264  | 1      | ٦     | J  | 1.19   | 1     | <  | U  | 1.84   | i     | <  | U  |
| METALS           | Calcium                    | 1210   | 1      |       |    | 660    | 1     |    |    | 769    | 1     |    |    |
| METALS           | Chromium                   | 17.4   | 1      |       |    | 7.07   | 1     |    |    | 10.1   | 1     |    |    |
| METALS           | Cobalt                     | 3.65   | 1      |       |    | 4      | 1     |    |    | 6.34   | 1     |    |    |
| METALS           | Copper                     | 4.55   | 1      |       |    | 3.33   | 1     | <  | U  | 4,45   | 1     | <  | IJ |
| METALS           | iron                       | 10900  | 1      |       |    | 4850   | 1     |    |    | 8410   | 1     |    |    |
| METALS           | Lead                       | 9.74   | 1      |       |    | 6.18   | 1     |    | Е  | 5.76   | 1     | <  | U  |
| METALS           | Magnesium                  | 309    | 1      |       |    | 178    | 1     |    |    | 157    | 1     |    |    |
| METALS           | Manganese                  | 198    | 1      |       |    | 244    | 1     |    |    | 545    | 1     |    |    |
| METALS           | Mercury                    | 0.0311 | 1      | J     | J  | 0.048  | t     | <  | Ð  | 0.051  | 1     | ۲  | U  |
| METALS           | Nickel                     | 5.68   | 1      |       |    |        |       |    |    |        |       |    |    |
| METALS           | Potassium                  | 231    | 1      |       |    | 161    | 1     |    |    | 200    | 1     |    |    |
| METALS           | Selenium                   | 0.337  | 1      |       |    | 0.404  | 1     | <  | U  | 0.384  | 1     | <  | IJ |
| METALS           | Silver                     | 1,66   | 1      | U     |    | 0.02   | 1     | <  | U  | 0.04   | 1     | <  | U  |
| METALS           | Sodium                     | 17.5   | 1      | J     | J  |        |       |    |    |        |       |    |    |
| METALS           | Strontium                  |        |        |       |    | 5.98   | 1     | <  | U  | 7.37   | 1     | <  | U  |
| METALS           | Thallium                   | 0.0452 | 1      |       |    |        |       |    |    |        |       |    |    |
| METALS           | Vanadium                   | 21.9   | t      |       |    |        |       |    |    |        |       |    |    |
| METALS           | Zinc                       | 76.1   | 1      |       |    | 6.28   | 1     |    |    | 11,3   | 1     |    |    |
| PERC             | Perchlorate                | 0.05   | 5      | υ     |    |        |       |    |    |        |       |    |    |
| SEMIVOLATILES    | 1.2,4-Trichlorobenzene     |        |        |       |    | 1.099  | 1     | <  | U  | 1.149  | 1     | ۲  | U  |
| SEMIVOLATILES    | 1,2-Dichlorobenzene        |        |        |       |    | 1.099  | 1     | <  | U  | 1.149  | 1     | <  | U  |
| SEMIVOLATILES    | 1.3-Dichlorobenzene        |        |        |       |    | 1.099  | 1     | <  | U  | 1,149  | 1     | <  | U  |
| SEMIVOLATILES    | 1,4-Dichlorobenzene        |        |        |       |    | 1.099  | 1     | <  | υ  | 1.149  | 1     | <  | U  |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol      |        |        |       |    | 1.099  | 1     | <  | U  | 1,149  | 1     | <  | U  |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol      |        |        |       |    | 1.099  | 1     | <  | U  | 1.149  | 1     | <  | U  |
| SEMIVOLATILES    | 2,4-Dichloropheno!         |        |        |       |    | 1.099  | 1     | <  | U  | 1.149  | 1     | <  | U  |
| SEMIVOLATILES    | 2,4-Dimethylphenol         |        |        |       |    | 0.549  | 1     | <  | υ  | 0.575  | 1     | <  | U  |
| SEMIVOLATILES    | 2,4-Dinitrophenol          |        |        |       |    | 10.989 | 1     | <  | U  | 11,494 | 1     | <  | U  |
| SEMIVOLATILES    | 2-Chloronaphthalene        |        |        |       |    | 0.33   | 1     | <  | U  | 0.345  | 1     | <  | U  |
| SEMIVOLATILES    | 2-Chlorophenol             |        |        |       |    | 0.549  | 1     | <  | U  | 0.575  | 1     | <  | U  |
| SEMIVOLATILES    | 2-Methylnaphthalene        |        |        |       |    | 0.33   | \$    | <  | υ  | 0.345  | 1     | <  | U  |
| SEMIVOLATILES    | 2-Methylphenol             |        |        |       |    | 0.549  | 1     | <  | U  | 0.575  | 1     | <  | U  |
| SEMIVOLATILES    | 2-Nitroaniline             |        |        |       |    | 3.297  | 1     | <  | υ  | 3,448  | 1     | <  | U  |
| SEMIVOLATILES    | 2-Nitrophenol              |        |        |       |    | 1.099  | 1     | <  | U  | 1,149  | 1     | <  | U  |
| SEMIVOLATILES    | 3.3 Dichlorobenzidine      |        |        |       |    | 0.549  | 1     | <  | υ  | 0.575  | 1     | <  | Ū  |
| SEMIVOLATILES    | 3-Nitroaniline             |        |        |       |    | 3.297  | 1     | <  | U  | 3.448  | 1     | <  | U  |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol |        |        |       |    | 5.495  | \$    | <  | υ  | 5.747  | 1     | ۲  | U  |
| SEMIVOLATILES    | 4-Bromophenyl chanyl ether |        |        |       |    | 1.099  | 1     | <  | U  | 1,149  | 1     | <  | U  |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol    |        |        |       |    | 0.549  | 1     | <  | υ  | 0.575  | 1     | <  | U  |

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



Concentrations of Chemicals in Soil Samples Associated with Sump 043

| [SUMP] = SUMP043 |                             |                  |                  |                  |
|------------------|-----------------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                             | 35SUMP043-SB01   | LH-S43-01        | LH-S43-01        |
| SAMPLE NO        |                             | 35-SMP43-SB01-02 | LH-S43-01 1      | LH-S43-01 2      |
| SAMPLE DATE      |                             | 9/14/2006        | 6/26/1993        | 6/26/1993        |
| DEPTH            |                             | 2.5 - 2.5 Ft     | .5 - 1 Ft        | 1.5 - 2 Ft       |
| SAMPLE PURPOSE   |                             | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LQ VQ |
| SEMIVOLATILES    | 4-Chloroaniline             |                  | 3,297 1 < U      | 3.448 1 < U      |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether |                  | 1.099 1 < U      | 1,149 1 < U      |
| SEMIVOLATILES    | 4-Methylphenol              |                  | 0.549 1 < U      | 0.575 1 < U      |
| SEMIVOLATILES    | 4-Nitroaniline              |                  | 5,495 1 < U      | 5,747 1 < U      |
| SEMIVOLATILES    | 4-Nitrophenol               |                  | 5.495 1 < U      | 5.747 1 < U      |
| SEMIVOLATILES    | Acenaphthene                |                  | 0.33 1 < U       | 0.345 1 < U      |
| SEMIVOLATILES    | Acenaphthylene              |                  | 0.549 1 < U      | 0.575 t < U      |
| SEMIVOLATILES    | Anthracene                  |                  | 0.549 1 < U      | 0.575 1 < U      |
| SEMIVOLATILES    | Benzo(a)anthracene          |                  | 0.33 1 < U       | 0.345 1 < U      |
| SEMIVOLATILES    | Benzo(a)pyrene              |                  | 0.549 1 < U      | 0.575 1 < U      |
| SEMIVOLATILES    | Benzo(b)fluoranthene        |                  | 1.099 1 < U      | 1.149 1 < U      |
| SEMIVOLATILES    | Beazo(ghi)perviene          |                  | 2.198 1 < U      | 2.299 1 < U      |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                  | 1.099 1 < U      | 1.149 1 < U      |
| SEMIVOLATILES    | his(2-Chloroethoxy)methane  |                  | 0.549 1 < U      | 0.575 1 < U      |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |                  | 0.549 1 < U      | 0.575 1 < U      |
| SEMIVOLATILES    | his(2-Chloroisonronyi)ether |                  | 1099 1 < 15      | 1149 1 e U       |
| SEMIVOLATILES    | his(2-Ethylheyyi)nhthalate  |                  | 0.549 1 2 1      | 0.575 1 < U      |
| SEMIVOLATILES    | Butyl henzyl nhthalate      |                  | 0.549 1 2 1      | 0.575 1 < 1      |
| SEMIVOLATILES    | Carbazole                   |                  | 1099 1 4 1       | 1149 1 < 11      |
| SEMIVOLATILES    | Chrysene                    |                  | 5495 1 - 11      | 5747 1 4 1       |
| SEMIVOLATILES    | Dibenzo(a h)anthracene      |                  | 2.198 1 2 1      | 2,299 1 < 1      |
| SEMIVOLATILES    | Dibenzofuran                |                  | 1099 1 2 1       | 1.149 1 c 1      |
| SEMIVOLATILES    | Dietbyl phthalate           |                  | 0.549 1 < U      | 0.575 1 < U      |
| SEMIVOLATILES    | Dimethyl ohthalate          |                  | 0.549 1 < 1      | 0.575 1 < 1      |
| SEMIVOLATILES    | di-n-Butyl phthalate        |                  | 5,066 1          | 6,885 1          |
| SEMIVOLATILES    | di-n-Ocivi nbinalate        |                  | 0.549 1 < U      | 0.575 1 < 1      |
| SEMIVOLATILES    | Elupranthepe                |                  | 0.549 1 < 1      | 0.575 1 < U      |
| SEMIVOLATILES    | Fluorene                    |                  | 0549 1 < U       | 0.575 1 < U      |
| SEMIVOLATILES    | Hexachlorobenzene           |                  | 1.099 1 < U      | 1.149 1 < U      |
| SEMIVOLATILES    | Hexachlorobutadiene         |                  | 3.297 1 < 1/     | 3.448 1 < 1      |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   |                  | 3.297 t < U      | 3.448 1 < U      |
| SEMIVOLATILES    | Hexachloroethane            |                  | 1.099 1 < U      | 1.149 1 < U      |
| SEMIVOLATILES    | indeno(1,2,3-cd)pyrene      |                  | 1.099 1 < U      | 1.149 1 < U      |
| SEMIVOLATILES    | sophorone                   |                  | 0.549 1 < U      | 0.575 1 < U      |
| SEMIVOLATILES    | Naphthalene                 |                  | 0.33 1 < U       | 0.345 1 < U      |
| SEMIVOLATILES    | Nitrobenzene                |                  | 0.549 1 < U      | 0.575 1 < U      |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |                  | 1.099 1 < U      | 1.149 1 < U      |
| SEMIVOLATILES    | n-Nitrosodiphenviamine      |                  | 0.549 1 < U      | 0.575 1 < U      |
| SEMIVOLATILES    | Pentachlorophenol           |                  | 5.495 1 < U      | 5.747 1 < U      |
| SEMIVOLATILES    | Phenanthrene                |                  | 0.549 1 < U      | 0.575 1 < U      |
| SEMIVOLATILES    | Phenol                      |                  | 0.549 1 < U      | 0.575 1 < U      |
| SEMIVOLATILES    | Pyrene                      |                  | 0.549 1 < U      | 0.575 1 < U      |
| VOLATILES        | 1,1,1,2-Tetrachloroethane   | 0.00523 1 U      |                  |                  |
| VOLATILES        | 1,1,1-Trichloroethane       | 0.00523 1 U      | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES        | 1,1.2.2-Tetrachloroethane   | 0.00523 1 U      | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES        | 1,1,2-Trichloroethane       | 0.00523 1 U      | 0.006 1 < U      | 0,006 1 < U      |
| VOLATILES        | 1,1-Dichloroethane          | 0.00523 1 U      | 0.006 1 < U      | 0.006 1 < U      |



| (SUMP] = SUMP043 |                                  |         |         |         |    |         |       | ••••   |        |        |       |    |         |
|------------------|----------------------------------|---------|---------|---------|----|---------|-------|--------|--------|--------|-------|----|---------|
| LOCATION _CODE   |                                  | 35SUM   | 043     | 5801    |    | LH-S4   | 13-01 |        |        | LH-S-  | 13-01 | -  |         |
| SAMPLE_NO        |                                  | 35-SMP4 | 13-SB   | 01-02   |    | LH-\$43 | 3-01_ | 1      |        | LH-S4  | 3-01_ | 2  |         |
| SAMPLE_DATE      |                                  | 9/1     | \$/2006 | ;       |    | 6/26/   | 1993  |        |        | 6/26/  | 1993  |    |         |
| DEPTH            |                                  | 2.5     | 2.5 F   | ł       |    | .5 •    | 1 Ft  |        |        | 1,5 -  | 2 Ft  |    |         |
| SAMPLE PURPOSE   |                                  | ٤       | REG     |         |    | RE      | G     |        |        | RE     | G     |    |         |
| Test Group       | Parameter (Units ≃ mo/kg)        | Result  | DIL     | LQ      | VQ | Result  | DIL   | LQ     | VQ     | Result | OIL   | LQ | VQ      |
| VOLATILES        | 1.1-Dichloroethene               | 0.00523 | 1       | U       |    | 0.006   | 1     | <      | Ų      | 0.006  | 1     | <  | U       |
| VOLATILES        | 1.1-Dichloropropene              | 0.00523 | 1       | U       |    |         |       |        |        |        |       |    |         |
| VOLATILES        | 1.2.3-Trichlorobenzene           | 0.00523 | 1       | U       |    |         |       |        |        |        |       |    |         |
| VOLATILES        | 1.2.3-Trichloropropane           | 0.00523 | 1       | U       |    |         |       |        |        |        |       |    |         |
| VOI ATILES       | 1.2.4-Trichlorobenzene           | 0.00523 | 1       | U       |    |         |       |        |        |        |       |    |         |
| VOLATILES        | 1.2.4-Trimethylbenzene           | 0.00523 | 1       | U       |    |         |       |        |        |        |       |    |         |
| VOLATILES        | 1.2-Dibromo-3-chloropropane      | 0.00523 | 1       | U       |    |         |       |        |        |        |       |    |         |
| VOLATILES        | 1.2-Dibromoethane                | 0.00523 | 1       | U       |    |         |       |        |        |        |       |    |         |
| VOLATILES        | 1 2-Dichlorobenzene              | 0.00523 | 1       | Ű       |    |         |       |        |        |        |       |    |         |
| VOLATILES        | 1.2-Dichloroetbane               | 0.00523 | 1       | Ū       |    | 0.006   | 1     | <      | U      | 0.016  | 1     | <  | U       |
| VOLATILES        | 1.2-Dichlorgethene               | 0.00000 |         | -       |    | 0.006   | 1     | <      | Ū      | 0.006  | ï     | <  | U       |
| VOLATILES        | 1 2-Dichloropronane              | 0.00523 | 1       | U       |    | 0.006   | 1     | <      | U      | 0.006  | 1     | <  | U       |
| VOLATILES        | i 2-Dimethylhenzene (o-Xylene)   | 0.00523 | 1       | Ū       |    |         |       |        |        |        |       |    |         |
| VOLATILES        | 13.5-Trimethylbenzene            | 0.00523 | 1       | Ū       |    |         |       |        |        |        |       |    |         |
| VOLATILES        | 1.3-Dichlorohenzene              | 0.00523 | 1       | ŭ       |    |         |       |        |        |        |       |    |         |
| VOLATILES        | 1 3-Dichloropropage              | 0.00523 |         | ц       |    |         |       |        |        |        |       |    |         |
| VOLATILES        | 1.4-Dichloroheozene              | 0.00523 | ,<br>1  | , i     |    |         |       |        |        |        |       |    |         |
| VOLATILES        | 2 2 Dichleroprenane              | 0.00523 | ÷       | 11      |    |         |       |        |        |        |       |    |         |
| VOLATILEO        | 2 Subsens                        | 0.00020 | ÷       | 11      |    | 0.11    | •     |        | ш      | 0.12   | 1     | 2  | н       |
| VOLATILES        | 2-Otkarione                      | 0.0105  | ÷       | 11      |    | 0.11    | '     | `      | Ŭ      | 0.14   |       |    | 5       |
| VOLATILES        | 2-Chieroteliuona                 | 0.0103  | 4       | - 11    |    |         |       |        |        |        |       |    |         |
| VOLATILES        | 2 Hexanene                       | 0.00320 | 1       | ň       |    | 0.055   | 1     |        | п      | 0.058  | 1     | z  | 11      |
| VOLATILES        |                                  | 0.0100  | ÷       |         |    | 0.000   | ,     | •      | 0      | 0.000  |       |    | •       |
| VULATILES        | 4-Uniordioluerie                 | 0.00323 |         | - U     |    | 0.11    | ł     |        | н      | 0.12   | 1     |    | 11      |
| VOLATILES        | Acetone                          | 0.0105  |         | ų.      |    | 0.006   | ÷     | Ĵ      | ů.     | 0.02   | 1     | Ĵ  | ü       |
| VOLATILES        | Benzehe                          | 0.00523 |         | 11      |    | 0.000   | '     |        | Ŷ      | 0,000  | ,     | `  | 5       |
| VOLATILES        | Bioinopenzene                    | 0.00523 | 4       |         |    |         |       |        |        |        |       |    |         |
| VOLATILES        | Bromochioromenane                | 0.00523 | ÷       |         |    | 0.006   | •     |        | п      | 0.005  | 1     |    | н       |
| VOLATILES        | Bromooschoromenalie              | 0.00523 |         | - 11    |    | 0.000   |       | 2      | 11     | 0.000  |       | 2  | 1       |
| VOLATILES        | Bromolorin                       | 0.00323 | 4       |         |    | 0.000   | ÷     | 2      |        | 0.006  | 1     | 2  | ii ii   |
| VOLATILES        | Bromomenane<br>Oathan dissilleda | 0.0103  |         |         |    | 0.000   | ÷     | 2      | н      | 0,000  | 1     | Ì  | 11      |
| VOLATILES        | Garbon districte                 | 0.00523 | · · ·   | 0       |    | 0.006   | -     | Ĵ      | · 0    | 0.000  | ł     | Ì  | U U     |
| VOLATILES        | Carbon tetrachionide             | 0.00523 | 4       | 1       |    | 0.008   | 1     | Ì      | н      | 0.000  |       | Ì  | й<br>1  |
| VOLATILES        | Chlorobenzene                    | 0.00523 |         | U<br>11 |    | 0.006   | 4     | Ĵ      | 1      | 0.006  | 4     | 2  | ŭ       |
| VOLATILES        | Chloretrane                      | 0.0105  | 4       | 0       |    | 0.000   | 4     | Ĵ      | 11     | 0,000  | 4     | Ĵ  | ů.      |
| VOLATILES        | Chlorosoffi                      | 0.00523 | 4       |         |    | 0.000   | 4     | 2      |        | 0.000  | 1     | 2  | 1       |
| VOLATILES        |                                  | 0.0105  | 4       | U<br>U  |    | 0.006   | 1     | ¢      | 0      | 0.000  |       | `  | 0       |
| VOLANLES         | cis-1,2-Dichloroethene           | 0.00323 |         |         |    | 0.006   |       |        | н      | 0.004  | ,     |    | н       |
| VOLATILES        | cis-1,3-Dichioropropene          | 0.00523 |         | 0       |    | 0,005   |       | ۹<br>د | U U    | 0.000  | 1     | 2  |         |
| VOLATILES        | Dipromochioromethane             | 0.00523 |         | 0       |    | 0.000   | '     | •      | Ŷ      | 0.000  |       | `  | U       |
| VOLATILES        | Dibromomethane                   | 0.00523 |         |         |    |         |       |        |        |        |       |    |         |
| VOLATILES        | Dichlorodilluoromethane          | 0.0105  |         |         |    | 0.000   |       |        |        | 0.000  |       |    |         |
| VOLATILES        | Emyidenzene                      | 0.00523 | ) 1<br> | 0       |    | 0.006   | 1     | <      | U      | 0.000  | 1     | ¢  | U       |
| VOLATILES        | Hexachioroputadiene              | 0.00523 |         | U<br>0  |    |         |       |        |        |        |       |    |         |
| VOLATILES        | sopropyipenzene                  | 0.00523 | )  <br> | U<br>P  |    |         |       |        |        |        |       |    |         |
| VOLATILES        | m,p-xylenes                      | 0.00523 |         | 0       |    | 0.077   | 4     |        |        | 0.050  |       | ,  | П       |
| VOLATILES        | Metnyi isobutyi ketone           | 0,0105  | > 1     | 0       |    | 0.055   | 1     | <      | U<br>H | 0.000  |       | ٢. | U<br>II |
| VOLATILES        | Methylene chloride               | 0.00523 | 1       | Ų       |    | 0.006   | 1     | <      | Ų      | 0.000  |       | <  | U       |

Table 3-43 Concentrations of Chemicals in Soil Samples Associated with Sump 043

Shaw Environmental, Inc. 00066061

| Co               | oncentrations of Chemic   | als in Soil S | San               | ple       | es As | sociated | l w   | ith | Sum | np 043    |        |          |          |
|------------------|---------------------------|---------------|-------------------|-----------|-------|----------|-------|-----|-----|-----------|--------|----------|----------|
| (SUMP) = SUMP043 |                           | SECTIME       | 049.1             | 6901      |       | 18.8     | 19.01 |     |     | LĤ.S      | 43-01  |          |          |
| LOCATION CODE    |                           | 25 6404       | 10 00             | 0001      |       | LH-SA    | 2.01  | •   |     | 14.54     | 3.01   | 2        |          |
| SAMPLE_NU        |                           | 33*3IVIF4     | 1/2001            | uruz<br>s |       | 6/26/    | 1003  |     |     | 6/26      | /1993  | <u>,</u> |          |
| SAMPLE_DATE      |                           | 971-          | 472000<br>. 7 E E | 5<br>5+   |       | 5.       | 1 F)  |     |     | 15        | . 2 Ft |          |          |
|                  |                           | 2,3*          | 2.01              |           |       |          | 6     |     |     | R         | FG     |          |          |
| SAMPLE_PUHPUSE   | Basemeter (Light - malks) | Docuit        | nii               | 10        | VO    | Result   |       | ۱n  | VO  | Result    | ות     | 10       | VO       |
| Test Group       | Parameter (Units = mgrkg) |               | 1                 |           | 102   | Tibadii  |       |     |     | riodoli ( | 010    |          | <u> </u> |
| VOLATILES        | ivapntnalene              | 0.0105        |                   |           |       |          |       |     |     |           |        |          |          |
| VOLATILES        | n-BUTYLBENZENE            | 0.00523       | 1                 | U         |       |          |       |     |     |           |        |          |          |
| VOLATILES        | n-PROPYLBENZENE           | 0.00523       | 1                 | U         |       |          |       |     |     |           |        |          |          |
| VOLATILES        | p-ISOPROPYLTOLUENE        | 0.00523       | 1                 | U         |       |          |       |     |     |           |        |          |          |
| VOLATILES        | sec-BUTYL8ENZENE          | 0.00523       | 1                 | U         |       |          |       |     |     |           |        |          |          |
| VOLATILES        | Styrene                   | 0.00523       | 1                 | U         |       | 0.006    | 1     | <   | U   | 0.005     | \$     | <        | Ų        |
| VOLATILES        | tert-BUTYLBENZENE         | 0.00523       | 1                 | U         |       |          |       |     |     |           |        |          |          |
| VOLATILES        | Tetrachloroethene         | 0.00523       | 1                 | Ų         |       | 0.006    | 1     | <   | U   | 0.006     | 1      | <        | U        |
| VOLATILES        | Toluene                   | 0.00523       | 1                 | U         |       | 0.006    | 1     | <   | U   | 0.006     | 1      | <        | U        |
| VOLATILES        | trans+1.2-Dichloroethene  | 0,00523       | 1                 | U         |       |          |       |     |     |           |        |          |          |
| VOLATILES        | trans-1,3-Dichloropropene | 0.00523       | 1                 | U         | UJ    | 0.006    | 1     | <   | U   | 0.006     | 1      | <        | U        |
| VOLATILES        | Trichlorosthene           | 0.00523       | 1                 | U         |       | 0.006    | 1     | <   | U   | 0.006     | 1      | <        | U        |
| VOLATILES        | Trichlorofluoromethane    | 0.0105        | 1                 | U         |       |          |       |     |     |           |        |          |          |
| VOLATILES        | Vinyl acetate             | 0.0105        | 1                 | U         |       |          |       |     |     |           |        |          |          |
| VOLATILES        | Vinyl chloride            | 0.0105        | 1                 | U         |       | 0.006    | 1     | <   | U   | 0.006     | 1      | <        | U        |
| VOLATILES        | Xylenes, Total            | ļ             |                   |           |       | 0.006    | 1     | <   | U   | 0.006     | 1      | <        | U        |

Table 3-43 oncentrations of Chemicals in Soil Samples Associated with Sump 043

Footnotes are shown on cover page to Tables Section.

a company and a construction of the company and the construction of the second s



| Table 3-44   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 044 |

| [SUMP] = SUMP044<br>1.OCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                             | 35SL<br>35-SH | JMP044-1<br>MP44-SB<br>9/15/2006<br>S - S FI | 5801<br>01-02<br>5 | i<br>L | H-DL44<br>H-DL44<br>7/10/199<br>2.1 - 2.8 | -01<br>-01<br>93<br>F1 |    | i<br>Li | .H-S44-0<br>1-S44-0<br>7/10/19<br>.5 - 1.5 | -01<br>)1_1<br>93<br>Ft |    | L<br>LH | H-S44-0<br> -S44-01<br>7/10/199<br>4 • 4.7 F | 01<br>2<br>3<br>1 |    | U<br>LH<br>7<br>7 | H-\$44-0<br> -\$44-0<br>1/10/199 | 01<br>1_3<br>03<br>Ft |    | ւ<br>Մ | H-544-()<br>I-S44-0)<br>7/11/199<br>5 - 1.5 F | 02<br>2_1<br>93<br>Fl |    | LH-<br>LH-<br>7/<br>4 | I-S44-02<br>S44-02_<br>11/1993<br>- 4.7 Ft | 2    |          | LH-S<br>LH-S4<br>7/11,<br>7.7 | 44-02<br>4-02_3<br>1993<br>8.3 F1 |       |
|---|-----------------------------|---------------|--|--------------------|--------|---|------------------------|----|---------|--|-------------------------|----|---------|--|-------------------|----|-------------------|----------------------------------|-----------------------|----|--------|---|-----------------------|----|-----------------------|--|------|----------|-------------------------------|-----------------------------------|-------|
| SAMPLE, PURPOSE   |                             |               | REG  |                    |        | REG                                       |                        |    |         | REG  |                         |    |         | REG  |                   |    |                   | REG                              |                       |    |        | REG   |                       |    |                       | REG  |      |          | R                             | G                                 |       |
| Test Group  | Parameter (Units = mg/kg)   | Result        | DIL  | LO VQ              | Result | ÐIL                                       | 10                     | VQ | Result  | DIL  | LO                      | VQ | Result  | DIL  | LO                | VQ | Result            | DIL                              | LQ                    | ٧Q | Result | DIL   | LQ                    | VQ | Result                | DIL L                                      | Q VC | > Res    | uli Di                        | L LQ                              | VQ    |
| EXPLOSIVES  | 2,4-Dinitrololuene          |               |  |                    | 0.33   | 1   | <                      | U  | 0.33    | 1  | <                       | U  | 0.33    | 1  | <                 | U  | 0.33              | 1                                | <                     | Ų  | 0.33   | 1   | <                     | Ų  | 0.33                  | 1  | < Ų  | 0.3      | 3 1                           | <                                 | υ     |
| EXPLOSIVES  | 2,6-Dinitrololuene          |               |  |                    | 0.33   | 1   | <                      | U  | 0.33    | 1  | ۲                       | U  | 0.33    | 1  | <                 | U  | 0.33              | 1                                | <                     | U  | 0.33   | 1   | <                     | U  | 0.33                  | 1  | < U  | 0.3      | 3 1                           | <                                 | ŭ     |
| METALS  | Aluminum                    |               |  |                    | 9300   | 1   |                        |    | 6520    | 1  |                         |    | 8810    | 1  |                   |    | 1960              | 1                                |                       |    | 8510   | 1   |                       |    | 13000                 | 1  |      | 462      | 20 1                          |                                   |       |
| METALS  | Antimony                    |               |  |                    | 3      | 1   | ¢                      | U  | 3       | 1  | <                       | υ  | 3       | 1  | <                 | U  | 3                 | 1                                | <                     | υ  | 3      | 1   | <                     | υ  | 3                     | 1  | < U  | Э        | 1                             | <                                 | Ų     |
| METALS  | Arsenic                     |               |  |                    | 1      | 1   | <                      | U  | 1.6     | 1  |                         |    | 2.5     | 1  |                   |    | 1                 | 1                                | <                     | U  | 1      | 1   | <                     | U  | 1.4                   | 1  |      | 1        | 1                             | <                                 | U     |
| METALS  | Barium                      |               |  |                    | 35.5   | 1   |                        |    | 72.9    | 1  |                         |    | 44.6    | 1  |                   |    | 13.6              | 1                                |                       |    | 63.5   | 1   |                       |    | 72.5                  | 1  |      | 23       | 5 1                           |                                   |       |
| METALS  | Cadmium                     |               |  |                    | ł      | 1   | <                      | U  | 1       | 1  | ۲                       | U  | 1       | 1  | <                 | U  | 1                 | 1                                | <                     | U  | 1      | ែ   | ۲                     | U  | 1                     | 1  | < U  | 1        | 1                             | <                                 | u     |
| METALS  | Calcium                     |               |  |                    | 1160   | 1   |                        |    | 1890    | 1  |                         |    | 439     | 1  |                   |    | 153               | 1                                |                       |    | 841    | 1   |                       |    | 568                   | 1  |      | 17       | 8 1                           |                                   |       |
| METALS  | Chromium                    |               |  |                    | 10.5   | 1   |                        |    | 7.6     | 1  |                         |    | 12.8    | 1  |                   |    | 2.4               | 1                                |                       |    | 9.2    | 1   |                       |    | 12.7                  | ٤  |      | 4,       | 6 1                           |                                   |       |
| METALS  | Coball                      |               |  |                    | 4.5    | 1   |                        |    | 7.9     | 1  |                         |    | 4       | 1  |                   |    | 1                 | 1                                | <                     | U  | 4.3    | 1   |                       |    | <b>6</b> .1           | 1  |      | 1        |                               |                                   |       |
| METALS  | Copper                      |               |  |                    | 4.8    | 1   |                        |    | 3.8     | 1  |                         |    | 3       | 1  |                   |    | 1                 | 1                                | ۲                     | U  | 4      | 1   |                       |    | 4,7                   | 1  |      | 1        |                               |                                   |       |
| METALS  | iran                        |               |  |                    | 14100  | 1   |                        |    | 11500   | 1  |                         |    | 17500   | 1  |                   |    | 3490              | 1                                |                       |    | 9120   | 1   |                       |    | 15900                 | 1  |      | 38       | 50 ·                          |                                   |       |
| METALS  | Lead                        |               |  |                    | 7.3    | 1   |                        |    | 8       | t  |                         |    | 8.5     | 1  |                   |    | 3.9               | 1                                |                       |    | 1      | 1   | <                     | U  | 8.2                   | 1  |      | З.       | 8 .                           |                                   |       |
| METALS  | Magnesium                   |               |  |                    | 685    | t   |                        |    | 573     | 1  |                         |    | 421     | 1  |                   |    | 127               | 1                                |                       |    | 711    | 1   |                       |    | 992                   | 1  |      | 28       | 1                             |                                   |       |
| METALS  | Manganese                   |               |  |                    | 43.6   | 1   |                        |    | 79.8    | 1  |                         |    | 159     | 1  |                   |    | 14.1              | 1                                |                       |    | 33     | 1   |                       |    | 159                   | 1  |      | 25       | .5                            |                                   |       |
| METALS  | Mercury                     |               |  |                    | 0.1    | 1   | <                      | U  | 0.1     | 1  | <                       | U  | 0.1     | 1  | <                 | U  | 0.1               | 1                                | <                     | U  | 0.1    | 1   | <                     | U  | 0.1                   | 1  | < U  | 0.       | 1                             | <                                 | U     |
| METALS  | Polassium                   |               |  |                    | 418    | 1   |                        |    | 359     | 1  |                         |    | 373     | 1  |                   |    | 90.7              | ٢                                |                       |    | 432    | 1   |                       |    | 430                   | 1  |      | 21       | 7                             |                                   |       |
| METALS  | Selenium                    |               |  |                    | t      | 1   | <                      | U  | 1       | 1  | <                       | U  | 1       | 1  | <                 | U  | i                 | 1                                | ~                     | Ų  | 1      | 1   | <                     | U  | 1                     | 1  | < t  | 1        |                               | <                                 | Ų     |
| METALS  | Silver                      |               |  |                    | 1      | 1   | <                      | U  | 1       | 1  | ۲                       | U  | 1       | 1  | <                 | U  | 1                 | 1                                | <                     | U  | ۱      | 1   | <                     | U  | t                     | 1  | < L  | 1        |                               | i <                               | ų     |
| METALS  | Strontlum                   |               |  |                    | 14.3   | 1   |                        |    | 17.6    | 1  |                         |    | 6.3     | 1  |                   |    | 1,9               | 1                                |                       |    | 11.8   | 1   |                       |    | 12                    | 1  |      | 2.       | 9                             | 1                                 |       |
| METALS  | Zinç                        |               |  |                    | 30.3   | 1   |                        |    | 23.7    | 1  |                         |    | 21.9    | 1  |                   |    | 6.7               | 1                                |                       |    | 22.9   | 1   |                       |    | 26.4                  | 1  |      | 7.       | 1                             | 1                                 |       |
| PERC  | Perchlorate                 | 0.02          | 5  | Ų                  |        |   |                        |    |         |  |                         |    |         |  |                   |    |                   |                                  |                       |    |        |   |                       |    |                       |  |      |          |                               |                                   |       |
| SEMIVOLATILES   | 1,2,4-Trichlorobenzene      |               |  |                    | 0.33   | 1   | <                      | U  | 0.33    | t  | <                       | U  | 0.33    | 1  | <                 | Ų  | 0.33              | 1                                | <                     | U  | 0.33   | 1   | <                     | U  | 0.33                  | 1  | < ل  | 0.       | 33                            | <                                 | U     |
| SEMIVOLATILES   | 1.2-Dichlorobenzene         |               |  |                    | 0.33   | 1   | ~                      | U  | 0.33    | 1  | <                       | U  | 0.33    | 1  | <                 | Ų  | 0.33              | t                                | <                     | U  | 0.33   | 1   | <                     | U  | 0.33                  | 1  | < 1  | 0.       | 33                            | 1 <                               | U     |
| SEMIVOLATILES   | 1.3-Dichlorobenzene         |               |  |                    | 0.33   | \$  | <                      | U  | 0.33    | 1  | <                       | U  | 0.33    | 1  | ۲                 | U  | 0.33              | 1                                | ۲                     | Ų  | 0.33   | 1   | ۲                     | U  | 0.33                  | ١  | < (  | J Q.     | 33                            | 1 <                               | U     |
| SEMIVOLATILES   | 1,4-Dichlorobenzene         |               |  |                    | 0.33   | 1   | ۲                      | U  | 0.33    | 1  | <                       | U  | 0.33    | 1  | ۲                 | U  | 0.33              | 1                                | ۲                     | U  | 0.33   | 1   | <                     | U  | 0.33                  | ;  | < L  | 0.       | 33                            | 1 <                               | U     |
| SEMIVOLATILES   | 2.4.5-Trichlorophenol       |               |  |                    | 1.65   | ١   | <                      | U  | 1.85    | 1  | <                       | U  | 1.65    | 1  | ۲                 | U  | 1.65              | 1                                | <                     | U  | 1.65   | 1   | <                     | U  | 1.65                  | 1  | < i, | ) 1.     | 65                            | 1 <                               | U     |
| SEMIVOLATILES   | 2,4,6-Trichlorophenal       |               |  |                    | 0.33   | 1   | <                      | U  | 0.33    | 1  | <                       | U  | 0.33    | 1  | <                 | Ų  | 0,33              | 1                                | <                     | U  | 0.33   | 1   | <                     | Ų  | 0.33                  | 1  | < (  | 0.       | 33                            | 1 <                               | U     |
| SEMIVOLATILES   | 2,4-Dichlarophenol          |               |  |                    | 0.33   | 1   | <                      | υ  | 0.33    | 1  | <                       | ប  | 0.33    | 1  | <                 | U  | 0.33              | 1                                | <                     | บ  | 0.33   | 1   | <                     | U  | 0.33                  | 1  | < L  | 0.       | 33                            | 1 <                               | U     |
| SEMIVOLATILES   | 2,4-Dimethylphenol          |               |  |                    | 0.33   | 1   | <                      | υ  | 0.33    | 1  | <                       | U  | 0.33    | 1  | <                 | U  | 0.33              | 1                                | <                     | U  | 0.33   | 1   | <                     | Ų  | 0.33                  | 1  | < 1  | J 0.     | 33                            | <                                 | U     |
| SEMIVOLATILES   | 2,4-Dinitrophenol           |               |  |                    | 1.65   | 1   | <                      | U  | 1.65    | 1  | ۲                       | U  | 1.65    | 1  | ۲                 | U  | 1.65              | 1                                | <                     | U  | 1.65   | \$  | <                     | U  | 1.65                  | 1  | < 1  | ) 1.     | 55                            | <                                 | U     |
| SEMIVOLATILES   | 2-Chloronaphthalene         |               |  |                    | 0.33   | 1   | <                      | U  | 0.33    | f  | <                       | Ų  | 0.33    | 1  | ۲                 | Ų  | 0.33              | 1                                | <                     | U  | 0.33   | 1   | ۲                     | U  | 0.33                  | 1  | < ل  | J 0.     | 33                            | ۲ <b>۲</b>                        | Ų     |
| SEMIVOLATILES   | 2-Chlorophenol              | ł             |  |                    | 0.33   | 1   | <                      | U  | 0.33    | 1  | <                       | Ų  | 0.33    | 1  | <                 | U  | 0.33              | 1                                | <                     | U  | 0.33   | 1   | ۲                     | U  | 0.33                  | 1  | < (  | 0.       | 33                            | 1 <                               | U     |
| SEMIVOLATILES   | 2-Methylnaphthalene         | 1             |  |                    | 0.33   | 1   | <                      | U  | 0.33    | រ  | <                       | U  | 0.33    | 1  | <                 | U  | 0.33              | 1                                | <                     | U  | 0.33   | 1   | <                     | U  | 0.33                  | 1  | < (  | ) 0.     | 33                            | < ۱                               | U     |
| SEMIVOLATILES   | 2-Methylphenol              | }             |  |                    | 0.33   | 1   | <                      | IJ | 0.33    | i  | <                       | Ð  | 0.33    | 1  | <                 | U  | 0,33              | 1                                | <                     | Ų  | 0.33   | 1   | <                     | U  | 0.33                  | ł  | < L  | J 0.     | 33                            | + <                               | U     |
| SEMIVOLATILES   | 2-Nitroaniline              |               |  |                    | 1.65   | 1   | <                      | U  | 1.65    | 1  | <                       | U  | 1.65    | 1  | ۲                 | U  | 1,65              | 1                                | ۲                     | U  | 1.65   | 1   | <                     | U  | 1.65                  | 1  | < L  | 1.       | 65                            | 1 <                               | 0     |
| SEMIVOLATILES   | 2-Nilrophenol               |               |  |                    | 0.33   | 1   | ۲                      | U  | 0,33    | 1  | <                       | U  | 0,33    | 1  | ۲                 | U  | 0.33              | 1                                | <                     | U  | 0.33   | 1   | <                     | U  | 0.33                  | 1  | < (  | , Q.     | 33                            | 1 <                               |       |
| SEMIVOLATILES   | 3.3'-Dichlorobenzidine      |               |  |                    | 0.65   | \$  | <                      | Ų  | 0.65    | 1  | <                       | Ų  | 0.65    | 1  | <                 | ប  | 0,65              | 1                                | <                     | U  | 0.65   | 1   | ۲                     | U  | 0.65                  | 1  | < L  | ) O.     | 65<br>                        | 1 <                               | U     |
| SEMIVOLATILES   | 3-Nitroaniline              |               |  |                    | 1.65   | 1   | ۲                      | Ų  | 1,65    | 1  | <                       | U  | 1.85    | 1  | ۲                 | U  | 1,65              | 1                                | <                     | υ  | 1,65   | 1   | ۲                     | Ų  | 1.65                  | 1  | < (  | ) 1.<br> | 65                            | 1 <                               |       |
| SEMIVOLATILES   | 4.6-Dinitro-2-methylphenol  |               |  |                    | 1.65   | 1   | ۲                      | U  | 1,65    | 1  | <                       | U  | 1.65    | 1  | <                 | U  | 1.65              | 1                                | <                     | υ  | 1.65   | 1   | <                     | U  | 1.65                  | 1  | < (  | ) 1.     | 65                            | 1 <                               | U     |
| SEMIVOLATILES   | 4-Bromophanyl phenyl eiher  |               |  |                    | 0.33   | 1   | <                      | U  | 0.33    | 1  | <                       | U  | 0.33    | 1  | <                 | U  | 0.33              | 1                                | <                     | U  | 0.33   | 1   | <                     | U  | 0.33                  | 1  | < 1  | J 0.     | 33                            | 1 <                               | 0     |
| SEMIVOLATILES   | 4-Chloro-3-methylphenol     | ļ             |  |                    | 0.65   | 1   | ۲                      | U  | 0.65    | 1  | <                       | U  | 0.65    | 1  | <                 | U  | 0,65              | 1                                | <                     | U  | 0,65   | 1   | <                     | U  | 0.65                  | 1  | < 1  | ) 0.     | 65                            | 1 <                               | U     |
| SEMIVOLATILES   | 4-Chioroaniline             | {             |  |                    | 0.65   | 1   | ۲                      | U  | 0.65    | f  | *                       | IJ | 0.65    | 1  | <                 | U  | 0.65              | 1                                | <                     | U  | 0.65   | 1   | ۲                     | U  | 0.65                  | 1  | < 1  | J 0.     | 65                            | × ۱                               | U     |
| SEMIVOLATILES   | 4-Chiarophenyl phenyl ether | {             |  |                    | 0.33   | 1   | <                      | Ų  | 0.33    | 1  | <                       | U  | 0.33    | 1  | <                 | U  | 0.33              | i                                | <                     | U  | 0.33   | 1   | <                     | U  | 0.33                  | 1  | < (  | J 0.     | 33                            | ۲ ۲                               | u     |
| SEMIVOLATILES   | 4-Methylphenol              | 1             |  |                    | 0.33   | 1   | <                      | U  | 0.33    | រ  | ۲                       | U  | 0.33    | 1  | <                 | U  | 0.33              | 1                                | <                     | U  | 0.33   | 1   | <                     | U  | 0.33                  | 1  | < 1  | J 0.     | 33                            | 1 <                               | U     |
| SEMIVOLATILES   | 4-Nitroaniline              |               |  |                    | 1.65   | 1   | <                      | U  | 1.65    | 1  | <                       | Ų  | 1,65    | 1  | <                 | U  | 1.65              | 1                                | <                     | υ  | 1.65   | 1   | ۲                     | υ  | 1.65                  | 1  | < 1  | J 1.     | 65                            | 1 <                               | U     |
| SEMIVOLATILES   | 4-Nilrophenol               |               |  |                    | 1.65   | 1   | ۲                      | Ų  | 1.65    | 1  | ć                       | U  | 1.65    | 1  | ۲                 | U  | 1.65              | 1                                | <                     | U  | 1.65   | 1   | <                     | ប  | 1.65                  | 1  | < (  | J 1.     | 65<br>                        | 1 <                               | U<br> |
| SEMIVOLATILES   | Acenaphihena                |               |  |                    | 0.33   | 1   | <                      | Ų  | 0.33    | 1  | ۲                       | U  | 0.33    | 1  | <                 | U  | 0.33              | 1                                | <                     | U  | 0.33   | 1   | <                     | U  | 0.33                  | 1  | < 1  | J 0.     | 33                            | 1 <                               | U     |
| SEMIVOLATILES   | Acenaphihylene              | 1             |  |                    | 0.33   | 1   | ۲                      | U  | 0.33    | 1  | ۲                       | U  | 0,33    | 1  | <                 | U  | 0.33              | \$                               | <                     | U  | 0.33   | 1   | <                     | U  | 0.33                  | 1  | < 1  | J 0.     | 33                            | } <                               | U     |
| SEMIVOLATILES   | Anthracene                  | }             |  |                    | 0.33   | 1   | <                      | U  | 0.33    | i  | <                       | u  | 0.33    | 1  | <                 | U  | 0.33              | 1                                | <                     | U  | 0.33   | 1   | <                     | U  | 0.33                  | 1  | <    | .0 L     | 33                            | 1 <                               | U     |
| SEMIVOLATILES   | Benzo(a)anthracene          | 1             |  |                    | 0.33   | 1   | <                      | u  | 0.33    | 1  | <                       | U  | 0.33    | 1  | <                 | U  | 0.33              | 1                                | ۲                     | U  | 0.33   | 1   | <                     | U  | 0.33                  | 1  | < 1  | J 0.     | 33                            | 1 <                               | U     |

### Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-44  | · .   |
|---|-------|
| Concentrations of Chemicals in Soil Samples Associated with Sum | o 044 |

| (SUMP) = SUMP044<br>LOCATION_CODE |                             | 355    | UMP044-S  | B01  | ł      | H-DL44  | -01        |    | 1      | .H-S44-  | 01       |       | LH     | 1-S44-0<br>S44-01 | ۱<br>2 |         | រ<br>អេ | H-S44-0 | 01<br>1_3 |        | СН     | 1-S44-0<br>S44-02 | )2<br>2_1 |        | ىن<br>رىب | -544-02<br>544-02_ | 2           |        | ւ։<br>Լ։։ | 1-544-02<br>•544-02_ | 3        |         |
|-----------------------------------|-----------------------------|--------|-----------|------|--------|---------|------------|----|--------|----------|----------|-------|--------|-------------------|--------|---------|---------|---------|-----------|--------|--------|-------------------|-----------|--------|-----------|--------------------|-------------|--------|-----------|----------------------|----------|---------|
| SAMPLE_NO                         |                             | 33-01  | 0/15/2006 | 1.02 |        | 7/10/19 | a <b>1</b> |    | 2,     | 7/10/19  | 93       |       | 7      | /10/1993          | 3      |         | 7       | /10/199 | 3         |        | 7      | 11/199            | 3         |        | 7/        | 11/1993            |             |        | 7/        | 11/1993              |          |         |
| SAMPLE_DATE                       |                             |        | 5 - 5 FI  |      |        | 21.28   | .~<br>F)   |    |        | .5 • 1.5 | <br>F1   |       | 4      | - 4.7 FI          |        |         | 7       | 9 - 8.6 | FI        |        |        | 5 • 1.5 F         | t         |        | 4         | - 4,7 Ft           |             |        | 7.        | 7 - 8.3 FI           | 1        |         |
|                                   |                             |        | REG       |      |        | REG     |            |    |        | REG      |          |       |        | REG               |        |         |         | REG     |           |        |        | REG               |           |        |           | REG                |             |        |           | REG                  |          |         |
| SAMPLE_PUHPUSE                    | Parameter (Linits ~ mg/kg)  | Result | DIL L     | ο νο | Result | DIL     | LQ         | vo | Result | DIL      | LQ       | VQ    | Result | DIL               | ια     | va      | Result  | DIL     | LQ        | vo     | Result | DIL               | LQ        | VQ     | Result    | DIL L              | <u>.a v</u> | IQ I   | Result    | DIL                  |          | 10      |
| SEMIVOLATILES                     | Benzo(a)ovrebe              |        |           |      | 0.33   | 1       | <          | U  | 0.33   | t        | <        | U     | 0.33   | 1                 | <      | U       | 0.33    | 1       | <         | U      | 0.33   | 1                 | <         | U      | 0.33      | 1                  | < )         | U      | 0.33      | 1                    | <        | Ų       |
| SEMIVOLATILES                     | Benzo(b)(luoranthene        |        |           |      | 0.33   | 1       | <          | U  | 0.33   | 1        | <        | U     | 0.33   | 1                 | <      | U       | 0.33    | 1       | <         | U      | 0.33   | 1                 | <         | U      | 0.33      | 1                  | <           | U      | 0.33      | 1                    | <        | U       |
| SEMIVOLATILES                     | Benzo(chilperviene          |        |           |      | 0.33   | ł       | <          | u  | 0.33   | 1        | <        | U     | 0.33   | 1                 | ۲      | U       | 0.33    | 1       | <         | U      | 0.33   | 1                 | <         | U      | 0.33      | 1                  | <           | U      | 0.33      | 1                    | < '      | U       |
| SEMIVOLATILES                     | Benzo(k)liuoranthene        |        |           |      | 0.33   | 1       | <          | U  | 0.33   | 1        | <        | U     | 0.33   | 1                 | <      | U       | 0.33    | 1       | <         | U      | 0.33   | 1                 | <         | υ      | 0.33      | 1                  | < ۲         | Ų      | 0.33      | 1                    | <        | U       |
| SEMIVOLATILES                     | Benzoic Acid                |        |           |      | 1.65   | 1       | <          | υ  | 1.65   | 1        | <        | U     | 1.65   | 1                 | <      | U       | 1.65    | 1       | ۲         | U      | 1.65   | 1                 | <         | ម      | 1.65      | 1                  | <           | U      | 1.65      | 1                    | <        | U       |
| SEMIVOLATILES                     | Benzyl Akohol               |        |           |      | 0.65   | 1       | <          | υ  | 0.65   | 1        | ۲        | U     | 0.65   | 1                 | <      | Ú       | 0.65    | 1       | <         | V      | 0.65   | 1                 | <         | U      | 0.65      | 1                  | <           | U      | 0.65      | 1                    | <        | U.      |
| SEMIVOLATILES                     | bis(2 Chloroethoxy)mathane  |        |           |      | 0.33   | 1       | <          | U  | 0.33   | 1        | <        | υ     | 0.33   | 1                 | <      | Ų       | 0.33    | 1       | <         | U      | 0.33   | 1                 | ۲         | U      | 0.33      | 1                  | <           | ų<br>  | 0.33      | 1                    | <        | U<br>U  |
| SEMIVOLATILES                     | bis{2-Chioroethyl}ether     |        |           |      | 0.33   | 1       | <          | U  | 0.33   | 1        | <        | Ų     | 0.33   | 1                 | <      | U       | 0.33    | 1       | <         | U      | 0.33   | 1                 | <         | U      | 0.33      | 1                  | <           | 0      | 0.33      | 1                    | <        |         |
| SEMIVOLATILES                     | bis(2-Chloroisopropyl)ether |        |           |      | 0.33   | 1       | ۲          | U  | 0.33   | 1        | <        | ບ     | 0.33   | 1                 | <      | U       | 0.33    | 1       | ۲         | U      | 0.33   | 1                 | <         | U      | 0,33      | 1                  | <           | 0      | 0.33      | 1                    | <        | 11      |
| SEMIVOLATILES                     | bis(2-Ethylhexyl)phthalate  |        |           |      | 0.33   | 1       | <          | U  | 0.33   | ۱        | <        | Ų     | 0.33   | 1                 | <      | Ų       | 0.33    | 1       | <         | U      | 0.33   | 1                 | <         | 0      | 0.33      | 1                  | <           | u<br>  | 0.33      |                      | Ś        |         |
| SEMIVOLATILES                     | Butyi benzyi phihalate      |        |           |      | 0.33   | 1       | <          | Ų  | 0.33   | 1        | ۲        | U     | 0.33   | 1                 | <      | U       | 0.33    | 1       | <         | U      | 0,33   | 1                 | <         |        | 0.33      |                    | ŝ           | U<br>N | 0.33      | ÷                    | 2        | n       |
| SEMIVOLATILES                     | Chrysene                    |        |           |      | 0.33   | 1       | <          | U  | 0.33   | 1        | <        | U     | 0.33   | 1                 | <      | Ų       | 0.33    | 1       | <         | U      | 0.33   | 1                 | <         | 0      | 0.33      | ,<br>,             | •           |        | 0.33      |                      | 2        | ň       |
| SEMIVOLATILES                     | Dibenzo(a.h)anthracene      |        |           |      | 0.33   | 1       | <          | U  | 0.33   | 1        | <        | U     | 0,33   | 1                 | <      | U<br>   | 0.33    | 1       | <         | U      | 0.33   |                   | <         |        | 0.33      |                    | 2           | ŭ      | 0.00      | 1                    | 2        | й<br>П  |
| SEMIVOLATILES                     | Dibenzafuran                | ļ      |           |      | 0.33   | 1       | <          | υ  | 0.33   | 1        | <        | U     | 0.33   | 1                 | <      | U       | 0.33    | 1       | <         | U<br>  | 0.33   | 1                 | <         | 0      | 0.33      | 1                  |             | 11     | 0.00      | 1                    | 2        | u .     |
| SEMIVOLATILES                     | Diethyl phthalate           |        |           |      | 0.33   | 1       | <          | u  | 0.33   | 1        | <        | U     | 0,33   | 1                 | <      | 0       | 0.33    | 1       | <         | U      | 0.33   | 1                 | <         |        | 0.33      | 1<br>†             | 2           | U<br>H | 0.33      | 1                    | Ì.       | ы<br>U  |
| SEMIVOLATILES                     | Dimethyl phthalate          |        |           |      | 0.33   | 1       | <          | U  | 0.33   | 1        | <        | U     | 0.33   | 1                 | <      | U.      | 0.33    | 1       | ۲         | Ų<br>u | 0.00   |                   | 5         |        | 0.00      | ,<br>t             | 2           | ň      | 0.33      | 1                    | ż        | ů       |
| SEMIVOLATILES                     | di-n-Butyl phthalate        |        |           |      | 0.33   | 1       | <          | U  | 0.33   | 1        | <        | 0     | 0.33   | 1                 | <      |         | 0.33    | 1       | <u>ڊ</u>  | 11     | 0.33   | :                 | 2         | tr     | 0.33      | 1                  | 2           | ň      | 0.33      | 1                    | ÷        | Ű       |
| SEMIVOLATILES                     | di-n-Octyl phihalate        |        |           |      | 0.33   | 1       | <          | U  | 0.33   | 1        | <        | U     | 0.33   | 1                 | <      | 0       | 0.33    | 1       | š.        | И      | 0.33   | 1                 | Ĵ         | н<br>Н | 0.00      | 1                  | 2           | 0      | 0.33      | 1                    | ÷.       | Ð       |
| SEMIVOLATILES                     | Fluoranthene                |        |           |      | 0.33   | 1       | <          | 0  | 0.33   | 1        | <        | υ     | 0,33   | 1                 | <      |         | 0.33    | +       | Ś         |        | 0.33   | 1                 | 2         |        | 0.33      | 1                  | è           | ü      | 0.33      | 1                    | <        | Ũ       |
| SEMIVOLATILES                     | Fluorene                    |        |           |      | 0.33   | 1       | <          | U  | 0.33   | 1        | <        | U<br> | 0.33   |                   | <      | U<br>11 | 0.33    | 1       | 5         |        | 0.00   |                   | 2         | л<br>П | 0.33      | 1                  | ž           | ม่     | 0.33      | 1                    | <        | Ū.      |
| SEMIVOLATILES                     | Hexachlorobenzene           | 1      |           |      | 0.33   | 1       | <          | Ų  | 0.33   | 1        | ¢        | 0     | 0.33   | -                 | ۲      | 11      | 0.33    |         | 5         |        | 0.33   | i                 | 2         | ü      | 0.33      | 5                  | ž           | ŭ      | 0.33      | 1                    | <        | Ŭ       |
| SEMIVOLATILES                     | Hexachlorobuladiene         |        |           |      | 0.33   | ł       | <          | 0  | 0.33   | 1        | ٠        | 0     | 0.33   | ;                 | š.     | Ц       | 0.00    |         |           | ů.     | 0.33   | 1                 |           |        | 0.33      | 1                  | 4           | υ      | 0.33      | 1                    | <        | Ū       |
| SEMIVOLATILES                     | Rexachlorocyclopentadiene   |        |           |      | 0.33   | }       | <          | 0  | 0.33   | 2        | <u>د</u> |       | 0.33   | 4                 |        | N N     | 0.33    |         | 2         | 11     | 0.00   | 1                 | 2         | Ū.     | 0.33      | 1                  | ż           | Ū      | 0.33      | 1                    | <        | Ú       |
| SEMIVOLATILES                     | Hexachloroelhane            |        |           |      | 0.33   | 2       | ~          | 0  | 0.33   | 1        | <        | 11    | 0.33   |                   |        |         | 0.33    | ł       | Ì         | ŭ      | 0.33   | i                 | ż         | Ū.     | 0.33      | 1                  | ÷           | Ű      | 0.33      | 1                    | <        | U       |
| SEMIVOLATILES                     | Indeno(1.2,3-cd)pyrane      |        |           |      | 0.33   |         | <          | 11 | 0.33   | 4        | <        | 11    | 0.33   | 1                 | -      | ň       | 0.33    | 1       | Ì         | ŭ      | 0.33   | 1                 | č         | Ű      | 0.33      | 1                  | <           | Ū      | 0.33      | 1                    | <        | U       |
| SEMIVOLATILES                     | Isophorone                  | ł      |           |      | 0.33   | 1       | ٠<br>•     |    | 0.33   | ,        | È        |       | 0.00   | i                 | 2      | ŭ       | 0.33    | 1       | ż         | Ű      | 0.33   | 1                 | <         | Ű      | 0.33      | 1                  | ۲           | U      | 0.33      | 1                    | <        | Ų       |
| SEMIVOLATILES                     | Naphthalene                 |        |           |      | 0.00   | ÷       |            |    | 6.33   | ÷        | 2        | й     | 0.00   | 1                 | Ż      | ŭ       | 0.33    | i       | ć         | Ū      | 0.33   | 1                 | <         | Ű      | 0.33      | 1                  | ۲.          | U      | 0.33      | 1                    | ٢        | U       |
| SEMIVOLATILES                     |                             |        |           |      | 0.00   | į.      |            |    | 0.00   | -        | Ż        | ň     | 0.33   | 1                 | ż      | ŭ       | 0.33    | 1       | <         | Ű      | 0.33   | 1                 | <         | υ      | 0.33      | 1                  | <           | U      | 0.33      | 1                    | ۲        | U       |
| SEMIVOLATILES<br>CENINOLATILES    | n-nitroso-ol-n-propyiamine  |        |           |      | 0.33   | 1       | Ż          | ŭ  | 0.33   | 1        | <        | Ŭ     | 0.33   | f                 | ۲      | Ū       | 0.33    | 1       | ۲         | Ú      | 0.33   | 1                 | <         | U      | 0.33      | 1                  | <           | U      | 0.33      | 1                    | <        | U       |
| SEMIVOLATILES                     | Bostocklerenhenel           |        |           |      | 1.65   | 1       | ė          | ŭ  | 1.65   | 1        | <        | บ     | 1.65   | 1                 | <      | U       | 1.65    | 1       | ~         | U      | 1.65   | 1                 | <         | U      | 1.65      | 1                  | <           | U      | 1.65      | 1                    | <        | U       |
| SEMIVOLATILES                     | Phononibrane                | Į      |           |      | 0.33   | 1       | ج          | u  | 0.33   | t        | <        | Ŭ     | 0.33   | 1                 | <      | U       | 0.33    | 1       | <         | U      | 0.33   | í                 | ۲         | U      | 0.33      | 1                  | <           | U      | 0.33      | 1                    | <        | ប       |
| SEMPOLATILES                      | Phanol                      | 1      |           |      | 0.33   | 1       | ~          | Ū  | 0.33   | 1        | ć        | U     | 0.33   | 1                 | <      | U       | 0.33    | 1       | <         | U      | 0.33   | 1                 | <         | Ų      | 0.33      | 1                  | <           | U      | 0.33      | 1                    | ۲        | U       |
| SEMIVOLATILES                     | Pyrene                      |        |           |      | 0.33   | 1       | <          | U  | 0.33   | 1        | <        | U     | 0.33   | 1                 | <      | U       | 0.33    | 1       | <         | υ      | 0.33   | 1                 | <         | U      | 0.33      | í                  | ۲           | U      | 0.33      | 1                    | ۲        | U       |
| VOI ATILES                        | 1.1.1-Trichloroelhane       |        |           |      | 0.005  | 1       | <          | U  | 0.005  | 1        | <        | U     | 0.005  | 1                 | <      | υ       | 0.005   | 1       | <         | U      | 0.005  | 1                 | ۲         | Ð      | 0.005     | 1                  | <           | U      | 0.005     | 1                    | <        | Ų       |
| VOLATILES                         | 1.1.2.2-Tetrachloroethane   |        |           |      | 0.005  | 1       | <          | U  | 0.005  | 1        | ۲        | บ     | 0.005  | 1                 | <      | υ       | 0.005   | 1       | <         | U      | 0.005  | 1                 | <         | U      | 0.005     | 1                  | ۲           | U      | 0.005     | 1                    | <        | ų       |
| VOLATILES                         | 1.1.2-Trichloroethane       |        |           |      | 0.005  | 1       | ~          | U  | 0.005  | 1        | ¢        | U     | 0.005  | 1                 | <      | U       | 0.005   | 1       | <         | U      | 0.005  | 1                 | ۲         | U      | 0.005     | 1                  | <           | U      | 0.005     | 1                    | <        | U       |
| VOLATILES                         | 1.1-Dichloroethane          |        |           |      | 0.005  | 1       | ć          | U  | 0.005  | 1        | ¢        | U     | 0.005  | 1                 | <      | U       | 0.005   | 1       | <         | U      | 0.005  | 1                 | ۲         | U      | 0.005     | 1                  | <           | U      | 0.005     | 1                    | ٢        | U       |
| VOLATILES                         | 1.1-Dichloroethene          |        |           |      | 0.005  | 1       | <          | Ų  | 0.005  | 1        | <        | U     | 0,005  | 1                 | <      | U       | 0.005   | 1       | ۲         | U      | 0.005  | 1                 | <         | U      | 0.005     | ែ                  | ۲           | U      | 0.005     | 1                    | ۲        | U       |
| VOLATILES                         | 1,2-Dichloroethane          |        |           |      | 0.005  | រ       | ۲          | U  | 0.005  | 1        | <        | U     | 0.005  | 1                 | <      | Ų       | 0.005   | 1       | ۲         | Ц      | 0.005  | 1                 | <         | U      | 0.005     | 1                  | <           | U      | 0.005     | 1                    | <        | U       |
| VOLATILES                         | 1,2-Dichloroelhane          |        |           |      | 0.005  | 1       | <          | υ  | 0.005  | t        | <        | U     | 0.005  | 1                 | ۲      | Ų       | 0.005   | f       | <         | U      | 0.005  | 1                 | <         | U      | 0.005     | 1                  | <           | υ      | 0.005     | 1                    | <        | U<br>   |
| VOLATILES                         | 1,2-Dichloropropane         | 1      |           |      | 0.005  | 1       | <          | U  | 0.005  | 1        | <        | U     | 0.005  | 1                 | <      | U       | 0,005   | 1       | ۲         | U      | 0.005  | 1                 | <         | U      | 0.005     | 1                  | <           | U      | 0.005     | 1                    | <        |         |
| VOLATILES                         | 2-Butanone                  | 1      |           |      | 0.05   | 1       | <          | U  | 0.05   | 1        | ۲        | U     | 0.05   | 1                 | <      | υ       | 0.05    | 1       | ۲         | U      | 0.05   | 1                 | <         | U      | 0.05      | 1                  | <           | 0      | 0.05      | 1                    | <        |         |
| VOLATILES                         | 2-Chloroethyl vinyl ether   |        |           |      | 0.01   | 1       | ۲          | U  | 0.01   | 1        | ~        | U     | 0.01   | 1                 | <      | U       | 0.01    | 1       | <         | U      | 0.01   | 1                 | ۲         | 0      | 0.01      | 1                  | <           | 0      | 0.01      | 1                    | ۲.       | U<br>TT |
| VOLATILES                         | 2-Hexanone                  |        |           |      | 0.05   | 1       | <          | U  | 0.05   | 1        | <        | Ų     | 0.05   | 1                 | <      | υ       | 0.05    | 1       | <         | U      | 0.05   | 1                 | ۲         | U      | 0.05      | 1                  | <           | U      | 0.05      | •                    | Ś        | ы<br>11 |
| VOLATILES                         | Acetone                     | 1      |           |      | 0,1    | 1       | <          | IJ | 0.1    | ۱        | <        | U     | 0.1    | 1                 | <      | U       | 0.1     | 1       | ۲         | U      | 0.1    | 1                 | 4         | U      | Q,1       | 1                  | <           | 0      | 0.1       |                      | <u>ڊ</u> | U<br>U  |
| VOLATILES                         | Benzena                     |        |           |      | 0.005  | 1       | <          | U  | 0.005  | 1        | <        | Ų     | 0.005  | 1                 | ۲      | U       | 0.005   | 1       | <         | U      | 0.005  | 1                 | <         | ų<br>v | 0.005     | 1                  | <           | 0      | 0.000     |                      | 2        | 5       |
| VOLATILES                         | Bromodichloromethane        |        |           |      | 0.005  | 1       | ۲          | U  | 0.005  | 1        | <        | U     | 0.005  | 1                 | <      | U<br>   | 0.005   | 1       | <         | 0      | 0,005  | 1                 | ۲.        | v      | 0.005     | 1                  | <u>ڊ</u>    | ы      | 0.000     | •                    | 2        | 11      |
| VOLATILES                         | Bromotorm                   |        |           |      | 0.005  | 1       | <          | U  | 0.005  | 1        | <        | U     | 0.005  | 1                 | <      | U<br>   | 0.005   | 1       | <         |        | 0.005  | 1                 | ۲.        | 0      | 0.005     | 1                  | -           | 0      | 0.003     | 1                    | 2        | Ŭ.      |
| VOLATILES                         | Bromomelhane                | 1      |           |      | 0.01   | 1       | <          | U  | 0.01   | 1        | <        | Ų     | 0.01   | 1                 | ۲      | U       | 0.01    | 1       | <         | 0      | 0.01   | 1                 |           | U<br>U | 0.01      |                    | 5           | u v    | 0.01      | 1                    | 2        | ŭ       |
| VOLATILES                         | Carbon disulfide            | 1      |           |      | 0,005  | 1       | ۲          | U  | 0.005  | 1        | <        | U     | 0,005  | 1                 | <      | U       | 0.005   | 1       | <         | U      | 0.005  |                   | <         | U      | 0.003     | '                  | •           | v      | 0.000     |                      | -        | -       |





Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

|                  |                           |      |        | С        | once | ntratio | ons      | of C | her | nicals | in S    | Soil  | San | nples. | Ass    | ocia | ted | with S | ump      | o 04 | 4  |        |          |      |    |        |         |     |    |        |           |      |    |
|------------------|---------------------------|------|--------|----------|------|---------|----------|------|-----|--------|---------|-------|-----|--------|--------|------|-----|--------|----------|------|----|--------|----------|------|----|--------|---------|-----|----|--------|-----------|------|----|
| (SUMP) = SUMP044 |                           |      |        |          |      |         |          |      |     |        |         |       |     |        |        |      |     |        |          |      |    |        |          |      |    |        |         |     |    |        |           |      |    |
| LOCATION _ CODE  |                           |      | 35\$U} | 4P044-SI | B01  | L.      | H-DL4    | 4-01 |     |        | LH-\$4  | 4-01  |     |        | LH-S4  | 4-01 |     |        | LH-S44   | -01  |    | 1      | H-S44    | -02  |    | 1      | H-\$44  | -02 |    |        | LH-S44    | -02  |    |
| SAMPLE NO        |                           |      | 35-SM  | P44-SB0  | 1-02 | 1       | LH-DL4   | 4-01 |     | 1      | LH-\$44 | -01_1 |     | 1      | H-S44  | 01_2 |     | L.     | H-S44-   | 01_3 |    | U      | H-S44-   | 02_1 |    | 1      | 1-544-0 | 2_2 |    | Ł      | .H-S44-(  | 05_3 |    |
| SAMPLE_DATE      |                           |      | 9/     | 15/2006  |      |         | 7/10/1:  | 993  |     |        | 7/10/1  | 993   |     |        | 7/10/  | 1993 |     |        | 7/10/19  | 993  |    |        | 7/11/19  | 93   |    |        | 7/11/19 | 93  |    |        | 7/11/19   | 993  |    |
| DEPTH            |                           |      | 1      | 5 • 5 Ft |      |         | 2.1 - 2. | 8 FI |     |        | .5 - 1. | 5 Ft  |     |        | 4 - 4, | 7 FI |     |        | 7.9 - 8. | 6 Fi |    |        | .5 • 1.5 | គ    |    |        | 4 - 4.7 | Ft  |    |        | 7,7 • 8.2 | 3 FI |    |
| SAMPLE_PURPOSE   |                           |      |        | REG      |      |         | REC      | 3    |     |        | RE      | G     |     |        | RE     | G    |     |        | REC      | ;    |    |        | REG      | ì    |    |        | REG     |     |    |        | 850       | 1    |    |
| Test Group       | Parameter (Units = mg/kg) | Re   | asult  | DIL L    | a va | Result  | DHL      | LQ   | VQ  | Result | DIL     | LQ    | VQ  | Result | DIE    | ιc   | VQ  | Result | Dil,     | ιQ   | VQ | Result | DIL      | LQ   | VQ | Result | DIL     | LQ  | ٧Q | Result | DiL       | ιo   | VQ |
| VOLATILES        | Carbon tetrachloride      | ···· | _      |          |      | 0.005   | 1        | <    | U   | 0.005  | 1       | <     | U   | 0.005  | 1      | <    | U   | 0.005  | 1        | <    | υ  | 0.005  | 1        | v    | -U | 0.005  | 1       | '   | U  | 0.005  | 1         | <    | Ų  |
| VOLATILES        | Chlorobenzene             | ļ    |        |          |      | 0.005   | 1        | <    | U   | 0.005  | 1       | <     | U   | 0.005  | 1      | <    | U   | 0.005  | 1        | <    | U  | 0.005  | 1        | <    | Ų  | 0.005  | 1       | <   | U  | 0.005  | 1         | ۲    | Ų  |
| VOLATILES        | Chloroethane              |      |        |          |      | 0.01    | 1        | <    | U   | 0.01   | 1       | <     | Ų.  | 0.01   | 1      | <    | υ   | 0.01   | 1        | <    | U  | 0.01   | 1        | ۲    | υ  | 0,01   | 1       | <   | U  | 0.01   | 1         | <    | U  |
| VOLATILES        | Chloraform                |      |        |          |      | 0.005   | 1        | <    | Ų   | 0.005  | 1       | <     | U   | 0.005  | 1      | <    | U   | 0.005  | 1        | <    | V  | 0.005  | 1        | <    | Ų  | 0.005  | 1       | ۲   | U  | 0.005  | 1         | <    | U  |
| VOLATILES        | Chioramethane             |      |        |          |      | 0.01    | 1        | <    | Ų   | 0.01   | 1       | <     | U   | 0.01   | 1      | <    | U   | 0.01   | 1        | <    | U  | 0.01   | 1        | <    | U  | 0.01   | 1       | <   | Ų  | 0.01   | 1         | ۲    | U  |
| VOLATILES        | cis-1,3-Dichlaropropene   |      |        |          |      | 0.005   | 1        | <    | U   | 0.005  | 1       | <     | Ų   | 0.005  | 1      | <    | U   | 0.005  | 1        | <    | U  | 0.005  | 1        | ۲    | U  | 0.005  | 1       | <   | U  | 0.005  | 1         | <    | U  |
| VOLATILES        | Dibromochloromethane      |      |        |          |      | 0.005   | ۱        | <    | U   | 0.005  | 1       | <     | U   | 0.005  | 1      | <    | U   | 0.005  | 1        | <    | U  | 0.005  | 1        | <    | Ų  | 0.005  | 1       | <   | Ų  | 0.005  | 1         | <    | U  |
| VOLATILES        | Ethylbenzene              |      |        |          |      | 0.005   | 1        | ۲    | U   | 0.005  | 1       | ۲     | U   | 0.005  | 1      | <    | υ   | 0.005  | 1        | ۲    | Ų  | 0.005  | 1        | <    | U  | 0.005  | 1       | <   | U  | 0.005  | 1         | <    | υ  |
| VOLATILES        | Mathyl isobutyl ketone    |      |        |          |      | 0.05    | 1        | <    | U   | 0.05   | 1       | ۲     | U   | 0.05   | 1      | ۲    | ų   | 0.05   | 1        | ٠    | U  | 0.05   | 1        | <    | U  | 0.05   | 1       | <   | U  | 0.05   | 1         | ۲    | U  |
| VOLATILES        | Methylene chloride        |      |        |          |      | 0.005   | 1        | <    | U   | 0.005  | 1       | <     | U   | 0.005  | 1      | ۲    | U   | 0.005  | 1        | <    | ນ  | 0.005  | 1        | ۲    | U  | 0.005  | 1       | <   | U  | 0.005  | 1         | <    | U  |
| VOLATILES        | Styrene                   |      |        |          |      | 0.005   | 1        | ۲    | U   | 0.005  | 1       | <     | U   | 0.005  | 1      | <    | U   | 0.005  | 1        | <    | U  | 0.005  | 1        | <    | U  | 0.005  | ែ       | <   | U  | 0.005  | 1         | <    | U  |
| VOLATILES        | Telrachtoroethene         |      |        |          |      | 0.005   | 1        | ۲    | U   | 0.005  | 1       | <     | U   | 0.005  | 1      | <    | Ų   | 0.005  | 1        | <    | U  | 0.005  | 1        | ۲    | U  | 0.005  | í       | <   | υ  | 0.005  | 1         | <    | U  |
| VOLATILES        | Toluene                   |      |        |          |      | 0.005   | 1        | <    | U   | 0.005  | 1       | ۲     | υ   | 0.005  | 1      | <    | U   | 0.005  | 1        | <    | υ  | 0.005  | 1        | <    | ប  | 0.005  | 1       | <   | U  | 0.005  | 1         | <    | U  |
| VOLATILES        | frans-1.3 Dichloropropene |      |        |          |      | 0.005   | 1        | <    | U   | 0.005  | ſ       | <     | U   | 0.005  | 1      | <    | U   | 0.005  | 1        | <    | U  | 0.005  | 1        | ۲    | U  | 0.005  | 1       | ۲   | U  | 0.005  | 1         | <    | Ų  |
| VOLATILES        | Trichloroethene           |      |        |          |      | 0.005   | 1        | ۲    | ប   | 0.005  | 1       | <     | Ų   | 0.005  | 1      | ۲    | U   | 0.005  | 1        | <    | U  | 0.005  | 1        | <    | U  | 0.005  | 1       | <   | U  | 0.005  | 1         | <    | U  |
| VOLATILES        | Vinyl acelate             |      |        |          |      | 0.05    | 1        | <    | U   | 0.05   | 1       | <     | U   | 0.05   | 1      | <    | υ   | 0.05   | 1        | <    | Ų  | 0.05   | 1        | <    | U  | 0.05   | 1       | ۲   | U  | 0.05   | 1         | <    | Ų  |
| VOLATILES        | Vinyt chloride            |      |        |          |      | 0.01    | 1        | ۲    | U   | 0.01   | t       | <     | ម   | 0.01   | 1      | <    | U   | 0.01   | 1        | <    | U  | 0.01   | 1        | <    | U  | 0.01   | 1       | <   | υ  | 0.01   | 1         | <    | U  |
| VOLATILES        | Xylenes, Total            | }    |        |          |      | 0.005   | 1        | <    | U   | 0.005  | 1       | <     | Ų   | 0.005  | 1      | <    | U   | 0.005  | 1        | <    | Ų  | 0.005  | 1        | <    | Ų  | 0.005  | 1       | <   | IJ | 0.005  | 1         | <    | Ų  |

Table 3-44

 VOLATILES
 Xylenes, Total

 Footnotes are shown on cover page to Tables Section.

Table 3-45 Concentrations of Chemicals in Soil Samples Associated with Sump 045

| (SUMP) = SUMP045 |  |               |               |          |               |                  |                      |        |            |             |                |             |         |               | 1045.01  |       |            | 111 646 64 |            |        | 1.545.01   |       |        |
|------------------|--|---------------|---------------|----------|---------------|------------------|----------------------|--------|------------|-------------|----------------|-------------|---------|---------------|----------|-------|------------|------------|------------|--------|------------|-------|--------|
| LOCATION _CODE   |  | 25C-60        | 25C-          | 50       | 25C-51        | 250-61           | 250-62               | L9-    | FDL45-01   |             |                | 100 2 1     | 2       | 18            | -949-01  |       | ,          | H-S45-01 1 | ,          | Ц      | S45-01     | 3     |        |
| SAMPLE_NO        |  | 25C-60(1)     | 25C-6         | )(2)     | 25C-61(1)     | 25C-61(2)        | 250-62(1)            | ្រ     | 1-0145-01  |             |                | LINDING     | 4<br>F  |               | 110/1002 |       | -          | 7/10/1003  | •          | 7      | 10/1993    | -     |        |
| SAMPLE_DATE      |  | 11/17/1999    | 11/17/        | 999      | 11/17/1999    | 11/17/1999       | 11/17/1999           |        | 10/1993    |             |                | 1/1Un 25    | 10<br>1 | '             | 5.15.Ft  |       |            | 67.77FI    |            | . 8    | 4 - 8.8 FI |       |        |
| DEPTH            |  | 0 - ,5 FI     | 1-2           | Ft       | 05 Ft         | 1.25             | 0 • .5 FI            |        | 050        |             |                | 01,011      |         |               | BEC      |       |            | REG        |            |        | REG        |       |        |
| SAMPLE_PURPOSE   |  | REG           | REI           |          | REG           | REG              | NO Reading Off LO VO | Decult | HEG<br>Dil |             | Bae            |             | 10 V    | ) Sesuit      | Di       | io vo | ) Result   | DIL        | LO VO      | Result | DIL        | LO VI | Q      |
| Test Group       | Parameter (Units = mg/kg)                  | Result DIL LO | VO Result DIL | LO VO HE | SUIT DIE LO V | O Hestin Dit. LO | VQ Hesun oit to vo   | Hestin |            | 10 10       | 0.2            | 1 1         | < U     | ( index       |          |       |            |            |            |        |            |       |        |
| EXPLOSIVES       | 1,3,5-1 noirrobenzene                      |               |               |          |               |                  |                      |        |            |             | 0.2            |             | < 1     |               |          |       |            |            |            |        |            |       |        |
| EXPLOSIVES       | 2.4.6.Tripitatelyapo                       |               |               |          |               |                  |                      |        |            |             | 0.2            | 1 1         | < U     |               |          |       |            |            |            |        |            |       |        |
| EXPLOSIVES       | 2.4. Dimitrologuene                        |               |               |          |               |                  |                      | 0.33   | 1          | < Ų         | 0.2            | i 1         | < 0     | 0.33          | ſ        | < U   | 0.33       | 1          | < U        | 0.33   | 1          | < i   | )      |
| EXPLOSIVES       | 2.6-Dinitrotoluene                         |               |               |          |               |                  |                      | 0.33   | 1          | < U         | 0.2            | 3 1         | < 1     | 0.33          | 5        | < U   | 0.33       | 1          | < U        | 0.33   | 1          | < l   | J      |
| EXPLOSIVES       | 4-Amino-2 6-dinifrontitiene                |               |               |          |               |                  |                      |        |            |             | 0.4            | 4 1         | < L     |               |          |       |            |            |            |        |            |       |        |
| EXPLOSIVES       | НМХ  |               |               |          |               |                  |                      |        |            |             | 1,9            | ) 1         | < (     |               |          |       |            |            |            |        |            |       |        |
| EXPLOSIVES       | m-Nitrotoluene                             |               |               |          |               |                  |                      |        |            |             | 0.8            | 8 î         | < 1     |               |          |       |            |            |            |        |            |       |        |
| EXPLOSIVES       | Närobenzene                                |               |               |          |               |                  |                      |        |            |             | 0.2            | 3 1         | ٢L      |               |          |       |            |            |            |        |            |       |        |
| EXPLOSIVES       | o-Nitrotoluene                             |               |               |          |               |                  |                      |        |            |             | 0.8            | 8 1         | < L     |               |          |       |            |            |            |        |            |       |        |
| EXPLOSIVES       | p-Nitratoluene                             |               |               |          |               |                  |                      |        |            |             | 2.7            | 7 1         | < l     |               |          |       |            |            |            |        |            |       |        |
| EXPLOSIVES       | RDX  |               |               |          |               |                  |                      |        |            |             | 0.9            | 6 1         | < L     | 5             |          |       |            |            |            |        |            |       |        |
| EXPLOSIVES       | Tetryi                                     |               |               |          |               |                  |                      |        |            |             | 0.6            | 5 1         | < ۱     |               |          |       |            |            |            |        |            |       |        |
| METALS           | Aluminum                                   |               |               |          |               |                  |                      | 10600  | 1          |             | 214            | 10 1        |         | 8280          | 1        |       | 10200      |            |            | 3600   | 1          |       |        |
| METALS           | Antimony                                   |               |               |          |               |                  |                      | 3      | 1          | < V         | 12.            | 2 1         | < U     | J 3           | 1        | < U   | 1 3        | 1          | < U        | 3      |            | < (   | ц<br>ц |
| METALS           | Arsenic                                    |               |               |          |               |                  |                      | 1      | 1          | < U         | 3.1            | 1 1         | •       | 1.6           | )        |       | 3          |            |            | 22.7   | ÷          | • •   | ,      |
| METALS           | Barium                                     |               |               |          |               |                  |                      | 53.9   | 1          |             | 9.6            | <b>3</b> 1  |         | 32,5          |          |       | 50.7<br>J  | 1          |            | 33.7   |            |       | a      |
| METALS           | Cadmium                                    |               |               |          |               |                  |                      | 1      | 1          | < Ų         | 1,7            | 21          | < (     | ) 1<br>(1966  |          | <     | י נ<br>157 | · ·        |            | 307    |            | • •   |        |
| METALS           | Calcium                                    |               |               |          |               |                  |                      | 941    |            |             | 33             | \$ 1<br>• • |         | 1/50          | 1        |       | 121        | 1          |            | 7.5    | ŕ          |       |        |
| METALS           | Chromium                                   |               |               |          |               |                  |                      | 14.5   | 2          |             | 10.            |             |         | r ina<br>i so |          |       | 5          |            |            | 2.6    | 1          |       |        |
| METALS           | Cobali                                     |               |               |          |               |                  |                      | 4.4    |            |             | 4.1            | 4  <br>5 {  |         | , 5.5<br>5.3  | ,<br>i   |       | 3.5        | 1          |            | 1.8    | 1          |       |        |
| METALS           | Copper                                     |               |               |          |               |                  |                      | 11000  | ÷          |             | 71/            | 10 t        |         | 12800         | 1        |       | 1890       | 0 1        |            | 6930   | 1          |       |        |
| METALS           | ron  |               |               |          |               |                  |                      | 7      |            |             | 2              | , .<br>7 i  |         | 7.2           | 1        |       | 8.3        | 1          |            | 8.6    | 1          |       |        |
| METALS           | Lead                                       |               |               |          |               |                  |                      | 449    | 1          |             | 13             | 2 1         |         | 547           | 1        |       | 670        | 1          |            | 247    | 1          |       |        |
| METALS           | Magnesium                                  |               |               |          |               |                  |                      | 117    | 1          |             | 25             | .2 1        |         | 52            | 1        |       | 108        | 1          |            | 125    | 1          |       |        |
| METALS           | Manganese                                  |               |               |          |               |                  |                      | 0.1    | 1          | < U         | 0.3            | 34 1        |         | 0.1           | 1        | < l   | 0.1 ز      | 1          | < U        | 0.1    | 1          | <     | Ų      |
| METALS           | Polaecium                                  |               |               |          |               |                  |                      | 496    | 1          |             | 24             | 4 1         | < 1     | J 449         | 1        |       | 450        | 1          |            | 179    | 1          |       |        |
| METALS           | Selenium                                   |               |               |          |               |                  |                      | 1      | 1          | < U         | F 0.1          | 14 1        | د ل     | U 1           | 1        | < ۱   | J 1        | 1          | < U        | 1      | 1          | <     | U      |
| METALS           | Silver                                     |               |               |          |               |                  |                      | 1      | 1          | < U         | 1. 1.          | 2 1         | < ا     | J 1           | 1        | ٤l    | 1 1        | ែ          | < U        | 1      | 1          | <     | U      |
| METALS           | Strontium                                  |               |               |          |               |                  |                      | 8.3    | 1          |             | 12             | .2 1        | <       | J 10.7        | 1        |       | 7,4        | វ          |            | 2.9    | 1          |       |        |
| METALS           | malium                                     |               |               |          |               |                  |                      |        |            |             | 6              | 1 1         | < ا     | J             |          |       |            |            |            |        |            |       |        |
| METALS           | Zinc                                       |               |               |          |               |                  |                      | 15.2   | 1          |             | 6              | 8 1         |         | 31.2          | 1        |       | 19.5       | i 1        |            | 15.9   | 1          |       |        |
| PERC             | Perchlorata                                | 0.024 ? <     | U 0.059 ?     | 0.       | .059 7 <      | U 0.13 7         | 0.058 ? < L          | 1      |            |             |                |             |         |               |          |       |            |            |            |        |            |       | п      |
| SEMIVOLATILES    | 1.2.4-Trichlorobenzene                     |               |               |          |               |                  |                      | 0.33   | 1          | < 0         | 1 0.4          | 41 1        | <       | 0.33          | 1        | < (   | U 0.30     | 1 I        | < U<br>. U | 0,00   |            | 5     | ů.     |
| SEMIVOLATILES    | 1,2-Dichlorobenzene                        |               |               |          |               |                  |                      | 0.33   | 1          | < 0         | J 0.4          | 41 1        | ۲       | U -0.33       | 1        | < 1   | 0.30       | 9 F        | < U<br>    | 0.33   | 1          |       | u<br>D |
| SEMIVOLATILES    | 1,3-Dichlorobenzene                        |               |               |          |               |                  |                      | 0,33   | 1          | < 0         | 1 0.4          | 41 1        | <       | U U.33        |          | < 1   | U 0.3.     | 2 P<br>1 E |            | 0.33   | 4          | 2     | n<br>n |
| SEMIVOLATILES    | 1,4-Dichlorobenzene                        |               |               |          |               |                  |                      | U.33   |            | < u         | 1 Q.4          | 41 I        | 4       | U U.33        |          |       | 1 (4)      | , .<br>    | 2 1        | 1.65   | 1          | ž     | ŭ      |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol                      | 1             |               |          |               |                  |                      | 1.00   | -          | < U<br>- 11 | , <u>,</u>     | 41 1        | 2       | 100           | ,<br>,   |       | U 0.33     | , -<br>, - | 2 11       | 0.33   | 1          | è.    | Ŭ      |
| SEMIVOLATILES    | 2,4.5-Trichforophenol                      | 1             |               |          |               |                  |                      | 0.03   | 1          | - 13        | , 0,-<br>; 0,- | <b>41</b> 1 | 2       | U 0.00        | 1        | ~ 1   | 0 0.00     | , .        | - U        | 0.33   | ł          | ۲, e  | Ū.     |
| SEMIVOLATILES    | 2,4-Dichlorophenol                         |               |               |          |               |                  |                      | 0.30   |            | ~ 0         | 1 0/           |             | 2       | 0.33          | 1        | è     | U 0.3      | 3 1        | < Ū        | 0.33   | 1          | ٠     | U      |
| SEMIVOLATILES    | 2.4-Dimethylphenol                         |               |               |          |               |                  |                      | 1.65   | 1          | 2 1         |                | × 1         | ,       | LI 1.65       | 1        | - i   | U 1.65     | 5 1        | - U        | 1,65   | 1          | ٤     | Ų      |
| SEMIVOLATILES    | 2,4-Unitrophenol                           |               |               |          |               |                  |                      | 1.00   |            | • •         | , .<br>0.4     | 41 1        | ž       | 0             |          |       |            |            |            |        |            |       |        |
| SEMIVULA HLES    | 2.4-Unitroloiuene                          |               |               |          |               |                  |                      |        |            |             | 0.4            | 41 1        | <       | u<br>U        |          |       |            |            |            |        |            |       |        |
| SEMIVOLATILES    | 2,0-Districtionene                         |               |               |          |               |                  |                      | 0.33   | 1          | < 1         | J -0.          | 41 1        | <       | U 0.33        | 1        | < 1   | U 0.33     | 3 1        | < U        | 0.33   | 1          | <     | u      |
| SEMIVOLATILES    | 2-Chloronaphularene<br>2-Chloronaphularene |               |               |          |               |                  |                      | 0.33   | 1          | < 1         | J 0.           | 41 1        | <       | U 0.33        | 1        | د ا   | U 0.3      | 3 1        | < U        | 0.33   | \$         | ۲     | U      |
| SEMIVOLATILES    | 2-Meihvinanhihalene                        |               |               |          |               |                  |                      | 0.33   | 1          | < L         | J 0.4          | 41 1        | ۲       | U 0.33        | ۴        | ۲     | U 0.3      | 3 i        | < U        | 0.33   | 1          | <     | U      |
| SEMIVOLATILES    | 2-Methylphenol                             | 1             |               |          |               |                  |                      | 0.33   | 1          | e l         | j 0.           | 41 1        | <       | U 0.33        | 1        | ۲     | U 0.3      | 3 1        | < 0        | 0.33   | 1          | <     | U      |
| SEMIVOLATILES    | 2-Nitroanitine                             |               |               |          |               |                  |                      | 1.65   | 1          | < L         | ; <b>ر</b>     | 2 1         | <       | Ų 1.65        | 1        | ۲     | U 1.6      | 51         | < U        | 1.65   | 1          | <     | U      |
| SEMIVOLATILES    | 2-Nitrophenol                              |               |               |          |               |                  |                      | 0.33   | 1          | < ل         | J 0.           | 41 1        | <       | U 0.33        | 1        | ۲     | U 0.3      | 3 1        | < 1)       | 0.33   | 1          | <     | U      |
| SEMIVOLATILES    | 3,3'-Dichlorobenzidine                     |               |               |          |               |                  |                      | 0.65   | t          | < L         | J 0.           | 82 1        | <       | U 0.65        | 1        | <     | U 0.6      | 5 1        | < U        | 0.65   | 1          | ۲     | U      |
| SEMIVOLATILES    | 3 Nitrosniline                             |               |               |          |               |                  |                      | 1,65   | 1          | < L         | J :            | 2 1         | <       | U 1.65        | 1        | <     | U 1.6:     | 5 1        | < U        | 1.65   | 1          | ۲     | U      |
| SEMIVOLATILES    | 4.6-Dintro-2-methylphenol                  |               |               |          |               |                  |                      | 1.65   | 1          | < i         | J ;            | 2 1         | <       | U 1.65        | 1        | <     | U 1.6:     | 5 1        | < U        | 1.65   | ٢          | ۲     | U      |
| SEMIVOLATILES    | 4-Bramophenyl phenyl ather                 | 1             |               |          |               |                  |                      | 0,33   | 1          | < L         | J 0,           | 41          | <       | U 0.33        | i        | ۲     | U 0.3      | 31         | * U        | 0.33   | 1          | ۲     | U      |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol                    | 1             |               |          |               |                  |                      | 0.65   | 1          | < t         | J 0.           | 41 1        | <       | U 0.65        | 1        | <     | U 0.6      | 5 1        | < 0        | 0.65   | 1          | ۰     | U      |



.....



Table 3-45

# Shaw Environmental, Inc.

### Concentrations of Chemicals in Soll Samples Associated with Sump 045

| [SUMP] = SUMP045 |  |                  |                    |                    |                  |                  |             |                 |           |           |        |           |          |                      | 16          | CAE NI   |  |
|------------------|--|------------------|--------------------|--------------------|------------------|------------------|-------------|-----------------|-----------|-----------|--------|-----------|----------|----------------------|-------------|----------|--|
| LOCATION CODE    |  | 25C-60           | 25C-60             | 25C-61             | 25C-61           | 25C-62           | UH-         | DL45-01         | LHS       | -3-12     | LH+S   | 545-01    |          | 5-545-01<br>R46.01 0 | رت<br>التا. | 545-01 2 |  |
| SAMPLE_NO        |  | 25C-60(1)        | 25C-60(2)          | 25C-61(1)          | 25C-61(2)        | 25C-62(1)        | <u>ί</u> Η. | DL45-01         | LHS       | -3-12     | LH-S4  | 45-01_1   | LN-<br>7 | 345-01_2             |             | 40/1003  |  |
| SAMPLE_DATE      |  | 11/17/1999       | 11/17/1999         | 11/17/1999         | 11/17/1999       | 11/17/1999       | 7/1         | 10/1993         | 1/10      | 1995      | 710    | /1993     |          | 10/1993              | ,,          | ( d d E) |  |
| DEPTH            |  | 0 + .5 Ft        | 1 • 2 Fi           | 05 FI              | 1 - 2 F1         | 05 Fi            | 2.          | 3 - 3 Ft        | Q.        | .5 Ft     | .5 -   | 1,5 FI    | ь.       | 7 • 7.7 FL           | 0.4         | 500 FI   |  |
| SAMPLE_PURPOSE   |  | REG              | REG                | REG                | REG              | REG              |             | REG             | R         | EG        | в      | EG NO NO  | Sec. 1   | NU LO VO             | Benult      | DIL LA   | 0.10   |
| Test Group       | Paramater (Units ± mg/kg)                  | Result DIL LO VO | D Result DIL LO VO | i Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result      | DIL LO VO       | Result    | DIL LO VO | Hesult |           | Resuk    |                      | 0.65        |          | <u>-                                    </u> |
| SEMIVOLATILES    | 4-Chloroaniline                            |                  |                    |                    |                  |                  | 0.65        | 1 < U           | 0.41      | 1 < 0     | 0.65   | 1 < 0     | 0.00     | 1 2 0                | 0.00        |          | . н  |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl elher                |                  |                    |                    |                  |                  | 0.33        | 1 < 0           | 0.41      | 1 < 0     | 0.33   | 1 < 0     | 0.00     | 1 4 1                | 0.33        | 1        | - 11   |
| SEMIVOLATILES    | 4-Melbylphenol                             |                  |                    |                    |                  |                  | 0,33        | 1 < 1           | 0.41      | 1 < U     | 0.33   | 1 4 0     | 0.33     | 1 2 0                | 1 65        |          | - 0  |
| SEMIVOLATILES    | 4-Nitroaniline                             |                  |                    |                    |                  |                  | 1.65        | 1 < 0           | 2         | 1 < 0     | 1,00   | 1 < 0     | 1.00     | 1 4 1                | 1.05        |          | - 11   |
| SEMIVOLATILES    | 4-Nitrophenol                              |                  |                    |                    |                  |                  | 1.65        | 1 < 0           | 2         | 1 < 0     | 1.00   |           | 0.00     | 1 4 9                | 0.33        |          | e ii   |
| SEMIVOLATILES    | Acenaphihene                               |                  |                    |                    |                  |                  | 0.33        | 1 < 0           | 0.41      | 1 2 0     | 0.30   | 1 4 9     | 0.00     |                      | 0.33        | 1        | e U  |
| SEMIVOLATILES    | Acenaphilitylene                           |                  |                    |                    |                  |                  | 0.33        |                 | 0.41      | + < 0     | 0.55   |           | 0.00     | 1 2 1                | 0.33        | 1 .      | < L  |
| SEMIVOLATILES    | Anthracena                                 |                  |                    |                    |                  |                  | 0.33        | 1 < 0           | 0,41      |           | 0.00   |           | 0.33     | 1 0 1                | 0.33        | ÷ .      | < U  |
| SEMIVOLATILES    | Senzo(a)anihracene                         |                  |                    |                    |                  |                  | 0.33        | 1 4 0           | 0,41      | 1 4 1     | 0.00   | 1 4 0     | 0.00     | 1 - 11               | 0.33        | i .      | < ປ  |
| SEMIVOLATILES    | Benzo(a)pyrene                             |                  |                    |                    |                  |                  | 0.00        | 1 2 0           | 0.41      |           | 0.33   | 1 4 1     | 0.33     | 1 < U                | 0.33        | 1 .      | < U  |
| SEMIVOLATILES    | Benzo(b)lluoranthene                       |                  |                    |                    |                  |                  | 0.33        |                 | 0.41      | 1 2 0     | 0.00   | 1 2 0     | 0.33     | 1 < 0                | 0.33        | 1.       | < U  |
| SEMIVOLATILES    | Benzo(ghi)perylene                         |                  |                    |                    |                  |                  | 0.33        |                 | 0.41      | 1 2 1     | 0.33   | 1 a Ŭ     | 0.33     | 1 < U                | 0.33        | 1        | < U  |
| SEMIVOLATILES    | Benzo(k)/luoranthene                       | }                |                    |                    |                  |                  | 1.65        | 1 4 1           | 2.41      | 1 2 11    | 1.65   | 1 < 0     | 1.65     | í «Ú                 | 1.65        | 1        | < U  |
| SEMIVOLATILES    | Benzoic Acid                               |                  |                    |                    |                  |                  | 1.00        | 1 4 8           | *<br>0.41 | 1 - 11    | 0.65   | 1 4 1     | 0.65     | 1 < U                | 0.65        | 1        | < U  |
| SEMIVOLATILES    | Benzyl Alcohol                             |                  |                    |                    |                  |                  | 0.00        | 1 - 11          | 0.41      | 1 2 1     | 0.33   | 1 < 0     | 0.33     | 1 < U                | 0.33        | 1        | < U  |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane                 |                  |                    |                    |                  |                  | 0.00        | 1 - 11          | 0.41      | 1 2 0     | 0.33   | 1 < 0     | 0.33     | 1 < U                | 0,33        | 1 -      | < U  |
| SEMIVOLATILES    | bis(2-Chloroelhyl)ather                    | [                |                    |                    |                  |                  | 0.00        | 1 2 0           | 041       | 1 < 0     | 0.33   | 1 < U     | 0.33     | 1 < U                | 0.33        | 1        | < U  |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether                |                  |                    |                    |                  |                  | 0.33        | 1 4 1           | 0.41      | 1 < 0     | 0.33   | 1 < 0     | 0.33     | i ∢ U                | 0.33        | i        | < ປິ   |
| SEMIVOLATILES    | bis(2-Elhylhexyl)phinalate                 |                  |                    |                    |                  |                  | 0.33        | 1 2 1           | 0.41      | 1 < 0     | 0.33   | 1 < ປ     | 0.33     | 1 < 0                | 0.33        | 1        | < U  |
| SEMIVOLATILES    | Bulyi benzyi phihalate                     |                  |                    |                    |                  |                  | 0.33        | 1 2 11          | 0.41      | 1 < U     | 0.33   | 1 < U     | 0.33     | 1 < V                | 0.33        | 1        | < U  |
| SEMIVOLATILES    | Chrysene                                   |                  |                    |                    |                  |                  | 0.00        | 1 2 8           | 0.41      | 1 < 0     | 0.33   | 1 < U     | 0.33     | 1 < U                | 0.33        | 1        | < U  |
| SEMIVOLATILES    | Ulbenzo(a,n)anthracene                     |                  |                    |                    |                  |                  | 0.33        | 1 2 0           | 0.41      | 1 < U     | 0.33   | 1 < U     | 0.33     | 1 < 0                | 0.33        | 1        | < U  |
| SEMIVOLATILES    | Dipenzoruran                               |                  |                    |                    |                  |                  | 0.33        | 1 < 0           | 0.41      | 1 < U     | 0.33   | 1 < U     | 0.33     | េ < ប                | 0.33        | 1        | < U  |
| SEMIVOLATILES    | Dietriyi ponoalate<br>Dietriyi ponoalate   |                  |                    |                    |                  |                  | 0.33        | 1 < 0           | 0.41      | 1 < U     | 0.33   | 1 < U     | 0.33     | េ < 1)               | 0.33        | ٢        | < U  |
| SEMIVOLATILES    | Çimenyi prinalale<br>di e. Subit abthetoto |                  |                    |                    |                  |                  | 0.33        | 1 < 0           | 0.41      | 1 < 0     | 0.33   | 1 < U     | 0.33     | 1 < U                | 0,33        | 1        | < U  |
| SENIVOLATILES    | di a Oatri akthalata                       |                  |                    |                    |                  |                  | 0.33        | 1 < 0           | 0.41      | 1 < U     | 0.33   | 1 < U     | 0.33     | 1 < 10               | 0.33        | 1        | < U  |
| SEMIVOLATILES    | Ekonolitana                                |                  |                    |                    |                  |                  | 0.33        | 1 < 0           | 0.41      | t < U     | 0.33   | 1 < U     | 0.33     | 1 < U                | 0.33        | 1        | < U  |
| SEMIVOLATILES    | Fluorente                                  |                  |                    |                    |                  |                  | 0.33        | 1 < U           | 0.41      | 1 < U     | 0,33   | 1 < U     | 0.33     | 1 < U                | 0.33        | 1        | < U  |
| CENTROLATILES    | Heyechlerobenzene                          |                  |                    |                    |                  |                  | 0,33        | 1 < U           | 0,41      | 1 < U     | 0.33   | 1 < U     | 0.33     | 1 < U                | 0.33        | 1        | < U  |
| SEMINOLATILES    | Hexachiorobutarliene                       |                  |                    |                    |                  |                  | 0.33        | 1 < U           | 0.41      | 1 < U     | 0.33   | 1 < U     | 0.33     | 1 < U                | 0.33        | 1        | < U  |
| SEMIVOLATILES    | Hexachiorocyclopeptadiese                  |                  |                    |                    |                  |                  | 0.33        | 1 < U           | 0.41      | 1 < U     | 0.33   | េ < U     | 0.33     | i < ∪                | 0.33        | ែ        | < U  |
| SEMIVOLATILES    | Heyachloroethane                           |                  |                    |                    |                  |                  | 0.33        | 1 < U           | 0.41      | 1 < U     | 0.33   | 1 < U     | 0.33     | 1 < U                | 0.33        | 1        | < U  |
| SEMIVOLATILES    | indepo(1.2.3-cd)pyrene                     |                  |                    |                    |                  |                  | 0.33        | 1 < 0           | 0.41      | 1 < U     | 0.33   | 1 < Ų     | 0.33     | 1 < 0                | 0.33        | 1        | < U  |
| SEMIVOLATILES    | Isophorone                                 |                  |                    |                    |                  |                  | 0.33        | 1 < U           | 0.41      | 1 < U     | 0.33   | 1 < U     | 0.33     | 1 < U                | 0.33        | 1        | < U  |
| SEMIVOLATILES    | Naphihalene                                |                  |                    |                    |                  |                  | 0.33        | 1 < U           | 0.41      | 1 < U     | 0.33   | 1 < U     | 0.33     | 1 < 0                | 0.33        | 1        | < 0  |
| SEMIVOLATILES    | Nitrobenzene                               |                  |                    |                    |                  |                  | 0.33        | 1 < U           | 0.41      | 1 < U     | 0.33   | 1 < U     | 0.33     | 1 < 0                | 0.33        | 1        | < U<br>                                      |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine                 |                  |                    |                    |                  |                  | 0.33        | t < U           | 0.41      | 1 < U     | 0.33   | 1 < U     | 0.33     | 1 < 0                | 0.33        | }        | < U  |
| SEMIVOLATILES    | n-Nitrosodiphenylamine                     |                  |                    |                    |                  |                  | 0.33        | 1 < U           | 0.41      | 1 < U     | 0.33   | 1 < 0     | 0.33     | 1 < U                | 0.33        | 1        | < 0  |
| SEMIVOLATILES    | Peniachiorophenol                          |                  |                    |                    |                  |                  | 1.65        | 1 < 0           | 2         | 1 < 0     | 1.65   | 1 < 0     | 1.65     | 1 < 0                | 1.65        | 1        | < U  |
| SEMIVOLATILES    | Phenanihrene                               |                  |                    |                    |                  |                  | 0.33        | 1 < U           | 0.41      | 1 < U     | 0.33   | 1 < 0     | 0.33     | 1 < U                | 0.33        | 1        | < 0  |
| SEMIVOLATILES    | Phenol                                     |                  |                    |                    |                  |                  | 0.33        | 1 < 0           | 0,41      | 1 < U     | 0.33   | 1 < 0     | 0.33     | 1 < 0                | 0.33        |          | < U  |
| SEMIVOLATILES    | Pyrene                                     |                  |                    |                    |                  |                  | 0.33        | ۲ < U           | 0.41      | 1 < 0     | 0.33   | 1 < 0     | 0.33     | 1 < 1                | 0.33        | 1        | < Ų  |
| VOLATILES        | 1,1,5,2 Tetrachloroethane                  |                  |                    |                    |                  |                  |             |                 | 0.012     | 1 < U     |        |           |          |                      | 0.005       |          |  |
| VOLATILES        | 1,1,1-Trichloroelhane                      |                  |                    |                    |                  |                  | 0.005       | 1 < 0           | 0.005     | 1 < 0     | 0.005  | 1 < 0     | 0.005    | 1 < 0                | 0.005       | -        | к U  |
| VOLATILES        | 1,1.2.2-Tetrachloroathane                  |                  |                    |                    |                  |                  | 0.005       | 1 < 0           | 0.006     | 1 < 0     | 0.005  | 1 < 0     | 0.005    | 1 < 0                | 0.005       |          | 2 11   |
| VOLATILES        | 1.1,2-Trichloroethane                      |                  |                    |                    |                  |                  | 0.005       | 1 < 0           | 0.006     | 1 < U     | 0.005  | 1 < 0     | 0.005    | 1 2 4                | 0.003       | í        | - U  |
| VOLATILES        | 1,1-Dichloroelhane                         |                  |                    |                    |                  |                  | 0.005       | 1 < U           | 0.006     | 1 4 U     | 0.005  | · · · · · | 0.005    |                      | 0.005       |          | 2 11   |
| VOLATILES        | 1,1-Dichloroelhene                         |                  |                    |                    |                  |                  | 0.005       | 5 < Q           | 0.005     | 1 < 0     | 0.005  | i < U     | 0.005    | , c ()               | 0.003       | ,        | - •  |
| VOLATILES        | 1.2.3 Trichloropropane                     |                  |                    |                    |                  |                  |             |                 | 0.012     | 1 4 9     |        |           |          |                      |             |          |  |
| VOLATILES        | 1.2-Dibromo-3-chloropropane                |                  |                    |                    |                  |                  |             |                 | 0.025     | · · · ·   |        |           |          |                      |             |          |  |
| VOLATILES        | 1,2-Dibromosihane                          |                  |                    |                    |                  |                  |             |                 | 0.025     | 1 < U     | 0.005  |           | 0.005    | 1 - 11               | 0.005       | 1        | < U  |
| VOLATILES        | 1,2-Dichloroelhane                         |                  |                    |                    |                  |                  | 0.005       | 1 < 0           | 0.005     | - 1 K V   | 0.005  | U         | 0.005    | 1 2 11               | 0.005       | 1        | < 0  |
| VOLATILES        | 1,2-Dichloroathena                         |                  |                    |                    |                  |                  | 0.005       | 1 < 0           | 0,000     |           | 0.005  |           | 0.000    | 1 2 1                | 0.005       | 1        | ح ت  |
| VOLATILES        | 1.2-Dichloropropane                        | 1                |                    |                    |                  |                  | 0.005       | 1 4 0           | 0.000     |           | 0,000  |           | 0.003    | 1 < 1                | 0.05        | 1        | ۔<br>حال                                     |
| VOLATILES        | 2-Butanona                                 | 1                |                    |                    |                  |                  | 0.05        | 1 <b>&lt; U</b> | Q.012     | , < U     | 0.00   |           | 0.03     |                      | 4.43        |          | v  |



Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-45 Concentrations of Chemicals in Soil Samples Associated with Sump 045

| [SUMP] = SUMP045 |                             |        |            |      |        |         |     |        |           |    |        |           |    |        | 750 63    | ,      |             |          |      | 18     | 5.3.12 |            |      | LH-S4      | 45-01     |      |       | LH         | -\$45-01 |       |      | LH-\$45  | -01   |          |
|------------------|-----------------------------|--------|------------|------|--------|---------|-----|--------|-----------|----|--------|-----------|----|--------|-----------|--------|-------------|----------|------|--------|--------|------------|------|------------|-----------|------|-------|------------|----------|-------|------|----------|-------|----------|
| LOCATION _CODE   |                             |        | 250-60     |      | 2      | 50-60   |     |        | 250-61    |    |        | 201,-01   |    | -      | 200.02    | 1      | U DEAL      | 11<br>14 |      | 11     | 5.3.12 |            |      | 111-549    | 5-01-1    |      |       | 18-5       | 545-01 2 |       |      | LH \$454 | 1_3   |          |
| SAMPLE_NO        |                             |        | 25C-60(1)  |      | 25     | C-60(2) |     |        | 250-61(1) |    | 2      | 56-61(2)  |    | 2      |           |        | 11004010    |          |      | 4.14   | 0/1005 |            |      | 7/10/      | 1001      |      |       | 7/1        | 0/1993   |       |      | 7/10/19  | 93    |          |
| SAMPLE_DATE      |                             |        | 11/17/1999 |      | 11/    | 17/1999 |     | 1      | 1/17/1999 |    | 1      | 1/17/1999 |    | 1      | 1/1//1999 |        | 0.0.05      | ,        |      |        | E EI   |            |      | 5.1        | 5 51      |      |       | 67         | 77FI     |       |      | 8.4 . 8. | 3 Ft  |          |
| DEPTH            |                             |        | 05 Fl      |      | 1      | - 2 Ft  |     |        | 05 F1     |    |        | 1-2Ft     |    |        | 05Fi      |        | 2.3 • 3 • 1 |          |      | v      | - 0 F1 |            |      |            | =0        |      |       | •          | REG      |       |      | REG      |       |          |
| SAMPLE_PURPOSE   |                             |        | REG        |      |        | reg     |     |        | REG       |    |        | REG       |    |        | HEG       |        | HEG         |          | 100  | Denvil |        |            | Bar  | rn.<br>uli | -9<br>Dil | in v | 'n    | Recuit     | 01       | io vo | Basu | R D      | i to  | vo       |
| Tesl Group       | Parameter (Units = mg/kg)   | Result | DIL LO V   | ia P | lesull | DIL LC  | VO. | Result | DIL LO    | VQ | Result | DIL LO    | VQ | Result | DIL LO VO | Hesuit |             | , tu     | VU   | Hesuit |        |            | 1103 |            |           |      | 11    | 0.01       | 1        |       | 0.01 |          |       | <u> </u> |
| VOLATILES        | 2 Chloroethyl vinyl ether   |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.01   | 1           | <        |      |        |        |            | 0.0  | / 1<br>    | -         |      | ň     | 0.05       | ÷        | 2 1   | 0.09 |          |       | Ū.       |
| VOLATILES        | 2-Hexanone                  |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.05   | 1           | <        | U    | 0.012  |        | < 0        | 0.0  | 10         |           | •    | v     | 0.00       | •        |       | 0.00 |          |       | -        |
| VOLATILES        | 2-Propenal                  | {      |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.02   |        | < U<br>. н |      |            |           |      | 11    | <b>D</b> 1 | •        | 2 11  | 0.1  |          |       | 11       |
| VOLATILES        | Acelone                     | i      |            |      |        |         |     |        |           |    |        |           |    |        |           | 0,1    | 1           | ۲        | Ų    | 0.012  |        | < 0        | ų.   | ,          | ,         | •    | 0     | 9,1        | •        |       |      |          |       | •        |
| VOLATILES        | Acetoniinie                 |        |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.12   | •      | < U        |      |            |           |      |       |            |          |       |      |          |       |          |
| VOLATILES        | Acrylonitrite               |        |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.12   |        | < 0        |      |            |           |      |       |            |          |       |      |          |       |          |
| VOLATILES        | Allyl chloride              |        |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.025  | 1      | < 0        |      |            |           |      |       | 0.005      |          | a 11  | 0.00 |          |       | в        |
| VOLATILES        | Benzene                     | ]      |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | 0    | 0.005  | !      | < 0        | 0.0  | 05         | 1         | < .  | 0     | 0.000      |          | - U   | 0.00 | с.<br>с. |       | ŭ        |
| VOLATILES        | Bromodichloromethane        |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | U    | 0.006  | 1      | < 0        | 0.0  | 45         | 1         | <    | 0     | 0.005      | :        | < V   | 0.00 | ,        |       | н        |
| VOLATILES        | Bromoform                   |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | U    | 0.006  | 1      | < 0        | 0.0  | 105        |           | <    | 0     | 0.000      | 1        |       | 0.00 |          |       | ň        |
| VOLATILES        | Bromomethane                |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.01   | t           | <        | Ų    | 0.012  | 1      | < 0        | 0,   | 01         | 1         | <    | U<br> | 0.01       | 1        | < 0   | 0.0  | r .      |       | ň        |
| VOLATILES        | Carbon disulfide            |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | U    | 0.006  | 1      | < U        | 0.0  | 05         | 1         | <    | 0     | 0.005      | 1        | < 0   | 0.00 | -<br>-   |       |          |
| VOLATILES        | Carbon letrachtoride        | [      |            |      |        |         |     |        |           |    |        |           |    |        |           | 0,005  | 1           | <        | Ų    | 0.005  | 1      | < 0        | 0.0  | 05         | 1         | <    | U     | 0.005      | 1        | < U   | 0.00 | 5        |       | ů.       |
| VOLATILES        | Chlorobenzene               | 1      |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | Ų    | 0.006  | 1      | < 0        | 0.0  | 005        | 1         | <    | U     | 0.005      | 1        | < 0   | 0.00 | 5        |       |          |
| VOLATILES        | Chloroethane                | 1      |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.01   | 1           | <        | U    | 0.012  | 1      | < 0        | 0.   | 01         | 1         | <    | U     | 0.01       | 1        | < 0   | 0.0  | -        |       |          |
| VOLATILES        | Chleroform                  |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | Ų    | 0.006  | 1      | < U        | 0.0  | 105        | 1         | <    | Ų     | 0.005      | 1        | < U   | 0.00 | 5        | 1 <   | 0        |
| VOLATILES        | Chloromethane               |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.01   | 1           | <        | U    | 0.012  | 1      | < U        | 0,   | 01         | 1         | <    | U     | 0.01       | 1        | < U   | 0.0  |          | 1 <   | ų        |
| VOLATILES        | Chioroprene                 |        |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.12   | 1      | < U        |      |            |           |      |       |            |          |       |      | _        |       |          |
| VOLATILES        | cis-1.3-Dichloropropene     | }      |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | U    | 0.006  | 1      | < ti       | 0.0  | 005        | 1         | <    | U     | 0.005      | 1        | < U   | 0.00 | 5        |       | U.       |
| VOLATILES        | Dipromochloromelhane        | 1      |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | U    | 0.006  | 1      | < (        | 0.0  | 005        | 1         | <    | U     | 0.005      | 1        | < U   | 0.00 | 5        | 1 <   | U        |
| VOLATILES        | Dibromomethane              |        |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.012  | 1      | < l,       |      |            |           |      |       |            |          |       |      |          |       |          |
| VOLATILES        | Dichlorodilluoromethane     |        |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.025  | 1      | < L        |      |            |           |      |       |            |          |       |      |          |       |          |
| VOLATILES        | Ethvi methacrvlate          |        |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.025  | 1      | < ાં       |      |            |           |      |       |            |          |       |      |          |       |          |
| VOLATILES        | Elhvibenzene                | ļ      |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | Ų    | 0.005  | 1      | < L        | 0.0  | 005        | 1         | <    | Ų     | 0.005      | 1        | < U   | 0.00 | 5        | 1 <   | Ų        |
| VOLATILES        | IODOMETHANE                 |        |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.012  | 1      | < L        |      |            |           |      |       |            |          |       |      |          |       |          |
| VOLATILES        | ISOBUTYL ALCOHOL            | 1      |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 2.5    | 1      | < l        |      |            |           |      |       |            |          |       |      |          |       |          |
| VOLATILES        | Methacrylonitrile           |        |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.025  | 1      | < ا        |      |            |           |      |       |            |          |       |      |          |       |          |
| VOLATILES        | Methyl isobutyl kelona      |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.05   | 1           | <        | U    | 0.012  | 1      | < l        | 0.   | .05        | 1         | <    | U     | 0.05       | 1        | < U   | 0.0  | 5        | 1 <   | U        |
| VOLATILES        | METHYL METHACRYLATE         |        |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.025  | 1      | < ۱        |      |            |           |      |       |            |          |       |      |          |       |          |
| VOLATILES        | Methylene chloride          | 1      |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | U    | 0.005  | 1      | < l        | 0/   | 005        | 1         | <    | U     | 0.005      | 1        | < U   | 0.00 | 15       | ۲ ۲   | U        |
| VOLATILES        | Penjachioroethane           | }      |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0,025  | 1      | < L        |      |            |           |      |       |            |          |       |      |          |       |          |
| VOLATILES        | Propionitrite               | 1      |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.062  | 1      | < l        |      |            |           |      |       |            |          |       |      |          |       |          |
| VOLATILES        | Styrene                     |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | Ų    | 0.006  | t      | < l        | I 0. | 005        | 1         | <    | U     | 0.005      | 1        | < U   | 0.00 | )5       | 1 <   | U        |
| VOLATHES         | Telcachiocoelhene           |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | U    | 0.006  | ;      | < (        | 0.   | 005        | 1         | <    | U.    | 0.005      | 1        | < U   | 0.00 | 5        | 1 <   | U        |
| VOLATILES        | Tokiene                     | ł      |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | υ    | 0.006  | 1      | < 1        | I 0, | 005        | 1         | <    | U     | 0.005      | 1        | < U   | KO.0 | 05       | 1 <   | U        |
| VOLATILES        | trans-1.3-Dichloropropene   |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           | <        | บ    | 0.006  | 1      | < (        | ) O/ | 005        | 1         | <    | U     | 0.005      | 1        | < U   | 0.0  | 5        | 1 <   | υ        |
| VOLATILES        | trans-1.4-Dichloro-2-butene | 1      |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.025  | 1      | < 1        | 1    |            |           |      |       |            |          |       |      |          |       |          |
| VOLATILES        | Trichingethese              |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.005  | 1           |          | U    | 0.006  | 1      | < (        | ) O. | 005        | 1         | <    | U     | 0.005      | 1        | < ()  | 0.0  | )5       | 1 <   | U        |
| VOLATILES        | Trichlorofluoromethane      |        |            |      |        |         |     |        |           |    |        |           |    |        |           |        |             |          |      | 0.012  | 1      | < 1        | )    |            |           |      |       |            |          |       |      |          |       |          |
| VOLATHES         | Vinut anatate               |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.05   | 1           | . <      | υ    | 0,012  | 1      | < 1        | ) 0  | .05        | 1         | <    | U     | 0.05       | 1        | < ປ   | 0.0  | 5        | 1 <   | U        |
| VOLATILES        | Vinut chinride              |        |            |      |        |         |     |        |           |    |        |           |    |        |           | 0,01   | -           | <        | ٠U   | 0.012  | 1      | < 1        | ) 0  | .01        | i         | <    | U     | 0.01       | 1        | < U   | 0.0  | 1        | i <   | . U      |
| VOLANGED         | sing belongs                | 1      |            |      |        |         |     |        |           |    |        |           |    |        |           | 0.004  |             |          | - 11 | 0.006  | 1      | e 1        | 1 0. | 005        | 1         | <    | ย     | 0.005      | 1        | < U   | 0.0  | 95       | 1 . < | r U -    |

VOLATILES Xylanes. Total Footnotes are shown on cover page to Tables Section.



| [SUMP] = SU<br>LOCATION _<br>SAMPLE_NO<br>SAMPLE_DA | 35SUN<br>35-SMI<br>9/     | /P046<br>P46-S<br>13/20 | S-SB01<br>B01-01<br>06 | 35SUI<br>35-SM<br>9/ | VIP040<br>P46-S<br>13/20 | 3-SB01<br>;B01-02<br>06 | 35SUM<br>35-SMF<br>9/ | IP046<br>946-SI<br>13/200 | 6-SBC<br>802-0<br>06 | 35SUN<br>35-SM<br>9/ | 102<br>1-02 |        |               |           |    |
|---|---------------------------|-------------------------|------------------------|----------------------|--------------------------|-------------------------|-----------------------|---------------------------|----------------------|----------------------|-------------|--------|---------------|-----------|----|
| DEPTH<br>SAMPLE_PU                                  | RPOSE                     | 0.5                     | 5 - 0.5<br>REG         | Ft                   | 1                        | 0 - 10<br>REG           | Ft                    | 0.5                       | i - 0.5<br>REG       | Ft                   |             | 11     | ) - 10<br>REG | : Ft<br>i |    |
| Test Group  | Parameter (Units = mg/kg) | Result                  | DIL                    | LQ VC                | Result                   | DIL                     | ια να                 | Result                    | DIL                  | LQ                   | ٧Q          | Result | DIL           | LQ        | VQ |
| PERC  | Perchlorate               | 0.745                   | 1                      |                      | 3.71                     | 10                      |                       | 0.0284                    | 1                    |                      |             | 0.01   | 1             | <u> </u>  |    |

### Table 3-46 Concentrations of Chemicals in Soil Samples Associated with Sump 046

Footnotes are shown on cover page to Tables Section.
Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/38 Sumps



Table 3-47 Concentrations of Chemicals in Soil Samples Associated with Sump 047

| [SUMP] = SUMP047 |  |                  |                    |                     |                  |                  | (1000)           |                  | 100.2.11              | 1 4 6 4 7 01                           | 1 4 647 01       |
|------------------|--|------------------|--------------------|---------------------|------------------|------------------|------------------|------------------|-----------------------|--|------------------|
| LOCATION _CODE   |  | 35SUMP047-SB01   | 35SUMP047-SB01     | 35SUMP047-S802      | 35SUMP047-SB02   | 47SB04           | 475804           | LH-DL47-01       | LHS-3-11<br>1 HS-3-11 | LH-347-01 1                            | 18-547-01 2      |
| SAMPLE_NO        |  | 35-SMP47-SB01-01 | 35-SMP47-SB01-02   | 35-SMP47-SB02-01    | 33-5MP47-5BUZ-02 | 4/5804(0-0_5)    | 5(30(2000        | 7/9/1993         | 1/10/1995             | 7/9/1993                               | 7/9/1993         |
| SAMPLE_DATE      |  | 9/15/2005        | 9/15/2006          | 5/15/2006<br>5 5 C+ | 25.255           | 0-55             | 1.2 Ft           | 5 - 1 5 Ft       | 05 Ft                 | .5 - 1.5 Ft                            | 2.2 - 3.2 Ft     |
|                  |  | .3+.3F(          | 2.3 - 2.3 -1       | REG                 | 2.0+2.0+1        | BEG              | REG              | REG              | REG                   | REG                                    | REG              |
| Teel Group       | Parameter (Linits = mn/kg)                               | Result Dil LO VO | Result DIL 10 VO   | Result Dil LO VO    | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ      | Result OIL LQ VQ                       | Result DIL LQ VQ |
| EXPLOSIVES       | 1 3 5-Trinitrobenzene                                    |                  |                    |                     |                  |                  |                  |                  | 0.22 1 < U            | ······································ |                  |
| EXPLOSIVES       | 1.3-Dinllrobenzane                                       |                  |                    |                     |                  |                  |                  |                  | 0.22 1 < U            |  |                  |
| EXPLOSIVES       | 2,4,6-Trinitrolaluene                                    |                  |                    |                     |                  |                  |                  |                  | 0.22 1 < U            |  |                  |
| EXPLOSIVES       | 2,4-Dinitrotolueno                                       |                  |                    |                     |                  |                  |                  | 0.33 1 < U       | 0,22 1 < U            | 0.33 1 < 0                             | 0.33 1 < U       |
| EXPLOSIVES       | 2,6-Dinitrololuene                                       |                  |                    |                     |                  |                  |                  | 0.33 1 < U       | 0.24 1 < U            | 0.33 1 < U                             | 0.33 1 < U       |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene                               | ĺ                |                    |                     |                  |                  |                  |                  | 0.45 1 < U            |  |                  |
| EXPLOSIVES       | HMX  |                  |                    |                     |                  |                  |                  |                  | 2 1 < U               |  |                  |
| EXPLOSIVES       | m-Nitrotoluene   |                  |                    |                     |                  |                  |                  |                  | 0.9 1 < 0             |  |                  |
| EXPLOSIVES       | Nitrobenzene   |                  |                    |                     |                  |                  |                  |                  | 0.24 1 < 0            |  |                  |
| EXPLOSIVES       | o-Nitratoluene   |                  |                    |                     |                  |                  |                  |                  | 0.9 1 < 0             |  |                  |
| EXPLOSIVES       | p-Nitrotoluena   | 1                |                    |                     |                  |                  |                  |                  | 27 1 5 0              |  |                  |
| EXPLOSIVES       | RDX  |                  |                    |                     |                  |                  |                  |                  |                       |  |                  |
| EXPLOSIVES       | Tetry  |                  | /                  |                     |                  |                  |                  | 12000 1          | 8030 1                | 18700 1                                | 12700 1          |
| METALS           | Aluminum   | 10100 1          | 8920 1             | 9680 1              | 9360 1           |                  |                  | 3 1 < 1          | 92 1 < 11             | 3 1 < U                                | 31 < U           |
| METALS           | Antimony   | 0.246            | 0.116 1            | 0.23                | 414 1            |                  |                  | 16 1 < 1         | 27 1 .                | 1.8 1 < U                              | 1.3 1 < U        |
| METALS           | Arsenic  | 14.0 1           | 801 1              | 4.11 I<br>64 1      | 367 1            |                  |                  | 131 1 < 0        | 36.4 1                | 99.8 1 < U                             | 74.6 1 < U       |
| METALO           | Bandhum  | 0.622 1          | 0.609 1            | 0.452 1             | 0.283 1 1 1      |                  |                  |                  |                       |  |                  |
|                  | Codmium  | 0.022            | 0.000 1            | 0.432 1             | 0.424 1 11 11    |                  |                  | 11<0             | 0.92 1 < 년            | 11 < U                                 | 11 < U           |
| METALS           | Caloium  | 090 1            | 1100 1             | 890 1               | 1080 1           |                  |                  | 1650 1           | 496 1                 | 1400 1                                 | 1030 1           |
| METALS           | Chromium   | 127 1            | 21.1 1             | 104 1               | 7.6 1            |                  |                  | 15.5 1 < U       | 10.5 1 J              | 18.9 1 < U                             | 13.7 1 < U       |
| METALS           | Cobalt   | 7.37 1           | 9.97 1             | 4.58 1              | 5.31 1           |                  |                  | 9.1 1            | 15 1                  | 5.7 1                                  | 3.3 1            |
| METALS           | Conner   | 4.61 1           | 3.58 1             | 3.22 1              | 2,35 1           |                  |                  | 4.3 1            | 9.3 1                 | 5.8 1                                  | 4.3 1            |
| METALS           | tron   | 13300 1          | 15100 1            | 12900 1             | 11000 1          |                  |                  | 16400 1          | 7960 1                | 17800 1                                | 10800 1          |
| METALS           | Lead   | 27.8 1           | 6.02 1             | 7.24 1              | 5.74 1           |                  |                  | 6.6 1            | 10.2 1                | 7 1                                    | 4.6 1            |
| METALS           | Magnesium  | 853 1            | 445 1              | 647 1               | 441 1            |                  |                  | 1180 1           | 472 1                 | 1270 1                                 | 672 1            |
| METALS           | Manganese  | 235 1            | 357 1              | 145 1               | 156 1            |                  |                  | 235 1            | 603 1 J               | 94.8 1                                 | 101 1            |
| METALS           | Mercury  | 0.029 1 J J      | 0.0256 f J J       | 0.0242 1 J J        | 0.0351 1 J J     |                  |                  | 0.1 1 < U        | 0.086 1 < U           | 0.1 1 < 0                              | 0.1 1 < 0        |
| METALS           | Nickel   | 7.89 1           | 6.17 1             | 5.55 1              | 4.19 1           |                  |                  |                  |                       |  | 600 A            |
| METALS           | Potassium  | 681 1            | 326 1              | 383 1               | 358 1            |                  |                  | 690 1            | 383 1                 | 828 1                                  | 663              |
| METALS           | Selenium   | 0.325 1          | 0.186 <b>1</b> J J | 0.151 1 J J         | 0.222 1 U U      |                  |                  | 11 < U           | 0.29 1 J              | 1   < U                                | 1 1 5 0          |
| METALS           | Silver   | 1.62 1 U U       | 1.53 1 U U         | 1.68 1 U U          | 0.222 1 J J      |                  |                  | 11 < 0           | 0.92 1 < 0            | 1150                                   | 1.4              |
| METALS           | Sadium   | 31.4 1           | 72.6 1             | 30.5 1              | 33 1             |                  |                  | 10 1             | 0.2 1 4 11            | 177 1                                  | 13 1             |
| METALS           | Strontium  |                  |                    |                     |                  |                  |                  | 18               | 9.2 I K U             | 11.7                                   |                  |
| METALS           | Thailium   | 0.061            | 0,0533             | 0.069 1             | 0.0586 1         |                  |                  |                  | 40.0 1 4 0            |  |                  |
| MEIALS           | Vanadium   | 24.1 1           | 27.5 1             | 49.1                | 40.0 1           |                  |                  | 241 1            | 20.2 1                | 28.9 1                                 | 15.8 1           |
| METALS           | Zinc   | 03.0 1           | 10.3 1             | 0.101 1             | 14 2             | 0.0496 1         | 0.0050 1 < 1     | 44-11-1 I        | LU.L .                |  |                  |
| PERC             | Perchiorate  | 0.0402 4 0 0     | 0.0496 3 0 0       | 0.101               | 1.4 2            | 0.0400           | 0.0000 / . 0     | 0.33 1 < 0       | 0.38 1 < U            | 0.33 1 < U                             | 0.33 1 < U       |
| SEMIVOLATILES    | 1.2 Diablarabanana                                       |                  |                    |                     |                  |                  |                  | 0.33 1 < U       | 0.38 1 < U            | 0.33 1 < U                             | 0.33 1 < U       |
| SEMIVOLATILES    | 1.3-Dichlorobenzene                                      |                  |                    |                     |                  |                  |                  | 0.33 1 < U       | 0.38 1 < U            | 0.33 1 < U                             | 0.33 1 < U       |
| SEMIVOLATILES    | 1 4-Dichlorobenzene                                      |                  |                    |                     |                  |                  |                  | 0.33 1 < U       | 0.38 1 < U            | 0.33 1 < U                             | 0.33 1 < U       |
| SEMIVOLATILES    | 2.4.5-Trichlorophenol                                    |                  |                    |                     |                  |                  |                  | 1.65 1 < U       | 1.9 1 < U             | 1,65 1 < U                             | 1.65 1 < U       |
| SEMIVOLATILES    | 2.4.6-Trichlorophenol                                    |                  |                    |                     |                  |                  |                  | 0.33 1 < U       | 0.38 1 < U            | 0.33 1 < U                             | 0.33 1 < U       |
| SEMIVOLATILES    | 2,4-Dichlorophenol                                       | 1                |                    |                     |                  |                  |                  | 0.33 1 < V       | 0.38 1 < U            | 0.33 1 < U                             | 0.33 1 < U       |
| SEMIVOLATILES    | 2,4-Dimethylphenol                                       |                  |                    |                     |                  |                  |                  | 0.33 1 < 0       | 0.38 1 < U            | 0.33 1 < U                             | 0.33 1 < U       |
| SEMIVOLATILES    | 2,4-Dinitrophenol  |                  |                    |                     |                  |                  |                  | 1.65 1 < U       | 1.9 1 < U             | 1.65 1 < U                             | 1,65 1 < U       |
| SEMIVOLATILES    | 2.4-Dinitrotoluene                                       |                  |                    |                     |                  |                  |                  |                  | 0.38 1 < 0            |  |                  |
| SEMIVOLATILES    | 2.6-Dinitrotoluene                                       |                  |                    |                     |                  |                  |                  |                  | 0.38 1 < 0            | 0.00 4 4 11                            | 0.00 1 4 11      |
| SEMIVOLATILES    | 2-Chloronaphihalene                                      |                  |                    |                     |                  |                  |                  | 0.33 1 < 0       | 0.38 1 < 0            | 0,33 1 4 0                             | 0.33 1 4 0       |
| SEMIVOLATILES    | 2-Chlorophenol   |                  |                    |                     |                  |                  |                  | 0.33 1 4 0       | 0.38 1 < 0            | 0.33 1 < 0                             | 0.33 1 < 0       |
| SEMIVOLATILES    | 2-Methylnaphlhalene                                      |                  |                    |                     |                  |                  |                  | 0,33 1 4 0       |                       | 0.33 1 4 1                             | 0.33 1 < 0       |
| SEMIVOLATILES    | 2-Methylphenol   |                  |                    |                     |                  |                  |                  | 185 1 4 1        | 10 1 - 11             | 165 1 < 1                              | 165 1 4 1        |
| SEMIVOLATILES    | 2-Nitroaniline   | 1                |                    |                     |                  |                  |                  |                  | 0.9 1 < 0             | 0.03 1 4 1                             | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Nitrophanol  |                  |                    |                     |                  |                  |                  | 0.65 1 < 0       | 0.77 1 < 1            | 0.65 1 < U                             | 0.65 1 < U       |
| SEMIVOLATILES    | 3,3-Dichloropenzidine                                    |                  |                    |                     |                  |                  |                  | 165 1 < 1        | 191 < 0               | 1.85 1 < U                             | 1.65 1 < U       |
| SEMIVOLATILES    | J-INICOARIINE<br>4 6 Dinitre 2 methylohonol              |                  |                    |                     |                  |                  |                  | 1.65 1 < 1       | 1.9 1 < 1             | 1.65 1 < U                             | 1.65 1 < U       |
|                  | 4.0-puttino-z-metryiphendi<br>4.Bromonhanid abasid albas |                  |                    |                     |                  |                  |                  | 0.33 1 < 1       | 0.38 1 < 1            | 0.33. 1 < U                            | 0.33 1 < U       |
|                  | 4-Chloro-3-methylotrenol                                 | 1                |                    |                     |                  |                  |                  | 0.65 1 < U       | 0.38 1 < 🗆            | 0.65 1 < U                             | 0.65 1 < U       |
| SEMIVOLATILES    | 4-Chloroanilina  |                  |                    |                     |                  |                  |                  | 0.65 1 < 0       | 0.38 1 < U            | 0.85 1 < U                             | 0.65 1 < U       |
| SEMIVOLATILES    | 4-Chlorophenvi phenvi ether                              | 1                |                    |                     |                  |                  |                  | 0.33 1 < U       | I 0,38 1 < Ū          | 0.33 1 < U                             | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Methylphenol   |                  |                    |                     |                  |                  |                  | 0.33 1 < U       | I 0.38 1 < U          | 0.33 1 < U                             | 0,33 1 < U       |
| SEMIVOLATILES    | 4-Nitroaniline   |                  |                    |                     |                  |                  |                  | 1.65 1 < U       | 1,9 1 < U             | 1.65 1 < U                             | 1.65 1 < U       |
| SEMIVOLATILES    | 4-Nitrophenol  |                  |                    |                     |                  |                  |                  | 1.65 1 < U       | I 1.9 1 < U           | 1.65 1 < U                             | 1.65 1 < U       |
| SEMIVOLATILES    | Acenaphthene   |                  |                    |                     |                  |                  |                  | 0.33 1 < U       | I 0.38 1 < U          | 0.33 1 < U                             | 0.33 1 < U       |

Data Evaluation Report Chemical Concentrations in Soli Associated with LHAAP-35/36 Sumps

|                                |  |                                    | Concentra                          | itions of Chemic                   | als in Soil Samp                   | les Associated v          | with Sump 047         |                          |                      |                          |                          |
|--------------------------------|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|---------------------------|-----------------------|--------------------------|----------------------|--------------------------|--------------------------|
| LOCATION _CODE<br>SAMPLE_NO    |  | 35SUMP047-SB01<br>35-SMP47-SB01-01 | 35SUMP047-SB01<br>35-SMP47-SB01-02 | 35SUMP047-SB02<br>35-SMP47-SB02-01 | 35SUMP047-SB02<br>35-SMP47-SB02-02 | 47\$804<br>47\$804(0-0_5) | 47SB04<br>47SB04(1-2) | LH-DL47-01<br>LH-DL47-01 | LHS-3-11<br>LHS-3-11 | LH-S47-01<br>LH-S47-01_1 | LH-S47-01<br>LH-S47-01_2 |
| SAMPLE_DATE                    |  | 9/15/2006                          | 9/15/2006                          | 9/15/2006                          | 9/15/2005                          | 5/30/2000                 | 5/30/2000             | 7/9/1993                 | 1/10/1995            | 7/9/1993                 | 7/9/1993                 |
| DEPTH                          |  | .55 Ft                             | 2.5 - 2.5 Ft                       | .55 FI                             | 2.5 + 2.5 Ft                       | 05 Ft                     | 1 • 2 Ft              | .5 - 1.5 M               | 05 FT                | BEG                      | 2.2 · 3.2 Ft<br>BEG      |
| Test Group                     | Parameter (Linits & mo/km)                   | Result Dil LO VO                   | Result Dil EO VO                   | Result DIL LO VO                   | Result DIL LO VO                   | Result DIL LO VO          | Result DIL LO VQ      | Result DIL LQ V          | /Q Result DIL LO VQ  | Result DIL LQ VQ         | Result DIL LQ VQ         |
| SEMIVOLATILES                  | Acenaphthylene                               |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Anthracene                                   |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Benzo(a)anthracene                           |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Benzo(a)pyrene                               |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | 0 0.38 1 < 0         | 0.33 1 < 0               | 0.33 1 < 0               |
| SEMIVOLATILES                  | Benzo(b)iluoraninene<br>Renzo(b)iluoraninene |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < 0               |
| SEMIVOLATILES                  | Benzo(k)fluoranihene                         |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Benzolc Acid                                 |                                    |                                    |                                    |                                    |                           |                       | 1,65 1 <                 | U 1.9 1 < U          | 1.65 1 < U               | 1.65 t < U               |
| SEMIVOLATILES                  | Sanzyi Alcohol                               |                                    |                                    |                                    |                                    |                           |                       | 0.65 1 <                 | U 0.38 1 < U         | 0.65 1 < 0               | 0.65 1 < U               |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane                   |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | 0 0.38 1 < 0         | 0.33 1 < 1               | 0.33 1 < 1               |
| SEMIVOLATILES                  | bis(2-Chloroeinyi)einer                      |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | bis(2-Ethylberyl)ohthalate                   |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0,33 1 < U               | 0.395 1                  |
| SEMIVOLATILES                  | Butyi benzyi phihalate                       | · · ·                              |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < V               |
| SEMIVOLATILES                  | Chrysene                                     |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Dibenzo(a,h)anthracene                       |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < 0               | 0.33 1 < 0               |
| SEMIVOLATILES                  | Dibenzofuran<br>District abbailata           |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 4                 | U 0.36 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES<br>SEMIVOLATILES | Directovi polinalate                         |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | di-n-Butyl phthalate                         |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | di-n-Octyl phthalate                         |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Fluoranthene                                 |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Fluorene                                     |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | 0 0.38 1 < 0         | 0.33 1 < 0               | 0.33 1 < 0               |
| SEMIVOLATILES                  | Hexachlorobutadiane                          |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < 0               | 0.33 1 < U               |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene                    |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0,33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Hexachloroethane                             | }                                  |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Indeno(1,2,3-cd)pyrene                       |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0,33 1 < U               | 0.33 1 < 0               |
| SEMIVOLATILES                  | Isophorone                                   |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | 0 0.38 1 < 0         | 0.33 1 < 0               | 0.33 1 < 0               |
| SEMIVOLATILES                  | Naphihaiene                                  |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | n-Nilroso-dl-n-propylamine                   |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine                       |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | U 0.38 1 < U         | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Pentachiorophenol                            |                                    |                                    |                                    |                                    |                           |                       | 1.65 1 <                 | U 1.9 1 < U          | 1.65 1 < U               | 1.65 1 < U               |
| SEMIVOLATILES                  | Phenanthrene                                 |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 <                 | 0 0.38 1 < 0         | 0.33 1 < U               | 0.33 1 < 0               |
| SEMIVOLATILES                  | Phenoi                                       |                                    |                                    |                                    |                                    |                           |                       | 0.33 1 4                 | 0 0.38 1 < 0         | 0.33 1 < 0               | 0.33 1 < U               |
| VOLATILES                      | 1.1.1.2-Tetrachloroethane                    |                                    |                                    |                                    |                                    |                           |                       | 0.00                     | 0.012 1 < U          |                          |                          |
| VOLATILES                      | 1,1,1-Trichloroethane                        |                                    |                                    |                                    |                                    |                           |                       | 0.005 1 <                | U 0.006 1 < U        | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane                    |                                    |                                    |                                    |                                    |                           |                       | 0.005 1 <                | U 0.006 1 < U        | 0,005 1 < U              | 0.005 1 < U              |
| VOLATILES                      | 1,1,2-Trichloroethane                        |                                    |                                    |                                    |                                    |                           |                       | 0.005 1 <                | U 0.005 1 < U        | 0,005 1 < U              | 0.005 1 < 0              |
| VOLATILES                      | 1.1-Dichlorosthane                           |                                    |                                    |                                    |                                    |                           |                       | 0.005 1 <                | 11 0.006 1 < 0       | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                      | 1.2.3-Trichioropropage                       |                                    |                                    |                                    |                                    |                           |                       | 0.000                    | 0.012 1 < U          | 0.000                    |                          |
| VOLATILES                      | 1,2-Dibromo-3-chloropropane                  |                                    |                                    |                                    |                                    |                           |                       |                          | 0.023 1 < U          |                          |                          |
| VOLATILES                      | 1,2-Dibromosthane                            |                                    |                                    |                                    |                                    |                           |                       |                          | 0.023 1 < U          |                          |                          |
| VOLATILES                      | 1,2-Dichloroethane                           | Í                                  |                                    |                                    |                                    |                           |                       | 0.005 1 <                | U 0.006 1 < U        | 0.005 1 < U              | 0.005 1 < 0              |
| VOLATILES                      | 1,2-Dichloroethene                           |                                    |                                    |                                    |                                    |                           |                       | 0.005 1 <                | 0 0.006 1 < 0        | 0.005 1 < 0              | 0.005 1 < 1              |
| VOLATILES                      | 2.Butapope                                   |                                    |                                    |                                    |                                    |                           |                       | 0.05 1 <                 | U 0.012 1 < U        | 0.05 1 < U               | 0.05 1 < U               |
| VOLATILES                      | 2-Chloraethyl vinyl ether                    |                                    |                                    |                                    |                                    |                           |                       | 0.01 1 <                 | U                    | 0.01 1 < U               | 0.01 1 < U               |
| VOLATILES                      | 2-Hexanone                                   |                                    |                                    |                                    |                                    |                           |                       | 0.05 1 <                 | U 0.012 1 < U        | 0.05 1 < U               | 0.05 1 < U               |
| VOLATILES                      | 2-Propenal                                   |                                    |                                    |                                    |                                    |                           |                       | <b>.</b>                 | 0.58 1 < U           |                          |                          |
| VOLATILES                      | Acetone                                      |                                    |                                    |                                    |                                    |                           |                       | 0,1 1 <                  | 0 0.012 1 < 0        | .0.1 1 × U               | 0.1 1 4 0                |
| VOLATILES                      | Acetonitrie                                  |                                    |                                    |                                    |                                    |                           |                       |                          | 0.12 1 < U           |                          |                          |
| VOLATILES                      | Allví chloride                               |                                    |                                    |                                    |                                    |                           |                       |                          | 0.023 1 < U          |                          |                          |
| VOLATILES                      | Benzene                                      |                                    |                                    |                                    |                                    |                           |                       | 0,005 1 <                | U 0,006 1 < U        | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                      | Bromodichloromethane                         |                                    |                                    |                                    |                                    |                           |                       | 0.005 1 <                | U 0.006 1 < U        | · 0.005 1 < U            | 0.005 1 < U              |
| VOLATILES                      | Bromoform                                    |                                    |                                    |                                    |                                    |                           |                       | 0.005 1 <                | U 0.006 1 < U        | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                      | Bromomethane                                 |                                    |                                    |                                    |                                    |                           |                       | 0.01 1 <                 |                      | 0.005 1 < 0              | 0.005 1 < U              |
| VOLATILES                      | Carbon fetrachloride                         |                                    |                                    |                                    |                                    |                           |                       | 0.005 1 <                | U 0.006 1 < U        | 0,005 1 < U              | 0.005 1 < U              |
| VOLATILES                      | Chlorobenzene                                |                                    |                                    |                                    |                                    |                           |                       | 0.005 1 <                | U 0.006 1 < U        | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                      | Chloroethane                                 |                                    |                                    |                                    |                                    |                           |                       | 0.01 1 <                 | U 0.012 1 < U        | 0.01 1 < U               | 0.01 1 < U               |
| VOLATILES                      | Chloroform                                   |                                    |                                    |                                    |                                    |                           |                       | 0.005 1 <                | U 0.006 1 < U        | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                      | Chloromethane                                | 1                                  |                                    |                                    |                                    |                           |                       | 0.01 1 <                 | U 0.012 1 < U        | 0.01 1 < V               | 0.01 1 < U               |

Table 3-47







ł

|                          |                               |                  | Concentra        | itions of Chemic | als in Soll Samp | les Associated v | with Sump 047    |            |      |          |           |          |          |       |         |               |
|--------------------------|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------|------|----------|-----------|----------|----------|-------|---------|---------------|
| LOCATION CODE            |                               | 35SUMP047-SB01   | 35SUMP047-SB01   | 35SUMP047-SB02   | 35SUMP047-SB02   | 475804           | 47SB04           | LH-DL47    | -01  | ĻΗ       | S-3-11    | LH-S4    | 7-01     | L:    | H-S47-( | 01            |
| SAMPLE NO                |                               | 35-SMP47-SB01-01 | 35-SMP47-SB01-02 | 35-SMP47-SB02-01 | 35-SMP47-SB02-02 | 47SB04(0-0_5)    | 47SB04(1-2)      | LH-DL47    | -01  | เห       | S-3-11    | LH-S47   | -01_1    | LH    | -\$47-0 | 1_2           |
| SAMPLE DATE              |                               | 9/15/2006        | 9/15/2006        | 9/15/2006        | 9/15/2008        | 5/30/2000        | 5/30/2000        | 7/9/199    | 13   | 1/1      | 0/1995    | 7/9/1    | 993      |       | 7/9/199 | 3             |
| DEPTH                    |                               | .55 Ft           | 2.5 - 2.5 FI     | 5 5 Ft           | 2.5 - 2.5 Ft     | 05 Ft            | 1 - 2 Ft         | .5 - 1.5   | Ft   | 0        | 5 Ft      | .5 - 1.  | 5 Ft     | 2     | 2 - 3.2 | FI            |
| SAMPLE PURPOSE           |                               | REG              | RĘG              | REG              | REG              | REG              | REG              | REG        |      | 1        | REG       | RE       | G        |       | REG     |               |
| Test Group               | Parameter (Units ≆ mg/kg)     | Result DIL LO VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result OIL LO VO | Result DIL LQ VQ | Result DIL | LQ V | Q Result | DIL LO VO | Result D | IL LO VO | Resul | DIL     | LQ VQ         |
| VOLATILES                | Chloroprene                   |                  |                  |                  |                  |                  |                  |            |      | 0.12     | 1 < U     |          |          |       |         |               |
| VOLATILES                | cia-1,3-Dichloropropene       |                  |                  |                  |                  |                  |                  | 0.005 1    | < (  | 0.006    | 1 < U     | 0.005    | । < ६    | 0.005 | 5 1     | < 0           |
| VOLATILES                | Dibromochloromethane          |                  |                  |                  |                  |                  |                  | 0.005 1    | < (  | J 0.006  | 1 < U     | 0.005    | । < L    | 0.00  | 5 1     | < U           |
| VOLATILES                | Dibromomethane                |                  |                  |                  |                  |                  |                  |            |      | 0.012    | 1 < U     |          |          |       |         |               |
| VOLATILES                | Dichlorodifluoromethane       |                  |                  |                  |                  |                  |                  |            |      | 0.023    | 1 < U     |          |          |       |         |               |
| VOLATILES                | Elhyl methacrylate            |                  |                  |                  |                  |                  |                  |            |      | 0.023    | 1 < U     |          |          |       |         |               |
| VOLATILES                | Ethylbenzene                  |                  |                  |                  |                  |                  |                  | 0.005 1    | < (  | J 0.006  | 1 < U     | 0.005    | ા < 1    | 0.00  | 5 1     | < U           |
| VOLATILES                | IODOMETHANE                   |                  |                  |                  |                  |                  |                  |            |      | 0.012    | 1 < U     |          |          |       |         |               |
| VOLATILES                | ISOBUTYL ALCOHOL              |                  |                  |                  |                  |                  |                  |            |      | 2.3      | 1 < U     |          |          |       |         |               |
| VOLATILES                | Methacrylonitrile             |                  |                  |                  |                  |                  |                  |            |      | 0.023    | 1 < U     |          |          |       |         |               |
| VOLATILEŠ                | Methyl isobutyl ketone        |                  |                  |                  |                  |                  |                  | 0.05 1     | < (  | U 0.012  | 1 < 0     | 0.05     | 1 < L    | 0.0   | 5 1     | < U           |
| VOLATILES                | METHYL METHACRYLATE           |                  |                  |                  |                  |                  |                  |            |      | 0.023    | 1 < U     |          |          |       |         |               |
| VOLATILES                | Methylene chloride            |                  |                  |                  |                  |                  |                  | 0.005 1    | < 1  | J 0.006  | 1 < U     | 0.005    | 1 < L    | 0.00  | 51      | < U           |
| VOLATILES                | Pentachloroelhane             |                  |                  |                  |                  |                  |                  |            |      | 0.023    | 1 < U     |          |          |       |         |               |
| VOLATILES                | Propionitrile                 |                  |                  |                  |                  |                  |                  |            |      | 0.058    | 1 < U     |          |          |       |         |               |
| VOLATILES                | Styrene                       |                  |                  |                  |                  |                  |                  | 0.005 1    | < 1  | U 0.006  | 1 < U     | 0.005    | 1 < L    | 0.00  | 51      | < U           |
| VOLATILES                | Teirschiproethene             |                  |                  |                  |                  |                  |                  | 0.005 1    | < 1  | 0.006    | 1 < U     | 0.005    | १ < १    | 0.00  | 51      | < Q           |
| VOLATILES                | Toluene                       | 1                |                  |                  |                  |                  |                  | 0.005 1    | < (  | U 0.006  | 1 < U     | 0.005    | 1 < 1    | 0.00  | 51      | < Ų           |
| VOLATILES                | trans-1,3-Dichloropropene     |                  |                  |                  |                  |                  |                  | 0.005 1    | < 1  | 0.006    | 1 < U     | 0.005    | 1 < L    | 0.00  | 51      | < U           |
| VOLATILES                | trans-1,4-Dichloro-2-butene   |                  |                  |                  |                  |                  |                  |            |      | 0.023    | 1 < U     |          |          |       |         |               |
| VOLATILES                | Trichloroathana               |                  |                  |                  |                  |                  |                  | 0.005 1    | < 1  | U 0.006  | 1 < U     | 0.005    | 1 < 1    | 0.00  | 51      | < U           |
| VOLATILES                | Trichlorofluoromethane        |                  |                  |                  |                  |                  |                  |            |      | 0.012    | 1 < U     |          |          |       |         |               |
| VOLATILES                | Vinyl acetate                 |                  |                  |                  |                  |                  |                  | 0.05 1     | < 1  | U 0.012  | 1 < U     | 0.05     | 1 < i    | 0.0   | 51      | < U           |
| VOLATILES                | Vinyl chloride                |                  |                  |                  |                  |                  |                  | 0.01 1     | < 1  | U 0.012  | 1 < U     | 0.01     | 1 < (    | J 0.0 | 11      | < U           |
| VOLATILES                | Xylenes, Total                |                  |                  |                  |                  |                  |                  | 0,005 1    | < 1  | U 0.006  | 1 < U     | 0.005    | 1 < l    | 0.00  | 5 1     | <u>&lt; U</u> |
| Footnotes are shown on c | cover page to Tables Section. |                  |                  |                  |                  |                  |                  |            |      |          |           |          |          |       |         |               |

Table 3-47

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps:



Table 3-48 Concentrations of Chemicals in Soil Samples Associated with Sump 048

| (SUMP) = SUMP048     |                              |                  | 2501330040 0004  | 175565           | 136000           |                  |   | 1 1 249 01       | 1.0.549.01       | 1 H-S48.02       |
|----------------------|------------------------------|------------------|------------------|------------------|------------------|------------------|---|------------------|------------------|------------------|
| SAMPLE NO            |                              | 35-SMP48-SB01-01 | 35.5MP48.5801-02 | 475806/0-0-5)    | 475806(1-2)      | 1 H-DE48-01      | EH-\$48-01_1                            | LH-S48-01 2      | LH-S48-01 3      | LH-S48-02        |
| SAMPLE DATE          |                              | 9/13/2005        | 9/13/2005        | 5/31/2000        | 5/31/2000        | 7/11/1993        | 7/27/1993                               | 7/27/1993        | 7/27/1993        | 7/27/1993        |
| DEPTH                |                              | .55 FI           | 10 - 10 Ft       | 05 Ft            | 1 - 2 Ft         | 2.7 - 3.4 Ft     | .5 - 1 Ft                               | 5 - 5.5 Ft       | 6,5 - 7 Ft       | .5 - 1 FI        |
| SAMPLE_PURPOSE       |                              | REG              | REG              | REG              | REG              | REG              | REG                                     | REG              | REG              | REG              |
| Test Group           | Parameter (Units = mg/kg)    | Result DIL LO VO | Result OIL LO VO | Result OIL LO VO | Result DIL LO VO | Result DIL LO VO | D Result DIL LA VA                      | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO |
| EXPLOSIVES           | 2,4-Dinitrololuene           |                  |                  |                  |                  | 0.33 t < U       | 0.33 1 < U                              | 0.33 1 < U       | 0.33 1 < U       | 0.33 F < U       |
| EXPLOSIVES           | 2.6-Dinitrotoluene           |                  |                  |                  |                  | 0.33 1 < L       | J 0.33 1 < U                            | 0.33 1 < U       | 0.33 f < U       | 0.33 I < U       |
| METALS               | Aluminum                     | 6890 1           | 10500 1          |                  |                  | 4820 1           | 7470 1                                  | 10000 1          | 23200 1          | 5820             |
| METALS               | Antemony                     | 0.107 1 U        | 0.125 1 U        |                  |                  | 31 < 0           | 1 31 < 0                                | 3 1 < 0          | 31 < 0           | 31 < 0           |
| METALS               | Arsenic                      | 5.84             | 2.56 1           |                  |                  | 2.3 1            | 2.3 1                                   | 2.3 1            | 2.1 1            | 3.3 1            |
| METALS               | Banum<br>Banum               | 63.5 1 J         | 125 1 J          |                  |                  | 48.1 1           | 48.9 1                                  | 129              | 75.3             | 38.8 1           |
| METALS               | Beryaum                      | 0.5/3 1          | 1 66,0           |                  |                  |                  |   | 1 1 - 11         | 1 1 2 1          | 1 1 2 11         |
| METALO               | Calcium                      | 0.097 1          | 0.144 1 2 2      |                  |                  | 997 1            |   | 556 1            | 995 1            | 1230 1           |
| METALS               | Chromium                     | 21.5 1           | 136 1            |                  |                  | t1.8 1           | 12.5 1                                  | 13.2 1           | 22.5 1           | 45.9 1           |
| METALS               | Cohait                       | 621 1            | 22 1             |                  |                  | 3.4 1            | 1.9 1                                   | 5.4 1            | 8.3 1            | 2.8 1            |
| METALS               | Copper                       | 5.71 1           | 12 1             |                  |                  | 4 1              | 3.5 1                                   | 3.4 1            | 6.2 1            | 8.4 1            |
| METALS               | Iron                         | 19000 t          | 15500 1          |                  |                  | 10100 1          | 9960 1                                  | 10800 1          | 21700 1          | 28200 1          |
| METALS               | Lead                         | 14,5 1           | 10.2 1           |                  |                  | 7,5 1            | 8.1 1                                   | 7.9 1            | 13,4 i           | 15.5 1           |
| METALS               | Magnesium                    | 308 1 J          | 3990 i J         |                  |                  | 199 1            | 456 1                                   | 575 1            | 1850 1           | 268 1            |
| METALS               | Manganese                    | 308 1            | 106 1            |                  |                  | 150 1            | 35.4 1                                  | 145 1            | 32.9 1           | 68.1 1           |
| METALS               | Mercury                      | 0.342 1          | 0.31 I U         |                  |                  | 0.1 1 < L        | ) 0.1 1 < U                             | 0.1 1 < U        | 0.1 1 < U        | 0.1 f < U        |
| METALS               | Nickel                       | 4.63 1           | 21.7 1           |                  |                  |                  |   |                  |                  |                  |
| METALS               | Polassium                    | 230 1            | 525 1            |                  |                  | 223 1            | 370 1                                   | 618 1            | 1100 1           | 258 1            |
| METALS               | Selenium                     | 0.359 1          | 0.164 1 J J      |                  |                  | 11 < l           | J 11 < U                                | 11 < U           | 1 1 < U          | 11 < U           |
| METALS               | Silver                       | 1.58 1 U         | 1.83 1 U         |                  |                  | 11 < i           | ) ११२४                                  | 11 < U           | 11 < U           | 11 < 0           |
| METALS               | Sodium                       | 19.3 1 J J       | 742 1            |                  |                  |                  | ** '                                    |                  |                  |                  |
| METALS               | Strontium                    | 0.0757           |                  |                  |                  | 4.2 1            | 5.2 1                                   | <b>0.6</b>       | 18.3 1           | 6.6 1            |
| METALS               | i navijum<br>Vecedium        | 0.0555 1         | 0.137 1          |                  |                  |                  |   |                  |                  |                  |
| METALS               | Ziee                         | 33.5 J           | 10.4 I J         |                  |                  | 125 1            | 113 1                                   | 16 1             | 38.8 1           | 32.2 1           |
| PERC                 | Percharate                   | 1 0.04 4 11      | 005 5 17         | 0.00608 1 < 11   | 0.0714 1         | 10.0             | 11.0                                    |                  | 0010             | 0010             |
| RANGE ORGANICS       | Carbon Banne C12-C28         | 39.6 1 J J       | 63.6 1 U         |                  | 0.0714           |                  |   |                  |                  |                  |
| RANGE ORGANICS       | Carbon Range C28-C35         | 34 1 J J         | 63.6 1 U         |                  |                  |                  |   |                  |                  |                  |
| RANGE_ORGANICS       | Carbon Range C6-C12          | 53 1 U           | 63.6 ≯ U         |                  |                  |                  |   |                  |                  |                  |
| SEMIVOLATILES        | 1.2.4-Trichlorobenzene       |                  |                  |                  |                  | 0.33 1 < L       | j 0.33 t < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 1.2-Dichlorobenzane          | 1                |                  |                  |                  | 0.33 1 < L       | J 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 1,3-Dichlorobenzene          | 1                |                  |                  |                  | 0.33 1 < U       | J 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 1.4-Dichlorobenzene          |                  |                  |                  |                  | 0.33 1 < L       | J 0.33 1 < U                            | 0.33 4 < U       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES        | 2.4,5-Trichlorophenol        | }                |                  |                  |                  | 1,65 1 < 0       | J 1,65 1 < U                            | 1.65 1 < U       | 1,65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES        | 2.4.5-Liteniorophenal        |                  |                  |                  |                  | 0.33 1 < 0       |   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES        | 2.4-Dimetoriological         | 1                |                  |                  |                  | 033 1 < 1        | 2 0.33 1 K U                            | 0.33 1 4 1       | 0.33 1 < 1       | 0.33 1 < U       |
| SEMIVOLATILES        | 2 4-Dinitrophenol            |                  |                  |                  |                  | 165 1 < 1        | 1651 e U                                | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES        | 2-Chloronaphthaiene          |                  |                  |                  |                  | 0.33 1 < 0       | J 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 2-Chlorophenol               |                  |                  |                  |                  | 0.33 1 < 1       | J 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 2-Methylnaphthalene          |                  |                  |                  |                  | 0,33 1 < U       | J 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 2-Methylphenol               |                  |                  |                  |                  | 0.33 1 < U       | J 0,33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 2-Nitroaniline               |                  |                  |                  |                  | 1.65 1 < U       | J 1.65 1 < U                            | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES        | 2-Nitrophenol                |                  |                  |                  |                  | 0.33 1 < U       | J 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 3,3'-Dichlorobenzidine       |                  |                  |                  |                  | 0.65 1 < U       | J 0.65 1 < U                            | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES        | 3-Nitroanifine               |                  |                  |                  |                  | 1,65 1 < 1       | J 1.65 1 < U                            | 1.65 1 < U       | 1,65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES        | 4.6-Dinitto-2-metryiphenol   |                  |                  |                  |                  | 1,65 1 < 1       | J 1,65 1 < U                            | 1,65 1 < U       | 1.05 1 < U       | 1.03 I < U       |
| SEMIVOLATILES        | 4-chora-3-methylohenet       |                  |                  |                  |                  | 0.50 1 < 1       | , u.aa i ≪ U<br>I 065 i - <sup>II</sup> | 0.65 1 - U       | 0.55 1 - 11      | 0.65 1 - 1       |
| SEMIVOLATIVES        | 4-Chiomaniline               | ļ                |                  |                  |                  | 0.00 1 < 1       | J 0.65 1 ∠ H                            | 0.65 1 2 11      | 0.65 1 2 11      | 0.65 1 2 1       |
| SEMIVOLATILES        | 4-Chlorophanyl phenyl eltrer | 1                |                  |                  |                  | 0.33 1 2 1       | J 0.33 1 e U                            | 0.33 1 ∠ E       | 0.33 1 < 1       | 0.33 1 < 1       |
| SEMIVOLATILES        | 4-Methylphenol               | 1                |                  |                  |                  | 0.33 1 < 1       | J 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 4-Nitroaniline               | 1                |                  |                  |                  | 1.65 1 < 1       | J 1,65 1 < U                            | 1.65 1 < U       | 1,65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES        | 4-Nitrophenal                | 1                |                  |                  |                  | 1.65 1 < 1       | J 1.65 1 < U                            | 1,65 1 < U       | 1.65 1 < U       | 1,65 1 < U       |
| SEMIVOLATILES        | Acenaphthene                 |                  |                  |                  |                  | 0.33 1 < 0       | J 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       |
| <b>SEMIVOLATILES</b> | Acenaphthylene               |                  |                  |                  |                  | 0.33 1 < 1       | J 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 i < U       |
| SEMIVOLATILES        | Anthracene                   |                  |                  |                  |                  | 0.33 1 < U       | J 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-48   |        |
|--|--------|
| Concentrations of Chemicals in Soil Samples Associated with Su | mp 048 |

| (SUMP) = SUMP048               |                                |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|--------------------------------|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE                 |                                | 35SUMP048-SB01   | 355UMP048-5801   | 475B06           | 47\$B06          | LH-0L48-01       | LH-S48-01        | LH-S48-01        | LH-S48-01        | LH-\$48-02       |
| SAMPLE_NO                      |                                | 35-SMP48-SB01-01 | 35-SMP48-SB01-02 | 47\$806(0.0_5)   | 47\$B06(1-2)     | LH-DL48-01       | LH-S48-01_1      | LH-S48-01_2      | LH-S48-01_3      | LH-S48-02        |
| SAMPLE_DATE                    |                                | 9/13/2006        | 9/13/2006        | 5/31/2000        | 5/31/2000        | 7/11/1993        | 7/27/1993        | 7/27/1993        | 7/27/1993        | 7/27/1993        |
| DEPTH                          |                                | .5 + .5 Ft       | 10 - 10 Ft       | 0+.5 Ft          | 1 - 2 FL         | 2.7 - 3.4 Ft     | .5 - 1 Ft        | 5 - 5.5 Ft       | 6,5 - 7 FI       | .5 - 1 Ft        |
| SAMPLE_PURPOSE                 |                                | REG              |
| Tasi Group                     | Parameter (Units = mg/kg)      | Result DIL LO VO | Result DIL LO VO | Result DIE EQ VQ | Result DIL LO VO | Result OIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result OIL LO VO | Result DIL LQ VO |
| SEMIVOLATILES                  | Benzo(a)anthracene             |                  |                  |                  |                  | 0.33 1 < U       |
| SEMIVOLATILES                  | Benzo(a)pyrene                 |                  |                  |                  |                  | 0.33 1 < U       | 0.33 i < U       |
| SEMIVOLATILES                  | Benzo(b)Suoranthene            |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Benzo(ghi)perviene             |                  |                  |                  |                  | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Benzo(k)fluoranthene           |                  |                  |                  |                  | 0.33 1 < U       |
| SEMIVOLATILES                  | Benzoic Acid                   |                  |                  |                  |                  | 0.001 1 < U      | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.55 1 < U       |
| SEMIVOLATILES                  | Benzyl Alcohol                 |                  |                  |                  |                  | 0.65 1 < U       | 0.65 1 < U       | 0,65 1 < U       | 0.65 î < U       | 0.65 1 < U       |
| SEMIVOLATILES                  | bis(2-Chioroethoxy)methane     |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 í < U       | 0.33 î < U       | 0.33 f < U       |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether        |                  |                  |                  |                  | 0.33 f < U       | 0.33 i < U       | 0.33 1 < U       | 0.33 î < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether    | 1                |                  |                  |                  | 0.33 f < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthalate     |                  |                  |                  |                  | 0.347 1          | 0.33 1 < U       | 0.33 1 < U       | 0.36 t           | 0.33 t < U       |
| SEMIVOLATILES                  | Bulyf benzyl phthalate         |                  |                  |                  |                  | 0.33 t < U       | 0.33 ( < U       | 0.33 t < U       | 0.33 t < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Chrysene                       |                  |                  |                  |                  | 0.33 1 < U       | 0.33 t < U       | 0.33 i < U       | 0.33 i < U       | 0.33 I < U       |
| SEMIVOLATILES                  | Dibenzo(a,h)anthracene         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 t < U       | 0.33 t < U       | 0.33 t < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Dibenzoluran                   |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 f < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Diethyl phthalate              | 1                |                  |                  |                  | 0.33 1 < U       | 0.33 î < U       | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Dimethyl phthafate             |                  |                  |                  |                  | 0.33 1 < U       | 0.33 î < U       | 0.33 1 < U       | 0,33 f < U       | 0.33 í c U       |
| SEMIVOLATILES                  | di-n-Butyl phihalale           |                  |                  | -                |                  | 0.33 1 < U       | 1.01 1           | 1.08             | 1.12 1           | 0.857 1          |
| SEMIVOLATILES                  | di-n-Ociyi phthalate           |                  |                  |                  |                  | 0.33 1 < U       | 0.33 f < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Fluoranthene                   |                  |                  |                  |                  | 0.33 1 < U       | 0.33 t < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Fluorane                       |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Hexachlorobenzene              |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Hexachlorobutadiene            |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 + < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Hexachtorocyclopentadiene      |                  |                  |                  |                  | 0.30 1 < U       | 0.33 † < V       | 0.33 1 < U       | 0.33 1 < U       | 0.33 f < U       |
| SEMIVOLATILES                  | Hexachioroethane               |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 f < U       |
| SEMIVOLATILES                  | Indeno(1.2.3-cd)pyrene         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 년       | 0.33 1 < U       |
| SEMIVOLATILES                  | Isophorone                     |                  |                  |                  |                  | 0,33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES                  | Naphthalene                    |                  |                  |                  |                  | 0.33 1 < U       |
| SEMIVOLATILES                  | Nifrobenzene                   |                  |                  |                  |                  | 0.33 1 < U       |
| SEMIVOLATILES                  | e-Neroso-di-n-propylamine      |                  |                  |                  |                  | 0.001 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES<br>SEMIVOLATILES | n-Nirosocionenviamine          |                  |                  |                  |                  | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | D.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES<br>SEMIVOLATILES | Pentachiorophenoi              |                  |                  |                  |                  | 1.65, 1 < U      | f.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       |
| SEMPLOLATILES                  | Phenalthrane                   |                  |                  |                  |                  | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       |
| CEMINOLATILES                  | Pueno                          |                  |                  |                  |                  | 0.33 1 < U       |
| VOLATILES                      | L 1 L 3 Zatrachiemethane       |                  | 0.00774          |                  |                  | 0.33 1 < 0       | 0.33 1 < U       |
| VOLATILES                      | 1.1.1 Trishlerestanes          |                  | 0.00574 1 U      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES                      | 1.1.2.2 Tatrackie settere      |                  | 0.00549 1 J J    |                  |                  | 0.0242 1         | 0.005 1 < U      | 0.294 1          | 0.0428 1         | 0.005 1 < U      |
| VOLATILES                      | 1.1.2.2-retrachordemane        |                  | 0.00574 1 U      |                  |                  | 0.005 1 < U      |
| VOLATILES                      | 1 1-Dichloreothane             |                  | 0.00574 1 0      |                  |                  | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES                      | 1.1-Dichlerethere              |                  | 0.00574 1 0      |                  |                  | 0.005 1 < 0      | 0.005 1 < U      |
| VOLATILES                      | 1 1-Dichlerenzonen             | {                | 0.00172 1 J J    |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.0071 1         | 0.005 1 < 0      | 0.005 1 < U      |
| VOLATILES                      | 1.2.3.Trichiomhanzana          |                  | 0.00374 3 0      |                  |                  |                  |                  |                  |                  |                  |
| VOLATH ES                      | 1.2.3-Tdebloroprogane          | }                | 0.00574 1 0      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES                      | 1.2.4.Tdeblorobenzene          |                  | 0.00574 1 1      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES                      | 1.2 & Trimelbythenzone         |                  | 0.00574 1 0      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES                      | 1 2-Dihrama, 3-chlorantopage   |                  | 0.00374 1 0      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES                      | 1 2-Sihremelbana               |                  | 0.00374 1 0      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES                      | 1 2-Dichlorobenzane            | }                | 0.00574 1 U      |                  |                  |                  |                  |                  | ,                |                  |
| VOLATILES                      | 1.2-Dichloroelbane             | 1                | 0.00574 1 1      |                  |                  | 0.005            | 0.005            | 0.005 4 - 12     | 0.005            | 0.005 1 - 11     |
| VOLATILES                      | 1.2-Dichloroeihene             | 1                | 5.000r- / U      |                  |                  | 0.005 4          | 0.005 4 - 11     |                  | 0.000 1 < U      | 0,006 I - 11     |
| VOLATILES                      | 1.2-Dichloropropane            |                  | 0.00574 1 11     |                  |                  | 0.005 1 < 0      |                  | 0.005 I < U      |                  | 0.005 1 < U      |
| VOLATILES                      | 1.2-Dimethylbenzene (n-Xviene) |                  | 0.00574 t 12     |                  |                  | 0.000 i < U      | 0.000 i < 0      | 0.000 T < U      | 0.003 I < U      | 0.003 i < 0      |
| VOLATILES                      | 1.3.5-Trimelhylbenzene         | ļ                | 0.00574 1 17     |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES                      | 1.3-Dichiorobanzena            |                  | 0.00574 1 11     |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES                      | 1.3-Dichioropropane            |                  | 0.00574 1 11     |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES                      | 1.4-Dichlorobenzene            | }                | 0.00574 1 1      |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES                      | 2,2-Dichloropropane            |                  | 0.00574 1 1      |                  |                  |                  |                  |                  |                  |                  |
|                                |                                | 1                | •                |                  |                  |                  |                  |                  |                  |                  |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-48   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 048 |

• •

| (SUMP) = SUMP048         |                              |  |                  |                 |                  | ••••            |              |             | 111P 04             | •          |      |          |          |             |        |       |       |             |            |            |
|--------------------------|------------------------------|--|------------------|-----------------|------------------|-----------------|--------------|-------------|---------------------|------------|------|----------|----------|-------------|--------|-------|-------|-------------|------------|------------|
| LOCATION _CODE           |                              | 355UMP048-5801 355UMP048-5801 475806 475806 475806 |                  |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| SAMPLE_NO                |                              | 35-SMP48-SB01-01                                   | 35-SMP48-SP01-02 | 470000          | 470000           | 0.000           | 1.48-01      |             | . U                 | H-\$48-0   |      | Ļ        | -\$48-01 |             | LH-S   | 48-01 |       | L.          | .H-\$48-0  | )2         |
| SAMPLE_DATE              |                              | 9/13/2006  | 9/19/2006        | #/3000(0·0_3)   | 4/3000(1-2)      | 1-2) LH+0L48-01 |              | LH-S48-01_1 |                     |            | LH-  | S48-01_2 | 2        | LH-S4       | 8-01_3 |       | L.    | H-S48-(     | 75         |            |
| DEPTH                    |                              | .55 El   | 10 - 10 FI       | 0.55            | 3/31/2000        | <i>11</i> 13    | 11993        |             | //2//1993           |            |      | 7/       | 27/1993  |             | 7/27   | 1993  |       |             | //27/199   | ,3         |
| SAMPLE_PURPOSE           |                              | REG  | REC              | 01.0 FL         | 0.251            | 2.7 -           | 2.7 - 3.4 Ft |             |                     | .5 - 1 Ft  |      | 5        | - 5.5 Ft |             | 6.5    | 7 Ft  |       |             | .5 - 1 F!  | I.         |
| Test Group               | Parameter (Units = rpg/kg)   | Sesuli Dii LO VO                                   | Result Dil LO VO | Recuit Di LO VO | FEG              | ۴               | AEG          |             | <b>.</b>            | REG        |      |          | REG      |             | 8      | EG.   |       |             | REG        |            |
| VOLATILES                | 2-Bulanone                   |  | 0.0115 1 11      |                 | Result DIL LO VO | Hesuit          | UL D         | <u>o vo</u> | Result              | DILL       | Q VQ | Result   | DILU     | <u>a va</u> | Result | DIL   | LQ VO | Result      | DiL        | LO VO      |
| VOLATILES                | 2-Chloroethyl vinyl ether    |  | 0.0115 1 11      |                 |                  | 0.05            | 1 4          | < U         | 0.05                | 1          | < U  | 0.05     | 1 .      | e U         | 0.05   | 1     | < U   | 0.0         | j 1        | < U        |
| VOLATILES                | 2-Chlorotoluene              |  | 0.00574 1 11     |                 |                  | 0,01            | 1 4          | < U         | 0.01                | 1          | e Q  | 0.01     | 1 4      | < U         | 0.01   | 1     | < Ų   | 0,01        | . 1        | < Ų        |
| VOLATILES                | 2-Hexanone                   |  | 0.0115 1 11      |                 |                  | 0.05            |              |             | <b>A</b> 0 <b>F</b> |            |      |          |          |             |        |       |       |             |            |            |
| VOLATILES                | 4-Chlorotoluene              |  | 0.00574 1 U      |                 |                  | 0.05            | 1 4          | < 0         | 0.05                | 1          | e Q  | 0.05     | 1 4      | < U         | 0,05   | 1     | < U   | 0.05        | × 1        | < U        |
| VOLATILES                | Acetone                      |  | 0.0115 1 11      |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATILES                | Benzene                      |  | 0.00574 1 11     |                 |                  | 0.000           | 1 4          | < U         | 0.1                 | 1          | 4 U  | 0,1      | 1 <      | e U         | 0.1    | 1     | < U   | <b>Q</b> .1 | . 1        | < U        |
| VOLATILES                | Bromobenzene                 |  | 0.00574 1 11     |                 |                  | 0.005           | I 4          | <i>c</i> u  | 0.005               | <b>,</b> . | : 0  | 0.005    | 1 <      | : 0         | 0.005  | 1     | < 0   | 0.00        | ) f        | < Ų        |
| VOLATILES                | Stomochloromathane           |  | 0.00574 1 1      |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATILES                | Bromodichloromethana         |  | 0.00574 1 1      |                 |                  | 0.000           |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATILES                | Bromoform                    |  | 0.00574 7 0      |                 |                  | 0.005           | 1 <          | < U         | 0.005               | 1          | : 13 | 0.005    | 1 <      | : U         | 0.005  | 1     | < U   | 0.005       | × 1        | < U        |
| VOLATILES                | Bromomelhane                 |  | 0.0115 1 11      |                 |                  | 0.005           |              | < U         | 0.005               | 1 1        | : U  | 0.005    | 1 <      | : U         | 0.005  | 1     | < Ü   | 0.005       | / <b>1</b> | < U        |
| VOLATILES                | Carbon disulfide             |  | 0.00574 1 1      |                 |                  | 0.01            | 1 <          | < U         | 0.01                | 1 1        | ( U  | 0.01     | 1 <      | : U         | 0.01   | 1     | < U   | 0.01        | 1          | < U        |
| VQLATILES                | Carbon tetrachloride         |  | 0.00574 1 11     |                 |                  | 0.005           | 1 <          | < U         | 0.005               | 1 -        | : U  | 0.005    | 1 <      | : U         | 0.005  | 1     | < U   | 0.005       | 1          | < U        |
| VOLATILES                | Chlorobenzene                |  | 0.00574 4 11     |                 |                  | 0.005           | 1 <          | : 0         | 0.005               | 1 •        | : U  | 0.005    | 1 <      | : U         | 0.005  | ٤     | < U   | 0.005       | · 1        | < U        |
| VOLATILES                | Chloroethane                 |  | 0.00374 1 0      |                 |                  | 0.005           | 1 <          | : U         | 0.005               | 1.         | : U  | 0.005    | 1 <      | : U         | 0.005  | 1     | ∢ Ų   | 0.005       | - 1 - I    | < U        |
| VOLATILES                | Chloroform                   |  |                  |                 |                  | 0,01            | 1 <          | : 0         | 0.01                | 1 .        | : U  | 0.01     | 1 <      | : U         | 0.01   | 1     | < U   | 0,01        | 1          | < U        |
| VOLATILES                | Chloromethane                | 1  | 0.00374 1 U      |                 |                  | 0.005           | 1 <          | : U         | 0.005               | 1.         | Ų    | 0.005    | 1 <      | U           | 0.005  | 1     | < Ų   | 0.005       | 1          | < U        |
| VOLATILES                | cis-1.2-Dichloroethene       |  | 0,0110 1 0       |                 |                  | Q.01            | 1 <          | : U         | 0.01                | 1 +        | ÷    | 0.01     | 1 <      | U           | 0.01   | 1     | < U   | 0.01        | 1          | < U        |
| VOLATILES                | cis-1 3-Dichlorooronage      |  | 0.00574 1 0      |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATILES                | Dibtomochlaromathana         |  | 0,00574 1 U      |                 |                  | 0.005           | 1 <          | : U         | 0.005               | 1.         | บ    | 0.005    | 1 c      | U           | 0.005  | í     | < U   | 0.005       | . 1        | < U        |
| VOLATILES                | Dibromomethane               |  | 0.00574 1 U      |                 |                  | 0,005           | 1 <          | : U         | 0.005               | 1 •        | U U  | 0.005    | 1 <      | U           | 0.005  | 1     | < Ų   | 0.005       | . 1        | < U        |
| VOLATILES                | Dichlorodifusconothano       |  | 0.005/4 1 U      |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATHES                 | Elhubertana                  |  | 0.0115 1 U       |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATILES                | Revictionalista              |  | 0.00574 1 1      |                 |                  | 0.005           | 1 <          | U           | 0.005               | 1 🔹        | U    | 0.005    | 1 <      | U           | 0.005  | 1     | < U   | 0.005       | 1          | < U        |
| VOLATILES                | Leorandoonaceo               |  | 0.00574 1 U      |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATILES                | m o Yulanaa                  |  | 0.00574 1 U      |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATILES                | Molbid included values       |  | 0.00574 1 U      |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATILES                | Menty sought keiping         |  | 0.0115 1 U       |                 |                  | 0.05            | 1 <          | U           | 0.05                | 1 -        | Ų    | 0.05     | 1 <      | U           | 0.05   | 1     | < U   | 0.05        | ٤          | e 11       |
| VOLATILES                | Mentylene colonog            |  | 0.00574 1 U      |                 |                  | 0.005           | t <          | U           | 0.005               | 1 .        | U    | 0.005    | f c      | U           | 0.005  | 1     | < U   | 0.005       | 1          | - U        |
| VOLATILES                | Napatoalene                  |  | 0,0115 1 U       |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATILES                |                              |  | 0.00574 1 U      |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATILES<br>V/11 ATILES | A FORDONY TO USEN            |  | 0.00574 1 U      |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATILES                |                              |  | 0.00574 1 U      |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATHES                 | SUCHUITUSENZENE              | 1  | 0.00574 1 U      |                 |                  |                 |              |             |                     |            |      |          |          |             |        |       |       |             |            |            |
| VOLATILES                | Styrene                      |  | 0.00574 1 U      |                 |                  | 0.005           | 1 <          | U           | 0.005               | 1 4        | U    | 0.005    | 1 <      | U           | 0.005  | 1     | < 1)  | 0.005       | 1          | e U        |
| VOLATILES                |                              |  | 0.00574 1 U      |                 |                  |                 |              |             |                     |            |      |          |          | -           |        |       |       |             |            | •          |
| VOLATILES                |                              |  | 0.00574 1 U      |                 |                  | 0.005           | 1 c          | U           | 0.005               | 1 <        | U    | 0.005    | 1 <      | Ð           | 0.005  | 1     | e U   | 0.005       | 1          | z 11       |
| VOLATILES                | 1 diuene                     |  | 0.00574 1 U      |                 |                  | 0.005           | 1 <          | U           | 0.005               | 1 0        | ប្   | 0.005    | 1 <      | ŭ           | 0.005  | 1     | εŭ    | 0.000       | ÷          | - 11       |
| VOLATILES                | irans-),2-Uichtordeihene     |  | 0.00574 1 U      |                 |                  |                 |              |             |                     |            |      | -        | -        | -           |        |       | 2     | 5           | •          |            |
| VOLATILES                | trans-1,3-Dichloropropene    | 1  | 0.00574 : U      |                 |                  | 0.005           | 1 <          | U           | 0.005               | 1 <        | U    | 0.005    | 1 0      | U           | 0.005  | 1     | e []  | 0.005       | 1          | - 11       |
| VOLATILES                | FICHORDER                    | 1  | 0.00318 1 J J    |                 |                  | 0.005           | 1 <          | U           | 0.005               | 1 4        | Ū    | 0.005    | 1 2      | U           | 0.005  | 1     | e 11  | 0.005       | ÷          | 2 11       |
| VOLATILES                | I nonrorofitoromethane       |  | 0.0115 1 U       |                 |                  |                 |              |             |                     |            | -    |          |          | -           | 4.445  |       |       | 0.005       |            |            |
| VOLATILES                | Vinyi scetate                |  | 0.0115 1 U       |                 |                  | 0.05            | 1 <          | U           | 0,05                | 1 <        | Ð    | 0.05     | 1 c      | U           | 0.05   | 1.    | - 11  | 0.05        | +          | - 11       |
| VOLANLES                 | Vinyi chioride               |  | 0.0115 1 U       |                 |                  | 0.01            | 1 <          | U           | 0.01                | 1 4        | Ū    | 0.01     | 1        | ŭ           | 0.00   |       | ~     | 0.00        | 4          | - U<br>- H |
| VULATILES                | Xylenes, Total               | 1  |                  |                 |                  | 0.005           | 1 <          | U           | 0.005               | 1 2        | Ū    | 0.005    | 1 -      | ŭ           | 0.005  |       |       | 0.07        |            |            |
| FUSHIOIS BIS SNOWN ON    | cover page to Tables Section |  |                  |                 |                  |                 |              |             |                     |            |      |          |          | <u> </u>    | V.000  |       |       | 0.000       |            | - U        |

Chemical Concentrations In Soil Associated with LHAAP-35/36 Sumps

### Shaw Environmental, Inc. 75 00066

|                  |                            | iapi<br>anin in Ca | ie J<br>ii o | -49    |     |            |                |            |    |        |                     |               | 40 |            |                 |             |             |
|------------------|----------------------------|--------------------|--------------|--------|-----|------------|----------------|------------|----|--------|---------------------|---------------|----|------------|-----------------|-------------|-------------|
|                  | Concentrations of Chemi    | icais in So        | цŞ           | am     | pie | 5 A\$5     | OC             | ate        | av | /itn ə | um                  | ip u          | 49 |            |                 |             |             |
| [SUMP] = SUMP049 |                            |                    |              |        |     |            |                |            |    |        |                     |               |    |            |                 |             |             |
| LOGATION _CODE   |                            | 355UM              | PU49         | -5801  |     | LP<br>LLLL | 1.545          | FU1        |    |        | -040<br>-040        |               |    | 41<br>1 11 | 640 T           |             |             |
| SAMPLE_NO        |                            | 35-5MP0            | 149-3        | 9801-C | 12  | LH-4       | 545-0<br>Vo/10 | n Qu<br>m  | i  |        | *348*<br>7/0/47     | -01_1<br>002  |    | цп<br>-    | -949.<br>Maise  | 01_2<br>109 |             |
| SAMPLE_DAIE      |                            | 9/1                | 9/200        | ,<br>, |     |            | /9/19          | 93<br>. Et |    |        | កម្ពាន<br>ក្រុមព្រះ | 995)<br>T E 1 |    |            | (19/19<br>  / 0 | 33<br>E+    |             |
| CANDLE DUDDORE   |                            | 4                  |              | T I    |     |            | 2 * 1.2<br>ED  | 1          |    |        | 0 • 1.3<br>720      | 2             |    |            | 9,414<br>1000   | 9 F 9<br>2  |             |
| SAMPLE_PURPUSE   | Bergmotor (Units - mr/kg)  | Bacult             |              | 10     | vo  | Decult     |                | 10         | vo | Decult |                     | ,<br>10       | vo | Decut      |                 | 10          | vo          |
|                  | 2 4-Dipitratoluone         | rieaun             | UIC.         | LQ     |     | 0.32       | 1              |            |    | 0.33   | 1                   |               | 11 | 0.33       | 1               |             | <del></del> |
| EXPLOSIVES       | 2.6-Dinitrotoluene         |                    |              |        |     | 0.33       | ÷              | 2          | ŭ  | 0.33   | 1                   | 2             | ι. | 0.33       | 1               | 2           | ŭ           |
| METALS           | Aluminum                   | 13700              | 1            |        |     | 3310       | ÷              | -          | Ŷ  | 7980   | 1                   | -             | Ũ  | 0.00       |                 |             | •           |
| METALS           | Antimony                   | 0 118              | i            | Ш      |     | 3          | 1              | é          | ŧŧ | .000   | 1                   | ~             | IJ |            |                 |             |             |
| METALS           | Arsenic                    | 1 14               | •            | 0      |     | 1          | 1              | Ĵ          | ŭ  | 15     | 1                   | è             | Ŭ  |            |                 |             |             |
| METALS           | Barium                     | 59.8               | 1            |        |     | 58         | 1              | Ż          | ŭ  | 48.4   | 1                   | ž             | Ð  |            |                 |             |             |
| METALS           | Beryllium                  | 0.439              | 1            |        |     |            |                | -          | ·  |        |                     | -             | -  |            |                 |             |             |
| METALS           | Cadmium                    | 0.0809             | 1            | J      | J   | 1          | 1              | <          | υ  | 1      | 1                   | <             | υ  |            |                 |             |             |
| METALS           | Calcium                    | 514                | 1            |        | •   | 637        | 1              |            | -  | 1010   | 1                   |               | -  |            |                 |             |             |
| METALS           | Chromium                   | 12                 | 1            |        |     | 5.7        | 1              | <          | U  | 9.7    | 1                   | <             | U  |            |                 |             |             |
| METALS           | Cobalt                     | 2.35               | 1            |        |     | 6.2        | 1              |            | -  | 2.7    | 1                   |               | -  |            |                 |             |             |
| METALS           | Copper                     | 2.38               | 1            |        |     | 1.3        | 1              |            |    | 2      | 1                   |               |    |            |                 |             |             |
| METALS           | Iron                       | 13200              | 1            |        |     | 4020       | 1              |            |    | 8850   | 1                   |               |    |            |                 |             |             |
| METALS           | Lead                       | 8,49               | 1            |        |     | 4.3        | 1              |            |    | 4.3    | 1                   |               |    |            |                 |             |             |
| METALS           | Maonesium                  | 590                | 1            |        |     | 153        | 1              |            |    | 348    | 1                   |               |    |            |                 |             |             |
| METALS           | Manganese                  | 19                 | 1            |        |     | 278        | 1              |            |    | 54.3   | 1                   |               |    |            |                 |             |             |
| METALS           | Mercury                    | 0.0193             | 1            | J      | J   | 0,1        | 1              | <          | U  | 0.1    | 1                   | <             | U  |            |                 |             |             |
| METALS           | Nickel                     | 4,24               | 1            |        |     |            |                |            |    |        |                     |               |    |            |                 |             |             |
| METALS           | Potassium                  | 329                | 1            |        |     | 155        | 1              |            |    | 313    | 1                   |               |    |            |                 |             |             |
| METALS           | Selenium                   | 0.356              | 1            |        |     | 1          | 1              | <          | U  | 1      | 1                   | <             | U  |            |                 |             |             |
| METALS           | Silver                     | 1.67               | 1            | U      |     | 1          | 1              | <          | U  | 1      | 1                   | <             | U  |            |                 |             |             |
| METALS           | Sodium                     | 35.3               | 1            |        |     |            |                |            |    |        |                     |               |    |            |                 |             |             |
| METALS           | Strontium                  |                    |              |        |     | 2.5        | 1              |            |    | 3.9    | 1                   |               |    |            |                 |             |             |
| METALS           | Thailium                   | 0.113              | 1            |        |     |            |                |            |    |        |                     |               |    |            |                 |             |             |
| METALS           | Vanadium                   | 32.7               | 1            |        |     |            |                |            |    |        |                     |               |    |            |                 |             |             |
| METALS           | Zinc                       | 15.1               | 1            |        |     | 5.5        | .1             |            |    | 10.4   | 1                   |               |    |            |                 |             |             |
| PERC             | Perchlorate                | 0.00983            | 1            | U      |     |            |                |            |    |        |                     |               |    |            |                 |             |             |
| RANGE_ORGANICS   | Carbon Range C12-C28       | 51.6               | 1            | J      | в   |            |                |            |    |        |                     |               |    |            |                 |             |             |
| RANGE_ORGANICS   | CARBON RANGE C28-C35       | 59.9               | 1            |        |     |            |                |            |    |        |                     |               |    |            |                 |             |             |
| RANGE_ORGANICS   | Carbon Range C6-C12        | 59.7               | 1            | IJ     |     |            |                |            |    |        |                     |               |    |            |                 |             |             |
| SEMIVOLATILES    | 1.2,4-Trichlarobenzene     |                    |              |        |     | 0.33       | 1              | <          | U  | 0.33   | 1                   | <             | U  | 0.33       | 1               | <           | U           |
| SEMIVOLATILES    | 1,2-Dichlorobenzene        |                    |              |        |     | 0.33       | 1              | <          | U  | 0.33   | 1                   | <             | U  | 0.33       | 1               | <           | U           |
| SEMIVOLATILES    | 1.3-Dichlorobenzene        |                    |              |        |     | 0.33       | 1              | <          | υ  | 0.33   | 1                   | <             | U  | 0.33       | 1               | <           | Ų           |
| SEMIVOLATILES    | 1,4-Dichlorobenzene        |                    |              |        |     | 0.33       | 1              | <          | U  | 0.33   | 1                   | <             | U  | 0.33       | 1               | <           | Ų           |
| SEMIVOLATILES    | 2.4,5-Trichlorophenol      |                    |              |        |     | 1.65       | ١              | <          | U  | 1.65   | 1                   | <             | U  | 1.65       | 1               | <           | U           |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol      |                    |              |        |     | 0.33       | ١              | <          | Ų  | 0.33   | ۲                   | <             | U  | 0.33       | 1               | <           | U           |
| SEMIVOLATILES    | 2,4-Dichlorophenol         |                    |              |        |     | 0.33       | 1              | <          | U  | 0.33   | 1                   | ۲             | U  | 0.33       | 1               | <           | U           |
| SEMIVOLATILES    | 2.4-Dimethylphenol         |                    |              |        |     | 0.33       | 1              | <          | Ð  | 0.33   | 1                   | <             | Ų  | 0.33       | 1               | <           | U           |
| SEMIVOLATILES    | 2,4-Dinitrophenol          |                    |              |        |     | 1.65       | 1              | ۲          | U  | 1.65   | 1                   | <             | U  | 1.65       | 1               | <           | U           |
| SEMIVOLATILES    | 2-Chloronaphthalene        |                    |              |        |     | 0,33       | 1              | <          | U  | 0.33   | 1                   | <             | U  | 0.33       | 1               | <           | Ų           |
| SEMIVOLATILES    | 2-Chiorophenol             |                    |              |        |     | 0.33       | 1              | <          | U  | 0.33   | 1                   | <             | Ų  | 0.33       | 1               | <           | U           |
| SEMIVOLATILES    | 2-Methylnaphthalene        |                    |              |        |     | 0,33       | 1              | <          | U  | 0.33   | 1                   | <             | U  | 0.33       | 1               | ۲           | U           |
| SEMIVOLATILES    | 2-Methylphenol             |                    |              |        |     | 0,33       | 1              | <          | U  | 0.33   | 1                   | <             | U  | 0,33       | 1               | <           | U           |
| SEMIVOLATILES    | 2-Nitroaniline             | 1                  |              |        |     | 1.65       | 1              | <          | U  | 1.65   | 1                   | <             | U  | 1.65       | 1               | <           | U           |
| SEMIVOLATILES    | 2-Nitrophenot              |                    |              |        |     | 0.33       | 1              | <          | Ų  | 0.33   | 1                   | <             | U  | 0.33       | 1               | <           | υ           |
| SEMIVOLATILES    | 3,3'-Dichlorobenzidine     |                    |              |        |     | 0.65       | 1              | <          | U  | 0.65   | 1                   | <             | Ų  | 0.65       | 1               | ۲           | υ           |
| SEMIVOLATILES    | 3-Nitroaniline             |                    |              |        |     | 1.65       | 1              | <          | U  | 1.65   | 1                   | <             | U  | 1.65       | 1               | <           | Ų           |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol |                    |              |        |     | 1.85       | 1              | <          | U  | 1.65   | 1                   | <             | U  | 1,65       | 1               | <           | U           |

# Table 3-49

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table | 3-49 |
|-------|------|
|-------|------|

.

| Concentrations of | Chemicals in Soil Sam | ples Associated with Sump 049 |
|-------------------|-----------------------|-------------------------------|
|-------------------|-----------------------|-------------------------------|

| (SUMP) = SUMP049           |                             |        |         |      |              | 18-849-01 |         |      |        |         |               |          |         |             |                |             |         |
|----------------------------|-----------------------------|--------|---------|------|--------------|-----------|---------|------|--------|---------|---------------|----------|---------|-------------|----------------|-------------|---------|
| LOCATION_CODE<br>SAMPLE NO |                             |        | IMPU4   | 9-51 | 501          |           | 1-545   |      |        |         | 11040<br>070  |          |         | цг<br>( 1 ( | 040            | -01<br>01 0 |         |
| SAMPLE_NO                  |                             | 35-5N  | IPU49-  | 58U  | n-02         | ιH-       | 549-0   | n uu |        | цп<br>- | - 399<br>Volu | ψι_ι<br> |         | μη·<br>-    | -048*<br>Un/48 | 00<br>00    |         |
| SAMPLE_DATE                |                             | :      | 9/19/20 | 06   |              |           | (JA) 19 | 93   |        | • •     | (19/15<br>- 4 | 193      |         |             | . v a<br>1911â | 80<br>80    |         |
| DEPTH                      |                             |        | 4 • 4 1 | Ft   |              |           | 5 • 1.5 | i Ht |        | 4       | - 1.<br>DE    | 5 PT     |         | 4           | - 4.8<br>DTC   | 1992        |         |
| SAMPLE_PURPOSE             |                             |        | HEG     |      | <b>•</b> ••• | D         | 10      |      | un     | Denult  | RE            | °. ^     | vo      | Decel       | DI DI          | 10          | vo      |
| Test Group                 | Parameter (Units = mg/kg)   | Hesuit |         | . L  | Q VQ         | Hesun     |         |      | 31     | nesuit  |               | <u></u>  |         | 0.22        | 1              | <u> </u>    |         |
| SEMIVOLATILES              | 4-Bromophenyi phenyi ether  |        |         |      |              | 0.33      | 1       | 5    | 0      | 0.00    | ÷             | 5        | U U     | 0.00        | -              | 2           | и       |
| SEMIVOLATILES              | 4-Chioro-3-methylphenol     |        |         |      |              | 0.65      | 1       | <    |        | 0.05    | 1             | <        |         | 0.00        | -              | 5           | 11      |
| SEMIVOLATILES              | 4-Chloroaniline             |        |         |      |              | 0.65      | 1       | <    | 0      | 0.05    |               | <        |         | 0.00        | -              |             | ¥       |
| SEMIVOLATILES              | 4-Chlorophenyl phenyl ether |        |         |      |              | 0.33      | 1       | ٢.   | - 0    | 0.00    | 1             | <u>د</u> | 1       | 0.00        | •              | Ś           | 1       |
| SEMIVOLATILES              | 4-Methylphenol              |        |         |      |              | 0.33      | 1       | <    | 0      | 0,00    | 1             |          | 4       | 4.00        | ÷              | 2           | ŭ       |
| SEMIVOLATILES              | 4-Nitroaniine               |        |         |      |              | 1.05      |         | <    | 0      | 1.00    | 4             | Ś        | 1       | 1.00        |                | 2           | ы<br>И  |
| SEMIVOLATILES              | 4-Nitrophenol               |        |         |      |              | 1.05      | 1       | <    | 0      | 0.00    | 4             | 5        | 0       | 0.00        | +              | 2           | н       |
| SEMIVOLATILES              | Acenaphthene                |        |         |      |              | 0.33      | 1       | <    | 0      | 0.33    |               |          |         | 0.00        | 1              |             | ы<br>П  |
| SEMIVOLATILES              | Acenaphinylene              |        |         |      |              | 0.33      |         | ×    | 0      | 0.00    | ł             | 2        |         | 0,00        | 4              | È           | 0       |
| SEMIVOLATILES              | Anthracene                  |        |         |      |              | 0,00      | 1       | \$   | И      | 0.00    | +             | 2        |         | 0.00        | 1              | 2           | ii ii   |
| SEMIVOLATILES              | Benzo(a)anthracene          |        |         |      |              | 0.33      |         | <    |        | 0.00    |               | ٩.       | U<br>11 | 0.00        | 1              | 2           |         |
| SEMIVOLATILES              | Henzo(a)pyrene              |        |         |      |              | 0.33      |         | <    |        | 0.33    | 4             | <u>د</u> |         | 0.00        | +              | 2           | ų<br>u  |
| SEMIVOLATILES              | Benzo(b)fluoranthene        | 1      |         |      |              | 0.33      |         | ~    |        | 0.00    | 1             | š.       |         | 0.00        | 4              | 5           |         |
| SEMIVOLATILES              | Benzo(ghi)perylene          |        |         |      |              | 0.33      |         | <    | 0      | 0.33    | 1             | <u>ج</u> | 0       | 0.00        | 4              | Ĵ.          |         |
| SEMIVOLATILES              | Benzo(K)/suoranmene         |        |         |      |              | 0.33      |         | ٢.   | 0      | 0.00    | <br>          |          |         | 1.85        | 4              | 2           |         |
| SEMIVOLATILES              | Benzoic Acid                |        |         |      |              | 1.65      | 1       | <    | 9      | 1.05    | 1             | <        |         | 1.05        |                | · ·         |         |
| SEMIVOLATILES              | Benzyl Alcohol              |        |         |      |              | 0.65      | 1       | <    | 0      | 0.05    | 1             | <        |         | 0.00        | -              | 5           | 0       |
| SEMIVOLATILES              | bis(2-Ghloroelhoxy)methane  |        |         |      |              | 0.33      | 1       | <    |        | 0.33    | 1             | <        |         | 0.00        |                | Ś           | 0       |
| SEMIVOLATILES              | bis(2-Chloroethyl)ether     |        |         |      |              | 0.33      | 1       | <    | 0      | 0.33    |               | <        | 0       | 0.33        |                | <           | 0       |
| SEMIVOLATILES              | bis(2-Ghloroisopropyl)elher |        |         |      |              | 0,33      | 1       | <    |        | 0.33    | 1             | <        | U II    | 0.00        | 1              | Ś           | 0<br>11 |
| SEMIVOLATILES              | bis(2-Ethylhexyl)phthalate  |        |         |      |              | 0.33      | 1       | <    | U      | 0.33    | 1             | <        | 0       | 0.33        | 1              | Ś           | U<br>N  |
| SEMIVOLATILES              | Bulyi benzyi phthalale      |        |         |      |              | 0.33      | 1       | <    | U<br>U | 0.33    |               | <        | U       | 0.00        | 1              | <           | 0       |
| SEMIVOLATILES              | Chrysene                    | 1      |         |      |              | 0.33      | 1       | ۲.   | 9      | 0,33    | 1             | <        | 0       | 0.33        | 1              | <           |         |
| SEMIVOLATILES              | Dibenzo(a,h)anthracene      |        |         |      |              | 0.33      | 1       | <    | 0      | 0.33    | 1             | <        | 0       | 0.33        | 1              | <           |         |
| SEMIVOLATILES              | Dibenzofuran                |        |         |      |              | 0,33      | 1       | <    | 0      | Q.33    | 1             | <        |         | 0.33        | 1              | <           | U       |
| SEMIVOLATILES              | Diethyl phthalate           |        |         |      |              | 0,33      | 1       | <    | 0      | 0.33    | 1             | <        | 0       | 0.33        | 1              | <           |         |
| SEMIVOLATILES              | Dimethyl phthalate          |        |         |      |              | 0.33      | 1       | <    | 0      | 0.33    | 1             | <        | 0       | 0.33        | 1              | <           | 0       |
| SEMIVOLATILES              | di-n-Butyl phthalate        |        |         |      |              | 0.33      | 1       | <    |        | 0.33    |               | <        | U<br>   | 0.33        |                | <           | 0       |
| SEMIVOLATILES              | di-n-Octyl phthalate        |        |         |      |              | 0.33      | 1       | <    | U<br>  | 0.33    | 1             | <        | 0       | 0.33        | 1              | <           | 0       |
| SEMIVOLATILES              | Fluoranthene                | }      |         |      |              | 0.33      | 1       | <    |        | 0,33    | 1             | *        | 0       | 0.33        | 1              | <           | U U     |
| SEMIVOLATILES              | Fluorene                    |        |         |      |              | 0.33      | 1       | <    | 0      | 0.33    | 1             | <        | U<br>II | 0,33        | 1              | <           |         |
| SEMIVOLATILES              | Hexachlorobenzene           | j      |         |      |              | 0.33      | 1       | <    | 0      | 0,33    | 1             | <        | 0       | 0.33        | 1              | <           |         |
| SEMIVOLATILES              | Hexachlorobuladiene         |        |         |      |              | 0.33      | 1       | <    | U      | 0.33    | 1             | <        | 0       | 0.33        | 1              | <           |         |
| SEMIVOLATILES              | Hexachlorocyclopentadiene   |        |         |      |              | 0.33      | 1       | <    | 0      | 0.33    | 1             | <        |         | 0.33        | 4              | <           |         |
| SEMIVOLATILES              | Hexachloroethane            |        |         |      |              | 0.33      | 1       | <    | 0      | 0.33    | )             | <        |         | 0.33        |                | <           |         |
| SEMIVOLATILES              | indena(1,2,3-cd)pyrene      |        |         |      |              | 0.33      | 1       | <    | 0      | 0.33    | 1             | <        |         | 0.33        |                | <           | 0       |
| SEMIVOLATILES              | Isophorone                  |        |         |      |              | 0.33      | 1       | <    | 0      | 0,33    | 1             | <        | U       | 0.33        | 1              | <           | 0       |
| SEMIVOLATILES              | Naphthalene                 |        |         |      |              | 0.33      | 2       | <    | 0      | 0.33    | 1             | ۲        | U       | 0.33        | 1              | <           | 0       |
| SEMIVOLATILES              | Nifrobenzene                |        |         |      |              | 0.33      | 1       | <    | U      | 0.33    | 1             | <        | U.      | 0.33        | 1              | <           |         |
| SEMIVOLATILES              | n-Nitroso-di-n-propylamine  |        |         |      |              | 0.33      | 1       | <    | 0      | 0.33    | 1             | <        | U       | 0.33        | ł              | <           | 0       |
| SEMIVOLATILES              | n-Nitrosodiphenylamine      |        |         |      |              | 0.33      | 1       | <    | U      | 0.33    | 1             | <        | 0       | 0.33        | 1              | <           | 0       |
| SEMIVOLATILES              | Pentachlorophenol           |        |         |      |              | 1.65      | 1       | <    | U.     | 1.65    | 1             | <        | 0       | 1.65        | 1              | ۲           | 0       |
| SEMIVOLATILES              | Phenanthrané                |        |         |      |              | 0.33      | 1       | <    | 0      | 0.33    | 1             | <        | 0       | 0.33        | 1              | <           | U       |
| SEMIVOLATILES              | Phenol                      |        |         |      |              | 0.33      | 1       | <    | Ų      | 0.33    | 1             | <        | 0       | 0.33        | 1              | ۲           | U<br>   |
| SEMIVOLATILES              | Pyrene                      |        |         |      |              | 0,33      | 1       | <    | U      | 0.33    | 1             | <        | U       | 0.33        | 1              | ۲           | Ų       |
| VOLATILES                  | 1,1,1,2-Tetrachloroethane   | 0.005  | 49 1    |      | U            |           |         |      |        |         | ,             |          | 1.1     | A 44        |                |             |         |
| VOLATILES                  | 1,1,1-Trichloroethane       | 0.005  | 49 1    |      | 0            | 0.005     | 1       | <    | U      | 0.005   | 1             | <        | U<br>   | 0.005       | 1              | <           | U       |
| VOLATILES                  | 1,1,2,2 Tetrachloroethane   | 0.005  | 49 1    |      | U            | 0.005     | 1       | <    | U      | 0.005   | 1             | <        | U       | 0.005       | 1              | <           | υ       |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



Table 3-49

| Concentrations of Chemicals in Soil Samples Asso | ciated with Sump 049 |
|--|----------------------|
|--|----------------------|

| (SUMP) = SUMP049 |                                |          |       |        |    |        |         |       |    |        |         |      |    |        |        |            |   |
|------------------|--------------------------------|----------|-------|--------|----|--------|---------|-------|----|--------|---------|------|----|--------|--------|------------|---|
| LOCATION _CODE   |                                | 35SUM    | P049  | -SB01  |    | Li Li  | 1-\$49  | -01   |    | LH     | I-S49   | HQ1  |    | L      | -\$49  | -01        |   |
| SAMPLE_NO        |                                | 35-\$MP0 | )49-5 | 8801-( | )2 | LH-    | S49-(   | )1 QC |    | LH     | S49-    | 01_1 |    | LH-    | \$49-( | 01_2       |   |
| SAMPLE_DATE      |                                | 9/1      | 9/200 | 06     |    | 7      | /9/19   | 93    |    | 7      | /9/19   | 93   |    | 7      | /9/19  | 33         |   |
| DEPTH            |                                | 4        | - 4 F | t      |    |        | 5 - 1,5 | 5 Ft  |    | .8     | 5 • 1.5 | Ft   |    | 4      | 4.8    | Ft         |   |
| SAMPLE_PURPOSE   |                                | 1        | REG   |        |    |        | FD      |       |    |        | REG     | 1    |    |        | REG    | . <b>.</b> |   |
| Test Group       | Parameter (Units = mg/kg)      | Result   | DIL   | LQ     | VQ | Result | DIL     | LQ    | VQ | Result | DIL.    | LQ   | VQ | Result | DIL    | LQ         |   |
| VOLATILES        | 1,1,2-Trichloroethane          | 0.00549  | 1     | Ų      |    | 0.005  | 1       | <     | υ  | 0.005  | 1       | <    | ป  | 0.005  | 1      | <          | U |
| VOLATILES        | 1,1-Dichloroethane             | 0.00549  | 1     | U      |    | 0.005  | 1       | <     | U  | 0.005  | 1       | <    | U  | 0.005  | 1      | <          | U |
| VOLATILES        | 1.1-Dichloroethene             | 0.00549  | 1     | Ų      |    | 0.005  | 1       | <     | U  | 0.005  | 1       | <    | U  | 0.005  | 1      | <          | U |
| VOLATILES        | 1,1-Dichloropropene            | 0.00549  | 1     | ų      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 1,2,3-Trichlorobenzene         | 0.00549  | ١     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 1.2.3-Trichloropropane         | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 1,2,4-Trichlorobenzene         | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 1,2,4-Trimethylbenzene         | 0.00549  | 1     | Ų      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 1.2-Dibromoethane              | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 1.2-Dichlorobenzene            | 0.00549  | 1     | Ų      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 1,2-Dichloroethane             | 0.00549  | 1     | U      |    | 0.005  | 1       | <     | U  | 0.005  | 1       | <    | U  | 0.005  | 1      | <          | U |
| VOLATILES        | 1,2-Dichloroethene             |          |       |        |    | 0.005  | 1       | <     | U  | 0.005  | 1       | <    | U  | 0.005  | 1      | <          | U |
| VOLATILES        | 1,2-Dichloropropane            | 0.00549  | 1     | U      |    | 0.005  | 1       | <     | U  | 0.005  | i       | <    | U  | 0.005  | 1      | <          | U |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 1,3,5-Trimethylbenzene         | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 1,3-Dichlorobenzene            | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 1.3-Dichloropropane            | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 1.4-Dichlorobenzene            | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 2,2-Dichloropropane            | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 2-Butanone                     | 0.011    | 1     | U      |    | 0.05   | 1       | <     | U  | 0.05   | 1       | <    | U  | 0.05   | 1      | <          | υ |
| VOLATILES        | 2-Chloroethyl vinyl ether      | 0.011    | 1     | U      |    | 0.01   | 1       | <     | U  | 0.01   | 1       | <    | U  | 0.01   | 1      | <          | U |
| VOLATILES        | 2-Chlorotoluene                | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | 2-Hexanone                     | 0,011    | t     | U      |    | 0.05   | 1       | <     | ប  | 0.05   | 1       | <    | U  | 0.05   | 1      | <          | U |
| VOLATILES        | 4-Chlorotoluene                | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | Acetone                        | 0.011    | 1     | U      |    | 0.1    | 1       | <     | U  | 0.1    | 1       | <    | U  | 0.1    | 1      | <          | U |
| VOLATILES        | Benzene                        | 0.00549  | 1     | U      |    | 0.005  | 1       | <     | U  | 0,005  | 1       | <    | υ  | 0.005  | 1      | <          | U |
| VOI ATILES       | Bromobenzene                   | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | Bromochloromethane             | 0.00549  | 1     | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | Bromodichioromethane           | 0.00549  | 1     | U      |    | 0.005  | 1       | <     | U  | 0.005  | 1       | <    | U  | 0.005  | 1      | <          | U |
| VOLATILES        | Bromoform                      | 0.00549  | 1     | U      |    | 0.005  | 1       | <     | U  | 0.005  | 1       | <    | U  | 0.005  | 1      | <          | U |
| VOLATILES        | Bromomethane                   | 0.011    | 1     | U      |    | 0.01   | 1       | <     | U  | 0.01   | 1       | <    | Ų  | 0.01   | 1      | <          | U |
| VOLATILES        | Carbon disulfide               | 0.00549  | 1     | U      |    | 0.005  | 1       | <     | υ  | 0.005  | 1       | <    | ປ  | 0.005  | 1      | <          | U |
| VOLATILES        | Carbon tetrachloride           | 0.00549  | 1     | υ      |    | 0.005  | i 1     | <     | U  | 0.005  | 1       | . <  | U  | 0.005  | 1      | <          | U |
| VOLATILES        | Chlorobenzene                  | 0.00549  | 1     | U      |    | 0,005  | ; 1     | <     | U  | 0.005  | 1       | <    | Ų  | 0.005  | 1      | <          | Ų |
| VOLATILES        | Chloroethane                   | 0.011    | 1     | U      |    | 0.01   | 1       | <     | U  | 0.01   | 1       | <    | U  | 0.01   | 1      | <          | U |
| VOLATILES        | Chloroform                     | 0.00549  | + 1   | U      |    | 0.005  | ; 1     | <     | U  | 0.005  | 1       | <    | U  | 0.005  | 1      | <          | υ |
| VOLATILES        | Chloromethane                  | 0.011    | 1     | U      |    | 0.01   | 1       | <     | U  | 0.01   | 1       | <    | U  | 0.01   | 1      | <          | U |
| VOLATILES        | cis-1,2-Dichloroethene         | 0.00549  | ) 1   | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | cis-1.3-Dichloropropene        | 0.00549  | 1     | U      |    | 0.00   | 5 1     | <     | U  | 0.005  | ; 1     | <    | U  | 0.005  | 1      | <          | U |
| VOLATILES        | Dibromochloromethane           | 0.00549  | 3 1   | U      |    | 0.00   | 5 1     | <     | U  | 0.005  | ; 1     | <    | U  | 0.005  | 1      | <          | U |
| VOLATILES        | Dibromomethane                 | 0.00549  | ) 1   | Ų      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | Dichlorodifluoromethane        | 0.01     | 1     | Ú      |    |        |         |       | ·  |        |         |      |    |        |        |            |   |
| VOLATILES        | Ethylbenzene                   | 0.00549  | ) 1   | Ú      |    | 0.00   | 5 1     | <     | U  | 0,008  | 5 1     | <    | Ų  | 0.005  | ; 1    | <          | U |
| VOLATILES        | Hexachlorobutadiene            | 0.00549  | ) 1   | Ū      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | Isopropylbenzené               | 0.0054   | 3 1   | U      |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | m.p-Xylenes <sup>o</sup>       | 0.0054   | ) 1   | - U    |    |        |         |       |    |        |         |      |    |        |        |            |   |
| VOLATILES        | Methyl isobulyl ketone         | 0.01     | 1 1   | U      |    | 0.0    | 5 1     | <     | U  | 0.0    | 5 1     | <    | U  | 0.04   | 5 1    | <          | U |
|                  |                                |          |       |        |    |        |         |       |    |        |         |      |    |        |        |            |   |

Shaw Environmental, Inc.

Data Evaluation Report

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps

|                 |                           |   |         |       |       |    |        |         |      |    |        |         | •    |    |        |               |      |          |
|-----------------|---------------------------|---|---------|-------|-------|----|--------|---------|------|----|--------|---------|------|----|--------|---------------|------|----------|
| SUMP] = SUMP049 |                           |   |         |       |       |    |        |         |      |    |        |         |      |    |        |               |      |          |
| LOCATION _CODE  |                           |   | 35SUM   | P049  | -S801 |    | អ      | 1-S49   | -01  |    | L      | H-\$49  | 9-01 |    | Ų      | <b>-</b> \$49 | -01  |          |
| SAMPLE_NO       |                           |   | 35-SMP( | 049-5 | B01-0 | )2 | LΗ-1   | S49-C   | 1 QC |    | LH     | -849-   | 01_1 |    | LH     | -S49-(        | )1_2 |          |
| SAMPLE_DATE     |                           |   | 9/1     | 9/20  | 26    |    | 7      | /9/19   | 93   |    |        | 7/9/19  | 93   |    | 7      | /9/199        | 33   |          |
| DEPTH           |                           |   | 4       | - 4 F | t     |    | .5     | 5 - 1.5 | Ft   |    | J.     | 5 - 1.5 | 5 Ft |    | 4      | • 4.8         | Ft   |          |
| SAMPLE_PURPOSE  |                           |   | · · · · | REG   |       |    |        | FD      |      |    |        | REC     | 3    |    |        | REG           |      |          |
| Test Group      | Parameter (Units = mg/kg) |   | Result  | DIL   | LQ    | VQ | Result | DIL     | LO   | VQ | Result | DIL     | LQ   | VQ | Result | DIL           | LQ   | VQ       |
| VOLATILES       | Methylene chloride        |   | 0.00549 | 1     | Ų     |    | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1             | <    | U        |
| VOLATILES       | Naphthalene               |   | 0.011   | 1     | υ     |    |        |         |      |    |        |         |      |    |        |               |      |          |
| VOLATILES       | n-BUTYLBENZENE            |   | 0.00549 | 1     | U     |    |        |         |      |    |        |         |      |    |        |               |      |          |
| VOLATILES       | n-PROPYLBENZENE           |   | 0.00549 | 1     | U     |    |        |         |      |    |        |         |      |    |        |               |      |          |
| VOLATILES       | p-ISOPROPYLTOLUENE        |   | 0,00549 | 1     | U     |    |        |         |      |    |        |         |      |    |        |               |      |          |
| VOLATILES       | sec-BUTYLBENZENE          |   | 0.00549 | 1     | U     |    |        |         |      |    |        |         |      |    |        |               |      |          |
| VOLATILES       | Styrene                   |   | 0.00549 | 1     | U     |    | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1             | <    | U        |
| VOLATILES       | tert-BUTYLBENZENE         |   | 0.00549 | 1     | U     |    |        |         |      |    |        |         |      |    |        |               |      |          |
| VOLATILES       | Tetrachloroethene         |   | 0.00549 | ١     | U     |    | 0.005  | 1       | <    | Ų  | 0.005  | 1       | <    | U  | 0.005  | 1             | <    | Ų        |
| VOLATILES       | Toluene                   |   | 0.00549 | 1     | Ų     |    | 0.005  | 1       | <    | Ų  | 0.005  | 1       | <    | U  | 0.005  | 1             | <    | U        |
| VOLATILES       | trans-1.2-Dichloroethene  |   | 0.00549 | ۱     | U     |    |        |         |      |    |        |         |      |    |        |               |      |          |
| VOLATILES       | trans-1,3-Dichloropropene |   | 0.00549 | 1     | U     |    | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1             | <    | U        |
| VOLATILES       | Trichloroethene           |   | 0.00877 | 1     | ·     |    | 0.005  | i       | <    | Ų  | 0.005  | 1       | <    | U  | 0.005  | 1             | <    | IJ       |
| VOLATILES       | Trichlorofluoromethane    | 1 | 0.011   | 1     | U     |    |        |         |      |    |        |         |      |    |        |               |      |          |
| VOLATILES       | Vinyl acetate             |   | 0.011   | 1     | Ų     |    | 0.05   | 1       | <    | U  | 0.05   | 1       | <    | υ  | 0.05   | 1             | <    | U        |
| VOLATILES       | Vinyl chloride            |   | 0.011   | 1     | Ų     |    | 0.01   | 1       | <    | Ų  | 0.01   | 1       | <    | Ų  | 0,01   | 1             | <    | Ų        |
| VOLATILES       | Xylenes, Total            |   |         |       |       |    | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1             | <    | <u> </u> |

Table 3-49 Concentrations of Chemicals in Soil Samples Associated with Sump 049

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



Table 3-50 Concentrations of Chemicals in Soil Samples Associated with Sump 050

| (SUMP) = SUMP050     |                             |                   |                   | 470000          | 47CR00           | LH-DI 50-01          | LH-S50-01        | LH-S50-01                    | LH-S50-01        |
|----------------------|-----------------------------|-------------------|-------------------|-----------------|------------------|----------------------|------------------|------------------------------|------------------|
| LOCATION_CODE        |                             | 35SUMP050-5801    | 35SUMP050-SB01    | 4/3009          | 470000           | 111-01-50-01         | LH-S50-01 1      | LH-S50-01_2                  | LH-S50-01_3      |
| SAMPLE_NO            |                             | 35-SMP050-SB01-01 | 35-SMP050-SB01-02 | 475809(0-0_0)   | 5/31/2000        | 7/11/1993            | 7/28/1993        | 7/27/1993                    | 7/27/1993        |
| SAMPLE_DATE          |                             | 9/22/2006         | 9/22/2006         | 5/31/2000       | 3/3//2000        | 2.29Ft               | 0.5 - 1.5 Fl     | 0.5 1.5 FL                   | 4 - 4.5 Ft       |
| DEPTH                |                             | 0.5 · 0.5 Pt      | 5.51              | 0 · 0.5 FI      | DEC.             | 860                  | BEG              | REG                          | REG              |
| SAMPLE_PURPOSE       |                             | REG               | HEG               | HEG             | Desult Dil LO VO |                      | Result DIL LO VO | Result DIL LQ VQ             | Result DIL LO VO |
| Test Group           | Parameter (Units = mg/kg)   | Result DIL LQ VQ  | Result DIL LO VO  | Hesun Dil La Va | Result Dit La Va | 0.93 1 4 11          | 0.33 1 < 11      | 0.33 1 < U                   | 0.33 1 < U       |
| EXPLOSIVES           | 2,4-Dinitrololuene          |                   |                   |                 |                  | 0.00 1 2 0           | 0.33 1 < U       | 0.33 1 < U                   | 0.33 t < U       |
| EXPLOSIVES           | 2,6-Dinkrotoluene           | Į                 |                   |                 |                  | 10400 1              | 13700 1          | 14300 1                      | 12000 1          |
| METALS               | Aluminum                    | 10300 1           | 13700 1           |                 |                  | 3 1 4 11             | 3 1 2 8          | 31 < 0                       | 31 < U           |
| METALS               | Antimony                    | 0.118 1 U UJL     | 0.118 1 U UJL     |                 |                  | 36 1                 | 38 1             | 4.6 1                        | 3.4 1            |
| METALS               | Arsenic                     | 2.66 1            | 1.49              |                 |                  | 72.5 1               | 65.7 1           | 98 1                         | 62.8 1           |
| METALS               | Barium                      | 36.5 1 JH         | 56.5 1 JH         |                 |                  | Q2,0                 | 0017             |                              |                  |
| METALS               | Beryllium                   | 0.491 1           | 0.643 1           |                 |                  | 1 1 4 11             | 11 < 11          | 11 < 0                       | 1 î < U          |
| METALS               | Cadmium                     | 0.0564 1 J J      | 0.092B 1 J J      |                 |                  | 356 1                | 2090 1           | 2760 1                       | 1720 1           |
| METALS               | Calcium                     | 861 1             | 1000 1            |                 |                  | 14 5 1               | 24.3 1           | 28.5 1                       | 16.3 1           |
| METALS               | Chromium                    | 35.1 1 JH         | 11,3 1 JH         |                 |                  | 28 1                 | 65 1             | 6.9 t                        | 6,1 1            |
| METALS               | Cobalt                      | 3.3 1             | 6.68 1            |                 |                  | 3,d 1                | 3 1              | 6.5 1                        | 7,1 1            |
| METALS               | Copper                      | 6.27 1            | 4.05 1            |                 |                  | 17400 1              | 43100 1          | 49400 1                      | 19500 t          |
| METALS               | Iron                        | 23500 1 J         | 13100 1 J         |                 |                  | 67 1                 | 164 1            | 20.2 1                       | 11,4 1           |
| METALS               | Lead                        | 8,41 1            | 7.79 1            |                 |                  | 400 I                | 1980 1           | 1280 1                       | 1370 1           |
| METALS               | Magnesium                   | 518 1             | 1490 1            |                 |                  | 422                  | 204 1            | 162 1                        | 26.1 1           |
| METALS               | Manganese                   | 55,6 î J          | 24.4 1 J          |                 |                  | 20.0 1<br>0.1 1 - 11 | 01 1 4 11        | 0.1 1 < 0                    | 0,1 1 < U        |
| METALS               | Mercury                     | 0.0233 1 J J      | 0.282 1 U U       |                 |                  | 0.1 1 4 0            | 0,0 1 4 0        |                              |                  |
| METALS               | Nickel                      | 8,47 1 JH         | 10.7 1 JH         |                 |                  | 440 1                | 535 1            | 623 1                        | 737 1            |
| METALS               | Potassium                   | 432 1 JH          | 539 1 JH          |                 |                  | 4400 1               | 1 1 4 11         | 1140                         | 11 < 0           |
| METALS               | Selenium                    | 0.385 1           | 0.236 1 U U       |                 |                  | 1 1 4 1              | 11 - 0           | 11 < 0                       | 11 < U           |
| METALS               | Silver                      | 1,76 1 U U        | 1,82 1 U U        |                 |                  | ,, , , ,             | , , , , ,        |                              |                  |
| METALS               | Sodium                      | 19.6 1 J J        | 45.1 1            |                 |                  | 44 1                 | 183 1            | 21.2 1                       | 22.2 1           |
| METALS               | Strontium                   |                   |                   |                 |                  | 4,4                  | 10.0             | -                            |                  |
| METALS               | Thallium                    | 0.0675 1          | 0,107 1           |                 |                  |                      |                  |                              |                  |
| METALS               | Vanadium                    | 59 1 JH           | 17 1 JH           |                 |                  | 16 5 1               | 38.A 1           | 43 1                         | 30.1 1           |
| METALS               | Zinc                        | 33.3 1 JH         | 27.2 1 JH         |                 | 0.00505 1        | 1,0,0 1              |                  | -                            |                  |
| PERC                 | Perchiorate                 | 0.00997 1 U U     | 0.00995 1 U U     | 0.00635 1 < 0   | 0.00595 1 < 0    | J                    |                  |                              |                  |
| RANGE_ORGANICS       | Carbon Range C12-C28        | 33.7 1 J B        | 58.9 1 U U        |                 |                  |                      |                  |                              |                  |
| RANGE_ORGANICS       | CARBON RANGE C28-C35        | 50,3 1 J J        | 32.1 1 J J        |                 |                  |                      |                  |                              |                  |
| RANGE_ORGANICS       | Carbon Range C5-C12         | 59.5 1 U U        | 58.9 1 U U        |                 |                  | 011 1 - 11           | 0.33 1 < 11      | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES        | 1.2,4-Trichlorobenzene      | 1                 |                   |                 |                  | 0.33 1 < 11          | 0.33 1 < 1       | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES        | 1,2-Dichlorobenzene         |                   |                   |                 |                  | 0.35 1 < 0           | 0.33 1 < 1       | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES        | 1,3-Dichiorobenzene         |                   |                   |                 |                  | 0.33 1 < 1           | 0.33 t < U       | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES        | 1,4-Dichlorobenzene         | ļ                 |                   |                 |                  | 165 1 4 11           | 165 1 c U        | 1.65 1 < U                   | 1,65 1 < U       |
| SEMIVOLATILES        | 2,4,5-Trichlorophenol       |                   |                   |                 |                  | 0.22 1 < 11          | 0.33 1 < 1       | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES        | 2.4.6-Trichiorophenol       |                   |                   |                 |                  | 0.22 1 4 11          | 0.33 1 < 1       | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES        | 2,4-Dichlarophenol          |                   |                   |                 |                  | 0.33 1 < 0           | 0.33 1 c U       | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES        | 2,4-Dimethylphenol          |                   |                   |                 |                  | 165 1 4 11           | 165 1 e U        | 1.65 1 < U                   | 1.65 1 < U       |
| SEMIVOLATILES        | 2,4-Dintrophenol            | 1                 |                   |                 |                  | 0.11 1 - 11          | 0.33 1 < U       | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES        | 2-Chioronaphihalene         |                   |                   |                 |                  | 0.00 1 4 1           | 033 1 4 1        | 1 0.33 1 4 U                 | 0.33 1 < U       |
| SEMIVOLATILES        | 2-Chlorophenol              |                   |                   |                 |                  | 0.00 1 4 1           | 0.00 1 < 0       | i 0.33 1 ≥ ti                | 0.33 1 < U       |
| SEMIVOLATILES        | 2-Methyinaphthalane         |                   |                   |                 |                  | 0.00 1 4 0           | 0.00 1 < 0       | i 0.33 1 < U                 | 0.33 1 < U       |
| SEMIVOLATILES        | 2-Methylphenol              |                   |                   |                 |                  | 0.00 I C U           | 1.65 1 2 1       | 1 165 1 c U                  | 1.65 I < U       |
| SEMIVOLATILES        | 2-Nitroaniline              |                   |                   |                 |                  | 1.00 1 4 0           |                  | 033 1 4 11                   | 0.33 1 c U       |
| SEMIVOLATILES        | 2-Nitrophenol               |                   |                   |                 |                  | 0,00 I < U           | 0.00 1 2 0       | 1 065 1 < 1                  | 0.65 1 < U       |
| SEMIVOLATILES        | 3.3'-Dichlorobenzidine      |                   |                   |                 |                  | 4.03 I < U           |                  | 1 185 1 - 11                 | 1.65 1 4 11      |
| SEMIVOLATILES        | 3-Nitroanifine              |                   |                   |                 |                  | 1,00 1 < U           | 1,00 1 4 4       | 185 1 - 11                   | 1.65 1 < U       |
| SEMIVOLATILES        | 4,6 Dinitro-2-methylphenol  |                   |                   |                 |                  | 1.00 1 < U           | 0.00             | 1 033 1 - 11                 | 0.33 1 < U       |
| SEMIVOLATILES        | 4-Bromophenyl phenyl ether  | }                 |                   |                 |                  | U.33 1 < U           | 0.00 1 < 1       | , 0,00 i € 0<br>I 0,65 t ∠ U | 0.65 1 < 1       |
| <b>SEMIVOLATILES</b> | 4-Chioro-3-methylphenol     | 1                 |                   |                 |                  | 0.00 1 4 0           |                  | 1 0.55 1 - 1                 | 0.65 1 < U       |
| SEMIVOLATILES        | 4-Chloroaniline             |                   |                   |                 |                  | U.00 1 < U           |                  |                              | 0.33 1 2 1       |
| SEMIVOLATILES        | 4-Chlorophenyl phenyl ether |                   |                   |                 |                  | 0.33 i < 0           | 0.00 1 < 0       |                              |                  |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table                               | 3-50                             |
|-------------------------------------|----------------------------------|
| Concentrations of Chemicals in Soil | Samples Associated with Sump 050 |

| (SUMP) = SUMP050 |                               |        |              |        |           |            |        | 120000     |       |       | 1700/   | 0       |      | 1 H.D   | 50.01  |         | 18-      | S50-01   |             | LH              | i-S50-0      | 1     | l          | 1-550-01     |             |  |
|------------------|-------------------------------|--------|--------------|--------|-----------|------------|--------|------------|-------|-------|---------|---------|------|---------|--------|---------|----------|----------|-------------|-----------------|--------------|-------|------------|--------------|-------------|--|
| LOCATION _CODE   |                               | 35SU   | MP050-SB01   | 35SU   | MP050-58  | 501        |        | 475809     | -     |       | 473DU   | 19      |      | iu.s    | 160.01 |         | 18.5     | 50-01 1  |             | LH-             | S50-01       | 2     | Ľ۲         | -S50-01_3    | 5           |  |
| SAMPLE_NO        |                               | 35-SM  | P050-SB01-01 | 35-SM  | P050-SB01 | 1.02       | 4      | 1/2808(0+0 | _5)   | 4     |         | 1.2)    |      |         | 11000  |         | 217.0    | a/1001   |             | 7/              | 27/199       | 1     | 7          | /27/1993     |             |  |
| SAMPLE_DATE      |                               | 9      | /22/2006     | 9      | /22/2006  |            |        | 5/31/2000  | }     |       | 5/31/20 | 100<br> |      |         | 11993  |         | 0.5      | 1 6 51   |             | 0.              | 5.151        | ł     |            | 4 - 4.5 Ft   |             |  |
| DEPTH            |                               | 0      | .5 - 0.5 Ft  |        | 5 - 5 Fl  |            |        | 0 - 0.5 Ft |       |       | 1+21    | -1      |      | 2.      | 2.9 FL |         | 0.0      | - 1.0 [3 |             |                 | DEG          | •     |            | BEG          |             |  |
| SAMPLE PURPOSE   |                               |        | REG          |        | REG       |            |        | REG        |       |       | REG     | I<br>   |      |         | EG     |         | <b>6</b> | 550      | ~ ~~~       | Deput           | DI           | 10 10 | Result     | DIL          | o vo        |  |
| Test Group       | Parameter (Units = mg/kg)     | Result | DIL LO VQ    | Result | DIL L     | o va       | Resu   | ult DIL    | LQ VQ | Resul |         | . ια ι  | Q Re | asult D | IL LO  | vo      | Result   |          | <u>u vu</u> | Result          |              |       | 030%       | 3 1          |             |  |
| SEMIVOLATUES     | 4-Methylphenol                |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 <    | U       | 0.33     | 1        | < U         | 0.33            |              | ε U   | 0.0        | ,            | 2 11        |  |
| SEMIVOLATILES    | 4-Nitroapiline                |        |              |        |           |            |        |            |       |       |         |         |      | 1.65    | 1 <    | U       | 1.65     | 1        | < U         | 1.65            | 1            | < 0   | 1.0        |              |             |  |
| SEMBYOLATHES     | 4-Nitrophenol                 |        |              |        |           |            |        |            |       |       |         |         |      | 1.65    | ۲ ۲    | U       | 1.65     | 1        | < U         | 1.65            | 1            | < U   | 1.0        |              | < Q<br>. II |  |
| SEMIVOLATILES    | Acenanhibene                  |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 <    | U       | 0.33     | 1        | < U         | 0.33            | Ţ            | < 0   | 0.3        | 3 1<br>7 1   | < u<br>     |  |
| SENIVOLATILES    | Acenaphibylepe                |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 <    | Ų       | 0.33     | 1        | < U         | 0.33            | 1            | < U   | 0.3        | 1            | < U         |  |
| SEMIVOLATILES    | Anthrocene                    |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | ۲ ۲    | U       | 0.33     | 1        | < U         | 0.33            | - 1          | < U   | 0.3        | 31           | < U         |  |
| SEMIVOLATILES    | Resso/sizebracana             | }      |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 <    | U       | 0.33     | 1        | < U         | 0.33            | - F          | < 0   | 0.3        | 31           | < 0         |  |
| SEMIVOLATILES    | Benze (a)arrinacións          |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 <    | υ       | 0.33     | 1        | < U         | 0.33            | , 1          | < 0   | 0.3        | 3 1          | < U         |  |
| SEMIVOLATILES    | Benzo(a)pyrene                |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 <    | U       | 0.33     | 1        | < U         | 0.33            | , 1          | < U   | 0.3        | 3 1          | < 0         |  |
| SEMIVOLATILES    | Denzo(c)iliooranimene         | ł      |              |        |           |            |        |            |       |       |         |         |      | 0.33    | i <    | U       | 0.33     | 1        | < U         | 0.33            | ; 1          | < U   | 0.3        | 31           | < U         |  |
| SEMIVOLATILES    | Benzolgniperviene             |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 <    | U       | 0.33     | 1        | < U         | 0.33            | 1            | < U   | 0.3        | 3 1          | < U         |  |
| SEMIVOLATILES    | Benzo(k)Ruoraninene           |        |              |        |           |            |        |            |       |       |         |         |      | 1.65    | 1 <    | U       | 1.65     | \$       | < U         | 1.65            | i 1          | < U   | 1.6        | 51           | < U         |  |
| SEMIVOLATILES    | Benzoic Acid                  | Į      |              |        |           |            |        |            |       |       |         |         |      | 0.65    | i <    | U       | 0.65     | 1        | < U         | 0.65            | <b>;</b> 1   | < U   | 0.6        | 51           | < U         |  |
| SEMIVOLATILES    | Benzyi Alconol                | {      |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 0    | U       | 0.33     | 4        | < ປ         | 0.33            | 11           | < U   | 0.3        | 13 1         | < U         |  |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane    |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 <    | U       | 0.33     | 1        | < U         | 0.33            | 3 1          | < U   | 0.         | 3 1          | < U         |  |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether       |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 <    | υ       | 0.33     | 1        | < U         | 0.33            | 3 1          | < U   | 0.         | 3 1          | < ປ         |  |
| SEMIVOLATILES    | bis(2-Chloroisopropyi)ether   | 1      |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 <    | U       | 0.33     | 1        | < U         | 0.3             | 3 1          | < (1  | 0.         | 33 1         | < U         |  |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phlhalale    | Í      |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1      | - 11    | 0.33     | 1        | < 1         | 0.3             | 3 1          | < U   | 0.:        | 33 1         | < U         |  |
| SEMIVOLATILES    | Butyi benzyi phihalale        |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 -    |         | 0.33     | 1        | < U         | 0.3             | 3 1          | < ل   | 0.         | 33 1         | < U         |  |
| SEMIVOLATILES    | Chrysene                      | Į      |              |        |           |            |        |            |       |       |         |         |      | 0.00    | 1      | ů       | 0.33     | 1        | <br>د ا     | 0.3             | 3 1          | < 1   | 0.         | 33 1         | < U         |  |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene        | 1      |              |        |           |            |        |            |       |       |         |         |      | 0.00    |        | . 11    | 0.00     | ì        | 2 1         | 0.3             | 3 1          | د ا   | I 0.       | 33 1         | < U         |  |
| SEMIVOLATILES    | Dibenzoluran                  |        |              |        |           |            |        |            |       |       |         |         |      | 0.00    | 1      | . u     | 0.33     | ÷        | 2 U         | 0.3             | 3 1          | < 1   | i 0.       | 33 1         | < U         |  |
| SEMIVOLATILES    | Dielhyl phthalate             | ļ      |              |        |           |            |        |            |       |       |         |         |      | 0.00    |        |         | 0.00     | ÷        | 2 1         | 0.3             | 3 1          | e l   | ı 0.       | 33 1         | < U         |  |
| SEMIVOLATILES    | Dimethyl phthalate            |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 4      |         | 0.00     | ÷        | • •         | 1 3             | <u>.</u>     |       | 0.1        | 77 1         |             |  |
| SEMIVOLATILES    | di-n-Butyl phthalate          |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    |        |         | 0.000    |          |             | > ^3            |              | - 1   | 1 0        | 33 1         | < 0         |  |
| SEMIVOLATILES    | di-n-Octyl phihalate          |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    |        | : U     | 0.00     |          |             | 1 0.0           | 0 1          |       |            | 33 1         | < 11        |  |
| SEMIVOLATILES    | Fluoranthene                  |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    |        | : 0     | 0.33     |          |             | , U.40<br>1 A 3 |              |       | ۰<br>۱     | 33 1         | 2 11        |  |
| SEMIVOLATILES    | Fluorene                      | 1      |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 4    | : U     | 0.33     |          | < L         | , 0.0           |              |       | , ,<br>, , | 22 1         | 2 11        |  |
| SEMIVOLATILES    | Hexachlorobenzene             |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 •    | د U<br> | 0.30     |          | < 1         | , 0,3<br>I 0,3  | 0 1          | - 1   | , 0.       | 22 1         | žů          |  |
| SEMIVOLATILES    | Hexachiorobuladiene           | 1      |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 1    | 4 U     | 0.30     |          | < ,         | , 0.3           | 3 I<br>5 S   |       | 1 0.       | 22 1         | 2 11        |  |
| SEMIVOLATILES    | Hexachlorocyclopeniadiene     | 1      |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 1    | < 0     | 0,33     |          | < (         | , 0.0           | 5 1          |       | , u        | - 00<br>-    |             |  |
| SEMIVOLATILES    | Hexachloroelbane              |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1      | < U     | 0.33     |          | < (         | , 0.3           | 3 1          |       | , ,        | no +         | λ U         |  |
| SEMIVOLATILES    | Indeno(1.2.3-cd)pyrene        |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1      | < 0     | 0.33     |          | < (         | ) 0.3<br>. 40   | 3 1          | < 1   | , ,        | 00 I<br>02 I |             |  |
| SEMIVOLATILES    | sophorone                     |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1.     | ¢ U     | 0.3      | 1 1      | < (         | J 0.3           | .d. 1        | < 1   | , ,        | 33 1         | < U<br>. H  |  |
| SEMIVOLATILES    | Naphthalene                   |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1.     | < U     | 0,33     | 1        | < 1         | J 0.3           | 31           | < 1   | , ,        | 33 1<br>20 4 | < U<br>. II |  |
| SEMIVOLATILES    | Nitrobenzene                  |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1      | < U     | 0.33     | 1        | < (         | J 0.3           | 1 6.         | < 1   | J U        | 321          | < 0         |  |
| SEMIVOLATILES    | n-Niiroso-di-n-propulamine    |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1 -    | < U     | 0.3      | 3 1      | < (         | 0.3 ل           | 3 1          | <     |            | 33 1         | < 0         |  |
| SEMIVOLATILES    | o-Nitrosodinham/Jamina        |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1      | < U     | 0.3      | 3 1      | < (         | J 0.3           | 13 1         | ۲ ا   | JO         | .33 1        | < 0         |  |
| CENNIOLATILES    | Paolashlarophatol             | 1      |              |        |           |            |        |            |       |       |         |         |      | 1.65    | 1      | < U     | 1.6      | 51       | < 1         | J 1.6           | <i>i</i> 5 1 | <     | 1 1        | .65 1        | < U         |  |
| SEMIVOLATILES    | Panapathrapa                  |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1      | < U     | 0.3      | 31       | < 1         | 0.2 ك           | 13 1         | <     | U 0        | .33 1        | < 0         |  |
| SEMIVOLATILES    | Phonel                        |        |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1      | < U     | 0.3      | 31       | < 1         | U 0.2           | 13 1         | <     | u c        | .33 1        | < U         |  |
| SEMIVOLATILES    | Pireno                        | ļ      |              |        |           |            |        |            |       |       |         |         |      | 0.33    | 1      | < U     | 0.3      | 31       | < 1         | U 0.3           | 13 1         |       | C          | .33 1        | < U         |  |
| SEMIVOLATILES    | ryiciic                       |        |              | 0.005  | 09 1      | บ บ        |        |            |       |       |         |         |      |         |        |         |          |          |             |                 |              |       |            |              |             |  |
| VOLATILES        | 1.1.1 Trichlersethana         |        |              | 0.005  | 09 1      | ů U        |        |            |       |       |         |         |      | 0.005   | 1      | نا >    | 0.00     | 51       | < 1         | 0.0             | .)5 1        | <     | U 0.       | 005 1        | < Ų         |  |
| VOLATILES        | t, 1, 1- incritorgetnane      |        |              | 0.005  | 09 1      | й и        |        |            |       |       |         |         |      | 0.005   | 1      | e i     | i 0.00   | 51       | < ا         | U 0.04          | 35 1         | ۲     | Ų 0.       | 05 1         | < U         |  |
| VOLATILES        | I, I, C, Z+I Ettachioroethane | 1      |              | 0.005  | 09 1      | ម្រឹ       |        |            |       |       |         |         |      | 0,005   | 1      | < ۱     | 0,00     | 51       | ۲ ا         | U 0.0           | J5 1         | ۲     | U 0.       | 305 1        | < U         |  |
| VOLATILES        | 1.7.2-1richiorgenane          |        |              | 0.003  | .ng 1     | 11 1       |        |            |       |       |         |         |      | 0.005   | 1      | < 1.    | 0.00     | 51       | < '         | U 0.0           | JS 1         | <     | U 0.       | 205 1        | < U         |  |
| VOLATILES        | 1,1+Dichloroelhane            |        |              | 0.005  | 00 1      |            |        |            |       |       |         |         |      | 0.005   | 1      | د ا     | 0.00     | 51       | ٢           | U 0.0           | 05 1         | <     | ບ 0.       | 005 1        | < U         |  |
| VOLATILES        | 1,1-Dichloroelhene            | 1      |              | 0.005  | 00 1      | ы 9<br>н п |        |            |       |       |         |         |      |         |        |         |          |          |             |                 |              |       |            |              |             |  |
| VOLATILES        | 1,1-Dichloropropene           | 1      |              | 0,005  | 03 1      |            |        |            |       |       |         |         |      |         |        |         |          |          |             |                 |              |       |            |              |             |  |
| VOLATILES        | 1,2,3-Trichlorobenzene        |        |              | 0.005  | 00 1      |            | ,<br>1 |            |       |       |         |         |      |         |        |         |          |          |             |                 |              |       |            |              |             |  |
| VOLATILES        | 1.2,3-Trichloropropane        | -      |              | 0.005  | 1 100     | 0 U        | ,      |            |       |       |         |         |      |         |        |         |          |          |             |                 |              |       |            |              |             |  |
| VOLATILES        | 1,2,4-Trichlorobanzene        | ł      |              | 0.005  | 108 1     | 0 L<br>0 · | ,      |            |       |       |         |         |      |         |        |         |          |          |             |                 |              |       |            |              |             |  |
| VOLATILES        | 1,2,4-Trimelhylbenzene        |        |              | 0.005  | /09 1     | υί         | 1      |            |       |       |         |         |      |         |        |         |          |          |             |                 |              |       |            |              |             |  |

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Solt Associated with LHAAP-35/36 Sumps

|                  |                                | Concentrati       | ons of Chen    | nicals     | in So      | il Sample           | s Asso | ciated wit | h Sum  | p 05(    | )    |        |            |         |        |            |             |        |        |             |
|------------------|--------------------------------|-------------------|----------------|------------|------------|---------------------|--------|------------|--------|----------|------|--------|------------|---------|--------|------------|-------------|--------|--------|-------------|
| (SUMP) = SUMP050 |                                |                   |                |            |            | 75800               | 4      | 75800      | 18.    | DI 50-01 |      | ин     | S50-01     |         | LH-    | \$50-01    |             | LH-S   | 50-01  |             |
| LOCATION CODE    |                                | 35SUMP050-SB01    | 35SUMP050-SB   | 01         | 470        | /5809<br>200/0.0 EV | 475    | R09(1.2)   | TH-    | DL50-01  |      | เหง    | 50-01_1    |         | LH-S   | 50-01_2    | 2           | LH-S5  | 0-01_3 |             |
| SAMPLE_NO        |                                | 35-SMP050-SB01-01 | 35-5MP050-5601 | ·U2        | #/30<br>5/ | 21/2000             | 50     | 31/2000    | 7/1    | 1/1993   |      | 7/     | 8/1993     |         | 7/2    | 7/1993     |             | 7/27/  | 1993   |             |
| SAMPLE_DATE      |                                | 9/22/2006         | 5,55           |            | ر.<br>۱    | - 0.5 FI            | 1      | 1 2 FI     | 2      | 2.9 Ft   |      | 0.5    | 1,5 Ft     |         | 0.5    | • 1,5 Ft   |             | 4 - 4  | .5 FI  |             |
| DEPTH            |                                | 0.5 - 0.5 -       | SEC .          |            | · ·        | REG                 |        | REG        |        | REG      |      |        | REG        |         | F      | REG        |             | R      | EĢ     |             |
| SAMPLE_PURPOSE   | Recentles (Units - mailes)     | Result DII 10 VO  | Result DIL LC  | a vo       | Result     | DIL LQ VQ           | Result | DIL LO VO  | Result | DILL     | a va | Result | DILL       | o va    | Result | DILL       | <u>a va</u> | Result | DIL LO | VQ          |
| Test Group       | 2 2 Dinteme 2 chilorographe    | 1163011 012 20 10 | 0.00509 1 U    | U          |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
|                  | 1.2-Dibiometbabe               |                   | 0.00509 1 U    | U U        |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | 1.2-Dichlorobenzene            |                   | 0,00509 t U    | U          |            |                     |        |            |        |          |      |        |            |         |        |            |             | 0.005  |        | н           |
| VOLATILES        | 1.2-Dichioroethane             |                   | 0,00509 1 U    | U          |            |                     |        |            | 0.005  | 1        | < U  | 0.005  | 1          | < 0     | 0.005  | 1          | < 0         | 0.005  | 1 2    | 11          |
| VOLATILES        | 1,2-Dichloroethane             | 1                 |                |            |            |                     |        |            | 0,005  | 1        | < U  | 0.005  | 1          | < V<br> | 0.005  | ÷          | ~ 0         | 0.000  | 1 2    | ů.          |
| VOLATILES        | 1.2-Dichloropropane            |                   | 0.00509 1 U    | U U        |            |                     |        |            | 0.005  | 1        | < U  | 0.005  | 1          | < 0     | 0.003  | '          |             | 0.000  |        | •           |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) |                   | 0.00509 1 L    | U U        |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | 1,3.5 Trimethylbenzene         |                   | 0.00509 1 L    | , u        |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | 1.3-Dichlorobenzene            |                   | 0.00509 1 1    |            |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | 1,3-Dichloropropane            |                   | 0.00509 1 U    |            |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | 1,4-Dichlorobenzene            |                   | 0.00509 1 1    |            |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | 2.2-Dichloropropane            |                   | 0.00509 1 4    | , U        |            |                     |        |            | 0.05   | 1        | < U  | 0.05   | 1          | < U     | 0.05   | 1          | < U         | 0.05   | 1 <    | υ           |
| VOLATILES        | 2-Bulanone                     |                   | 0.0102 1 0     |            |            |                     |        |            | 0.01   | 1        | < U  | 0.01   | 1          | < U     | 0.01   | 1          | < U         | 0.01   | 1 <    | U           |
| VOLATILES        | 2-Chloroethyl vinyl ether      |                   | 0.0102 1 0     |            |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | 2-Chlorololuene                |                   | 0.00309 1 0    |            |            |                     |        |            | 0.05   | ٢        | < U  | 0.05   | 1          | < U     | 0.05   | 1          | < U         | 0.05   | া <    | U           |
| VOLATILES        | 2-Hexanone                     |                   | 0.0102 1 0     |            |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | 4-Ghiorotoluene                |                   | 0.000000 1 1   | i u        |            |                     |        |            | 0.1    | 1        | < U  | 0.3    | 1          | < U     | Q.1    | 1          | < U         | 0.1    | 1 4    | : U         |
| VOLATILES        | Actione                        | 1                 | 0.00509 1      | มับ        |            |                     |        |            | 0.005  | 1        | < U  | 0.005  | 1          | < U     | 0.005  | 1          | < U         | 0.005  | 1 <    | : U         |
| VOLATILES        | Benzene                        |                   | 0.00509 1      | 0 U        |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | Bromooblizene                  |                   | 0.00509 1      | U U        |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | Bromodichloromaihane           |                   | 0.00509 1      | υυ         |            |                     |        |            | 0.005  | 1        | < U  | 0.005  | ; †        | < U     | 0.005  | 1          | < U         | 0.005  | 1 4    | : 0         |
| VOLATILES        | Bromolorm                      |                   | 0.00509 1      | υu         |            |                     |        |            | 0.005  | 1        | < U  | 0.00   | i 1        | < U     | 0.005  | 1          | < U         | 0.005  | 1 1    | ( U         |
| VOLATILES        | Bromomethane                   |                   | 0.0102 1       | υU         |            |                     |        |            | 0.01   | 1        | < U  | 0.0    | 1          | < 0     | 0.01   | 1          | < 0         | 0,01   | 1 •    | 2 U<br>. 11 |
| VOLATILES        | Carbon disulfide               |                   | 0.00509 1      | υυ         |            |                     |        |            | 0.005  | 1        | < 0  | 0.00   | 51         | < V     | 0.005  |            | < U         | 0.005  |        |             |
| VOLATILES        | Carbon tetrachloride           |                   | 0.00509 1      | U U        |            |                     |        |            | 0.005  | 1        | < U  | 0.00   | ; ;<br>- ; | < 0     | 0.005  | - 1<br>- 1 | < U         | 0.000  | 1      | - 11        |
| VOLATILES        | Chlorobenzene                  |                   | 0.00509 1      | บ บ        |            |                     |        |            | 0.005  | }        | < U  | 0,00   | ) )<br>  1 | < U     | 0.003  | 1          | 2 11        | 0.000  | 1      | < ປ         |
| VOLATILES        | Chloroethane                   |                   | 0.0102 1       | U U        |            |                     |        |            | 0.01   | 1        | < U  | 0.0    | 1 I<br>7 1 | - 11    | 0.005  | 1          | < 0         | 0.005  | 1 .    | < U         |
| VOLATILES        | Chloroform                     |                   | 0.00509 1      | 0 0        |            |                     |        |            | 0.005  | 1        | ~ 11 | 0.00   | 1 1        | e 11    | 0.01   | 1          | < U         | 0.01   | 1      | < U         |
| VOLATILES        | Chloromethane                  |                   | 0.0102 1       | 0 0        |            |                     |        |            | 0.01   | ,        | ~ ~  | 0.0    | , ,        |         |        |            |             |        |        |             |
| VOLATILES        | cis-1.2-Dichloroethene         |                   | 0.00509 1      | υ υ<br>н н |            |                     |        |            | 0.005  | 1        | < U  | 0.00   | 51         | < U     | 0.005  | 1          | < U         | 0,005  | 1      | < U         |
| VOLATILES        | cis-1,3-Dichloropropene        |                   | 0.00509        | 0 0        |            |                     |        |            | 0.005  | 1        | < U  | 0.00   | 51         | < U     | 0.005  | i 1        | ۷ ×         | 0.005  | 1      | < U         |
| VOLATILES        | Dibromochlozomethane           |                   | 0.00509 1      | 0 U        |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | Dipromomeinane                 |                   | 0.0102 1       | u u        |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | Distribiographicatie           |                   | 0.00509 1      | υū         |            |                     |        |            | 0.005  | i 1      | < U  | 0.00   | 51         | < U     | 0.005  | i 1        | < U         | 0.005  | 1      | < U         |
| VOLATILES        | Howachlorabutadiene            |                   | 0.00509 1      | υŪ         |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | Isoprovibenzene                |                   | 0.00509 1      | υU         |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | m.o-Xvienes                    |                   | 0.00509 1      | ម ប        |            |                     |        |            |        |          |      |        |            |         |        |            |             | 0.05   |        | . 11        |
| VOLATILES        | Melhyl isobutyl ketone         |                   | 0.0102 1       | U U        |            |                     |        |            | 0.05   | 5 1      | < U  | 0.0    | 51         | < 0     | 0.00   |            | < U         | 0.05   | 1      | < U<br>4 II |
| VOLATILES        | Methylene chloride             |                   | 0,00509 1      | υU         |            |                     |        |            | 0.005  | 5 1      | < L  | 0,00   | 5 1        | < 0     | 0.003  |            | < 0         | 0.000  |        |             |
| VOLATILES        | Naphihalene                    |                   | 0.0102 1       | υU         |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | n-BUTYLBENZENE                 |                   | 0.00509 1      | υU         |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | n-PROPYLBENZENE                |                   | 0.00509 1      | 0 0        |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | p-ISOPROPYLTOLUENE             |                   | 0.00509 1      | U U        |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | sec-BUTYLBENZENE               |                   | 0.00509 1      | U U        |            |                     |        |            | 0.00   | 51       | < ۱  | 0.0    | 15 f       | < 1     | 0.00   | 51         | < U         | 0.005  | 1      | < U         |
| VOLATILES        | Slyrene                        |                   | 0.00509 1      | 0 0        |            |                     |        |            | 1.00   |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | Iet-BUTYLBENZENE               |                   | 0,00309 1      | 11 11      |            |                     |        |            | 0.00   | 51       | < l  | 0.0    | 5 1        | < L     | 0.00   | 51         | < U         | 0.005  | 1      | < U         |
| VOLATILES        | i etrachioroeinene             |                   | 0.00000 1      | и н        |            |                     |        |            | 0.00   | 51       | < 1  | J 0,0  | )5 1       | < L     | J 0.00 | 51         | < U         | 0.005  | 1      | < U         |
| VOLATILES        | Louge ( 2 Disblore-Bass        | 1                 | 0.00509 1      | บีเ        |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |
| VOLATILES        | rans-1,2-beneroenene           |                   | 0.00509 1      | บบ         |            |                     |        |            | 0.00   | 5 1      | < ۱  | 0.0    | X5 1       | < ۱     | ) 0.00 | 51         | < U         | 0.005  | 1      | < U         |
| VUUATILES        | 1919-19-Diminional Aberra      | 1                 |                |            |            |                     |        |            |        |          |      |        |            |         |        |            |             |        |        |             |

Table 3-50

#### Data Evaluation Report Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



· ....

| Table 3-50  |       |
|---|-------|
| Concentrations of Chemicals in Soil Samples Associated with Sum | p 050 |

| [SUMP] = SUMP050<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                           | 3556<br>35-56 | UMP050-SB01<br>1P050-SB01-01<br>9/22/2006<br>0.5 - 0.5 Ft<br>BEG | 35SUM<br>35-SMP<br>9/ | MP050-5<br>2050-58<br>22/2006<br>5 - 5 Ft<br>REG | 6801<br>601-02 | 47      | 47SB09<br>\$B09(0-0_5)<br>5/31/2000<br>0 • 0.5 Ft<br>REG |        | 47SB09<br>47SB09(1-2<br>5/31/2000<br>1 - 2 Ft<br>REG | 2)    | LH<br>LH<br>7/<br>2 | I-DL50-<br>I-DL50-<br>/11/199<br>2 - 2.9 P<br>REG | 01<br>01<br>3<br>1 | LH<br>LH-<br>7/<br>0.1 | -\$50-0<br>550-01<br>28/199<br>5 - 1.5<br>REG | 01<br>1_1<br>83<br>Ft | UH<br>UH<br>7.<br>0. | H-S50-01<br>-S50-01<br>/27/1993<br>5 - 1.5 F<br>REG | <br>_2<br> | LH-<br>1.H-<br>7.<br>4 | H-S50-01<br>-S50-01_3<br>/27/1993<br>4 - 4.5 F1<br>REG | 1     |
|--|---------------------------|---------------|--|-----------------------|--|----------------|---------|--|--------|--|-------|---------------------|---|--------------------|------------------------|---|-----------------------|----------------------|---|------------|------------------------|--|-------|
| SAMPLE_PURPUSE   |                           | <b>5</b> 4    |  | (Lease)               | DI   |                | Basult  | DI LO VO   | ) Besu | t DIL  | LO VO | Result              | DIL   | LQ VO              | Result                 | DiL   | ιο νο                 | Result               | DIL   | LQ VQ      | Result                 | DRLL   | 0 10  |
| Test Group   | Parameter (Units = mg/kg) | Hesut         |  | nesui                 |  | 10 10          | 1100011 |  |        |  |       | 0.005               | 1   | < 11               | 0.005                  | 1   | < U                   | 0.005                | 5 1   | < U        | 0.005                  | 51.  | < U > |
| VOLATILES  | Trichloroethene           |               |  | 0.00509               | 1  | υυ             |         |  |        |  |       | 9.005               | '   |                    |                        |   |                       |                      |   |            |                        |  |       |
| VOLATILES  | Trichlorolluoromethane    |               |  | 0.0102                | 1  | υU             |         |  |        |  |       |                     |   |                    | 0.05                   |   | - 11                  | 0.05                 | . 1   | ~ II       | 0.0                    | 51   | ۵ ا   |
| VOLATIEES  | Vinvi acetate             |               |  | 0.0102                | 1  | υU             |         |  |        |  |       | 0.05                | 1   | 2 U                | 0,03                   |   |                       | 0.01                 |   | . u        | 0.0                    |  | νú.   |
|  | Mand als lands            |               |  | 0.0102                | 1  | U U            |         |  |        |  |       | 0.01                | 1   | < U                | 0.01                   | 1   | < U                   | 0.0                  | 1 1   | < 0        | 0.0                    |  | •     |
| VOLATILES  | Allilài Chiloinge         | 1             |  |                       |  |                |         |  |        |  |       | 0.005               | 1   | < U                | 0.005                  | 1   | < U                   | 0.00                 | 51  | < U        | 0.00                   | 5 1  | < U   |
| VOLATILES  | Xylenes, Tolal            |               |  |                       |  |                |         |  |        |  |       |                     |   |                    |                        |   |                       |                      |   |            |                        |  |       |



Data Evaluation Report Chemical Concentrations In Soil Associated with LHAAP-35/36 Sumps

Table 3-51

## Concentrations of Chemicals in Soil Samples Associated with Sump 051

| [SUMP] = SUMP051               |                             |        |            |        |               |            |         |          |           |     | 0001010   |            |             |         | 170000               |            |        | 475809     |       |        | HOSBI     | 3     |        | HOSB13     |      | ł      | 05813     |    |
|--------------------------------|-----------------------------|--------|------------|--------|---------------|------------|---------|----------|-----------|-----|-----------|------------|-------------|---------|----------------------|------------|--------|------------|-------|--------|-----------|-------|--------|------------|------|--------|-----------|----|
| LOCATION _CODE                 |                             | 35SUM  | /P051-St   | 301    | 35SU          | MP051      | SBOI    | 35SUMP   | 151-\$801 |     | 355UMP    | 051-50     | 101<br>M OC | 170     | 47 3000<br>2009 /0.7 | )<br>() () | ٨      | 75808 (1-) | וק    | н      | IOSB13/0- | 0.51  | \$     | HOSB13(3-5 | 1    | HO     | 813(8-10) |    |
| SAMPLE_NO                      |                             | 35-SM  | P51-SB0    | 1-01   | 35-SMP        | 51-SB01    | I-D1-OC | 35-SMP51 | -5801-0   | 2   | 33-5NP31- | 3001-0     | Nº GIG      | 416     | 5/21/20/0            | 0_0/<br>0  | -      | 5/31/2000  | -,    |        | 12/5/200  | 10    |        | 12/5/2000  |      | 1      | 2/5/2000  |    |
| SAMPLE_DATE                    |                             | 9/     | 13/2005    |        | 9             | /13/2006   | 5       | 9/13/    | 2005      |     | 5/13      | 7 54       |             |         | 0.05E                | а<br>1     |        | 1 - 2 Fi   |       |        | 0 - 0.5 F | 4     |        | 3 - 5 FI   |      | f      | - 10 Ft   |    |
| DEPTH                          |                             | 0.5    | 5 - 0,5 F1 |        | 0             | .5 - 0.5 H | 1       | / .      | 7 21      |     | ,.        | 7.5        |             |         | 010.01               | 1          |        | BEG        |       |        | REG       |       |        | REG        |      |        | REG       |    |
| SAMPLE_PURPOSE                 |                             |        | REG        |        |               | 20         |         | 71       | :0        | 10  | Presult I | יט<br>וויס |             | Barrit  | 760                  |            | Becult | DE         | io vo | Result | t DIL     | LO VO | Result | DIL LI     | a vo | Result | DIL LO    | VQ |
| Test Group                     | Parameter (Units = mg/kg)   | Result | DILL       | Q VQ   | Result        | DIL        | La vu   | Hesuit   |           | vu  | HESUI     | 0.6        |             | 1 daton | 010                  |            |        |            |       |        |           |       |        |            |      |        |           |    |
| EXPLOSIVES                     | 2,4-Dinitrololuene          |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| EXPLOSIVES                     | 2.6-Dinitrolatuane          |        |            |        | 4 4 5 6 6     |            |         | 7600     |           |     | 10000     | 1          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Aluminum                    | 7590   |            |        | 11300         | 2          |         | 0.0813   |           |     | 0.116     | 1          | 1           |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Antimony                    | 0.109  |            | u ,    | 0.007         | -          | Ų       | 4.05     |           | ï   | 0 172     | 1          | ч<br>.1 .1  |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Arsenic                     | 1.92   | 1          | ل<br>ا | 0.037         | -          |         | 24.6     | 4         | , d | 32        | 1          | J           |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Banum                       | 56.8   | 1          | 3      | 04.4<br>0 316 | ÷          |         | 0.944    | •         | .i  | 0 276     | ŝ          | JJ          |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Beryklum                    | 0.003  |            |        | n n 695       | ÷          | 1 1     | 0.442    | 1 1       | •   | 0.0459    | 1          | ۔<br>ان ان  |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Cadmium                     | 0.104  | ۱<br>د     | J J    | 0.0023        | ÷          |         | 255      | 1         |     | 250       | 1          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Calcium                     | 14.0   | -          | Ч      | 017           | ÷          |         | 9.39     | ſ         | .1  | 7.68      | 1          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Chitomum                    | 24.2   |            |        | 3.11          | 4          |         | 4 91     | 1         | •   | 3.18      | 1          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Const                       | 2.74   | 1          | ų      | 2.40          | ł          |         | 3.31     | 1         |     | 2.49      | ٢          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| ME) ALS                        | Copper                      | 22400  | <          | .1     | 10100         | 1          |         | 16900    | 1         | J   | 5700      | 1          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALO                         | 101                         | 7 79   | 1          | v      | 5.79          | 1          |         | 8.93     | 1         | J   | 5         | 1          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Leau<br>Magazium            | 365    | ÷          | .t.    | 642           | i.         |         | 619      | 1         | з   | 616       | 1          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Magnesium                   | 395    | 5          | Ĵ      | 26.7          | 1          |         | 78.9     | 1         | J   | 12        | t          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Marquese                    | 0 267  | 1          | เม     | 0.0724        | 1          | L L     | 0.289    | 1 U       |     | 0.0211    | 1          | J J         |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALO                         | Nergury                     | 4 79   | 1          | •      | 3.87          | · 1        |         | 3.92     | 1         |     | 3.74      | 1          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| NETALO                         | Polattium                   | 253    | 1          |        | 297           | 1          |         | 264      | £         |     | 285       | 1          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| NETALO                         | Selection                   | 0.198  | 1          | L L    | 0.232         | 1          | U       | 0.248    | 1         |     | 0.231     | í          | U           |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALQ                         | Silver                      | 1.7    | 1          | Ů.     | 1.61          | 1          | U       | 1.77     | 1 U       |     | 1.58      | 1          | U           |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Sodum                       | 22.3   | 1          | _<br>J | 108           | 1          |         | 115      | 1         |     | 119       | 1          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Steptium                    |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Thallium                    | 0.0697 | 1          |        | 0.0846        | i 1        |         | 0.0815   | 1         |     | 0.0753    | ٢          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Vanadium                    | 30.2   | 1          | J      | 16.4          | 1          |         | 25.5     | 1         | ſ   | 8,27      | 1          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| METALS                         | Zinc                        | 29     | i          | J      | 15.3          | 3 1        |         | 14.2     | 1         | ţ   | 14,4      | 1          |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| PERC                           | Perchlorate                 | 0.0495 | 5          | U      | 0.05          | 5 5        | Ų       | 0.1      | 10 U      |     | 0.1       | 10         | U           | 0.019   | 16                   |            | 0.005  | 1 99       | < 0   |        |           |       |        |            |      |        |           |    |
| RANGE ORGANICS                 | Carbon Range C12-C28        | 55.1   | 1          | υ      | 57.1          | L † 1      | U       | 56.4     | 1 U       | I   | 57.1      | េ          | U           |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| RANGE ORGANICS                 | CARBON RANGE C28-C35        | 55.1   | 1          | U      | 57.1          | 1          | U       | 56,4     | 1 U       | I   | 57.1      | 1          | U           |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| RANGE ORGANICS                 | Carbon Range C6-C12         | 55,1   | t          | U      | 57.1          | 1 1        | U       | 56.4     | 1 U       | F   | 57.1      | 1          | V           |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 1,2.4 Trichlarobenzene      |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene         |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 1,3-Dichlorobenzene         |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene         |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenoi       |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 2.4.6 Trichlorophanol       |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 2.4-Dichlorophenol          | 1      |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 2.4-Dimethylphenol          | ł      |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 2.4-Dinifrophenol           |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 2-Chloronaphthalene         |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 2-Chlorophenol              |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 2-Methylnaphthalene         |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 2-Methylphenol              |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 2-Nitroaniline              |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 2-Nitrophenol               |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 3.3-Dichlorobenzione        |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 3-Nitroanine                |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 4.6-Dinimo-2-metnyiphenoi   |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 4-Bitimophenyi phenyi enler | 1      |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | 4-Chineseniline             |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMMYOLATILES                  | AChiorophenyl obenyl other  |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SENNVOLATILES<br>SENNVOLATILES | 4-Mathylohanol              | 1      |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SCHIVOLAHLES                   | 4.Nimanilina                |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMINOLATILES                  | 4-Nitronbenol               |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMINOLATILES                  | Acenanhihana                |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | Acenaphthylene              |        |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
| SEMIVOLATILES                  | Anihracene                  | 1      |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |
|                                |                             | •      |            |        |               |            |         |          |           |     |           |            |             |         |                      |            |        |            |       |        |           |       |        |            |      |        |           |    |

ŝ

Data Evaluation Report Chemical Concentrations In Soil Associated with LHAAP-35/36 Sumps

constraint of the sector of th

Table 3-51

## Concentrations of Chemicals in Soil Samples Associated with Sump 051

| (SUMP) = SUMP051<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                                | 355UMP051-SB01<br>35-SMP51-SB01-01<br>9/13/2005<br>0.5 - 0.5 F1<br>BEG | 355UMP051-5801<br>35-5MP51-5801-01-0C<br>9/13/2008<br>0.5 - 0.5 Ft<br>FD | 35SUMP051-SB01<br>35-SMP51-SB01-02<br>8/13/2006<br>7 - 7 Ft<br>REG | 35SUMP051-SB01<br>35-SMP51-SB01-02-0C<br>9/13/2006<br>7 - 7 Pt<br>FD | 47SB08<br>47SB08 (0-0_5)<br>5/31/2000<br>0 + 0.5 Ft<br>REG | 47\$808<br>47\$808 (1-2)<br>5/31/2000<br>1 - 2 Ft<br>AEG | HOSB13<br>HOSB13(0-0_5)<br>12/5/2000<br>0 - 0.5 Ft<br>REG | HOSB13<br>HOSB13(3-5)<br>12/5/2000<br>3 · 5 Fi<br>REG<br>Restit DIL 10, VO | HOSB13<br>HOSB13(8-10)<br>12/5/2000<br>8 - 10 Ft<br>REG<br>Result DH_LO VQ |
|--|--------------------------------|--|--|--|--|--|--|---|--|--|
| SAMPLE_FURPUSE   | Parameter (Units = mo/k0)      | Result Dil, LO VO  | Result DIL LO VO   | Result DIL LQ VQ   | Result DIL LO VO   | Result Dil, LQ VQ  | Hesuit dil LQ VQ   | HESDE DIE EQ 10   |  | ······································                                     |
| SEMIVOLATILES  | Benzo(a)anihracene             |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Benzo(a)pyrene                 |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Benzo(b)#uoranthene            |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Benzo(ghi)perviene             | Į  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Benzo(k)lluoranthene           |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Benzoic Acid                   |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Benzyl Alcohol                 |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane     |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | bis(2-Chloroethy))ether        |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | bis(2-Chioroisopropy)einer     |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Ruby boomd phihaisia           |  |  |  |  |  |  |   |  |  |
| SEMINOLATILES  | Christene                      |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Dibenzo(a.b)anihracene         |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Dihenzoluran                   |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Diethyl phthalate              |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Dimethyl phihalate             |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | di-n-Butyl phthalate           |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | di-n Octyl phihalale           |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Fluoranthens                   |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Fluorene                       | Í  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Hexachlorobenzene              |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Hexachlorobuladiene            |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Heyachlorocyclopeniaciene      |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Hexacoloroemana                |  |  |  |  |  |  |   |  |  |
| SEMIVOLATICES  | isophorona                     |  |  |  |  |  |  |   |  |  |
| SEMINOLATILES  | Nanh®alene                     |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Nitrobenzene                   |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine     |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | n-Nitrosodiphanylamine         |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Pentachlorophenol              |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Phenanthrana                   |  |  |  |  |  |  |   |  |  |
| SEMIVOLATILES  | Phenol                         |  |  |  |  |  |  |   |  | FI - 1 03  |
| SEMIVOLATILES  | Pyrene                         |  |  |  |  |  |  | 56.8 1 < U  | 57.7 1 < U   | 59 1 4 1   |
| TPH  | Hydrocarbons as Diesei Filei   |  |  |  |  |  |  | 56.8 1 < U  | 57.7 1 C U   | 59 1 < U   |
| TPH  | TOTAL HYDROCABBONS             |  |  |  |  |  |  | 2018 I < O  | 37.7   |  |
| VOLATILES  | 1 1 1 2-Tetrachiorosthabe      |  |  | 0.00579 1 U  | 0.0048 1 U   |  |  |   |  |  |
| VOLATILES  | t.t.1-Trichloroelbane          |  |  | 0.00579 1 U  | 0.0048 1 U   |  |  |   |  |  |
| VOLATILES  | 1,1,2,2-Teirachloroethane      |  |  | 0.00579 1 U  | 0.0048 1 U   |  |  |   |  |  |
| VOLATILES  | 1,1,2-Trichloroethane          |  |  | 0.00579 f U  | 0.0048 1 U   |  |  |   |  |  |
| VOLATILES  | 1,1-Dichloroethane             |  |  | 0.00579 1 U  | 0.0048 1 0   |  |  |   |  |  |
| VOLATILES  | 1,1-Dichloroethene             |  |  | 0.00579 1 0  | 0.0048 1 0   |  |  |   |  |  |
| VOLATILES  | 1,1-Dichloropropena            |  |  | 0.00579 1 0  | 0.0048 1 U   |  |  |   |  |  |
| VOLATILES  | 1.2.3-Trichlorobenzane         |  |  | 0.00579 1 U  | 0.0048 1 U   |  |  |   |  |  |
| VOLATILES  | 1,2,3-Trichloropropane         |  |  | 0.00579 1 U  | 0.0048 ¥ U   |  |  |   |  |  |
| VOLATILES  | 1.2.4-Trichlorabenzene         | Í  |  | 0.00579 1 U  | 0.0048 1 U   |  |  |   |  |  |
| VOLATILES  | 1,2,4-1 mmetnykoskizene        |  |  | 0.00579 I U  | 0.0048 1 U   |  |  |   |  |  |
| VOLATILES  | 1 2-Dibromoethaba              |  |  | 0.00579 1 U  | 0.0048 1 U   |  |  |   |  |  |
| VOLATILES  | 1 2-Dichlorobenzene            |  |  | 0.00579 i U  | 0.0048 1 U   |  |  |   |  |  |
| VOLATILES  | 1,2-Dichloroethane             |  |  | 0.00579 1 U  | 0.0048 t U   |  |  |   |  |  |
| VOLATILES  | 1.2-Dichloroethene             |  |  |  | 0.0040 1 17  |  |  |   |  |  |
| VOLATILES  | 1,2-Dichloropropane            |  |  | 0.00579 1 U  | 0.0048 1 0   |  |  |   |  |  |
| VOLATILES  | 1,2-Dimolhylbenzene (b-Xylene) |  |  | 0.00579 1 U  | 0.0048 1 1   |  |  |   |  |  |
| VOLATILES  | 1,3,5 Trimethylbanzene         |  |  | 0.00379 1 0  | 0.0048 1 U   |  |  |   |  |  |
| VOLATILES  | 1,3-Dichlorobenzene            | 1  |  | 0.00018 1 0  | 0.00 · · · ·   |  |  |   |  |  |

Shaw Environmental, Inc. 00066084

Defa Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-51

## Shaw Environmental, Inc. 00066085

## Concentrations of Chemicals in Soil Samples Associated with Sump 051

| (SUMP) = SUMP051 |                                 |                        |                     |                   | 25SLIMPOS1-SB01     | 47\$B08          | 47SB08             | HOSB13           | HOSB13           | HOSB13             |
|------------------|---------------------------------|------------------------|---------------------|-------------------|---------------------|------------------|--------------------|------------------|------------------|--------------------|
| LOCATION _CODE   |                                 | 35SUMP051-SE01         | 3550MP051-5801      | 3550MP031-5001    | 35-SMP51-SB01-02-0C | 47SB08 (0-0_5)   | 47SB06 (1-2)       | HO\$B13(0-0_5)   | HOSB13(3-5)      | HOSE13(8-10)       |
| SAMPLE_NO        |                                 | 35-SMP51-SB01-01       | 35-SMP51-SB01-01-QC | 0/10/0001-02      | 9/13/2006           | 5/31/2000        | 5/31/2000          | 12/5/2000        | 12/5/2000        | 12/5/2000          |
| SAMPLE_DATE      |                                 | 9/13/2005              | 9/13/2006           | 9 1 3 / 2 0 0 0   | 7 - 7 FI            | 0 - 0.5 Ft       | 1 - 2 Ft           | 0 - 0.5 Ft       | 3 - 5 F1         | 8 - 10 FL          |
| DEPTH            |                                 | 0.5 + 0.5 FC           | 0.0+0.0 Ft          | BEG               | FD                  | REG              | REG                | REG              | REG              | REG                |
| SAMPLE_PURPOSE   |                                 | REG<br>Desuit Of LO VO | Reput OIL 10 VO     | Result Dil. LO VQ | Result OIL LO VO    | Result DIL LO VO | 2 Result DIL LO VO | Result DIL LO VO | Result Dit LO Vi | Q Result DIL LQ VQ |
| Test Group       | Parameter (Units = mg/kg)       | Hesuit Die CO VO       | Absoli Die Lee Ad   | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | 1,3-Dichloropropane             |                        |                     | 0.00579 1 U       | 0,0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | n 4-Dichiotopenzerie            |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | 2,2-Dichioropropane             | 1                      |                     | 0.0116 1 U        | 0.00959 1 U         |                  |                    |                  |                  |                    |
| VOLANLES         | 2 Chlomethol vigul ether        |                        |                     | 0,0116 1 U        | 0.00959 1 U         |                  |                    |                  |                  |                    |
| VOLATICES        | 2-Chicrotoluggo                 |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | 2.4023000                       |                        |                     | 0.0116 f U        | 0.00959 1 U         |                  |                    |                  |                  |                    |
| VOLATILES        | 4-Chlambaliana                  |                        |                     | 0,00579 1 U       | 0.0048 t U          |                  |                    |                  |                  |                    |
| VOLATILES        | Acalone                         | Í                      |                     | 0.0116 1 U        | 0.00959 1 U         |                  |                    |                  |                  |                    |
| VOLATILES        | Regione                         |                        |                     | 0.00579 t U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Bromohantena                    |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLANCES         | Bromochioromethane              |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Bromodichloromethane            |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Bromolorm                       |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Bromomethane                    |                        |                     | 0.0116 1 U        | 0.00959 1 U         |                  |                    |                  |                  |                    |
| VOLATHES         | Carbon disulfide                |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Carbon letrachloride            |                        |                     | 0.00579 1 U       | 0.004B 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Chlorobenzene                   |                        |                     | 0.00579 t U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Chiorpelbane                    |                        |                     | 0.0116 1 U        | 0.00959 I U         |                  |                    |                  |                  |                    |
| VOLATILES        | Chloroform                      |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Chloromethane                   |                        |                     | 0.0116 1 U        | 0.00959 1 U         |                  |                    |                  |                  |                    |
| VOLATILES        | cis-1.2-Dichloroethene          |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | cis-1.3-Dichloropropene         |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Dibromochloromethane            |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Dibromomethane                  |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Dichlorodifluoromethane         |                        |                     | 0.0116 1 U        | 0.00959             |                  |                    |                  |                  |                    |
| VOLATILES        | Ethylbenzene                    |                        |                     | 0.00579 1 U       | 0.0048 1 0          |                  |                    |                  |                  |                    |
| VOLATILES        | Hexachlorobutadiene             | 1                      |                     | 0,00579 1 0       | 0.0048 1 0          |                  |                    |                  |                  |                    |
| VOLATILES        | Isopropylbenzene                |                        |                     | 0.00579 1 U       | 0.0048 0            |                  |                    |                  |                  |                    |
| VOLATILES        | m,p-Xylenes                     |                        |                     | 0.00579 1 U       | 0,0048 1 0          |                  |                    |                  |                  |                    |
| VOLATILES        | Methyl isobutyl ketone          |                        |                     | 0.0116 1 0        | 0.0040 t 11         |                  |                    |                  |                  |                    |
| VOLATILES        | Methylene chlorida              |                        |                     | 0,005/9 1 U       | 0.0046 1 0          |                  |                    |                  |                  |                    |
| VOLATILES        | Naphthalene                     |                        |                     |                   | 0.00333 1 0         |                  |                    |                  |                  |                    |
| VOLATILES        | n-BUTYLBENZENE                  |                        |                     | 0.00575 1 1       | 0.0048 1 1          |                  |                    |                  |                  |                    |
| VOLATILES        | n-PROPYLBENZENE                 |                        |                     | 0.00579 1 1       | 0.0048 1 1          |                  |                    |                  |                  |                    |
| VOLATILES        | p-ISOPROPYLTOLUENE              |                        |                     | 0.00575 1 1       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | SEC BUTYLEENZENE                |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Styrena                         |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | In BUTYLSENZENE                 |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Tetrachloroelhane               |                        |                     | 0.00579 1 13      | 0.0048 I U          |                  |                    |                  |                  |                    |
| VOLATILES        | Tokiene                         | 1                      |                     | 0.00579 1 1       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | trans-1,2-Dichloroethene        | 1                      |                     | 0.00579 1 1       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | Irans-1.3-Dichloropropena       |                        |                     | 0.00579 1 U       | 0.0048 1 U          |                  |                    |                  |                  |                    |
| VOLATILES        | I Inchioroelhene                |                        |                     | 0.0116 1 U        | 0.00959 1 U         |                  |                    |                  |                  |                    |
| VOLATILES        | FICTION/OTOMEINARE              | i                      |                     | 0.0116 1 U        | 0.00959 1 U         |                  |                    |                  |                  |                    |
| VOLATILES        | viryi ageidie<br>Vioul chloride |                        |                     | 0.0116 1 U        | 0.00959 1 U         |                  |                    |                  |                  |                    |
| VOLATILES        | Yulonos Total                   |                        |                     |                   |                     |                  |                    |                  |                  |                    |
| VOLATILEO        | nynanada roran                  |                        |                     |                   |                     |                  |                    |                  |                  |                    |

, ÷

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

**SEMIVOLATILES** 

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

SEMIVOLATILES

1,3-Dichlorobenzene

1.4-Dichlorobenzene

2,4,5 Trichlorophenol

2.4.6-Trichlorophenol

2.4 Dichlorophenol

2.4 Dimethylphenol

2 Chloronaphthalene

2-Methylnaphthalene

3,3'-Dichlorobenzidine

4,6-Dinitro-2-methylphenol

4-Chloro-3-methylphenol

4-Bromophenyl phenyl elher

2.4-Dinitrophenol

2-Chlorophenol

2-Methylphenol

2-Nitroaniline

2-Nitrophenol

3-Nitroaniline

4-Chioroaniline



LO VO

< U

< U

< U

< U

e U

< U

U

< U

< U

< U

< U

< Ų

1 < U

1.65 1 < U

0.33 1 < U

0.65 1 < U

0.65 1 < U

1 < U

0.33 1 < U

0.33 1 < U

1.65 1 < U

0.33 1 ۲. U

0.33 1 ۲ U

0.33 1 <

1.65 1

0.33 1 < U

0.33 1

0.33

0.33 1

1.65 1

0.33 1

0.65 1 < U

1.65

0.33

0.33 1 < υ

1.65

0.33

0.33

0.33 1

1.65

0.33 1

0.33 1 < U

0.33 1 < 1J

0.33 1

1.65 1

0.33 1 < U

0.65 1

1,65

1.65

0.33

1

1

1 <

1

1

< U

< U

< U

< U

< U

< U

< U

< ئا

< U

< Ų

< U

U

U

U

U

U

0.33

0.33 1 ۲

1.65 1 <

0.33 1

0.33

0.33

1.65

0.33

0.33

0.33

0.33 1

1.65

0.33

0.65

1.65

1.65 1

0.33 1 < U

1

1

í <

1

1

1

1 ۲.

1

í <

1

1

0.55 1 < U

0.65 1 < U

< υ

< U

< U

¢ U

< U

< U

< U

د U

< U

1 < U

1 < 1/

1 < U

0.65 1 < U

0.65 1 < U

Ų

U <

U <

υ <

| (SUMP) = SUMP051 |                           |        | uncai    | •     |     | 19     | 6851.        | .01      |     | U      | H-S51  | -01 |         | U      | I-S51- | 01  |    | ы      | +\$51  | Q1    |
|------------------|---------------------------|--------|----------|-------|-----|--------|--------------|----------|-----|--------|--------|-----|---------|--------|--------|-----|----|--------|--------|-------|
| LOCATION_GOUE    |                           | HO     | 2012/0.  | 10\00 |     | LH S   | 551-01       | 100      |     | 1.H    | -851-0 | 1 1 |         | LH-    | \$51-0 | 1_2 |    | ĻΗ     | -551-0 | )1_3  |
| SAMPLE_NO        |                           | HU:    | + 2/6/20 | 10,00 |     | 7/     | 11/10        | 02       |     | 7      | /11/19 | 93  |         | 7/     | 11/19  | 93  |    | 7      | /\1/19 | 93    |
| SAMPLE_DATE      |                           |        | 12/0/20  |       |     |        | 5.15         | 20<br>21 |     | ,<br>0 | 5 - 13 | FI  |         | 6      | • 6.7  | FI  |    | 15.    | 7 - 16 | .2 Fi |
| DEPTH            |                           |        | 8-101    | -1    |     | 0.     | 6- 1.5<br>CD |          |     | v      | BEG    |     |         |        | REG    |     |    |        | REG    |       |
| SAMPLE_PURPOSE   |                           | Denvil | PŲ<br>DI | 10    | MA  | Ostuli | DH DH        | ιn       | vo  | Besult | DIL    | 1.0 | vo      | Result | DIL    | ια  | ٧Q | Result | DIL    | Ļ     |
| Test Group       | Parameter (Units = mg/kg) | Hesun  |          |       | VQ. | 0.22   |              |          | 11  | 0.33   | 1      |     | <u></u> | 0.33   | 1      | <   | υ  | 0.33   | 1      | ~     |
| EXPLOSIVES       | 2,4 Dinitrololuene        | l l    |          |       |     | 0.00   |              | 2        | Ŭ.  | 0.33   | 1      | Ż   | ŭ       | 0.33   | 1      | <   | υ  | 0.33   | 1      | <     |
| EXPLOSIVES       | 2,6-Dinitroloiuene        |        |          |       |     | 4000   | -            | `        | U   | 5140   |        |     | -       | 6680   | 1      |     |    | 8240   | 1      |       |
| METALS           | Aluminum                  |        |          |       |     | 4920   |              |          |     | 0110   | 1      | ,   |         | 3      | 1      | ~   | u  | 3      | 1      |       |
| METALS           | Antimony                  | 1      |          |       |     | 3      | 1            | `        | Ŷ   | 10     | 4      | `   | v       | 1      | 1      | •   | •  | 1.8    | 1      |       |
| METALS           | Arsenic                   | ĺ      |          |       |     | 2.4    | 1            |          |     | 1.0    |        |     |         | 30.2   | ÷      |     |    | 250    | 1      |       |
| METALS           | Barium                    |        |          |       |     | 59,1   | 1            |          |     | 65.2   |        |     |         | 00.2   | •      |     |    | 1.00   | •      |       |
| METALS           | Beryllium                 | Į      |          |       |     |        |              |          |     |        |        |     |         |        |        |     | 11 | 1      | 1      |       |
| METALS           | Cadmium                   |        |          |       |     | 1      | 1            | <        | Ų   | 1      | 1      | <   | U       | 1      |        | ,   | U  | 2140   | ÷      |       |
| METALS           | Calcium                   | ĺ      |          |       |     | 1110   | 1            |          |     | 1250   | 1      |     |         | 399    |        |     |    | 14.6   | ÷      |       |
| METALS           | Chromium                  |        |          |       |     | 10.7   | 1            |          |     | 13.1   | 1      |     |         | (.8    | 1      |     |    | 14.0   |        |       |
| METALS           | Cobalt                    |        |          |       |     | 4      | 1            |          |     | 3.9    | 1      |     |         | 4,1    | 1      |     |    | 21.0   |        |       |
| METALS           | Copper                    |        |          |       |     | 2.7    | 1            |          |     | 2,9    | 1      |     |         | 2.9    | 1      |     |    | 17.0   |        |       |
| METALS           | Iron                      |        |          |       |     | 10500  | 1            |          |     | 12700  | 1      |     |         | 8950   | 1      |     |    | 17000  | ;      |       |
| METALS           | Lead                      |        |          |       |     | 11.9   | 1            |          |     | 13.5   | 1      |     |         | \$3.7  | 1      |     |    | 11.4   | 1      |       |
| METALS           | Magnesium                 |        |          |       |     | 195    | 1            |          |     | 213    | 1      |     |         | 574    | 1      |     |    | 3570   | 1      |       |
| METALS           | Manganese                 |        |          |       |     | 288    | 1            |          |     | 331    | 1      |     |         | 95.9   | 1      |     |    | 285    | 1      |       |
| METALS           | Mercury                   | ļ      |          |       |     | 0.1    | 1            | <        | Û   | 0.1    | 1      | <   | U       | 0.1    | 1      | <   | U  | Q,1    | 1      |       |
| METALS           | Nickel                    | 1      |          |       |     |        |              |          |     |        |        |     |         |        |        |     |    |        |        |       |
| METALS           | Potassium                 |        |          |       |     | 183    | 1            |          |     | 205    | 1      |     |         | 269    | 1      |     |    | 842    | 1      |       |
| METALS           | Selenium                  |        |          |       |     | 1      | 1            | <        | IJ  | 1      | 1      | ۲   | Ų       | 1      | 1      | <   | U  | 1      | 1      |       |
| METALS           | Silver                    | 1      |          |       |     | 1      | 1            | <        | U   | 1      | 1      | <   | U       | 1      | 1      | <   | U  | 1      | 1      |       |
| METALS           | Sodium                    |        |          |       |     |        |              |          |     |        |        |     |         |        |        |     |    |        |        |       |
| HETALC           | Strontium                 |        |          |       |     | 4.5    | 1            |          |     | 5.3    | 1      |     |         | 9.5    | 1      |     |    | 47.6   | 1      |       |
| METALO           | Thelium                   |        |          |       |     |        |              |          |     |        |        |     |         |        |        |     |    |        |        |       |
| NETALO           | Venadium                  |        |          |       |     |        |              |          |     |        |        |     |         |        |        |     |    |        |        |       |
| NETALO           | Zine                      |        |          |       |     | 18.3   | 1            |          |     | 17     | 1      |     |         | 12.5   | 1      |     |    | 91.6   | i 1    |       |
| ME FALS          | parte<br>Description      |        |          |       |     |        |              |          |     |        |        |     |         |        |        |     |    |        |        |       |
| PERU             | Carbon Bases C12 C28      |        |          |       |     |        |              |          |     |        |        |     |         |        |        |     |    |        |        |       |
| RANGE_ORGANICS   | CARDON PUBLICE COR COR    |        |          |       |     |        |              |          |     |        |        |     |         |        |        |     |    |        |        |       |
| HANGE_OHGANICS   | Carbon Rande Czo-Co3      |        |          |       |     |        |              |          |     |        |        |     |         |        |        |     |    |        |        |       |
| HANGE, OHGANIUS  | Largon Hange Coroliz      |        |          |       |     | 0.33   |              | e        | 11  | 0.33   | 1      |     | U       | 0.33   | 1      | <   | U  | 0.3    | 3 1    |       |
| SEMIVOLATILES    | 1.2.4+ Inchorgoenzene     |        |          |       |     | 0.00   | i t          |          | u U | 0.33   | 3 1    | <   | Ű       | 0.33   | 1      | <   | U  | 0.3    | 3 1    |       |
| SEMIVOLATILES    | 1.2-Dichioropenzene       | 1      |          |       |     | 0.00   |              | •        | v   | 0.00   |        | -   | -       |        |        |     |    |        |        |       |

### Table 3-51 Concentrations of Chemicals in Soil Samples Associated with Sump 051

0.33

0.33

1.65 1 < υ

0.33

0.33 1 <

1.65 1

0.33 1 <

0.33 1

0.65 1 < U

1.65

0.33 1 < U

0.33 1

0.33 1

1.65 1 <

1.65 1

0.55 1

1

0.65 1 < U

0.33 1

1

1

0.33 1 < U

< U

<

< U

<

< U

< U

< U

د U

نا به

< U

ح U

11

....

Ш

U

U

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-51   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 051 |

| (SUMP) = SUMP051 |                             |        |       |         |      |    |        |          |    |         |        |                   |            |       |                |           |           |         | 11         | L.C.6.1          | <b>D</b> 1          |         |
|------------------|-----------------------------|--------|-------|---------|------|----|--------|----------|----|---------|--------|-------------------|------------|-------|----------------|-----------|-----------|---------|------------|------------------|---------------------|---------|
| LOCATION _CODE   |                             |        | HOS   | B13     |      |    | Ļ      | I-S51-   | 01 |         | L<br>  | H-851             | 1-01       |       | 05             | -551-4    |           |         | LI<br>LILU | CELO             | 1.2                 |         |
| SAMPLE_NO        |                             | нç     | SB13  | (8-10)( | x    |    | LH-    | 551-01   |    |         | Lr.    | 1-551-            | 01_1       |       | L/1-3          |           | 1_4<br>IA |         | 7          | 11/100<br>11/100 | 22                  |         |
| SAMPLE_DATE      |                             |        | 12/5/ | 2000    |      |    | 7/     | (11/19   | 93 |         |        | 2004<br>1. – 1. – | 993        |       |                | 17199     | 9<br>9    |         | 15         | 7.16             | 20<br>2 Fi          |         |
| DEPTH            |                             |        | 8 - 1 | 0 Ft    |      |    | Q.     | 5 • 1.5  | Pt |         | , i    | 1.5 1.            | .⇒.+:<br>• |       | 0              | 0.75      |           |         | 10.        | BE0              | <b>-</b> 1 <b>1</b> |         |
| SAMPLE_PURPOSE   |                             |        | F     | 0       |      |    |        | FU<br>FU |    |         | Dearth | nc.               | 3          | vo    | Recult         | neq<br>ni | 10        | vo      | Result     | DI               | 10                  | vo      |
| Test Group       | Parameter (Units = mg/kg)   | Result | DII.  |         | a va |    | Hesult |          | La | <u></u> | Hesur  | - 1012            |            | 11    | nesuli<br>0.22 | 1         | <u> </u>  | 11      | 0.33       | 1                |                     | 11      |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl efher |        |       |         |      |    | 0.33   |          | <  | 0       | 0.33   | -                 | Ś          | 1     | 0.03           | 1         | 2         | ŭ       | 0.33       | 1                | ż                   | ŭ       |
| SEMIVOLATILES    | 4-Methylphenol              |        |       |         |      |    | 0.33   | 1        | <  |         | 0.00   | -                 |            |       | 1 85           | ÷         | 2         | L.C.    | 1.65       | 1                | ż                   | Ū       |
| SEMIVOLATILES    | 4-Nitroaniline              |        |       |         |      |    | 1.65   | 1        | <  | 0       | 1.00   | 1                 | Ś          | ů.    | 1.65           | ;         | 2         |         | 1.65       | 1                | è                   | Ŭ       |
| SEMIVOLATILES    | 4-Nitrophenol               |        |       |         |      |    | 1.65   |          | <  |         | 1.00   |                   | 5          |       | 0.00           | •         |           | ň       | 0.33       | i                | è                   | บั      |
| SEMIVOLATILES    | Acenaphihene                |        |       |         |      |    | 0.33   | 2        | <  | U U     | 0.33   | 1<br>- 1          | 5          | H H   | 0.33           | ÷         | Ĵ         | ŭ       | 0.33       | 1                | , k                 | Ū.      |
| SEMIVOLATILES    | Acenaphihylene              |        |       |         |      |    | 0.33   | 1        | ٠  |         | 0.00   | 1                 | <u></u>    | ň     | 0.00           | ÷         | 2         | ŭ       | 0.33       | 1                | è                   | Ū       |
| SEMIVOLATILES    | Anihracene                  | 1      |       |         |      |    | 0.33   | 1        | <  |         | 0.00   |                   |            |       | 0.00           |           | Ì         | ň       | 0.33       | i                | ż                   | ŭ       |
| SEMIVOLATILES    | Benzo(a)anthracene          |        |       |         |      |    | 0.33   | 1        | <  |         | 0.00   |                   |            | 11    | 0.00           |           |           | л.<br>П | 0.33       |                  | è                   | ŭ       |
| SEMIVOLATILES    | Benzo(a)pyrene              |        |       |         |      |    | 0,33   | 1        | <  |         | 0.33   |                   | 5          |       | 0.00           | 1         | 2         | ы       | 0.33       | 1                | ž                   | Ū       |
| SEMIVOLATILES    | Benzo(b)Huoranthene         |        |       |         |      |    | 0.33   | 1        | <  |         | 0.00   | -                 |            |       | 0.00           | 1         | 2         |         | 0.33       | ì                | è                   | ŭ       |
| SEMIVOLATILES    | Benzo(ghi)perylene          |        |       |         |      |    | 0.33   | 1        | <  |         | 0,33   |                   | •          |       | 0.00           | ÷         | 2         | ň       | 0.33       | 1                | 2                   | ŭ       |
| SEMIVOLATILES    | Benzo(k)#uoranihene         |        |       |         |      |    | 0.33   | 1        | <  |         | 0,33   |                   | č.         |       | 1.00           | 4         |           | ŭ       | 1.65       |                  | 2                   | ŭ       |
| SEMIVOLATILES    | Benzoic Acid                |        |       |         |      |    | 1.65   | 1        | <  |         | 1.55   |                   | <          |       | 0.00           | 1         |           |         | 0.65       | 4                | 2                   | ň       |
| SEMIVOLATILES    | Benzyl Alcohol              |        |       |         |      |    | 0.65   | 1        | <  | 0       | 0.65   |                   | <          | 0     | 0.00           | -         |           |         | 0.00       | ÷                | 2                   | ŭ       |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  |        |       |         |      |    | 0.33   | 1        | ~  | U       | 0.33   |                   | <          | 0     | 0.33           | 4         | ŝ         |         | 0.00       | ;                | 2                   | 11      |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |        |       |         |      |    | 0.33   | 1        | <  | U       | 0,33   |                   | <          | 0     | 0.00           | 1.        | ÷.        | ň       | 0.00       | 4                | 2                   | ŭ       |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether |        |       |         |      |    | 0.33   | 1        | <  | U       | 0.33   | i 1               | <          |       | 0.33           | -         |           |         | 0.00       |                  |                     | н       |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |        |       |         |      |    | 0.33   | 1        | <  | 0       | 0.33   |                   | <          |       | 0.33           | -         | 5         |         | 0.00       | 4                | 2                   | ň       |
| SEMIVOLATILES    | Butyl benzyl phihalate      |        |       |         |      |    | 0.33   | 1        | ۲  | 0       | 0.33   |                   | <          | 0     | 0.33           | +         | ۲.        |         | 0.00       |                  | 2                   |         |
| SEMIVOLATILES    | Chrysene                    | 1      |       |         |      |    | 0.33   | 1        | <  | U       | 0,33   | 1                 | <          | 0     | 0.33           |           | Š.        |         | 0.00       |                  | 2                   | 11      |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      |        |       |         |      |    | 0.33   | 1        | <  | U       | 0.33   | 1                 | <          | 0     | 0.33           |           | <         |         | 0.33       | 1                |                     | 1       |
| SEMIVOLATILES    | Dipenzoluran                |        |       |         |      |    | 0.33   | 1        | <  | U       | 0.33   | 1                 | <          | U     | 0.33           | 1         | <         |         | 0.00       |                  | <u>.</u>            |         |
| SEMIVOLATILES    | Diethyl phthalale           |        |       |         |      |    | 0.33   | 1        | <  | U       | 0.33   | 3 1               | <          | U<br> | 0.33           | 1         | <         | 0       | 0.33       |                  | 5                   |         |
| SEMIVOLATILES    | Dimethyl phthalate          |        |       |         |      |    | 0.33   | 1        | <  | U       | 0.33   | 9 1               | <          | 0     | 0.33           | 1         | <         |         | 0.00       |                  | ٠.                  | ä       |
| SEMIVOLATILES    | di-n-Butyl phihalale        | 1      |       |         |      |    | 0.33   | 1        | ~  | U       | 0.33   | 3 1               | <          | 0     | 0.33           | 1         | <         |         | 0,33       |                  |                     | 11      |
| SEMIVOLATILES    | di-n-Octyl phthalate        |        |       |         |      |    | 0.33   | 1        | <  | U       | 0.33   | 3 1               | ۲          | U     | 0.33           | 2         | <         | 0       | 0.33       | ;                | <                   | U<br>11 |
| SEMIVOLATILES    | Fluoranthene                |        |       |         |      |    | 0,33   | 1        | <  | U       | 0.33   | 31                | <          | U<br> | 0.33           | 1         | ٢.        | U<br>14 | 0.33       | -                | -                   |         |
| SEMIVOLATILES    | Fluorene                    |        |       |         |      |    | 0.33   | 1        | <  | U       | 0.33   | 3 1               | ۲          | 0     | 0.33           | 1         | ٢         |         | 0.00       | 2                |                     | U U     |
| SEMIVOLATILES    | Haxachlorobenzene           |        |       |         |      |    | 0.33   | 1        | <  | U       | 0,33   | 3 1               | 4          | Ų<br> | Q.33           | 1         | <         | u       | 0.33       |                  |                     |         |
| SEMIVOLATILES    | Hexachlorobutadiene         | }      |       |         |      |    | 0.33   | 1        | <  | U       | 0.33   | 3 1               | <          | U<br> | 0.33           | 1         | <         | и<br>11 | 0,33       | · •              |                     | 11      |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   |        |       |         |      |    | 0.33   | 1        | ۲  | U       | 0.33   | 3 1               | <          | U     | 0.33           | 1         | <         |         | 0.00       |                  |                     |         |
| SEMIVOLATILES    | Hexachloroethane            |        |       |         |      |    | 0.33   | 1        | <  | 0       | 0.33   | 3 1               | <          | 0     | 0.33           |           | ¢         |         | 0.00       |                  | <u></u>             |         |
| SEMIVOLATILES    | indeno(1,2,3-cd)pyrene      |        |       |         |      |    | 0.33   | 1        | <  | 0       | 0.3    | 3 1               | <          |       | 0.33           |           | <         | u<br>U  | 0.00       |                  | 5                   | ň       |
| SEMIVOLATILES    | Isophorona                  |        |       |         |      |    | 0.33   | 1        | <  | U       | 0.30   | <b>J</b> 1        | <          |       | 0.33           | 1         | ~         |         | 0.00       |                  | Ĵ                   | ů.      |
| SEMIVOLATILES    | Naphthalene                 |        |       |         |      |    | 0.33   | 1        | <  | U       | 0,3    | 3 1               | <          | 0     | 0,33           | 1         | ~         |         | 0.00       |                  |                     |         |
| SEMIVOLATILES    | Nitrobenzene                |        |       |         |      |    | 0.33   | ; 1      | <  | υ       | 0.3    | 31                | <          | 0     | 0.33           | 1         | <         |         | 0.33       |                  | ÷                   | 11      |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  | i      |       |         |      |    | 0.33   | 1        | <  | u       | 0,3    | 3 1               | <          | U     | 0.33           |           | ٠         |         | 0.30       |                  | 5                   |         |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      |        |       |         |      |    | 0.33   | 1        | ۲  | U       | 0.3    | 31                | <          | U<br> | 0.33           | 1         | ۲         | u<br>   | 0.30       |                  | <u>ج</u>            | 0       |
| SEMIVOLATILES    | Pentachlorophenol           |        |       |         |      |    | 1.65   | 5 1      | <  | U       | 1.6    | 51                | <          | U     | 1,65           | 1         | <         |         | 1.03       |                  | ć                   |         |
| SEMIVOLATILES    | Phenanthrene                | 1      |       |         |      |    | 0.33   | 1        | <  | υ       | 0,3    | 31                | <          | U     | 0.33           | 1         | <         |         | 0.3        |                  | <                   | 0       |
| SEMIVOLATILES    | Phenol                      | i      |       |         |      |    | 0.33   | 3 1      | <  | U       | 0.3    | 3 1               | <          | U     | 0.33           |           | <         | 0       | 0.3        | \$ 1<br>• •      | <                   | U<br>17 |
| SEMIVOLATILES    | Pyrene                      |        |       |         |      |    | 0.33   | 3 1      | <  | U       | 0.3    | 3 1               | <          | u     | 0.33           | 1         | <         | U       | 0.3        |                  | . <                 | 0       |
| трн              | Hydrocarbons as Diesel Fuel |        | 59    | 1       | < 1  | U  |        |          |    |         |        |                   |            |       |                |           |           |         |            |                  |                     |         |
| трн              | Hydrocarbons as Gasoline    | 1      | 59    | \$      | < (  | U  |        |          |    |         |        |                   |            |       |                |           |           |         |            |                  |                     |         |
| три              | TOTAL HYDROCARBONS          | 1      | 59    | 1       | < 1  | U. |        |          |    |         |        |                   |            |       |                |           |           |         |            |                  |                     |         |
| VOLATILES        | 1.1.1.2 Tetrachloroethane   |        |       |         |      |    |        |          |    |         |        |                   |            |       |                |           |           |         |            |                  |                     |         |
| VOLATILES        | 1.1.1-Trichloroethane       |        |       |         |      |    | 0.010  | 5 1      |    |         | 0.00   | 5 1               | <          | U     | 0.0135         | 1         |           |         | 0.013      | s 1              |                     |         |
| VOLATILES        | 1,1,2,2+Tetrachloroethane   | ]      |       |         |      |    | 0.00   | 5 1      | 4  | : U     | 0.00   | 5 1               | <          | U     | 0.005          | 1         | <         | 0       | 0.00       | 31               | <                   | U       |
| VOLATILES        | 1,1,2-Trichloroeihane       |        |       |         |      |    | 0.00   | 51       | •  | : U     | 0,00   | 5 1               | <          | U     | 0.005          | 1         | <         | U.      | 0.00       | 5 1              | <                   | U<br>., |
| VOLATILES        | 1,1-Dichloroelhane          |        |       |         |      |    | 0.00   | 51       | •  | e U     | 0.00   | 5 1               | <          | U     | 0.005          | 1         | <         |         | 0.00       |                  | <                   |         |
| VOLATILES        | 1.1-Dichloroethene          |        |       |         |      |    | 0.00   | 51       | •  | 4 U     | 0.00   | 5 1               | ۲ ۱        | U     | 0.005          | 1         | <         | U       | 0.00       | 5 1              | <                   | U       |

#### Data Evaluation Report Chemical Concentrations In Soli Associated with LHAAP-35/36 Sumps



| Table                                      | e 3-51                           |
|--|----------------------------------|
| <b>Concentrations of Chemicals in Soil</b> | Samples Associated with Sump 051 |

| [SUMP] = SUMP051<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                                | н     | HOSB<br>0SB13(8-<br>12/5/20<br>8 - 10 | 13<br>-10)QC<br>000<br>Fl |    | LH<br>LH-S<br>7/<br>0.5 | -\$51-0<br>651-01<br>11/199<br>5 - 1.5 | 01<br>QC<br>93<br>Ft |    | LH-<br>LH-<br>7/<br>0.1 | I-851-0<br>851-0<br>11/199<br>5 - 1.5 | )1<br> _1<br> 3<br> Ft |    | 다<br>114-<br>77<br>6 | I-S51-<br>-S51-0<br>/11/19:<br>- 6.7 1 | 01<br>1_2<br>33<br>Fl |     | LH<br>LH-<br>7/<br>15. | 1-851-0<br>-551-0<br>-11/196<br>7 - 16.1 | 01<br>1_3<br>93<br>2 Ft |    |
|---|--------------------------------|-------|---------------------------------------|---------------------------|----|-------------------------|--|----------------------|----|-------------------------|---------------------------------------|------------------------|----|----------------------|--|-----------------------|-----|------------------------|--|-------------------------|----|
| SAMPLE_PURPOSE  |                                |       | FD                                    |                           |    |                         | FD                                     |                      |    |                         | REG                                   |                        |    |                      | REG                                    |                       | 10  | Dent                   | RCQ<br>Dil                               | 10                      | vo |
| Test Group  | Parameter (Units = mg/kg)      | Resul | DIŁ                                   | <u>1</u> Q                | vo | Result                  | DIL                                    | LQ                   | VQ | Result                  | DIL                                   | LQ                     | VQ | Result               | DIL                                    | - La                  | VQ  | HESUK                  | DR                                       | Lu                      |    |
| VOLATILES   | 1,1-Dichloropropene            |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 1,2,3-Trichlorobenzene         |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 1,2,3-Trichloropropane         |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 1,2,4-Trichlorobenzene         | 1     |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 1,2,4-Trimethylbenzene         |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 1,2-Dibromo-3-chloropropane    |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 1.2-Dipromoethane              | 1     |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 1,2-Dichlorobenzene            |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 1.2-Dichloroethane             |       |                                       |                           |    | 0.005                   | 1                                      | <                    | Ų  | 0.005                   | 1                                     | <                      | U  | 0.005                | 1                                      | ۲                     | U   | 0.005                  | 1  | <                       | U  |
| VOLATILES   | 1.2-Dichloroethene             |       |                                       |                           |    | 0.005                   | 1                                      | <                    | U  | 0.005                   | 1                                     | <                      | U  | 0.005                | 1                                      | <                     | U   | 0.005                  | 1  | <                       | U  |
| VOLATILES   | 1.2-Dichloropropane            |       |                                       |                           |    | 0.005                   | 1                                      | <                    | U  | 0.005                   | 1                                     | <                      | Ų  | 0.005                | 1                                      | <                     | υ   | 0.005                  | 1  | <                       | U  |
| VOLATILES   | 1.2-Dimethylbenzene (o-Xylane) |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
|   | 1 3 5. Trimethybenzene         |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 1.3-Dichlorobenzene            |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
|   | 1 3-Dichloropropage            |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 1 4-Dichlorobenzene            |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 2.2 Dishlerepresson            |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 2.2-Olchoroproparie            |       |                                       |                           |    | 0.05                    | 1                                      | ~                    | u  | 0.05                    | 1                                     | <                      | U  | 0.05                 | 1                                      | <                     | U   | 0.05                   | 1  | <                       | U  |
| VOLATILES   | 2-Bulanone                     |       |                                       |                           |    | 0.00                    | •                                      | ÷                    | ū  | 0.01                    | 1                                     | <                      | U  | 0.01                 | 1                                      | <                     | U   | 0.01                   | 1  | <                       | U  |
| VOLANLES  | 2-Childroteinyi vinyi einer    |       |                                       |                           |    | 0.01                    |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 2-Chloroloiuena                |       |                                       |                           |    | 0.05                    | 1                                      |                      | Ð  | 0.05                    | 1                                     | <                      | U  | 0.05                 | 1                                      | <                     | U   | 0.05                   | 1  | <                       | ប  |
| VOLATILES   | 2-Hexanone                     |       |                                       |                           |    | 0,00                    |  | `                    |    | 0.04                    |                                       |                        | •  |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | 4-Uniorotoiuene                |       |                                       |                           |    | 0.1                     | 1                                      |                      | 11 | 0.1                     | 1                                     | e                      | U  | 0.1                  | 1                                      | <                     | U   | 0.1                    | 1  | <                       | U  |
| VOLATILES   | Acetone                        |       |                                       |                           |    | 0.005                   | - 1<br>- 4                             | 5                    |    | 0.005                   | ;                                     | 2                      | ŭ  | 0.005                | ť                                      | k                     | Ū   | 0.005                  | 1  | <                       | U  |
| VOLATILES   | Benzene                        |       |                                       |                           |    | 0.005                   | 1                                      | •                    | U  | 0,000                   | •                                     |                        |    | 0.000                |  | -                     | -   |                        |  |                         |    |
| VOLATILES   | Bromobenzene                   |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | Bromochloromethane             |       |                                       |                           |    | 0.007                   |  |                      |    | 0.005                   | 1                                     |                        | п  | 0.005                | 1                                      |                       | B   | 0.005                  | . 1                                      | <                       | U  |
| VOLATILES   | Bromodichioromethane           |       |                                       |                           |    | 0.005                   | 1                                      | <                    |    | 0.003                   | -                                     | ٩                      | 11 | 0.000                |  | 2                     | ň   | 0.005                  | : 1                                      | è                       | ũ  |
| VOLATILES   | Bromoform                      |       |                                       |                           |    | 0.005                   | 1                                      | <                    |    | 0.005                   | 1                                     |                        |    | 0.003                | 4                                      | )                     | ŭ   | 0.00                   | 1  | ż                       | Ū. |
| VOLATILES   | Bromomethane                   |       |                                       |                           |    | 0,01                    |  | <                    | Ň  | 0.01                    | +                                     |                        |    | 0.01                 |  | 2                     | U.  | 0.005                  | 1  | k                       | U  |
| VOLATILES   | Carbon disulfide               |       |                                       |                           |    | 0.005                   | 1                                      | ~                    | 0  | 0.005                   |                                       | 5                      | ů  | 0.005                |  | 2                     | ň   | 0.005                  | 1  | , e                     | Ű  |
| VOLATILES   | Carbon telrachloride           |       |                                       |                           |    | 0.005                   | 1                                      | <                    | 0  | 0.005                   |                                       | ٢.                     |    | 0.000                |  | )                     | , i | 0.000                  |  | 2                       | 11 |
| VOLATILES   | Chiorobenzane                  |       |                                       |                           |    | 0.005                   | 1                                      | <                    | 0  | 0.005                   | 1                                     | <                      | 11 | 0.000                | , ,                                    |                       |     | 0.000                  |  | 2                       | 1  |
| VOLATILES   | Chloroethane                   |       |                                       |                           |    | 0,01                    | 1                                      | <                    | 0  | 0,01                    | 1                                     | ۲                      |    | 0,01                 |  |                       |     | 0.01                   |  | 2                       | ň  |
| VOLATILES   | Chloroform                     |       |                                       |                           |    | 0.005                   | 1                                      | <                    | 0  | 0.005                   |                                       | <                      |    | 0.000                | , ,                                    |                       | ň   | 0.000                  |  | 2                       |    |
| VOLATILES   | Chloromethane                  |       |                                       |                           |    | 0.01                    | 1                                      | ~                    | Ų  | 0.01                    | 1                                     | <                      | U  | 0.01                 |  | ۲,                    | ų   | 0.01                   |  | `                       | -  |
| VOLATILES   | cis-1.2-Dichloroethene         |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        | ., | 0.000                |  |                       | 11  | 0.000                  | : +                                      |                         |    |
| VOLATILES   | cls-1.3-Dichloropropene        |       |                                       |                           |    | 0.005                   | 1                                      | <                    | 0  | 0.005                   | 1                                     | <                      |    | 0.005                |  | 4                     |     | 0.000                  |  | 2                       |    |
| VOLATILES   | Dibromochloromethane           | 1     |                                       |                           |    | 0.005                   | 1                                      | <                    | ບ  | 0.005                   | 1                                     | <                      | U  | 0.005                | > 1                                    | <                     | U   | 0.000                  | , ,                                      | •                       | 0  |
| VOLATILES   | Dibromomethane                 |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | Dichlorodilluoromethane        |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     | 0.00                   |  |                         |    |
| VOLATILES   | Ethylbenzene                   |       |                                       |                           |    | 0.005                   | 1                                      | ۲                    | U  | 0.005                   | 1                                     | <                      | U  | 0.00                 | 5 1                                    | <                     | Ų   | 0.00                   | , ,                                      | ٠                       | U  |
| VOLATILES   | Hexachlorobutadiene            |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | Isopropylbenzana               |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | m.p-Xylenes                    |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | Methyl isobutyl ketone         |       |                                       |                           |    | 0.05                    | ; 1                                    | ۲                    | U  | 0.05                    | i 1                                   | <                      | U  | 0.0                  | 51                                     | <                     | U   | 0.0                    | 5 1                                      | ~                       | 0  |
| VOLATILES   | Melhylene chloride             | 1     |                                       |                           |    | 0.005                   | 51                                     | <                    | U  | 0.005                   | ; 1                                   | <                      | U  | 0.00                 | 51                                     | <                     | Ų   | 0.00                   | 5 1                                      | <                       | υ  |
| VOLATILES   | Naphlhalene                    |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | n-BUTYLBENZENE                 | 1     |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | n-PROPYLBENZENE                |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |
| VOLATILES   | p-ISOPROPYLTOLUENE             |       |                                       |                           |    |                         |  |                      |    |                         |                                       |                        |    |                      |  |                       |     |                        |  |                         |    |

VOLATILES

sec-BUTYLBENZENE

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

. . . . . . .



| [SUMP] ≈ SUMP051<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE E DUPPOSE |                           | ноз    | HOSI<br>813(0<br>12/5/2<br>8 - 10<br>FE | 313<br>3-10)Q(<br>000<br>)FL | ;  | Լ։<br>Լ։։<br>7<br>0. | H-S51-<br>551-01<br>/11/19:<br>5 - 1.5<br>FD | 01<br>I OC<br>93<br>Fl |    | L<br>LH<br>7 | H-S51-<br>-S51-(<br>711/19<br>.5 - 1.8<br>- REG | -01<br>)1_1<br>93<br>5 Ft |    | Ա<br>ԼH<br>7<br>8 | 4-S51-0<br>-S51-0<br>/11/19<br>3 - 6.7  <br>REG | 01<br>1_2<br>93<br>Fl |     | UH<br>114<br>71<br>15. | i-S51-0<br>-S51-0<br>/11/19<br>7 - 16.<br>REG | -01<br>h1_3<br>93<br>2.≓t |    |
|---|---------------------------|--------|---|------------------------------|----|----------------------|--|------------------------|----|--------------|---|---------------------------|----|-------------------|---|-----------------------|-----|------------------------|---|---------------------------|----|
| Test Group  | Parameter (Units = mo/ko) | Result | DIL                                     | LQ                           | VQ | Result               | DIL  | ĻΩ                     | VQ | Result       | DIL   | LQ                        | VQ | Result            | DIL   | LQ                    | VQ_ | Result                 | DIL   | LQ                        | VQ |
| VOLATILES   | Slyrene                   | <br>   |   |                              |    | 0.005                | 1  | ंर                     | U  | 0.005        | 1   | <                         | Ų  | 0.005             | 1   | <                     | U   | 0.005                  | 1   | <                         | U  |
| VOLATILES   | tert-BUTYLBENZENE         |        |   |                              |    |                      |  |                        |    |              |   |                           |    |                   |   |                       |     |                        |   |                           |    |
| VOLATILES   | Tetrachlorosthene         |        |   |                              |    | 0.005                | 1  | <                      | Ų  | 0,005        | 1   | ۲                         | U  | 0.005             | 1   | <                     | U   | 0.005                  | 1   | <                         | υ  |
| VOLATILES   | Toluene                   |        |   |                              |    | 0.005                | 1  | <                      | U  | 0.005        | 1   | <                         | υ  | 0.005             | 1   | ۲                     | U   | 0.005                  | 1   | <                         | U  |
| VOLATILES   | trans-1,2-Dichloroethene  |        |   |                              |    |                      |  |                        |    |              |   |                           |    |                   |   |                       |     |                        |   |                           |    |
| VOLATILES   | trans-1.3-Dichloropropene |        |   |                              |    | 0.005                | 1  | <                      | U  | 0.005        | t   | <                         | U  | 0.005             | 1   | <                     | U   | 0,005                  | 1   | <                         | U  |
| VOLATILES   | Trichloroethene           |        |   |                              |    | 0.005                | 1  | <                      | υ  | 0.005        | 1   | <                         | U  | 0.005             | 1   | <                     | U   | 0.005                  | 1   | ۲                         | U  |
| VOLATILES   | Trichlorofluoromethane    |        |   |                              |    |                      |  |                        |    |              |   |                           |    |                   |   |                       |     |                        |   |                           |    |
| VOLATILES   | Vinvl acetale             |        |   |                              |    | 0,05                 | £  | <                      | U  | 0.05         | 1   | <                         | ប  | 0.05              | 1   | ۲                     | U   | 0.05                   | 1   | <                         | U  |
| VOLATILES   | Vinvl chloride            |        |   |                              |    | 0.01                 | 1  | <                      | υ  | 0.01         | 1   | <                         | ų  | 0.01              | 1   | ۲                     | U   | 0.01                   | 1   | <                         | U  |
| VOLATILES   | Xylenes, Total            |        |   |                              |    | 0.005                | 1  | <                      | U  | 0.005        | 1   | <                         | U  | 0,005             | 1   | <                     | U   | 0.005                  | 1   | <                         | U  |

Table 3-51 Concentrations of Chemicals in Soil Samples Associated with Sump 051





| Table 3-52   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 052 |

| (SUMP) = SUMP052 |                            |          |            |        |          |             |        |          |       |          | 170000   |       |          | ה כ פו        |        |        | LN-SE         | 2.01        |             | 1             | 14-852-  | 01  |        |
|------------------|----------------------------|----------|------------|--------|----------|-------------|--------|----------|-------|----------|----------|-------|----------|---------------|--------|--------|---------------|-------------|-------------|---------------|----------|-----|--------|
| LOCATION _CODE   |                            | 35SUMP   | 052-SB01   | 35SU   | MP052-S  | 801         |        | 475829   |       |          | 4/5529   | ~     | มา<br>เม | 10-0-04       | 0<br>0 |        | 111.955       | 101 1       |             | ,<br>L        | H-S52-0  | 1 2 |        |
| SAMPLE_NO        |                            | 35-SMP05 | 52-5801-01 | 35-SM  | P052-SBC | 1-02        | 475    | 5829(0-0 | )_5)  | 4/       | 5829(1-  | -2)   | L/<br>1/ | 10/100        | 5      |        | R/9/1         | 001_1       |             | 5             | 8/3/195  | a   |        |
| SAMPLE_DATE      |                            | 9/19     | /2006      | 9      | /19/2006 |             |        | 8/4/2000 | )     |          | 6/4/2000 | )     |          | 10/199        | 9      |        | 5.1           | 535<br>  FI |             |               | 1.5 - 21 | Fi  |        |
| DEPTH            |                            | .5 •     | .5 FI      |        | 3 - 3 Ft |             |        | 0514     |       |          | 1.24     |       | L.       | 11.3 CI       |        |        |               | 6           |             |               | BEG      |     |        |
| SAMPLE_PURPOSE   |                            | Ŕ        | EG         |        | REG      |             |        | HĘG      |       | <b>5</b> | REG      | 10.10 | Deer®    | NGQ<br>NR     | 10     | vo     | Docut I       | SI I        | n vo        | Result        |          | 10  | vo     |
| Test Group       | Parameter (Units = mg/kg)  | Result D | ι μα να    | Result | DIL      | <u>a va</u> | Result | DR,      | La vo | Result   | DIL      | LO VO | Hesui    |               | 10     |        | Resolu        |             | <u>u</u> ,u | 10301         |          |     |        |
| EXPLOSIVES       | 1,3,5-Trinitrobenzene      |          |            |        |          |             |        |          |       |          |          |       | 0.24     |               | ę      |        |               |             |             |               |          |     |        |
| EXPLOSIVES       | 1,3-Dinitrobenzene         |          |            |        |          |             |        |          |       |          |          |       | 0.24     | 1             | <      |        |               |             |             |               |          |     |        |
| EXPLOSIVES       | 2,4,6-Trinitrotoluege      |          |            |        |          |             |        |          |       |          |          |       | 0.24     | 1             | <      | U      |               |             |             |               |          |     |        |
| EXPLOSIVES       | 2,4-Dinitrololuene         |          |            |        |          |             |        |          |       |          |          |       | 0.24     | 1             | <      | U<br>  |               |             |             |               |          |     |        |
| EXPLOSIVES       | 2.6-Dinitratoluene         |          |            |        |          |             |        |          |       |          |          |       | 0.26     |               | <      | U      |               |             |             |               |          |     |        |
| EXPLOSIVES       | 4+Amino-2.6-dinitrololuene |          |            |        |          |             |        |          |       |          |          |       | 0.49     | 1             | <      | 0      |               |             |             |               |          |     |        |
| EXPLOSIVES       | нмх                        |          |            |        |          |             |        |          |       |          |          |       | 2.2      | I I           | ۲      | U      |               |             |             |               |          |     |        |
| EXPLOSIVES       | m-Nitrotoluena             |          |            |        |          |             |        |          |       |          |          |       | 0.99     | 1             | <      | u      |               |             |             |               |          |     |        |
| EXPLOSIVES       | Nitrobenzene               |          |            |        |          |             |        |          |       |          |          |       | 0.26     |               | <      | 0      |               |             |             |               |          |     |        |
| EXPLOSIVES       | o-Nitrololuene             |          |            |        |          |             |        |          |       |          |          |       | 0.99     | 1             | <      | U      |               |             |             |               |          |     |        |
| EXPLOSIVES       | p-Nitrotoluene             |          |            |        |          |             |        |          |       |          |          |       | 3        | 1             | <      | υ      |               |             |             |               |          |     |        |
| EXPLOSIVES       | RDX                        |          |            |        |          |             |        |          |       |          |          |       | 1.1      | 1             | <      | U      |               |             |             |               |          |     |        |
| EXPLOSIVES       | Tetrvl                     |          |            |        |          |             |        |          |       |          |          |       | 0.73     | 8 1           | <      | U      |               |             |             |               |          |     |        |
| METALS           | Aluminum                   |          |            |        |          |             |        |          |       |          |          |       | 9190     | ) 1           |        |        | 21600         | 1           |             | 95            | 90 1     |     |        |
| METALS           | Antimotiv                  |          |            |        |          |             |        |          |       |          |          |       | 15.3     | 3 1           | <      | IJ     | 3             | 1           | < U         |               | 3 1      | <   | U      |
| METALS           | Arsenic                    |          |            |        |          |             |        |          |       |          |          |       | 1.6      | 3 1           |        | J      | 3.3           | 1           |             |               | 2.3 1    |     |        |
| METALS           | Barlum                     |          |            |        |          |             |        |          |       |          |          |       | 55.3     | 3 1           |        |        | 99.5          | 1           |             |               | 96 1     |     |        |
| METALE           | Cadmium                    |          |            |        |          |             |        |          |       |          |          |       | 1.5      | 5 1           | <      | U      | 1             | ١           | < U         | ŧ.            | 1 1      | <   | U      |
| VETALO           | Calcium                    |          |            |        |          |             |        |          |       |          |          |       | 1160     | 1 (           |        |        | 2830          | 1           |             | 5             | j74 1    |     |        |
| METALO           | Chemium                    |          |            |        |          |             |        |          |       |          |          |       | 57.2     | 2 1           |        | J      | 31.1          | 1           |             | 1             | 4.7 1    |     |        |
| METALS .         | Coholt                     |          |            |        |          |             |        |          |       |          |          |       | 3,3      | 31            |        |        | 7.8           | 1           |             |               | 4.9 1    |     |        |
| METALS           | Cooa                       |          |            |        |          |             |        |          |       |          |          |       | 90.8     | B 1           |        |        | 7,4           | 1           |             |               | 31       |     |        |
| METALS           | CODDE:                     |          |            |        |          |             |        |          |       |          |          |       | 7270     | 0 1           |        |        | 25800         | 1           |             | 88            | 390 1    |     |        |
| METALS           | hond                       | 1        |            |        |          |             |        |          |       |          |          |       | 10       | 8 1           |        |        | 8.9           | 1           |             |               | 6.7 1    |     |        |
| METALS           |                            |          |            |        |          |             |        |          |       |          |          |       | 58       | 0 1           |        |        | 2180          | 1           |             | ţ             | 546 1    |     |        |
| METALS           | Magnesium                  | i        |            |        |          |             |        |          |       |          |          |       | 41,      | 6 1           |        | J      | 111           | 1           |             |               | 185 1    |     |        |
| METALS           | Manganese                  |          |            |        |          |             |        |          |       |          |          |       | 0.2      | 4 1           |        |        | 0,1           | 1           | < ۱         | J             | 0.1 1    | <   | U      |
| METALS           | Marcury                    | }        |            |        |          |             |        |          |       |          |          |       | 37       | 61            |        |        | 1740          | 1           |             |               | 581 1    |     |        |
| METALS           | Potassium                  |          |            |        |          |             |        |          |       |          |          |       | 0,4      | 8 1           |        | J      | 1             | 1           | < 1         | J             | 1 1      | <   | U      |
| METALS           | Selenium                   | Í        |            |        |          |             |        |          |       |          |          |       | 1        | 51            | <      | U      | វ             | 1           | < L         | J             | 1 1      | <   | U      |
| METALS           | Silver                     |          |            |        |          |             |        |          |       |          |          |       | 15,      | 31            | <      | U      | 26.7          | 1           |             |               | 7.6 1    |     |        |
| METALS           | Stronium                   |          |            |        |          |             |        |          |       |          |          |       | 76.      | 7 1           | 4      | υ      |               |             |             |               |          |     |        |
| METALS           | Thallium                   |          |            |        |          |             |        |          |       |          |          |       | 40       | 2 1           |        |        | 52.3          | 1           |             | 1             | 15.1 1   |     |        |
| METALS           | Zinc                       |          |            |        |          |             | 0.004  | . 60     | ۰ II  | 0.005    | 86 1     | ~ 11  | 10       | • •           |        |        |               |             |             |               |          |     |        |
| PERC             | Perchiorale                | 1        | • •        | 0.1    |          |             | 0.000  |          |       | 0.000    |          |       | 0.5      | a 1           | ۲      | U      | 0.33          | 1           | < (         | ) (           | J.33 1   | <   | U      |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene     | 0.378    | 2 0        | 0.1    | 74 1     |             |        |          |       |          |          |       | 0.5      | a 1           | ź      | Ũ      | 0.33          | 1           | ح (         | j             | J.33 I   | <   | U      |
| SEMIVOLATILES    | 1,2-Dichlorobenzene        | 0.378    | 2 0        | 0.1    | 74       |             |        |          |       |          |          |       | 0.5      | a t           | è      | ū      | 0.33          | 1           | < 6         | J (           | 0.33 1   | <   | U      |
| SEMIVOLATILES    | 1,3-Dichlorobenzene        | 0.378    | 2 0        | 0,1    | 74       | 0           |        |          |       |          |          |       | 0.5      | 3 1           | Ż      | ŭ      | 0.33          | 1           | < 1         | J (           | 0.33 1   | <   | U      |
| SEMIVOLATILES    | 1,4-Dichlorobenzene        | 0.376    | 2 0        | 0,1    | 14 1     | 0           |        |          |       |          |          |       | 2        | 6 1           | 2      | ŭ      | 1.65          | 1           | د ا         | _<br>J 1      | 1.65 1   | <   | υ      |
| SEMIVOLATILËS    | 2.4.5-Trichloraphenol      | 0.378    | 2 0        | 0.1    | 74 1     | u<br>       |        |          |       |          |          |       | 0.5      | <b>1</b> 1    | 2      | ŭ      | 0.33          | 1           | < 1         | _<br>J (      | 0.33 1   | <   | U      |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol      | 0.378    | 2 U        | 0,1    | 74 1     | U           |        |          |       |          |          |       | 0.5      | о.<br>1       | 2      | ü      | 0.33          | i           | 2           |               | 0.33 1   | <   | ΰ      |
| SEMIVOLATILES    | 2,4-Dichlorophenol         | 0.378    | 2 U        | 0.1    | 74 1     | 0           |        |          |       |          |          |       | 0.0      |               | C      | ŭ      | 0.33          | i           | 2           |               | 0.33 1   | <   | Ū      |
| SEMIVOLATILES    | 2,4-Dimelhylphenol         | 0.378    | 2 U        | 0.1    | 74 3     | U           |        |          |       |          |          |       | 0.0      | 1 0           | )      | U I    | 1.65          |             | 2 i         | о<br>П        | 1.65     | , k | Ū      |
| SEMIVOLATILES    | 2,4-Dinitrophenol          | 1.69     | 2 U        | 8.0    | 71 1     | U           |        |          |       |          |          |       |          | .v. i<br>:a i | 2      | ň      | 0.33          | i           | 2           | u a           | 0.33 1   | i e | Ũ      |
| SEMIVOLATILES    | 2.4-Dinitrotoluene         | 0.378    | 2 U        | Q.1    | 74 1     | U           |        |          |       |          |          |       | 0.0      | 10 1<br>11 1  | 5      | ŭ      | 0.00          | ÷           | 2           | τι i          | 0.33 1   | i e | ŭ      |
| SEMIVOLATILES    | 2.6-Dinitrololuene         | 0.378    | 2 U        | 0.1    | 74 1     | U           |        |          |       |          |          |       | 0.0      | N2 1<br>10 4  | 5      |        | 0.00<br>6 7 0 | ł           | 2           | i i           | 0.33     |     | ū      |
| SEMIVOLATILES    | 2-Chloronaphthalene        | 0.378    | 2 U        | 0.1    | 74 1     | ບ           |        |          |       |          |          |       | 0.5      | 50 I<br>15 I  | <      |        | 0.03          | ،<br>۱      | 2           | i i           | 0.33     | 2   | Ū      |
| SEMIVOLATILES    | 2-Chiarophenol             | 0.378    | 2 U        | 0.1    | 74 1     | Ų           |        |          |       |          |          |       | 0.5      | -n -          | ~      |        | Q.33          | -           |             |               | 0.33     |     | u<br>U |
| SEMIVOLATILES    | 2-Methylnaphthalene        | 0.378    | 2 U        | 0.1    | 74 1     | U           |        |          |       |          |          |       | 0.6      | N 1           | ۲.     |        | V.33          | 4           | 2           | <u>.</u><br>н | 0.33     |     | ŭ      |
| SEMIVOLATILES    | 2-Methylphenol             | 0.378    | 2 U        | 0.1    | 74 1     | U           |        |          |       |          |          |       | 0,5      | 1 60          | <      | U<br>U | 4.00          | 1           | Ś           | о .<br>П      | 1.55     |     | ы      |
| SEMIVOLATILES    | 2-Nitroaniline             | 1.89     | 2 U        | 0.8    | 71 1     | U           |        |          |       |          |          |       | 2        | .0 1          | <      |        | 1.65          | 1           | Ś           | U .           | 0.23     |     | ň      |
| SEMIVOLATILES    | 2-Nitrophenol              | 0.378    | ន ព        | 0.1    | 74 1     | U           |        |          |       |          |          |       | 0.5      | 53 1          | <      |        | 0,33          |             | ۴           |               | 0.00 I   | 1 . | 11     |
| SEMIVOLATILES    | 3.3'-Dichlorobenzidine     | 0.755    | 2 U        | 0.3    | 49 1     | U           |        |          |       |          |          |       | 1        | .1 1          | <      | U      | 0.65          | 1           | <           | U I           | 0,00     |     | Ŷ      |

| 7   |
|---|
|   |
| Data Evaluation Report  |
| Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps |
|   |



. .

| Table 3-52   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 052 |

,

| [SUMP] = SUMP052 |  |                   |                   | 12000           | 470000           | 1 45.3.08        | LH-\$52-01                      | LH-\$52-01              |
|------------------|--|-------------------|-------------------|-----------------|------------------|------------------|---------------------------------|-------------------------|
| LOCATION _CODE   |  | 35SUMP052-SB01    | 35SUMP052-SB01    | 4/5029          | 470023           | LHS-3-08         | LH-S52-01 1                     | LH-\$52-01_2            |
| SAMPLE_NO        |  | 35-SMP052-SB01-01 | 35-SMP052-SB01-02 | 4/2853(0-0_5)   | 6/4/2000         | 1/10/1995        | B/3/1993                        | 8/3/1993                |
| SAMPLE_DATE      |  | 9/19/2006         | 9/19/2006         | 0/4/2000        | 1.251            | 0 • .5 Fl        | .5 - 1 Fl                       | 1.5 - 2 FI              |
| DEPTH            |  | .5 • .5 F1        | 3-3-1             | 01.3 FL         | 956              | REG              | REG                             | REG                     |
| SAMPLE_PURPOSE   |  | REG               | HEG               | Result DI LO VO | Betult DIL 10 VO | Result DIL LO VQ | Result DIL LO VO                | Result DIL LO VO        |
| Test Group       | Parameter (Units = mg/kg)                  | Result DIL LO VO  | Hesuit DIL LO VU  | Heson Dit LO VO | HESOIL DIE EG FO | 26 1 U           | 1,65 1 < U                      | 1.65 1 < U              |
| SEMIVOLATILES    | 3-Nitroaniline                             | 1.89 2 U          | 0.871 1 0         |                 |                  | 26 1 < U         | 1,65 î < U                      | 1.65 1 < U              |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol                 | 1.89 2 U          | 0.871 1 0         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 î < U              |
| SEMIVOLATILES    | 4-Bromophenyi phenyi elher                 | 0.378 2 0         | 0,174 1 0         |                 |                  | 0.53 1 < U       | 0.65 1 < U                      | 0,65 1 < U              |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol                    | 0.378 2 0         | 0.174 1 0         |                 |                  | 0.53 1 < U       | 0.65 1 < U                      | 0.65 1 < U              |
| SEMIVOLATILES    | 4-Chloroaniline                            | 0.378 2 U         | 0.174 1 U         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl elher                | 0.378 2 0         | 0.174 1 0         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | 4-Methylphanol                             | 0.378 2 0         | 0,174 1 0         |                 |                  | 2.6 1 < U        | 1.65 1 < U                      | 1.65 1 < 반              |
| SEMIVOLATILES    | 4-Nitroaniline                             | 1.69 2 0          | 0.071 1 0         |                 |                  | 2.6 1 < U        | 1.65 1 < U                      | 1.65 1 < U              |
| SEMIVOLATILES    | 4-Nitrophenol                              | 1.89 2 U          | 0.871 1 0         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | Acenaphihene                               | 0.378 2 0         | 0.174 1 0         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | Acenaphinylene                             | 0.378 2 0         | 0,174 1 0         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | Anihracene                                 | 0.378 2 U         | 0.174 1 0         |                 |                  | 0.21 1 J         | 0.33 1 < U                      | 0,33 1 < U              |
| SEMIVOLATILES    | Benzo(a)anihracene                         | 0.378 2 0         | 0,174 1 0         |                 |                  | 0.26 1 J         | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | Benzo(a)pyrene                             | 0.378 2 0         | 0.174 1 0         |                 |                  | 13 1             | 0.33 î < U                      | 0.33 1 < 난              |
| SEMIVOLATILES    | Benzo(b)Ruoraninene                        | 0.378 2 U         | 0.174 1 0         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 i < U              |
| SEMIVOLATILES    | Benzo(ghi)perylene                         | 0.378 2 0         | 0.174 1 0         |                 |                  | 0.39 1 J         | 0.33 t < U                      | 0,33 î < U              |
| SEMIVOLATILES    | Benzo(k)Ruoranihene                        | 0.378 2 0         | 0.174 1 0         |                 |                  | 2.6 1 < U        | 1.65 1 < U                      | 1.65 1 < U              |
| SEMIVOLATILES    | Benzok Aco                                 | 1.59 2 U          | 0.071 1 0         |                 |                  | 0.53 1 < U       | 0.65 1 < U                      | 0.65 1 < U              |
| SEMIVOLATILES    | Benzyl Alcohol                             | 0.376 2 U         | 0.174 1 0         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | bis(2-Chloroethoxy)meinane                 | 0.378 2 0         | 0.174 1 0         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether                    | 0.378 2 0         | 0.174 1 U         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | bis (2-Chioroisopropy) errer               | 0.378 2 0         | 0.174 1 0         |                 |                  | 0,53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | bis(2-Envinexy)prinalate                   | 0.378 2 0         | 0.174 1 11        |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | Buryi benzyi prinalate                     | 0.376 2 U         | 0.174 1 11        |                 |                  | 1.3 1            | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | Unrysene                                   | 0.370 2 0         | 0.174 1 1         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | Dibenzo(a,n)aninfacene                     | 0.378 2 11        | 0.174 1 1         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | Dipenzouran                                | 0.378 2 1         | 0.174 1 U         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | Distriyi pininalate<br>Distriyi pininalate | 0.378 2 11        | 0.174 1 U         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | din. But introduce                         | 0.378 2 U         | 0.174 1 U         |                 |                  | 0,19 1 J         | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | di.o.Och/ phihalate                        | 0.378 2 U         | 0.174 i U         |                 |                  | 0,53 i < U       | 0.33 1 < U                      | 0,33 1 < U              |
| CCHRVOLATHEC     | Eluoranthane                               | 0.378 2 U         | 0,174 1 U         |                 |                  | 1.4 1            | 0.33 1 < U                      | 0.33 1 < 0              |
| CENIVOLATILES    | Eluorene                                   | 0.378 2 U         | 0,174 1 U         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| CENIMOLATILES    | Hevachiorobeozene                          | 0.378 2 U         | 0.174 1 U         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 1 < U              |
| SEMIVOLATILES    | Hexachlorobutadiene                        | 0.378 2 U         | 0.174 1 U         |                 |                  | 0.53 1 < U       | 0.33 1 < U                      | 0.33 } < U              |
| SEMIVOLATILES    | Hexachlorocyclopentadiene                  | 0.378 2 U         | 0.174 1 U         |                 |                  | 0.53 1 < U       | 0.33 1 < 0                      | 0.33 1 < 0              |
| SEMIVOLATILES    | Hexachloroethane                           | 0.378 2 U         | 0.174 I U         |                 |                  | 0.53 1 < U       | 0.33 1 < 0                      | U,33 1 < U              |
| SEMIVOLATILES    | Indeno(1.2.3-cd)pyrene                     | 0.378 2 U         | 0.174 1 U         |                 |                  | 0.53 1 < U       | 0.33 1 < 0                      | 0.33 1 < U              |
| SEMIVOLATILES    | Isophorone                                 | 0.378 2 U         | 0.174 1 U         |                 |                  | 0.53 1 < U       | 0.33 1 < 0                      | 0.33 1 < 0              |
| SEMIVOLATILES    | Naphhalane                                 | 0.378 2 U         | 0.174 1 U         |                 |                  | 0.63 1 < 0       | 0.33 1 < 0                      | 0.33 1 < 0              |
| SEMIVOLATILES    | Nilrobenzene                               | 0.378 2 U         | 0.174 i U         |                 |                  | 0.53 1 < 0       | 0.33 1 < 0                      | 0.33 1 < 0              |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine                 | 0,378 2 U         | 0.174 1 U         |                 |                  | 0.53 1 < 0       | 0.33 1 < U                      | 0.33 1 < 0              |
| SEMIVOLATILES    | n-Nitrosodiphenylamine                     | 0.378 2 U         | 0.174 1 U         |                 |                  | 0.53 1 < 0       | 0.33 1 < 0                      | 0,33 1 < U              |
| SEMIVOLATILES    | Penlachlorophenol                          | 1.89 2 U          | 0.871 i U         |                 |                  | 2.6 1 < ∪        | 1.05 } < U                      | 1.00 I < U<br>633 I ∠ U |
| SEMIVOLATILES    | Phonanthrene                               | 0.378 2 U         | 0.174 1 U         |                 |                  | 0.54 1           | 0,33 I < U<br>0.03 I < U        | 0.00 1 4 0              |
| SEMIVOLATILES    | Phenol                                     | 0.378 2 U         | 0.174 1 U         |                 |                  | Q.53 1 < U       | 0,03 4 < 0                      |                         |
| SEMIVOLATILES    | Pyrane                                     | 0.378 2 U         | 0.174 1 U         |                 |                  | 2.2 1            | 0.33 i < 0                      |                         |
| VOLATILES        | 1,1,1,2-Telrachloroelhane                  | 1                 | 0.00561 1 U       |                 |                  | 0.015 1 < 0      | 0.005 1 - 11                    | 0.005 1 < 1             |
| VOLATILES        | 1,1,1-Trichloroethane                      |                   | 0,00551 1 U       |                 |                  | 0.008 1 < U      | i 9,005 i < 0<br>i 0,005 i - 11 | 0.005 1 < U             |
| VOLATILES        | 1,1,2,2-Tetrachloroethane                  | ļ                 | 0.00561 1 U       |                 |                  | 0.008 1 < 0      |                                 | 0.005 1 2 11            |
| VOLATILES        | 1,1,2-Trichloroethane                      |                   | 0.00561 1 U       |                 |                  | 0.008 1 < 0      | 0.005 1 × 0                     | 0.005 1 < U             |
| VOLATILES        | 1,1-Dichlorosthane                         |                   | 0.00561 1 U       |                 |                  | 0.008 1 < 0.     |                                 |                         |

•

i

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

•



 Table 3-52

 Concentrations of Chemicals in Soil Samples Associated with Sump 052

| [SUMP] = SUMP052 |                                |                   |         |        |        |      |               |           |        | 19001  | 10         |         | LUC.2        | -09        |          |        | LH-S        | 52.01        |   |    | LH              | ·\$52-0      | ri –  |    |
|------------------|--------------------------------|-------------------|---------|--------|--------|------|---------------|-----------|--------|--------|------------|---------|--------------|------------|----------|--------|-------------|--------------|---|----|-----------------|--------------|-------|----|
| LOCATION_CODE    |                                | 35SUMP052-SB01    | 35SUMF  | 052-5  | 5801   |      | 475829        |           |        | 4/30/  | (a)<br>(a) |         | LING-1       | -00        |          |        | 19.55       | 2.01         | • |    | 1.11-           | 552-01       | 2     |    |
| SAMPLE_NO        |                                | 35-SMP052-SB01-01 | 35-SMP0 | 52-58  | 01-02  |      | 47SB29(0-0_5) |           | 4/     | SB29   | 1-2)       |         | 1000         | -00<br>00E |          |        | eni<br>ani  | 6"V"<br>1002 |   |    | 8               | (3/199)      | <br>I |    |
| SAMPLE_DATE      |                                | 9/19/2006         | 9/19    | 1/2005 | 5      |      | 6/4/2000      |           |        | 6/4/20 | 00         |         | INUT         | 892        |          |        | Diar<br>E   | + Ei         |   |    | 1               | 6.26         | ,     |    |
| DEPTH            |                                | .5 - 5 Ft         | 3.      | 3 Ft   |        |      | 0 · .5 Fl     |           |        | 1-21   | -1         |         | V•.5         | F1         |          |        | .g.         |              |   |    | •               | DEG          | •     |    |
| SAMPLE_PURPOSE   |                                | REG               | F       | (EG    |        |      | REG           |           | - ·    | REG    | i<br>      |         | HE!          |            |          |        | ורו<br>אווא |              |   | 10 | Denut           | DI           | 10    | NO |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LO VQ  | Result  | DIL    | LQ V   | O Re | esult DIL LO  | <u>va</u> | Result | OIL    | . ια γα    | P Hesul |              | <u> </u>   | 2 VC     | Re     | 3UR         | 01           |   |    | nesuii<br>0.005 |              |       |    |
| VOLATILES        | 1,1-Dichloroelhene             |                   | 0.00561 | 1      | Ų      |      |               |           |        |        |            | 0.0     | 08 1         | <          | Ų        |        | 0.005       | 1            | < | U  | 0.005           |              | ٠     | 0  |
| VOLATILES        | 1,1-Dichloropropene            |                   | 0.00561 | 1      | U      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 1,2,3-Trichlorobenzene         |                   | 0.00561 | 1      | Ų      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 1.2.3-Trichloropropane         |                   | 0.00561 | 1      | U .    |      |               |           |        |        |            | 0.0     | 16 1         | <          | U U      |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 1,2,4-Trichiorobenzene         |                   | 0.00551 | 1      | U      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOI ATILES       | 1.2.4-Trimethylbenzene         |                   | 0,00561 | 1      | U      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    |                   | 0.00561 | \$     | U      |      |               |           |        |        |            | 0.0     | 32 1         | <          | u u      |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 1.2-Dibromoethane              |                   | 0.00561 | 1      | U      |      |               |           |        |        |            | 0.0     | 32 1         | <          | : U      |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 1.2 Dichlorobenzene            |                   | 0.00561 | 1      | U      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | t.2-Dichloroethane             |                   | 0.00561 | 1      | U      |      |               |           |        |        |            | 0.0     | X08 1        |            | : V      |        | 0.005       | 1            | < | U  | 0.005           | 1            | <     | υ  |
| VOLATILES        | 1.2-Dichloroelhene             |                   |         |        |        |      |               |           |        |        |            | 0.0     | 08 1         | i •        | : 10     |        | 0.005       | 1            | ۲ | υ  | 0.005           | 1            | <     | U  |
| VOLATILES        | 1 2-Dichloropropage            |                   | 0.00561 | 1      | υ      |      |               |           |        |        |            | 0.0     | 808          | i .        | : U      |        | 0.005       | 1            | < | U  | 0.005           | 1            | ۲     | U  |
| VOLATILES        | 1.2.Dimethylbenzene (n.Xvlene) |                   | 0.00561 | 1      | U      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 1.3 E-Trimolhylhenzene         |                   | 0.00561 | 1      | U      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 1.3-Dichlorobenzone            |                   | 0.00561 | 1      | U      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 1.2-Dishloropropage            |                   | 0.00561 | 1      | ŭ      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 1.4-Dichlorohenzene            |                   | 0.00561 | 1      | ū      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 3.3-Dishieronronan             |                   | 0.00561 | 1      | Ū      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 2.2-Dichild optopane           |                   | 0.0112  | 1      | ษ      |      |               |           |        |        |            | 0.0     | 016          | េ          | ۰ U      |        | 0.05        | 1            | < | U  | 0.05            | i 1          | ۲     | Ų  |
| VOLATILES        | 2 Chloresteriord sites         |                   | 0.0112  | 1      | н<br>Н |      |               |           |        |        |            |         |              |            |          |        | 0.01        | 1            | < | υ  | 0.0             | 1            | <     | U  |
| VOLATILES        | 2-Chlorotekiye viriyi ekiler   |                   | 0.00561 | ;      | ň      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        |                                |                   | 0.00301 | i      | ŭ      |      |               |           |        |        |            | 0,      | 016          | <b>۱</b>   | < U      |        | 0.05        | 1            | < | U  | 0.0             | 5 1          | <     | υ  |
| VOLATILES        | 2-Rexanone                     |                   | 0.0112  |        | v      |      |               |           |        |        |            |         | .79          | 1          | < 1,     |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 2-Propenal                     |                   | 0.00561 |        | 11     |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | 4-Chiorololuene                |                   | 0.00501 | ÷      | 1      |      |               |           |        |        |            | 0.      | 016          | 1          | <ι       | ,      | 0.1         | 1            | < | U  | 0.              | 1            | <     | U  |
| VOLATILES        | Acetone                        |                   | 0.00035 | 1      | v      |      |               |           |        |        |            | (       | ).16         | 1          | < l      | 1      |             |              |   |    |                 |              |       |    |
| VOLATILES        | Acetonitile                    |                   |         |        |        |      |               |           |        |        |            | (       | 1.16         | 1          | έL       | 1      |             |              |   |    |                 |              |       |    |
| VOLATILES        | Acrylanifrie                   |                   |         |        |        |      |               |           |        |        |            | n.      | 032          | 1          | < L      | )      |             |              |   |    |                 |              |       |    |
| VOLATILES        | Aliyi chloride                 |                   | 0.00001 |        |        |      |               |           |        |        |            | 0       | 008          | 1          | ۔<br>د ا | J      | 0.005       | 1            | < | Ų  | 0.00            | 51           | <     | U  |
| VOLATILES        | Benzene                        |                   | 0.00501 |        |        |      |               |           |        |        |            | ¢.      |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | Bromobenzene                   |                   | 0.00561 |        | 11     |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | Bromochioromethane             |                   | 0.00551 |        | U U    |      |               |           |        |        |            | 0       | 008          | 1          | e i      | )      | 0.005       | 1            | < | υ  | 0.00            | 51           | <     | U  |
| VOLATILES        | Bromodichloromethane           |                   | 0.00501 |        |        |      |               |           |        |        |            | 0       | 008          | 1          | <br>     | J      | 0.005       | 1            | ۲ | Ŭ  | 0.00            | 51           | <     | U  |
| VOLATILES        | Bromolorm                      |                   | 0.00501 |        | 0      |      |               |           |        |        |            | ň       | 016          | i.         | 2 1      |        | 0.01        | 1            | < | Ú  | 0.0             | 1 1          | <     | U  |
| VOLATILES        | Bromomethane                   |                   | 0.0112  | 1      | 0      |      |               |           |        |        |            | 0       | 008          | 1          | 2        | 1      | 0.005       | 1            | < | Ū  | 0.00            | 51           | <     | U  |
| VOLATILES        | Carbon disulfide               |                   | 0.00561 | 1      | U      |      |               |           |        |        |            | ň       | 000          | ÷          | 2        | -      | 0.005       | 1            | é | ũ  | 0.00            | 51           | 4     | U  |
| VOLATILES        | Carbon tetrachloride           |                   | 0.00561 |        | u<br>  |      |               |           |        |        |            | ň       | 009          | •          | 2        | -      | 0.005       | 1            | < | ū  | 0.00            | 51           | <     | U  |
| VOLATILES        | Chiorobenzene                  |                   | 0.00561 | 1      |        |      |               |           |        |        |            | 0       | 016          | ì          | 2        | -      | 0.01        | 1            | è | ŭ  | 0.0             | 1 1          | <     | U  |
| VOLATILES        | Chloroethane                   |                   | 0.0112  | 1      | 0      |      |               |           |        |        |            | v<br>0  | 000          | 1          |          | 1      | 0.005       | 1            |   | Ū. | 0.00            | 5 1          | <     | U  |
| VOLATILES        | Chloroform                     |                   | 0.00561 | 1      | 0      |      |               |           |        |        |            | 0       | 000          |            | 2 1      | -      | 0.000       | 1            | 2 | Ŭ  | 00              | 1 1          | ~     | Ū. |
| VOLATILES        | Chloromethane                  |                   | 0.0112  | 1      | U      |      |               |           |        |        |            | U       | 0 10<br>0 10 |            |          | 1      | 0.01        | •            |   | Ũ  | 0,0             |              |       | •  |
| VOLATILES        | Chloroprene                    |                   |         |        |        |      |               |           |        |        |            |         | V. 10        |            | 5 1      | ,      |             |              |   |    |                 |              |       |    |
| VOLATILES        | cis-1,2-Dichloroethene         |                   | 0.00561 | 1      | U      |      |               |           |        |        |            |         |              |            |          |        | 0.005       | 1            |   | Ш  | 0.00            | 5 1          |       | 11 |
| VOLATILES        | cls-1,3-Dichloropropene        |                   | 0.00561 | 1      | u      |      |               |           |        |        |            | 0       | 800          | 1          | < 1      |        | 0.005       |              | 5 |    | 0.00            | 10 I<br>15 I | 2     | ц. |
| VOLATILES        | Dibromochloromethane           |                   | 0.00561 | 1      | U      |      |               |           |        |        |            | 0       | 006          | 1          | < 1      |        | 0,005       | • •          | < | U  | 0.00            |              | `     | Ū  |
| VOLATILES        | Dibromomethane                 |                   | 0.00561 | 1      | U      |      |               |           |        |        |            | 0       | .016         | 1          | <        | U<br>  |             |              |   |    |                 |              |       |    |
| VOLATILES        | Dichlorodifluoromethane        |                   | 0.0112  | , 1    | Ų      |      |               |           |        |        |            | 0       | 1032         | 1          | <        | U<br>L |             |              |   |    |                 |              |       |    |
| VOLATILES        | Elhyi melhaciylate             |                   |         |        |        |      |               |           |        |        |            | 0       | 260.         | 1          | < !      | U<br>  |             |              |   |    | 0.00            |              |       | n  |
| VOLATILES        | Ethylbenzene                   |                   | 0.00561 | 1      | U      |      |               |           |        |        |            | C       | .008         | 1          | < 1      | Ų      | 0.005       | 1            | < | v  | 0.00            | /a 1         | <     | Ų  |
| VOLATILES        | Hexachlorobuladiene            |                   | 0.00561 | 1      | U      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |
| VOLATILES        | IODOMETHANE                    |                   |         |        |        |      |               |           |        |        |            | 0       | .016         | 1          | <        | U<br>  |             |              |   |    |                 |              |       |    |
| VOLATILES        | ISOBUTYL ALCOHOL               |                   |         |        |        |      |               |           |        |        |            |         | 3.2          | ş          | <        | U      |             |              |   |    |                 |              |       |    |
| VOLATILES        | Isopropylbenzene               |                   | 0.00561 | . 1    | U      |      |               |           |        |        |            |         |              |            |          |        |             |              |   |    |                 |              |       |    |

Chemical Concentrations in Soli Associated with LHAAP-35/36 Sumps

| [SUMP] = SUMP052 |                             |        |           |        |         |        |        |      |       |          |       |        |         |       |        |         |    |    |        |        |    |    |        |         |     |    |
|------------------|-----------------------------|--------|-----------|--------|---------|--------|--------|------|-------|----------|-------|--------|---------|-------|--------|---------|----|----|--------|--------|----|----|--------|---------|-----|----|
| LOCATION _CODE   |                             | 35SU   | IMP052    | -SBO1  | 35SUM   | P052-  | SB01   |      | 4     | 7SB29    |       |        | 47SB2   | 9     | l      | HS-3-0  | 8  |    | 1,H-3  | \$52-0 | 1  |    | LH.    | -855-0  | 1   |    |
| SAMPLE_NO        |                             | 35-SM  | P052-5    | B01-01 | 35-SMP( | )52-S  | B01-02 |      | 47SB  | 29(0-0_5 | )     | 41     | /SB29(* | -2)   | 1      | .HS-3-( | 8  |    | LH-S   | 52-01  | 1  |    | ιH-    | 352-01  | _2  |    |
| SAMPLE_DATE      |                             | ş      | 9/19/200  | 26     | 9/1     | 9/200  | 6      |      | 6/    | 4/2000   |       |        | 6/4/200 | 0     | 1      | /10/195 | 15 |    | 8/3    | /1993  |    |    | 8      | 3/1993  |     |    |
| DEPTH            |                             |        | .5 • .5 F | 1      | Э       | - 3 Ft |        |      | 0     | • .5 Ft  |       |        | 1.2F    | t     |        | 05 F    | ŧ  |    | .5     | - 1 FL |    |    | 1      | 5 - 2 F |     |    |
| SAMPLE_PURPOSE   |                             |        | REG       |        |         | REG    |        |      |       | REG      |       |        | REG     |       |        | REG     |    |    | F      | IEĢ    |    |    |        | REG     |     |    |
| Test Group       | Parameter (Units = mg/kg)   | Result | DIL       | La vo  | Result  | DIL    | LQ N   | VQ R | esuit | DRL LC   | va va | Result | DIL.    | LQ VQ | Result | DIL     | LO | VQ | Result | DIL    | LO | VQ | Result | DIL     | LQ_ | VQ |
| VOLATILES        | m,p-Xylenes                 |        |           |        | 0.00561 | 1      | U      |      |       |          |       |        |         |       |        |         |    |    |        |        |    |    |        |         |     |    |
| VOLATILES        | Methacryloninie             |        |           |        |         |        |        |      |       |          |       |        |         |       | 0.03   | 21      | <  | U  |        |        |    |    |        |         |     |    |
| VOLATILES        | Methyl isobutyl ketone      |        |           |        | 0.0112  | ĩ      | U      |      |       |          |       |        |         |       | 0.01   | 61      | <  | U  | 0.05   | 1      | <  | U  | 0.05   | 1       | <   | U  |
| VOLATILES        | METHYL METHACRYLATE         |        |           |        |         |        |        |      |       |          |       |        |         |       | 0.03   | 21      | ~  | U  |        |        |    |    |        |         |     |    |
| VOLATILES        | Methylene chloride          |        |           |        | 0.00561 | 1      | U      |      |       |          |       |        |         |       | 0.00   | B 1     | <  | U  | 0.005  | 1      | <  | U  | 0.005  | ٢       | <   | U  |
| VOLATILES        | Naphthalene                 |        |           |        | 0.0112  | 1      | U      |      |       |          |       |        |         |       |        |         |    |    |        |        |    |    |        |         |     |    |
| VOLATILES        | n-BUTYLBENZENE              |        |           |        | 0.00561 | 1      | U      |      |       |          |       |        |         |       |        |         |    |    |        |        |    |    |        |         |     |    |
| VOLATILES        | n-PROPYL8ENZENE             |        |           |        | 0.00561 | 1      | U      |      |       |          |       |        |         |       |        |         |    |    |        |        |    |    |        |         |     |    |
| VOLATILES        | Penlachloroelhane           |        |           |        |         |        |        |      |       |          |       |        |         |       | 0.03   | 21      | <  | U  |        |        |    |    |        |         |     |    |
| VOLATILES        | p-ISOPROPYLTOLUENE          |        |           |        | 0.00561 | 1      | U      |      |       |          |       |        |         |       |        |         |    |    |        |        |    |    |        |         |     |    |
| VOLATILES        | Propionitrile               |        |           |        |         |        |        |      |       |          |       |        |         |       | 0.07   | 91      | <  | Ð  |        |        |    |    |        |         |     |    |
| VOLATILES        | sec-BUTYLBENZENE            | }      |           |        | 0.00561 | 1      | U      |      |       |          |       |        |         |       |        |         |    |    |        |        |    |    |        |         |     |    |
| VOLATILES        | Styrene                     |        |           |        | 0.00561 | 1      | U      |      |       |          |       |        |         |       | 0.00   | 81      | <  | U  | 0.005  | 1      | <  | Ų  | 0.005  | 1       | <   | U  |
| VOLATILES        | tert-BUTYLBENZENE           | 1      |           |        | 0.00561 | 1      | U      |      |       |          |       |        |         |       |        |         |    |    |        |        |    |    |        |         |     |    |
| VOLATILES        | Tetrachloroethene           |        |           |        | 0.00561 | 1      | U      |      |       |          |       |        |         |       | 0,00   | 8 1     | <  | U  | 0.005  | 1      | <  | U  | 0.005  | 1       | <   | U  |
| VOLATILES        | Taluene                     |        |           |        | 0.00561 | 1      | U      |      |       |          |       |        |         |       | 0,00   | 8 1     | <  | ប  | 0.005  | 1      | <  | U  | 0.005  | 1       | <   | U  |
| VOLATILES        | Irans-1,2-Dichloroethene    |        |           |        | 0.00561 | 1      | U      |      |       |          |       |        |         |       |        |         |    |    |        |        |    |    |        |         |     |    |
| VOLATILES        | trans-1.3-Dichloropropene   |        |           |        | 0.00561 | t      | U      |      |       |          |       |        |         |       | 0.00   | 81      | ۲  | U  | 0.005  | 1      | <  | U  | 0.005  | 1       | ۲   | U  |
| VOLATILES        | trans-1,4-Dichloro-2-butene | ļ      |           |        |         |        |        |      |       |          |       |        |         |       | 0.03   | 21      | <  | U  |        |        |    |    |        |         |     |    |
| VOLATILES        | Trichloraethene             |        |           |        | 0.0282  | 1      |        |      |       |          |       |        |         |       | 0.00   | 81      | ۲  | U  | 0.005  | 1      | <  | U  | 0.005  | 1       | <   | υ  |
| VOLATILES        | Trichloroffuoromethane      |        |           |        | 0.0112  | 1      | U      |      |       |          |       |        |         |       | 0.01   | 61      | <  | U  |        |        |    |    |        |         |     |    |
| VOLATILES        | Viny! acetate               |        |           |        | 0.0112  | 1      | U      | ເມ   |       |          |       |        |         |       | 0.01   | 61      | <  | U  | 0.05   | 1      | <  | Ų  | 0.05   | 1       | <   | υ  |
| VOLATILES        | Vinyl chloride              | 1      |           |        | 0.0112  | 1      | υ      |      |       |          |       |        |         |       | 0.01   | 51      | ۲  | U  | 0.01   | 1      | <  | U  | 0.01   | 1       | <   | U  |
| VOLATILES        | Xylenes, Total              |        |           |        |         |        |        |      |       |          |       |        |         |       | 0.00   | 8 1     | <  | U  | 0.005  | 1      | <  | U  | 0.005  | 1       | <   | Ų  |

Table 3-52 Concentrations of Chemicals in Soil Samples Associated with Sump 052

Footnotes are shown on cover page to Tables Section.

Shew Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-53 Concentrations of Chemicals in Soil Samples Associated with Sump 053

| [SUMP] = SUMP053 |  |        |          |            |        |          |        |           |            |          |            |        |          |       |       |            |                       |          |             |         |        |            |      |          |            |     |        |          |      |
|------------------|--|--------|----------|------------|--------|----------|--------|-----------|------------|----------|------------|--------|----------|-------|-------|------------|-----------------------|----------|-------------|---------|--------|------------|------|----------|------------|-----|--------|----------|------|
| LOCATION _CODE   |  | 35SUI  | MP053-5  | SB01       | 35SI   | JMP053   | SB01   |           | \$7SB10    |          | 47SB10     | UH     | -DL53-01 | 1     |       | LHS-3      | -13                   |          | LH-S53-0    | 1       | U      | H-S53-01   |      | LH       | I-S53-02   |     | L      | H-S53-0  | 2    |
| SAMPLE_NO        |  | 35-SM  | IP53-SB( | 01-01      | 35-SI  | MP53-SE  | 301-02 | 47S       | B10(0-0_5) | 47       | 7SB10(1-2) | LH     | -DL53-01 | 1     |       | LHS-3      | +13                   | L        | H-\$53-01   | 1       | LH     | -S53-01_2  | !    | UH-      | \$53-02_1  |     | LH     | -S53-02  | _2   |
| SAMPLE_DATE      |  | 9/     | /13/2006 | ;          |        | 9/13/200 | 6      | 5         | 31/2000    | :        | 5/31/2000  | 7/     | 13/1993  |       |       | 1/10/1     | 995                   |          | 7/13/199    | 3       | 7.     | /13/1993   |      | 7/       | 13/1993    |     | 7      | /13/1993 | 3    |
| DEPTH            |  | 0.     | 5-0.5 F  | ł          |        | 8-8Ft    |        | c         | - 0.5 Ft   |          | 1-2 Ft     | (      | 0-0Ft    |       |       | 0 - 0.5    | 5 Ft                  |          | 0.5 - 1.5 F | 1       | 7      | 7 - 8.1 Ft |      | 0.5      | 5 - 1.5 Ft |     |        | 7 - 8 Ft |      |
| SAMPLE PURPOSE   |  |        | REG      |            |        | REG      |        |           | REG        |          | 8FG        |        | BEG      |       |       | BEC        | 3                     |          | REG         |         |        | BEG        |      |          | REG        |     |        | REG      |      |
| Test Group       | Parameter (Units - ma/ka)  | Recult | D#       |            | Recult | D#       |        | ) Recult  |            | Boerilt  |            | Docult | - L-U    | 10 10 | D Rec | ult Dil    | -<br>10 W             | 3 Recult | DI          | o vo    | Recult | DE 10      |      | Recult   | ມະເດ       | NO  | Docult |          |      |
| EXPLOSIVES       | 135.Tripitrobanzana  | Hostan | DIL      |            | novan  | DIL      |        | ( Theolet |            | 2 110304 |            | 710301 | UIC      |       | 0.2   | 04 104     | < H                   | x noson  | 512         | -u /u   | 10000  |            | 2 10 | Treadure |            | 10  | noson  | DAL 1    |      |
| EXPLOSIVES       | 1.2 Disimhermone   |        |          |            |        |          |        |           |            |          |            |        |          |       | 0.2   | 2 1        | < U                   |          |             |         |        |            |      |          |            |     |        |          |      |
| EXPLOSIVES       |  |        |          |            |        |          |        |           |            |          |            |        |          |       | 0.2   | 2 1        | < 0                   |          |             |         |        |            |      |          |            |     |        |          |      |
| EXPLOSIVES       | 2,4,6-1 nnitrotoluene  |        |          |            |        |          |        |           |            |          |            |        |          |       | 0.2   | 21         | < U                   |          |             |         |        |            |      |          |            |     |        |          |      |
| EXPLOSIVES       | 2.4-Dinitrotoluene   |        |          |            |        |          |        |           |            |          |            | 0.33   | 1        | < U   | 0.2   | 2 1        | < U                   | 0.33     | 1           | < U     | 0.33   | 1 <        | U    | 0.33     | 1 <        | U   | 0.33   | 1        | < U  |
| EXPLOSIVES       | 2,6-Dinitrotoluene   |        |          |            |        |          |        |           |            |          |            | 0.33   | 1        | < U   | 0.2   | 4 1        | < U                   | 0.33     | 1           | < U     | 0.33   | 1 <        | บ    | 0.33     | 1 <        | U   | 0.33   | 1        | < ป  |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene   |        |          |            |        |          |        |           |            |          |            |        |          |       | 0.4   | 6 1        | < U                   |          |             |         |        |            |      |          |            |     |        |          |      |
| EXPLOSIVES       | нмх  |        |          |            |        |          |        |           |            |          |            |        |          |       | 2     | 1          | < U                   |          |             |         |        |            |      |          |            |     |        |          |      |
| EXPLOSIVES       | m-Nitrotoluene   |        |          |            |        |          |        |           |            |          |            |        |          |       | 0.9   | 1 1        | < U                   |          |             |         |        |            |      |          |            |     |        |          |      |
| EXPLOSIVES       | Nitrobenzene   |        |          |            |        |          |        |           |            |          |            |        |          |       | 0.2   | 4 1        | < 1                   |          |             |         |        |            |      |          |            |     |        |          |      |
| EXPLOSIVES       | o-Nitrotoluene   |        |          |            |        |          |        |           |            |          |            |        |          |       | 0.9   | 1 1        | < lł                  |          |             |         |        |            |      |          |            |     |        |          |      |
| EXPLOSIVES       | n-Nitrotokiepe   |        |          |            |        |          |        |           |            |          |            |        |          |       | 27    | 7 1        | < 11                  |          |             |         |        |            |      |          |            |     |        |          |      |
| EXPLOSIVES       | PDY  |        |          |            |        |          |        |           |            |          |            |        |          |       |       | , ,<br>a 1 | ~ 12                  |          |             |         |        |            |      |          |            |     |        |          |      |
|                  | Tabá   |        |          |            |        |          |        |           |            |          |            |        |          |       | 0.9   |            |                       |          |             |         |        |            |      |          |            |     |        |          |      |
| EXPLOSIVES       | 1 eays   |        |          |            |        |          |        |           |            |          |            |        |          |       | 0.6   | 8 1        | < 0                   |          |             |         |        |            |      |          |            |     |        |          |      |
| METALS           | Alummum  | 8250   | 2        |            | 7110   | 1        |        |           |            |          |            | 16900  | 1        |       | 786   | 50 1       |                       | , 7680   | 1           |         | 5470   | 1          |      | 13900    | 1          |     | 3980   | 1        |      |
| METALS           | Antimony   | 0.107  | 1        | U          | 0.11   | 1        | U      |           |            |          |            | 3      | 1        | < U   | 20    | ) 1        | < U.                  | 1 3      | 1           | < ()    | 3      | 1 <        | U    | 3        | 1 <        | U   | 3      | 1        | < 0  |
| METALS           | Arsenic  | 5.67   | 1        |            | 1.45   | 1        |        |           |            |          |            | 2.1    | 1        |       | 5.2   | 2 1        | J                     | 1.8      | 1           |         | 2.3    | 1          |      | 2.1      | 1          |     | t      | 1        |      |
| METALS           | Barium   | 58.6   | 2        | J          | 191    | 1        | J      |           |            |          |            | 60.8   | 1        |       | 48.   | 2 1        |                       | 54.7     | 1           |         | 89.8   | 1          |      | 60       | 1          |     | 49.4   | 1        |      |
| METALS           | Berylkum   | 0.659  | 2        | J J        | 0.932  | 1        |        |           |            |          |            |        |          |       |       |            |                       |          |             |         |        |            |      |          |            |     |        |          |      |
| METALS           | Cadmium  | 0.241  | 2        | j j        | 0.158  | 1        | JJ     |           |            |          |            | 1      | 1        | < U   | 2     | 1          | < 13                  | 1        | 1           | < U     | 1      | 1 <        | U    | 1        | 1 <        | ប   | 1      | 1        | < U  |
| METALS           | Catcium  | 1420   | 2        |            | 815    | 1        |        |           |            |          |            | 296    | 1        |       | 115   | 50 1       |                       | 622      | 1           |         | 661    | 1          |      | 883      | 1          |     | 460    | 1        |      |
| METALS           | Chromium   | 35.2   | 2        | ,          | 10     | 1        | ,      |           |            |          |            | 12 1   | 1        |       | 37    | 5 1        | J.                    | 23.6     | 1           |         | 88     | 1          |      | 15.7     | 1          |     | 86     | 1        |      |
| METALS           | Cohall   | 4 22   | 2        | •          | 10.1   |          | ·      |           |            |          |            | 24     | 1        |       |       |            | <ul> <li>I</li> </ul> | £1       |             |         | 21.4   |            |      |          |            |     | 7      |          |      |
| METALS           | Copac  | 9.00   | 2        |            | 13.1   |          |        |           |            |          |            | 1.0    | 1        |       |       |            |                       | 0.1      | 1           |         | 23.4   | 1          |      | J.1      | 1 .        |     | 20     | -        |      |
| METALS           | Copper   | 24.1   | 2        |            | 5.55   |          |        |           |            |          |            | 1.8    | 1        |       | 11.   | .1 1       |                       | 2.4      | 1           |         | 3.3    | 1          |      | 4.9      | 1          |     | 3.2    | ł        |      |
| METALS           | Iron   | 107000 | 10       |            | 17400  | 1        |        |           |            |          |            | 9940   | 3        |       | 121   | 1 00       |                       | 12300    | 1           |         | 11000  | 1          |      | 16700    | 1          |     | 6490   | 1        |      |
| METALS           | Lead   | 16.2   | 1        |            | 2.33   | 1        |        |           |            |          |            | 6.6    | 1        |       | 94.   | 1 1        |                       | 6.4      | 1           |         | 5.4    | 1          |      | 10.4     | 1          |     | 3.3    | 1        |      |
| METALS           | Magnesium  | 372    | 2        | 3          | 1370   | 1        | ſ      |           |            |          |            | 707    | 1        |       | 49    | 4 1        |                       | 272      | 1           |         | 721    | 1          |      | 632      | 1          |     | 626    | 1        |      |
| METALS           | Manganese  | 219    | 2        |            | 485    | 1        |        |           |            |          |            | 40.1   | 1        |       | 60.   | .8 1       | J                     | 177      | 1           |         | 192    | 1          |      | 41.8     | 1          |     | 63.8   | 1        |      |
| METALS           | Mercury  | 0.037  | 1        | <b>j</b> j | 0.275  | រ        | U      |           |            |          |            | 0.1    | 1        | ່< ປ  | 0.2   | 1 1        | < U                   | 0.1      | 1           | < U     | 0.1    | 1 <        | U    | 0.1      | 1 <        | U   | 0.1    | 1        | < U  |
| METALS           | Nickeł   | 11     | 2        |            | 13.8   | 1        |        |           |            |          |            |        |          |       |       |            |                       |          |             |         |        |            |      |          |            |     |        |          |      |
| METALS           | Potassium  | 186    | 2        |            | 441    | 1        |        |           |            |          |            | 706    | 1        |       | 54    | <b>i</b> 1 |                       | 367      | 1           |         | 329    | 1          |      | 671      | 1          |     | 293    | 1        |      |
| METALS           | Selenium   | 0.269  | -        |            | 0.11   | 1        |        |           |            |          |            | 1      | 1        | ~ 11  | 1 04  | <b>3</b> 1 | . I                   | 1        | 1           | z 11    | 1      | 1 2        | п    | 1        | 1 2        | 11  | 1      | 1        | z (i |
| METALS           | Cibror   | 2.05   | ·<br>•   | 14         | 1 70   |          | 11     |           |            |          |            |        | :        |       |       | · ·        |                       |          | •           |         | ÷      |            |      | ÷        |            | И   |        |          |      |
|                  | One of the other of the other of the other of the other othe | 3.23   | 2        |            | 1.12   |          | v      |           |            |          |            | •      |          | ς υ   | ~ ~   | 1          | < 0                   |          | '           | < U     | •      | , 、        | 0    | f        | 1 (        | 0   | L      |          | ζŲ   |
| METALS           | Social   | 12.1   | 2        | 1 J        | 199    | •        |        |           |            |          |            |        |          |       |       |            |                       |          |             |         |        |            |      |          |            |     |        |          |      |
| METALS           | Strontum   |        |          |            |        |          |        |           |            |          |            | 8.6    | ĩ        |       | 20    | ) 1        | < U                   | 5.7      | 3           |         | 15.8   | 1          |      | 9        | 1          |     | 12,7   | 1        |      |
| METALS           | Thallium   | 0.0558 | 1        |            | 0.0786 | 1        |        |           |            |          |            |        |          |       | 10    | 01         | < U                   |          |             |         |        |            |      |          |            |     |        |          |      |
| METALS           | Vanadium   | 63.5   | 2        | J          | 22.7   | 1        | J      |           |            |          |            |        |          |       |       |            |                       |          |             |         |        |            |      |          |            |     |        |          |      |
| METALS           | Zinc   | 156    | 2        | L          | 30     | 1        | L      |           |            |          |            | 16.2   | 1        |       | 32    | 61         |                       | 11       | 1           |         | 23     | 1          |      | 90.6     | 1          |     | 14.9   | 1        |      |
| PERC             | Perchlorate  | 0.0361 | 4        | j J        | 0.597  | 20       |        | 0.104     | 1          | 0.158    | 1          |        |          |       |       |            |                       |          |             |         |        |            |      |          |            |     |        |          |      |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene   |        |          |            |        |          |        |           |            |          |            | 0.33   | 1        | < U   | 0.7   | 91         | < U                   | 0.33     | 1           | < U     | 0.33   | 1 <        | U    | 0.33     | 1 <        | U   | 0.33   | 1        | < U  |
| SEMIVOLATILES    | 1.2-Dichlorobeazene  |        |          |            |        |          |        |           |            |          |            | 0.33   | 1        | < 11  | 07    | 9 1        | < 1)                  | 0.33     | 1           | < 11    | 0.33   | 1 <        | IJ   | 0.33     | 1 <        | ŧ   | 0.33   | 1        | < 11 |
| SEMBYOLATH ES    | 1 3 Dichlorohenzene  |        |          |            |        |          |        |           |            |          |            | 0.33   |          | ~ 11  | 07    | 0 1        | ~ 11                  | 0.33     | 1           | 2 II    | 0.33   | 1 /        | 11   | 0.33     | 1 /        | ŭ   | 0.33   | 1        | - 11 |
| SEMEVOLATHES     | 1 / Dichlorobenzene  |        |          |            |        |          |        |           |            |          |            | 0.33   |          | ~ "   | 0.7   | 5 I        |                       | 0.00     |             | ~ 1)    | 0.00   | 1 2        |      | 0.00     |            | n   | 0.00   |          | ~ 15 |
| OCHINACI ATRICO  |  |        |          |            |        |          |        |           |            |          |            | 0.33   |          |       | 0.1   | <b>5</b> 1 |                       | 0.33     |             |         | 0.33   |            | Ň    | 0.33     |            |     | 0.33   |          |      |
| SEMINOLATILES    |  |        |          |            |        |          |        |           |            |          |            | 1.00   |          | < 0   | . 4   | 1          | < U<br>               | 1.00     |             | < 0     | 1.00   |            |      | 1.00     | 1 4        |     | 1.00   |          | < U  |
| SEMIVOLANLES     | 2,4,6-Inchlorophenol   |        |          |            |        |          |        |           |            |          |            | 0.33   | 1        | < 0   | 0.7   | 9 1        | < U                   | 0.33     | 1           | < บ     | 0.33   | 1 <        | U    | 0.33     | 1 <        | U   | 0.33   | 1        | < U  |
| SEMIVOLATILES    | 2,4-Dichtorophenot   |        |          |            |        |          |        |           |            |          |            | 0.33   | 1        | < U   | 0.7   | 9 1        | < 13                  | 0.33     | 1           | < ধ     | 0.33   | 1 <        | υ    | 0.33     | 1 <        | U   | 0.33   | 1        | < U  |
| SEMIVOLATILES    | 2,4-Dimethylphenol   |        |          |            |        |          |        |           |            |          |            | 0.33   | 1        | < U   | 0.7   | 9 1        | < U                   | 0.33     | 1           | < U     | 0.33   | 1 <        | U    | 0.33     | 1 <        | U   | 0.33   | 1        | < U  |
| SEMIVOLATILES    | 2,4-Dinitrophenol  |        |          |            |        |          |        |           |            |          |            | 1.65   | 1        | < U   | 4     | \$         | < 1                   | 1.65     | 1           | < U     | 1.65   | 1 <        | U    | 1.65     | 1 <        | U   | 1.65   | 1        | < U  |
| SEMIVOLATILES    | 2,4-Dinitrotoluene   |        |          |            |        |          |        |           |            |          |            |        |          |       | 0.7   | 91         | < U                   |          |             |         |        |            |      |          |            |     |        |          |      |
| SEMIVOLATILES    | 2.6-Dinitrotoluene   |        |          |            |        |          |        |           |            |          |            |        |          |       | 0.7   | 9 1        | < U                   |          |             |         |        |            |      |          |            |     |        |          |      |
| SEMIVOLATILES    | 2-Chloronaebihalene  |        |          |            |        |          |        |           |            |          |            | 0.33   | 1        | < 13  | 0.7   | 9 t        | < 11                  | 0.33     | t           | < 11    | 0.33   | 1 <        | ŧĭ   | 0.33     | 1 c        | U   | 0.33   | 1        | c II |
| SEMINOLATH ES    | 2.Chlorophonot   |        |          |            |        |          |        |           |            |          |            | 0.00   |          | ~ 15  | 1017  | 5.<br>A. 1 | . 1                   | 0.00     | •           | · U     | 0.22   | 1 2        | ŭ    | 0.00     | 1 2        | u . | 0.00   | •        | ~ •  |
|                  |  |        |          |            |        |          |        |           |            |          |            | 0.33   | •        | < 0   | 0.7   |            | < U<br>               | 0.33     |             | < 0     | 0.55   | , <        |      | 0.55     | 1 <        |     | 0.35   |          | < 0  |
| SEMIVOLATILES    | 2-weurymapresaterie  |        |          |            |        |          |        |           |            |          |            | 0.33   | 5        | < U   | 0.7   | 9 1        | < 0                   | 0.33     | 1           | < U     | 0.33   | 1 <        | U    | 0.33     | 1 <        | U   | 0.33   | 1        | < 0  |
| SEMIVOLATILES    | 2-Methylphenol   |        |          |            |        |          |        |           |            |          |            | 0.33   | 1        | < U   | 0.7   | 9 1        | < U                   | 0.33     | 1           | < U     | 0.33   | 1 <        | U    | 0.33     | t <        | U   | 0.33   | 1        | < U  |
| SEMIVOLATILES    | 2-Nitroaniline   |        |          |            |        |          |        |           |            |          |            | 1.65   | 1        | < U   | 4     | 1          | < U                   | 1.65     | 1           | < U     | 1.65   | 1 <        | U    | 1.65     | 1 <        | U   | 1.65   | 1        | < U  |
| SEMIVOLATILES    | 2-Nitrophenol  |        |          |            |        |          |        |           |            |          |            | 0.33   | 1        | < U   | 0.7   | 91         | < U                   | 0.33     | 1           | < U     | 0.33   | 1 <        | U    | 0.33     | 1 <        | U   | 0.33   | 1        | < U  |
| SEMIVOLATILES    | 3,3'-Dichtorobenzidine   |        |          |            |        |          |        |           |            |          |            | 0.65   | 1        | < U   | 1.6   | 5 1        | < U                   | 0.65     | 1           | < U     | 0.65   | 1 <        | ป    | 0.65     | 1 <        | U   | 0.65   | 1        | < U  |
| SEMIVOLATILES    | 3-Nitroaniline   |        |          |            |        |          |        |           |            |          |            | 1.65   | 1        | < 11  | 4     | 1          | < 1)                  | 1.65     | 1           | < U     | 1.65   | 1 <        | U    | 1.65     | 1 <        | U   | 1.65   | 1        | < 11 |
| SEMIVOLATILES    | 4.6-Dinitro-2-methyloheno?   |        |          |            |        |          |        |           |            |          |            | 1.65   | •        | 2 11  |       |            | 2 11                  | 1 65     | 1           | ~ 11    | 1.65   | 1 -        | ы    | 1.65     | 1 /        | ũ   | 1.65   | 1        | ~ 11 |
| SEMIMOL ATH DO   | A-Bromonhand above after   |        |          |            |        |          |        |           |            |          |            | 0.00   |          | 2     | 4     | ,<br>0 1   |                       | 0.00     | •           |         | 0.92   |            |      | 0.03     |            | 11  | 1.00   | ;        |      |
| OCMINICATE CO    | Chlore 2 methods   |        |          |            |        |          |        |           |            |          |            | 0.33   | ļ        | < 0   | 0.7   | ə 1<br>n - | < 0                   | 0.33     | 1           | < U<br> | 0.33   | . <        | 5    | 0.55     | . <        |     | 0.33   |          |      |
| DEMINULATILES    | 4-CHRORO-S-Internyzphenol  |        |          |            |        |          |        |           |            |          |            | 0.65   | 1        | < 0   | 0.7   | 9 1        | ئا >                  | 0.65     | 1           | < U     | 0.65   | 1 <        | U    | 0.65     | 1 <        | U   | 0.65   | 1        | < U  |
| SEMIVOLATILES    | 4-Chloroaniline  |        |          |            |        |          |        |           |            |          |            | 0.65   | 1        | < U   | 0.7   | 91         | < U                   | 0.65     | 1           | < U     | 0.65   | 1 <        | U    | 0.65     | 1 <        | IJ  | 0.65   | 1        | < U  |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether  |        |          |            |        |          |        |           |            |          |            | 0.33   | 1        | < U   | 0.7   | 91         | < U                   | 0.33     | 1           | < U     | 0.33   | 1 <        | Ų    | 0.33     | 1 <        | ម   | 0.33   | 1        | < U  |
| SEMIVOLATILES    | 4-Methylphenol   |        |          |            |        |          |        |           |            |          |            | 0.33   | 1        | < U   | 0.7   | 9 1        | نا >                  | 0.33     | 1           | < ປ     | 0.33   | 1 <        | U    | 0.33     | 1 <        | U   | 0.33   | 1        | < U  |
| SEMIVOLATILES    | 4-Nitroaniline   |        |          |            |        |          |        |           |            |          |            | 1.65   | 1        | < U   | 4     | 1          | < U                   | 1.65     | 1           | < บ     | 1.65   | 1 <        | U    | 1.65     | 1 <        | U   | 1.65   | 1        | < U  |
|                  | •  |        |          |            |        |          |        |           |            |          |            |        |          |       |       |            |                       |          |             |         |        |            |      |          |            |     |        |          |      |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas

Shaw Environmental, Inc.



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-53 Concentrations of Chemicals in Soil Samples Associated with Sump 053

| (SUMP) = SUMP053 |                             |        |             |         |              |         |               |    |                  |        |          |    |         |           |            |             |              |             |                     |        |                                       |                |            |          |  |        |          |       |
|------------------|-----------------------------|--------|-------------|---------|--------------|---------|---------------|----|------------------|--------|----------|----|---------|-----------|------------|-------------|--------------|-------------|---------------------|--------|---------------------------------------|----------------|------------|----------|--|--------|----------|-------|
| LOCATION _CODE   |                             | 35SUN  | AP053-SB01  | 355     | SUMP053-SB01 |         | 47SB10        |    | 47SB10           | U      | H-DL53-4 | 01 |         | L         | HS-3-13    |             | L.           | H-S53-01    |                     | L      | H-S53-01                              |                | U          | H-S53-0  | 2  | I      | H-S53-0  | )2    |
| SAMPLE_NO        |                             | 35-SM  | P53-SB01-01 | 35-3    | SMP53-SB01-0 | 2       | 47SB10(0-0_5) |    | 47SB10(1-2)      | υ      | 1-DL53-  | 01 |         | L         | HS-3-13    |             | LH           | -\$53-01_   | t                   | LH     | -S53-01_                              | 2              | LH         | -\$53-02 | _1   | Ľ      | I-S53-02 | 2_2   |
| SAMPLE_DATE      |                             | 9/     | 13/2006     |         | 9/13/2006    |         | 5/31/2000     |    | 5/31/2000        | 7      | /13/199  | 3  |         | 1         | /10/1995   |             | 7            | /13/1993    |                     | 7      | /13/1993                              |                | 7          | /13/199  | 3  |        | 7/13/199 | 3     |
| DEPTH            |                             | 0.5    | i - 0.5 Ft  |         | 8 - 8 Ft     |         | 0 - 0.5 Ft    |    | 1 - 2 Ft         |        | 0 - 0 Ft |    |         | (         | ) - 0.5 Ft |             | 0            | .5 - 1.5 Ft | t                   | 7      | 7 - 8.1 Ft                            |                | 0          | .5 - 1.5 | t  |        | 7 - 8 Ft |       |
| SAMPLE_PURPOSE   |                             |        | REG         |         | REG          |         | REG           |    | REG              |        | REG      |    |         |           | REG        |             |              | REG         |                     |        | REG                                   |                |            | REG      |  |        | REG      |       |
| Test Group       | Parameter (Units = mg/kg)   | Result | DIL LO VO   | 2 Resul | t DIL LQ     | VQ Resu | ult DIL LQ    | VQ | Result DIL LQ VQ | Result | DIL      | LQ | VQ      | Result    | DILL       | Q VC        | ) Result     | DILL        | Q VQ                | Result | Dil L                                 | Q VQ           | Result     | ÐIL      | LQ VQ  | Result | DIL      | LO VO |
| SEMIVOLATILES    | 4-Nitrophenol               |        |             |         |              |         |               |    |                  | 1.65   | 1        | <  | U       | 4         | 1          | < U         | 1.65         | 1 .         | < 0                 | 1.65   | 1 .                                   | < 13           | 1.65       | 1        | < 0  | 1.65   | 1        | < 0   |
| SEMIVOLATILES    | Acenaphthene                |        |             |         |              |         |               |    |                  | 0.33   | 1        | <  | 0       | 0.79      | 1          | < U         | 0.33         | 1 .         | < 0                 | 0.33   |                                       | < 0            | 0.33       | 1        | < 0  | 0.33   | 1        | < U   |
| SEMIVOLATILES    | Acenaphthylene              | 1      |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | 1          | < U         | 0.33         | 1 .         | < ປ                 | 0.33   | 1 .                                   | < 10           | 0.33       | 1        | < 0  | 0.33   | 1        | < 0   |
| SEMIVOLATILES    | Anthracene                  |        |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | 1          | < 1         | 0.33         | 1 .         | < 0                 | 0.33   | 1 .                                   | < 10           | 0.33       | 1        | < 0  | 0.33   | 1        | < 0   |
| SEMIVOLATILES    | Benzo(a)anthracene          |        |             |         |              |         |               |    |                  | 0.33   | 1        | <  | 0       | 0.79      | 1          | < 0         | 0.33         | 1 .         | < U                 | 0.33   | 1 .                                   | < 0            | 0.33       |          | < 0  | 0.33   | •        | < U   |
| SEMIVOLATILES    | Benzo(a)pyrene              |        |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | 1          | < U         | 0.33         |             | < U                 | 0.33   |                                       | < 0            | 0.33       |          | < U  | 0.33   |          | < U   |
| SEMIVOLATILES    | Benzo(b)fluoranthene        | Į –    |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | 1          | < 0         | 0.33         |             | < U                 | 0.33   |                                       | < 0            | 0.33       |          | < 0  | 0.33   |          |       |
| SEMIVOLATILES    | Benzo(gia)perylene          | Ì      |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U<br>11 | 0.79      |            | < U         | 0.33         | •           | < U                 | 0.33   | •                                     | < U<br>2 11    | 0.33       | 1        | < 0<br>- 11  | 0.33   | 1        | < U   |
| SEMIVOLATILES    | Benzo(K)fluoranthene        |        |             |         |              |         |               |    |                  | 1.00   | 1        | Ś  | 11      | 0_//9<br> | 1          | < 0<br>2 11 | 1.65         | 4           | ~ 11                | 1.55   | 1                                     | ~ 11           | 1.55       | 1        | × и  | 1.65   | 1        |       |
| SEMIVOLATILES    | Benzoic Acid                |        |             |         |              |         |               |    |                  | 0.00   |          |    | U<br>H  | 4         | 4          | < U         | 0.05         | 1           |                     | 0.05   | , , , , , , , , , , , , , , , , , , , | ~ 11           | 0.65       | ÷        | ~ 11   | 0.65   | 1        | 2 11  |
| SEMIVOLATILES    | Benzyl Alcohol              | 1      |             |         |              |         |               |    |                  | 0.00   | +        | Ś  | н       | 0.79      | 1          | < 0<br>- н  | 0.00         | , ,         | < 0<br>2 H          | 0.03   |                                       | ~ 17           | 0.03       | 1        | <ul><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li><li></li></ul> | 0.00   | 1        | < U   |
| SEMIVOLATILES    | bis(2-Chioroethoxy)methane  | 1      |             |         |              |         |               |    |                  | 0.33   | 1        |    | 11      | 0.75      | 1          | - U         | 0.35         | , .<br>1    | ~ 11                | 0.00   |                                       | × v<br>∠ ti    | 0.33       | 1        | 2 11   | 0.00   | 1        | z II  |
| SEMIVOLATILES    | Dis(2-Crisoroetriyi)ether   |        |             |         |              |         |               |    |                  | 0.33   |          | 2  |         | 0.79      | 1          | ~ 11        | 0.33         | 1           | ~ 11                | 0.00   | 1                                     | × 10.<br>2 11  | 0.33       | 1        | 2 11   | 0.33   | 4        | ~ 11  |
| SEMIVOLATILES    | bis(2-Chioroisopropy)euter  |        |             |         |              |         |               |    |                  | 0.00   | 1        | 2  | п       | 0.75      | 1          | - 11        | 0.33         | 1           | 2 11                | 0.00   | 1                                     | ~ 11           | 0.00       | ,<br>1   | ~ 1  | 0.33   | 1        | र ग   |
| SEMIVOLATILES    | Dis(2-Envinexy) printalate  | 1      |             |         |              |         |               |    |                  | 0.33   |          | 2  | н       | 0.75      | 1          | ~ 11        | 0.30         | 1           | ~ "                 | 0.00   | 1                                     | ~ 11           | 0.33       | ,<br>†   | 2 11   | 0.33   | 1        | र स   |
| SEMIVOLATILES    | Butyl benzyl photalate      | 1      |             |         |              |         |               |    |                  | 0.33   | 1        | Ì  | 4       | 0.75      | 1          | 2 11        | 0.00         | 1           | <ul><li>N</li></ul> | 0.33   | 1                                     | < U            | 0.33       | 1        | 2 11   | 0.33   | 1        | < 1   |
| SEMIVOLATILES    | Disercia bloothrance        | 1      |             |         |              |         |               |    |                  | 0.00   | 1        | Ì  | 11      | 0.79      | 1          | ~ 11        | 0.00         | 1           | 2 11                | 0.33   | 1                                     | < U            | 0.33       | 1        | ~ 11   | 0.33   | 1        | < 11  |
| SEMINOLATILES    | Diberzotania                | ł      |             |         |              |         |               |    |                  | 0.33   |          | Ì  | ม<br>ม  | 0.79      | 1          | ~ 13        | 0.33         | 1           | < 11                | 0.33   | 1                                     | र हो<br>टार्डी | 0.33       | 1        | < 11   | 0.33   | 1        | < 1   |
| SEMIVOLATILES    | Diethyl abthalate           | İ      |             |         |              |         |               |    |                  | 0.00   | ,        | 2  | ir .    | 6.79      | t.         | ~ 17        | 0.33         | 1           | < 11                | 0.33   | 1                                     | < 11           | 0.33       | ì        | < 11   | 0.33   | 1        | < 1   |
| SEMIVOLATILES    | Digothy philadale           |        |             |         |              |         |               |    |                  | 0.00   | 1        | 2  | 11      | 0.79      | 1          | < 11        | 0.33         | 1           | < 11                | 0.33   | 1                                     | < 1)           | 0.33       | 1        | < U  | 0.33   | 1        | < 1   |
| SEMIVOLATILES    | di o Butt obtalato          |        |             |         |              |         |               |    |                  | 0.33   | 1        | è  | 11      | 0.79      | 1          | < 11        | 0.33         | 1           | < 13                | 0.33   | 1.                                    | < 1)           | 0.33       | 1        | < 0  | 0.33   | 1        | < U   |
| SEMIVOLATILES    | dine Ochil phthalate        |        |             |         |              |         |               |    |                  | 0.33   | 1        | Ì  | ŭ       | 0.79      | 1          | < 11        | 0.33         | 1           | < U                 | 0.33   | •                                     | < U            | 0.33       | 1        | < 1  | 0.33   | 1        | < U   |
| SEMINOLATILES    | Charaothooo                 | 1      |             |         |              |         |               |    |                  | 0.33   | 1        | Ż  | UI      | 0.79      | 1          | < U         | 0.33         | 1           | < 11                | 0.33   | 1.                                    | < 1J           | 0.33       | 1        | < 1  | 0.33   | 1        | < 0   |
| SEMILOU ATHES    | Fluerene                    |        |             |         |              |         |               |    |                  | 0.33   | t        | <  | U       | 0.79      | 1          | < U         | 0.33         | 1           | < 0                 | 0.33   | 1 .                                   | < U            | 0.33       | 1        | < U  | 0.33   | 1        | < U   |
| SEMINOLATILES    | Havachlorohonzene           | 1      |             |         |              |         |               |    |                  | 0.33   | 1        | <  | Ū       | 0.79      | 1          | < U         | 0.33         | 1           | < U                 | 0.33   | 1                                     | < U            | 0.33       | 1        | < U  | 0.33   | 1        | < U   |
| SEMIVOLATILES    | Hexachlorobutadiese         | 1      |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | - 1        | < U         | 0.33         | 1           | < U                 | 0.33   | 1                                     | < U            | 0.33       | 1        | < U  | 0.33   | 1        | < U   |
| SEMIVOLATILES    | Rexachlorocyclopentaciene   |        |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | 1          | < ป         | 0.33         | 1           | < U                 | 0.33   | 1                                     | < U            | 0.33       | 1        | < U  | 0.33   | 1        | < U   |
| SEMIVOLATILES    | Hexachloroethane            |        |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | 1          | < U         | 0.33         | 1           | < U                 | 0.33   | 1                                     | < U            | 0.33       | 1        | < U  | 0.33   | 1        | < U   |
| SEMIVOLATILES    | Indeno(1.2.3-cd)ovrepe      |        |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | 1          | < ย         | 0.33         | 1           | < U                 | 0.33   | 1                                     | < U            | 0.33       | 1        | < U  | 0.33   | 1        | < U   |
| SEMIVOLATILES    | Isophorone                  |        |             |         |              |         |               |    |                  | 0.33   | t        | <  | U       | 0.79      | 1          | < 0         | 0.33         | 1           | < U                 | 0.33   | 1                                     | < U            | 0.33       | 1        | < U  | 0.33   | 1        | < U   |
| SEMIVOLATILES    | Naphthaiene                 |        |             |         |              |         |               |    |                  | 0.33   | t        | <  | Ð       | 0.79      | 1          | < U         | 0.33         | 1           | < U                 | 0.33   | 1                                     | < U            | 0.33       | 1        | < ປ  | 0.33   | t        | < U   |
| SEMIVOLATILES    | Nitrobenzene                |        |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | 1          | < U         | 0.33         | 1           | < U                 | 0.33   | 1                                     | < U            | 0.33       | 1        | < ป  | 0.33   | t        | < U   |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |        |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | 1          | < Ŭ         | 0.33         | 1           | < U                 | 0.33   | 1                                     | < U            | 0.33       | 1        | < U  | 0.33   | 1        | < U   |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      |        |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | 1          | < ป         | 0.33         | 1           | < U                 | 0.33   | 1                                     | < U            | 0.33       | 1        | < U  | 0.33   | 1        | < U   |
| SEMIVOLATILES    | Pentachlorophenoi           |        |             |         |              |         |               |    |                  | 1.65   | t        | <  | U       | 4         | 1          | < U         | 1.65         | 1           | < U                 | 1.65   | 1                                     | < U            | 1.65       | 1        | < U  | 1.65   | 1        | < U   |
| SEMIVOLATILES    | Phenanthrese                | [      |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | 1          | < ປ         | 0.33         | 1           | < ป                 | 0.33   | 1                                     | < 8            | 0.33       | 1        | < U  | 0.33   | 1        | < U   |
| SEMIVOLATILES    | Phenol                      | 1      |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | 1          | < U         | 0.33         | 1           | < V                 | 0.33   | 1                                     | < บ            | 0.33       | 1        | < U  | 0.33   | 1        | < U   |
| SEMIVOLATILES    | Pyrene                      | 1      |             |         |              |         |               |    |                  | 0.33   | 1        | <  | U       | 0.79      | 1          | < U         | 0.33         | 1           | < U                 | 0.33   | 1                                     | < U            | 0.33       | 1        | < U  | 0.33   | 1        | < U   |
| VOLATILES        | 1,1,1,2-Tetrachforcethane   | 1      |             |         |              |         |               |    |                  |        |          |    |         | 0.024     | 1          | < U         | 1            |             |                     |        |                                       |                |            |          |  |        |          |       |
| VOLATILES        | 1,1,1-Trichloroethane       |        |             |         |              |         |               |    |                  | 0.005  | í        | <  | U       | 0.012     | 1          | < U         | 0.005        | 1           | < U                 | 0.005  | 1                                     | < U            | 0.005      | 1        | < U  | 0.005  | 1        | < U   |
| VOLATILES        | 1,1,2,2-Tetrachloroethane   |        |             |         |              |         |               |    |                  | 0.005  | 1        | <  | U       | 0.012     | 1          | < U         | 0.005        | 1           | < 1                 | 0.005  | 1                                     | < U            | 0.005      | 1        | < U  | 0.005  | 1        | < U   |
| VOLATILES        | 1,1,2-Trichloroethane       |        |             |         |              |         |               |    |                  | 0.005  | 1        | <  | บ       | 0.012     | 1          | < U         | 0.005        | 1           | < U                 | 0.005  | 1                                     | < U            | 0.005      | 1        | < U  | 0.005  | 1        | < U   |
| VOLATILES        | t,1-Dichloroethane          |        |             |         |              |         |               |    |                  | 0.005  | 1        | <  | υ       | 0.012     | 1          | < U         | 0.005        | 1           | < U                 | 0.005  | 1                                     | < ∜            | 0.005      | 1        | < U  | 0.005  | 1        | < 0   |
| VOLATILES        | 1,1-Dichloroethene          | · ·    |             |         |              |         |               |    |                  | 0.005  | 1        | <  | U       | 0.012     | 1          | < U         | 0.005        | 1           | < U                 | 0.005  | 1                                     | < U            | 0.005      | 1        | < U  | 0.005  | 1        | < 0   |
| VOLATILES        | 1,2,3-Trichioropropane      |        |             |         |              |         |               |    |                  |        |          |    |         | 0.024     | 1          | < ()        | 1            |             |                     |        |                                       |                |            |          |  |        |          |       |
| VOLATILES        | 1,2-Dibromo-3-chloropropane |        |             |         |              |         |               |    |                  |        |          |    |         | 0.048     | 1          | < 0         | 1            |             |                     |        |                                       |                |            |          |  |        |          |       |
| VOLATILES        | 1,2-Dibromoethane           |        |             |         |              |         |               |    |                  |        |          |    |         | 0.048     | 1          | < U         |              |             |                     |        |                                       |                |            |          |  |        |          |       |
| VOLATILES        | 1,2-Dichloroethane          |        |             |         |              |         |               |    |                  | 0.005  | 1        | <  | U       | 0.012     | 1          | < 1         | 0.005        | 1           | < 0                 | 0.005  | 1                                     | < 6            | 0.005      | 1        | < U  | 0.005  | 1        | < 0   |
| VOLATILES        | 1,2-Dichloroethene          | 1      |             |         |              |         |               |    |                  | 0.005  | 1        | <  | U       | 0.012     | 1          | < 0         | 0.005        | I           | < U                 | 0.005  | 1                                     | < 13           | 0.005      | 1        | < 0  | 0.005  | 1        | < 0   |
| VOLATILES        | 1,2-Dichloropropane         | {      |             |         |              |         |               |    |                  | 0.005  | 1        | <  | U       | 0.012     | 1          | < 1         | 0.005        | 1           | < 0                 | 0.005  | 1                                     | < U<br>        | 0.005      | ſ        | < 0  | 0.005  | 1        | < U   |
| VOLATILES        | 2-Butanone                  |        |             |         |              |         |               |    |                  | 0.05   | 1        | <  | U       | 0.024     | ţ          | < . U       | 0.05         | ,           | < 0                 | 0.05   | 1                                     | < U<br>. u     | 0.05       | 1        | < U<br>. II  | 0.05   | 1        | < U   |
| VOLATILES        | 2-Chloroethyl vinyl ether   |        |             |         |              |         |               |    |                  | 0.01   | 1        | <  | U       |           |            |             | 0.01         |             | < U                 | 0.01   | 1<br>+                                | < V<br>. U     | 0.01       |          | < U  | 0.01   | 1        | < U   |
| VOLATILES        | 2-Hexanone                  |        |             |         |              |         |               |    |                  | 0.05   | 1        | <  | 0       | 0.024     | 1          | < U         | 0.00         | C C         | < 0                 | 0.05   | 1                                     | < 0            | 0.05       |          | < 0  | 0.05   |          | < 0   |
| VOLATILES        | 2-Propenal                  |        |             |         |              |         |               |    |                  |        |          |    |         | 1.2       | ,          | < U         | ,<br>1 01    | 4           | . 11                | 0.1    |                                       | . 11           | <b>a</b> • | •        | 2 H  | 0.1    | 1        | < 11  |
| VOLATILES        | Acetone                     |        |             |         |              |         |               |    |                  | 0.1    | 1        | <  | U       | 0.024     |            | < U         | 1 U.1        | 1           | < 0                 | 0.1    |                                       | < 0            | 0.1        | '        | ς ψ  | 0.1    |          | < U   |
| VOLATILES        | Acetonimie                  | 1      |             |         |              |         |               |    |                  |        |          |    |         | 0.24      | •          | ~ U         | ,<br>I       |             |                     |        |                                       |                |            |          |  |        |          |       |
| VOLATILES        | Acryionizile                | 1      |             |         |              |         |               |    |                  |        |          |    |         | 0.24      | 1          | - U<br>- U  | ,<br>I       |             |                     |        |                                       |                |            |          |  |        |          |       |
| VOLATILES        | Allyl chlonde               |        |             |         |              |         |               |    |                  | 0.005  |          |    |         | 0.040     | ÷          | < U         | ,<br>1 0.00F | 1           | <i>~</i> 11         | 0.005  | 1                                     | <i>-</i> 11    | U 102      |          | 2 11   | 0 005  | 1        | 2 AI  |
| VOLATILES        | Deil2ene                    |        |             |         |              |         |               |    |                  | 0.005  | 4        | ·  | 14      | 0.012     | ,          | ~ 0         | - CUULO -    | ,           | ~ 0                 | 200.0  | 1                                     | 2 11           | 0.003      | 1        | ~ 11   | 0.003  | 1        | < 11  |
| VOLATILES        | Dromotorm Dromotorm         |        |             |         |              |         |               |    |                  | 0.003  |          | 2  | 13      | 0.012     | , 1        | - U<br>- H  | 1 0.005      | 1           | 2 U                 | 0.003  | 1                                     | < 11           | 0.000      | 1        | < 11   | 0.005  | 1        | < 11  |
| VOLATILES        | Dromomathana                |        |             |         |              |         |               |    |                  | 6.003  | 1<br>1   | 2  | U.      | 0.074     | ,          | - U<br>- II | 0.000<br>    | 1           | < 11                | 0.000  | 1                                     | < 11           | 0.01       | 1        | < 11   | 0 01   | 1        | < 11  |
| VOLATILES        | Carboo dissifida            | 1      |             |         |              |         |               |    |                  | 200.0  | 1        | 2  | 13      | 0.012     | 1          | - u<br>< 11 | 1 0.005      | 1           | < 11                | 0.005  | 1                                     | र स            | 8 005      | 1        | < 1f   | 0.005  | 1        | < 11  |
| VOLAHLES         | Carbon distance             | 1      |             |         |              |         |               |    |                  | 0.000  |          | •  | •       | v-v16.    | •          |             | 0.000        | ,           |                     | 0.000  | •                                     |                | 2.000      | •        |  |        |          | •     |

# 00066095

# Table 3-53 Concentrations of Chemicals in Soil Samples Associated with Sump 053

| [SUMP] = SUMP053 |                              |                  |                  |                  |                   |        |          |     |          |         |       |          |           |       |        |         |          |      |        |          |      |        |          |       |   |
|------------------|------------------------------|------------------|------------------|------------------|-------------------|--------|----------|-----|----------|---------|-------|----------|-----------|-------|--------|---------|----------|------|--------|----------|------|--------|----------|-------|---|
| LOCATION _CODE   |                              | 35SUMP053-SB01   | 35SUMP053-SB01   | 47SB10           | 47SB10            | LH     | -DL53-01 |     |          | LHS-3-  | 3     | 1        | H-S53-    | 01    | 1      | LH-\$53 | 3-01     |      | UH     | -S53-02  |      | L      | H-S53-(  | 12    |   |
| SAMPLE_NO        |                              | 35-SMP53-SB01-01 | 35-SMP53-SB01-02 | 47S810(0-0_5)    | 47SB10(1-2)       | ťΗ     | -DL53-01 |     |          | LHS-3-  | 3     | ម        | 1-\$53-0  | 1_1   | U      | H-S53-  | 01_2     |      | ĹΗ (   | \$53-02_ | 1    | LH     | -\$53-02 | 2     |   |
| SAMPLE_DATE      |                              | 9/13/2006        | 9/13/2006        | 5/31/2000        | 5/31/2000         | 7/     | 13/1993  |     |          | 1/10/19 | 95    |          | 7/13/19   | 93    |        | 7/13/1  | 993      |      | 7/*    | 3/1993   |      | 7      | /13/199  | 3     |   |
| Depth            |                              | 0.5 - 0.5 Ft     | 8 - 8 Ft         | 0 - 0.5 Ft       | 1 - 2 Ft          |        | 0-0F1    |     |          | 0 - 0.5 | t     | (        | 1.5 - 1.5 | Ft    |        | 7 - 8.1 | Ft       |      | 0.5    | - 1.5 Fi |      |        | 7 - 8 Ft |       |   |
| SAMPLE_PURPOSE   |                              | REG              | REG              | REG              | REG               |        | reg      |     |          | REG     |       |          | REG       |       |        | REC     | 3        |      |        | REG      |      |        | REG      |       |   |
| Test Group       | Parameter (Units = mg/kg)    | Result DIL LQ VQ | Result DIL LQ VO | Result DIL LO VO | Result Dil, LQ VQ | Result | DIL I    | QV  | Q Result | DIL     | LQ VO | ) Result | DIL       | 10 V( | Result | DIL     | LQ       | VQ I | Result | DILL     | Q VQ | Result | DIL      | LQ VQ | _ |
| VOLATILES        | Carbon tetrachloride         |                  |                  |                  |                   | 0.005  | 1        | < ( | J 0.012  | 1       | < U   | 0.005    | 1         | < U   | 0.005  | 1       | <        | U    | 0.005  | 1        | < U  | 0.005  | 1        | < 0   |   |
| VOLATILES        | Chlorobenzene                |                  |                  |                  |                   | 0.005  | 1        | < ۱ | J 0.012  | 1       | < U   | 0.005    | 1         | < U   | 0.005  | 1       | <        | U    | 0.005  | 1        | c U  | 0.005  | 1        | < U   |   |
| VOLATILES        | Chloroethane                 |                  |                  |                  |                   | 0.01   | 1        | < 1 | 0.024    | 1       | < U   | 0.01     | 1         | < U   | 0.01   | 1       | <        | IJ   | 0.01   | 1 ·      | < U  | 0.01   | 1        | < U   |   |
| VOLATILES        | Chloroform                   |                  |                  |                  |                   | 0.005  | 1        | < ( | J 0.012  | 1       | < U   | 0.005    | 1         | < U   | 0.005  | 1       | <        | U    | 0.005  | 1 ·      | c U  | 0.005  | 1        | < U   |   |
| VOLATILES        | Chloromethane                |                  |                  |                  |                   | 0.01   | 1        | < ( | 0.024    | t       | < U   | t0.0     | 1         | < U   | 0.01   | 1       | <        | U    | 0.01   | 1        | د U  | 0.01   | 1        | < U   |   |
| VOLATILES        | Chloroprene                  |                  |                  |                  |                   |        |          |     | 0.24     | 1       | < U   |          |           |       |        |         |          |      |        |          |      |        |          |       |   |
| VOLATILES        | cis-t,3-Dichloropropene      |                  |                  |                  |                   | 0.005  | 1        | < 1 | J 0.012  | t       | < U   | 0.005    | 1         | < U   | 0.005  | 1       | <        | Ũ    | 0.005  | 1        | < U  | 0.005  | 1        | < U   |   |
| VOLATILES        | Dibromochloromethane         |                  |                  |                  |                   | 0.005  | 1        | < 1 | J 0.012  | 1       | < U   | 0.005    | 1         | < U   | 0.005  | 1       | <        | IJ   | 0.005  | 1        | < U  | 0.005  | 1        | < U   |   |
| VOLATILES        | Dibromomethane               |                  |                  |                  |                   |        |          |     | 0.024    | 1       | < U   |          |           |       |        |         |          |      |        |          |      |        |          |       |   |
| VOLATILES        | Dichlorodifluoromethane      |                  |                  |                  |                   |        |          |     | 0.048    | 1       | < U   |          |           |       |        |         |          |      |        |          |      |        |          |       |   |
| VOLATILES        | Ethyl methacrylate           |                  |                  |                  |                   |        |          |     | 0.048    | 1       | < U   |          |           |       |        |         |          |      |        |          |      |        |          |       |   |
| VOLATILES        | Ethylbenzene                 | ŕ                |                  |                  |                   | 0.005  | 1        | < 1 | J 0.012  | 1       | < U   | 0.005    | 1         | < 0   | 0.005  | 1       | <        | U    | 0.005  | 1        | < U  | 0.005  | 1        | < U   |   |
| VOLATILES        | IODOMETHANE                  |                  |                  |                  |                   |        |          |     | 0.024    | 1       | < U   |          |           |       |        |         |          |      |        |          |      |        |          |       |   |
| VOLATILES        | ISOBUTYL ALCOHOL             |                  |                  |                  |                   |        |          |     | 4.8      | 1       | < U   |          |           |       |        |         |          |      |        |          |      |        |          |       |   |
| VOLATILES        | Methacrylonitrile            |                  |                  |                  |                   |        |          |     | 0.048    | 1       | < ប   |          |           |       |        |         |          |      |        |          |      |        |          |       |   |
| VOLATILES        | Methyl isobutyl ketone       |                  |                  |                  |                   | 0.05   | 1        | < 1 | 0.024    | 1       | < U   | 0.05     | 1         | < บ   | 0.05   | 1       | <        | U    | 0.05   | 1 .      | < U  | 0.05   | 1        | < U   |   |
| VOLATILES        | METHYL METHACRYLATE          |                  |                  |                  |                   |        |          |     | 0.048    | 1       | < 1J  |          |           |       |        |         |          |      |        |          |      |        |          |       |   |
| VOLATILES        | Methylene chloride           |                  |                  |                  |                   | 0.005  | ŧ        | < ( | 0.012    | 1       | < U   | 0.005    | 1         | < U   | 0.005  | 1       | <        | U    | 0.005  | 1        | < U  | 0.005  | 1        | < U   |   |
| VOLATILES        | Pentachloroethane            |                  |                  |                  |                   |        |          |     | 0.048    | 1       | < U   |          |           |       |        |         |          |      |        |          |      |        |          |       |   |
| VOLATILES        | Propionitrile                |                  |                  |                  |                   |        |          |     | 0.12     | 1       | < U   |          |           |       |        |         |          |      |        |          |      |        |          |       |   |
| VOLATILES        | Styrene                      |                  |                  |                  |                   | 0.005  | 1        | < ( | J 0.012  | 1       | < U   | 0.005    | 1         | < 1   | 0.005  | 1       | <        | U    | 0.005  | 1        | < U  | 0.005  | 1        | < U   |   |
| VOLATILES        | Tetrachloroethene            |                  |                  |                  |                   | 0.005  | 1        | < ( | J 0.012  | 1       | < U   | 0.005    | 1         | < U   | 0.005  | 1       | <        | U    | 0.005  | 1        | ςU   | 0.005  | 1        | < U   |   |
| VOLATILES        | Toluene                      |                  |                  |                  |                   | 0.005  | 1        | < 1 | J 0.012  | 1       | < U   | 0.005    | 1         | < U   | 0.005  | 1       | <        | U    | 0.005  | 1 -      | ل >  | 0.005  | 1        | < U   |   |
| VOLATILES        | trans-1,3-Dichloropropene    |                  |                  |                  |                   | 0.005  | 1        | < 1 | J 0.012  | 1       | < U   | 0.005    | 1         | < U   | 0.005  | 1       | <        | U    | 0.005  | 1        | < U  | 0.005  | 1        | < U   |   |
| VOLATILES        | trans-1,4-Dict:loro-2-butene |                  |                  |                  |                   |        |          |     | 0.048    | 1       | < U   |          |           |       |        |         |          |      |        |          |      |        |          |       |   |
| VOLATILES        | Trichloroethene              |                  |                  |                  |                   | 0.005  | 1        | < ! | J 0.012  | 1       | < U   | 0.005    | 1         | < U   | 0.005  | 1       | <        | ŋ    | 0.005  | 1        | < U  | 0.005  | 1        | < U   |   |
| VOLATILES        | Trichlorofluoromethane       |                  |                  |                  |                   |        |          |     | 0.024    | 1       | < U   |          |           |       |        |         |          |      |        |          |      |        |          |       |   |
| VOLATILES        | Vinyl acetate                |                  |                  |                  |                   | 0.05   | 1        | < 1 | J 0.024  | 1       | < U   | 0.05     | 1         | < U   | 0.05   | 1       | <        | บ    | 0.05   | 1        | < U  | 0.05   | t        | < U   |   |
| VOLATILES        | Vinyl chloride               |                  |                  |                  |                   | 0.01   | 1        | < 1 | 0.024    | 1       | < U   | 0.01     | 1         | < U   | 0.01   | 1       | <        | U    | 0.01   | 1        | < U  | 0.01   | 1        | < U   |   |
| VOLATILES        | Xylenes, Total               |                  |                  |                  |                   | 0.005  | 1        | <   | J 0.012  | 1       | < U   | 0.005    | 1         | < U   | 0.005  | 1       | <u> </u> | ย    | 0.005  | 1        | < U  | 0.005  | 1        | < U   | _ |



Data Evaluation Report Chemical Concentrations in Soli Associated with LHAAP-35/36 Sumpa



Table 3-54 Concentrations of Chemicals in Soil Samples Associated with Sump 054

| [SUMP] = SUMP054 |                             |           |         |          |            |      |              |             |    |        |            |            |         |                |      |        |         |     |            |           |        |          |        | <b>.</b>   |                      |      |           |                  |         |
|------------------|-----------------------------|-----------|---------|----------|------------|------|--------------|-------------|----|--------|------------|------------|---------|----------------|------|--------|---------|-----|------------|-----------|--------|----------|--------|------------|----------------------|------|-----------|------------------|---------|
| LOCATION _CODE   |                             | 35SUMP05  | 54-SB01 | 35SUN    | MP054-S    | B02  | LH-D         | .54-01      |    | LH-    | DL55-0     | 11         | LH      | DL55-0         | 2    | LH-    | S54-01  |     | LH-S54     | -01       | LH-    | S55-01   |        | LH-S5      | 5-01                 |      | LH-S      | 55-01            |         |
| SAMPLE_NO        |                             | 35-SMP54- | SB01-02 | 35-SM    | P54-SB0    | 2-02 | LH-Đ         | 54-01       |    | LH-    | DL55-0     | )1         | LH      | 01.55-0        | 2    | LH-S   | 54-01_1 |     | UH-554-0   | 01_2      | LH-SS  | 55-01 QC |        | LH-555     | +01_1                |      | 141       | 15-01_2<br>/1000 |         |
| SAMPLE_DATE      |                             | 9/15/2    | 006     | 9/       | 15/2005    |      | 7/12         | 1993        |    | 7/     | 12/1990    | 9          | "       | 12/1993        |      | //1;   | 2/1993  |     | 112/15     | /93<br>=1 |        | 2/1890   |        | (14)       | 553                  |      | 25.       | (1350<br>E E E)  |         |
| DEPTH            |                             | 6-6       | FI      |          | 6-6FL      |      | 2.5          | 3.5 Ft      |    | 2.5    | 1 - 3.5 F  | 1          | 2.      | 5+3,5 P<br>050 | ſ    | U<br>1 |         |     | 4.67       | -1        | Ű      | FD       |        | AF         | G C                  |      | 3.3-<br>B | FG               |         |
| SAMPLE_PURPUSE   | Parameter (Unite and Re)    | Read D    |         | ) Doguli | HEG<br>Off |      | Parul (      | 50<br>NI 10 | vo | Oscult | neo<br>oii | in vr      | C Becut | 011            |      | Result |         | vn  | Result Dil |           | Besult |          | va     | Besult Dil | ŭ LO                 | VO F | Result D  | NL LO            | vo      |
| EXPLOSIVES       | 2 4-Dinitratoluene          | 7160UN 0  |         | 2 (16301 |            |      | 0.33         | 1 <         | -0 | 0.13   | 1          | - 0        | i 0.33  | 1              | < U  | 0.33   | 1 <     | U   | 0.33 1     | < 1       | 0.33   | 1 <      | U      | 0.33 1     | <                    | Ų    | 0.33      | 1 <              | Ü       |
| EXPLOSIVES       | 2.6-Dipitrotoluene          |           |         |          |            |      | 0.33         | 1 4         | Ű  | 0.30   | 1          | د ب<br>د   | 0.33    | 1              | < 0  | 0.33   | 1 <     | Ū   | 0.33 í     | < U       | 0.33   | 1 <      | U      | 0.33 1     | <                    | U    | 0.33      | 1 <              | Ų       |
| METALS           | Aluminum                    | 12100     | 1       | 6970     | t          |      | 6040         | 1           | -  | 4660   | 1          |            | 13400   | 1              |      | 3960   | 1       |     | 5480 1     |           | 5960   | 1        |        | 5010 1     |                      |      | 4710      | 1                |         |
| METALS           | Antimorty                   | 0.117     | 1 U     | 0.112    | 1          | u    | 3            | t <         | U  | 3      | 1          | < U        | 1 3     | 1              | < U  | 3      | 1 <     | Ų   | 3 1        | < U       | 3      | 1 <      | U      | 3 1        |                      |      | з         | 1 <              | U       |
| METALS           | Arsenic                     | 0.312     | 1 J J   | 0.431    | 1          |      | t.9          | 1           |    | 1,9    | 1          |            | 1.7     | 1              |      | 23.1   | 1       |     | 1.5 1      |           | 2.8    | 1        |        | 2.6 î      |                      |      | 2,1       | 1                |         |
| METALS           | Barium                      | 67.4      | ſ       | 52.1     | 1          |      | 54.6         | 1           |    | 65.7   | 1          |            | 67.9    | 1              |      | 30.4   | 1       |     | 28 1       |           | 55.9   | 1        |        | 52.2 1     |                      |      | 31,8      | 1                |         |
| METALS           | Beryllium                   | 0.346     | ៀរ      | 0.33     | 1          | JJ   |              |             |    |        |            |            |         |                |      |        |         |     |            |           |        |          |        |            |                      |      |           |                  |         |
| METALS           | Cadmium                     | 0.0782    | 1 ] ]   | 0.057    | 1          | 1 1  | 1            | 1 <         | U  | í      | 1          | < U        | F 1.    | 1              | < U  | 1      | 1 <     | ប   | 1 1        | < U       | 1      | 1 <      | U      | 1 1        | <                    | U    | 1         | 1 <              | U       |
| METALS           | Calcium                     | 590       | 1       | 480      | 1          |      | 750          | 1           |    | 2180   | i          |            | 935     | 1              |      | 1540   | 1       |     | 825 1      |           | 1460   | 1        |        | 1410 1     |                      |      | 898       | 1                |         |
| METALS           | Chromium                    | 10        | 1       | 6.66     | i          |      | 12.9         | 1           |    | 21.1   | 1          |            | 18.5    | 1              |      | 15.7   | 1       |     | 6.8 1      |           | 19.9   | 1        |        | 15.3 1     |                      |      | 11.6      | 1                |         |
| METALS           | Coball                      | 5.71      | 1       | 6.41     | 1          |      | 3.3          | 1           |    | 7.5    | 1          |            | 7.1     | 1              |      | 2.2    | 1       |     | 4,4 1      |           | 7.2    | 1        |        | 5.9 1      |                      |      | 5.4       | 1                |         |
| METALS           | Copper                      | 4.33      | 1       | 3.87     | 1          |      | 1.9          | 1           |    | 3,4    | 1          |            | 3.9     | 1              |      | 2.2    | 1       |     | 2 1        |           | 7      | រ        |        | 7.2 1      |                      |      | 2.5       | 1                |         |
| METALS           | Cyanide, Total              |           |         |          |            |      | 0.5          | 1 <         | Ų  | 0.5    | 1          | < L        | J 0.5   | 1              | < U  | 0.5    | 1 <     | U   | 0.5 1      | < U       | 0.5    | 1 <      | U      | 0.5 1      | <                    | U    | 0.5       | 1 <              | U       |
| METALS           | tron                        | 9780      | 1       | 9600     | 1          |      | 9940         | 1           |    | 7580   | 1          |            | 12700   | 1              |      | 20000  | 1       |     | 9410 1     |           | 15900  | 1        |        | 11300 1    |                      |      | 11200     | 1                |         |
| METALS           | Lead                        | 4.95      | 1       | 5.16     | 1          |      | 6.3          | 1           |    | 9.4    | 1          |            | 7.1     | 1              |      | 1      | 1 <     | U   | 7.6 1      |           | 37.4   | 1        |        | 14.5 1     |                      |      | 5.7       | 1                |         |
| METALS           | Magnesium                   | 980       | 1       | 882      | 1          |      | 313          | 1           |    | 195    | i          |            | 732     | 1              |      | 175    | 1       |     | 317 1      |           | 707    | 1        |        | 654 1      |                      |      | 300       | 1                |         |
| METALS           | Manganese                   | 31.7      | 1       | 47.9     | 1          |      | 91           | 1           |    | 445    | 1          |            | 140     | 1              |      | 73.6   | 1       |     | 36.6 1     |           | 271    | 1        |        | 212 1      |                      |      | 105       | 1                |         |
| METALS           | Mercury                     | 0.0175    | 1 J J   | 0.282    | 1          | U    | 0.1          | ۲ ۲         | U  | 0.1    | 1          | < (        | J 0,1   | 1              | < U  | 0.1    | 1 <     | Ų   | 0.1 1      | < Ų       | 0,1    | 1 <      | U      | 0.1 1      | <                    | Ų    | 0.1       | 1 <              | u       |
| METALS           | Nickel                      | 7.37      | 1       | 7.84     | 1          |      |              |             |    |        |            |            |         |                |      |        |         |     |            |           |        |          |        |            |                      |      |           |                  |         |
| METALS           | Potassium                   | 414       | 1       | 380      | 1          |      | 360          | 1           |    | 300    | 1          |            | 923     | 1              |      | 197    | 1       |     | 299 1      |           | 348    | 1        |        | 312 1      |                      |      | 268       | 1                |         |
| METALS           | Selenium                    | 0.233     | 1 U     | 0.225    | 1          | Ų    | 1            | 1 <         | IJ | 1      | 1          | < L        | J 1     | 1              | < U  | 1      | 1 <     | Ų   | 1 1        | < U       | 1      | 1 <      | Ų      | 1 1        | ۲                    | U    | 1         | 1 <              | U       |
| METALS           | Silver                      | 1.69      | f Ų     | 1.59     | 1          | U    | 1            | 1 <         | Ų  | 1      | 1          | < l        | 1       | 1              | < U  | 1      | 1 <     | U   | 1 1        | < U       | 1      | 1 <      | U      | 1 1        | <                    | U    | 1         | 1 <              | U       |
| METALS           | Sodium                      | 197       | 1       | 161      | 1          |      |              |             |    |        |            |            |         |                |      |        |         |     |            |           |        |          |        |            |                      |      |           |                  |         |
| METALS           | Stronlium                   |           |         |          |            |      | 9.6          | 1           |    | 14.4   | 1          |            | 9.1     | 1              |      | 6.7    | 1       |     | 8.1 1      |           | 8.6    | 1        |        | 6.7 1      |                      |      | 11.4      | 1                |         |
| METALS           | Thallium                    | 0.0564    | 1       | 0.0471   | 1          |      |              |             |    |        |            |            |         |                |      |        |         |     |            |           |        |          |        |            |                      |      |           |                  |         |
| METALS           | Vanadium                    | 14.8      | 1       | 13.9     | 1          |      |              |             |    |        |            |            |         |                |      |        |         |     |            |           |        |          |        |            |                      |      |           |                  |         |
| METALS           | Zinc .                      | 23.2      | 1       | 22,3     | 1          |      | 8,6          | 1           |    | 183    | ٢          |            | 20.4    | 1              |      | 55.5   | 1       |     | 12.4 1     |           | 132    | 1        |        | 144 1      |                      |      | ð.1       | 1                | н       |
| SEMIVOLATILES    | 1,2,4-Trichlarobenzene      |           |         |          |            |      | 0.33         | 1 <         | U  | 0.33   | 1          | < l        | J 0.33  | 1              | ¥ U  | 0.33   | 1 <     | U   | 0,33 1     | < U       | 0.33   | 1 <      | Ų      | 0.33 1     | <                    | 0    | 0.33      | 1 4              | U<br>11 |
| SEMIVOLATILES    | 1,2-Dichlorobenzene         |           |         |          |            |      | 0.33         | 1 <         | Ų  | 0.33   | 1          | < L        | J 0.33  | 1              | < U  | 0.33   | 1 <     | U U | 0.33 1     | < U       | 0.33   | 1 <      | U<br>U | 0,33 1     | <                    |      | 0.03      |                  | 11      |
| SEMIVOLATILES    | 1.3-Dichlorobenzene         |           |         |          |            |      | 0.33         | 1 <         |    | 0,33   | 1          | < (        | J 0.33  | 1              | < U  | 0.33   | 1 <     |     | 0.33 1     | < U       | 0.33   | 1 4      |        | 0.00 1     |                      |      | 0.33      |                  | н       |
| SEMIVOLATILES    | 1.4-Dichkorobenzene         |           |         |          |            |      | 0,33         | } <         |    | 0.33   | 1          | < (        | J 0.33  |                | < 0  | 0,33   |         |     | (05 1      | ~ 11      | 1.66   | 1 4      |        | 1 65 1     |                      | UL I | 1.65      | ; ;              | й       |
| SEMIVOLATILES    | 2,4,5-1 richlaraphenol      |           |         |          |            |      | 1.05         | 1 <         |    | 1,05   | 1          | < 1        | J 1.05  |                | < 0  | 1.00   | 1 4     |     | 0.00 1     |           | 0.33   |          |        | 0.33 1     |                      | EF . | 0.33      | ì                | ŭ       |
| SEMIVOLATILES    | 2.4,6-Trichlorophenol       |           |         |          |            |      | 0.33         |             |    | 0.33   | 1          | < i        | 1 0.33  | -              | < U  | 0.33   | 1 4     | ü   | 0.00 1     | 2.11      | 0.93   | 1 2      | ň      | 0.00 1     |                      | Ŭ.   | 0.33      | 1 2              | ŭ       |
| SEMIVOLATILES    | 2.4-Dicnorophenol           |           |         |          |            |      | 0.00<br>66 G | 1 2         |    | 0.33   | ì          | 2 1        | 1 0.33  | ÷              | 2 11 | 0.33   |         | ŭ   | 0.33 1     | 2 0       | 0.33   | 1 2      | Ū      | 0.33 1     |                      | Ũ    | 0.33      | 1 4              | Ū       |
| SEMMOLATILES     | 2.4. Disitrashanat          |           |         |          |            |      | 1.65         | ÷           |    | 1.65   |            | 2          | J 165   | 1              | 2 0  | 1.65   | 1 2     | ň   | 1.65 1     | e U       | 1.65   | 1 <      | Ū      | 1.65 1     |                      | Ŭ    | 1.65      | 1 2              | Ū       |
| SEMIVOLATILES    | 2.Chloronaphthalene         |           |         |          |            |      | 0.33         | 1 2         | 11 | 0.33   | 1          |            | J 0.33  | •              | 2 1  | 0.33   | 1 4     | Ŭ   | 0.33 1     | < U       | 0.33   | 1 <      | Ū      | 0.33 1     | د                    | Ū    | 0.33      | 1 <              | U       |
| SEMIVOLATILES    | 2-Chlorophenol              |           |         |          |            |      | 0.33         | 1 2         | ŭ  | 0.33   | i          | e l        |         | 1              | ₹Ŭ   | 0.33   | 1 <     | Ū   | 0.33 1     | < U       | 0.33   | 1 <      | Ū      | 0.33 1     | l e                  | U    | 0.33      | 1 <              | Ų       |
| SEMIVOLATILES    | 2-Melhyinaohthalene         |           |         |          |            |      | 0.33         | 1 <         | Ū  | 0.33   | 1          | < 1        | J 0.33  | 1              | < U  | 0.33   | 1 <     | υ   | 0.33 1     | < U       | 0.33   | 1 <      | U      | 0.33 1     | <ul> <li></li> </ul> | U    | 0.33      | 1 <              | U       |
| SEMIVOLATILES    | 2-Melhylohenol              |           |         |          |            |      | 0.33         | 1 <         | Ū  | 0.33   | 1          | < 1        | J 0.33  | 1              | < U  | 0.33   | 1 <     | Ű   | 0.33 1     | < U       | 0.33   | 1 <      | U      | 0.33 1     | <ul> <li></li> </ul> | U    | 0.33      | 1 <              | U       |
| SEMIVOLATILES    | 2-Nitroaniline              |           |         |          |            |      | 1.65         | 1 <         | U  | 1.65   | 1          | < (        | J 1.65  | 1              | < U  | 1.65   | 1 <     | U   | 1.65 1     | < U       | 1.65   | 1 <      | U      | 1.65 1     | <pre></pre>          | U    | 1.65      | 1 e              | Ų       |
| SEMIVOLATILES    | 2-Nitrophenol               |           |         |          |            |      | 0.33         | 1 <         | U  | 0.33   | 5          | < 1        | 0,33    | 1              | < U  | 0.33   | 1 <     | U   | 0.33 1     | < U       | 0.33   | 1 <      | U      | 0.33 1     | <ul> <li></li> </ul> | U    | 0.33      | 1 <              | U       |
| SEMIVOLATILES    | 3.3 Dichlorobenzidine       |           |         |          |            |      | 0.65         | 1 <         | U  | 0.65   | 1          | <i>د</i> ا | 0.65    | <sup>.</sup> 1 | < U  | 0.65   | 1 <     | U   | 0.65 1     | < U       | 0.65   | 1 <      | U      | 0.65 1     |                      | U    | 0.65      | 1 <              | υ       |
| SEMIVOLATILES    | 3-Nitroaniline              |           |         |          |            |      | 1.65         | 1 <         | U  | 1.65   | 1          | ィl         | U 1.65  | 1              | < U  | 1.65   | 1 <     | u   | 1.65 1     | < 11      | 1.65   | 1 <      | Ű      | 1.65 1     | <ul> <li></li> </ul> | U    | 1.65      | 1 <              | U       |
| SEMIVOLATILES    | 4.6-Dinitro-2-methylphenol  |           |         |          |            |      | 1.65         | 1 4         | U  | 1.65   | 1          | < (        | U 1.65  | 1              | < U  | 1.65   | 1 <     | ម   | 1.65 1     | < U       | 1.65   | 1 <      | U.     | 1.65 1     | < <                  | U    | 1.65      | 1 <              | U       |
| SEMIVOLATILES    | 4-Bromophenyl phenyl elher  |           |         |          |            |      | 0.33         | 1 <         | U  | 0.33   | 1          | < 1        | U 0.33  | 1              | < U  | 0.33   | 1 <     | υ   | 0.33 1     | < U       | 0.33   | 1 <      | U      | 0.33 1     | <u>ح</u>             | V    | 0.33      | 1 <              | Ų       |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     |           |         |          |            |      | 0.65         | 1 <         | υ  | 0.65   | 1          | e l        | U 0.65  | 1              | < U  | 0.65   | 1 <     | U   | 0.65 1     | < U       | 0.65   | 1 <      | U      | 0.65 1     | ۲ ا                  | υ    | 0.65      | 1 <              | U       |
| SEMIVOLATILES    | 4-Chloroaniline             |           |         |          |            |      | 0.65         | 1 <         | U  | 0.65   | 1          | < (        | U 0.65  | 1              | < U  | 0.65   | 1 <     | U   | 0.65 1     | < U       | 0,65   | 1 <      | U      | 0.65       | > ۱                  | U    | 0.65      | 1 <              | V       |
| SEMIVOLATILES    | 4-Chiorophenyl phenyl ether | }         |         |          |            |      | 0.33         | 1 <         | U  | 0.33   | 1          | < 1        | U 0.33  | í              | < U  | 0.33   | 1 <     | U   | 0.33 1     | < U       | 0.33   | 1 <      | : ป    | 0.33       | > ۱                  | U    | 0.33      | 1 <              | Ų       |
| SEMIVOLATILES    | 4-Melhylphenol              |           |         |          |            |      | 0.33         | 1 <         | U  | 0,33   | 1          | < 1        | U 0.33  | 1              | < U  | 0.33   | 1 <     | υ   | 0.33 1     | < ປ       | 0.33   | 1 <      | : U    | 0.33       | 1 <                  | U    | 0.33      | 1 <              | U       |
| SEMIVOLATILES    | 4-Nitroaniline              |           |         |          |            |      | 1.65         | 1 <         | U  | 1.65   | 1          | < (        | U 1.65  | 1              | < U  | 1.65   | 1 <     | υ   | 1.65 1     | < U       | 1.65   | 1 <      | : U    | 1.65       | 1 <                  | U    | 1.65      | 1 <              | U       |
| SEMIVOLATILES    | 4-Nitrophenol               |           |         |          |            |      | 1.65         | 1 <         | υ  | 1.65   | 1          | < 1        | U 1,65  | 1              | < U  | 1.65   | 1 <     | U   | 1,65 1     | < U       | 1.65   | 1 <      | : U    | 1,65       | < ۲                  | U    | 1.65      | 1 <              | υ       |



and the second se



 Table 3-54

 Concentrations of Chemicals in Soil Samples Associated with Sump 054

| [SUMP] = SUMP054 |                             |                  |                  |                 |                                |                                 | 111 004 04      | LU CEA M        | 14.555.01       | LH-\$55-01       | 1H-S55-01        |
|------------------|-----------------------------|------------------|------------------|-----------------|--------------------------------|---------------------------------|-----------------|-----------------|-----------------|------------------|------------------|
| LOCATION _CODE   |                             | 35SUMP054-SB01   | 35SUMP054-SB02   | LH-DL54-01      | CH-D155-01                     | LH-DL55-02                      | LH-554-01       | LN-COMPUT       | LIPOSTO         | 18-555-01 1      | LH-S55-01-2      |
| SAMPLE_NO        |                             | 35-SMP54-SB01-02 | 35-SMP54-SB02-02 | LH-DL54-01      | LH-0L55-01                     | CH-DL55-02                      | UP-004-VI_I     | 2/10/1003       | 7/12/1003       | 7/12/1993        | 7/12/1993        |
| SAMPLE_DATE      |                             | 9/15/2006        | 9/15/2006        | 7/12/1993       | 7/12/1993                      | 7/12/1993                       | 7/12/1993       | 1 5 54          | A-3 El          | 0.251            | 35-55Ft          |
| DEPTH            |                             | 6 - 6 FI         | 6 - 6 F1         | 2.5 - 3.5 Fl    | 2.5 - 3.5 Fl                   | 2.5 - 3.5 Ft                    | 0-2 Ft          | 4+0 FL          | FD              | REG              | REG              |
| SAMPLE_PURPOSE   |                             | REĞ              | REG              | REG             | REG                            | HEG                             | HEG VO          | Result Of LO VO | Result DN LO VO | Result DII LO VO | Result DR. LQ VQ |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO V | Q Result DIL LO VO             | Result DIL LO VO                | Mesun Dit to vo | All DIL LO VO   | 0.32 1 4 11     | 0.33 1 < 11      | 0.33 t < U       |
| SEMIVOLATILES    | Acenaphthene                |                  |                  | 0.33 1 <        | 0 0.33 1 < 0                   | 0.33 1 < U                      | 0.33 1 4 0      | 0.00 1 < 1      | 0.33 1 4 11     | 0.33 1 4 U       | 0.33 1 < U       |
| SEMIVOLATILES    | Acenaphthylene              |                  |                  | 0,33 1 <        | U 0.33 1 < U                   | 0.33 1 < 0                      | 0.33 1 < 0      | 0.30 1 4 0      | 0.33 1 < 11     | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Anthracene                  |                  |                  | 0.33 1 <        | 0 0.33 1 < 0                   | 0.33 1 < 0                      | 0.00 1 4 11     | 0.03 1 < 0      | 0.33 1 2 1      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(a)anthracene          |                  |                  | 0.33 1 <        |                                | 0.33 1 < 0                      | 0.33 1 4 0      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(a)pyrene              |                  |                  | 0.33 1 <        |                                | 0.33 1 < U                      | 0.00 1 4 0      | 0.33 1 < 1      | 0.33 1 c U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(b)fluoranthene        |                  |                  | 0,33 7 <        | 0 0,33 1 < 0                   | 0.33 1 < 0                      | 0.00 1 4 0      | 033 1 4 1       | 0.33 1 < U      | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES    | Benzo(ghi)perylene          |                  |                  | 0.33 1 <        | U 0.33 I < U                   | 0.00   < 0                      | 0.33 1 < 1      | 0.33 1 c U      | n.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(k)/luoranthene        |                  |                  | 0,33 1 <        | U U.33 I < U<br>U 1055 ( , U   | 0.33 I < 0                      | 165 1 < 1       | 165 1 < U       | 1.65 1 < U      | 1.55 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | Benzoic Acid                |                  |                  | 1.65 1 <        |                                | 0.65 1 < 11                     | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES    | Benzyl Alcohol              |                  |                  | 0.00 1 <        | U 0.65 I < U                   | 0.33 1 < U                      | 0.33 1 < 1      | 0.33 1 < U      | 0.33 1 < U      | 0.33 t < U       | 0,33 1 < U       |
| SEMIVOLATILES    | bis{2-Chloroethoxy)methane  |                  |                  | 0.33            | 0 0.33 1 < 0                   | 0.33 1 < 1                      | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES    | bis(2 Chloroethyl)ether     |                  |                  | 0.00 1 4        | 0 0,33 1 < 0                   | 0.33 1 < U                      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 ≮ U       |
| SEMIVOLATILES    | bis(2-Chioroisopropyi)einer |                  |                  | 0.35 1 4        | U 0.33 1 2 U                   | 0.33 t < U                      | 0.33 1 « U      | 0.33 i < U      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bist2-Ethynexyljphthalate   |                  |                  | 0.00 1 4        | 10 0.33 1 4 0                  | 0.33 1 < 1                      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Butyl benzyl phinalate      |                  |                  | 0.33            | 0 0.33 1 < 0                   | 0.33 1 < 1                      | 0.33 1 < U       | 0,33 t < U       |
| SEMIVOLATILES    | Chrysene                    |                  |                  | 0.33 1 4        | 0 0.00 1 4 0<br>11 0.33 1 < 11 | 0.33 1 < U                      | 0.33 1 < U      | 0,33 1 < U      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Dibenzo(a,n)aninracene      |                  |                  | 0.33 1 4        | U 033 1 CU                     | 0.33 1 ¢ U                      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Dipenzoluran                |                  |                  | 0.00 1 <        | U 0.33 1 e U                   | 0.33 1 < U                      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Disanyi prinalate           |                  |                  | 0.33 1 -        | U 0.33 1 e U                   | 0.33 1 < U                      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | di n. Butul abthalata       |                  |                  | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U       | 0.33 < U         |
| SEMIVOLATILES    | dun-Detri ohibalate         |                  |                  | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0,33 1 < U      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| CELINOLATILES    | Eluoranthana                |                  |                  | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0,33 1 < U      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Fluorana                    |                  |                  | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U      | 0,33 1 < U       | 0.33 1 < U       |
| CELINIOLATILES   | Hevenhinnhenzene            |                  |                  | 0.33 1 <        | U 0.33 1 < U                   | 0,33 1 < U                      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorobilitadiene       |                  |                  | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0,33 1 < U      | 0.33 1 < 단      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Bexachlorocyclopentadiene   |                  |                  | 0.33 t <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachloroethane            |                  |                  | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0.33 1 < U      | 0.33, 1 < U     | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | indenp(1.2.3-cd)pyrene      |                  |                  | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Isophorane                  |                  |                  | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 × U                      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Naphthalene                 |                  |                  | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0,33 1 < U      | 0.33 1 < U      | 0.33 1 < 0      | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | Nilrobenzene                |                  |                  | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0.33 1 < U      | 0.33 1 < 0      | 0.33 1 < 0      | 0.33 1 < 0       | 0,33 1 < 0       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |                  |                  | 0.33 t <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < 0       | Q.33 1 < U       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      |                  |                  | 0,33 1 <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < 0      | 0.33 1 < 0       | 165 1 4 1        |
| SEMIVOLATILES    | Pentachlorophenol           |                  |                  | 1.65 1 <        | U 1.65 1 < U                   | 1.65 1 < U                      | 1,65 1 < 0      | 1.65 1 < U      | 1.65 1 < U      | 1.05 1 < U       |                  |
| SEMIVOLATILES    | Phenanthrene                |                  |                  | 0.33 1 <        | 0 0.33 1 < 0                   | 0.33 1 < U                      | 0.33 1 < U      | 0.33 1 < 0      | 0.33 1 < 0      | 0.33   < 0       |                  |
| SEMIVOLATILES    | Phenol                      |                  |                  | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0.33 1 < 0      | 0,33 1 < U      | 0.33 1 < 0      | 0.33 1 4 11      | 0.33 1 4 11      |
| SEMIVOLATILES    | Pyrene                      |                  |                  | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U                      | 0.33 1 < 0      | 0.33 1 < 0      |                 | 0.005 1 < 11     | 0.005 1 < 1      |
| VOLATILES        | 1,1,1-Trichloroethane       |                  |                  | 0.005 1 <       | U 0.005 1 < U                  | 0.005 1 < 0                     | 0.005 1 < 0     | 0.005 1 < 0     | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,1,2,2-Tetrachloroethane   |                  |                  | 0.005 1 <       | 0 0.005 1 < 0                  | 0.005 1 < 0                     | 0.005 1 < 0     | 0.005 1 < 0     | 0.005 1 < 0     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,1,2-Trichloroethane       |                  |                  | 0.005 1 <       | 0 0.005 1 4 0                  | 0,005 1 < 0                     | 0.005 1 < 0     | 0,005 1 4 0     | 0.005 1 4 U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichloroethane          |                  |                  | 0.005 1 <       | 0 0.005 1 < 0                  | 0.005 1 2 0                     | 0.005 7 4 0     | 0,005 1 < U     | 0.005 1 < 0     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1.1-Dichloroethene          |                  |                  | 0.005 1 <       |                                | i 0,005 t ≪ 0<br>E 0,005 t ≪ 1  | 0.005 1 ~ 1     | 0.005 1 < U     | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichloroethane          |                  |                  | 0.005 1 <       |                                | ; 0.003 i ≪ 0<br>I 0.005 i ∢ II | 0.005 1 < 0     | 0.005 1 < U     | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1.2-Uschloroelhene          |                  |                  | 0.005 1 <       |                                | / 0.000 i ⊄ 0<br>I 0.005 1 -> 0 | 0.005 1 < 0     | 0.005 1 < U     | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1.2 Dichloropropane         |                  |                  | 0.003 ) <       |                                | 1 0.05 1 2 11                   | 0.05 1 < 1      | 0.05 1 < 1)     | 0,05 1 < U      | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | 2-dutanone                  |                  |                  | 0.01 1 -        |                                | , 0,00 ¦ < 0<br>} 001 1 ∠ II    | 0.01 1 < 1      | 0.01 1 < U      | 0.01 1 < U      | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | z-Uniordetnyi vinyi ether   | · ·              |                  | 0.01 1 <        |                                | 005 1 - 0                       | 0.05 1 < 0      | 0.05 1 < 1      | 0,05 1 < 0      | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | ∠-rievanone                 | ļ                |                  | 0.00 F 2        |                                | J 0,1 1 e U                     | 0,1 1 < 1       | 0.1 1 < 0       | 0,1 1 < U       | 0.1 1 < U        | `0.1 1 < Ŭ       |
| VULATILES        | Renzant                     |                  |                  | 0.005 1 <       | U 0.005 1 < 1                  | J 0.005 t < U                   | 0.005 1 < 0     | 0.005 1 < U     | 0.005 1 < U     | 0.005 î < U      | 0.005 1 < U      |
| VOLATILES        | Bromodinhiaramathana        |                  |                  | 0.005 1 -       | U 0.005 1 < L                  | j 0.005 t ⊲ U                   | 0.005 1 < L     | 0.005 1 < U     | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILGO        | orumous norum en en arre    | 1                |                  |                 |                                |                                 |                 |                 |                 |                  |                  |

Data Evaluation Report Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



Table 3-54 Concentrations of Chemicals in Soil Samples Associated with Sump 054

| [SUMP] = SUMP054 |                           |        |           |       |        |        |          |        |           |    |    |        |         |     |    |        |       |    |      |        |        |             |        |         |      |          |              |       |    |        |          |     |           |        |           |         |  |
|------------------|---------------------------|--------|-----------|-------|--------|--------|----------|--------|-----------|----|----|--------|---------|-----|----|--------|-------|----|------|--------|--------|-------------|--------|---------|------|----------|--------------|-------|----|--------|----------|-----|-----------|--------|-----------|---------|--|
| LOCATION _CODE   |                           | 35SU   | MP054-1   | SB01  | 35     | SUMPO  | 54-SB02  | լե     | •DL54-(   | )1 |    | LH     | -DL55   | -01 |    | LH-    | DL55- | 02 |      | LH     | S54-01 |             | U U    | H-S54-  | -01  |          | LH-SS        | 5-01  |    | Li     | -S55 (   | 01  |           | LH.    | I-S55-0   | 1       |  |
| SAMPLE_NO        |                           | 35-SN  | AP54-SB   | 01-02 | 35     | -SMP54 | SB02-02  | լե     | ·DL54.0   | 31 |    | LH     | DL55    | -01 |    | ιH.    | DL55- | 02 |      | LH-S   | 54-01_ | 1           | LH     | -\$54-0 | 1_2  | u        | H-S55-1      | 01 QC |    | LH     | S55-01   | 1_1 |           | LH-    | S55-01    | _2      |  |
| SAMPLE_DATE      |                           | 8      | 9/15/2006 | 5     |        | 9/15/2 | 006      | 7      | 12/1993   | 3  |    | 7/     | 12/199  | 93  |    | 7/     | 2/199 | 3  |      | 7/1    | 2/1993 |             | 7      | /12/19  | 93   |          | 7/12/1       | 993   |    | 7.     | 12/199   | 93  |           | П      | 12/199    | 3       |  |
| DEPTH            |                           |        | 6 - 6 Ft  |       |        | 6-6    | FL       | 2.     | 5 - 3.5 F | વ  |    | 2.     | 5 · 3.5 | Fl  |    | 2.5    | - 3.5 | Fl |      | 0      | - 2 Fl |             |        | 4 • 6 F | 4    |          | 0-2          | FI    |    |        | J - 2 FI | l   |           | 3,     | 5 - 5.5 P | 1       |  |
| SAMPLE_PURPOSE   |                           |        | REG       |       |        | RË     | G        |        | REG       |    |    |        | RĘG     |     |    |        | reg   |    |      |        | REG    |             |        | REG     |      |          | FC           | )     |    |        | REG      |     |           |        | REG       |         |  |
| Test Group       | Parameter (Units = mg/kg) | Result | DIL       | LO VO | ) Resu | n D    | IL LO VO | Result | DIL       | LQ | VQ | Result | DIL     | ιo  | VQ | Result | DIL   | 10 | VQ F | Result | DIL    | <u>o vo</u> | Result | DIL     | LQ V | ) Result | DIL          | . LQ  | VQ | Result | DIL      | la  | <u>vo</u> | Result | DIL       |         |  |
| VOLATILES        | Bromolarm                 |        |           |       |        |        |          | 0.005  | 1         | <  | Ü  | 0.005  | 1       | ۲   | U  | 0.005  | 1     | <  | U    | 0.005  | 1      | < U         | 0.005  | 1       | < U  | 0.00     | 5 1          | <     | U  | 0.005  | 1        | ۲   | U         | 0.005  | 1         | < 0     |  |
| VOLATILES        | Bromomethane              |        |           |       |        |        |          | 0.01   | 1         | <  | Ų  | 0,01   | 1       | <   | U  | 0.01   | 1     | ۲  | Ų    | 0.01   | 1      | < Ų         | 0.01   | 1       | < U  | 0.0      | ri 1         | <     | U  | 0.01   | 1        | <   | U         | 0.01   | 1         | < U     |  |
| VOLATILES        | Carbon disulfide          |        |           |       |        |        |          | 0.005  | 1         | <  | Ų  | 0.005  | 1       | <   | U  | 0.005  | 1     | ۲  | U    | 0.005  | 1      | < U         | 0.005  | 1       | < U  | 0.00     | 5 1          | <     | U  | 0.005  | 1        | <   | 0         | 0,005  | 1         | < 0     |  |
| VOLATILES        | Carbon letrachloride      |        |           |       |        |        |          | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | Ų  | 0.005  | 1     | <  | U    | 0.005  | 1      | < U         | 0.005  | 1       | < 0  | 0.00     | 5 1          | <     | Ų  | 0.005  | 1        | <   | Ų         | 0.005  | 1         | < U     |  |
| VOLATILES        | Chlorobenzene             |        |           |       |        |        |          | 0.005  | 1         | <  | 0  | 0.005  | 1       | <   | Ų  | 0,005  | 1     | <  | U    | 0.005  | 1      | < U         | 0.005  | 1       | < U  | 0.00     | 6 1          | <     | Ų  | 0.005  | 1        | <   | U         | 0.005  | 1         | < U     |  |
| VOLATILES        | Chloroethane              |        |           |       |        |        |          | 0.01   | 1         | ۲  | U  | Q.01   | 1       | ۲   | U  | 0,01   | 1     | <  | U    | 0.01   | 1      | < U         | 0.01   | 1       | < ل  | 0.0      | 11 1         | <     | U  | 0.01   | 1        | ۲   | U         | 0.01   | 1         | < 0     |  |
| VOLATILES        | Chloroform                |        |           |       |        |        |          | 0.005  | \$        | ٢  | U  | 0.005  | 1       | <   | U  | 0.005  | 1     | <  | U    | 0.005  | 1      | ۷ v         | 0.005  | 1       | < L  | 0.00     | 15 1         | ۲     | U  | 0.005  | 1        | ۲   | U         | 0.005  | 1         | < U<br> |  |
| VOLATILES        | Chloromethane             |        |           |       |        |        |          | 0.01   | ែ         | <  | Ų  | 0.01   | 1       | <   | U  | 0.01   | 1     | <  | U    | 0.01   | 1      | < U         | 0.01   | 1       | < L  | 0.0      | 15 1         | ۲     | Ų  | 0.01   | 1        | ۲   | U         | 0.01   | 1         | < 0     |  |
| VOLATILES        | cis-1,3-Dichloropropene   |        |           |       |        |        |          | 0.005  | 1         | ۲  | υ  | 0.005  | 1       | <   | U  | 0.005  | 1     | ۲  | U    | 0.005  | 1      | < Ų         | 0.005  | 1       | < U  | 0.00     | 5 1          | <     | Ų  | 0.005  | 1        | <   | U .       | 0.005  | 1         | < 0     |  |
| VOLATILES        | Dibromachloromethane      |        |           |       |        |        |          | 0.005  | 1         | <  | ប  | 0.005  | 1       | <   | U  | 0.005  | 1     | <  | U    | 0.005  | 1      | < U         | 0.005  | 1       | < U  | 0.00     | 5 1          | <     | Ų  | 0.005  | 1        | <   | U         | 0.005  | 1         | < 0     |  |
| VOLATILES        | Ethylbenzene              |        |           |       |        |        |          | 0,005  | 1         | <  | U  | 0.005  | 1       | <   | U  | 0.005  | 1     | ۲  | Ų    | 0.005  | 1      | < U         | 0.005  | ſ       | < U  | 0.00     | 15 1         | <     | U  | 0.005  | 1        | <   | U.        | 0.005  | 1         | < 0     |  |
| VOLATILES        | Methyl isobutyl ketone    | ļ      |           |       |        |        |          | 0.05   | 1         | ۲  | U  | 0.05   | 1       | <   | U  | 0.05   | 1     | ۲  | Ų    | 0.05   | i      | < U         | 0.05   | ١       | < U  | 0.0      | 15 1         | <     | U  | 0.05   | 1        | <   | Ų         | 0.05   | 1         | < U     |  |
| VOLATILES        | Methylene chloride        |        |           |       |        |        |          | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | U  | 0.005  | 1     | ۲  | U    | 0.005  | 1      | < U         | 0.005  | ٢       | < (  | 0.00     | 15 1         | <     | U  | 0,005  | 1        | <   | Û.        | 0.005  | 1         | < U     |  |
| VOLATILES        | Styrene                   |        |           |       |        |        |          | 0.005  | 1         | <  | U  | 0.005  | ٢       | <   | U  | 0.005  | 1     | <  | U    | 0.005  | 1      | < U         | 0.005  | 1       | < l  | 0.00     | 15 1         | <     | U  | 0.005  | 1        | <   | U         | 0.005  | 1         | < 0     |  |
| VOLATILES        | Tetrachloroethene         | 1      |           |       |        |        |          | 0.005  | ŧ         | <  | U  | 0.005  | 1       | <   | U  | 0.005  | 1     | <  | U    | 0.005  | 1      | < U         | 0.005  | 1       | < (  | 0.00     | )5 1         | ۲     | U  | 0.005  | 1        | <   | U         | 0.005  | 1         | < U     |  |
| VOLATILES        | Toluene                   |        |           |       |        |        |          | 0.005  | t         | <  | บ  | 0.005  | 1       | <   | U  | 0.005  | 1     | <  | Ų    | 0.005  | 1      | < U         | 0,005  | 1       | < l  | / 0.00   | 15 1         | <     | U  | 0.005  | 1        | ۲   | U         | 0.005  | 1         | < U     |  |
| VOLATILES        | (rans-1,3-Dichloropropene |        |           |       |        |        |          | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | Ų  | 0.005  | 1     | <  | U    | 0.005  | 1      | < U         | 0.005  | 1       | < l  | 0.00     | 15 1         | <     | U  | 0.005  | 1        | <   | U         | 0.005  | 1         | < U     |  |
| VOLATILES        | Trichloroathana           |        |           |       |        |        |          | 0.005  | 1         | <  | IJ | 0.005  | 1       | 4   | U  | 0.005  | 1     | <  | U    | 0.005  | 1      | < U         | 0.005  | 1       | < (  | J 0.00   | )5 1         | <     | U  | 0.005  | 1        | ۲   | U         | 0.005  | 1         | < U     |  |
| VOLATILES        | Vinyl acelate             |        |           |       |        |        |          | 0.05   | 1         | <  | U  | 0.05   | 1       | <   | U  | 0.05   | 1     | <  | Ų    | 0.05   | 1      | < U         | 0.05   | 1       | < l  | J 0.0    | )5 1         | <     | U  | 0.05   | 1        | <   | U         | 0.05   | 1         | < U     |  |
| VOLATILES        | Vinyl chloride            |        |           |       |        |        |          | 0.01   | 1         | <  | U  | 0.01   | 1       | <   | U  | 0.01   | 1     | <  | U    | 0.01   | 1      | < Ų         | 0.01   | 1       | < (  | ) 0.0    | )1 1         | <     | IJ | 0.01   | 1        | <   | U         | 0.01   | 1         | < U     |  |
| VOLATILES        | Xylenes, Total            |        |           |       |        |        |          | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | U  | 0.005  | 1     | <  | U    | 0.005  | 1      | < U         | 0.005  | 1       | < {  | 0.00     | <b>)</b> 5 1 | <     | V  | 0.005  | 1        | <   | <u> </u>  | 0.005  | 1         | < U     |  |

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps

|                  | Table 3-55<br>Concentrations of Chemicals in Soil Samples Associated with Sump 055 |
|------------------|--|
| (SUMP) = SUMP055 |  |

| (SUMP) = SUMP055 |                             | and Lucest 4 OPA1 | 100111 /D004 0000 | I H DI EX M            | LU.DEEL01      | 1 H.DI 55.02     | LH-S54-01       | LH-S54-01                     | LH-S55-01                   | LH-S55-01                 | LH-S55-01         |
|------------------|-----------------------------|-------------------|-------------------|------------------------|----------------|------------------|-----------------|-------------------------------|-----------------------------|---------------------------|-------------------|
| LOCATION_CODE    |                             | 355UMP054-5801    | 3550000004-3602   |                        | LP-DL55-01     | LH-DL55-02       | 14-554-01 1     | LH-\$54-01_2                  | LH-S55-01 QC                | LH-S55-01_1               | LH-S55-01_2       |
| SAMPLE_NO        |                             | 35-5MP54-5801-02  | 35-5MP54-5002-02  | 7/10/1003              | 7/19/1003      | 7/10/1003        | 7/12/1993       | 7/12/1993                     | 7/12/1993                   | 7/12/1993                 | 7/12/1993         |
| SAMPLE_DATE      |                             | 9/15/2006         | 5/15/2006         | 712/1993               | 26 26 50       | 25.355           | 0.25            | 4 - 6 Fl                      | 0 · 2 FI                    | 0-2FI                     | 3.5 - 5.5 FI      |
| DEPTH            |                             | 6-67              | 5 · 5 PI          | 2.3 • 3.3 m            | 2.3 • 3.3 F    | 2.0-0,011<br>EFG | BEG             | REG                           | FD                          | 860                       | REG               |
| SAMPLE_PURPOSE   |                             | HEG NO. NO.       | HEG               | neu<br>Devuk Dil LO VO | Read DIL LO VO | Pasult Olt LO VO | Besult DILLO VO | Besuit DIL LO VQ              | Result DIL LQ VQ            | Result DIL LO VO          | Result Dil, LO VQ |
| Tesl Group       | Parameter (Units = mg/Kg)   | Result DIL LO VO  | Result OIL LU VO  | Ann 1                  | 0.32 1 11      |                  | 0.33 1 4 11     | 0.33 1 < U                    | 0.33 1 < U                  | 0.33 1 < U                | 0.33 1 < U        |
| EXPLOSIVES       | 2,4-Uintrotoiuene           |                   |                   | 0.33 1 < 0             | 0.33 1 2 1     | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 × U                    | 0.33 1 < U                  | 0.33 1 < U                | 0.33 t < U        |
| EXPLOSIVES       | 2,5-Uthtrololuene           | (3)(00 (          | 5070 1            | 5040 1                 | 4560 1         | 13400 1          | 3960 1          | 5480 1                        | 5960 1                      | 5010 1                    | 4710 1            |
| METALS           | Alumnum                     | 0.117 1 11        | 03/0 1            | 3 1 - 11               | 3 1 2 1        | 3 1 < 0          | 31 < 0          | 3 1 < U                       | 3 1 < 1                     | 3 1                       | 3 1 × U           |
| METALS           | Animony                     |                   | 0.112 1 0         | 10 1                   | 19 1           | 17 1             | 23.1 1          | 1.6 1                         | 2.8                         | 2.6 1                     | 2.1 1             |
| METALS           | Arsenic                     | 67.4 1            | 501 1             | 54.6 1                 | 65.7 1         | 67.9 1           | 30.4 t          | 28 1                          | 55.9 1                      | 52.2 1                    | 31.8 1            |
| METALO           | Bandium                     | 0.246 1 1         | 0.13 1 .1 .1      | <b>0</b> -1.0          |                |                  |                 |                               |                             |                           |                   |
| METALO           | Codmium                     | 0.040 / 0 0       | 0.057 1           | 1120                   | 11 < 0         | 11 < 0           | 11 < 0          | 11 e U                        | 11 < 0                      | 11 < U                    | 11 < U            |
| METALS           | Catrium                     | 590.1             | 480 1             | 750 1                  | 2180 1         | 935 1            | 1540 1          | 825 1                         | 1460 1                      | 1410 1                    | 896 1             |
| METALS           | Chramium                    | 10 1              | 655 1             | 12.9 1                 | 21.1 1         | 18.5 1           | 15.7 1          | 6.8 1                         | 19.9 1                      | 15.3 1                    | 11.6 1            |
| METALO           | Ceball                      | 571 1             | 6.41 1            | 3.3 1                  | 7.5 1          | 7.1 1            | 2.2 1           | 4,4 1                         | 7.2 1                       | 5.9 1                     | 5.4 1             |
| NETALC           | Conper                      | 4.33 1            | 3.87 1            | 1.9 1                  | 3.4 1          | 3.9 1            | 2,2 1           | 2 1                           | 7 1                         | 7.2 1                     | 2.5 1             |
| HETALS           | Ovanida Total               |                   |                   | 0.5 1 < U              | 0.5 1 < U      | 0.5 1 < U        | 0.5 1 < 0       | 0.5 t < U                     | 0.5 1 < U                   | 0.5 1 < U                 | 0.5 1 < U         |
| METALS           | iran                        | 9780 1            | 9600 1            | 9940 1                 | 7580 1         | 12700 1          | 20000 1         | 9410 1                        | 15900 1                     | 11300 1                   | 11200 1           |
| METALS           | lead                        | 4.95 1            | 5.16 1            | 6.3 1                  | 9.4 1          | 7.1 1            | 11 < U          | 7.6 1                         | 37.4 1                      | 14,5 1                    | 5.7 1             |
| METALS           | Mannesium                   | 980               | 882 1             | 313 1                  | 195 1          | 732 1            | 175 1           | 317 1                         | 707 1                       | 654 1                     | 300 1             |
| METALS           | Manganese                   | 31.7 1            | 47.9 1            | 91 1                   | 445 1          | 140 1            | 73,6 1          | 36.6 1                        | 271 1                       | 212 1                     | 105 1             |
| METALS           | Mercury                     | 0.0175 1 J J      | 0.282 1 U         | 0.1 1 < U              | 0.1 1 < U      | 0.1 1 < U        | 0.1 1 < U       | t 0.1 1 < U                   | 0.1 1 < U                   | 0.1 1 < U                 | 0.1 1 < U         |
| METALS           | Nickel                      | 7.37 1            | 7.84 1            |                        |                |                  |                 |                               |                             |                           |                   |
| METALS           | Potassium                   | 414 1             | 380 1             | 360 1                  | 300 1          | 923 1            | 197 1           | 299 1                         | 348 1                       | 312 1                     | 268 1             |
| METALS           | Selenium                    | 0.233 1 U         | 0.225 î U         | 11 e U                 | 11 < U         | 11 < U           | 11 < 1          | 1 1 1 < U                     | 11 < 1                      | 11 < IJ                   | 1 1 < U           |
| METALS           | Silver                      | 1.69 1 U          | 1.59 1 U          | 11 < 0                 | 11 < U         | 11 < U           | 11 < 1          | 1 1 t ≪ U                     | 11 < 1                      | 11 < U                    | ii «U             |
| METALS           | Sadium                      | 197 1             | 151 1             |                        |                |                  |                 |                               |                             |                           |                   |
| METALS           | Strontium                   |                   |                   | 9.6 1                  | 14.4 1         | 9.1 1            | 6.7 1           | 8.1 1                         | 8.6 1                       | 6.7 1                     | 11,4 1            |
| METALS           | Thallium                    | 0.0564 1          | 0,0471 1          |                        |                |                  |                 |                               |                             |                           |                   |
| METALS           | Vanadium                    | 14.8              | 13.9 1            |                        |                |                  |                 |                               |                             |                           |                   |
| METALS           | Zinc                        | 23.2 1            | 22.3 1            | B,6 1                  | 183 1          | 20.4 1           | 55.5 1          | 12.4 1                        | 132 1                       | 144 1                     | 8.1 1             |
| SEMIVOLATILES    | 1.2.4 Trichlarobenzene      |                   |                   | 0.33 1 < U             | 0.33 1 < U     | 0,33 1 < U       | ∣ 0.33 1 < t    | ) 0.33 1 < U                  | 0.33 1 < U                  | 0.33 1 < U                | 0.33 1 < 0        |
| SEMIVOLATILES    | 1,2-Dichlorobenzene         |                   |                   | 0.33 1 < U             | 0.33 1 < U     | 0.33 1 < U       | I 0.33 1 < L    | ) 0.33 1 < U                  | 0.33 1 < U                  | 0.33 1 < 0                | 0.33 1 < 0        |
| SEMIVOLATILES    | 1,3-Dichlorobenzene         |                   |                   | 0.33 1 < U             | 0.33 1 < U     | 0.33 1 < U       | I 0.33 1 < L    | J 0,33 1 < U                  | 0.33 1 < U                  | 0.33 1 < 0                | 0.33 1 < 0        |
| SEMIVOLATILES    | 1,4-Dichlorobenzene         |                   |                   | 0.33 1 < U             | 0.33 i < U     | 0.33 1 < U       | I 0,33 1 < U    | J 0.33 1 < U                  | 0.33 1 < 0                  | 0.33 1 < 0                | 0,33 1 < 0        |
| SEMIVOLATILES    | 2.4.5 Trichlorophenol       |                   |                   | 1.65 1 < U             | 1.65 î < U     | 1.65 1 < U       | 1.65 1 < 1      | J 1.65 1 < U                  | 1.65 1 < 0                  | 1.65 1 < U                | 1.55 1 < U        |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol       |                   |                   | 0.33 1 « U             | 0.33 1 < U     | 0.33 1 < U       | U 0.33 1 < 0    | ) 0.33 1 < U                  | 0.33 1 < 0                  | 0.33 1 < 0                | 0.33 1 < 0        |
| SEMIVOLATILES    | 2,4-Dichlorophenol          |                   |                   | 0.33 1 < U             | 0,33 1 < U     | 0.33 1 < U       | 0.33 1 < L      | ) 0.33 1 < U                  | 0.33 1 < U                  | 0.33 1 < U                | 0.33 1 < 0        |
| SEMIVOLATILES    | 2,4-Dimethylphenol          |                   |                   | 0.33 1 < U             | 0.33 1 < U     | 0.33 1 < U       | 0.33 1 < t      | ) 0.33 1 < U                  | 0.33 1 < 0                  | 0.33 1 < 0                | 0.33 1 < 0        |
| SEMIVOLATILES    | 2.4 Dinitrophenol           |                   |                   | 1,65 1 < U             | 1.65 1 < 1     | 1.65 1 < U       | I 1.65 1 < L    | J 1.85 1 < U                  | 1.65 1 < U                  | 1,65 1 < 0                | 1,00 I < U        |
| SEMIVOLATILES    | 2-Chioronaphihalene         |                   |                   | 0.33 1 < U             | 0.33 1 < U     | 0.33 1 < U       | 1 0.33 1 < L    | ) 0,33 1 < U                  | 0.33 1 < 0                  | 0.33 1 < 0                | 0.00 1 < 0        |
| SEMIVOLATILES    | 2-Chlorophenol              |                   |                   | 0.33 1 < U             | 0.33 1 < U     | 0.33 1 < U       | ) 0.33 1 < U    | J 0.33 1 < U                  | 0,33 1 < 0                  | 0.33 1 < 0                | 0.33 1 < 0        |
| SEMIVOLATILES    | 2-Methylnaphthalene         | •                 |                   | 0.33 1 < U             | 0,33 1 < U     | 0.33 1 < U       | 1 0,33 1 < 1    | J 0,33 1 < U                  | 0,33 1 < 0                  | 0.33 } < 0                | 0.33 1 4 0        |
| SEMIVOLATILES    | 2-Melhylphenol              |                   |                   | 0.33 1 < U             | 0.33 1 < U     | 0.33 1 < U       | ) 0.33 1 < 1    | J 0.33 1 < U                  | 0.33 } < 0                  | 0.33 1 < 0                | 0.00 1 < 0        |
| SEMIVOLATILES    | 2-Nitroaniline              |                   |                   | 1.65 1 < U             | 1.65 1 < 1     | 1.65 1 < U       | J 1.65 1 < 1    | ງ 1.65 1 < U                  | 1.65 1 < 0                  | 1.65 1 < 0                | 0.00 1 < 0        |
| SEMIVOLATILES    | 2-Nitrophenol               |                   |                   | 0.33 1 < U             | 0.33 1 < U     | 0.33 1 < 0       | ) 0.33 1 < 0    | J 0.33 1 < U                  | 0.33 1 < 0                  |                           |                   |
| SEMIVOLATILES    | 3,3-Dichlorobenzidine       |                   |                   | 0.65 f < U             | 0.65 i < L     | 0.65 1 < 0.      | 0.65 1 <        | J 0.65 1 < U                  | 0.65 1 < 0                  | 1.05 1 < 0                | 165 1 ~ 11        |
| SEMIVOLATILES    | 3-Nitroaniline              |                   |                   | 1.65 1 < U             | 1.65 1 < L     | 1 1.65 1 < L     | ) 1.65 1 < 1    | j 1.65 } < U                  | 1.55 1 < 0                  | 1,00 1 4 0                | 1.00 1 4 0        |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol  |                   |                   | 1.65 1 < U             | 1.65 1 < 1     | I,65 1 < U       | J 1,65 1 < 1    | ∪ 1.65, 1 < U                 | 1,00 ) < U                  | 1.00 1 4 0                |                   |
| SEMIVOLATILES    | 4-Bromophenyl phenyl elher  |                   |                   | 0.33 1 < U             | 0.33 1 < l     | 1 0.33 1 < L     | J 0.33 1 <      | ⊔ 0.33 1 < U                  | 0.001 < 0                   | 0.55 1 4 0                |                   |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     |                   |                   | 0.65 1 < U             | 0.65 1 < L     | 0.65 1 < L       | ) 0.65 1 <      | U 0,65 1 < U                  | 0.00 I < U                  | 0.65 1 - 11               |                   |
| SEMIVOLATILES    | 4-Chloroaniline             | 1                 |                   | 0.65 i < U             | 0.65 1 < L     | 0.65 1 < 1       | J 0,65 1 <      | ບ 0.65 1 < ປ                  | U.03 I < U                  | U > 1 ¢0,0                |                   |
| SEMIVOLATILES    | 4-Chiarophenyl phenyl ether | 1                 |                   | 0,33 1 < U             | 0.33 1 < L     | ) 0,33 1 < U     | ) 0,33 1 <      | ∪ 0.33 ī < U<br>⊯ 0.90 4 - '' | 0.33 ! < U                  | ∪ > ۱ دەس∪<br>۱۱ - ۱ دەس∪ | 0.33 1 - 11       |
| SEMIVOLATILÉS    | 4-Methylphenol              |                   |                   | 0.33 1 < U             | 0.33 1 < L     | ) 0.33 1 < L     | J 0.33 1 <      | u 0.331 < U                   | 1 U.33 1 4 U                | 165 1 - 1                 |                   |
| SEMIVOLATILES    | 4-Nitroaniline              |                   |                   | 1.65 1 < L             | 1,65 1 < 1     | ) 1.65 1 < L     | J 1.65 1 <      | U 1.65 I < U                  | }00   < V<br>  >   00,5   - | 1.00 1 4 0                | 165 1 c 1         |
| SEMIVOLATILES    | 4-Nitrophenol               |                   |                   | 1.65 1 < L             | 1.65 1 < U     | J 1.65 } < \     | J 1.55 1 <      | U 1.00 ? < U                  | 1.00 1 < 0                  | 1.00 ( K U                |                   |





 Table 3-55

 Concentrations of Chemicals in Soil Samples Associated with Sump 055

|                                |                                  |                    |                        |              |                         | •            |                  | -               |                  |                   |                  |
|--------------------------------|----------------------------------|--------------------|------------------------|--------------|-------------------------|--------------|------------------|-----------------|------------------|-------------------|------------------|
| SUMPLE SUMPOSS                 |                                  |                    | 2561040054 6002        | IN DISCOL    | 1 M.DI 65-01            | 1 H-D1 55-02 | 14.554.01        | 194-554-01      | LH-S55-01        | LH-S55-01         | LH-S55-01        |
| LOCATION GODE                  |                                  | 355UMP054-5601     | 3550000054-5502        |              |                         | 1 M-D1 55-02 | 19.954.01 1      | H-S54-01 2      | LH-555-01 OC     | LH-\$55-01_1      | LH-S55-01 2      |
| SAMPLE_NO                      |                                  | 35-5MP54-5801-02   | 35-5MP54-5002-02       | 2/(2/1002    | 7010000                 | 2/12/1003    | 7/12/1003        | 7/10/1001       | 7/12/1993        | 7/12/1993         | 7/12/1993        |
| SAMPLE_DATE                    |                                  | 9/15/2006          | 9/15/2006              | 1112/1993    | 1112/1993               | 112/1888     | 0.25             | 1.45            | 0 - 2 F1         | 0,2Fi             | 3.5 - 5.5 FI     |
| DEPTH                          |                                  | 0-070              | 0-071                  | 2.3 - 3.3 FI | 2.3 3.3 71              | 2.0 10.0 P   | 050              | REG             | FD               | REG               | REG              |
| SAMPLE_PUHPOSE                 | Description (1) Jaile - marfied) | REG DAVIS DE LO NO | Reg<br>Devit Dil LO VO |              | NEG<br>L Darul Di LO VO | Date IN VO   | Retuit Dil LO VO | Besult DILLO VO | Besult DIL 10 VO | Besult Dil. LO VO | Result DIL LO VO |
| CELINIOL ATTLES                | Parameter (onlis = mgukg)        | HESUI DIL LO VO    | Hestil Dit Co Vo       | 0.22 1 - 11  | Ann die La Va           | 0.22 1 - 11  | 0.13 1 - 11      | 0.33 1 × U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Acenaphiliene                    |                    |                        | 0.00 1 < 0   | 0.03 1 < 0              | 0.00 1 < 11  | 0.33 1 4 11      | 0.33 1 2 1      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Acenaphinyiene                   |                    |                        | 0.33 1 4 0   | 0.33 1 4 11             | 0.33 1 4 11  | 0.33 1 < 11      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Rentacene<br>Renta(a)anihracene  |                    |                        | 0.13 1 4 11  | 0.33 1 < U              | 0.33 1 4 11  | 0.33 1 4 11      | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES<br>SEMIVOLATILES | Benzolajanmacene                 |                    |                        | 0.33 1 < 0   | 0.33 1 < 11             | 0.33 1 < 11  | 0.33 1 2 0       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMINOLATILES                  | Benze (b) fiverenthene           |                    |                        | 0.03 1 4 11  | 0.33 1 < 11             | 0.33 1 4 11  | 0.33 1 - 0       | 0.33 1 < 1      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMINOLATILES                  | Benzo(obi)neo/ene                |                    |                        | 0.33 1 < 11  | 0.33 1 < 1              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 t < U       |
| CLANCOLATILES                  | Benzo(ghi)perylene               |                    |                        | 0.33 1 4 11  | 0.30 1 < 0              | 0.33 t < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES<br>SEMIVOLATILES | Benzoix heid                     |                    |                        | 165 1 4 16   | 165 1 2 11              | 165 1 < 1    | 165 1 2 0        | 1.65 1 < 1/     | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < U       |
| SEMIVOLATILES                  | Benzul Alcohol                   |                    |                        | 0.85 1 c U   | 0.65 1 < 1              | 0.65 1 < 0   | 0.65 1 < U       | 0.65 1 < U      | 0.65 1 < U       | 0.65 1 < U        | 0.65 1 < U       |
| SEMIVOLATILES                  | his/2.Chloroothavy/methane       |                    |                        | 0.33 1 < 11  | 0.33 1 < 1              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0,33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMINOLATH ES                  | bis(2-Chloroethul)ethor          |                    |                        | 0.33 1 4 11  | 0.33 1 < 11             | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether      |                    |                        | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMINOLATILES                  | his/2-Ethylheyyllohthalate       |                    |                        | 0.33 1 4 1   | 0.33 1 4 1              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 t < U       | 0,33 1 < U        | 0.33 1 < U       |
| SENIVOLATILES                  | But / henzy / nhthalate          |                    |                        | 0.33 1 < U   | 0.33 1 < 1              | 0.33 1 < 1   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Chrysene                         |                    |                        | 0.33 1 < U   | 0.33 t < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0,33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMMOLATILES                   | Dihenzo(a h)anihracene           |                    |                        | 0.33 1 4 0   | 0.33 1 < U              | 0.33 1 < 0   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 I < U       |
| SEMIVOLATILES                  | Dibenzofuran                     |                    |                        | 0.33 i < U   | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 t < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMINOLATILES                  | Diethy philosiale                |                    |                        | 0.33 1 4 U   | 0.33 1 c U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Dimethyl nhthalate               |                    |                        | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | di n-Butvi obihalate             |                    |                        | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | ri-n-Ocivi phihalate             |                    |                        | 0.33 1 < 1   | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0,33 1 < U        | 0,33 i < U       |
| SEMIVOLATILES                  | Fluoranthene                     |                    |                        | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Fluorene                         |                    |                        | 0.33 1 < U   | 0.33 t < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Hexachiorobenzene                |                    |                        | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Hexachlorobutadlene              |                    |                        | 0.33 1 < 0   | 0.33 i < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 t < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Hexachlorocyclopentadlene        |                    |                        | 0.33 f < U   | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Hexachloroethane                 |                    |                        | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Indeno(1.2.3-cd)pyrene           |                    |                        | 0.33 1 < U   | 0.33 I < U              | 0,33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Isophorone                       |                    |                        | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Naphihalene                      |                    |                        | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U   | 0,33 † < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Nitrobenzene                     |                    |                        | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamina       |                    |                        | 0.33 1 < U   | 0,33 1 < U              | 0.33 1 < U   | 0.33 î < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine           |                    |                        | 0.33 t < U   | I 0.33 1 < U            | 0.33 1 < Ų   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES                  | Pentachlorophenol                |                    |                        | 1.65 1 < U   | I 1.65 1 < U            | 1.65 1 < U   | 1,65 1 < U       | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < U       |
| SEMIVOLATILES                  | Phenanihrene                     |                    |                        | 0.33 1 < U   | I 0.33 1 < U            | 0,33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | I 0.33 1 < U     |
| SEMIVOLATILES                  | Phenol                           |                    |                        | 0.33 1 < 13  | I 0.33 1 ⊂ U            | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0,33 1 < U        | I 0.33 1 < U     |
| SEMIVOLATILES                  | Pyrene                           |                    |                        | 0.33 1 < U   | I 0.33 1 < U            | 0.33 1 < U   | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < 0       |
| VOLATILES                      | 1,1,1-Trichloroethane            |                    |                        | 0.005 1 < L  | I 0.005 1 < U           | 0.005 1 < U  | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U       | I 0.005 1 < U    |
| VOLATILES                      | 1.1.2.2-Tetrachloroethane        |                    |                        | 0.005 1 < L  | I 0,005 1 < U           | 0.005 1 < U  | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |
| VOLATILES                      | 1,1,2-Trichlorosthane            |                    |                        | 0.005 1 < L  | / 0.005 1 < U           | 0.005 i < U  | 0.005 1 < U      | 0.005 t < U     | 0.005 f < U      | 0.005 1 < U       | U 0.005 1 < U    |
| VOLATILES                      | 1,1-Dichloroethane               |                    |                        | 0.005 1 < 1  | J 0.005 1 < U           | 0.005 1 < U  | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U       | U 0.005 1 < U    |
| VOLATILES                      | 1,1-Dichloroethene               |                    |                        | 0.005 1 < L  | J 0.005 1 < U           | 0.005 1 < U  | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U       | 0.005 I < U      |
| VOLATILES                      | 1,2-Dichloroethane               |                    |                        | 0.005 1 < L  | ) 0.005 1 < ປ           | 0.005 1 < U  | 0.005 1 < U      | 0.005 1 < U     | 0,005 1 < U      | 0.005 1 < U       | J 0.005 1 < U    |
| VOLATILES                      | 1.2 Dichloroelhene               |                    |                        | 0.005 i < l  | ) 0.005 t < U           | 0.005 1 < U  | 0.005 t < U      | 0.005 1 < U     | 0,005 1 < U      | 0.005 1 < 0       | 0.005 1 < U      |
| VOLATILES                      | 1,2-Dichloropropane              |                    |                        | 0.005 i < l  | ) 0,005 t < U           | 0.005 1 < U  | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0,005 1 < 0       | i 0.005 1 < U    |
| VOLATILES                      | 2-Bulanone                       | 1                  |                        | 0.05 î < l   | J 0.05 1 < U            | 0.05 1 < U   | 0.05 1 < U       | 0.05 1 < U      | 0.05 1 < U       | 0.05 t < U        | J 0.05 1 < U     |
| VOLATILES                      | 2-Chloroethyl vinyl ether        | ĺ                  |                        | 0.01 1 < L   | J 0,01 1 < Ü            | 0.01 1 < U   | 0.01 1 < U       | 0.01 1 < U      | 0.01 1 < U       | 0.01 1 < L        | ) 0.01 1 < U     |
| VOLATILES                      | 2-Hexanone                       |                    |                        | 0.05 1 < l   | J 0.05 1 < U            | 0.05 1 < U   | 0.05 1 < 0       | 0.05 1 < U      | 0.05 1 < U       | 0.05 1 < L        | ) 0,05 1 < U     |
| VOLATILES                      | Acetone                          |                    |                        | 0.1 1 < l    | J 0.1 1 < U             | 0.1 1 < U    | 0.1 t < U        | 0.1 1 < U       | 0.1 1 < U        | 0.1 1 < L         | ) 0.1 1 < U      |
| VOLATILES                      | Benzene                          |                    |                        | 0.005 f < l  | J 0.005 1 < U           | 0.005 1 < U  | 0.005 i < L      | 0.005 1 < 강     | 0.005 1 < U      | 0.005 1 < U       | J 0.005 1 < U    |
| VOLATILES                      | Bromodichloromathane             | 1                  |                        | 0.005 i < l  | J 0.005 1 < U           | 0.005 1 < 0  | 0.005 1 < L      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < (       | J 0.005 1 < U    |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



 Table 3-55

 Concentrations of Chemicals in Soil Samples Associated with Sump 055

| [SUMP] = SUMP055 |                           |        |           |       |        |         |        |        |         |       |       |        |        |      | -      |         |      |    |        |        |     |    |        |               |      |    |        |        |      |    |        |         |     |    |        |          |    |    |
|------------------|---------------------------|--------|-----------|-------|--------|---------|--------|--------|---------|-------|-------|--------|--------|------|--------|---------|------|----|--------|--------|-----|----|--------|---------------|------|----|--------|--------|------|----|--------|---------|-----|----|--------|----------|----|----|
| LOCATION _CODE   |                           | 35SL   | JMP054-8  | B01   | 358    | UMP054  | -SB02  | LH     | DL54-   | 01    |       | LH-DI  | L55-01 | 1    | UH     | DL55    | 5-02 |    | LH-    | S54-(  | 01  |    | U      | - <b>S</b> 54 | 01   |    | Ú      | H-S55  | -01  |    | լե     | ·S55-   | 01  |    | Ų      | 1-\$55-0 | )1 |    |
| SAMPLE_NO        |                           | 35-SM  | AP54-SBC  | 01-02 | 35-S   | MP54-S  | B02-02 | LH     | ·DL54-  | 01    |       | 1.H-DI | L55-01 | 1    | LH     | DLS     | i-02 |    | LH-S   | 54-0   | 1_1 |    | LH     | S54-0         | )1_2 |    | LH-    | S55-0  | 1 00 |    | LH     | S55-0   | 1_1 |    | ٤H     | -S55-01  | 2  |    |
| SAMPLE_DATE      |                           | 5      | 9/15/2006 |       |        | 9/15/20 | 06     | 7/     | 12/199  | 3     |       | 7/12/  | /1993  |      | 7.     | 12/19   | 93   |    | 7/1    | 2/199  | 33  |    | 7      | /12/19        | 93   |    | 7      | /12/19 | 93   |    | 7/     | 12/19   | 93  |    | 7.     | /12/199  | 3  |    |
| DEPTH            |                           |        | 6 - 6 F1  |       |        | 6 · 6 F | ય      | 2.:    | 5 - 3.5 | FI    |       | 2.5 -  | 3.5 FI |      | 2.     | 5 • 3.5 | FI   |    | 0      | • 2 FI | (   |    |        | 4-6F          | 7    |    |        | 0.21   | 1    |    |        | ) • 2 F | 1   |    | 3.     | 5 - 5.5  | Fi |    |
| SAMPLE_PURPOSE   |                           |        | REĠ       |       |        | REG     |        |        | REG     |       |       | 88     | EG     |      |        | REG     |      |    | ł      | REG    |     |    |        | REG           |      |    |        | FD     |      |    |        | REG     |     |    |        | REG      |    |    |
| Test Group       | Parameter (Units = mg/kg) | Result | DIL I     | 0 VQ  | Result | DIL     | LO VO  | Result | DIL     | LO VO | Resul | t Di   | IL LO  | a va | Result | ÐIL     | LQ   | VQ | Result | DIL    | LQ  | VQ | Result | DIL           | LQ   | VQ | Result | DIL    | LQ   | VQ | Result | DIL     | ιQ  | VQ | Result | DIL      | LQ | VO |
| VOLATILES        | Bromoform                 |        |           |       |        |         |        | 0.005  | 1       | < 0   | 0.00  | )5 1   | 1 <    | : U  | 0.005  | 1       | <    | Ų  | 0.005  | 1      | <   | U  | 0.005  | 1             | <    | U  | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  | 0.005  | 1        | <  | T  |
| VOLATILES        | Bromomethane              |        |           |       |        |         |        | 0.01   | 1       | < U   | 0.0   | )1 1   | ه ا    | : U  | 0.01   | t       | <    | U  | 0.01   | 1      | <   | υ  | 0.01   | 1             | <    | U  | 0.01   | 1      | <    | บ  | 0.01   | 1       | <   | U  | 0.01   | 1        | <  | U  |
| VOLATILES        | Carbon disulfide          |        |           |       |        |         |        | 0.005  | 1       | < U   | 0,00  | 15 1   | ه ۱    | : U  | 0.005  | t       | ۲    | U  | 0.005  | 1      | <   | υ  | 0.005  | 1             | <    | U  | 0.005  | 1      | <    | υ  | 0.005  | 1       | <   | υ  | 0.005  | 1        | <  | U  |
| VOLATILES        | Garbon tetrachloride      |        |           |       |        |         |        | 0.005  | 1       | ح U   | 0.00  | 15 1   |        | U S  | 0.005  | 1       | ۲    | U  | 0.005  | 1      | <   | υ  | 0.005  | - İ           | ۲    | U  | 0.005  | 1      | <    | υ  | 0.005  | 1       | <   | U  | 0.005  | 1        | <  | υ  |
| VOLATILES        | Chlorobenzene             |        |           |       |        |         |        | 0.005  | ۶       | < U   | 0.00  | 5 1    | 1 4    | : U  | 0.005  | ٢       | <    | U  | 0.005  | 1      | <   | U  | 0.005  | 1             | <    | U  | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | Ų  | 0.005  | 1        | <  | U  |
| VOLATILES        | Chlorogihane              |        |           |       |        |         |        | 0.01   | 1       | < U   | 0.0   | )1 1   | > ۱    | : U  | 0.01   | ŧ       | <    | U  | 0.01   | 1      | ۲   | U  | 0.01   | 1             | <    | U  | 0.01   | 1      | e    | U  | 0.01   | 1       | <   | U  | 0.01   | 1        | <  | U  |
| VOLATILES        | Chloroform                |        |           |       |        |         |        | 0.005  | 1       | < 0   | 0.00  | 15 1   | ه ۱    | : U  | 0.005  | t       | <    | U  | 0.005  | 1      | 4   | υ  | 0.005  | 1             | <    | Ų  | 0.005  | 1      | ۲    | U  | 0.005  | 1       | <   | U  | 0.005  | 1        | <  | U  |
| VOLATILES        | Chloromethane             |        |           |       | •      |         |        | 0.01   | 1       | < U   | 0.0   | )1 1   | ि      | : U  | 0.01   | 5       | <    | U  | 0.01   | 1      | <   | U  | 0.01   | 1             | <    | U  | 0.01   | 1      | <    | U  | 0.01   | 1       | <   | υ  | 0.01   | 1        | <  | U  |
| VOLATILES        | cis-1,3-Dichloropropene   |        |           |       |        |         |        | 0.005  | 1       | < Ų   | 0.00  | 15 1   | ۲ ا    | : U  | 0.005  | ţ       | ۲    | U  | 0.005  | 1      | <   | U  | 0.005  | 1             | <    | Ų  | 0.005  | 1      | ۲    | υ  | 0.005  | 1       | <   | U  | 0.005  | 1        | <  | υ  |
| VOLATILES        | Dibromochloromethane      |        |           |       |        |         |        | 0.005  | 1       | < U   | 0.00  | 15     | 1 <    | ÷ V  | 0.005  | 1       | <    | U  | 0,005  | 1      | <   | U  | 0.005  | 1             | <    | U  | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  | 0.005  | 1        | <  | U  |
| VOLATILES        | Ethylbenzene              |        |           |       |        |         |        | 0.005  | 1       | < U   | 0.00  | 5 1    | 1 4    | : U  | 0.005  | í       | <    | U  | 0.005  | 1      | <   | U  | 0.005  | 1             | <    | U  | 0.005  | 1      | ۲    | U  | 0.005  | 1       | <   | U  | 0.005  | 1        | <  | U  |
| VOLATILES        | Methyl isobutyl ketone    |        |           |       |        |         |        | 0.05   | 1       | < U   | 0.0   | 5 1    | <      | : U  | 0.05   | 1       | <    | U  | 0.05   | 1      | ۲   | U  | 0.05   | 1             | <    | U  | 0.05   | 1      | <    | U  | 0.05   | 1       | <   | U  | 0.05   | 1        | ۲  | U  |
| VOLATILES        | Methylene chloride        |        |           |       |        |         |        | 0.005  | 1       | < U   | 0.00  | )5 1   | <      | : U  | 0.005  | t       | <    | u  | 0.005  | 1      | <   | υ  | 0.005  | 1             | <    | U  | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  | 0.005  | 1        | ۲  | υ  |
| VOLATILES        | Styrene                   |        |           |       |        |         |        | 0.005  | 1       | < U   | 0.00  | )5 1   | i 🗸    | : U  | 0.005  | t       | <    | U  | 0.005  | 1      | <   | U  | 0.005  | 1             | ¢    | υ  | 0.005  | 1      | <    | υ  | 0.005  | 1       | <   | υ  | 0.005  | 1        | <  | U  |
| VOLATILES        | Tetrachiorosihene         |        |           |       |        |         |        | 0.005  | 1       | < U   | 0.00  | 5 1    | > ۱    | : U  | 0.005  | 1       | <    | U  | 0.005  | 1      | <   | U  | 0.005  | \$            | <    | υ  | 0,005  | 1      | <    | υ  | 0.005  | 1       | <   | Ų  | 0.005  | 1        | <  | υ  |
| VOLATILES        | Toluene                   |        |           |       |        |         |        | 0.005  | 1       | < U   | 0.00  | 5 1    | 1 <    | : U  | 0.005  | 1       | <    | U  | 0,005  | 1      | <   | U  | 0.005  | ١             | <    | Ų  | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  | 0.005  | 1        | <  | U  |
| VOLATILES        | trans-1,3-Dichloropropene |        |           |       |        |         |        | 0.005  | 1       | < U   | 0.00  | )5 1   | ہ ۱    | : U  | 0.005  | 1       | <    | U  | 0.005  | 1      | <   | U  | 0.005  | 1             | ۲    | Ų  | 0.005  | ١      | ۲    | Ų  | 0.005  | ٢       | <   | Ų  | 0.005  | 1        | <  | U  |
| VOLATILES        | Trichloroethene           |        |           |       |        |         |        | 0.005  | 1       | < U   | 0.00  | 5 1    | ہ ا    | : U  | 0.005  | 1       | <    | U  | 0.005  | 1      | <   | U  | 0.005  | ١             | <    | U  | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U  | 0.005  | 1        | ۲. | U  |
| VOLATILES        | Vinyl acetate             |        |           |       |        |         |        | 0.05   | 1       | < U   | 0.0   | 15 1   | ۰ ا    | : U  | 0.05   | 1       | <    | U  | 0.05   | 1      | <   | Ų  | 0.05   | 1             | <    | U  | 0.05   | 1      | ۲    | U  | 0.05   | 1       | <   | U  | 0.05   | 1        | <  | U  |
| VOLATILES        | Vinyl chloride            |        |           |       |        |         |        | 0.01   | 1       | < U   | 0.0   | 1 1    | ! <    | : U  | 0,01   | 1       | <    | Ų  | 0.01   | 1      | ~   | U  | 0.01   | 1             | ¢    | υ  | 0.01   | 1      | ۲    | U  | 0.01   | 1       | ۲   | Ų  | 0.01   | t        | <  | Ų  |
| VOLATILES        | Xylenes, Total            |        |           |       |        |         |        | 0.005  | 1       | < U   | 0.00  | 5 1    | 1 <    | : U  | 0.005  | 1       | 4    | U  | 0.005  | 1      | <   | U  | 0.005  | 1             | <    | U  | 0.005  | 1      | <    | U  | 0.005  | 1       | ~   | U  | 0.005  | 1        | ٠  | U  |

Shaw Environmental, Inc.

#### Data Evaluation Report Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps

| -               | •••••                       |           |        |            |            | •       |          |        |          |            |              |       |          |      |              |            |     |     |  |
|-----------------|-----------------------------|-----------|--------|------------|------------|---------|----------|--------|----------|------------|--------------|-------|----------|------|--------------|------------|-----|-----|--|
| SUMP] = SUMP056 |                             | 25 CU IN  | 10056. | SBOI       |            | 3551 h  | POSE     | -580   | 11       |            | LH           | -S56- | 01       |      | LH           | -\$56-     | 01  |     |  |
|                 |                             | 35.SMP    | 056-51 | 301.0      | 11         | 35-SMP  | 056-9    | - BO1  | -02      |            | LH-S         | 356-0 | 1        |      | LH-S         | 356-0      | 1_2 |     |  |
| SAMPLE_NO       |                             | 00-00-0/- | 20/200 | 501-0<br>C | <i>1</i> 1 | 100-001 | 000 V    | ne     | <b>4</b> |            | 8/           | 5/100 | 33       |      | - 8/         | 9/199      | 3   |     |  |
| SAMPLE_DATE     |                             | 374<br>E  | C2/200 |            |            |         | 1.35     | 4      |          |            | ,            |       | -1       |      | 3.5          | - 5.5      | Ft  |     |  |
|                 |                             |           | DEC    |            |            |         | REG      | •      |          |            |              | REG   | •        |      |              | REG        |     |     |  |
| SAMPLE_PURPOSE  | Developmentar (Line)te      | Decult    | neu    |            | vo         | Decult  | DI       | 10     | n v      | <u>о в</u> | lesult       | DI    | 10       | vo   | Result       | DIL        | LQ  | vo  |  |
| Test Group      | Parameter (Units # mg/kg)   | nesuii    |        | 10         |            | 10000   |          |        |          | <u>.</u>   | 0 13         | 1     |          | 11   | 0.33         | 1          | <   | U   |  |
| EXPLOSIVES      | 2,4-Dinitrotoluene          |           |        |            |            |         |          |        |          |            | 0.00         | ,     | 2        | ň    | 0.33         | 1          | è   | ũ   |  |
| EXPLOSIVES      | 2,6-Unitrotoluane           | ĺ         |        |            |            |         |          |        |          |            | 7090         | i     | •        | U    | 14500        | i          |     |     |  |
| METALS          | Auminum                     |           |        |            |            |         |          |        |          |            | 2            | ł     |          | n    | 3            | 1          |     | н   |  |
| METALS          | Antimony                    |           |        |            |            |         |          |        |          |            | 25           | 1     |          | 0    | 2            | 1          |     | v   |  |
| METALS          | Arsenic                     |           |        |            |            |         |          |        |          |            | 716          |       |          |      | 700          | ,          |     |     |  |
| METALS          | Barium                      |           |        |            |            |         |          |        |          |            | 11.0         |       |          |      | ۵.۵ /<br>۱   | 4          |     | п   |  |
| METALS          | Cadmium                     |           |        |            |            |         |          |        |          |            | 1            |       | <        | υ.   |              | ÷          |     | Û   |  |
| METALS          | Calcium                     |           |        |            |            |         |          |        |          |            | 338          | 1     |          |      | 503          | -          |     |     |  |
| METALS          | Chromium                    | 1         |        |            |            |         |          |        |          |            | 13.9         | 1     |          |      | 23           | ÷.         |     |     |  |
| METALS          | Cobalt                      |           |        |            |            |         |          |        |          |            | 7.8          | 1     |          |      | 7.3          | 2          |     |     |  |
| METALS          | Copper                      |           |        |            |            |         |          |        |          |            | 3            | 1     | <        | U    | 6./          | 1          |     |     |  |
| METALS          | Iron                        | Į         |        |            |            |         |          |        |          |            | 7920         | 1     |          |      | 26900        | 1          |     |     |  |
| METALS          | Lead                        |           |        |            |            |         |          |        |          |            | 5.4          | 1     |          |      | 6.2          | 1          |     |     |  |
| METALS          | Magnesium                   |           |        |            |            |         |          |        |          |            | 333          | 1     |          |      | 788          | ٢          |     |     |  |
| METALS          | Manganese                   |           |        |            |            |         |          |        |          |            | 127          | 1     |          |      | 144          | 1          |     |     |  |
| METALS          | Mercury                     | 1         |        |            |            |         |          |        |          |            | 0.1          | 1     | <        | U    | 0.1          | 1          | <   | U   |  |
| METALS          | Potassium                   | 1         |        |            |            |         |          |        |          |            | 378          | 1     |          |      | 714          | 1          |     |     |  |
| METALS          | Selenium                    |           |        |            |            |         |          |        |          |            | 1            | 1     | <        | U    | 1            | 1          | <   | U   |  |
| METALS          | Silver                      |           |        |            |            |         |          |        |          |            | 1            | 1     | <        | U    | 1            | 1          | <   | U   |  |
| METALS          | Strontium                   |           |        |            |            |         |          |        |          |            | 5.7          | 1     |          |      | 10.3         | 1          |     |     |  |
| METALS          | Zinc                        | 1         |        |            |            |         |          |        |          |            | 11.1         | 1     |          |      | 24.3         | 1          |     |     |  |
| SEMIVOLATILES   | 1.2.4-Trichlorobenzene      | 2.15      | 10     | U          | U          | 0.21    | 4 1      | 1      | U        | Ų          | 0.33         | 1     | <        | U    | 0.33         | 1          | ۲   | U   |  |
| SEMIVOLATILES   | 1.2-Dichlorobenzene         | 2.15      | 10     | U          | U          | 0.1     | 3 1      |        | J        | J          | 0.33         | 1     | <        | U    | 0.33         | 1          | <   | U   |  |
| SEMIVOLATILES   | 1.3-Dichlorobenzene         | 2,15      | 10     | U          | U          | 0.21    | 4 1      |        | U        | U          | 0.33         | 1     | <        | U    | 0,33         | 1          | <   | U   |  |
| SEMIVOLATILES   | 1.4-Dichlorobenzene         | 2.15      | 10     | U          | U          | 0.21    | 4 1      |        | Ų        | บ          | 0.33         | 1     | <        | U    | 0.33         | 1          | <   | U   |  |
| SEMIVOLATILES   | 2.4.5-Trichlorophenel       | 2.15      | 10     | Ų          | υ          | 0.21    | 4 1      |        | U        | U          | 1.65         | 1     | <        | U    | 1.65         | 1          | <   | U   |  |
| SEMIVOLATILES   | 2.4.6-Trichlorophenol       | 2.15      | 10     | U          | U          | 0,21    | 4 1      |        | υ        | U          | 0.33         | 1     | <        | U    | 0.33         | 1          | <   | U   |  |
| SEMIVOLATILES   | 2 4-Dichlorophenol          | 2.15      | 10     | U          | U          | 0.21    | 4 1      |        | U        | U          | 0.33         | 1     | <        | U    | 0.33         | 1          | <   | Ų   |  |
| SEMIVOLATILES   | 2.4-Dimethyliphenol         | 2.15      | 10     | U          | υ          | 0.21    | 4 1      |        | U        | U          | 0.33         | 1     | <        | U    | 0.33         | 1          | <   | U   |  |
| SEMIVOLATILES   | 2 4-Digitrophengi           | 10.7      | 10     | U          | Ú          | 1.0     | 7 1      |        | U        | U          | 1.65         | 1     | <        | U    | 1.65         | \$         | <   | U   |  |
| SEMIVOLATILES   | 2 4-Dinitrotokuene          | 2.15      | 10     | Ŭ          | ປ          | 0.21    | 4 1      |        | υ        | U          |              |       |          |      |              |            |     |     |  |
| SEMIVOLATILES   | 2.6-Dinimatoluane           | 2 15      | 10     | u          | Ū          | 0.21    | 4 1      |        | Ú        | U          |              |       |          |      |              |            |     |     |  |
| SEMINOLATILES   | 2-Chiozonanbthalene         | 2.15      | 10     | Ū          | Ű          | 0.21    | 4        |        | Ú.       | U          | 0.33         | 1     | <        | U    | 0.33         | . 1        | <   | U   |  |
| SEMIVOLATILES   | 2-Chlomabenol               | 2 15      | 10     | ũ          | ū          | 0.21    | 4 .      | [      | Ŭ        | Ū          | 0.33         | 1     | <        | υ    | 0.33         | 1          | <   | υ   |  |
| CONVOLATILES    | 2-Methyloanhtbalene         | 2 15      | 10     | ŭ          |            | 0.21    | 4        |        | ū        | Ū          | 0.33         | 1     | <        | U    | 0,33         | 1          | <   | U   |  |
| CEMINOLATILES   | 2-Methylopacol              | 2.15      | 10     | 1Ŭ         | Ū          | 0.21    | 4 .      | 1      | Ū        | Ū          | 0.33         | 1     | ح        | Ű    | 0.33         | 1          | <   | U   |  |
| SEMINOLATILES   | 2 Nichtyphichton            | 10.7      | 10     | Ŭ.         | ň          | 10      | ,<br>7   | 1      | Ð        | ů.         | 1.65         | 1     | <        | U    | 1.65         | 1          | <   | u   |  |
| SEMIVOLATILES   | 2-Nitronhooo]               | 2 15      | 10     | ŭ          | ŭ          | 0.21    | ٠.       | 1      | Ŭ        | ŭ          | 0.33         | Ť     | <        | Ū    | 0.33         | 1          | ~   | U   |  |
| SEMIVOLATILES   | 2 9' Disblershaatidiga      | 4 20      | 10     | ŭ          | - U        | 0.45    | ר<br>פי  | 1      | ii.      | ũ          | 0.65         | í     | ~        | Ū    | 0.65         | 1          | <   | U   |  |
| SEMIVOLATILES   | 5.3 -Dichlotobenzidine      | 4.65      | 10     | 1          | UE UE      | 1.6     | 17 .     | •      | ň        | ñ          | 1.65         | 1     | ć        | Ū    | 1.65         | . 1        | <   | Ú   |  |
| SEMIVOLATILES   | 3-Murdanime                 | 10.7      | 10     | 11         | ŭ          | 1.0     | ''<br>17 | •      | н<br>Н   | ŭ          | 1.65         | 1     | Ę        |      | 1.65         | 1          | ~   | Ű   |  |
| SEMIVOLAHLES    | 4,0-Dinitro-2-methylphenol  | 10.7      | 10     | 0          | - U        | 0.00    |          | 1      | ы        | u U        | 0.33         | 4     | )        | 11   | 0.39         |            | 2   | Ū   |  |
| SEMIVOLATILES   | 4-Bromophenyl phenyl einer  | 2.15      | 10     | 0          | 10         | 0.2     | int<br>M |        | о<br>11  | 1          | 0.00<br>33 A | 1     | )        | 1    | 0.64         |            | 2   | ũ   |  |
| SEMIVOLATILES   | 4-Gnioro-3-memyiphenol      | 2.15      | 10     | 0          | - U<br>- H | 0.2     | 4        | י<br>1 | 0        | u<br>U     | 0.00         | 1     | )        | 1    | 0.6          | 1          | 2   | ň   |  |
| SEMIVOLATILES   | 4-Chioroaniline             | 2.15      | 10     | U 14       | 0          | 15.0    | -+<br>   | •      | и<br>Н   | 0          | 0.00         | 4     |          | . 11 | 0.00         |            | )   | Ū Ū |  |
| SEMIVOLATILES   | 4-Uniorophenyl phenyl ether | 2,15      | 10     | 0          |            | 0.2     | 14<br>14 | ।<br>न | 0        | U<br>II    | 0.33         | 1     |          | . 11 | 0.0          | 2 1<br>2 1 | 2   | u u |  |
| SEMIVOLATILES   | 4-Methylphenol              | 2.15      | 10     | 0          | 0          | 0.2     | 14       | 1      | 0        | 9<br>11    | 0,00         | •     | <u>د</u> | . u  | يو.پ<br>بويه |            |     | . н |  |
| SEMIVOLATILES   | 4-Nitroaniline              | 10.7      | 10     | U          | U          | 1.(     | 11       | 1      | u        | Ŷ          | 1.05         | - 1   | <        | , Q  | 1.03         | , 1        |     |     |  |

### Table 3-56 Concentrations of Chemicals in Soil Samples Associated with Sump 056

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



Table 3-56

Concentrations of Chemicals in Soil Samples Associated with Sump 056

| [SUMP] = SUMP056 |                             |                   |     |    |                   |           |     |        |             |           |           |                     |             |              |     |    |         |
|------------------|-----------------------------|-------------------|-----|----|-------------------|-----------|-----|--------|-------------|-----------|-----------|---------------------|-------------|--------------|-----|----|---------|
| LOCATION _CODE   |                             | 35SUMP056-SB01    |     |    | 35SUM             | LH-556-01 |     |        |             | LH        | LH-S56-01 |                     |             |              |     |    |         |
| SAMPLE_NO        |                             | 35-SMP056-SB01-01 |     |    | 35-SMP056-SB01-02 |           |     |        | LH-S56-01_1 |           |           |                     | LH-S56-01_2 |              |     |    |         |
| SAMPLE_DATE      |                             | 9/22/2006         |     |    |                   | 9/22/2006 |     |        |             | 8/5/1993  |           |                     |             | B/9/1993     |     |    |         |
| DEPTH            |                             | .55 FI            |     |    |                   | 3 - 3 Ft  |     |        |             | .5 - 2 Ft |           |                     |             | 3.5 - 5.5 Ft |     |    |         |
| SAMPLE_PURPOSE   |                             | REG               |     |    | REG               |           |     | REG    |             |           |           | REG                 |             |              |     |    |         |
| Test Group       | Parameter (Units = mg/kg)   | Result            | DIL | LQ | VQ                | Result    | DIL | LQ     | VQ          | Result    | DIL       | LQ                  | VQ          | Result       | DIL | ŁQ | VQ      |
| SEMIVOLATILES    | 4-Nitrophenol               | 10.7              | 10  | U  | U                 | 1.07      | 1   | U      | U           | 1.65      | 1         | <                   | U           | 1.65         | 1   | <  | Ü       |
| SEMIVOLATILES    | Acenaphthene                | 2.15              | 10  | Ų  | U                 | 0.214     | 1   | U      | U           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | Acenaphthylene              | 2.15              | 10  | U  | U                 | 0.214     | 1   | U      | U           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | Anthracene                  | 2.15              | 10  | U  | U                 | 0.214     | 1   | U      | U           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | Benzo(a)anthracene          | 2.15              | 10  | U  | U                 | 0.214     | 1   | U      | U           | 0.33      | 1         | . <                 | U           | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | Benzo(a)pyrene              | 2.15              | 10  | U  | U                 | 0.214     | 1   | U      | U           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | Benzo(b)fluoranthene        | 2.15              | 10  | U  | U                 | 0.214     | 1   | Ų      | U           | 0.33      | 1         | <                   | U           | 0,33         | 1   | <  | U       |
| SEMIVOLATILES    | Benzo(ghi)perylene          | 2.15              | 10  | Ų  | U                 | 0.214     | 1   | Ų      | U           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | Benzo(k)fluoranthene        | 2.15              | 10  | U  | U                 | 0.214     | 1   | U      | U           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | Benzoic Acid                | 10.7              | 10  | U  | UJ                | 1.07      | 1   | U      | UJ          | 1.65      | 1         | <                   | U           | 1.65         | 1   | <  | U       |
| SEMIVOLATILES    | Benzyl Alcohol              | 2.15              | 10  | U  | U                 | 0.214     | ſ   | U      | U           | 0.65      | 1         | <                   | U           | 0.65         | 1   | <  | Ų       |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  | 2.15              | 10  | U  | υ                 | 0.214     | 1   | Ú      | U           | 0,33      | 1         | <                   | U           | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     | 2.15              | 10  | U  | U                 | 0.214     | 1.  | U      | Ű           | 0.33      | 1         | <                   | U           | 0.33         | ſ   | <  | U       |
| SEMIVOLATILES    | bis(2-Chlaroisopropyl)ether | 2.15              | 10  | Ú  | ΰ                 | 0.214     | 1   | Ū      | Ű           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | bis(2-Ethylhexyl)ohthalate  | 2.15              | 10  | Ū  | ū                 | 0.214     | 1   | Ű      | ū           | 0.391     | 1         |                     |             | 0.33         | 1   | <  | Ū       |
| SEMIVOLATILES    | Butvi benzvi ohthalate      | 2.15              | 10  | Ū  | ū                 | 0.214     | 1   | ū      | ข้          | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | Ū       |
| SEMIVOLATILES    | Chrysene                    | 2.15              | 10  | Ū  | Ū                 | 0.214     | 1   | Ū      | -<br>U      | 0.33      | 1         | <                   | Ū           | 0.33         | 1   | <  | Ū       |
| SEMIVOLATILES    | Dibenzo(a,b)anthracene      | 2.15              | 10  | ŭ  | ΰ                 | 0.214     | 1   | ū      | Ū.          | 0.33      | t         | < label{eq:starter} | Ū.          | 0.33         | 1   | <  | Ū       |
| SEMIVOLATILES    | Dibenzofuran                | 2.15              | 10  | ŭ  | ÷.                | 0.214     | 1   | Ū      | Ū.          | 0.33      | 1         | è                   | Ū           | 0.33         | 1   | <  | Ū       |
| SEMIVOLATILES    | Diethyl ohthalate           | 2 15              | 10  | ŭ  | 1                 | 0.214     | 1   | ų.     | ŭ           | 0.33      | 1         | ż                   | н<br>Н      | 0.33         | 1   | è  | ц.<br>Н |
| SEMIVOLATILES    | Dimethyl ohthalate          | 2.15              | 10  | ū  | ÷                 | 0.214     | 1   | -<br>U | Ū           | 0.33      | 1         | ÷                   | Ū.          | 0.33         | 1   | <  | Ū       |
| SEMIVOLATILES    | di-n-Buivi ohthalate        | 2.15              | 10  | ū  | 11                | 0.214     | 1   | ÷      | Ð           | 0.33      | 1         | è                   | Ŭ           | 0.33         | 1   | ۲  | Ū       |
| SEMIVOLATILES    | di-n-Octyl phthalate        | 2.15              | 10  | ū  | Ū.                | 0.214     | 1   | ÷      | Ū           | 0.33      | 1         | ć                   | Ū           | 0.33         | 1   | <  | บ้      |
| SEMIVOLATILES    | Fluoranthene                | 2 15              | 10  | ū  | Ū.                | 0.214     | 1   | Ū      | Ū.          | 0.33      | 1         | <                   | Ū           | 0.33         | 1   | <  | Ū       |
| SEMIVOLATILES    | Fluorene                    | 2.15              | 10  | Ū  | Ū                 | 0.214     | 1   | Ū      | Ū           | 0.33      | 1         | <                   | U           | 0.33         | 1   | e. | Ú       |
| SEMIVOLATILES    | Hexachlorobenzene           | 2.15              | 10  | IJ | U                 | 0.214     | 1   | υ      | Ū           | 0.33      | 1         | <                   | Ū.          | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | Hexachlorobutadiene         | 2.15              | 10  | U  | Ū                 | 0.214     | 1   | U      | Ū           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   | 2.15              | 10  | U  | U                 | 0.214     | 1   | Ð      | U           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | υ       |
| SEMIVOLATILES    | Hexachloroethane            | 2.15              | 10  | Ų  | U                 | 0.214     | 1   | U      | U           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene      | 2.15              | 10  | U  | U                 | 0.214     | 1   | υ      | U           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | Isopharana                  | 2.15              | 10  | υ  | Ū                 | 0.214     | 1   | Ū      | Ů           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | Ū       |
| SEMIVOLATILES    | Naphthalene                 | 2.15              | 10  | U  | U                 | 0.214     | 1   | U      | U           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | U       |
| SEMIVOLATILES    | Nitrobenzene                | 2.15              | 10  | Ū  | Ū                 | 0.214     | 1   | Ű      | Ū           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | Ū       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  | 2.15              | 10  | Ū  | Ū                 | 0.214     | 1   | Ū      | Ū           | 0.33      | 1         | <                   | Ū           | 0.33         | 1   | <  | Ū       |
| SEMIVOLATILES    | n-Nitrosodiphenviamine      | 2.15              | 10  | Ū  | Ű                 | 0.214     | 1   | Ū      | Ū           | 0.33      | 1         | <                   | U           | 0.33         | 1   | <  | Ű       |
| SEMIVOLATILES    | Pentachlorophenol           | 10.7              | 10  | Ū  | Ű                 | 1.07      | 1   | Ū      | Ū           | 1.65      | 1         | <                   | U           | 1.65         | 1   | <  | Ū       |
| SEMIVOLATILES    | Phenanthrene                | 2.15              | 10  | Ū  | Ú                 | 0.214     | 1   | Ū      | Ū           | 0.33      | 1         | <                   | Ū           | 0.33         | 1   | <  | Ū       |
| SEMIVOLATILES    | Phenol                      | 2.15              | 10  | Ű  | Ū                 | 0.214     | 1   | Ū      | ŭ           | 0.33      | 1         | <                   | Ū.          | 0.33         | 1   | <  | υ       |
| SEMIVOLATILES    | Pyrene                      | 2.15              | 10  | Ű  | U                 | 0.214     | 1   | Ú      | Û           | 0.33      | 1         | <                   | Ð           | 0.33         | 1   | <  | Ŭ       |
| VOLATILES        | 1,1,1,2-Tetrachloroethane   |                   | -   |    |                   | 0.00672   | 1   | Ū      | Ū           |           |           |                     | -           |              |     |    |         |
| VOLATILES        | 1.1.1-Trichlorgethane       |                   |     |    |                   | 0.00672   | 1   | ū      | Ũ           | 0.005     | 1         | <                   | IJ          | 0.005        | i   | <  | U       |
| VOLATILES        | 1.1.2.2-Tetrachloroethane   |                   |     |    |                   | 0.00672   | 1   | ū      | Ű           | 0.005     | 1         | <                   | Ū           | 0.005        | 1   | <  | Ŭ       |
| VOLATILES        | 1,1,2-Trichloroethane       |                   |     |    |                   | 0.00672   | 1   | Ū      | Ū           | 0.005     | 1         | k                   | IJ          | 0.005        | 1   | ÷  | Ū       |
| VOLATILES        | 1,1-Dichloroethane          |                   |     |    |                   | 0.00672   | 1   | Ū      | Ū           | 0.005     | 1         | <                   | Ű           | 0.005        | 1   | <  | ū       |
| VOLATILES        | 1,1-Dichloroethene          |                   |     |    |                   | 0.00672   | 1   | -<br>ט | บ           | 0.005     | 1         | k                   | Ú           | 0.005        | 1   | é  | ū       |
| VOLATILES        | 1,1-Dichloropropene         |                   |     |    |                   | 0.00872   | 1   | Ū      | Ð           |           |           |                     | -           |              |     |    | -       |
| VOLATILES        | 1.2.3-Trichlorobenzene      |                   |     |    |                   | 0.00672   | 1   | Ū      | Ų           |           |           |                     |             |              |     |    |         |
|                  |                             |                   |     |    |                   |           |     |        |             |           |           |                     |             |              |     |    |         |
Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



## Table 3-56

| (SUMP) = SUMP056 |                                |        |           |       |     |         |        |         |        |        |        |       |    |        |         | ••  |    |
|------------------|--------------------------------|--------|-----------|-------|-----|---------|--------|---------|--------|--------|--------|-------|----|--------|---------|-----|----|
| LOCATION _CODE   |                                | 35SU   | MP056     | -\$B0 | 11  | 35SUM   | P056   | -SB01   |        | LF     | 1-856  | -01   |    | LH     | -856-   | 01  |    |
| SAMPLE_NO        |                                | 35-SM  | P056-S    | B01-  | -01 | 35-SMPC | )56-S  | 801-(   | 2      | ιH-    | \$56-0 | 01_1  |    | 1H-    | 555-0   | n_2 |    |
| SAMPLE_DATE      |                                | 9      | /22/200   | 08    |     | 9/2     | 2/200  | 6       |        | 8      | /5/19  | 93    |    | 8      | /9/195  | 13  |    |
| DEPTH            |                                |        | .5 • .5 F | t     |     | . 3     | • 3 Fi | 1       |        |        | 5 2    | Ft    |    | 3.:    | 5 - 5.5 | H   |    |
| SAMPLE_PURPOSE   |                                |        | REG       |       |     | 1       | REG    |         |        |        | REG    | )<br> |    |        | REG     |     |    |
| Test Group       | Parameter (Units = mg/kg)      | Result | DIL       | LQ    | VQ  | Result  | DIL    | LQ      | VQ     | Result | DIL    | LQ    | VQ | Result | DIC     | LQ  | VQ |
| VOLATILES        | 1,2.3-Trichloropropane         |        |           |       |     | 0,00672 | 1      | U       | Ų      |        |        |       |    |        |         |     |    |
| VOLATILES        | 1.2.4-Trichlorobenzene         |        |           |       |     | 0.00672 | ١      | Ų       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | 1,2,4-Trimethylbenzene         |        |           |       |     | 0.00672 | 1      | Ų       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    |        |           |       |     | 0.00672 | 1      | Ų       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | 1,2-Dibromoethane              |        |           |       |     | 0.00672 | 1      | U       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | 1.2-Dichlorobenzene            | 1      |           |       |     | 0.00672 | 1      | U       | Ų      |        |        |       |    |        |         |     |    |
| VOLATILES        | 1,2-Dichloroethane             |        |           |       |     | 0.00672 | 1      | Ų       | U      | 0,005  | 1      | <     | U  | 0.005  | 1       | <   | U  |
| VOLATILES        | 1,2-Dichloroethene             |        |           |       |     |         |        |         |        | 0.005  | 1      | <     | Ų  | 0.005  | 1       | <   | U  |
| VOLATILES        | 1,2-Dichloropropane            |        |           |       |     | 0.00672 | 1      | U       | Ų      | 0.005  | 1      | ۲     | U  | 0.005  | 1       | <   | U  |
| VOLATILES        | 1.2-Dimethylbenzene (o-Xylene) |        |           |       |     | 0.00672 | 1      | υ       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | 1,3,5-Trimethylbenzene         |        |           |       |     | 0.00672 | 1      | U       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | 1.3-Dichlorobenzene            |        |           |       |     | 0.00672 | 1      | U       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | 1.3-Dichloropropane            |        |           |       |     | 0.00672 | 1      | U       | IJ     |        |        |       |    |        |         |     |    |
| VOLATILES        | 1.4-Dichlorobenzene            |        |           |       |     | 0.00672 | 1      | U       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | 2.2-Dichloropropage            |        |           |       |     | 0.00672 | 1      | υ       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | 2-Bulanone                     |        |           |       |     | 0.0134  | 1      | U       | U      | 0.05   | 1      | <     | U  | 0.05   | 1       | <   | U  |
| VOLATILES        | 2-Chloroothul viout ather      |        |           |       |     | 0.0134  | ÷      | ü.      | Ū      | 0.01   | 1      | <     | Ū. | 0.01   | 1       | <   | υ  |
| VOLATILES        | 3-Chlorobiuone                 |        |           |       |     | 0.00672 | 1      | ŭ       | Ű      |        |        |       |    |        |         |     |    |
| VOLATILES        | 2-Onicionadene                 |        |           |       |     | 0.0134  | 1      | 11      | л<br>П | 0.05   | 1      | e     | Ш  | 0.05   | 1       | <   | υ  |
| VOLATILES        | 2-mexaligne                    |        |           |       |     | 0.0107  | 4      | U U     | ň      | 0.00   | •      |       | 4  |        |         |     |    |
| VOLATILES        | 4-Ghiordiblidene               |        |           |       |     | 0.00072 | 4      |         |        | 0.1    | 1      | ~     | 11 | 0.1    | 1       | e   | ų. |
| VOLATILES        | Acetone                        | 1      |           |       |     | 0.0104  | •      | н       | 0      | 0.005  | 1      | 2     | Ŭ  | 0.005  | 1       | è   | ŭ  |
| VOLATILES        | Benzene                        |        |           |       |     | 0.00072 |        | 1       | 0      | 0.005  | ,      | `     | U  |        | ,       | `   | Ŷ  |
| VOLATILES        | Bromobenzene                   |        |           |       |     | 0.00672 |        | Ц       |        |        |        |       |    |        |         |     |    |
| VOLADLES         | Bromochloromethane             |        |           |       |     | 0.00072 |        | 0       |        | 0.005  |        |       |    | 0.005  | 4       |     | ш  |
| VOLATILES        | Bromodichioromethane           | ļ      |           |       |     | 0.00072 | 1      | U<br>11 | 1      | 0.005  | 1      | Ś     | 11 | 0.005  | 1       | Č   | 15 |
| VOLATILES        | Bromotorm                      | 1      |           |       |     | 0.00672 | 1      | 0       | U      | 0.005  |        | <     | 0  | 0.005  | 1       | Ś   |    |
| VOLATILES        | Bromomethane                   |        |           |       |     | 0.0134  | 1      |         | U      | 0.01   | 2      | <     |    | 0.01   |         |     |    |
| VOLATILES        | Carbon disulfide               |        |           |       |     | 0.00672 | 1      | Ų       |        | 0.005  | 1      | <     |    | 0.005  |         | <   | 0  |
| VOLATILES        | Carbon tetrachloride           |        |           |       |     | 0.00672 | 1      | U       | U      | 0.005  | 1      | <     | 0  | 0.005  |         | ٤   |    |
| VOLATILES        | Chlorobenzene                  |        |           |       |     | 0.00672 | 1      | U       | U      | 0.005  | 1      | <     | U  | 0.005  | 1       | <   | 0  |
| VOLATILES        | Chloroethane                   |        |           |       |     | 0.0134  | 1      | U       | U      | 0.01   | 1      | <     | U  | 0.01   | 1       | <   | 10 |
| VOLATILES        | Chioroform                     |        |           |       |     | 0.00672 | 1      | U       | U      | 0.005  | 1      | <     | U  | 0.005  | 1       | <   | U  |
| VOLATILES        | Chloromethane                  |        |           |       |     | 0.0134  | 1      | U       | U      | 0.01   | ۱      | <     | Ų  | 0.01   | 1       | <   | U  |
| VOLATILES        | cis-1.2-Dichloroethene         |        |           |       |     | 0.00672 | 1      | Ų       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | cis-1,3-Dichloropropene        |        |           |       |     | 0.00672 | 1      | U       | U      | 0.005  | 1      | <     | U  | 0.005  | 1       | <   | U  |
| VOLATILES        | Dibromochloromethane           |        |           |       |     | 0.00672 | 1      | U       | U      | 0.005  | 1      | <     | U  | 0.005  | 1       | <   | Û  |
| VOLATILES        | Dibromomethane                 |        |           |       |     | 0.00672 | 1      | U       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | Dichlorodifluoromethane        |        |           |       |     | 0.0134  | 1      | Ų       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | Ethylbenzene                   |        |           |       |     | 0.00672 | 1      | U       | Ų      | 0.005  | 1      | <     | Ų  | 0.005  | i 1     | <   | Ų  |
| VOLATILES        | Hexachlorobutadlene            |        |           |       |     | 0.00672 | : 1    | U       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | Isopropyibenzene               |        |           |       |     | 0.00672 | : 1    | U       | Ų      |        |        |       |    |        |         |     |    |
| VOLATILES        | m.p-Xylenes                    | 1      |           |       |     | 0.00872 | : 1    | U       | U      |        |        |       |    |        |         |     |    |
| VOLATILES        | Methyl isobutyl ketone         | 1      |           |       |     | 0.0134  | 1      | U       | U      | 0.05   | 1      | <     | U  | 0.05   | i 1     | <   | Ų  |
| VOLATILES        | Methylene chloride             |        |           |       |     | 0.00672 | 1      | Ų       | U      | 0.005  | 1      | <     | U  | 0.005  | i 1     | <   | U  |
| VOLATILES        | Naphthalene                    |        |           |       |     | 0.0134  | 1      | U       | E U    |        |        |       |    |        |         |     |    |
| VOLATILES        | n-BUTYLBENZENE                 |        |           |       |     | 0.00672 | : 1    | υ       | U U    |        |        |       |    |        |         |     |    |
| VOI ATILES       | n-PROPYL RENZENE               | 1      |           |       |     | 0.00672 | 1      | U       | U U    |        |        |       |    |        |         |     |    |

Concentrations of Chemicals In Soil Samples Associated with Sump 056

# Shaw Environmental, Inc.

## Data Evaluation Report

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps

| Ų.               | oncentrations of c        | TETHIC | 113 1  | iii e | .011 | ownipic | 14 P   |       | 001 | 1004 1   | ****    |      |    |        |         |     |    |
|------------------|---------------------------|--------|--------|-------|------|---------|--------|-------|-----|----------|---------|------|----|--------|---------|-----|----|
| [SUMP] = SUMP056 |                           |        |        |       |      |         |        |       |     |          |         |      |    |        | 050     | ~ 1 |    |
| LOCATION _CODE   |                           | 35SU   | MP05   | 6-SB( | 01   | 35SUM   | P056-  | SB01  |     | Li<br>Li | 1-\$56  | -01  |    | ្រុ    | -926-   | 01  |    |
| SAMPLE_NO        |                           | 35-SM  | P056-  | SB01  | -01  | 35-SMP  | 056-SI | 301-0 | 2   | LH       | -\$56-( | 11_1 |    | լн.    | S56-0   | 1_2 |    |
| SAMPLE DATE      |                           | S      | /22/20 | 06    |      | 9/2     | 2/200  | 8     |     | 8        | 3/5/199 | 93   |    | 8      | /9/199  | 3   |    |
| DEPTH            |                           |        | 5 • 5  | Ft    |      | 3       | • 3 Ft |       |     |          | .5 • 2  | Ft   |    | 3.     | 5 - 5.5 | Ft  |    |
| SAMPLE PURPOSE   |                           |        | REG    |       |      |         | REG    |       |     |          | REG     |      |    |        | REG     |     |    |
| Test Group       | Parameter (Units = mg/kg) | Result | DiL    | LQ    | ٧Q   | Result  | DIL    | LQ    | ٧Q  | Result   | DIL     | LQ   | VQ | Result | DIL     | LQ  | VQ |
| VOLATILES        | p-ISOPROPYLTOLUENE        |        |        |       |      | 0.00672 | 1      | U     | U   |          |         |      |    |        |         |     |    |
| VOLATILES        | sec-BUTYLBENZENE          | 1      |        |       |      | 0.00672 | 1      | U     | U   |          |         |      |    |        |         |     |    |
| VOLATILES        | Styrene                   |        |        |       |      | 0.00672 | 1      | Ų     | U   | 0.005    | ٢       | <    | U  | 0.005  | 1       | <   | υ  |
| VOLATILES        | tert-BUTYLBENZENE         |        |        |       |      | 0,00672 | 1      | υ     | บ   |          |         |      |    |        |         |     |    |
| VOLATILES        | Tetrachloroethene         |        |        |       |      | 0.00672 | 1      | Ų     | Ų   | 0,005    | 1       | <    | Ų  | 0.005  | 1       | <   | U  |
| VOLATILES        | Toluene                   |        |        |       |      | 0.00672 | 1      | U     | Ų   | 0,005    | 1       | <    | U  | 0.005  | 1       | <   | U  |
| VOLATILES        | trans-1.2-Dichloroethene  | 1      |        |       |      | 0.00672 | 1      | Ų     | Ų   |          |         |      |    |        |         |     |    |
| VOLATILES        | trans-1,3-Dichloropropene |        |        |       |      | 0.00672 | 1      | U     | Ð   | 0.005    | i       | <    | Ų  | 0.005  | 1       | <   | Ų  |
| VOLATILES        | Trichloroethene           |        |        |       |      | 0.00672 | 1      | Ų     | U   | 0.005    | 1       | <    | U  | 0.005  | 1       | <   | Ų  |
| VOLATILES        | Trichlorofluoromethane    |        |        |       |      | 0.0134  | 1      | ម     | U   |          |         |      |    |        |         |     |    |
| VOLATILES        | Vinyl acetate             | ľ      |        |       |      | 0.0134  | 1      | Ų     | U   | 0.05     | ٢       | <    | U  | 0.05   | 1       | <   | U  |
| VOLATILES        | Vinyl chloride            |        |        |       |      | 0.0134  | 1      | U     | U   | 0.01     | 1       | <    | ย  | 0,01   | ۱       | <   | Ų  |
| VOLATILES        | Xvienes, Total            |        |        |       |      |         |        |       |     | 0.005    | 1       | <    | U  | 0.005  | 1       | <   | U  |

Table 3-56 Concentrations of Chemicals in Soil Samples Associated with Sump 056

Footnotes are shown on cover page to Tables Section.



 Table 3-57

 Concentrations of Chemicals in Soil Samples Associated with Sump 057

| (SUMP) = SUMP057 |                            |                  |                  |            |                |            | ~ .      |        | 111 067   |                 |            | 1.11   | \$57.01             |             | 114.9  | 267-02  |      | 19.            | \$57-02 |         | ł            | H-S57-      | 02   |    |
|------------------|----------------------------|------------------|------------------|------------|----------------|------------|----------|--------|-----------|-----------------|------------|--------|---------------------|-------------|--------|---------|------|----------------|---------|---------|--------------|-------------|------|----|
| LOCATION _CODE   |                            | 35SUMP057-SB01   | 35SUMP057-SB01   | LH5-3      | -07            | LH-55/*    | 01       |        | LH-25/    | -01<br>A1 A     |            | 10     | 057-01              | 2           | LH-SP  | 57.02 1 | 1    | 18-8           | 57-02   | 2       | U            | -S57-0      | 2 3  |    |
| SAMPLE_NO        |                            | 35-SMP57-S801-01 | 35-SMP57-SB01-02 | LHS-3      | -07            | LH-557-0   | 1_1      |        | LH-557-1  | 01_2            |            |        | ວວ/າບ1ູ<br>ວວ/ເວດວ  | 3           | 7/00   | 2/1002  | •    | 7/3            | 2/1003  | -       |              | 7/22/19     | 93   |    |
| SAMPLE_DATE      |                            | 9/13/2006        | 9/13/2006        | 1/10/1     | 995            | 7/22/19    | 93       |        | //22/19   | <del>19</del> 0 |            |        | 22/1993<br>( 0.0 H) |             | 1120   | . 1 Er  |      | , inc.<br>     | 1000    |         |              | 4-85        | ) Ft |    |
| DEPTH            |                            | 0.5 · 0.5 Ft     | 7 - 7 Fl         | 0 - 0.5    | 5 Ft           | 0.5 - 1    | Ft       |        | 2-31      | FL .            |            | 8.4    | 9-6.971<br>DEC      |             | 0.5    |         |      |                |         |         |              | RFG         |      |    |
| SAMPLE_PURPOSE   |                            | REG              | REG              | REC        | 3              | HEG        |          |        | HEG       | 3<br>           |            | D      |                     | a va        | Cosult | 58      |      | Qaeuli         | DIL     | 10 V    | ) Besult     | וח          | 10   | vn |
| Test Group       | Parameter (Units = mg/kg)  | Result DIL LO VO | Result DIL LO VO | Result Dil | L LO VO        | Result Dil | <u> </u> | va     | Hesuit Di | <u>, L</u>      | YU -       | Result |                     | 0 10        | neşuk  | ψıς.    |      | TICOUN         |         |         | 100001       |             |      |    |
| EXPLOSIVES       | 1.3.5-Trinitrobenzena      |                  |                  | 0.24       | < U            |            |          |        |           |                 |            |        |                     |             |        |         |      |                |         |         |              |             |      |    |
| EXPLOSIVES       | 1,3-Dinitrobenzene         |                  |                  | 0.24 1     | < U            |            |          |        |           |                 |            |        |                     |             |        |         |      |                |         |         |              |             |      |    |
| EXPLOSIVES       | 2,4,6-Trinitrololuene      |                  |                  | 0.24 1     | < U            |            |          |        |           |                 |            |        |                     |             | 0.00   |         |      | 0 12           |         | a H     | 0.3          | 2 1         |      | 11 |
| EXPLOSIVES       | 2,4-Dinitrolaluene         |                  |                  | 0.24 1     | < U            | 0.33 1     | <        | U      | 0.33 1    | 1 <             | 0          | 0.33   | 1                   | < 0         | 0.33   | }       | < U  | 0.00           | -       | - X - U | 0.0          | 3 I         | 2    | ñ  |
| EXPLOSIVES       | 2,6-Dinitrotoluene         | }                |                  | 0.26 1     | < U            | 0,33 1     | × .      | U      | 0.33 1    | 1 <             | U          | 0.33   | ł                   | < Ų         | 0.33   | ,       | < U  | 0.00           | 1       |         | 0.5          | <b>,</b>    |      | v  |
| EXPLOS/VES       | 4-Amino-2,6-dinitrotoluene | 1                |                  | 0.5 1      | < U            |            |          |        |           |                 |            |        |                     |             |        |         |      |                |         |         |              |             |      |    |
| EXPLOSIVES       | нмх                        |                  |                  | 2.2 1      | < ()           |            |          |        |           |                 |            |        |                     |             |        |         |      |                |         |         |              |             |      |    |
| EXPLOSIVES       | m-Nitrololuene             |                  |                  | 1 1        | < U            |            |          |        |           |                 |            |        |                     |             |        |         |      |                |         |         |              |             |      |    |
| EXPLOSIVES       | Nitrobenzene               |                  |                  | 0,26 1     | < U            |            |          |        |           |                 |            |        |                     |             |        |         |      |                |         |         |              |             |      |    |
| EXPLOSIVES       | o-Nitrotoluene             | Į                |                  | 1 1        | < U            |            |          |        |           |                 |            |        |                     |             |        |         |      |                |         |         |              |             |      |    |
| EXPLOSIVES       | p-Nitrotoluene             |                  |                  | 3 1        | < U            |            |          |        |           |                 |            |        |                     |             |        |         |      |                |         |         |              |             |      |    |
| EXPLOSIVES       | RDX                        |                  |                  | 1.1 1      | < U            |            |          |        |           |                 |            |        |                     |             |        |         |      |                |         |         |              |             |      |    |
| EXPLOSIVES       | Tetryl                     |                  |                  | 0.74 1     | < U            |            |          |        |           |                 |            |        |                     |             |        |         |      |                |         |         |              |             |      |    |
| METALS           | Aluminum                   |                  |                  | 2790 1     |                | 29900 1    |          |        | 22000     | 1               |            | 8170   | 1                   |             | 38900  | 1       |      | 18800          | 1       |         | /45          | 0 1         |      |    |
| METALS           | Antimony                   |                  |                  | 11.8 1     | < UJ           | 3 1        | <        | U      | 3 .       | 1 <             | U          | 3      | 1                   | < U         | 3      | 1       | < U  | 3              | 1       | < (     |              | 3 1         | <    | U  |
| METALS           | Arsenic                    |                  |                  | 2,1 1      | ل ا            | 1 1        | <        | U      | 2.4       | 1               |            | 1,7    | 1                   |             | 1,3    | 1       |      | 1,5            | 1       |         | 2.           | 4 1         |      |    |
| METALS           | Barlum                     | İ                |                  | 23.5 1     |                | 162 1      |          |        | 348       | 1               |            | 208    | 1                   |             | 159    | 1       |      | 104            | 1       |         | 15           | 5 1         |      |    |
| METALS           | Cadmium                    |                  |                  | 1.2 1      | < U            | 1 1        | 4        | Ų      | 1 1       | 1 <             | U          | 1      | 1                   | < U         | 1      | 1       | < U  | 1              | 1       | < l     | I            | 1 1         | <    | U  |
| METALS           | Calcium                    |                  |                  | 205 1      |                | 2040 1     |          |        | 826       | 1               |            | 613    | 1                   |             | 1090   | 1       |      | 1010           | + 1     |         | 58           | 0 1         |      |    |
| METALS           | Chromium                   |                  |                  | 8.3 1      | i J            | 26.8 1     |          |        | 19,8      | i               |            | 14.1   | 1                   |             | 28.7   | 1       |      | 18.5           | 1       |         | 15           | 3 1         | ÷    |    |
| METALS           | Cobalt                     |                  |                  | 2.5 1      | 1              | 5.5 1      |          |        | 6.3       | 1               |            | 11.2   | 1                   |             | 6.3    | 1       |      | 8.9            | 1       |         | 11           | 91          |      |    |
| METALS           | Cooper                     | ł                |                  | 2.4 1      | l < U          | 6.4 1      |          |        | 6.1       | 1               |            | 4,1    | 1                   |             | 7.2    | 1       |      | 5.2            | 1       |         | 5            | 5 1         |      |    |
| METALS           | iron                       |                  |                  | 6660 1     | 1              | 18000 1    |          |        | 16700     | 1               |            | 12500  | 1                   |             | 20200  | 1       |      | 18100          | 1       |         | 1310         | 0 1         |      |    |
| LISTAL C         | iani                       |                  |                  | 14.3       | 1              | 12.5 1     |          |        | 11,1      | 1               |            | 6.2    | 1                   |             | 13,9   | ٢       |      | 8              | : 1     |         | 5            | 9 1         |      |    |
| METALS           | Magnesium                  |                  |                  | 132        | 1              | 1490 1     | !        |        | 1420      | 1               |            | 1420   | 1                   |             | 1780   | 1       |      | 1690           | ) 1     |         | 132          | 1 0         |      |    |
| NETAC            | Manganasa                  |                  |                  | 75.2       | t J            | 65.7 1     | 1        |        | 78.2      | í               |            | 135    | 1                   |             | 77.5   | 1       |      | 105            | 1       |         | 14           | 11 1        |      |    |
| NETALO           | Mercum                     | 1                |                  | 0.085      | 1 < U          | 0.1 1      | <        | υ      | 0.1       | 1 <             | : U        | 0.1    | 1                   | < U         | 0.1    | 1       | < U  | 0,1            | 1       | < ا     | J 0          | .1 1        | <    | U  |
| METALO           | Polassium                  |                  |                  | 237        | 1 < U          | 979 1      | r        |        | 769       | 1               |            | 509    | 1                   |             | 1380   | 1       |      | 77;            | 2 1     |         | 49           | <b>15 1</b> |      |    |
| METALO           | Selenium                   |                  |                  | 0.23       | 1 J            | 1          | i <      | U      | 1         | 1 .             | : U        | 1      | 1                   | < U         | í      | 1       | < U  |                | 1       | < ا     | j            | 1 1         | <    | U  |
| NETALO           | Silvor                     |                  |                  | 1.2        | 1 < U          | 1 1        |          | U      | 1         | 1 .             | : ป        | 1      | 1                   | < U         | 1      | 1       | < ປ  |                | 1       | < 1     | J            | 1 1         | <    | U  |
| MCTACS<br>MCTACS | Stradium                   |                  |                  | 11.8       | 1 < 1          | 21.6       | 1        |        | 22.7      | 1               |            | 20. i  | 1                   |             | 19.3   | 1       |      | 30             | ) 1     |         | 18           | .2 1        |      |    |
| NETALO           | Thallium                   |                  |                  | 59.2       | t < 11         |            |          |        |           |                 |            |        |                     |             |        |         |      |                |         |         |              |             |      |    |
| METALO           | Zina                       |                  |                  | 107        | 1              | 42.2       | 1        |        | 39.3      | 1               |            | 53     | 1                   |             | 53.8   | 1       |      | 40,0           | 3 1     |         | 63           | .4 1        |      |    |
| METALS           | 2PC<br>Rembioraio          |                  | 0.2 20 11        |            |                |            |          |        |           |                 |            |        |                     |             |        |         |      |                |         |         |              |             |      |    |
| PERG             | Perchaptale                | 0.04 4 0         | GE EU O          | 0.43       | 1 2 11         | 0.33       | 5 e      | ŧ.     | 0.33      | 1.              | < U        | 0.33   | 1                   | < U         | 0.33   | 1       | < U  | 0.3            | 3 1     | ۲ ا     | J 0.3        | 33 1        | ۲    | U  |
| SEMIVOLATILES    | 1,2,4- monorodenzene       |                  |                  | 0.43       | 1 2 0          | 0.33       | 1 2      | ŭ      | 0.33      | 1 .             | e U        | 0.33   | 1                   | < U         | 0.33   | 1       | < U  | 0.3            | 3 T     | ٠.      | J 0.         | 33 1        | <    | Ų  |
| SEMIVOLATILES    | 1.2. Dichlordbenzene       |                  |                  | 0.43       | 1 - 11         | 0.33       | <br>1 e  | Ū      | 0.33      | 1.              | ζ υ        | 0.33   | ١                   | < U         | 0.33   | 1       | < U  | 0.3            | 3 1     | <       | J 0.         | 33 1        | <    | U  |
| SEMIVOLATILES    | 1,3-Dichlorobenzene        |                  |                  | 0.43       | 1 - U          | 0.00       | 1 -      | ŭ      | 0.33      | 1 .             | -<br>ر     | 0.33   | 1                   | < U         | 0.33   | 1       | < U  | 0.3            | 3 1     | ¢       | J 0.         | 33 1        | <    | Ų  |
| SEMIVOLATILES    | 1,4-Dichlorobanzene        |                  |                  | 21         | · · ·          | 1.65       | t        | ų.     | 1.65      | 1               | -<br>د آ   | 1.65   | 1                   | < U         | 1.65   | i 1     | < tj | 1.6            | 51      | <       | U 1,         | 55 1        | ¢    | U  |
| SEMIVOLATILES    | 2.4.5 Trichiorophenol      |                  |                  | 6.1        | 1 2 1          | 0.03       | 1        | 11     | 0.33      | 1 .             | . U        | 0.33   | 1                   | e U         | 0.33   | 1       | < L  | 0.3            | 31      | <       | U 0.         | 33 1        | د    | U  |
| SEMIVOLANLES     | 2,4,6-110700700100         |                  |                  | 0.40       | 1 2 1          | 0.00       | 1 -      | 1      | 0.33      | ·<br>•          |            | 0.33   | 1                   | < 11        | 0.33   | 1       | < 6  | 0.3            | 3 1     | <       | U 0.         | 33 1        | <    | U  |
| SEMIVOLATILES    | 2,4-0,0000000000           |                  |                  | 0.43       | 1 4 0          | 0.00       | 1 .      | ň      | 0.33      | 1               | - 11       | 0.33   | 1                   | e U         | 0.33   | 1       | < 1  | 0.3            | 3 1     | <       | U 0.         | 33 1        | ۲    | U  |
| SEMIVOLATILES    | 2,4-Dimeinyiphenol         |                  |                  | 0,43       |                | 0.00       |          | ň      | 1.65      |                 |            | 1.65   |                     | 2 11        | 1.65   | 1       | e l  | 1.6            | 5 1     | <       | U 1.         | 65 1        | <    | U  |
| SEMIVOLATILES    | Z.4-Unitrophenol           |                  |                  | 2.1        | 1 < U<br>4 . U | CO.1       |          | U      | 1.00      |                 |            |        |                     | - 0         | 1.04   |         |      |                |         |         |              |             |      |    |
| SEMIVOLATILES    | 2,4 Dinitrolojuene         |                  |                  | 0.43       | 1 < U<br>4 . H |            |          |        |           |                 |            |        |                     |             |        |         |      |                |         |         |              |             |      |    |
| SEMIVOLATILES    | 2,5-Dinitrololuene         |                  |                  | 0,43       | 0              | A 13       |          |        | A 33      | 1               | . 11       | 0.11   | 1 1                 | 2.11        | 0.35   | 1       | e 1  | , 03           | 3 1     | e       | U 0.         | 33 1        | <    | U  |
| SEMIVOLATILES    | 2-Chloronaphihalene        |                  |                  | 0,43       |                | 0.00       |          |        | 0.00      |                 |            | 0.00   | , ,<br>, ,          | 2 11        | 0.00   | 2 1     | 21   | . 0.0<br>I 0.1 | 3 1     | e       | . ຈ<br>ປີ ທີ | 33 1        | <    | บ  |
| SEMIVOLATILES    | 2-Chlorophenol             |                  | 1                | 0.43       | 1 < U          | 0.33       |          |        | 0.00      | 4               |            | 0.30   |                     | ~ •         | 0.00   | 2 1     | 21   | . 0.0          | 3 1     | è       | - ••         | 33 1        | ć    | Ū  |
| SEMIVOLATILES    | 2-Methylnaphthalene        |                  |                  | 0,43       |                | Q.33       |          |        | 0.33      | 1 .             | ς υ<br>. μ | 0.33   |                     |             | 0.00   | 2 1     |      | , 0.0          | 3 1     | ž       | υ 0          | 33 1        | ć    | Ū  |
| SEMIVOLATILES    | 2-Methylphenol             |                  |                  | 0.43       | 1 < U          | 0.33       | • <      | Ų<br>U | 0.00      | 1               | с U<br>. И | 0.33   |                     |             | 0.00   |         | 21   | , 0.0<br>  1.6 | 5 1     | 2       | 11 1         | 65 1        |      | Ū  |
| SEMIVOLATILES    | 2-Nitroaniline             |                  |                  | 2.1        | 1 < U          | 1.65       | · ·      | Ų<br>L | 1.00      | •               | د ت<br>۱۰  | 1.02   | 2 I<br>1 7          | پ »<br>۱۱ ر | 1,00   |         |      | , na           | 3 1     | 2       |              | 33 1        | 2    | ũ  |
| SEMIVOLATILES    | 2-Nitrophenol              | 1                |                  | 0.43       | 1 < U          | 0.33       | 1 <      | U      | 0.33      | 1               | < 0        | 0.33   | 1 1                 | < 0         | 0.55   | , ,     | < 1  | 2 0,0          | ~ '     |         | - v.         |             | -    | ÷  |



Table 3-57 Concentrations of Chemicals in Soil Samples Associated with Sump 057

| [SUMP] = SUMP057 |  |                  |                  | 1110 2 07             | 14 657 01                 | 1 1 657 01                              | 14.957.01           | 14-557-02        | H-857-02         | LH-\$57-02        |
|------------------|--|------------------|------------------|-----------------------|---------------------------|---|---------------------|------------------|------------------|-------------------|
| LOCATION _CODE   |  | 3550MP057-S801   | 35SUMP057-SB01   | LHD-3-07              |                           | 10.007-01                               | LB-\$57-01_3        | LH-\$57-02_1     | LH-S57-02_2      | LH-S57-02 3       |
| SAMPLE_NO        |  | 35-SMP57-SB01-01 | 35-SMP57-S801-02 | LMS-3-07              | LH-357-01_1               | 7/00/1002                               | 703/1003            | 7/99/1001        | 7/22/1993        | 7/22/1993         |
| SAMPLE_DATE      |  | 9/13/2006        | 9/13/2006        | 1/10/1995             | 112211953                 | 1 2 5                                   | 94-995              | 05.1 Ft          | 2 . 3 FI         | 8.4 - 8.9 Ft      |
| DEPTH            |  | 0.5 • 0.5 Ft     | 7.78             | 0+0.5 Pt              | 0.3 + 1 Pt                | 2-3-5                                   | DEG                 | REG              | REG              | REG               |
| SAMPLE_PURPOSE   |  | REG              | REG NO. NO.      | REG<br>Danah Di LO VO | REQ<br>Partition DR LO VO | Posuli Dil UO W                         | D Result Dill 10 VO | Recuit Dii LO VO | Result DIL LO VO | Result DIL LO VO  |
| Tesi Group       | Parameter (Units = mg/kg)              | Hesuit Dir LO VO | Result DR. LO VO | Hester DIL LO VO      |                           | 0.65 1 / II                             | 065 1 4 11          | 0.85 1 < U       | 0.65 1 < U       | 0.65 1 < U        |
| SEMIVOLATILES    | 3,3 Uichlorobenzidine                  |                  |                  | 0.65 1 < 0            | 165 3 4 11                | 165 1 - 11                              | 165 1 < 1           | 165 1 < 1        | 1.65 1 < U       | 1,65 1 < U        |
| SEMIVOLATILES    | 3 Miroaniine                           |                  |                  |                       | 1.00 1 4 0                | 185 1 - 1                               | 165 1 - 11          | 165 1 e 1        | 1.65 1 < U       | 1.55 1 < U        |
| SEMIVOLATILES    | 4,6-Dintro-2-methylphenol              |                  |                  |                       | 1.00 1 < U                |   | 0.33 1 < 11         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | 4-Bromophenyl phenyl elher             | {                |                  | 0.43 i < 0            |                           | 0.65 1 4 1                              | 0.65 1 < 1          | 0.65 1 < 11      | 0.65 1 < U       | 0.65 1 < U        |
| SEMIVOLATILES    | 4-GR/pro-3-metny/pheno/                |                  |                  | 0.43 1 4 0            | 0.65 1 4 0                | 0.65 1 < 1                              | 0.65 1 4 11         | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U        |
| SEMIVOLATILES    | 4-Chiproaniine                         |                  |                  | 0,43 1 < 0            |                           | 0.00 1 < 0                              | 0.33 1 4 11         | 033 1 4 1        | 0.33 1 < U       | 0.33 1 < 0        |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl elher            |                  |                  | 0.43 1 < 0            | 0.03 1 4 0                | 0.00 1 4 0                              |                     | 0.33 1 4 1       | 0.33 1 4 0       | 0.33 1 <b>⊲</b> U |
| SEMIVOLATILES    | 4-Methylphenol                         |                  |                  | 0.43 1 < 0            | 0,33 F < 0<br>see s - 11  | 105 1 2 0                               | 165 1 < 11          | 165 1 < 1        | 1.65 1 < U       | 1.65 1 < U        |
| SEMIVOLATILES    | 4-Nitroaniine                          |                  |                  | 2.1 1 2 0             | 1.65 1 < 0                | 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 165 1 < 11          | 155 1 < U        | 1.65 1 < 1       | 1.65 1 < U        |
| SEMIVOLATILES    | 4-Nitrophenol                          |                  |                  | 2.1   < 0             | 1.65 1 < 0                | 1.00 1 4 4                              | 100 t < 1           | 033 1 2 1        | 0.33 1 < 1       | 0.33 1 < U        |
| SEMIVOLATILES    | Acenaphihene                           |                  |                  | 0,43 1 < 0            | 0.33 1 4 0                | 0.00 1 1                                | U - 1 60.0          | 033 1 < 0        | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Acenaphthylene                         |                  |                  | 0.43 1 < 0            | 0.00 1 4 0                | 0.00 1 4 1                              |                     | 0.33 1 4 11      | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Anthracene                             |                  |                  | 0,43 1 < 0            | 0.33 1 < 0                | 0.00 1 4 0                              |                     | 0.33 1 < 1       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Benzo(a)anthracena                     |                  |                  | 0.43 1 < 0            | 0.33 1 < 0                | 0.00 1 < 0                              |                     | 033 1 - 11       | 033 1 e U        | 0.33 1 < U        |
| SEMIVOLATILES    | Benzo(a)pyrene                         |                  |                  | 0.43 1 < 0            | 0.33 1 < 0                | 0.03 1 4 1                              |                     | 033 1 < 1        | 0.33 1 < 1       | 0.33 1 < U        |
| SEMIVOLATILES    | Benzo(b)Buoranihene                    |                  |                  | 0,43 1 < 0            | 0.33 1 < 0                | 0.00 1 4 4                              |                     | 033 1 - 1        | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Benzo(ghi)perylene                     |                  |                  | 0,43 1 < 0            | 0.33 1 < 0                | 0.00 1 4 1                              |                     | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Benzo(k)fluoranthens                   |                  |                  | 0.43 1 < 0            | 1.33 1 < 0                | 165 1 4 1                               | 185 1 - 11          | 165 1 < U        | 1.65 1 < 1       | 1.65 1 < U        |
| SEMIVOLATILES    | Benzoic Acid                           |                  |                  | 2.1 1 < 0             |                           | 1.00 1 4 .0                             |                     | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U        |
| SEMIVOLATILES    | Benzyl Alcohol                         |                  |                  | 9.43 I < U            |                           | 0.00 1 4 (                              |                     | 0.00 1 4 0       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | bis(2 Chloroelhoxy)methane             |                  |                  | 0.43 1 < 0            | 0.00 1 4 0                | 0.00 1 1                                |                     | 0.33 1 - 11      | 033 t < U        | 0.33 1 < U        |
| SEMIVOLATILES    | bis(2-Chloroelhyl)ether                |                  |                  | 0.43 1 4 0            | 0.03 1 < 0                | 0.00 1 4 1                              |                     | 033 1 4 1        | 033 1 < U        | 0.33 1 < U        |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)elher            |                  |                  | 0.43 1 < 0            | .50.35 1 < 0              | 0.00 1 - 1                              |                     | 0.33 1 - 1       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate             |                  |                  | 0.43 1 < 0            | 0.00 1 < 0                | 0.00 1 4 6                              |                     | 0.33 1 ~ 1       | 0.33 1 e U       | 0.33 1 < U        |
| SEMIVOLATILES    | Butyl benzyl onthalate                 |                  |                  | 0.43 1 < 0            | 0.33 1 < U                | 0.00 1 < 1                              |                     | 0.33 1 ~ U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Chrysene                               |                  |                  | 0.43 1 < 0            | 0.03 1 < 0                | 0.00 1 4 1                              | 033 1 4 1           | 0.33 1 c U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Dibenzo(a,n)aninracene                 |                  |                  | 0.43 1 4 0            |                           | 0.33 1 - 1                              |                     | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Ulbenzoluran<br>Distu ju bihatata      |                  |                  | 0.43 1 4 1            | 0.00 1 4 0                | 0.33 1 - 1                              | , 0.33 1 ∠ U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATLES     | Dietnyi prinalate                      |                  |                  | 0.43 1 < 1            | 033 1 4 1                 | 0.33 1 - 1                              | , 0.33 t < U        | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U        |
| SEMIVOLATILES    | Dimetry private                        |                  |                  |                       | 125 1                     | 0.741 1                                 | 0.895 1             | 0.348 1          | 0.455 1          | 0.622 1           |
| SEMIVOLATILES    | dini-buly proside                      |                  |                  | 0.43 1 - 11           | 0.33 1 - 11               | 033 1 - 1                               | 1 033 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Character and Character                |                  |                  | 0.43 1 < 11           | 0.33 1 4 1                | 0.33 1 < 1                              | I 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SCHIVOLATILED    | Flugstanthene                          |                  |                  | 0.40 1 4 0            | 0.33 1 4 11               | 0.33 1 < 1                              | I 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Havashlarebasaan                       |                  |                  | 043 1 4 1             | 0.33 1 - 11               | 0.33 1 < 1                              | J 0.33 1 ≪ U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Hexachioroberizene                     |                  |                  | 0.43 1 < 1            | 0.33 1 - 11               | 0.33 1 < 1                              | J 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Hevachiorobulatione                    |                  |                  | 0.49 1 4 1            | 033 1 < 1)                | 0.33 1 < 1                              | 1 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMMOLATILES     | Hexachiorosibana                       |                  |                  | 0.43 1 < 11           | 0.33 1 < 11               | 0.33 1 < 1                              | j 0.33 t < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| CENIVOLATILES    | Independent 2.2 and purchase           |                  |                  | 0 42 1 64.0           | 0.33 1 4 11               | 0.33 1 <                                | 1 033 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | indeno(1,2,3,4,0)pyrene                |                  |                  | 0.43 1 4 11           | 0.33 1 4 11               | 033 1 4                                 | J 033 1 ≤ U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
|                  | Neglethelese                           |                  |                  | 0.42 1 4 1            | 0.33 1 - 11               | 0.33 1 < 1                              | 1 033 1 e II        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Naprinaliene                           |                  |                  | 0.43 1 < 0            | 0.33 1 4 1                | 0.33 1 < 1                              | I 0.33 1 ≼ U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Narodenzene.                           |                  |                  | 0.43 1 < 1            |                           | 0.33 1                                  | 1 0.33 1 e U        | 0.33 1 < 1       | 0.33 t < U       | 0.33 1 < U        |
| SENIVOLA HLES    | n-Nilloso-ul-n-propytamine             |                  |                  | 0.43 1 2 0            | 033 1 4 1                 | 0.33 1 <                                | 1 0.33 1 ≼ U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| SEMINULA FILES   | Partachierenheeel                      | 1                |                  | 21 1 2 11             | 165 1 - 11                | 1.65 1                                  | J 1.65 1 e U        | 1.65 1 « U       | 1.65 I < U       | 1.65 1 < U        |
| SEMBVOLATILES    | Pericauniorophenoi<br>Bhasaathrasa     |                  |                  | 0.43 1 - 11           | 0.33 1 - 11               | 0.33 1 -                                | E 0.33 1 ≠ E        | 0.33 1 e U       | 0.33 1 < U       | 0.33 1 < U        |
| CENTROLATILES    | Phanal                                 | ł                |                  | 0.43 1 2 1            |                           | 0.33 1 <                                | J 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |
| CENTROLATILES    | Pirana                                 |                  |                  | 0.43 1 2 11           | 0.33 1 2 11               | 0.33 1                                  | J 0.33 1 2 U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U        |
| SEMIVOLATILES    | Fyleid<br>1.5.1.2 Tolrashiorooibana    |                  | 11 7 20100       | 0.45 1 2 1            | 0.00 1 4 0                | 0.00                                    |                     |                  |                  |                   |
| VOLATILES        | 1.5.1.Zrieblotodkose                   |                  | 0.00492 1 0      | 0.006 1 - 11          | 0.005 1 - 11              | 0.005 1 <                               | J 0.005 1 < 11      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       |
| VOLATILES        | 1, 1, 1, 3, 3 Tetrabla anti-           |                  | 0.00402 1 11     | 0.006 1 2 1           | 0.005 1 - 11              | 0.005                                   | 1 0.005 1 < 11      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       |
| VULATILGO        | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 1                | 1.0040C I U      | 0,000 1 4 0           | 4.990 · · · ·             |   |                     | ···· · · •       |                  |                   |





## Table 3-57 Concentrations of Chemicals in Soil Samples Associated with Sump 057

| LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE  |  | 35SUMP057-SB01    | 35SUM    | P057-SB01                             | LHS-3     | -07     |               | LH-S57  | 7-01  |          | LH-55    | 7-01  |       |            | LH-S5  | 7-01        |        | LH-55    | 7-02  |             | ψı-s   | 01-02  |     |                | çun ça         | 1.02         |     |
|--|--|-------------------|----------|---------------------------------------|-----------|---------|---------------|---------|-------|----------|----------|-------|-------|------------|--|-------------|--------|----------|-------|-------------|--------|--------|-----|----------------|----------------|--------------|-----|
| SAMPLE_NO<br>SAMPLE DATE   |  | 15.51/057.0001.01 | 26 C U.D |                                       |           |         |               |         |       |          |          |       |       |            |  |             |        |          |       |             | 111.00 | - ^^ ^ |     | 1              | 10 667         | A2 2         |     |
| SAMPLE DATE  |  | 1011000-10180     | 30-OMP   | 57-5801-02                            | LHS-3     | -07     |               | LH-S57- | 01_1  |          | LH-S57   | -01_2 |       | 4          | H-S57  | -01_3       |        | UH-S57   | -02_1 |             | 14-55  | 7-02_2 |     |                | 100/           | -02_3<br>000 |     |
| and the second second second second second second second second second second second second second second second |  | 9/13/2005         | 9/1      | 3/2006                                | 1/10/1    | 995     |               | 7/22/1  | 993   |          | 7/22/1   | 1993  |       |            | 7/22/1                                       | 993         |        | 7/22/1   | 993   |             | 7/22   | 1993   |     |                | 1122/1         | 993<br>0 Er  |     |
| DEPTH  |  | 0.5 - 0.5 FI      | 7        | - 7 FI                                | 0 - 0.5   | i Fl    |               | 0.5 - 1 | l Ft  |          | 2.3      | Ft    |       |            | 8.4 • 8                                      | .9 Ft       |        | 0.5 -    | 1 Ft  |             | 2.     | 3 Ft   |     |                | 8.4 8.         | 971          |     |
| SAMPLE_PURPOSE   |  | REG               | I        | REG                                   | REC       | 3       |               | REC     | 3     |          | RE       | G     |       |            | RE   | 9           |        | RE       | G     |             | H      | EG     | •   | 5 D            |                | 3            | 10  |
| Test Group   | Parameter (Units ⊭ mg/kg)                    | Result DIL LQ VQ  | Result   | DIL LO VO                             | Result DI | L LO VO | ) Re          | su≹ D   | AL LO | a vo     | Result C |       | LQ VQ | Resul      | Dil  | <u>. io</u> | va     | Røsult ( | ML LO |             | Hesun  | UK.    |     | a Hesu         |                |              |     |
| VOLATILES  | 1,1,2-Trichloroethane                        |                   | 0.00492  | 1 U                                   | 0.006 1   | < U     |               | 0.005   | 1 <   | ų        | 0.005    | 1     | < 0   | 0.00       | 15 1   | <           | U<br>U | 0.005    | 1 <   | . 0         | 0.005  | 1      | < U |                | 00 1<br>02 1   | 5            | 11  |
| VOLATILES  | 1.1-Dichloroethane                           |                   | 0.00492  | 1 U                                   | 0.005 1   | < U     |               | 0.005   | 1 <   | U        | 0.005    | 1     | < U   | 0.00       | 15 1   | <           | 0      | 0.005    | 1 <   |             | 0.005  |        | < U | 0.0            | 05 1           | Ś            | н   |
| VOLATILES  | 1,1-Dichloroelhane                           |                   | 0.00492  | 1 U                                   | 0.005 1   | < 0     |               | 0.005   | 1 <   | U        | 0,005    | 1     | < Ų   | 0.00       | 25 1   | <           | U      | 0.005    | 1 <   | U           | 0.005  | 1      | < 0 | . 0.04         | <b>v</b> a 1   | •            | U U |
| VOLATILES  | 1,1-Dichloropropene                          |                   | 0,00492  | 1 U                                   |           |         |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | 1.2,3-Trichlorabenzene                       | }                 | 0.00492  | 1 U                                   |           |         |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | 1,2,3-Trichloropropane                       |                   | 0.00492  | 1 U                                   | 0.013 1   | < U     |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | 1,2,4-Trichlorobenzene                       |                   | 0.00492  | 1 U                                   |           |         |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | 1,2,4-Trimethylbenzene                       |                   | 0,00492  | 1 U                                   |           |         |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | 1,2-Dibromo-3-chloropropane                  |                   | 0.00492  | 1 U                                   | 0.026 1   | < U     |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | 1,2-Dibromoethane                            | }                 | 0.00492  | 1 U                                   | 0.026 1   | ∢ U     |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | 1.2-Dichlorobenzene                          | 1                 | 0.00492  | 1 U                                   |           |         |               |         |       |          |          |       |       |            |  |             |        | 0.005    |       | . n         | 0.005  | 1      | . I |                | 05 1           |              | 11  |
| VOLATILES  | 1,2-Dichloroethane                           |                   | 0.00492  | 1 U                                   | 0.005 1   | < 0     |               | 0.005   | 1 •   | : 0      | 0,005    | 1     | < 0   | 0.00       | 25 I   | <           |        | 0.000    |       |             | 0.005  | 4      | 2 1 | , 0.0<br>I 0.0 | 05 1           | 2            | ů.  |
| VOLATILES  | 1,2-Dichloroelhene                           |                   |          |                                       | 0.006 1   | < U     |               | 0.005   | •     | : U      | 0.005    | 1     | < U   | 0.00       | ו פוט<br>אייייי                              | <           |        | 0.003    | * *   |             | 0.005  | ÷      |     | 1 0.0          | 05 1           |              | ũ   |
| VOLATILES  | 1.2-Dichloropropane                          |                   | 0.00492  | 1 U                                   | 0.006 1   | < U     |               | 0.005   | 1 •   | : U      | 0.005    | 3     | < 0   | 0.00       | 105  | <           | U      | 0.000    |       |             | 0.000  | '      | •   | , Q, Q         | ~ '            | •            | v   |
| VOLATILES  | 1,2-Dimethylbenzene (a-Xylene)               |                   | 0.00492  | 1 U                                   |           |         |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | 1,3,5-Trimethylbenzene                       |                   | 0.00492  | 1 ປ                                   |           |         |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | 1,3-Dichlorobenzene                          |                   | 0.00492  | 1 U                                   |           |         |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | 1,3-Dichloroptopane                          |                   | 0.00492  | 1 U                                   |           |         |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | 1,4-Dichlorobanzene                          |                   | 0.00492  | 1 U                                   |           |         |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | 2.2-Dichloropropane                          |                   | 0.00492  | 1 0                                   |           |         |               |         |       |          |          |       |       |            | <b>AF</b> 4                                  |             |        | 0.05     |       | - 11        | 0.05   | 1      |     | م <u>ا</u>     | 05 1           |              | 11  |
| VOLATILES  | 2-Bulanone                                   |                   | 0.00983  | 1 U                                   | 0,013 1   | < U     | )             | 0.05    | 1 -   | < U      | 0.05     |       | < 0   | 0.0        | 03 1   |             | ů.     | 0.05     |       | ~ V<br>~ II | 0.00   | i      | -   |                | D1 1           | ż            | ŭ   |
| VOLATILES  | 2-Chloroethyl vinyl ether                    |                   | 0.00983  | 1 U                                   |           |         |               | 0.01    | 1     | ÷ U      | 0,01     | 1     | < Ų   | 0.0        | V1 I   | 4           | U      | 0.01     | ,     |             | 0.01   |        |     |                |                | -            | -   |
| VOLATILES  | 2-Chlorotoluene                              |                   | 0.00492  | 1 U                                   |           |         |               |         |       |          |          |       |       |            |  |             |        | 0.05     |       | . u         | 0.05   | 4      |     |                | 05 1           | ۷            | Ð   |
| VOLATILES  | 2-Hexanona                                   |                   | 0.00983  | 1 U                                   | 0.013     |         | )             | 0.05    | 1     | e U      | 0.05     | 1     | < 0   | <b>U</b> . | UD 1   | 4           | U      | 0.03     | ,     |             | 0.05   |        |     |                |                |              | •   |
| VOLATILES  | 2-Propenal                                   |                   |          |                                       | 0.64      | l < L   | )             |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | 4-Chlorololuene                              | 1                 | 0.00492  | 1 0                                   |           |         |               |         |       |          | 0.1      |       |       | . ,        |  |             | 11     | 01       | 1     | 2 11        | 0.1    | 1      | e 1 | ม .            | 0.1 1          | <            | U   |
| VOLATILES  | Acetone                                      |                   | 0.00983  | 1 0                                   | 0.013     | 1 < L   | <b>)</b><br>1 | 0.1     |       | ε υ      | 0.1      | •     |       |            | <b>,</b> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |             | ÷      |          | •     |             | •      | •      | -   | •              |                |              |     |
| VOLATILES  | Acatonitrile                                 |                   |          |                                       | 0.13      |         | ,             |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | Acryionitrile                                |                   |          |                                       | 0.10      |         | ,             |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | Aliyi chloride                               |                   | 0 00 (00 |                                       | 0.000     |         | ,             | 0.005   | 1     | - 11     | 0.005    | +     |       | 00         | 05 1   |             | 11     | 0.005    | 1     | < 1)        | 0.005  | 1      | د ا | U 0,0          | 205 1          | <            | Ų   |
| VOLATILES  | Benzene                                      |                   | 0.00492  |                                       | 0.000     |         | ,             | 0.000   |       |          | 0.000    |       | •••   |            | •••  |             | •      |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | Bromobenzene                                 |                   | 0.00492  |                                       |           |         |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLAHLES   | Bromochipromethane                           | 1                 | 0.00432  | 1 1                                   | 0.005     | 1 - 1   |               | 0.005   | 1     | < 11     | 0.005    | 1     | < 1.  | 0.0        | 05 1   | i <         | U      | 0.005    | 1     | < U         | 0.005  | 1      | <   | U 0.0          | 005 1          | <            | U   |
| VOLATILES  | Bromogichioromeinane<br>Bromogichioromeinane |                   | 0.00402  | 1 1                                   | 0.006     | 1 2 1   | 1             | 0.005   | 1     | e U      | 0.005    | 1     | د ا   | 0.0        | 05 1   | <           | U      | 0.005    | 1     | < U         | 0.005  | 1      | <   | U 0.0          | 005 1          | ۲.           | U   |
| VOLATILES  | Branomathana                                 |                   | 0.00432  |                                       | 0.000     | 1 2 1   |               | 0.01    | t     | 2 11     | 0.01     | 1     | < L   | I 0.       | .01 1  | · <         | Ú      | 0.01     | ٤     | < U         | 0.01   | 1      | <   | U O            | .01 1          | ्र           | U   |
| VOLATILES  | Carbon ditudide                              |                   | 0.00402  | 1 1                                   | 0.006     | 1.2.1   | J             | 0.005   | 1     | د ب<br>د | 0.005    | 1     | < 1   | 0.0        | 05   | <pre></pre> | U      | 0.005    | 1     | < 1)        | 0.005  | 1      | <   | U 0.0          | 205 1          | <            | U   |
| VOLATILES  | Carbon tekasbleride                          | ļ                 | 0.00402  |                                       | 0.006     | tel     | J             | 0.005   | 1     | < U      | 0.005    | 1     | < 1   | 0.0        | K05 '  | ۱ <         | U      | 0.005    | 1     | لا 🖌        | 0.005  | 1      | <   | U 0.0          | 005 1          | <            | U   |
| VOLATILES  | Chlorabenzeae                                |                   | 0.00492  |                                       | 0.006     | 1 < 1   | J             | 0.005   | 1     | < U      | 0.005    | 1     | < (   | 0.0        | X05 ·  | <u>ه</u> ا  | ម      | 0.005    | 1     | < U         | 0.005  | 1      | < ۲ | U 0.0          | 005 1          | <            | Ų   |
| VOLATILES  | Chloroothano                                 |                   | 0.00402  |                                       | 0.013     | 1 < 1   | 1             | 0.01    | 1     | < Ū      | 0.01     | 1     | < i   | ; 0.       | .01  | i <         | Ų      | Q.01     | 1     | e U         | 0.01   | 1      | <   | y c            | 0.01 1         | < <          | U   |
| VOLATILES  | Chlorolorm                                   |                   | 0.00492  | , , , , , , , , , , , , , , , , , , , | 0.006     | 1 < 1   | _<br>_        | 0.005   | 1     | < Ū      | 0.005    | 1     | < L   | 0.0        | X05 ·  | > ۱         | U      | 0.005    | 1     | < U         | 0.005  | 1      | <   | U 0.0          | 005 1          | < <          | Ų   |
| VOLATILES  | Chloromelhane                                |                   | 0.00983  | 1 1                                   | 0.013     | 1 4 1   | J             | 0.01    | 1     | < U      | 0.01     | 1     | < (   | J 0.       | .01  | > ۱         | Ų      | 0.01     | 1     | < U         | 0,01   | 1      | <   | U C            | ). <b>01</b> 1 | Í <          | Ų   |
| VOLATILES  | Chloronrene                                  |                   | 0100000  |                                       | 0.13      | 1 < 1   | J             |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | cis-1 2-Dichloroethene                       |                   | 0.00492  | 2 1 U                                 |           |         |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | cis-1.3-Dichloropropene                      |                   | 0.00492  | 2 1 0                                 | 0.005     | 1 < 1   | J             | 0.005   | 1     | < U      | 0.005    | 1     | < (   | J 0,0      | 205  |             | U      | 0.005    | 1     | < U         | 0.005  | 1      | <   | U 0.           | 005            | <            | U   |
| VOLATILES  | Dibromochkoromelhane                         |                   | 0.00492  | 2 1 1                                 | 0.006     | 1 < 1   | υ             | 0.005   | 1     | < U      | 0.005    | 1     | < (   | J 0.0      | 205  | 1 <         | U      | 0.005    | 1     | < U         | 0.005  | 1      | <   | U 0.           | 005            | { <          | U   |
| VOLATILES  | Dipromomethane                               |                   | 0.00492  | 210                                   | 0.013     | 1 e     | υ             |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | Dichlorodilluoromethane                      |                   | 0.00983  | 3 I U                                 | 0.026     | 1 < 1   | IJ            |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | Ethyl methacrylale                           |                   |          |                                       | 0.026     | 1 < 1   | U             |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |
| VOLATILES  | Elhybenzene                                  |                   | 0.00492  | 2 1 U                                 | 0.005     | 1 < 1   | U             | 0.005   | 1     | < U      | 0.005    | 1     | < (   | J 0.0      | 005  | 1 <         | U      | 0.005    | 1     | < Ų         | 0.005  | 1      | ۲   | U 0.           | 005            | 1 <          | U   |
| VOLATILES  | Hexachlorobuladiene                          |                   | 0.00493  | 2 1 U                                 |           |         |               |         |       |          |          |       |       |            |  |             |        |          |       |             |        |        |     |                |                |              |     |



| Table 3-57  |          |
|---|----------|
| Concentrations of Chemicals in Soil Samples Associated with | Sump 057 |

| . [SUMP] = SUMP057<br>LOCATION _CODE<br>SAMPLE_NO |                             | 35ŞU<br>35-SM | MP057    | -S801<br>301-01 | 35SI<br>35-SI | JMP05<br>MP57-5 | 7-580<br>\$801- | )1<br>02 | ł      | LHS-3-<br>LHS-3- | 07<br>07 |    |      | LH-SS<br>H-SS | 57-01<br>7-01_1 | I    |    | LH-S   | S57-0  | 1<br>_2 |    | Ĺ     | LH-S5<br>H-S57 | 7-01<br>-01_3 |          | ւ<br>Մ | H-S57           | -02<br>)2_1 |             | L<br>Li | H-S5<br>1-S57 | 7-02<br>·02_2 |          |      | LH-<br>LH-S | 557-0<br>57-02 | 2<br>_3 |          |
|---|-----------------------------|---------------|----------|-----------------|---------------|-----------------|-----------------|----------|--------|------------------|----------|----|------|---------------|-----------------|------|----|--------|--------|---------|----|-------|----------------|---------------|----------|--------|-----------------|-------------|-------------|---------|---------------|---------------|----------|------|-------------|----------------|---------|----------|
| SAMPLE_DATE                                       |                             | 9             | 9/13/200 | NG              |               | 9/13/20         | X06             |          |        | 1/10/19          | 95       |    |      | 71221         | 1993            |      |    | 112    | 2199   | 1       |    |       | 11221          | 993           |          |        | 1/22/18         | 30          |             |         | 0.0           | 933<br>F1     |          |      | 54          | 202            | ,<br>1  |          |
| DEPTH   |                             | 0             | .5 - 0.5 | Ft              |               | 7.7             | Ft              |          |        | Q · 0.5          | Fl       |    |      | 0.5 -         | t Fł            |      |    | 2      | - 3 Ft |         |    |       | 8.4 • 8        | 1,9 11        |          |        | 0.5 - 1         | P1          |             |         | 2-3           | F1            |          |      | 0.4         | • 0.9 r        |         |          |
| SAMPLE_PURPOSE                                    |                             |               | REG      |                 |               | REC             | 5               |          |        | REG              | i        |    |      | RE            | G               |      |    | i      | REG    |         |    |       | RĘ             | G             |          |        | REG             |             |             |         | HE?           | 5.<br>        | •        |      |             | REG.           |         |          |
| Test Group  | Parameter (Units ± mg/kg)   | Result        | DIL      | LO VO           | Result        | Dil             | L L(            | ) VQ     | Result | DIL              | ιQ       | VQ | Resu | 1             | DIL             | ία ι | vq | Result | DIL    | LQ      | VQ | Resul | 며              | L LC          | 2 VQ     | Result | D               | <u>L L</u>  | Q VQ        | Result  | C             | н <b>і</b> Г  | <u>.</u> | U KE | asun        | U1L            | <u></u> | VQ       |
| VOLATILES   | IODOMETHANE                 |               |          |                 |               |                 |                 |          | 0.01   | 3 1              | <        | U  |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | ISOBUTYL ALCOHOL            |               |          |                 |               |                 |                 |          | 2,0    | 6 1              | <        | U  |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | 1sopropylaenzene            |               |          |                 | 0.0049        | 92 1            | U               | 1        |        |                  |          |    |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | m,p-Xylenes                 | }             |          |                 | 0.0049        | 92 1            | U               | 1        |        |                  |          |    |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | Melhacrylonitrile           | }             |          |                 |               |                 |                 |          | 0.02   | 6 î              | <        | U  |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | Methyl isobutyl kelone      | 1             |          |                 | 0.0098        | 53 1            | Ļ               | ł        | 0,01   | 31               | <        | U  |      | 0.05          | 1               | <    | U  | 0.05   | 1      | <       | U  | 0.0   | 5 1            | <             | U        | 0.     | 05 1            | •           | : U         | 0.      | 05            | 1             | < (      | 1    | 0.05        | 1              | <       | U        |
| VOLATILES   | METHYL METHACRYLATE         | 1             |          |                 |               |                 |                 |          | 0.02   | 61               | <        | U  |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | Methylene chloride          |               |          |                 | 0.0049        | 92 1            | L               | J        | 0.00   | 61               | <        | U  | 0    | 005           | 1               | <    | U  | 0.005  | 1      | <       | U  | 0.00  | 5 1            | <             | Ų        | 0.0    | 05 1            | •           | : U         | 0.0     | 05            | 1             | < 1      | J    | 0.005       | 1              | <       | Ų        |
| VOLATILES   | Naphihalene                 |               |          |                 | 0.009         | B3 1            | t               | t        |        |                  |          |    |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | n-BUTYLBENZENE              |               |          |                 | 0.0049        | 92 1            | ι               | 1        |        |                  |          |    |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | n-PROPYLBENZENE             |               |          |                 | 0.004         | 92 î            | ι               | ļ –      |        |                  |          |    |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | Pentachloroethane           |               |          |                 |               |                 |                 |          | 0.02   | 6 F              | <        | U  |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | p-ISOPROPYLTOLUENE          | 1             |          |                 | 0.004         | 92 1            | ι               | )        |        |                  |          |    |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | Propionitrile               |               |          |                 |               |                 |                 |          | 0.06   | 4 <sup>′</sup> 1 | <        | υ  |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | sec-BUTYLBENZENE            | ļ             |          |                 | 0.004         | 92 1            | i               | J        |        |                  |          |    |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | Styrene                     |               |          |                 | 0.004         | 51 1            | J               | IJ       | 0.00   | 6 1              | <        | U  | 0    | 005           | 1               | <    | U  | 0.005  | 1      | ۲       | Ų  | 0.00  | 5 1            | e             | U        | 0.0    | 05 <sup>·</sup> |             | t U         | 0.0     | 05            | 1             | د ا      | J    | 0.005       | 1              | <       | U        |
| VOLATILES   | lert-BUTYLBENZENE           |               |          |                 | 0.004         | 92 1            | Ę               | J        |        |                  |          |    |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | Tetrachioroethene           |               |          |                 | 0.004         | 92 1            | ι               | )        | 0.00   | 61               | ح        | U  | 0    | .005          | 1               | <    | U  | 0.005  | 1      | <       | U  | 0.00  | 15 1           | <             | : U      | 0.0    | 05 -            |             | e U         | 0,0     | 05            | 1             | < 1      | J    | 0.005       | 1              | <       | U        |
| VOLATILES   | Toluene                     |               |          |                 | 0.004         | 92 1            | ι               | )        | 0.00   | 61               | <        | U  | 0    | 005           | 1               | <    | U  | 0.005  | 1      | <       | U  | 0,0   | 5 1            | 4             | : U      | 0.0    | 05 ·            |             | < U         | 0,0     | 05            | 1             | < 1      | j    | 0.005       | 1              | <       | U        |
| VOLATILES   | Irans-1.2-Dichloroethene    |               |          |                 | 0,004         | 92 1            | ι ι             | J        |        |                  |          |    |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | Irans-1,3-Dichloropropene   | ļ             |          |                 | 0.004         | 92 1            | ιι              | J        | 0.00   | 61               | <        | U  | C    | .005          | 1               | <    | U  | 0.005  | 1      | <       | U  | 0.00  | 15 1           |               | : U      | 0.0    | 05 ·            | •           | ∠ Ų         | 0.0     | 05            | 1             | < ا      | J    | 0.005       | 1              | ۲       | U        |
| VOLATILES   | trans-1,4-Dichloro-2-butene |               |          |                 |               |                 |                 |          | 0.02   | 61               | <        | U  |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | Trichloroethene             |               |          |                 | 0.004         | 92 1            | 1               | 1        | 0.00   | 61               | <        | U  | G    | .005          | 1               | <    | U  | 0.005  | 1      | <       | U  | 0.00  | <b>)</b> 5 1   | <             | ÷ Ų      | 0.0    | 05 1            |             | < Ų         | 0.0     | 05            | 1             | <        | 9    | 0.005       | 1              | <       | U        |
| VOLATILES   | Trichlorofluoromethane      |               |          |                 | 0.009         | 63 1            | ι               | 1        | 0.01   | 31               | <        | U  |      |               |                 |      |    |        |        |         |    |       |                |               |          |        |                 |             |             |         |               |               |          |      |             |                |         |          |
| VOLATILES   | Vinyl acetale               | 1             |          |                 | 0.009         | 63 1            | L               | J        | 0.01   | 31               | 4        | U  |      | 0.05          | 1               | <    | U  | 0.05   | 1      | <       | U  | 0.0   | 5 1            | <             | : U      | 0.     | .05             | ļ ,         | < U         | 0.      | 05            | 1             | < 1      | U    | 0.05        | 1              | <       | V,       |
| VOLATILES   | Vinvi chloride              |               |          |                 | 0.009         | 63 1            | L L             | J        | 0.01   | 3 1              | <        | U  |      | 0.01          | 1               | <    | U  | 0.01   | 1      | ۲       | Ų  | 0.0   | 1 10           |               | e U      | 0.     | 01              | ; ·         | < U         | 0.      | 01            | 1             | < ا      | J    | 0.01        | 1              | <       | U        |
| VOLATILES   | Xylenes, Total              |               |          |                 |               |                 |                 |          | 0.00   | 6 1              | <        | U  | ç    | 005           | 1               | <    | U  | 0.005  | : 1    | <       | ٠Ų | 0.0   | )5             | 6             | <u> </u> | 0.0    | 05              |             | <u>د با</u> | 0,0     | 05            | 1             | <        | U    | 0.005       | 1              | <       | <u> </u> |

Footnotes are shown on cover page to Tables Section.





| Table 3-58   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 058 |
|  |

.

| (SUMP) = SUMP058<br>LOCATION_CODE |                            | 35SUMP058-SB01   | 35SUMP058-SB01   | 35SUMP058-SB02   | 35SUMP058-SB02   | LH-DL58-01                 | LH5-3-19         | LH-S58-01        | LH-\$58-01       |
|-----------------------------------|----------------------------|------------------|------------------|------------------|------------------|----------------------------|------------------|------------------|------------------|
| SAMPLE_NO                         |                            | 35-SMP58-SB01-01 | 35-SMP58-SB01-02 | 35-SMP58-SB02-01 | 35-SMP58-SB02-02 | LH-DL58-01                 | LHS-3-19         | LH-S58-01_1      | LH-\$58-01_2     |
| SAMPLE_DATE                       |                            | 9/13/2005        | 9/13/2006        | 9/13/2006        | 9/13/2006        | 6/26/1993                  | 1/10/1995        | 6/26/1993        | 6/26/1993        |
| DEPTH                             |                            | 0.5 - 0.5 Ft     | 10 - 10 Ft       | 0.5 - 0.5 Ft     | 10 • 10 Ft       | 2.1 - 2.9 Ft               | 0 - 0.5 Ft       | 0.5 - 1,5 FI     | 3 - 4.5 FI       |
| SAMPLE_PURPOSE                    |                            | PEG              | REG              | REG              | REG              | REG                        | REG              | REG              | REG              |
| Test Group                        | Parameter (Units = mg/kg)  | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO           | Result DIL LO VO | Result DIL LO VO | Result DIL LO VQ |
| EXPLOSIVES                        | 1,3,5-Trinkrobenzene       |                  |                  |                  |                  |                            | 0.23 1 < U       |                  |                  |
| EXPLOSIVES                        | 1,3-Dinitrobenzene         |                  |                  |                  |                  |                            | 0.23 1 < U       |                  |                  |
| EXPLOSIVES                        | 2,4,6-Trinitrataluene      |                  |                  |                  |                  |                            | 0.23 1 < U       |                  |                  |
| EXPLOSIVES                        | 2.4-Dinitrotoluene         |                  |                  |                  |                  | 1,205 1 < U                | 0.23 1 < U       | 1.159 1 < U      | 1.205 1 < U      |
| EXPLOSIVES                        | 2,6-Dinitrotoluene         |                  |                  |                  |                  | 1.205 1 < U                | 0.25 1 < U       | 1.159 1 < U      | 1.205 1 < U      |
| EXPLOSIVES                        | 4-Amino-2.6-dinitrololuene |                  |                  |                  |                  |                            | 0.48 1 < U       |                  |                  |
| EXPLOSIVES                        | нмх                        |                  |                  |                  |                  |                            | 2.1 1 < U        |                  |                  |
| EXPLOSIVES                        | m-Nitrotoluene             |                  |                  |                  |                  |                            | 0.95 1 < U       |                  |                  |
| EXPLOSIVES                        | Nitrobenzene               |                  |                  |                  |                  |                            | 0.25 1 < U       |                  |                  |
| EXPLOSIVES                        | o-Nitrotoluene             |                  |                  |                  |                  |                            | 0.95 1 < U       |                  |                  |
| EXPLOSIVES                        | p-Nitrotoluene             |                  |                  |                  |                  |                            | 2.9 1 < U        |                  |                  |
| EXPLOSIVES                        | RDX                        |                  |                  |                  |                  |                            | 1 1 < U          |                  |                  |
| EXPLOSIVES                        | Tetryl                     |                  |                  |                  |                  |                            | 0.7 1 < U        |                  |                  |
| METALS                            | Aluminum                   |                  |                  |                  |                  | 12000 1                    | 8140 1           | 13500 1          | 11000 1          |
| METALS                            | Antimony                   | 1                |                  |                  |                  | 9.18 1 < U                 | 15.3 1 < UJ      | 9.56 1 < U       | 5.96 1 < U       |
| METALS                            | Arsenic                    |                  |                  |                  |                  | 1.7 1 E                    | 9.6 1 J          | 7.12 1           | 2,98 1           |
| METALS                            | Barium                     |                  |                  |                  |                  | 78.8 1                     | 81.1 1           | 53.9 1           | 69.5 1           |
| METALS                            | Cadmium                    |                  |                  |                  |                  | 3.21 1 E                   | 0.86 1 < U       | 6,84 1           | 3.61 1           |
| METALS                            | Calcium                    |                  |                  |                  |                  | 1680 1                     | 211 1            | 668 1            | 915 1            |
| METALS                            | Chromium                   |                  |                  |                  |                  | 8.54 1                     | 80.4 1 J         | 27.1 1           | 18.8 1           |
| METALS                            | Cobali                     |                  |                  |                  |                  | 2.98 1                     | 8.4 1            | 4.73             | 6.14 1           |
| METALS                            | Copper                     |                  |                  |                  |                  | 8.17 1                     | 4 1              | 7,7 1            | 5.11 3           |
| METALS                            | Iron                       |                  |                  |                  |                  | 9990 1                     | 69300            | 24500 1          | 12200 1          |
| METALS                            | Lead                       |                  |                  |                  |                  | 18.6 1 E                   | 10.2             | 29.1 1           | 20 1             |
| METALS                            | Magnesium                  | *                |                  |                  |                  | 427 1                      | 214 1            | 429 1            | 457 1            |
| METALS                            | Manganese                  |                  |                  |                  |                  | 44.8 1                     | 236 1            | 93.6 1           | 94.9             |
| METALS                            | Mercury                    |                  |                  |                  |                  | 0.041 1 < U                | 0.1 1 < 0        | 0.07 1           | 0.027 1 < 0      |
| METALS                            | Potassium                  |                  |                  |                  |                  | 535 1                      | 172 1 < 0        | 592 1            | 55/ 1            |
| METALS                            | Selenium                   |                  |                  |                  |                  | 0.918 1 < U                | 0.52 1 J         | 0.956 1 < U      | 0.596 1 < 0      |
| METALS                            | Silver                     |                  |                  |                  |                  | 0,046 1 < U                | 1.5 1 < 0        | 0.048 1 E        | 0.045 1 E        |
| METALS                            | Strontium                  | }                |                  |                  |                  |                            | 8.6 1 < 0        | 5,98 1           | 8.64 1           |
| METALS                            | Thallium                   |                  |                  |                  |                  |                            | 42.9 1 < 0       |                  |                  |
| METALS                            | Zinc                       |                  |                  |                  |                  | .35 1                      | 15.7 1           | 20.8             | 22.4             |
| PERC                              | Perchlorate                | 0.0365 1         | 0.497 10         | 0.111 2          | 0.318 10         |                            | - <b>4</b>       |                  |                  |
| SEMIVOLATILES                     | 1.2,4-Trichlorobenzene     |                  |                  |                  |                  | 1.205 1 < 0                | 0.39 1 < 0       | 1.159 1 < U      | 1.205 1 < 0      |
| SEMIVOLATILES                     | 1,2-Dichlorobenzene        |                  |                  |                  |                  | 1.205 1 < 0                | 0,39 1 < 0       | 1,138 I < U      | 1.200 1 4 11     |
| SEMIVOLATILES                     | 1.3-Dichlorobenzene        |                  |                  |                  |                  | 1.205 1 < 0                | 0.39 1 < 0       | 1.158 1 < U      | 1.205 I K U      |
| SEMIVOLATILES                     | 1.4-Dichlorobenzene        |                  |                  |                  |                  | 1.205 1 < 0                | 0.39 1 < 0       | 1.159 1 < 0      | 1.205 1 4 1      |
| SEMIVOLATILES                     | 2.4,5-Trichlorophenol      |                  |                  |                  |                  | 1.205 1 < 0                | 1.9 1 < U        | 1.159 1 < 0      | 1.205 1 < 0      |
| SEMIVOLATILES                     | 2,4,6-Trichlorophenol      |                  |                  |                  |                  | 1.205 1 < 0                | 0.39 1 < 0       | 1,109 1 < 0      | 1.205 1 < 0      |
| SEMIVOLATILES                     | 2,4-Dichlorophenol         | 1                |                  |                  |                  | 1,205 1 < 0                | 0.39 1 < 0       | 0.670 1 4 1      | 0.602 1 < 1      |
| SEMIVOLATILES                     | 2,4-Dimethylphenol         |                  |                  |                  |                  | 0.602 1 < 0                | 0,39 1 < 0       | 11 597 1 4 11    | 12.048 1 ~ 11    |
| SEMIVOLATILES                     | 2,4-Dinitrophenol          |                  |                  |                  |                  | 12.046 I < U               |                  | 11.367 / 4 0     | 12.040 1 2 0     |
| SEMIVOLATILES                     | 2.4-Dinifrotoiuene         |                  |                  |                  |                  |                            | 0.39 3 4 0       |                  |                  |
| SEMIVOLATILES                     | 2.6-Dinitrotoluene         |                  |                  |                  |                  | 0.961 4                    | 0.30 4 41        | 0348 1 - U       | 0.361 1 - 1      |
| SEMIVOLATILES                     | 2-Ghloronaphthalene        |                  |                  |                  |                  |                            | 0.39 1 4 0       | 0.579 1 - 1      | 0.602 1 < 0      |
| SEMIVOLATILES                     | 2-Chlorophenol             |                  |                  |                  |                  | 0.002 1 < 0                |                  | 0.348 1 - 11     | 0.361 1 < 1      |
| SEMIVOLATILES                     | 2-Methylnaphthalene        |                  |                  |                  |                  | 0.001 2 < 0                | 0.03 1 4 0       | 0.579 1 2 1      | 0.602 1 < 11     |
| SEMIVOLATILES                     | 2-Methylphenol             | 1                |                  |                  |                  | 0,00¢ i < U<br>3,614 1 - H | 19 1 - 11        | 3476 1 2 11      | 3614 1 < 1       |
| SEMIVOLATILES                     | 2-naroaniine               | 1                |                  |                  |                  |                            |                  |                  |                  |

Data Evaluation Report

### Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



 Table 3-58

 Concentrations of Chemicals in Soil Samples Associated with Sump 058

| [SUMP] = SUMP058 |  |                  |                  |                  |                  |                  |                  | 1                |                  |
|------------------|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |  | 35SUMP058-SB01   | 3SSUMP058-SB01   | 35SUMP058-SB02   | 35SUMP058-SB02   | LH-DL58-01       | LHS-3-19         | LH-S58-01        | LH-S58-01        |
| SAMPLE_NO        |  | 35-SMP58-SB01-01 | 35-SMP58-SB01-02 | 35-SMP58-SB02-01 | 35-SMP58-S802-02 | LH-DL58-01       | LHS-3-19         | LH-S58-01_1      | LH-858-01_2      |
| SAMPLE_DATE      |  | 9/13/2006        | 9/13/2006        | 9/13/2006        | 9/13/2006        | 6/26/1993        | 1/10/1995        | 6/26/1993        | 6/26/1993        |
| DEPTH            |  | 0.5 - 0.5 Ft     | 10 - 10 Ft       | 0.5 - 0.5 Ft     | 10 - 10 Ft       | 2.1 - 2.9 Fi     | 0 - 0.5 Ft       | 0.5 - 1.5 Pt     | 3 - 4.5 Ft       |
| SAMPLE_PURPOSE   |  | REG              |
| Tesl Group       | Parameter (Units = mg/kg)                    | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO |
| SEMIVOLATILES    | 2-Nitrophenol                                |                  |                  |                  |                  | 1.205 1 < U      | 0.39 1 < U       | 1,159 1 < U      | 1.205 1 < U      |
| SEMIVOLATILES    | 3.3'-Dichlorobenzidine                       |                  |                  |                  |                  | 0.602 1 < U      | 0.77 1 < U       | 0.579 1 < U      | 0.602 1 < U      |
| SEMIVOLATILES    | 3-Nitroaniline                               |                  |                  |                  |                  | 3,614 1 < U      | 1.9 1 < U        | 3.476 1 < U      | 3.614 1 < U      |
| SEMIVOLATILES    | 4.6-Dinitro-2-methylphanol                   |                  |                  |                  |                  | 6.024 1 < U      | 1.9 1 < U        | 5.794 1 < U      | 6.024 1 < U      |
| SEMIVOLATILES    | <ol> <li>Bromophenyl phenyl ether</li> </ol> | [                |                  |                  |                  | 1.205 1 < U      | 0.39 1 < U       | 1.159 1 < U      | 1.205 1 < 0      |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol                      | {                |                  |                  |                  | 0,602 1 < U      | 0.39 1 < U       | 0.579 1 < U      | 0.602 1 < U      |
| SEMIVOLATILES    | 4-Chloroaniline                              |                  |                  |                  |                  | 3.614 1 < U      | 0.39 1 < U       | 3,476 1 < U      | 3.614 1 < U      |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether                  |                  |                  |                  |                  | 1.205 1 < U      | 0.39 1 < U       | 1.159 1 < U      | 1.205 1 < U      |
| SEMIVOLATILES    | 4-Methylphenol                               |                  |                  |                  |                  | 0.602 1 < U      | 0.39 1 < U       | 0,579 1 < 0      | 0.602 1 < 0      |
| SEMIVOLATILES    | 4-Nitroaniline                               |                  |                  |                  |                  | 6.024 i < U      | 1.9 1 < U        | 5.794 1 < U      | 6.024 1 < U      |
| SEMIVOLATILES    | 4-Nitrophenol                                |                  |                  |                  |                  | 6.024 1 < U      | 1.9 1 < U        | 5.794 1 < U      | 6.024 1 < U      |
| SEMIVOLATILES    | Acenaphthene                                 |                  |                  |                  |                  | 0.361 1 < U      | 0.39 1 < U       | 0.348 1 < U      | 0.361 1 < U      |
| SEMIVOLATILES    | Acenaphthylene                               |                  |                  |                  |                  | 0.602 1 < U      | 0.39 1 < U       | 0.579 1 < U      | 0.602 1 < U      |
| SEMIVOLATILES    | Anthracene                                   |                  |                  |                  |                  | 0.602 1 < U      | 0.39 1 < U       | 0.579 1 < U      | 0.602 1 < U      |
| SEMIVOLATILES    | Benzo(a)anihracene                           |                  |                  |                  |                  | 0.361 1 < U      | 0.39 1 < U       | 0.348 1 < U      | 0.361 1 < U      |
| SEMIVOLATILES    | Benzo(a)pyrene                               |                  |                  |                  |                  | 0.602 1 < U      | 0.39 1 < U       | 0.579 1 < U      | 0.602 1 < U      |
| SEMIVOLATILES    | Benzo(b)fluoranthene                         |                  |                  |                  |                  | 1.205 1 < 0      | 0.39 1 < U       | 1.159 1 < U      | 1.205 1 < 0      |
| SEMIVOLATILES    | Benzo(ghi)perylene                           |                  |                  |                  |                  | 2.41 1 < U       | 0,39 1 < U       | 2.317 1 < U      | 2.41 1 < U       |
| SEMIVOLATILES    | Senzo(k)fluoranthene                         |                  |                  |                  |                  | 1.205 1 < U      | 0.39 1 < U       | 1.159 1 < U      | 1.205 1 < U      |
| SEMIVOLATILES    | Benzoic Acid                                 | }                |                  |                  |                  |                  | 1,9 1 < U        |                  |                  |
| SEMIVOLATILES    | Benzyl Alcohol                               |                  |                  |                  |                  |                  | 0.39 1 < U       |                  |                  |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane                   |                  |                  |                  |                  | 0.602 1 < U      | 0,39 1 < U       | 0.579 1 < U      | 0.602 1 < U      |
| SEMIVOLATILES    | bis(2-Chlorosthyi)elher                      |                  |                  |                  |                  | 0.602 1 < U      | 0.39 1 < U       | 0.579 1 < 0      | 0.602 f < U      |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether                  |                  |                  |                  |                  | 1,205 1 < U      | 0.39 1 < U       | 1,159 1 < U      | 1.205 1 < U      |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate                   |                  |                  |                  |                  | 0.506 1 < U      | 0.39 1 < U       | 0.22 1 < 0       | 0,133 1 < 0      |
| SEMIVOLATILES    | Butyl benzyl phthalate                       |                  |                  |                  |                  | 0.602 1 < U      | 0.39 1 < U       | 0.579 1 < U      | 0.602.1 < 0      |
| SEMIVOLATILES    | Carbazole                                    |                  |                  |                  |                  | 1.205 1 < U      |                  | 1.159 1 < 0      | 1.205 1 < 0      |
| SEMIVOLATILES    | Ghrysene                                     |                  |                  |                  |                  | 6.024 1 < U      | 0,39 1 < U       | 5.794 1 < 0      | 5.024 1 < U      |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene                       |                  |                  |                  |                  | 2.41 1 < U       | 0.39 1 < U       | 2.317 1 < 0      | 2.41 1 < 0       |
| SEMIVOLATILES    | Dibenzoluran                                 |                  |                  |                  |                  | 1.205 1 < 0      | 0.39 \ < 0       | 1.159 1 < U      | 1.205 1 < 0      |
| SEMIVOLATILES    | Diethyl ohthalate                            |                  |                  |                  |                  | 0.157 1 J        | 0.39 1 < U       | 0.579 1 < U      | 0.802 1 < 0      |
| SEMIVOLATILES    | Dimethyl ohthalale                           |                  |                  |                  |                  | 0.602 1 < U      | 0.39 1 < 0       | 0.579 1 < U      | 0.602 1 < 0      |
| SEMIVOLATILES    | di-n-Butyl phihalate                         |                  |                  |                  |                  | 7.614 1 < U      | 0.39 1 < 0       | 3.43 1 < U       | 1.47 1 < U       |
| SEMIVOLATILES    | di-n-Octyl phthalate                         |                  |                  |                  |                  | 0.602 1 < U      | 0.39 1 < U       | 0.579 1 < U      | 0.502 1 < 0      |
| SEMIVOLATILES    | Fluoranthene                                 |                  |                  |                  |                  | 0.602 1 < U      | 0.39 1 < 0       | 0.579 1 < U      | 0.602 1 < 0      |
| SEMIVOLATILES    | Fluorene                                     |                  |                  |                  |                  | 0.602 1 < U      | 0.39 1 < V       | 0.579 1 < U      | 0.602 1 < 0      |
| SEMIVOLATILES    | Hexachlorobenzene                            |                  |                  |                  |                  | 1.205 1 < U      | 0.39 1 < U       | 1,159 1 < U      | 1.205 1 < 0      |
| SEMIVOLATILES    | Hexachlorobutadiene                          |                  |                  |                  |                  | 3.614 1 < U      | 0.39 1 < 0       | 3.476 1 < U      | 3.614 1 < U      |
| SEMIVOLATILES    | Hexachlorocyclopentadiene                    |                  |                  |                  |                  | 3.614 1 < U      | 0.39 1 < U       | 3.476 1 < U      | 3.614 1 < U      |
| SEMIVOLATILES    | Hexachioroethane                             | }                |                  |                  |                  | 1.205 1 < U      | 0.39 1 < U       | 1.159 1 < U      | 1,205 1 < 0      |
| SEMIVOLATILES    | indeno(1,2,3-cd)pyrene                       |                  |                  |                  |                  | 1.205 1 < U      | 0.39 1 < U       | 1.159 1 < U-     | 1.205 1 < 0      |
| SEMIVOLATILES    | Isophorone                                   |                  |                  |                  |                  | 0.602 1 < 0      | 0.39 1 < U       | 0,579 1 < U      | 0.602 1 < U      |
| SEMIVOLATILES    | Naphihalene                                  |                  |                  |                  |                  | 0.361 1 < 0      | 0.39 1 < U       | 0.348 1 < U      | 0.361 1 < 0      |
| SEMIVOLATILES    | Nilrobenzene                                 |                  |                  |                  |                  | 0.602 1 < 0      | 0.39 1 < U       | 0.579 1 < U      | 0.602 1 < 0      |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine                   |                  |                  |                  |                  | 1.205 1 < U      | 0.39 1 < U       | 1.159 1 < 0      | 1.205 1 < 0      |
| SEMIVOLATILES    | n-Nilrosodiphenylamine                       | 1                |                  |                  |                  | 0.602 1 < U      | 0,39 1 < U       | 0.579 1 < 0      | 0.602 1 < U      |
| SEMIVOLATILES    | Pentachlorophenol                            |                  |                  |                  |                  | 6.024 1 < U      | 1.9 1 < U        | 5.794 1 < U      | 6.024 1 < U      |
| SEMIVOLATILES    | Phenanthrene                                 |                  |                  |                  |                  | 0.602 1 < U      | 0.39 1 < U       | 0.579 1 < 0      | 0.602 1 < U      |
| SEMIVOLATILES    | Phenol                                       |                  |                  |                  |                  | 0.602 1 < U      | 0.39 1 < U       | 0.579 1 < U      | 0.602 1 < U      |
| SEMIVOLATILES    | Pyrene                                       | 1                |                  |                  |                  | 0.602 1 < U      | 0.39 1 < U       | 0,579 1 < U      | 0.602 1 < U      |

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

|                         |                              | Concentratio      | ons of Chemic    | ais in Soil Sam                         | ples Associated  | l with S | ump 058   |                  |                  |  |
|-------------------------|------------------------------|-------------------|------------------|---|------------------|----------|-----------|------------------|------------------|--|
| [SUMP] ≠ SUMP058        |                              | 0501 H 10055 0004 | ACCULUDADA DOAL  | SECULIOSES COAS                         | 2501100069.0000  | 16.5     | V 58.01   | 185-3-19         | LH-S58-01        | LH-S58-01                              |
| LOCATION _CODE          |                              | 35SUMP058-SB01    | 355UMP056-SBUT   | 355000000000000000000000000000000000000 | 2000/WF 030-302  | L HLT    | 1 58-01   | 1 HS-3-19        | LH-S58-01 1      | LH-S58-01_2                            |
| SAMPLE_NO               |                              | 35-5MP58-5B01-01  | 33-3WP36-3601-02 | 011212006                               | 0/13/2006        | 6/2      | 6/1003    | 1/10/1995        | 6/26/1993        | 6/26/1993                              |
| SAMPLE_DATE             |                              | 9/13/2006         | 9/13/2006        | 9/13/2008                               | 10 - 10 Et       | 21       | . 29 Ft   | 0 - 0.5 Ft       | 0.5 - 1.5 Ft     | 3 - 4.5 Ft                             |
| DEPTH<br>DAMPLE DUDDOGE |                              | 0.5 - 0.5 M       | REG              | BEG                                     | REG              | F        | REG       | REG              | REG              | REG                                    |
| SAMPLE_PURPOSE          | Bernmater (Units - mailes)   | George Dill LO VO | Result DIL LO VO | Besult DII LO VO                        | Besult DIL LO VO | Result   | DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO                       |
| Test Group              | 1 1 1 2 Tetrasherelbane      |                   |                  |   |                  |          |           | 0.012 1 < U      |                  | ······································ |
| VOLATILES               | 1.1.1.Trichlorosibane        |                   |                  |   |                  | 0.006    | 1 < U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U                            |
| VOLATILES               | 1 1 2 2-Teirochlomethane     |                   |                  |   |                  | 0.006    | 1 < បិ    | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U                            |
| VOLATILES               | 1.1.2.Trichloroethane        |                   |                  |   |                  | 0.006    | 1 < U     | 0.006 1 < U      | 0.006 t < U      | 0.006 i < U                            |
| VOLATILES               | 1 1 Dichloroethane           |                   |                  |   |                  | 0,006    | 1. < U    | 0.006 1 < U      | 0.005 1 < U      | 0.006 1 < U                            |
| VOLATILES               | 1 -Dichloroethene            |                   |                  |   |                  | 0,006    | t < U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U                            |
| VOLATILES               | 1.2.3-Trichloropropage       |                   |                  |   |                  |          |           | 0.012 1 < U      |                  |  |
| VOLATILES               | 1.2.Dibromo-3.cbloropropane  |                   |                  |   |                  |          |           | 0.023 1 < U      |                  |  |
| VOLATILES               | 1 2.Dibromoethane            |                   |                  |   |                  |          |           | 0.023 1 < U      |                  |  |
| VOLATILES               | 1.2-Dichloroethane           |                   |                  |   |                  | 0.006    | 1 < U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U                            |
| VOLATILES               | 1 2-Dichloroghana            |                   |                  |   |                  | 0.006    | 1 < U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U                            |
| VOLATILES               | 1.2-Dichloropropage          |                   |                  |   |                  | 0.006    | 1 < ⊍     | 0.005 1 < U      | 0.006 1 < U      | 0.006 1 < U                            |
| VOLATIES                | 2-Butanone                   |                   |                  |   |                  | 0.06     | 1 < U     | 0.012 1 < U      | 0.058 i < U      | 0.06 1 < U                             |
| VOLATILES               | 2-Chloroethyl vinvi ether    |                   |                  |   |                  |          |           | 0.012 1 < U      |                  |  |
| VOLATILES               | 2-Hevenene                   |                   |                  |   |                  | 0.06     | 1 < 0     | 0.012 1 < U      | 0.058 1 < U      | 0.06 1 < U                             |
| VOLATIES                | 2-Pronenal                   | 1                 |                  |   |                  |          |           | 0.58 1 < U       |                  |  |
| VOLATILES               | àcainna                      |                   |                  |   |                  | 0.035    | 1 < ⊍     | 0.012 1 < U      | 0.008 1 < U      | 0.083 1 < U                            |
| VOLATILES               | Acatonitrila                 |                   |                  |   |                  |          |           | 0.12 1 < U       |                  |  |
| VOLATILES               | Acedonitie                   |                   |                  |   |                  |          |           | 0.12 1 < U       |                  |  |
| VOLATILES               | Acryonanie<br>Albi oblaside  |                   |                  |   |                  |          |           | 0.012 1 < 0      |                  |  |
| VOLATILES               | Bopzono                      |                   |                  |   |                  | 0.006    | 1 < U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U                            |
| VOLATILES               | Bernadiableremethate         |                   |                  |   |                  | 0.006    | 1 < 0     | 0.006 1 < U      | 0,006 1 < U      | 0.006 1 < U                            |
| VOLATILES               | Bromotorm                    |                   |                  |   |                  | 0.006    | 1 < 0     | 0.006 1 < U      | 0.006 1 < U      | 0.006 t < U                            |
| VOLATILES               | Bromomothann                 |                   |                  |   |                  | 0.03     | 1 < U     | 0.012 1 < U      | 0.029 1 < U      | 0.03 1 < U                             |
| VOLATILES               | Corbon dicultido             |                   |                  |   |                  | 0.006    | 1 < U     | 0.006 1 < U      | 0.003 1          | 0.032 1                                |
| VOLATILES               | Carbon tateshorida           |                   |                  |   |                  | 0.006    | 1 < U     | 0.006 1 < U      | 0.006 I < U      | 0.006 1 < U                            |
|                         | Chlorobenzano                |                   |                  |   |                  | 0.006    | 1 < U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U                            |
| VOLATILES               | Chierenthana                 |                   |                  |   |                  | 0.03     | 1 < 1     | 0.012 1 < U      | 0.029 1 < U      | 0.03 i < U                             |
| VOLATILES               | Chinolerm                    |                   |                  |   |                  | 0.006    | 1 < U     | 0.006 1 < U      | 0.005 t < U      | 0.006 t < U                            |
| VOLATILES               | Chloremothean                |                   |                  |   |                  | 0.03     | 1 < U     | 0.012 1 < U      | 0.029 i < U      | 0.03 1 < U                             |
| VOLATILES               | Chloroproze                  | ł                 |                  |   |                  |          |           | 0.12 1 < L       |                  |  |
|                         | cie-1 3-Dichloropropago      | }                 |                  |   |                  | 0.006    | 1 < 0     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U                            |
| VOLATILES               | Disconscience                |                   |                  |   |                  | 0.006    | 1 < 0     | 0.006 1 < L      | 0.006 1 < U      | 0.006 1 < U                            |
| VOLATILES               | Dibromocnorometrane          |                   |                  |   |                  |          |           | 0.023 1 < 0      |                  |  |
| VOLATILES               | Dipromomentarie              |                   |                  |   |                  |          |           | 0.023 1 < 1      |                  |  |
| VOLATILES               | Ethyl mathagailato           |                   |                  |   |                  |          |           | 0.023 1 < 1      | )                |  |
| VOLATILES               | Ethyl methacrylate           |                   |                  |   |                  | 0.006    | 1 < 1     | 0.006 1 < L      | / 0,006 1 < U    | 0.006 1 < U                            |
| VOLATILES               | PODOUETLANE                  |                   |                  |   |                  |          |           | 0.012 1 < L      | ,<br>I           |  |
| VOLATILES               | IDDOMETHANE                  |                   |                  |   |                  |          |           | 2.3 1 < 1        | I                |  |
| VOLATILES               | ISOBULTI, ALCOHOL            |                   |                  |   |                  |          |           | 0.023 1 < 1      | ł                |  |
| VOLATILES               | Methacrytoninite             |                   |                  |   |                  | 0.06     | t < 11    | 0.012 1 < 1      | J 0.058 1 < U    | 0.06 1 < U                             |
| VOLATILES               | Methyl Isobutyl ketone       |                   |                  |   |                  | 0100     |           | 0.023 1 < L      | )                |  |
| VOLATILES               | MEINTL MEINAGRYLAIE          |                   |                  |   |                  | 0.004    | 1 4 1)    | 0.005 1 < 1      | J 0.005 î < U    | 0.006 1 < U                            |
| VOLATILES               | Melnyiene chloride           |                   |                  |   |                  | v.v04    |           | 0.023 1 < 1      | 1                |  |
| VULATILES               | Pentachioroethane            |                   |                  |   |                  |          |           | 0.058 1 < 1      | }                |  |
| VOLATILES               | Propionitrile                |                   |                  |   |                  | 0.006    | 1 2 11    | 0.006 1 < 1      | J 0.006 1 < U    | J 0.006 1 < U                          |
| VULATILES               | Styrene                      |                   |                  |   |                  | 0.000    | 1 2 17    | 0.006 1 < 1      | J 0.006 1 < Ú    | 0.006 1 < U                            |
| VOLATILES               | i etrachioroethene           |                   |                  |   |                  | 0.000    | 1 2 1     | 0.006 1 < 1      | J 0.006 1 < U    | 1 0,006 t < U                          |
| VOLATILES               | roluene                      |                   |                  |   |                  | 0.000    | 1 2 11    | 0.006 1 < 1      | J 0.006 1 < U    | ) 0.006 1 < U                          |
| VOLATILES               | trans-1,3-Dichloropropene    |                   |                  |   |                  | 0.000    | ,         | 0.023 1 < 1      | · -              |  |
| VOLATILES               | I/2/15+1,4-U/GR/070-2-0Utene | 1                 |                  |   |                  |          |           |                  |                  |  |

Table 3-58

shaw Environmental. Inc.

### Data Evaluation Report Chemical Concentrations in Soli Associated with LHAAP-35/36 Sumps

|   |                           | QUINCHIGH                                       |   |   |   | treated a second second               |                                   |                                       |                                       |
|---|---------------------------|---|---|---|---|---------------------------------------|-----------------------------------|---------------------------------------|---------------------------------------|
| {SUMP} = SUMP058<br>LOGATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE |                           | 35SUMP058-SB01<br>35-SMP58-SB01-01<br>9/13/2005 | 35SUMP058-SB01<br>35-SMP58-SB01-02<br>9/13/2006 | 35SUMP058-S802<br>35-SMP58-S802-01<br>9/13/2006 | 35SUMP058-SB02<br>35-SMP58-SB02-02<br>9/13/2006 | LH-DL58-01<br>LH-DL58-01<br>6/26/1993 | LHS-3-19<br>LHS-3-19<br>1/10/1995 | LH-S58-01<br>LH-S58-01_1<br>6/26/1993 | LH-S58-01<br>LH-S58-01_2<br>6/26/1993 |
| DEPTH   |                           | 0.5 - 0.5 Ft                                    | 10 - 10 Ft                                      | 0.5 - 0.5 Ft                                    | 10 - 10 FI                                      | 2.1 + 2.9 Ft                          | 0 - 0.5 Fl                        | 0,5 - 1.5 Ft                          | 3 - 4.5 Ht                            |
| SAMPLE PUBPOSE  |                           | REG   | REG   | REG   | REG   | REG                                   | REG                               | REG                                   | REG                                   |
| Test Group  | Parameter (Units = mg/kg) | Result DIL LO VO                                | Result DIL LQ VQ                                | Result DIL LO VO                                | Result DIL LO VO                                | Result DIL LO VO                      | Result DIL LQ VQ                  | Result DIL LO VO                      | Result DIL LO VO                      |
| VOLATILES   | Trichloroethene           |   |   |   |   | 0.006 1 < U                           | 0.006 1 < U                       | 0.002 1                               | 0.003 1                               |
| VOLATILES   | Trichlorofluoromethane    |   |   |   |   |                                       | 0.012 1 < U                       |                                       |                                       |
| VOLATILES   | Vinvl acetate             |   |   |   |   |                                       | 0.012 1 < U                       |                                       |                                       |
| VOLATILES   | VInvi chloride            |   |   |   |   | 0.03 1 < U                            | 0.012 1 < U                       | 0.029 1 < U                           | 0.03 1 < U                            |
| VOLATILES   | Xylenes, Total            |   |   |   |   | 0,006 1 < U                           | 0.006 1 < U                       | 0.006 1 < U                           | 0.006 1 < U                           |

Table 3-58 Concentrations of Chemicals in Soil Samples Associated with Sump 058

Footnotes are shown on cover page to Tables Section.



| Table 3-59  |        |
|---|--------|
| Concentrations of Chemicals in Soil Samples Associated with Sur | np 059 |

| [SUMP] = SUMP059                  |                            |         |              |         |              |          |              |       |           |       |        |           |            |              |               |       |        |            |          |        |          |          |          |          |        |             |             |
|-----------------------------------|----------------------------|---------|--------------|---------|--------------|----------|--------------|-------|-----------|-------|--------|-----------|------------|--------------|---------------|-------|--------|------------|----------|--------|----------|----------|----------|----------|--------|-------------|-------------|
| LOCATIONCODE                      |                            | 355U    | JMP059-\$B(  | 11      | 475611       |          | 47SB11       |       | 47SB11    |       | Ų      | H-S59-0   | D1         |              | LH-559        | -01   | Ļ      | H-\$59-01  |          | ιH-    | 559-02   |          | LH-5594  | 02       | 1      | 4-559-02    |             |
| SAMPLE_NO                         |                            | 35-SM   | MP59-SB01-   | 01 4    | 75811(0-0_5) | 475      | B11(0-0_5)QC |       | 47\$811(1 | -2)   | ĻΗ     | -\$59-01  | 1_1        | 1            | LH-\$59-0     | 01_2  | Ю      | -559-01_   | 3        | (H•S   | 59-02_1  | Ļ        | H-\$59-0 | 2_2      | LH     | \$59.02_0   | 3           |
| SAMPLE_DATE                       |                            | ş       | 9/15/2006    |         | 6/1/2000     |          | 6/1/2000     |       | 6/1/2000  | )     | 7      | /21/199   | 93         |              | 7/21/19       | 93    | 7      | /21/1993   |          | 7/2    | 1/1993   |          | 7/21/199 | 93       | 17.    | /21/1993    |             |
| DEPTH                             |                            | 0       | 0.5 - 0.5 Ft |         | 0 • 0.5 Ft   |          | 0 - 0.5 F1   |       | 1 • 2 F1  |       | c      | 0.5 • 1 P | 1          |              | 4 - 4.5       | FI    | E      | 3.5 • 7 Fl |          | 0.1    | i - 1 Fl |          | 4 - 4.5  | 4        | 9.9    | 3 • 10.9 Ft | t           |
| SAMPLE PURPOSE                    |                            |         | REG          |         | REG          |          | FD           |       | REG       |       |        | REG       |            |              | REG           |       |        | REG        |          | 1      | REG      |          | REG      |          |        | REG         |             |
| (SUMP) = SUMP060                  | Parameter (Units = mg/kg)  | Result  | րլ լն        | VQ Resu | I DIL LO     | VQ Resul | I DIL LO     | VQ Re | esult DIL | LO VO | Result | DIL       | LO VO      | a Resu       | it DIL        | LO VO | Result | DIL I      | o vo     | Result | DIL LO.V | O Resul  | DIL      | LO VO    | Result |             | <u>a vo</u> |
| EXPLOSIVES                        | 2.4-Dinitrotoluene         | T       |              |         |              |          |              |       |           |       | 0.33   | ۱         | < U        | 0.33         | 1             | < U   | 0.33   | 1          | < U      | 0.33   | 1 <      | Ú 0.33   | 1        | < U      | 0.33   | 1 <         | ¢U          |
| EXPLOSIVES                        | 2.6-Dinitratoluene         |         |              |         |              |          |              |       |           |       | 0.33   | 1         | < U        | 0.33         | 3 1           | < U   | 0,33   | ſ          | < U      | 0,33   | 1 <      | U 0.33   | í        | < U      | 0.33   | 1 <         | ເປ          |
| METALS                            | Aluminum                   |         |              |         |              |          |              |       |           |       | 8800   | 1         |            | 1030         | 1 0           |       | 19800  | 1          |          | 16100  | 1        | 15200    | 1        |          | 5800   | 1           |             |
| METALS                            | Antimony                   |         |              |         |              |          |              |       |           |       | 3      | 1         | < Ų        | 3            | 1             | < U   | 3      | 1          | < U      | 3      | 1 <      | U 3      | 1        | < Ų      | з      | ۲ ۲         | د U         |
| METALS                            | Arsenic                    | i       |              |         |              |          |              |       |           |       | 9.6    | 1         |            | 4.3          | 1             |       | з      | 1          |          | 4,3    | 1        | 2.7      | 1        |          | 1,9    | 1           |             |
| METALS                            | Badum                      |         |              |         |              |          |              |       |           |       | 63     | 1         | < U        | 106          | : 1           | < U   | 1490   | 1          | e U      | 92.2   | 1 <      | U 138    | 1        | < U      | 78.5   | 1 4         | < U         |
| MCTALO                            | Cadmium                    |         |              |         |              |          |              |       |           |       | 1      | ٢         | < U        | i i          | 1             | < U   | 1      | 1          | < Ų      | 1      | 1 <      | U 1      | 4        | < U      | 1      | 1.          | < U         |
| NETALO                            | Calaium                    |         |              |         |              |          |              |       |           |       | 1800   | í         |            | 1820         | 0 1           |       | 1380   | 1          |          | 1360   | 1        | 1050     | 1        |          | 843    | 1           |             |
| METALO                            | Chromium                   |         |              |         |              |          |              |       |           |       | 26.4   | 1         | e t        | 12.4         | 4 1           | < U   | 18.5   | 1          | < U      | 17.7   | 1 <      | U 17     | 1        | < U      | 6,5    | 1 4         | < U         |
| NETALO<br>MOTALO                  | Cabal                      |         |              |         |              |          |              |       |           |       | 52     | 1         |            | 6            | 1             |       | 12.2   | 1          |          | 8.5    | 1        | 6.i      | 1        |          | 7      | 1           |             |
| METALS                            | Cobait                     |         |              |         |              |          |              |       |           |       | 9.9    | ì         |            | 84           | . 1           |       | 8.6    | 1          |          | 7.5    | 1        | 6.2      | 1        |          | 6.5    | 1           |             |
| METALS                            | Copper                     |         |              |         |              |          |              |       |           |       | 89100  | 4         |            | 2190         | NG 1          |       | 18500  | 1          |          | 18700  | 1        | 14900    | 1        |          | 10300  | 1           |             |
| METALS                            | Iron                       |         |              |         |              |          |              |       |           |       | 461    | ÷         |            | 50.5         | 2 1           |       | 12     | 1          |          | 8.9    | 4        | 7.2      | ;        |          | 4,1    | 1           |             |
| METALS                            | Lead                       |         |              |         |              |          |              |       |           |       | 640    | -         |            | 1000         | 0 1<br>0 1    |       | 2580   | i          |          | 1280   | 1        | 956      | 1        |          | 1010   | 1           |             |
| METALS                            | Magnesium                  |         |              |         | •            |          |              |       |           |       | 107    |           |            | 100          |               |       | 61.0   | ÷          |          | 281    | 1        | 242      | 1        |          | 126    | 1           |             |
| METALS                            | Manganese                  |         |              |         |              |          |              |       |           |       | 197    | -         |            | 1 0 1        | , ,           |       | 01     |            | - N      | 0.1    | ; .      | 11 01    |          | 2 H      | 0.1    | . i .       | < 11        |
| METALS                            | Mercury                    |         |              |         |              |          |              |       |           |       | 0.1    | 2         | < L        | 1 0.1        |               | ÷ 0   | 1500   | ,          | •••      | 1020   |          | D44      |          |          | 462    | 1           |             |
| METALS                            | Potassium                  |         |              |         |              |          |              |       |           |       | 407    |           |            | 020          |               |       | 1000   | ,          | . 11     | 1000   |          | 11 - 1   |          | 2 11     | 1      | 1.          | ~ U         |
| METALS                            | Selenium                   |         |              |         |              |          |              |       |           |       | 1      | 1         | < (        |              | 1             | < u   | · 1    |            | < (r     | 4      |          | 11 1     |          | ~ 11     |        | 1           | 2 11        |
| METALS                            | Silver                     |         |              |         |              |          |              |       |           |       | 1      | 1         | < 1        | J 1          |               | < U   | · · ·  |            | < U      | 20.0   |          |          |          |          | 477    |             | · •         |
| METALS                            | Strontium                  |         |              |         |              |          |              |       |           |       | 13.1   | 1         |            | 21.4         | 4 1           |       | 40.9   | 1          |          | 20.2   | 1        | 21,9     | ;        |          | 46.4   |             |             |
| METALS                            | Zinc                       |         |              |         |              |          |              |       |           |       | 42.1   | í         |            | 28.1         | 1 1           |       | 48.5   | ,          |          | 32.9   | 1        | 20.0     |          |          | 40.7   |             |             |
| PERC                              | Perchiorale                | 0.00985 | 51 L         | 0.05    | 9 1          | J 0.0060 | )1 1 <       | UJ O  | .006 1    | < U   |        |           |            |              |               |       |        |            |          |        |          |          |          |          |        |             |             |
| SEMIVOLATILES                     | 1,2,4-Trichtorobanzene     |         |              |         |              |          |              |       |           |       | 0.33   | 1         | < 1        | J 0.33       | 3 1           | < U   | 0.33   | 1          | < U      | 0.33   | 1 <      | U 0.33   | 1        | < 0      | 0.33   |             | < U         |
| SEMIVOLATILES                     | 1,2-Dichlorobenzene        | 1       |              |         |              |          |              |       |           |       | 0.33   | 1         | <u>د</u> ا | J 0.33       | 3 1           | < U   | 0.33   | 1          | < U      | 0.33   | 1 <      | U 0.33   | 1        | < U      | £U.33  | 1 .         | < U         |
| SEMIVOLATILES                     | 1,3-Olchiorobenzene        | 1       |              |         |              |          |              |       |           |       | 0.33   | 1         | રા         | J 0,3        | <b>3</b> 1,   | < U   | 0.33   | 1          | < U      | 0.33   | 1 <      | U 0.33   | 1        | < 0      | 0,33   | 1 .         | < 0         |
| SEMIVOLATILES                     | 1.4-Dichlorobenzene        |         |              |         |              |          |              |       |           |       | 0.33   | 1         | < 1        | J 0.3        | 3 1           | < U   | 0.33   | 1          | < U      | 0.33   | 1 <      | 0 0.33   | 1        | < U      | 0.33   | 1 .         | < 0         |
| SEMIVOLATILES                     | 2,4,5-Trichlorophenol      |         |              |         |              |          |              |       |           |       | 1.65   | t         | ٤l         | J 1.6        | 5 1           | نا >  | 1.65   | 1          | < U      | 1,65   | 1 <      | U 1.65   | 1        | < U      | 1.65   | 1 .         | < 0         |
| SEMIVOLATILES                     | 2.4.5-Trichlorophenol      |         |              |         |              |          |              |       |           |       | 0.33   | 1         | < 1        | J 0.3        | 3 1           | < ك   | 0.33   | 1          | < U      | 0,33   | 1 <      | U 0.33   | 1        | < U      | 0,33   | 1 -         | < U         |
| SEMIVOLATILES                     | 2.4-Dichlorophenol         |         |              |         |              |          |              |       |           |       | 0.33   | 1         | < 1        | J 0.3        | 3 1           | < L   | 0.33   | 1          | < U      | 0.33   | 1 <      | U 0.33   | 1        | < Ų      | 0.33   | 1           | < U         |
| SEMIVOLATILES                     | 2.4-Dimethylphenol         |         |              |         |              |          |              |       |           |       | 0.33   | 1         | < 1        | J 0.3        | 3 1           | < Ļ   | 0.33   | 1          | < U      | 0.33   | 1 <      | U 0.33   | 1        | < U      | 0.33   | 1           | < U         |
| SEMIVOLATILES                     | 2.4-Dinitrophenol          |         |              |         |              |          |              |       |           |       | 1,65   | 1         | < 1        | J 1.6        | 5 1           | < L   | 1.65   | 1          | < U      | 1.65   | 1 <      | Ų 1,65   | 1        | < Ų      | 1.65   | 1 -         | < U         |
| SEMIVOLATILES                     | 2-Chloronaphthalene        |         |              |         |              |          |              |       |           |       | 0.33   | 1         | < 1        | J 0,3        | 3 1           | < 1   | 0.33   | 1          | ςŲ       | 0.33   | 1 <      | U 0.33   | 1        | < U      | 0.33   | 1           | < U         |
| SEMIVOLATILES                     | 2 Chlorophanol             |         |              |         |              |          |              |       |           |       | 0,33   | 1         | < ۱        | J 0.3        | 3 1           | < L   | 0.33   | 1          | < U      | 0.33   | 1 <      | U 0.33   | 1        | < ປ      | 0.33   | 1 -         | < U         |
| SEMIVOLATILES                     | 2-Melbyloaphihalene        |         |              |         |              |          |              |       |           |       | 0.33   | 1         | < 1        | J 0.3        | 3 1           | < L   | 0.33   | 1          | < U      | 0.33   | 1 <      | U 0.33   | 1        | `< U     | 0.33   | 1           | < U         |
| SEMIVOLATILES                     | 2 Methylobenol             |         |              |         |              |          |              |       |           |       | 0.33   | 1         | < 1        | J 0.3        | 3 1           | < 1   | 0.33   | 1          | < 0      | 0.33   | 1 <      | U 0.33   | 1        | < U      | 0.33   | 1           | < U         |
| SEMIVOLATILES                     | 2-Nitroanilina             |         |              |         |              |          |              |       |           |       | 1.65   | 1         | < (        | J 1.6        | 5 1           | < 1   | 1.65   | 1          | < U      | 1.65   | 1 <      | U 1.65   | 1        | < U      | 1.65   | 1           | < U         |
| SEMIVOLATILES                     | 2-Nitronbenol              |         |              |         |              |          |              |       |           |       | 0.33   | 1         | < 1        | J 0.3        | <b>3</b> 1    | < L   | 0.33   | 1          | < U      | 0.33   | i <      | U 0.33   | +        | < U      | 0.33   | 1           | < U         |
| SEMIVOLATILES                     | 3.3'-Dichlorobenzidine     |         |              |         |              |          |              |       |           |       | 0.65   | 1         | د ا        | J 0.6        | 5 1           | < 1   | 0.65   | 1          | < U      | 0.65   | 1 <      | U 0.65   | 1        | < U      | Q.65   | 1           | < U         |
| SEMINOLATILES                     | 3-Nitroaniine              |         |              |         |              |          |              |       |           |       | 1.65   | 1         | < 1        | J 1.6        | 5 1           | < L   | 1.65   | 1          | < U      | 1.65   | 1 <      | U 1.65   | 1        | < U      | 1.65   | 1           | e U         |
| SEMINOLATILES                     | 4.6.Dipitro.2.methylohenol |         |              |         |              |          |              |       |           |       | 1.65   | 1         | < 1        | J 1.6        | 5 1           | < (   | 1.65   | 1          | < 0      | 1.65   | 1 <      | U 1.65   | 1        | < U      | 1.65   | 1           | < U         |
| CEMIVOLATILES                     | 4-Brameshanid shanid shar  |         |              |         |              |          |              |       |           |       | 0.33   | 1         | e I        | J 0.3        | 3 1           | રા    | 0.33   | 1          | < U      | 0.33   | 1 <      | U 0.33   | 1        | < U      | 0.33   | 1           | < Ų         |
| ACHINOLATILES                     | 4 Chlam 2 mailuánhanal     |         |              |         |              |          |              |       |           |       | 0.65   | ì         | -          | 0.0          | 5 1           | 1     | 0.65   | 1          | e U      | 0.65   | 1 <      | U 0.65   | 1        | < U      | 0.65   | \$          | < U         |
| SEMIVOLATILES<br>CELINICI, ITRICÉ | 4 Chiercestine             |         |              |         |              |          |              |       |           |       | 0.65   |           |            | 0.0          | 5 1           |       | 0.65   | 1          | e U      | 0.65   | 1 <      | U 0.65   | 1        | ςU       | 0.65   | ١           | < Ų         |
| SENIVOLATILES                     | 4 Characheaul sharul aiber |         |              |         |              |          |              |       |           |       | 0.33   | ÷         | 2          | 0.3          | 13 1          |       | 0.33   | 1          | -<br>د ا | 0.33   | 1 <      | U 0.33   | 1        | < U      | 0.33   | 1           | < U         |
| SEMIVOLATILES                     | 4 Chiertebeeel             |         |              |         |              |          |              |       |           |       | 0.00   | ÷         |            | 0.0<br>1 0.0 | 12 1          |       | 1 0.33 | 1          | 2 10     | 0.33   | 1 4      | U 0.33   | 1        | ۰.<br>۲  | 0.33   | 1           | < U         |
| SEMIVOLATILES                     | 4-Meinyiphanoi             |         |              |         |              |          |              |       |           |       | 4.05   | 4         |            | U 0.0        | 10 I          | ~ `   | 50.0   |            | 2 11     | 1.65   | 1        | 1 1 1 65 | 1        | - 10     | 1.65   | 1           | 2 11        |
| SEMIVOLATILES                     | 4-Nitroanitne              |         |              |         |              |          |              |       |           |       | 1.00   | 4         |            | 0 1.0        | 50 I          |       | 20,1 7 |            | 2 1      | 1.65   |          | U 165    |          | ~ 11     | 1.65   | 1           | 2 11        |
| SEMIVOLATILES                     | 4-Nitrophenol              |         |              |         |              |          |              |       |           |       | 1.00   | 5         | ٢.         | 0 1.0        |               |       | / 1.00 |            | . н      | 0.00   | 1.2      | 1 0.25   | 1        | - 11     | 0.33   | 1           | 2 10        |
| SEMIVOLATILES                     | Acenaphthene               |         |              |         |              |          |              |       |           |       | 0.33   | 1         | <          | U 0.3        | 53 I          | < 1   | 1 0.00 | ÷          |          | 0.00   |          | 10 0.00  |          | ~        | 0.00   | ÷           | 2 11        |
| SEMIVOLATILES                     | Acenaphthylene             | 1       |              |         |              |          |              |       |           |       | 0.33   | 1         | <          | U U.3        | ະວີ 1<br>ນາ - | < 1   | , U.33 |            | < U      | 0,33   | 1 5      | 0.00     |          | 2 11     | 0.00   | i           | 2 11        |
| SEMIVOLATILES                     | Anthracene                 | 1       |              |         |              |          |              |       |           |       | 0.33   | 1         | ۲          | u 0.3        | oð 1          | < (   | J 0.33 |            | < 0      | 0.00   |          | U 0,33   |          |          | 0.00   | 1           | 2 0         |
| SEMIVOLATILES                     | Benzo(a)anihracene         |         |              |         |              |          |              |       |           |       | 0.33   | 1         | <          | u 0.3        | 3 1           | < (   | 0.33   | 1          | < 0      | 0.33   |          | 0 0.32   | 1        | < 0      | 0.33   |             | 2 10        |
| SEMIVOLATILES                     | Benzo(a)pyrene             | 1       |              |         |              |          |              |       |           |       | 0.33   | 1         | <          | U 0.3        | 33 1          | < {   | J 0.33 | 1          | < ປ      | 0.33   | 1 <      | 0 0.33   |          | نا »<br> | 0.33   | 1           | < U         |
| SEMIVOLATILES                     | Benzo(b)#uoranthene        |         |              |         |              |          |              |       |           |       | 0.33   | 1         | <          | U 0.3        | 33 1          | < {   | J 0.93 | 1          | < U      | 0.33   | 1 <      | U 0,33   | · 1      | < U      | 0.03   | 1           | < U         |
| SEMIVOLATILES                     | Benzo(ghi)perylene         |         |              |         |              |          |              |       |           |       | 0.33   | 1         | <          | U 0.3        | 33 1          | ۲ ا   | J 0.33 | 1          | < 0      | 0.33   | 1 <      | 0 0.3    | 1<br>    | < 11     | 0.33   | 1           | < U         |
| SEMIVOLATILES                     | Benzo(k)fluoranthene       |         |              |         |              |          |              |       |           |       | 0,33   | 1         | <          | U 0.3        | 33 1          | < ۱   | J 0.33 | 1          | < Ų      | 0.33   | 1 <      | U 0.3    | 1        | < U      | 0.33   | 1           | < U         |
| SEMIVOLATILES                     | Benzoic Acid               | 1       |              |         |              |          |              |       |           |       | 1.65   | 1         | <          | U 1.6        | 55 1          | < 1   | J 1.65 | 1          | < U      | 1.55   | 1 <      | U 1.6    | i 1      | < U      | 1.65   | 1           | < U         |
| SEMIVOLATILES                     | Senzyl Alcohol             | 1       |              |         |              |          |              |       |           |       | 0.65   | 1         | <          | U 0.6        | 65 1          | < 1   | J 0.65 | 1          | < U      | 0.65   | 1 <      | U 0.6    | 5 1      | < U      | 0,65   | 1           | < .0        |
| SEMIVOLATILES                     | bis(2-Chloroethoxy)methane |         |              |         |              |          |              |       |           |       | 0.33   | 1         | <          | U 0.3        | 33 1          | < 1   | J 0.33 | 1          | < Ų      | 0.33   | 1 <      | U 0.3    | , 1      | < U      | 0.33   | 1           | < 0         |

-----

Shaw Environmental, Inc. 00066116

Date Evaluation Report Chemical Concentrations in Soli Associated with LHAAP-35/36 Sumps

Table 3-59 Concentrations of Chemicals in Soil Samples Associated with Sump 059

| [SUMP] = SUMP059       |                                     |                  |                  |                          |                             |                           | LU CEO DI          | 10 640 61       | 1 9-959-02                   | LH-S59-02                    | LH-S59-02        |
|------------------------|-------------------------------------|------------------|------------------|--------------------------|-----------------------------|---------------------------|--------------------|-----------------|------------------------------|------------------------------|------------------|
| LOCATION _CODE         |                                     | 35SUMP059-SB01   | 475811           | 47SB11                   | 475811                      | LH-S59-01                 | LR-839-01          | 14-959-01 3     | 18-559-02 1                  | LH-559-02_2                  | LH-\$59-02_3     |
| SAMPLE_NO              |                                     | 35-SMP59-SB01-01 | 47SB11(0-0_5)    | 47SB11(0-0_5)QC          | 475811(1-2)                 | Lu-228-01_1               | 7/31/5003          | 7/21/1993       | 7/21/1993                    | 7/21/1993                    | 7/21/1993        |
| SAMPLE_DATE            |                                     | 9/15/2006        | 6/1/2000         | 6/1/2000                 | 6/1/2000                    | 1/2//1990<br>0.E . 1.51   | 4.45 Ft            | 6.5 • 7 El      | 0.5 - 1 Et                   | 4 - 4.5 Ft                   | 9.9 · 10.9 Ft    |
| DEPTH                  |                                     | 0.5 · 0,5 FI     | 0 - 0.5 F1       | 0-0.5 F1                 | 1.2.5                       | 0.3-171                   | REG                | REG             | REG                          | REG                          | REG              |
| SAMPLE_PURPOSE         |                                     | REG              | REG              | FD<br>Barrier Diff I O M | , HEG<br>D. Romit DIL LO VO | ngo<br>L Baeult Dil LO V( | ⊖ Result Dil LO VO | Basuli DiL LO V | Result DIL LO VO             | Result DIL LO VO             | Result DIL LO VO |
| [SUMP] = SUMP060       | Parameter (Units = mg/kg)           | Result DIL LO VO | Result DIL LO VO | Resum DIL LU VU          | a headil bit to va          | 0.33 1 < 0                | 0.33 1 < U         | 0.33 1 < U      | 0.33 1 < U                   | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES          | his(2-Chloroethyl)ether             |                  |                  |                          |                             | 0,00 1 2 0                | 1 0.33 1 < U       | 0.33 1 < U      | + 0.33 1 < U                 | 0.33 1 < U                   | 0.33 i < U       |
| SEMIVOLATILES          | bis(2-Chlorolsopropyi)ether         |                  |                  |                          |                             | 0.33 1 2 1                | 0.33 1 < U         | 0.33 1 < U      | i 0.33 1 < U                 | 0.33 1 < U                   | 0.33 t < U       |
| SEMIVOLATILES          | bis(2-Elhy/hexy/)phihalate          |                  |                  |                          |                             | 0.33 1 < 1                | ) 0.33 1 < U       | 0.586 1         | 0.33 1 < U                   | 0.419 1                      | 0,786 1          |
| SEMIVOLATILES          | Butyl benzyl prinalate              |                  |                  |                          |                             | 0.33 1 < U                | ) 0.33 1 < U       | 0.33 1 < L      | J 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES          | Chrysene<br>Dihar ya/a b)pathrasana |                  |                  |                          |                             | 0.33 1 < L                | J 0.33 1 < U       | 0.33 1 < U      | / 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES          | Dibenzolarinjandracena              |                  |                  |                          |                             | 0.33 1 < U                | J 0.33 1 < U       | 0.33 1 < L      | ) 0.33 1 ≺ U                 | 0.33 1 < V                   | 0.33 1 < U       |
| CONTROLATILES          | Distly shthelete                    |                  |                  |                          |                             | 0.33 1 < L                | ) 0.33 1 < U       | 0.33 1 < L      | ) 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 < U       |
| CEMINOLATILES          | Dimethyl ohthalate                  |                  |                  |                          |                             | 0.33 1 < 1                | J 0.33 1 < U       | 0,33 1 < L      | J 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES          | diso-Buty phibalate                 |                  |                  |                          |                             | 0.33 1 < U                | J 0.33 1 < U       | 0.33 1 < L      | J 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES          | ri-o-Octy obbalale                  |                  |                  |                          |                             | 0.33 1 < L                | J 0.33 1 < U       | 0.33 1 < L      | J 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 K U       |
| SEMIVOLATILES          | Fluoranthene                        |                  |                  |                          |                             | 0.33 t < l                | J 0.33 1 < U       | 0,33 1 < 1      | ) 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 < ∪       |
| SEMIVOLATILES          | Fluorene                            |                  |                  |                          |                             | 0,33 i < l                | J 0.33 1 < U       | 0.33 i < l      | ) 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 < 0       |
| SEMIVOLATILES          | Hexachlorobenzene                   |                  |                  |                          |                             | 0.33 1 < U                | U 0,33 1 < U       | 0.33 1 < 0      | J 0.33 1 < U                 | 0.33 1 < 0                   | 0.33 1 < 0       |
| SEMIVOLATILES          | Hexachlorobuladiene                 |                  |                  |                          |                             | 0.33 1 < 0                | U 0.33 1 < U       | 0,33 1 < 1      | J 0.33 1 < U                 | 0.33 1 4 0                   | 0.33 1 4 0       |
| SEMIVOLATILES          | Hexachlorocyclopentadiene           |                  |                  |                          |                             | 0.33 1 < 1                | U 0.33 1 < U       | 0.33 1 < 1      | ) 0,33 1 < U<br>I 0,00 4 → U | 0.33 1 < 0                   | 0.33 1 2 1       |
| SEMIVOLATILES          | Hexachloroethane                    |                  |                  |                          |                             | 0.33 1 < 1                | 0.33 1 < 0         | 0.33            | J 0,33 1 < U<br>I 0,02 1 → U | 0.33 1 2 0                   | 0.33 1 4 1       |
| SEMIVOLATILES          | Indeno(1,2,3-cd)pyrene              |                  |                  |                          |                             | 0.33 1 < 1                | Ų 0.33 1 < U       | 0.33 1 < 1      | J Q,33   < U<br>I 020 1 - 11 | 0.00 1 2 0                   | 0.33 1 4 1       |
| SEMIVOLATILES          | Isophorone                          | ŧ.               |                  |                          |                             | 0.33 1 <                  | 0 0.33 1 < 0       | 0,33 1 < 1      | J 0,33   < U                 |                              | 0.03 1 4 1       |
| SEMIVOLATILES          | Naphthalene                         |                  |                  |                          |                             | 0.33 1 < 3                | U 0.33 1 < U       | 0,33 1 2 1      | 0.02 1 < 0                   | 0.33 1 4 0                   | 0.33 1 < U       |
| SEMIVOLATILES          | Nitrobenzene                        |                  |                  |                          |                             | 0,33 1 < 1                | U 0,33 1 < U       | 0.33 1 < 1      | 0 0.33 I C D                 | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES          | n-Nilroso-di-n-propylamine          |                  |                  |                          |                             | 0.33 1 <                  | 0 0,33 1 4 0       | 0,03 1 4 1      | 0 0.00 1 × 0<br>11 × 1 200 1 | 0.33 1 c U                   | 0.33 1 < U       |
| SEMIVOLATILES          | n Nitrosodiphenylamine              |                  |                  |                          |                             | 0.33                      | 0 0.55 1 4 0       | 165 1 4         | U 165 1 < U                  | 1.65 1 K U                   | 1.65 1 < U       |
| SEMIVOLATILES          | Pentachlorophenol                   |                  |                  |                          |                             | 0.02 1 4                  | 1.00 I CU          | 0.33 1 <        | U 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES          | Phenanihrene                        | 1                |                  |                          |                             | 0.33 1 4                  | U 0,00 1 < U       | 0.33            | v<br>U 0,33 1 < L            | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES          | Phenol                              | 1                |                  |                          |                             | 0.33 1 <                  | 0.33 1 < 0         | 0.33 1 <        | U 0.33 1 < U                 | 0.33 1 < U                   | 0.33 1 < U       |
| SEMIVOLATILES          | Pyrena                              |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 < U      | 0.005 1 <       | U 0.005 1 < L                | / 0.005 1 < U                | 0.005 1 < U      |
| VOLATILES              | 1,1,1-Trichloroethane               |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 < U      | 0.005 1 <       | U 0.005 1 < L                | / 0.005 1 < U                | 0.005 1 < U      |
| VOLATILES              | 1,1,2,2,- I strachorosinane         |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 < U      | 0.005 1 <       | U 0.005 1 < U                | 1 0.005 1 < U                | I0.005 1 < U     |
| VOLATILES              | 1.1. Dichloroothane                 | 1                |                  |                          |                             | 0.005 1 <                 | U 0.005 1 < U      | 0.005 1 <       | U 0.005 1 < L                | /0.005 1 < U                 | 0.005 1 < U      |
| VOCATILES              | 1 1-Dichloroethene                  |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 K U      | 0.005 1 <       | U 0.005 1 < U                | ) 0.005 1 < U                | 0.005 1 < 0      |
| VOLATILES              | 1.2-Dichloroethane                  |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 < U      | 0.005 1 <       | U 0,005 1 < L                | / 0.005 1 < U                | 0.005 1 < U      |
| VOLATILES              | 1.2-Dichioroelhene                  |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 < U      | ) 0.005 1 <     | U 0.005 1 < L                | / 0.005 1 < U                | 0.005 1 < U      |
| VOLATILES              | 1,2-Dichloropropane                 |                  |                  |                          |                             | 0.005 t <                 | U 0.005 i < U      | ) 0.005 1 <     | U 0.005 1 < U                | 1 0.005 1 < U                | 1 0,005 1 < 0    |
| VOLATILES              | 2-Butanona                          |                  |                  |                          |                             | 0.05 1 <                  | U 0.05 1 < L       | 0.05 4 <        | U 0,05 1 < U                 | 0.05 1 < 0                   |                  |
| VOLATILES              | 2-Chioroethyl vinyl ether           |                  |                  |                          |                             | 0.01 1 <                  | U 0,01 1 < L       | 0.01 1 <        | 0 0.01 1 < 4                 | / 0.01 1 < 0                 |                  |
| VOLATILES              | 2-Hexanone                          |                  |                  |                          |                             | 0.05 1 <                  | U 0.05 1 < L       | ) 0.05 1 <      | U 0.05 1 < U                 | ) 0.05 L < 0                 |                  |
| VOLATILES              | Acetone                             |                  |                  |                          |                             | 0.1 1 <                   |                    | ) ().) 1 <      |                              | ) 0,7 1 < 0<br>1 0,005 1 < U | , 0,05 1 < U     |
| VOLATILES              | Benzene                             |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 < 0      | 1 0.005 1 4     | 0 0.005 1 < 1                | ) 0.005 1 < U                | J 0.005 1 < U    |
| VOLATILES              | Bromodichloromethane                |                  |                  |                          |                             | 0.005 1 <                 |                    |                 | 1 0.005 1 < 1                | J 0.005 1 < U                | J 0.005 1 < U    |
| VOLATILES              | Bramolorm                           | }                |                  |                          |                             | 0.00.0                    |                    | 0.000 1 <       | U 0.01 1 <                   | J 0.01 1 < U                 | J 0.01 1 < U     |
| VOLATILES              | Bromomethane                        |                  |                  |                          |                             | 0.005 1 <                 | 11 0.005 1 2 1     | 0.005 1 <       | LI 0.005 1 <                 | J 0.005 1 < U                | J 0.005 1 < U    |
| VOLATILES              | Carbon disulfide                    |                  |                  |                          |                             | 0.005 1 <                 | 11 0.005 1 ∠ L     | 0.005 1 <       | U 0.005 1 < 1                | J 0.005 1 < U                | J 0.005 1 < U    |
| VOLATILES              | Carbon tetrachloride                |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 < U      | J 0.005 1 <     | U 0,005 1 <                  | J 0.005 1 < U                | J 0.005 1 < U    |
| VOLATILES              | Chlorobenzene                       |                  |                  |                          |                             | 0.01 1 <                  | U 0.01 1 < 1       | J 0.01 1 <      | U 0.01 1 <                   | J 0.01 1 < Ľ                 | J 0,01 1 < U     |
| VOLATILES              | Chioroemane                         |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 < 1      | J 0.005 1 <     | U 0.005 1 < 1                | J 0.005 1 < L                | J 0.005 1 < U    |
| VOLATILES              | Chieremethana                       |                  |                  |                          |                             | 0.01 1 <                  | U 0.01 1 < U       | U 0.01 1 <      | U 0.01 1 <                   | J 0.01 1 < L                 | U 0.01 1 < U     |
| VOLATILES<br>VOLATILES | cir.1.2-Dichloropopapa              |                  |                  |                          |                             | 0.005 1 <                 | U 0,005 1 < 1      | U 0.005 1 <     | U 0.005 1 <                  | J 0.005 1 < l                | U 0.005 1 < U    |
| VOLATILES              | Dibromochloromelbane                |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 < U      | U 0.005 i <     | U 0.005 1 <                  | J 0.005 1 < \                | U 0.005 1 < U    |
| VOLATILES              | Fibuhanzane                         |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 <        | U 0.005 1 <     | U 0.005 1 <                  | i) 0.005 1 < ∖               | U 0.005 1 < U    |
| VOLATILES              | Mathyl isobutyl ketone              |                  |                  |                          |                             | 0.05 1 <                  | Ü 0.05 1 c ∣       | U 0.05 1 <      | U 0.05 1 <                   | J 0.05 1 < L                 | U 0.05 1 < U     |
| VOLATILES              | Melhylene chloride                  |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 < 1      | U 0.005 1 <     | U 0.005 1 <                  | J 0.005 1 < 1                | U 0.005 1 < U    |
| VOLATILES              | Styrene                             |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 <        | U 0.005 1 <     | U 0.005 1 <                  | J 0.005 −1 < U               | U 0.005 1 < U    |
| VOLATILES              | Tetrachloroethene                   |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 <        | U 0.005 1 <     | U 0.005 1 <                  | U 0.005 1 < L                | U U.005 1 < U    |
| VOLATILES              | Toluene                             |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 <        | U 0.005 1 <     | U 0.005 1 <                  | ⊔ 0.005 1 < L                |                  |
| VOLATILES              | trans-1.3-Dichloropropene           |                  |                  |                          |                             | 0.005 1 <                 | U 0.005 1 <        | U 0.005 1 <     | U 0.005 1 <                  | n knnna i ≮ r                | 0 0.000 1 1 0    |



| Table 3-59  |       |
|---|-------|
| Concentrations of Chemicals in Soil Samples Associated with Sum | p 059 |

| (SUMP) = SUMP059<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                           | 355UMP059-\$801<br>35-5MP59-\$801-01<br>9/15/2006<br>0.5 - 0.5 F1 | 475811<br>475811(0-0_5)<br>6/1/2000<br>0 • 0.5 Ft | 47SB11<br>47SB11(0-0_5)QC<br>6/1/2000<br>0 - 0.5 Ft | 475811<br>475811(1-2)<br>6/1/2000<br>1 - 2 F1 | LH-S59-01<br>LH-S59-01_1<br>7/21/1993<br>0.5 - 1 Fl | LH-S59-01<br>LH-S59-01_2<br>7/21/1993<br>4 - 4.5 Ft | LH-S59-01<br>LH-S59-01_3<br>7/21/1993<br>6.5 - 7 Ft | LH-S59-02<br>LH-S59-02_1<br>7/21/1993<br>0.5 - 1 FI<br>PEG | LH-S59-02<br>LH-S59-02_2<br>7/21/1993<br>4 - 4.5 Ft<br>BEG | LH-S59-02<br>LH-S59-02_3<br>7/21/1993<br>9.9 - 10.9 Ft<br>REG |
|---|---------------------------|---|---|---|---|---|---|---|--|--|---|
| SAMPLE_PURPOSE  |                           | REG   | REG   | FD  | REG   | REG   | REG   | HEG   |  | Domit Bill LO VO   | Borult DB 10 VO   |
| [SUMP] = SUMPOSO  | Parameter (Units = mg/kg) | Result DIL LO VO  | Result DIL LO VO                                  | Result DIL LO VO                                    | ) Result DIL LO VO                            | Result DIL LQ VO                                    | Result DIL LQ VQ                                    | Mesur Dil LU V                                      | Q Result OIL CO VO   |  |   |
| VOLATILES   | Trichlorgethene           | - r   |   |   |   | 0.005 1 < U   | 0,005 1 < U   | 0.005 1 < 1   | J 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < 0   |
| VOLATILES   | Vinul acetate             |   |   |   |   | 0.05 1 < U  | 0.05 1 < U  | 0.05 1 < 1  | J 0,05 1 < U   | 0.05 1 < U   | 0.05 1 < U  |
| VOCATILES   | sites a standar           |   |   |   |   | 001 1 a U   | 0.01 1 < U  | 0.01 1 <  | J 0.01 1 < U   | 0.01 1 < U   | 0.01 1 < U  |
| VOLAHLES  | vinyi chionee             |   |   |   |   | 0.007 1 1   | 0.006 1 4 11  | 0.005 1   | 1 0.005 1 × U  | 0.005 1 < U  | 0.005 1 < U   |
| VOLATILES   | Xylenes, Total            |   |   |   |   | 0.005 1 < 0   | 0,005 / K 0   | 0.003   |  | 0,000  |   |

Footnotes are shown on cover page to Tables Section.

Table 3-60 Concentrations of Chemicals in Soil Samples Associated with Sump 060

| [SUMP] = SUMP060 |                            |                  |                  |                  |                  |                  | 111 005 04       | 111 000 00       | 1 11 065 02      | 111.960.02       | 1 H-\$60-02      |
|------------------|----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                            | 35SUMP060-SB01   | 35SUMP060-SB01   | 47\$814          | 47SB14           | LH-\$50-01       | LH-\$60-01       | LT-300-02        | 1 00002          | 1 4 660 02 2     | 18-560-02 3      |
| SAMPLE_NO        |                            | 35-SMP60-SB01-01 | 35-SMP60-SB01-02 | 476814(0-0_5)    | 47\$B14(1-2)     | LH-\$60-01_1     | LH-S80-01_2      | LH-S60-02 QC     | LU-900-05        | 2/10/002_2       | 7/22/1003        |
| SAMPLE_DATE      |                            | 9/26/2006        | 9/26/2006        | 6/2/2000         | 6/2/2000         | 7/22/1993        | 7/22/1993        | 7/22/1993        | //22/1993        | 11221 (335       | 75 25            |
| DEPTH            |                            | 0.5 - 0.5 Ft     | 6 - 6 Ft         | 0 - 0.5 Ft       | 1-2Fl            | 0.5 - 1 Ft       | 3 - 3.4 Ft       | 5 - 5.5 Ft       | 5-55+1           | 0.5-170          | 2.5.3 FL         |
| SAMPLE_PURPOSE   |                            | REG              | REG              | REG              | REG              | REG              | REG              | FD               | REG              | REG              |                  |
| Test Group       | Parameter (Units = mg/kg)  | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result OIL LO VO | Result DIL LQ VQ | Result DIL LO VO |
| EXPLOSIVES       | 2.4-Dinitrololuene         |                  |                  |                  |                  | 0.33 1 < Ų       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       |
| EXPLOSIVES       | 2.6-Dinitrolojuene         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| METALS           | Aluminum                   |                  |                  |                  |                  | 14200 1          | 16800 1          | 14700 1          | 17500 1          | 16000 1          | 22300 1          |
| METALS           | Antimony                   |                  |                  |                  |                  | 3 1 < 8          | 31 < U           | 31 < U           | 31 < U           | 31 < U           | 31 < 0           |
| METALS           | Arsenic                    |                  |                  |                  |                  | 2 1              | 11 < U           | 2.8 1            | 1,1 \$           | 1.6 1            | 2.4 3            |
| METALS           | Batium                     |                  |                  |                  |                  | 106 1            | 86.5 1           | 234 1            | 307 1            | 393 1            | 123 1            |
| METALS           | Cadmium                    |                  |                  |                  |                  | 11 < 0           | 11 < ប           | 11 < U           | 11 < 0           | 11 < U           | 11 < U           |
| METALS           | Caldum                     |                  |                  |                  |                  | 1580 1           | 2670 1           | 1200 1           | 1060 1           | 2150 1           | 1700 1           |
|                  | Chromium                   |                  |                  |                  |                  | 24.3 1           | 14.9 1           | 17,6 1           | 12.7 1           | 15.4 1           | 26.2 1           |
| METALO           | Cohalt                     |                  |                  |                  |                  | 10.4 1           | 4.9 t            | 9.1 1            | 6.8 1            | 9.6 1            | 7.1 1            |
| NETALO           | Cannor                     |                  |                  |                  |                  | 5.4 1            | 4.7 1            | 12.2 1           | 5 1              | 4.1 1            | 4,3 1            |
| METALS           | Copper                     |                  |                  |                  |                  | 15400 1          | 11200 1          | 18100 1          | 11600 1          | 13500 1          | 24400 1          |
| METALS           | kon                        |                  |                  |                  |                  | 12.3 1           | 13.1 1           | 19.3 1           | 11.1 1           | 15.6 1           | 12.2 1           |
| METALS           | Lead                       |                  |                  |                  |                  | 1230 1           | 955 1            | 1320 1           | 1220 1           | 1360 1           | 1290 1           |
| METALS           | Magnesium                  |                  |                  |                  |                  | 343 1            | 94.2 1           | 166 1            | 42.6 1           | 367 1            | 152 1            |
| METALS           | Manganese                  |                  |                  |                  |                  |                  | 03 3 4 11        | 011 4 8          | 01 1 < U         | 0.1 1 < U        | 0.1 1 < U        |
| METALS           | Mercury                    |                  |                  |                  |                  | 0.1 7 5 0        | 635 4            | 667 1            | 587 1            | 703 1            | 980 1            |
| METALS           | Polassium                  | }                |                  |                  |                  | 009 1            | 4 4 4 11         | 44 4 11          | 11 < 11          | 11 < 1           | 11 < 1           |
| METALS           | Selenium                   |                  |                  |                  |                  | 1 1 5 9          |                  |                  | 1 1 4 0          | 1128             | 1 1 4 4 1        |
| METALS           | Silver                     |                  |                  |                  |                  | 11 < 0           | 11 < 0           | 000 1            | 204 4            | 790.1            | 29 1             |
| METALS           | Strontium                  |                  |                  |                  |                  | 14,6 1           | 29.1 1           | 20.8 1           |                  | 24.6 1           | 309 1            |
| METALS           | Zinc                       |                  |                  |                  |                  | 36.5 1           | 21.2 1           | 29.0 1           | 23 1             | 29.0             | 00.0             |
| PERC             | Perchlorate                | 0.0999 10 U U    | 0.201 20 U U     | 0.00563 1 < U    | 0.00663 1 < U    |                  |                  |                  | 0.00 1 4 11      | 0.32 1 4 1       | 0.93 1 2 11      |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene     |                  |                  |                  |                  | 0,33 1 < 0       | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 ( C U       | 0,03 1 4 1       | 0.30 1 4 0       |
| SEMIVOLATILES    | 1,2-Dichlorobenzene        |                  |                  |                  |                  | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 4 0       | 0,33 3 4 0       |
| SEMIVOLATILES    | 1,3-Dichlorobenzene        |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 4 0       |                  |
| SEMIVOLATILES    | 1,4-Dichlorobenzene        |                  |                  |                  |                  | 0.33 f < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 4 0       |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol      |                  |                  |                  |                  | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1,65 1 < U       | 1.65 1 < 0       | 1.65 1 < 0       |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol      |                  |                  |                  |                  | 0,33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | 2,4-Dichlorophenol         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | 2,4-Dimethylphenol         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | 2,4-Dinitrophenol          |                  |                  |                  |                  | 1.65 1 < 0       | 1.65 1 < U       |
| SEMIVOLATILES    | 2-Chioronaphihalene        |                  |                  |                  |                  | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 4 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | 2-Chlorophenol             |                  |                  |                  |                  | 0,33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES    | 2-Methylnaphthalene        |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Methylphenol             |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES    | 2-Nitroaniline             | ļ                |                  |                  |                  | 1.65 1 < U       | 1,65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | 2-Nitrophenel              |                  |                  |                  |                  | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 3.3'-Dichlorobenzidine     |                  |                  |                  |                  | 0.65 1 < U       | 0.65 1 < U       | 0,65 1 < U       | 0.65 1 < U       | 0,65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES    | 3-Nitroaniline             |                  |                  |                  |                  | 1.65 1 < U       | 1.65 1 < U       | 1,65 i < U       | 1.65 1 < U       | 1.65 1 < U       | 1,65 1 < U       |
| SEMIVOLATILES    | 4 6-Dinitro-2-methylphanol |                  |                  |                  |                  | 1.65 1 < U       |
| SEMINOLATILES    | A-Bromonhenvi phenvi etter |                  |                  |                  |                  | 0.33 1 < U       | 0,33 1 < U       | 0,33 1 < U       |
| CENIVOLATILES    | 4-Chipre-3-methylohonol    |                  |                  |                  |                  | 0.65 1 < U       |
| CEMIVOLATILES    | 4 Chlorespilles            |                  |                  |                  |                  | 0.65 1 < U       |
| DEMINULATILES    | 4-Giloroanune              |                  |                  |                  |                  | 033 1 < 1        | 0.33 1 < 1/      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < Ü       | 0.33 1 < U       |
| OF MINOLATILES   | 4 Mathematic               |                  |                  |                  |                  | 033 1 < U        | 033 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVULATILES    | 4-weatyphend               | 1                |                  |                  |                  | 165 1 4 13       | 165 1 < 11       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 t < U       |
| SEMIVOLATILES    |                            |                  |                  |                  |                  | 185 1 <b>c</b> B | 1.65 1 < U       | 1.65 1 < 단       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVULATILES    |                            |                  |                  |                  |                  | 133 S < U        | 0.33 1 < 1       | 0.33 1 < U       |
| SEMIVOLATILES    | Acenaprimene               |                  |                  |                  |                  | 0.00 7 1 0       | 033 1 2 12       | 0.33 1 ≤ II      | 0.33 1 < 1       | 0.33 1 < 8       | 0.33 1 < 1       |
| SEMIVOLATILES    | Acenaphthylene             |                  |                  |                  |                  | 0.00 1 4 0       | 0.00 1 4 0       | 0.33 1 < II      | 0.33 1 < 11      | 0.33 1 < 1       | 0.33 1 < 12      |
| SEMIVOLATILES    | Aninracene                 |                  |                  |                  |                  |                  | 0.33 4 2 11      | 0.33 4 4 11      | 033 1 < 1        | 0.33 1 < 11      | 0.33 1 < 11      |
| SEMIVOLATILES    | Reuto(a)supracene          |                  |                  |                  |                  | 0.00 1 4 0       |                  | 0.33 4 2 11      | 0.33 5 2 11      | 0.33 1 < 11      | 0.33 1 < 11      |
| SEMIVOLATILES    | Benzo(a)pyrene             | 1                |                  |                  |                  | 0.33 1 4 0       | 0.33 ( * 0       | 0.33 4 2 44      | 0.00 ( ~ 0       | 0.33 1 < II      | 0.33 1 < 11      |
| SEMIVOLATILES    | Benzo(b)fluoranthene       |                  |                  |                  |                  | 0.33 1 < 0       | 0,33 3 < U       | 0.03 1 5 0       | 0.33 1 < 0       | 0.33 4 2 11      | 0.33 1 < 1       |
| SEMIVOLATILES    | Benzo(ghi)perylene         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 4 0       | 0.33 1 4 0       | 0,00 / 10        | 0,00 1 4 0       |

Shaw Environmental, Inc.



Table 3-60 Concentrations of Chemicals in Soil Samples Associated with Sump 060

| (SUMP) = SUMP060 |                             |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |
|------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                             | 35SUMP060-SB01   | 35SUMP060-SB01   | 47SB14           | 475814           | LH-S60-01        | LH-S60-01        | LH-S60-02        | LH-S60-02        | LH-S60-02        | LH-\$60-02       |
| SAMPLE_NO        |                             | 35-SMP60-SB01-01 | 35-SMP60-SB01-02 | 47SB14(0-0_5)    | 47\$B14(1-2)     | LH-S60-01_1      | LH-\$60-01_2     | LH-\$60-02 QC    | LH-S60-02_1      | LH-S60-02_2      | LH-\$60-02_3     |
| SAMPLE_DATE      |                             | 9/26/2006        | 9/26/2006        | 6/2/2000         | 6/2/2000         | 7/22/1993        | 7/22/1993        | 7/22/1993        | 7/22/1993        | 7/22/1993        | 7/22/1993        |
| Depth            |                             | 0.5 - 0.5 Ft     | 6 - 6 Fl         | 0 - 0.5 Ft       | 1 - 2 Ft         | 0.5 - 1 Ft       | 3 - 3.4 Ft       | 5 - 5.5 Ft       | 5 - 5.5 Ft       | 0.5 - 1 Ft       | 2.5 - 3 Ft       |
| SAMPLE_PURPOSE   |                             | REG              | REG              | REG              | REG              | REG              | REG              | FD               | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LQ VQ | Result Dit LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result Dil LQ VQ |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0,33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzoic Acid                |                  |                  |                  |                  | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 \$ < U      | 1,65 1 < U       | 1,65 1 < U       |
| SEMIVOLATILES    | Benzyi Alcohol              |                  |                  |                  |                  | 0.65 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  |                  |                  |                  |                  | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 f < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chioroisopropyi)ether |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | Butyl benzyl phthalate      |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | Chrysene                    |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      |                  |                  |                  |                  | 0.33 1 < U       | 0,33 1 < 13      | 0.33 1 < 0       |
| SEMIVOLATILES    | Dibenzofuran                |                  |                  |                  |                  | 0.33 1 < U       | 0,33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | Diethyl phthalate           |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | Dimethyl phthalate          |                  |                  |                  |                  | 0.33 1 < U       |
| SEMIVOLATILES    | di-n-Butyl phthalate        |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | Q.33 1 < U       |
| SEMIVOLATILES    | di-n-Oclyl phthalate        |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES    | Fluoranthene                |                  |                  |                  |                  | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES    | Fiuorene                    |                  |                  |                  |                  | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorobenzene           |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 빙       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorobutadiene         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 † < U       |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   |                  |                  |                  |                  | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachloroethane            |                  |                  |                  |                  | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < 강       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Indeno(1,2,3-od)pyrene      |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < じ       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES    | Isophorone                  |                  |                  |                  |                  | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Naphihalene                 |                  |                  |                  |                  | 0.33 \$ < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Nitrobenzene                |                  |                  |                  |                  | 0.33 t < U       | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 t < U       | 0.33 1 < U       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |                  |                  |                  |                  | 0.33 f < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Penlachlorophenol           |                  |                  |                  |                  | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 0       | 1.65 1 < U       | 1,65 1 < U       |
| SEMIVOLATILES    | Phenanihrene                |                  |                  |                  |                  | 0.33 1 < U       |
| SEMIVOLATILES    | Phenol                      |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < ປ       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Pyrene                      |                  |                  |                  |                  | 0.33 1 < U       |
| VOLATILES        | 1,1,1-Trichloroethane       |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,1,2,2-Tetrachloroethane   |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILE\$       | 1,1,2-Trichloroethane       |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichloroelhane          |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichloroelhene          |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < 0      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichloroethane          |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichloroethene          |                  |                  |                  |                  | 0.005 1 < じ      | 0.005 1 < U      | 0.005 1 < U      | 9.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichioropropane         |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0,005 1 < U      |
| VOLATILES        | 2-Butanone                  |                  |                  |                  |                  | 0.05 1 < U       | 0.05 f < U       |
| VOLATILES        | 2-Chloroethyl vinyl ether   |                  |                  |                  |                  | 0.01·1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | 2-Hexanone                  |                  |                  |                  |                  | 0.05 1 < U       | 0.05 f < U       | 0.05 1 < 0       | 0.05 1 < U       | 0,05 1 < 0       | 0.05 1 < U       |
| VOLATILES        | Acelone                     |                  |                  |                  |                  | 0.1 1 < U        | 0,1 1 < U        | 0,1 1 < U        | 0.1 1 < 0        | 0.1 1 < U        | 0.1 1 < U        |
| VOLATILES        | Benzene                     |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromodichloromethane        |                  |                  |                  |                  | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromotorm                   |                  |                  |                  |                  | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromomethane                |                  |                  |                  |                  | 0.01 i < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Carbon disulfide            |                  |                  |                  |                  | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Carbon letrachloride        |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      |
| VOLATILES        | Chiorobenzene               |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chicroelhane                |                  |                  |                  |                  | 0.01 1 < U       | 0,01 1 < U       |
| VOLATILES        | Chloroform                  |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chioromethane               |                  |                  |                  |                  | 0.01 1 < U       | 0.01 1 < U       | 0,01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | cis-1,3-Dichloropropene     |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |



Table 3-60 Concentrations of Chemicals in Soil Samples Associated with Sump 060

| (SUMP) = SUMPOSO<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | 35SUMP060-SB01<br>35-SMP60-SB01-01<br>9/26/2006<br>0.5 - 0.5 Fl<br>REG | 355UMP060-S801<br>35-SMP60-S801-02<br>9/26/2006<br>6 - 6 Ft<br>REG | 47SB14<br>47SB14(0-0_5)<br>6/2/2000<br>0 - 0.5 Ft<br>REG | 47S814<br>47S814(1-2)<br>6/2/2000<br>1 - 2 Ft<br>REG | LH-S60-01<br>LH-S60-01_1<br>7/22/1993<br>0.5 - 1 Fl<br>REG | LH-S60-01<br>LH-S60-01_2<br>7/22/1993<br>3 - 3.4 Fl<br>REG | LH-S60-02<br>LH-S60-02 QC<br>7/22/1993<br>5 - 5.5 Ft<br>FD | LH-860-02<br>LH-860-02_1<br>7/22/1993<br>5 - 6.5 Ft<br>REG | LH-S60-02<br>LH-S60-02_2<br>7/22/1993<br>0.5 - 1 Fl<br>REG | LH-S60-02<br>LH-S60-02_3<br>7/22/1993<br>2,5 - 3 Ft<br>REG |
|--|---------------------------|--|--|--|--|--|--|--|--|--|--|
| Test Group   | Parameter (Units = ma/kg) | Result DIL LQ VQ   | Result DIL LO VO   | Result DIL LO VO   | Result DIL LQ VQ                                     | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   |
| VOLATILES  | Dibromochloromethane      |  |  |  |  | 0.005 1 < U  | 0.005 1 < U  | 0,005 { < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < 0  |
| VOLATILES  | Ethylbenzene              |  |  |  |  | 0.005 1 < U  | 0.005 t < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < 0  |
| VOLATILES  | Methyl Isobutyl ketone    |  |  |  |  | 0.05 1 < U   | 0.05 1 < 0   | 0.05 1 < 0   |
| VOLATILES  | Melhylene chloride        |  |  |  |  | 0.005 1 < U  | 0.005 f < U  | 0.005 1 < U  | 0.005 1 < U  | 9.005 1 < U  | 0,005 1 < U  |
| VOLATILES  | Styrene                   |  |  |  |  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < じ  | 0,005 1 < U  | 0.005 1 < 0  |
| VOLATILES  | Tetrachloroethene         |  |  |  |  | 0.005 1 < U  |
| VOLATILES  | Toluene                   |  |  |  |  | 0.005 1 < U  |
| VOLATILES  | Irans-1.3-Dichioropropage |  |  |  |  | 0,005 1 < U  | 0.005 1 < U  | 0,005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | Trichloroethane           |  |  |  |  | 0,005 1 < U  | 0.005 1 < U  | 0.005 t < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES  | Vinvl acetate             |  |  |  |  | 0.05 1 < U   | 0.05 1 < U   | 0.05 1 < U   | 0.05 t < U   | 0.05 1 < U   | 0.05 t < U   |
| VOLATILES  | Vinyl chloride            |  |  |  |  | 0.01 1 < U   | 0,01 1 < U   |
| VOLATILES  | Xylenes, Total            |  |  |  |  | 0.005 1 < U  |

Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas





Table 3-61 Concentrations of Chemicals In Soil Samples Associated with Sump 061

| SUMP) = SUMP061 |                            |                         |                  |                  |                  |                   | 110.0.00         | 14.001.01                   | 14.561-01                 | LH-S61-02        | LH-S61-02                 |
|-----------------|----------------------------|-------------------------|------------------|------------------|------------------|-------------------|------------------|-----------------------------|---------------------------|------------------|---------------------------|
| LOCATION _CODE  |                            | 35SUMP061-SB01          | 35SUMP051-SB01   | 475815           | 475815           | LH-DL51-01        | 140.2.05         |                             | LH-S61-01-2               | LH-S61-02 1      | LH-561-02_2               |
| SAMPLE_NO       |                            | 35-SMP61-SB01-01        | 35-SMP61-SB01-02 | 4/5815(0+0_5)    | e/apta(1*2)      | 9/6/1003          | 1/9/1995         | 8/6/1993                    | 8/6/1993                  | 8/6/1993         | 8/6/1993                  |
| SAMPLE_DATE     |                            | 9/14/2005               | 9/14/2008        | 6/3/2000         | 6/3/2000         | 2.25              | 0.05 51          | 0.5+3.Ft                    | 8 - 10 FL                 | 1 - 3 Ft         | 8 + 10 Ft                 |
| DEPTH           |                            | 0.5 - 0,5 F1            | 7+7 11           | 0 • 0.5 PI       | 1-2 Ft           | REG               | REG              | REG                         | REG                       | REG              | REG                       |
| SAMPLE_PURPOSE  |                            | HEG<br>Desuit OIL LO VO | REG DI LO VO     | Recuit OIL LO VO | Regult Dil 10 VO | Result Dil. LO VQ | Result DIL LO VO | Result OIL LO VO            | Result DIL LO VO          | Result DIL LO VQ | Result DIL LO VO          |
| Test Group      | Parameter (Units = mg/kg)  | Hesoir Dic Lo Vo        | HESON DIE LO VO  | Hoadit oft Ed Ta |                  |                   | 0.24 1 < U       |                             |                           |                  |                           |
| EXPLOSIVES      | 1.3-Dinitrobenzene         |                         |                  |                  |                  |                   | 0.24 1 K U       |                             |                           |                  |                           |
| EXPLOSIVES      | 2 4 6-Tripitrotoluene      |                         |                  |                  |                  |                   | 0.24 1 < U       |                             |                           |                  |                           |
| EXPLOSIVES      | 2.4-Dinitrotoluena         |                         |                  |                  |                  | 0.33 1 < U        | 0.24 1 < U       | 0.33 1 < U                  | 0.33 1 < U                | 0.33 1 < U       | 0.33 1 < 0                |
| EXPLOSIVES      | 2.6-Dinitrotoluene         |                         |                  |                  |                  | 0.33 1 < U        | 0.25 1 < U       | 0.33 1 < U                  | 0.33 1 < U                | 0.33 1 < 0       | 0.33 1 < U                |
| EXPLOSIVES      | 4-Amino-2,6-dinitrotoluene |                         |                  |                  |                  |                   | 0.49 1 < U       |                             |                           |                  |                           |
| EXPLOSIVES      | HMX                        |                         |                  |                  |                  |                   | 2.2 1 < U        |                             |                           |                  |                           |
| EXPLOSIVES      | m-Nitrololuene             |                         |                  |                  |                  |                   | 0.98 1 < U       |                             |                           |                  |                           |
| EXPLOSIVES      | Nitrobenzene               |                         |                  |                  |                  |                   | 0.25 1 < U       |                             |                           |                  |                           |
| EXPLOSIVE5      | o-Nirotoluene              |                         |                  |                  |                  |                   | 0,98 1 < U       |                             |                           |                  |                           |
| EXPLOSIVES      | p-Nitratoluene             |                         |                  |                  |                  |                   | 2.9 1 < 0        |                             |                           |                  |                           |
| EXPLOSIVES      | RDX                        |                         |                  |                  |                  |                   | 1,1 1 < 0        |                             |                           |                  |                           |
| EXPLOSIVES      | Tetryl                     |                         |                  |                  |                  |                   | 0.73 1 < U       | 40000                       | 19000 1                   | 10400 1          | 16300 1                   |
| METALS          | Aluminum                   |                         |                  |                  |                  | 22100 1           | 8390 1           |                             | 9 4 4 1                   | 75 1             | 31 < 1                    |
| METALS          | Antimony                   |                         |                  |                  |                  | 31 < 0            | 13.4 1 < 00      | 31 < 0                      | 86 1                      | 16.6 1           | 3.9 1                     |
| METALS          | Arsenic                    |                         |                  |                  |                  | 5.8               | 25.7 1 J         | 3.9 1                       | 253 1                     | 55.6 1           | 236 1                     |
| METALS          | Barium                     |                         |                  |                  |                  | 94 1              | 30.2 1           | 3 1 2 1                     | 11 4 1                    | 2.9 1            | 11 < U                    |
| METALS          | Cadmium                    |                         |                  |                  |                  | 1000 1            | 968 1            | 3040 1                      | 2720 1                    | 30500 1          | 1920 1                    |
| METALS          | Calcium                    |                         |                  |                  |                  | 28.9 1            | 379 1 1          | 25.5 1                      | 27.8 1                    | 56,2 1           | 22.9 1                    |
| METALS          | Chromium                   |                         |                  |                  |                  | 59 1              | 27 1 < U         | 21.8 1                      | 54.4 1                    | 5.5 1            | 51 1                      |
| METALS          | Coball                     |                         |                  |                  |                  | 66 1              | 46.2 1           | 9,1 1                       | 13,5 1                    | 11 < U           | 9.5 1                     |
| METALS          | Copper                     | Į                       |                  |                  |                  | 0.5 1 < U         |                  | 0.5 t < U.                  | 0.5 1 < U                 | 0,5 1 < U        | 0.5 t < U                 |
| METALS          | Lyanide, (olas             |                         |                  |                  |                  | 27600 1           | 47600 1          | 30100 1                     | 38100 1                   | 29600 1          | 21200 1                   |
| METALS          | Lond                       |                         |                  |                  |                  | 11,3 1            | 24,5 1           | 24.4 1                      | 10.9 1                    | .18,9 1          | 9.5 1                     |
| METALS          | Unnocium                   |                         |                  |                  |                  | 1150 1            | 275 1            | 1990 1                      | 2920 1                    | 1970 1           | 3080 1                    |
| METALO          | Kapaanasa                  |                         |                  |                  |                  | 178 1             | 124 1 J          | 260 1                       | 481 1                     | 202 1            | 397                       |
| METALS          | Marcun                     |                         |                  |                  |                  | 0.1 1 < U         | 0.12 1 < U       | 0.1 1 < U                   | 0.1 1 < U                 | 0.1 1 < U        | 0,1 1 < U                 |
| METALS          | Potassium                  |                         |                  |                  |                  | 859 1             | 268 1 < U        | 895 1                       | 1240 1                    | 277 1            | 1210 1                    |
| METALS          | Selenium                   |                         |                  |                  |                  | 11 < U            | 1 1 J            | 11 < U                      | 11 < 1                    | 11 < 0           | 11 C U                    |
| METALS          | Silver                     |                         |                  |                  |                  | t t < U           | 1.5 1            | 11 < U                      | 11 < 0                    | 11 < ♥           | 11 < U                    |
| METALS          | Stronkum                   |                         |                  |                  |                  | 13.1 1            | 13,4 t < U       | 41 1                        | 48.5 1                    | 81.9 1           | 43.5                      |
| METALS          | Thallum                    | 4.1                     |                  |                  |                  |                   | 67 1 < U         |                             |                           | cia (            | 100 1                     |
| METALS          | Zins                       |                         |                  |                  |                  | 33.1 1            | 161 1            | 82.7 1                      | 151 1                     | 54.9             | 100                       |
| PERC            | Perchlorate                | 0.05 5 U                | 0.4 40 U         | 0.189 1          | 0.0738 1         |                   |                  | 0.00 4                      | ال ب د دده                | 0.23 1 / 1       | 0.33 1 < 11               |
| SEMIVOLATILES   | 1,2,4-Trichlorobenzene     |                         |                  |                  |                  | 0.33 1 < 0        | 0.53 1 < 0       | 0.33 1 2 0                  | 0.33 1 < U                | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES   | 1,2-Dichlorobenzene        |                         |                  |                  |                  | 0.33 1 < 0        | 0.53 1 2 0       | 0,33 1 4 1                  | 0.33 1 4 1                | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES   | 1,3-Dichlorobenzene        |                         |                  |                  |                  | 0.33 1 4 0        | 0.53 t < . U     | 0.33 1 < U                  | 0.33 1 < U                | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES   | 1,4-Dichlorobenzene        |                         |                  |                  |                  | 165 1 2 1         | 2.6 1 < 1        | 1.65 1 < U                  | 1.65 1 < U                | 1.65 1 < U       | 1.65 ( < Ų                |
| SEMIVOLATILES   | 2,4,5-Trichloropheno!      |                         |                  |                  |                  | 0.33 1 4 1        | 0.53 1 < U       | 0.33 1 < U                  | 0.33 1 < U                | 0.33 1 < L       | 0.33 1 < U                |
| SEMIVOLATILES   | 2,4,6-1 honioropheno       | {                       |                  |                  |                  | 0.33 1 < U        | 0.53 1 < U       | 0.33 1 < U                  | 0.33 t < U                | 0.33 1 < L       | 0.33 1 < U                |
| SEMIVOLANLES    | 2,4+Dicatoroprience        |                         |                  |                  |                  | 0.33 1 < Ú        | 0.53 1 < U       | 0.33 1 < U                  | 0.33 1 < U                | 0.33 1 < L       | 0.33 1 < U                |
| SEMIVOLATILES   | 2.4-Dinitrophenol          |                         |                  |                  |                  | 1,65 1 < U        | 2.6 1 < U        | 1.65 1 < U                  | 1.65 1 < U                | 1,65 1 < U       | 1.65 1 < U                |
| SEMIVOLATILES   | 2 & Dinitrojoluene         |                         |                  |                  |                  |                   | 0.53 1 < U       |                             |                           |                  |                           |
| SEMIVOLATILES   | 2.6-Dinitrotoluene         |                         |                  |                  |                  |                   | 0.53 t < U       |                             |                           |                  |                           |
| SEMIVOLATILES   | 2-Chloronaphthalene        |                         |                  |                  |                  | 0.33 1 < U        | 0.53 i < U       | 0.39 1 < U                  | 0.33 1 < U                | 0.33 i < l       | 0.33 i < U                |
| SEMIVOLATILES   | 2-Chiorophanol             |                         |                  |                  |                  | 0.33 1 < U        | 0.53 1 < U       | 0.3¦3 1 < U                 | 0.33 1 < U                | 0.33 1 < L       | 0.33 1 < U                |
| SEMIVOLATILES   | 2 Methylnaphthalene        |                         |                  |                  |                  | 0.33 I < U        | 0.53 1 < U       | 0.33 1 < U                  | 0.33 1 < U                | 0.33 1 < L       | 0.33 1 < U                |
| SEMIVOLATILES   | 2-Methylphenol             |                         |                  |                  |                  | 0.33 t < U        | 0.53 1 < U       | 0.33 1 < U                  | 0.33 1 < U                | 0.33 1 < 0       | 0.33 1 < U                |
| SEMIVOLATILES   | 2-Nitroaniline             |                         |                  |                  |                  | 1.85 1 < U        | 2.5 1 < 0        | 1.65 1 < U                  | 1.65 1 < U                | 1.65 1 < 1       | 1,55 1 < U                |
| SEMIVOLATILES   | 2-Nitrophanoi              |                         |                  |                  |                  | 0.33 1 < U        | 0.53 1 < 0       | 0.33 / < U                  | 0.33 1 < U                | 0.33 1 < 0       |                           |
| SEMIVOLATILES   | 3,3'-Dichlorobenzidine     | 1                       |                  |                  |                  | 0,65 1 < U        | 1,1 1 < L        | 0.65 1 < U                  | 0.65 T < U                | 100 1 < 1        | i uosi < U<br>I 165 1 - U |
| SEMIVOLATILES   | 3-Nitroaniline             |                         |                  |                  |                  | 1.65 1 < U        | 2.6 1 < 1        | ⊨ 1.65 1 < U                | 1 > 1 co.i                | 165 1 4 4        | 1 165 1 × U               |
| SEMIVOLATILES   | 4.6-Dinitro-2-methylphenol |                         |                  |                  |                  | 1.65 1 < U        | 2,61 < 1         | 1 1 1 1 1 4 U               | 1,00 1 < ⊍<br>0.33 1 - 11 | 0.33 1 2 1       | 1 0.33 1 2 U              |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether | 1                       |                  |                  |                  | 0.33 1 < 0        | 0,03 1 < 0       | , u,aa   < U<br>  065 ( , ∐ |                           | 0.65 1           | J 0.55 1 < U              |
| SEMIVOLATILES   | 4-Chlora-3-methylphenol    | 1                       |                  |                  |                  | 0.65 1 < 0        | 0,53 1 < 0       | , 0.02 i < 0                | 0.03 i K V                |                  |                           |



Table 3-61 Concentrations of Chemicals in Soil Samples Associated with Sump 061

| [SUMP] = SUMP061 |                             |                  |                  |                  |                 |                  |                  | 111 604 64       | I HISSEN ON      | ( H-S61-02       | 18-561-02        |
|------------------|-----------------------------|------------------|------------------|------------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                             | 35SUMP061-SB01   | 35SUMP061-SB01   | 47SB15           | 47SB15          | LH-DL61-01       | LHS-3-05         | 10.001-01        | 18-561-01-2      | H-961-02 1       | LH-561-02 2      |
| SAMPLE_NO        |                             | 35-SMP61-SB01-01 | 35-SMP61-S801-02 | 47SB15(0-0_5)    | 475815(1-2)     | LH-0101          | 1/0/1005         | 8/8/1993         | 8/6/1993         | 8/6/1993         | 8/6/1993         |
| SAMPLE_DATE      |                             | 9/14/2006        | 9/14/2006        | 6/3/2000         | 6/3/2000        | 0.95             | 0-055            | 0.5 - 3 FI       | 8 - 10 FI        | 1 - 3 Ft         | 8 • 10 Ft        |
| DEPTH            |                             | 0.5 • 0.5 FI     | 7 • 7 Ft         | 0 - 0.5 Pt       | 0-271           | 2-37             | BEG              | REG              | REG              | REG              | REG              |
| SAMPLE_PURPOSE   |                             | REG              | REG              | REG              |                 | Beeufi Dil LO VO | Basult Dil LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LO VO |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LO VO | Result DIL LO VO | Hesuit UIL LU VU | Hesuk Dir LO VQ | 0.65 1 < 0       | 0.53 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES    | 4-Chloroaniline             |                  |                  |                  |                 | 0.33 1 < U       | 0.53 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl elher |                  |                  |                  |                 | 0.33 1 < U       | 0.53 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Meinyiphendi              |                  |                  |                  |                 | 1.65 1 < U       | 2.6 1 < U        | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | 4-Niroaniine                |                  |                  |                  |                 | 1.65 1 < U       | 2.6 1 < U        | 1.65 1 c U       | 1,65 1 < U       | 1.65 1 < U       | 1.65 1 < Ü       |
| SEMIVOLATILES    | 4-Nittoprenoi               |                  |                  |                  |                 | 0.33 î < U       | 0.53 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Acersphiliese               |                  |                  |                  |                 | 0.33 1 < U       | 0.53 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATICES    | Acenaphinylene              |                  |                  |                  |                 | 0.33 1 < U       | 0.53 i < U       | 10.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Renzn/a)anlhracene          |                  |                  |                  |                 | 0.33 1 < V       | 0.21 1 J         | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMINOLATILES    | Benzola Inviene             |                  |                  |                  |                 | -0.33 1 < U      | 0.2 1 J          | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES    | Benzo(b)Suprasibene         |                  |                  |                  |                 | 0.33 1 < U       | 0.48 1 J         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < ∪       | 0.33 1 < 0       |
| SEMIVOLATILES    | Benzo(ohi)perviene          |                  |                  |                  |                 | 0.33 1 < V       | 0.53 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES    | Benzo(k)#uoranthene         |                  |                  |                  |                 | 0,33 1 < U       | 0.17 1 J         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES    | Benzoic Acid                |                  |                  |                  |                 | 1.65 i < U       | 2.6 1 < U        | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 0       | 1,05 1 4 0       |
| SEMIVOLATILES    | Benzyl Alcohol              |                  |                  |                  |                 | 0.65 1 < U       | 0.53 1 < 0       | 0.65 1 < 0       | 0.65 1 < 0       |                  | 0.00 1 2 1       |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  |                  |                  |                  |                 | 0.33 1 < U       | 0.53 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 4 0       | 0.33 1 2 1       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |                  |                  |                  |                 | 0.33 1 < U       | 0.53 1 < 0       | 0.33 1 < 0       | 0.33 .1 < V      | 0.33 1 C U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether | 1                |                  |                  |                 | 0.33 1 < 0       | 0.53 1 < 0       | 0.33 1 < 0       | 0.33 1 4 1       | 0.39 1 1         | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |                  |                  |                  |                 | 0.33 1 < 0       | 0.53 1 < 0       | 0.33 1 2 0       | 0.00 1 < 0       | 0.33 1 < 1       | 0.33 1 < Ü       |
| SEMIVOLATILES    | Butyl benzyl phthalate      |                  |                  |                  |                 | 0.33 1 < 0       | 0,53 1 < 0       | 0.33 1 4 1       | 0.33 1 2 1       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Chrysene                    |                  |                  |                  |                 | 0.33 1 < U       | 0.53 1 J         | 0.33 1 < 0       | 0.33 t < U       | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      |                  |                  |                  |                 | 0.33 1 < 0       | 0.53 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | Olberizofuran               |                  |                  |                  |                 | 0.33 1 < 0       | 0,53 1 4 4       | 0.33 1 2 11      | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Disthyl phihalale           |                  |                  |                  |                 | 0.00 1 < 0       | 0,50 1 2 1       | 0.33 1 < 1       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Dimethyl phthalale          |                  |                  |                  |                 |                  | 0.53 i < L       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES    | di-n-Bulyi phthalate        |                  |                  |                  |                 | 0.33 1 c U       | 0.53 1 < 1       | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | ol-n-Ostyl phinalate        |                  |                  |                  |                 | 0.33 1 < U       | 0.52 1           | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Fluerene                    |                  |                  |                  |                 | 0.33 1 < U       | 0.53 1 < U       | 0.33 1 < U       | 0.33 f < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATLES     | Hovenberghenzene            |                  |                  |                  |                 | 0.33 t < U       | U 0.53 1 < L     | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 난       | 0.33 1 < U       |
| SEMIVOLATILES    | Hevechlorobulariane         |                  |                  |                  |                 | 0,33 1 < 0       | 0.53 1 < `l      | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorocyclopeniadiene   |                  |                  |                  |                 | 0.39 1 < L       | J 0.53 i < t     | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES    | Hexachloroethane            |                  |                  |                  |                 | 0.33 1 < L       | 0,53 1 < L       | J 0.33 i < U     | 0.33 1 < 0       | 0.33 1 < ∪       | 0.33 1 < 0       |
| SEMIVOLATILES    | Indena(1,2,3-cd)pyrane      |                  |                  |                  |                 | 0.33 i < i       | ) 0.53 1 < U     | J 0.33 1 < U     | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 2 0       |
| SEMIVOLATILES    | Isophorone                  |                  |                  |                  |                 | 0.33 f < L       | J 0,53 1 < L     | ) 0.33 1 < U     | 0.33 1 < U       | 0.33 1 < 0       | 0,33 1 2 0       |
| SEMIVOLATILES    | Naphihalene                 |                  |                  |                  |                 | 0.33 1 < L       | ) 0.53 1 < L     | ) 0.33 1 < U     | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 2 1       |
| SEMIVOLATILES    | Nitrobenzene                |                  |                  |                  |                 | 0.33 1 < 1       | 0.53 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 2 0       | 0.33 1 < U       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |                  |                  |                  |                 | 0,33 1 < U       |                  |                  | 0.33 1 4 0       | 0.33 1 < 1       | 0.33 1 < U       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      | í                |                  |                  |                 | 0.33 1 < 0       | 0.53 1 < 0       |                  | 165 1 2 1        | 165 1 < 1        | 1.65 1 < U       |
| SEMIVOLATILES    | Pentachlorophenol           |                  |                  |                  |                 | 1,55 1 < 0       | 1 024 1          | 033 1 4 0        | 0.33 1 < U       | 0.33 1 < U       | 0.33 î < U       |
| SEMIVOLATILES    | Phenanthrene                |                  |                  |                  |                 | 0.00 1 4 4       |                  | 1 033 1 2 1      | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES    | Phenof                      |                  |                  |                  |                 | 0.00 1 4 4       | 1 12 1           | 0.33 1 < U       |
| SEMIVOLATILES    | Pyrana                      |                  |                  |                  |                 | 0.00 1 4 4       | 0.016 1 < 1      | )<br>)           |                  |                  |                  |
| VOLATILES        | 1,1,1,2-1etrachioroemane    |                  |                  |                  |                 | 0.005 1 <        | J 0.008 1 <      | J 0.005 1 < U    | 0.005 1 < U      | 0.005 t < U      | 0.005 t < U      |
| VOLATILES        | 1.1.2.2 Zetracherathara     |                  |                  |                  |                 | 0.005 1 < 0      | J 0.008 1 <      | J 0.005 1 ≺ U    | 0.005 i < U      | 0.005 1 < U      | 1 0.005 1 < U    |
| VOLATILES        | 1,1,2,2 reliacionolitaria   |                  |                  |                  |                 | 0.005 1 < 1      | J 0.008 1 < 1    | J 0.005 1 < U    | 0.005 t < U      | 0.005 1 < U      | I 0,005 1 < U    |
|                  | 1.1.Dichionelbane           |                  |                  |                  |                 | 0.005 i < 1      | J 0.008 1 <      | U 0.005 1 < U    | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 × U      |
| VOLATILES        | 1.1-Dichleroethene          |                  |                  |                  |                 | 0.005 1 < 6      | U 0.008 1 <      | U 0.005 1 < U    | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1.2.3-Trichloropropane      |                  |                  |                  |                 |                  | 0.016 1 <        | U                |                  |                  |                  |
| VOLATILES        | 1.2-Dibromo-3-chloropropane |                  |                  |                  |                 |                  | 0.032 1 <        | U                |                  |                  |                  |
| VOLATILES        | 1.2-Dibromoelhane           |                  |                  |                  |                 |                  | 0.032 1 <        | U                |                  |                  |                  |
| VOLATILES        | 1,2-Dichloroethane          |                  |                  |                  |                 | 0.005 1 <        | U 0,00B 1 <      | U 0.005 1 < U    | 0.005 1 < 0      | 0,005 T < U      |                  |
| VOLATILES        | 1.2-Dichloroethene          |                  |                  |                  |                 | 0.005 1 <        | U 0.008 1 <      | U 0.005 1 < U    | 0.005 1 < U      |                  |                  |
| VOLATILES        | 1,2-Dichloropropane         |                  |                  |                  |                 | 0.005 1 <        | U 0.008 1 <      | U 0,005 1 < U    |                  | 0.000 1 < 0      | ) 0.05 1 < U     |
| VOLATILES        | 2-Bulanone                  | 1                |                  |                  |                 | 0.05 1 <         | U 0.0161 <       | 0.01 1 4 0       |                  |                  | 1 0.01 1 2 U     |
| VOLATILES        | 2-Chlorosthyl vinyl ether   | 1                |                  |                  |                 | 0,01 1 <         | v                | 0.01 1 < 0       | 0.01 1 4 6       |                  |                  |



| Table 3-61   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 061 |

| [SUMP] = SUMP061 |                             |                  |                  |                  |                  |                  |                  |                  | 111 551 64       | 10 564 00        | 10.561.00        |
|------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                             | 35SUMP061-S801   | 35SUMP061-SB01   | 475815           | 47SB15           | LH-DL61-01       | URS-3-05         | LENGEL OF        |                  |                  | 14.961.09.2      |
| SAMPLE_NO        |                             | 35-SMP61-SB01-01 | 35-SMP61-SB01-02 | 47\$815(0-0_5)   | 475815(1-2)      | LH-DL61-01       | LHS-3-05         | FH-201-01_1      | LH-301-01_2      | 0/201404_1       | 0/6/1003         |
| SAMPLE_DATE      |                             | 9/14/2006        | 9/14/2006        | 6/3/2000         | 6/3/2000         | B/6/1993         | 1/9/1995         | 8/6/1993         | 8/6/1993         | 0/0/1993         | 0 40 51          |
| DEPTH            |                             | 0.5 - 0.5 F1     | 7 • 7 Ft         | 0 - 0.5 FI       | 1 - 2 Ft         | 2 - 3 Ft         | 0 - 0.5 Ft       | 0.5 · 3 F1       | 8,1011           | 1.371            | 0.1011           |
| SAMPLE_PURPOSE   |                             | REG              | HEG              |                  |                  |
| Tesl Group       | Parameter (Units = mg/kg)   | Result DIL LO VO | Result DIL LO VO | Result QIL LO VO | Result DIL LO VO | Result DIL LQ VO | Result DIL LO VO | Result DIL LO VO | Hesuit Dil La Va | Hesuit UIL LU VU | Result Lit Lu Vu |
| VOLATILES        | 2-Hexanone                  |                  |                  |                  |                  | 0.05 1 < U       | 0.016 1 < U      | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < 0       | 0.05 1 < 0       |
| VOLATILES        | 2-Propanal                  |                  |                  |                  |                  |                  | 0,8 1 < U        |                  |                  |                  | <b>AA A A</b>    |
| VOLATILES        | Acetone                     |                  |                  |                  |                  | 0.1 1 < U        | 0.016 1 < U      | 0.1 1 < U        | 0.1 1 < 0        | 0.1 1 < 0        | 0.1 1 4 0        |
| VOLATILES        | Acelonitrile                |                  |                  |                  |                  |                  | 0.16 1 < U       |                  |                  |                  |                  |
| VOLATILES        | Acryloniinie                |                  |                  |                  |                  |                  | 0,16 i < U       |                  |                  |                  |                  |
| VOLATILES        | Altyl chloride              | 1                |                  |                  |                  |                  | 0.032 1 < U      |                  |                  |                  | 0.007 4 11       |
| VOLATILES        | Benzene                     | 1                |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0,005 1 < 0      |
| VOLATILES        | Bromodichloromethane        | {                |                  |                  |                  | 0,005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      |
| VOLATILES        | Bromotorm                   |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | Bromomethane                |                  |                  |                  |                  | 0.01 1 < U       | 0.016 1 < U      | 0.01 1 < U       | 0.01 1 < 0       | 0.01 1 < 0       | 0.01 1 < 0       |
| VOLATILES        | Carbon disulfide            |                  |                  |                  |                  | 0,005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | Carbon tetrachloride        |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chlorobenzene               |                  |                  |                  |                  | 0,005 1 < U      | 0,008 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloroelhane                |                  |                  |                  |                  | 0.01 1 < U       | 0.016 t < U      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Chloroform                  |                  |                  |                  |                  | 0.005 1 < V      | 0.008 1 < U      | 0.005 i < U      | 0.005 I < U      | 0.005 1 < U      | 0.005 1 < 0      |
| VOLATILES        | Chloromethana               |                  |                  |                  |                  | 0.01 1 < U       | 0.015 1 < U      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < V       |
| VOLATILES        | Chloroprena                 |                  |                  |                  |                  |                  | 0.16 1 < U       |                  |                  |                  |                  |
| VOLATILES        | cls-1.3 Dichloropropene     |                  |                  |                  |                  | 0,005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromochloromethane        |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0,005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromomethane              |                  |                  |                  |                  |                  | 0.016 1 < U      |                  |                  |                  |                  |
| VOLATILES        | Dichlorodifluoromethane     |                  |                  |                  |                  |                  | 0.032 1 < U      |                  |                  |                  |                  |
| VOLATILES        | Ethvi methacrvlate          |                  |                  |                  |                  |                  | 0.032 1 < U      |                  |                  |                  |                  |
| VOLATILES        | Ethylbanzena                |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | IODOMETHANE                 |                  |                  |                  |                  |                  | 0.016 1 < U      |                  |                  |                  |                  |
| VOLATILES        | ISOBUTYL ALCOHOL            |                  |                  |                  |                  |                  | 3.2 1 < U        |                  |                  |                  |                  |
| VOLATILES        | Methacrylonitrile           |                  |                  |                  |                  |                  | 0.032 1 < U      |                  |                  |                  |                  |
| VOLATILES        | Methyl isobutyl ketone      |                  |                  |                  |                  | 0.05 1 < U       | 0.016 .1 < U     | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | METHYL METHACRYLATE         |                  |                  |                  |                  |                  | 0,032 1 < U      |                  |                  |                  |                  |
| VOLATILES        | Methylene chloride          | l                |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Penlachiorosthane           | }                |                  |                  |                  | •                | 0.032 1 < U      |                  |                  |                  |                  |
| VOLATILES        | Propionitrile               |                  |                  |                  |                  |                  | 0.08 1 < U       |                  |                  |                  |                  |
| VOLATILES        | Styrena                     | í                |                  |                  |                  | 0.005 i < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Tetrachlorpethene           |                  |                  |                  |                  | 0.005 1 < U      | 0.008 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Toluane                     |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 i < U      |
| VOLATILES        | Irans-1.3-Dichloropropene   |                  |                  |                  |                  | 0.005 1 < U      | 0,008 t < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | trans-1.4-Dichloro-2-butene |                  |                  |                  |                  |                  | 0.032 1 < U      |                  |                  |                  |                  |
| VOLATILES        | Trichlorgethene             |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOI ATILES       | Trichlorofluoromethane      |                  |                  |                  |                  |                  | 0.016 1 < U      |                  |                  |                  |                  |
| VOLATILES        | Vinvl acetate               |                  |                  |                  |                  | 0.05 i < U       | 0.016 1 < U      | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0,05 1 < U       |
| VOLATILES        | Vinvi oblande               |                  |                  |                  |                  | 0.01 1 < U       | 0.016 1 < U      | 0.01 1 < U       | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U       |
| VOLATILES        | Yulones Total               |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |

VOLATILES Xylenes, rotal Footnotes are shown on cover page to Tables Section.



| Table 3-62   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 062 |

| (SUMP) = SUMP062 |                           | LH-S    | 062-( | 11 |     |       | LH-    | S062   | -01 |         | ĻΗ·          | S062   | 2-01 |     | LH           | -S06   | 2-01       |            |  |
|------------------|---------------------------|---------|-------|----|-----|-------|--------|--------|-----|---------|--------------|--------|------|-----|--------------|--------|------------|------------|--|
|                  |                           | LH-SOF  | 2-01  | 00 |     |       | LH-S   | 062-0  | 1 1 |         | LH-S         | 062-   | 01_2 |     | LH-          | S062   | -01_3      | 1          |  |
| SAMPLE_NO        |                           | 8/5     | 1993  |    |     |       | 8/     | 5/199  | 3   |         | 8            | 5/19   | 93   |     | 8            | /5/11  | 993        |            |  |
| DEDTU            |                           | 0.5 -   | 1.21  | -  |     |       | 0.5    | - 1.2  | Ft  |         | 2.           | 5.3    | Ft   |     | 3            | .5 -   | I FI       |            |  |
| SAMPLE DURPOSE   |                           |         | ÷D    |    |     |       |        | REG    |     |         |              | REG    |      |     |              | RE     | G          |            |  |
| Tasl Groun       | Parameter (Units = mo/kg) | Result  | DIL   | LC | ) v | Q     | Result | DIL    | LO  | ٧Q      | Result       | DIL    | LQ   | ٧Q  | Result       | DIL    | ιQ         | VQ         |  |
| EXPLOSIVES       | 1 3 5-Tripitrobenzene     | 0.7     | 1     | <  | 1   | Ű     | 0.7    | 1      | <   | U       | Q.7          | 1      | <    | Ü   | 0,7          | 1      | <          | U          |  |
| EXPLOSIVES       | 1.3-Dinitrobenzene        |         |       |    |     |       | 0.5    | 1      | <   | U       | 0.5          | 1      | <    | U   | 0.5          | 1      | <          | U          |  |
| EXPLOSIVES       | 2 4.6-Tripitrotoluene     | 0.5     | ŧ     | <  | . ; | u     | 0,5    | 1      | <   | υ       | 0.5          | 1      | <    | U   | 0.5          | 1      | <          | U          |  |
| EXPLOSIVES       | 2 4-Dinitrololuene        | 0.5     | 1     | <  | - 1 | U     | 0,5    | 1      | ¢   | U       | 0.5          | 1      | <    | Ų   | 0.5          | 1      | \$         | U          |  |
| EXPLOSIVES       | 2.6-Dinitrotoluene        | 0.5     | 1     | <  | - 1 | V     | 0.5    | t      | <   | U       | 0.5          | t      | <    | U   | 0.5          | 1      | <          | Ų          |  |
| EXPLOSIVES       | HMX                       | 0.9     | 1     | <  |     | U     | 0.9    | 1      | <   | U       | 0,9          | 1      | ۲    | U   | 0.9          | 1      | <          | Ų          |  |
| EXPLOSIVES       | m-Nitrotoluene            | 0,9     | í     | <  |     | U     | 0.9    | 1      | <   | U       | 0.9          | 1      | ۲    | U   | 0.9          | 1      | <          | Ų          |  |
| EXPLOSIVES       | NIOBIUM                   | 0.6     | 1     | <  | :   | U     | 0.6    | 1      | <   | Ų       | 0.6          | 1      | <    | U   | 0.6          | 1      | <          | U          |  |
| EXPLOSIVES       | o-Nitrololuene            | 0.9     | 1     | <  |     | Ų     | 0.9    | 1      | <   | U       | 0.9          | 1      | ۲    | U   | 0.9          | t      | <          | Ų          |  |
| EYPLOSIVES       | n-Nitrotoluene            | 1,1     | t     | <  |     | U     | 1.1    | 1      | <   | U       | 1.1          | 1      | <    | u   | 1.1          | 1      | <          | U          |  |
| EXPLOSIVES       | BDX                       | 0.5     | í     | <  |     | u     | 0,5    | 1      | <   | U       | 0.5          | 1      | <    | U   | 0.5          | 1      | <          | ป          |  |
| EVPLOSIVES       | Tatad                     | 1.9     | 1     |    |     | U     | 1,9    | 1      | <   | U       | 1.9          | ſ      | <    | U   | 1.9          | 1      | <          | U          |  |
| METALE           | áluminum                  | 17300   | 1     |    |     |       | 12300  | 1      |     |         | 9390         | 1      |      |     |              |        |            |            |  |
| METALS           | Anlimony                  | 3       | 1     | <  | :   | U     | 3      | 1      | ¢   | U       | 3            | 1      | <    | U   |              |        |            | •          |  |
| METALO           | Argenic                   | 4.8     | 1     |    | -   | -     | 3.9    | 1      |     |         | 2.9          | . 1    |      |     |              |        |            |            |  |
| METALO           | Barlum                    | 81      | 1     |    |     |       | 98     | 1      |     |         | 102          | 1      |      |     |              |        |            |            |  |
| METALO           | Codmium                   |         | 1     |    |     | u     | 1      | 1      | <   | υ       | 1            | 1      | <    | υ   |              |        |            |            |  |
| METALS           | Calalum                   | 1630    |       |    | •   | •     | 1500   | 1      |     | •       | 325          | 1      |      |     |              |        |            |            |  |
| METALS           | Chromium                  | 16      |       |    |     |       | 16     | 1      |     |         | 12           | 1      |      |     |              |        |            |            |  |
| METALS           | Calculation               | 4       | 1     |    |     |       | , s    | 1      |     |         | 8            | 1      |      |     |              |        |            |            |  |
| METALS           | Coost                     |         | ÷     |    |     |       | 3      | Í      |     |         | 3            | 1      |      |     |              |        |            |            |  |
| METALS           | Copper<br>Outside Tetal   | 1       | ÷     |    | ,   | H     | 0.5    | ÷      |     | ш       | 0.5          | i.     | <    | U   | 0.5          | 1      |            |            |  |
| METALS           | Gyanide, Total            | 1 6 400 | 1     |    | `   | v     | 12600  | ÷      | `   | č       | 8430         | 1      | -    | •   |              |        |            |            |  |
| METALS           | Iron                      | 14400   | •     |    |     |       | 8.4    | í      |     |         | 10           | •      |      |     |              |        |            |            |  |
| METALS           | Lead                      | 0.0     | +     |    |     |       | 724    | ÷      |     |         | 418          | i      |      |     |              |        |            |            |  |
| METALS           | Magnesium                 | 903     |       |    |     |       | 593    | 4      |     |         | 520          | 1      |      |     |              |        |            |            |  |
| METALS           | Manganese                 | 240     |       |    |     |       | 000    | 1<br>1 |     | Ω.      | 0.1          |        |      | ш   |              |        |            |            |  |
| METALS           | Mercury                   | 0.1     | 1     |    | <   | ų     | 250    |        | `   | v       | 409          | ÷      | ``   | Ŭ   |              |        |            |            |  |
| METALS           | Potassium                 | /35     | 1     |    |     |       | 000    | 1      |     |         | 430          | 4      |      | 11  |              |        |            |            |  |
| METALS           | Selenium                  |         | 1     |    | <   |       |        |        | Ś   | ň       |              | 4      | 2    | ŭ   |              |        |            |            |  |
| METALS           | Silver                    | 1       | 1     |    | <   | Ų     | 10     |        | ¢   | 0       | ,<br>5       | á      |      | 0   |              |        |            |            |  |
| METALS           | Strontium                 | 12      | 1     |    |     |       | 14     | +      |     |         | 10           | ÷      |      |     |              |        |            |            |  |
| METALS           | Zinc                      | 10      | 1     |    |     |       | 19     | +      |     | 11      | 31<br>0.93   | ;      |      | я   | ñ 33         |        |            | e 1)       |  |
| SEMIVOLATILES    | 1.2,4-Trichlorobenzene    | 0.33    | 1     |    | <   |       | 0.33   | -      | Ś   | U<br>TL | 0.33         | ÷      |      |     | 0.00         |        |            | , v        |  |
| SEMIVOLATILES    | 1.2-Dichlorobenzene       | 0.33    | 1     |    | <   | U.    | 0.33   | 1      | <   |         | 0.33         | 1      | 2    | - U | 0,00         |        | 2          | - 11       |  |
| SEMIVOLATILES    | 1,3-Dichlorobenzene       | 0.33    |       |    | <   | 0     | 0,33   |        |     |         | 0.00         | )<br>( | 2    |     | 0.00         | 2 4    |            | , u        |  |
| SEMIVOLATILES    | 1.4-Dichlorobenzene       | 0.33    |       |    | <   | Ų.    | 0.33   | 1      | <   |         | 0.00         |        |      | ň   | 1.00         |        |            |            |  |
| SEMIVOLATILES    | 2,4,5 Trichlorophenol     | 1.65    |       |    | <   | ย<br> | 1,65   | 1      | <   |         | 1.00         | 1      |      | ň   | 0.00         |        |            |            |  |
| SEMIVOLATILES    | 2,4,6-Trichiorophenol     | 0.33    | 1     |    | <   | 0     | 0,33   | 1      | <   |         | 0.00         |        |      |     | 0.0          |        |            | . v        |  |
| SEMIVOLATILES    | 2,4-Dichlorophenol        | 0.33    | F 1   |    | ۲   | 0     | 0.33   | 1      | <   | U       | Ų.33<br>0 00 | 1      | <    | . U | 0.3          |        |            |            |  |
| SEMIVOLATILES    | 2,4-Dimethylphenol        | 0.33    | 1     |    | <   | U     | 0.33   | 1      | <   |         | 0.33         | 1      | 5    |     | 9.0.<br>1 Pi |        |            |            |  |
| SEMIVOLATILES    | 2,4-Dinitrophenol         | 1.65    | 1     |    | <   | Ų     | 1.65   | 1      | <   | 0       | 1,65         | )      | <    |     | 1.0          |        |            | с V<br>- н |  |
| SEMIVOLATILES    | 2,4-Dinitrotoluene        | 0.33    | 1     |    | <   | 0     | 0,33   | 1      | <   | Ų       | 0.33         |        | <    | 0   | 0.3          |        |            | ε φ<br>. Π |  |
| SEMIVOLATILES    | 2,6-Dinitrotoluene        | 0.33    | 3 1   |    | <   | U     |        |        |     |         | 0.33         |        | <    | 0   | 0.3          |        |            | с U<br>. П |  |
| SEMIVOLATILES    | 2-Chloronaphthalene       | 0.33    | 3 1   |    | <   | U     | 0.33   | 1      | <   | U       | 0.33         | 1      | <    |     | 0.3          | 2      |            | ε U<br>. H |  |
| SEMIVOLATILES    | 2-Chlorophenol            | 0.33    | 3 1   |    | <   | U     | 0.33   | 1      | <   | U       | 0.33         | 1      | . <  |     | 0.3          |        |            | ч U<br>, н |  |
| SEMIVOLATILES    | 2-Methylnaphthalene       | 0.33    | 3 1   |    | <   | U     | 0.33   | 1      | <   | U       | 0.33         | 1      |      | 0   | 0.3          | э<br>• |            | с U<br>, н |  |
| SEMIVOLATILES    | 2-Methylphenol            | 0.33    | 3 1   |    | <   | U     | 0.33   | 1      | <   | U       | 0.33         |        | <    | U   | 0.3          | ې<br>۲ |            |            |  |
| SEMIVOLATILES    | 2-Nitroaniline            | 1.6     | 5 1   |    | <   | U     | 1,65   | 1      | <   | U       | 1,65         | 1      | ×    | : U | 1.6          | 5      | 1 ·        | < U        |  |
| SEMIVOLATILES    | 2-Nitrophenol             | 0.3     | 3 1   |    | <   | U     | 0.33   | 1      | <   | U       | 0.33         | 1,1    | <    | : U | 0.3          | 3      | <b>.</b> . | < U        |  |

Shaw Environmental, Inc. 00066125

### Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

 Table 3-62

 Concentrations of Chemicals in Soil Samples Associated with Sump 062

| SUMP] = SUMP062 |                             |        |            |    |            |        |            |      |               |        |       |     |         |        |       |            |    |
|-----------------|-----------------------------|--------|------------|----|------------|--------|------------|------|---------------|--------|-------|-----|---------|--------|-------|------------|----|
| LOCATION _CODE  |                             | LH-S   | 062-0      | )1 |            | Ĺŀŀ    | -S062      | -01  |               | LH.    | 5062  | 01  |         | UH-    | S062- | -01        |    |
| SAMPLE_NO       |                             | LH-S06 | 52-01      | 00 |            | LΗ-\$  | 5062-      | 01_1 |               | LH-S   | 062-0 | 1_2 |         | LR-S   | 062-0 | )1_3<br>`` |    |
| SAMPLE_DATE     |                             | 8/5/   | (1993      | 1  |            | 8      | /5/19      | 93   |               | 8/     | 5/199 | 3   |         | 8/     | 5/199 | 13         |    |
| DEPTH           |                             | 0.5 -  | 1.2        | Ft |            | 0.5    | 5 - 1,2    | 2 FI |               | 2.     | 5 - 3 | -t  |         | 3.     | 5-41  | Ft         |    |
| SAMPLE_PURPOSE  |                             | 1      | FD         |    |            |        | REG        | I I  |               |        | RËG   |     |         |        | REG   |            |    |
| Test Group      | Parameter (Units = mg/kg)   | Result | DIL        | LQ | ٧Q         | Result | DIL        | LQ   | VQ            | Result | DIL   | LQ  | VQ      | Result | DIL   | LQ         | VQ |
| SEMIVOLATILES   | 3,3'-Dichlorobenzidine      | 0.65   | 1          | ۲  | U          | 0.65   | 1          | <    | U             | 0.65   | 1     | <   | U       | 0.65   | 1     | <          | 0  |
| SEMIVOLATILES   | 3-Nitroaniline              | 1.65   | 1          | <  | U          | 1.65   | i          | <    | U             | 1.65   | 1     | <   | U       | 1.65   | 1     | <          | U  |
| SEMIVOLATILES   | 4.6-Dinitro-2-methylphenol  | 1.65   | 1          | <  | U          | 1.65   | 1          | <    | U             | 1.65   | 1     | <   | U       | 1.65   | 1     | <          | U  |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether  | 0.33   | 1          | <  | Ų          | 0.33   | 1          | <    | U             | 0.33   | 1     | <   | Ų       | 0.33   | 1     | <          | 0  |
| SEMIVOLATILES   | 4-Chloro-3-methylphenol     | 0.65   | 1          | <  | U          | 0.65   | 1          | <    | ប             | 0.85   | 1     | <   | U       | 0.65   | 1     | <          | U  |
| SEMIVOLATILES   | 4-Chloroaniline             | 0.65   | \$         | <  | U          | 0.65   | 1          | <    | U,            | 0.65   | 1     | <   | U       | 0.65   | 1     | <          | U  |
| SEMIVOLATILES   | 4-Chiorophenyl phenyl ether | 0.33   | 1          | <  | IJ         | 0.33   | 1          | <    | U             | 0.33   | 1     | <   | υ       | 0.33   | 1     | <          | U  |
| SEMIVOLATILES   | 4-Methylphenol              | 0,33   | 1          | ح  | Ų          | 0.33   | 1          | <    | Ų             | 0.33   | 1     | <   | U       | 0.33   | 1     | <          | U  |
| SEMIVOLATILES   | 4-Nitroaniline              | 1.65   | 1          | <  | U          | 1.65   | 1          | <    | Ų             | 1.65   | 1     | <   | U       | 1.65   | 1     | <          | U  |
| SEMIVOLATILES   | 4-Nitrophenol               | 1.65   | 1          | <  | Ų          | 1.65   | 1          | <    | υ             | 1,65   | 1     | ۲   | U       | 1.65   | 1     | <          | Ų  |
| SEMIVOLATILES   | Acenaphthene                | 0.33   | 1          | <  | U          | 0.33   | 1.         | . <  | U             | 0.33   | 1     | <   | υ       | 0.33   | 1     | <          | Ų  |
| SEMIVOLATILES   | Acenaphthylene              | 0.33   | 1          | ۲  | U          | 0.33   | 1          | <    | ប             | 0.33   | 1     | <   | U       | 0.33   | 1     | <          | U  |
| SEMIVOLATILES   | Anihracene                  | 0.33   | t          | <  | U          | 0.33   | 1          | <    | υ             | 0.33   | 1     | <   | Ų       | 0.33   | 1     | <          | U  |
| SEMBIOLATILES   | Benzo(a)anibracene          | 0.33   | 1          | <  | · U        | 0,33   | 1          | <    | Ų             | 0.33   | 1     | <   | Ų       | 0.33   | 1     | <          | ប  |
| SEMIVOLATILES   | Benzo(a)ovrene              | 0.33   | 1          | <  | ម          | 0.33   | 1          | <    | U             | 0,33   | 1     | <   | U       | 0.33   | 1     | ۲          | U  |
| SEMIVOLATILES   | Benzo(h)(luoranthene        | 0.33   | 1          | <  | U          | 0.33   | 1          | <    | U             | 0.33   | 1     | <   | U       | 0.33   | 1     | <          | U  |
| SEMIVOLATILES   | Benzo(abi)cerviene          | 0.33   | ٤          | <  | U          | 0,33   | 1          | <    | U             | 0.33   | 1     | <   | U       | 0.33   | 1     | <          | U  |
| SEMIVOLATILES   | Benzo(k)lluoranthane        | 0.33   | 1          | <  | U          | 0.33   | 1          | <    | U             | 0.33   | i     | <   | U       | 0.33   | 1     | <          | U  |
| SEMINOLATILES   | Benzoic Arid                | 1.65   | 1          | <  | U          | 1.65   | 1          | <    | Ų             | 1.65   | 1     | <   | Ų       | 1.65   | 1     | <          | U  |
| SEMIVOLATILES   | Benzyl Alcohol              | 0.65   | 1          | <  | Ū          | 0.65   | 1          | <    | U             | 0.65   | 1     | <   | U       | 0.65   | 1     | <          | U  |
| CENTROLATILES   | his/2.Chlomethow/methane    | 0.33   | 1          | <  | Ű          | 0.33   | 1          | <    | U             | 0.33   | 1     | <   | Ų       | 0.33   | 1     | <          | U  |
| SEMIVOLATILES   | bis(2-ChloroethyBather      | 0.33   | 1          | <  | Ū          | 0.33   | 1          | <    | Ų             | 0.33   | 1     | <   | U       | 0.33   | 1     | <          | ប  |
| SEMIVOLATILES   | bis(2-Chloroisonronyl)ether | 0.33   | 1          |    | . ย        | 0.33   | 1          | <    | Ú             | 0.33   | 1     | <   | U       | 0.33   | 1     | <          | U  |
| SEMIVOLATILES   | bic/2-Ethylhox/liphihalate  | 0.519  | 1          |    | *          | 0.33   | 1          | <    | Ű             | 0.33   | 1     | <   | U       | 0.33   | 1     | <          | U  |
| SEMIYOLATILES   | Dista bonnd obtaiste        | 0.33   | 4          |    | U          | 0.33   | 1          | <    | Ū             | 0.33   | 1     | .<  | U       | 0.33   | 1     | <          | U  |
| SCINIVOLATILES  | Character Character         | 0.33   | t          | 2  | ū          | 0.33   | 1          | <    | Ū             | 0.33   | 1     | <   | U       | 0.33   | 1     | <          | U  |
| SEMIVOLATILES   | Diheerafa bianthraceee      | 0.33   | 1          | 2  | - Ĥ        | 0.33   | 1          | <    | Ū             | 0.33   | 1     | <   | Ų       | 0.33   | 1     | <          | U  |
| SEMIVOLANLES    | Diserteturo                 | 0.00   | i          |    | - 11       | 0.33   | . 1        | ć    | Ŭ             | 0.33   | i     | <   | U       | 0.33   | 1     | <          | U  |
| SEMIVOLATILES   | District address            | 0.00   | 4          |    | , u        | 0.33   | i t        | ć    | ū             | 0.33   | 1     | <   | U       | 0.33   | 1     | <          | U  |
| SEMIVOLATILES   | Digenty primatate           | 0.00   | 4          | )  | , ŭ        | 0.33   |            | ž    | ū             | 0.33   | 1     | <   | Ű       | 0.33   | 1     | <          | U  |
| SEMIVOLATILES   | di a Datal abbatate         | 0.00   |            |    | · •        | 0.00   | i i        | Ż    | Ď             | 0.433  | 1     |     |         | 0.68   | 1     |            |    |
| SEMIVOLATILES   | di-n-butyi phinalate        | 0.04/  |            |    | . 11       | 0.00   | 1          | 2    | ū             | 0.33   | 1     | ~   | U       | 0.33   | 1     | <          | U  |
| SEMIVOLATILES   | di-n-Octyl phinalate        | 0,00   |            |    |            | 0.00   |            | 2    | Ŭ             | 0.33   | 1     | è   | Ū       | 0.33   | 1     | <          | Ú  |
| SEMIVOLATILES   | Fluoraninene                | 0.00   |            |    |            | 0.00   | 2 1        | 2    | 11            | 0.33   | 1     | į   | ū       | 0.33   | 1     | <          | Ŭ  |
| SEMIVOLATILES   | Fluorene                    | 0,33   | )<br>  1   |    |            | 0.00   | 2 1        | )    | ŭ             | 0.33   | 1     | 2   | ŭ       | 0.33   | 1     | <          | Ű  |
| SEMIVOLATILES   | Hexachloropenzene           | 0.33   | , ,<br>, , |    | - 11       | 0.30   | , ,<br>, , | Ì    | , n           | 0.33   | ÷     | Ż   | ័ម      | 0.33   | 1     | ج          | บ้ |
| SEMIVOLATILES   | Hexachiorobutaciene         | 0.33   | )  <br>    |    | с ц<br>. н | 0.00   | 3 1<br>1 1 | )    | ů.            | 0.33   | 1     | Ż   | ů       | 0.33   | Í     | <          | Ū  |
| SEMIVOLATILES   | Hexachlorocyclopentaclene   | 0.33   |            |    | i u        | 0.00   | , ,<br>    | È    | <b>у</b><br>н | 0.00   | 4     | 2   | ŭ       | 0.33   | 1     | ž          | Ū  |
| SEMIVOLATILES   | Hexachloroethane            | 0.33   | 5 1<br>5 6 | 1  | ς υ<br>    | 0.00   | )  <br>    |      |               | 0.00   |       | 2   | Н       | 0.33   | i     | ż          | ů  |
| SEMIVOLATILES   | Indeno(1,2,3-cd)pyrene      | 0.33   | 5 I        | •  | с U<br>. н | 0.00   | )  <br>2   |      | ň             | 0,00   | ÷     | )   | ŭ       | 0.00   |       | Ż          | ŭ  |
| SEMIVOLATILES   | Isophorone                  | 0,33   | 5 1        |    | < U        | 0.30   | 5 1<br>5 1 |      |               | 0.00   |       | 2   | , u     | 0.00   | 1     | 2          | ů  |
| SEMIVOLATILES   | Naphthalane                 | 0.33   |            |    | < 0        | Ų.3.   | 3 I<br>4 4 | <    |               | 0.00   | 4     | 2   |         | 0.00   |       | 2          | ŭ  |
| SEMIVOLATILES   | Nitrobenzene                | 0.33   | 31         |    | < U        | 0.3    | 3 I<br>7 I |      | 0             | 0.00   | 1     | Ĵ   |         | 0.00   | ł     | Ì          | Ŭ. |
| SEMIVOLATILES   | n-Nitroso-di-n-propylamine  | 0.33   | 5 1        |    | < U        | 0.3    | 3 I        | Š.   |               | 0.00   |       | 2   | ű       | 0.00   | 1     | 2          | ŭ  |
| SEMIVOLATILES   | n-Nitrosodiphenylamine      | 0.33   | 3 1        |    | < U >      | 0.3    | 3 Ì        | <    | . U           | 0.33   | · •   |     | U<br>11 | 0.33   | 1     | <u>د</u>   |    |
| SEMIVOLATILES   | Pentachlorophenol           | 1.6    | 5 1        |    | < U        | 1.6    | ວ 1<br>^ໍ່ | <    | U             | 1.65   | 4     |     | . ц     | 1.00   | 4     |            |    |
| SEMIVOLATILES   | Phenanthrene                | 0.33   | 31         | 1  | < U<br>    | 0.3    | 3 1<br>0 4 |      | . U           | 0.33   | 1     |     |         | 0.33   | 1     |            | 1  |
| SEMIVOLATILES   | Phenol                      | 0.3    | 3 1        | 1  | < Ų        | 0.3    | ა 1<br>ი კ |      | : U           | 0.33   |       | Š   | . 0     | 0.00   |       | 5          | ŭ  |
| SEMIVOLATILES   | Pyrane                      | 0.3    | 31         | 1  | < U        | 0.3    | រ 1        | <    |               | 0.33   | . 1   |     |         | 0.00   | -     |            |    |
| VOLATILES       | 1,1,1-Trichloroethane       | 0.00   | 5 1        | 1  | < U        | 0.00   | 5 1        | •    | : 0           | 0.005  | 1     |     | Ų       | 0.005  | 1     | <          | v  |

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

| [SUMP] = SUMP062 |                           | LH-S   | 062-0 | 1      |       | เห     | S062       | -01 |         | LH-    | 5062  | 2-01         |      | LH-    | 5062  | -01      |          |
|------------------|---------------------------|--------|-------|--------|-------|--------|------------|-----|---------|--------|-------|--------------|------|--------|-------|----------|----------|
|                  |                           | LH-SOE | 2-01  | oc -   |       | LH-S   | 062 (      | 1_1 |         | LH-S   | 062-  | 01_2         |      | LH-S   | 062 ( | 01_3     |          |
| SAMPLE_NU        |                           | 8/5/   | 1993  |        |       | 8/     | 5/199      | 13  |         | 8/     | 5/199 | 93           |      | 8/     | 5/199 | 33       |          |
| SAMPLE_DATE      |                           | 0.5 -  | 1.2 F | ł      |       | 0.5    | - 1.2      | Ft  |         | 2.     | 5 - 3 | FI           |      | 3.     | 5.4   | Ft       |          |
| OUT IN           |                           | -,-    | Ð     |        |       |        | REG        |     |         |        | REG   |              |      |        | reg   |          |          |
| SAMPLE_PURPUOD   | Perameter (Units = mr/kn) | Result | DIL   | LQ     | VQ    | Result | DIL        | ίQ  | va      | Result | DIL   | ιQ           | VQ   | Result | DIL   | LQ       | VQ       |
| VOLATILES        | 1 1 2 2-Tetrachloroelhane | 0.005  | 1     | <      | Ų     | 0.005  | 1          | <   | U       | 0.005  | 1     | <            | Ų    | 0.005  | 1     | <        | U        |
| VOLATILES        | 1 1 2-Trichloroethane     | 0.005  | t     | <      | Ū     | 0.005  | i          | <   | υ       | 0,005  | 1     | <            | U    | 0.005  | 1     | <        | U        |
| VOLATILES        | 1 1 Dirbloroathana        | 0.005  | 1     | <      | ป     | 0.005  | 1          | <   | U       | 0.005  | 1     | <            | U    | 0.005  | 1     | <        | U        |
| VOLATILES        | 1.1-Dichiorathene         | 0.005  | 1     | <      | U     | 0.005  | 1          | <   | U       | 0.005  | 1     | <            | U    | 0.005  | 1     | <        | U        |
| VOLATILES        | 1.2-Dichloroethane        | 0.005  | 1     | <      | Ű     | 0.005  | 1          | <   | IJ      | 0.005  | 1     | <            | Ų    | 0.005  | 1     | <        | U        |
| VOLATILES        | 1.2.Dichloroethene        | 0.005  | 1     | <      | Ű     | 0.005  | 1          | <   | U       | 0.005  | 1     | <            | ប    | 0.005  | 1     | <        | U        |
| VOLATILES        | 1.2.Dichloreeropage       | 0.005  | 1     | <      | Ū     | 0.005  | 1          | <   | U       | 0.005  | 1     | <            | Ų    | 0.005  | 1     | <        | U_       |
| VOLATILES        | 2 Putanana                | 0.05   | 1     | <      | Ū     | 0.05   | ŧ          | <   | ប       | 0.05   | 1     | <            | Ų    | 0.05   | i     | <        | Ų        |
| VOLANCES         | 2 Chlorothyl yind other   | 0.01   | 1     | ,<br>K | ŭ     | 0.01   | 1          | <   | U       | 0.01   | 1     | <            | U    | 0.01   | 1     | <        | IJ       |
| VOLATILES        | 2 Herenero                | 0.05   | 1     | ć      | Ū.    | 0.05   | 1          | <   | IJ      | 0.05   | 1     | <            | Ų    | 0.05   | 1     | ۲        | Ų        |
| VOLATILES        |                           | 01     | 1     | è      | Ū     | 0.1    | 1          | <   | ឋ       | 0,1    | 1     | <            | U    | 0.1    | 1     | <        | Ų        |
| VOLANCES         | Regione                   | 0.005  | í     | ż      | Ũ     | 0.005  | 1          | <   | Ų       | 0.005  | 1     | <            | U    | 0.005  | 1     | <        | U        |
| VOLATILES        | Benzene                   | 0.005  | ÷     | Ż      | ũ     | 0.005  | 1          | <   | Ú       | 0.005  | 1     | <            | Ų    | 0.005  | 1     | <        | U        |
| VOLATILES        | Bronogicinoromeniane      | 0.005  | ì     | ÷      | ū     | 0.005  | 1          | <   | Ű       | 0.005  | 1     | <            | U    | 0.005  | 1     | <        | U        |
| VOLATILES        | Bromolonn                 | 0.000  | ÷     |        | Ĥ     | 0.01   | 1          | <   | Ü       | 0.01   | 1     | <            | U    | 0.01   | 1     | <        | U        |
| VOLATILES        | Bromomeinane              | 0.005  |       | 2      | Ĥ     | 0.005  | 1          | ć   | Ū       | 0.005  | 1     | <            | υ    | 0.005  | 1     | <        | U        |
| VOLATILES        | Carbon disumae            | 0.005  | ł     | )      | ŭ     | 0.005  |            | ž   | ũ       | 0.005  | 1     | <            | Ű    | 0.005  | 1     | <        | U        |
| VOLATILES        | Garbon tetrachioride      | 0.005  | ÷     | Ì      | ŭ     | 0.005  | 1          |     | B       | 0.005  | 1     | ۲            | Ū    | 0.005  | 1     | <        | U        |
| VOLATILES        | Chlorobenzene             | 0.005  |       | Č      | U I   | 0.000  | i          | è   | ŭ       | 0.01   | 1     | <            | Ū    | 0.01   | 1     | <        | υ        |
| VOLATILES        | Chloroethane              | 0.01   | 1     | 2      | ü     | 0.01   | ,<br>t     | 2   | 11      | 0.005  | i     | č            | ū    | 0.005  | 1     | ۲        | U.       |
| VOLATILES        | Chloroform                | 0,005  | -     | Ś      |       | 0,000  | 1          | Ĵ   | ŭ       | 0.01   | ł     | k            | Ū    | 0.01   | 1     | <        | U        |
| VOLATILES        | Chloromelhane             | 0.01   |       | ٢.     |       | 0.01   | 4          | 2   | , u     | 0.005  | i     | Ż            | Ū    | 0.005  | 1     | <        | υ        |
| VOLATILES        | cis-1.3-Dichloropropene   | 0.005  | 1     | <      |       | 0.005  | ,          | 2   | 11      | 0.005  | 1     | 2            | ŭ    | 0.005  | 1     | <        | Ú        |
| VOLATILES        | Dibromochloromethane      | 0.005  | 1     | <      |       | 0.005  | 4          | )   | ű       | 0.005  | ł     | ,            | ŭ    | 0.005  | 1     | <        | Ū        |
| VOLATILES        | Ethylbenzene              | 0.005  | 1     | <      |       | 0.000  |            |     |         | 0.000  | 1     | 2            | ň    | 0.05   | ÷     | <        | Ũ        |
| VOLATILES        | Methyl isobutyl kelone    | 0.05   |       | <      |       | 0.00   | -          | 2   | 11      | 0.005  | 4     | 2            | Li I | 0.005  | 1     | <        | Ŭ        |
| VOLATILES        | Methylene chloride        | 0.005  | 1     | <      | 0     | 0.005  |            | 5   |         | 0.005  |       | 5            | ŭ    | 0.005  | 1     | 2        | υ.<br>U  |
| VOLATILES        | Styrene                   | 0.005  |       | <      | 0     | 0.005  |            | ٢   | 11      | 0.005  | - 1   | 2            |      | 0.005  | 1     | Ż        | , i      |
| VOLATILES        | Tetrachloroethene         | 0.005  | - 1   | <      | U<br> | 0.005  |            | <   | 0       | 0.005  |       | 2            |      | 0.000  | 1     | 2        | ů        |
| VOLATILES        | Toluene                   | 0.005  | 1     | <      | U     | 0.005  |            | <   |         | 0.000  | 4     | 2            |      | 0.000  | 1     |          | ň        |
| VOLATILES        | trans-1,3-Dichloropropene | 0.005  | 1     | <      | Ų     | 0.005  | 1          | <   | 0       | 0.005  |       |              |      | 0.005  | 1     | 2        | ň        |
| VOLATILES        | Trichloroethane           | 0.005  | i 1   | <      | U     | 0.005  |            | <   | U<br>., | 0.005  | 1     | ×            |      | 0.000  | ÷     | Ĵ        | 11       |
| VOLATILES        | Vinyl acetate             | 0.05   | 5 1   | <      | Ų     | 0.05   | 1          | <   |         | 0.05   | 1     | <            |      | 0.05   |       | 2        | П        |
| VOLATILES        | Vinyl chloride            | 0.01   | 1     | <      | υ     | 0.01   | 1          | <   | U       | 0.01   | 1     | <            | 0    | 0.01   | 4     | Ś        | ň        |
| VOLATILES        | Xylenes, Totai            | 0.005  | 5 1   | <      | U     | 300,0  | <u>i i</u> | <   | U       | 0.005  | 1     | <u>`````</u> | 0    | 0.005  |       | <u> </u> | <u> </u> |

 Table 3-62

 Concentrations of Chemicals in Soil Samples Associated with Sump 062

Footnotes are shown on cover page to Tables Section,

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc. 00066127

|                  |                            | Concentrations of C   |                  | n ounspied i tee |                  |   |                     |                  |
|------------------|----------------------------|-----------------------|------------------|------------------|------------------|---|---------------------|------------------|
| [SUMP] = SUMP063 |                            |                       |                  |                  | 10.0002.01       | 14-5063-01  | LH-S063-01          | LHS-3-21         |
| LOCATION _CODE   |                            | 47SB16                | 4/5816           |                  | LH-3003-01 1     | LH-S063-01-2  | LH-S063-01_3        | LHS-3-21         |
| SAMPLE_NO        |                            | 47SB16(0-0_5)         | 4/5010(1+2)      | 9/6/1003         | 8/5/1003         | 8/5/1993  | 8/5/1993            | 1/10/1995        |
| SAMPLE_DATE      |                            | 6/2/2000              | 0/2/2000         | 1.15.59          | 1-15 Ft          | 2 - 2.5 Ft  | 2.5 - 3 Ft          | 0 - 0.5 Ft       |
| DEPTH            |                            | 0+0.5 FI              | DEC.             | REG              | REG              | REG   | REG                 | REG              |
| SAMPLE_PURPOSE   |                            | REG<br>Deput DI LO VO | Registration VO  | Result DI 10 VO  | Result Dil. LO V | 0 Result DIL LQ VQ  | Result DIL LO VO    | Result DIL LQ VQ |
| Test Group       | Parameter (Units = mg/xg)  | Hestat DIE EQ VO      | Hesuit DIL LO VO | 07 1 1           |                  | 0.7 1 < U   | 0.7 1 < U           | 0.22 1 < U       |
| EXPLOSIVES       | 1,3,5-1 rinitropenzene     |                       |                  |                  | 05 1 < 1         | J 0.5 1 < U   | 0.5 1 < U           | 0.22 1 < U       |
| EXPLOSIVES       | 1.3-Dinitrobenzene         |                       |                  |                  | 0.5 1 c l        | 1 0.5 1 < U   | 0.5 1 < U           | 0.22 1 < U       |
| EXPLOSIVES       | 2.4.6- Frinitrototuene     |                       |                  | 0.5 1 < 0        | 0.5 1 < 1        | ) 0.5 1 < U   | 0.5 1 < U           | 0.22 1 < U       |
| EXPLOSIVES       | 2,4-Dinitrololuene         |                       |                  |                  | 05 1 < 1         | 1 0.5 1 < U   | 0.5 1 < U           | 0.24 1 < U       |
| EXPLOSIVES       | 2,6-Dinitratoluene         |                       |                  | 0.0 1 2 0        | 0.0 1 4 4        |   |                     | 0.45 1 < U       |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene |                       |                  | 00.5 - 11        | 00 1 - 1         | 1 09 1 < U  | 0.9 1 < U           | '2 1 < U         |
| EXPLOSIVES       | HMX                        |                       |                  |                  | 09 1 4           | i 091 < U   | 0.9 1 < U           | 0.91 1 < U       |
| EXPLOSIVES       | m-Nitrotoluene             |                       |                  | 0,91 < 0         | 0.5 1 <          |   | 0.6 1 < U           |                  |
| EXPLOSIVES       | NIOBIUM                    |                       |                  | 0.0 ; < 0        | 0.0 1 1          |   |                     | 0.24 1 < U       |
| EXPLOSIVES       | Nitrobenzene               |                       |                  | 00 t . II        | 00 1 -           | 1 00 1 - 11   | 09 1 < U            | 0.91 1 < U       |
| EXPLOSIVES       | o-Nitrotoluene             |                       |                  | 0.9 1 < 0        | 0.9 1 4          |   | 11 1 2 1            | 2.7 1 < U        |
| EXPLOSIVES       | p-Nitrotoluene             |                       |                  | 1.1 1 2 0        | 1.1 1 <          |   | 05 1 < 1            | 0.98 1 < U       |
| EXPLOSIVES       | RDX                        |                       |                  | 0.5 1 < 0        | 0.5 1 4          |   | 10 1 2 1            | 0.67 1 < U       |
| EXPLOSIVES       | Tetryl                     |                       |                  | 1,9 1 < U        | 1.9   <          |   | 40400 1             | 13100 1          |
| METALS           | Aluminum                   |                       |                  | 6330 1           | 17700 1          |   | 40400 I<br>3 1 ~ II | 18 1 2 10        |
| METALS           | Antimony                   |                       |                  | 31 < 0           | 31 <             | U 31 < U  | 39 1                | 59 1 .           |
| METALS           | Arsenic                    | 1                     |                  | 2.8 1            | 3.2 1            | 7.1 1   | 176 1               | 176 1            |
| METALS           | Barium                     |                       |                  | 142 1            | 15/ 1            | 87 1  | 1/0 1               | 10 1 - 11        |
| METALS           | Cadmium                    |                       |                  | 11 < 0           | 1 ) <            |   |                     | E140 1           |
| METALS           | Calcium                    |                       |                  | 895 1            | 2560 1           | 520 1   | 1 056               |                  |
| METALS           | Chromium                   |                       |                  | 11 1             | 17 1             | 23 1  | 27 1                | 20.0 1 0         |
| METALS           | Cobalt                     |                       |                  | 10 1             | 15 1             | 7   | 10 1                | 1 6.0            |
| METALS           | Copper                     |                       |                  | 3 1              | 4 1              | 2 1   |                     | 17 6             |
| METALS           | Cyanide, Total             |                       |                  | 0.5 1 < U        | 0.5 1 <          | 0 0.5 1 < 0   | 0.5 1 < 0           | 10700 1          |
| METALS           | iron                       |                       |                  | 7820 1           | 16900 1          | 23900 1   | 22200 1             | 10/00 1          |
| METALS           | Lead                       |                       |                  | 8.1 1            | B 1              | 9.9 1   | 12.4 1              | 40               |
| METALS           | Magnesium                  |                       |                  | 313 1            | 1630 1           | 910 1   | 2150 1              | 962 1            |
| METALS           | Manganese                  |                       |                  | 990 1            | 495 1            | 213 1   | 138 1               | 1/3 1            |
| METALS           | Mercury                    |                       |                  | 0.1, 1 < U       | 0,1 1 <          | U 0,11 < U  | 0,1 1 < 0           | 0.17 1 < 0       |
| METALS           | Potassium                  |                       |                  | 274 1            | 797 1            | 548 1   | 1500 1              | 533 1            |
| METALS           | Selenium                   |                       |                  | 11 < U           | 11 <             | U 11 < U  | 11 < 0              | 0,69 1 J         |
| METALS           | Silver                     |                       |                  | 11 < U           | 11 <             | U 11 <u< td=""><td>11 &lt; 0</td><td>1.8 1 &lt; U</td></u<> | 11 < 0              | 1.8 1 < U        |
| METALS           | Strontium                  |                       |                  | 8 1              | 24 1             | 11 1  | 19 1                | 25.3 1           |
| METALS           | Thallium                   |                       |                  |                  |                  |   |                     | 90.2 1 < U       |
| METALS           | Zine                       |                       |                  | 91               | 37 1             | 22 1  | 47 1                | 208 1            |
| PERC             | Perchlorate                | 0.00576 1 < U         | 0.00602 1 < U    |                  |                  |   |                     |                  |
| SEMBLOF ATH ES   | 1 2 4-Trichlorobenzene     |                       |                  | 0.33 1 < U       | 0.33 1 <         | U 0.33 1 < U  | 0.33 1 < U          | 0.62 1 < U       |
| SEMIVOLATILES    | 1 2-Dichlorobenzene        |                       |                  | 0.33 1 < U       | 0.33 1 <         | U 0.33 1 < U  | 0.33 1 < U          | 0.62 1 < U       |
| SEMIVOLATILES    | 1 3-Dichlorobenzene        | 1                     |                  | 0.33 1 < U       | 0,33 1 <         | ປ 0.33 1 < U  | 0.33 1 < U          | 0.62 1 < U       |
| CEMINOLATILES    | 1 4-Dichlorobenzene        |                       |                  | 0.33 1 < U       | 0.33 1 <         | U 0.33 1 < U  | 0.33 1 < U          | 0.62 1 < U       |
| SEMWOLATILES     | 2 4 5-Trichlorophenol      |                       |                  | 1.65 1 < U       | 1.65 1 <         | U 1.65 1 < U  | 1.65 1 < U          | 3,1 î < U        |
|                  | 2.4. A. Trichlorophenol    |                       |                  | 0.33 1 < U       | 0.33 1 <         | U 0.33 1 < U  | 0.33 1 < U          | 0.62 1 < U       |
| CONVOLATILES     | 2.4.Dichlorophanol         |                       |                  | 0.33 1 < 0       | 0.33 1 <         | U 0.33 1 < U  | 0.33 1 < U          | 0.62 1 < U       |
| SEMIVULATILES    | 2 4-Dimothylphonel         |                       |                  | 0.33 1 < U       | 0.33 1 <         | U 0.33 1 < U  | 0.33 1 < U          | 0.62 1 < U       |
| SEMIVOLATILES    | 2.4-Ciniteshanol           |                       |                  | 1.65 1 < U       | 1.65 1 <         | ป 1.65 1 < ป  | 1.65 1 < U          | 3.1 1 < U        |
| SEMIVOLATILES    | 2.4-Cinitratellisere       |                       |                  | 0.33 1 < 0       | 0.33 1 <         | U 0.33 1 < U  | 0.33 1 < U          | 0.62 1 < U       |
| SEMIVOLATILES    | 2,4-Dinitrololuene         |                       |                  |                  | 0.33 1 <         | U 0.33 1 < U  | 0.33 1 < U          | 0.62 1 < U       |
| SEMIVOLATILES    |                            |                       |                  | 0.33 1 ∠ II      | 0.33 1 <         | U 0.33 1 < U  | 0.33 1 < U          | 0.62 1 < U       |
| SEMIVOLATILES    | 2-Unioronaphinaiene        |                       |                  |                  | V(V) · · ·       |   |                     |                  |



|                                |                                     | Concentrations of | Cilemanda an Or  |                  |                  |   |                          | (UC a at         |
|--------------------------------|-------------------------------------|-------------------|------------------|------------------|------------------|---|--------------------------|------------------|
| LOCATION _CODE                 |                                     | 47SB16            | 475816           | LH-DL063-01      | LH-S063-01       | LH-S063-01                              | LH-S063-01               | LIG D DT         |
| SAMPLE_NO                      |                                     | 47\$B16(0-0_5)    | 47\$816(1-2)     | LH-DL063-01      | LH-S063-01_1     | LH-S063-01_2                            | LH-S063-01_3             | 1/10/1005        |
| SAMPLE_DATE                    |                                     | 6/2/2000          | 6/2/2000         | 8/5/1993         | 8/5/1993         | 8/5/1993                                | 8/5/1993                 | 1710/1995        |
| DEPTH                          |                                     | 0 - 0.5 Ft        | 1 - 2 FI         | 1 - 1.5 Ft       | 1 - 1.5 Ft       | 2 - 2.5 Ft                              | 2.5 - 3 - 1              | 0-0.5 Fi         |
| SAMPLE_PURPOSE                 |                                     | REG               | REG              | REG              | REG              | REG                                     | HEG NO.                  |                  |
| Test Group                     | Parameter (Units = mg/kg)           | Result DIL LQ VO  | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ                        | Result DIL LQ VQ         | Hesuit Die Cu VU |
| SEMIVOLATILES                  | 2-Chlorophenol                      |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < 0               | 0.62 1 < 0       |
| SEMIVOLATILES                  | 2-Methylnaphthalene                 |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0                              | 0.33 1 < 0               | 0.62 1 < 0       |
| SEMIVOLATILES                  | 2-Methylphenol                      |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0                              | 0.33 1 < 0               | 0.62 1 < 0       |
| SEMIVOLATILES                  | 2-Nitroaniline                      |                   |                  | 1.65 t < U       | 1.65 1 < U       | 1.65 1 < 0                              | 1.65 1 < ∪               | 3.1 1 < 0        |
| SEMIVOLATILES                  | 2-Nitrophenol                       |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < 0               | 0.62 1 < 0       |
| SEMIVOLATILES                  | 3.3'-Dichlorobenzidine              |                   |                  | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U                              | 0.65 1 < 0               | 1.2 1 < U        |
| SEMIVOLATILES                  | 3-Nitroaniline                      | 1                 |                  | 1.65 1 < U       | 1.85 1 < U       | 1.65 1 < U                              | 1.65 1 < 0               | 3.1 1 < 0        |
| SEMIVOLATILES                  | 4.6-Dinitro-2-methylphenol          |                   |                  | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 ≺ U                              | 1.65 1 < 0               | 3.1 1 < U        |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether          |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < 0               | 0,62 1 < 0       |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol             |                   |                  | 0.65 t < U       | 0.65 1 < U       | 0.65 1 < U                              | 0.65 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | 4-Chloroaniline                     |                   |                  | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < Ü                              | 0.65 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | 4-Chlorophenyl phenyl ether         |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < U               | 0.62 1 < 0       |
| SEMIVOLATILES                  | 4-Melhylphenol                      |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < U               | 0,62 1 < U       |
| SEMIVOLATILES                  | 4-Nitroaniline                      |                   |                  | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U                              | 1.65 1 < U               | 3.1 1 < U        |
| SEMIVOLATILES                  | 4-Nitrophenol                       |                   |                  | 1.65 1 < Ü       | 1.65 1 < U       | 1.65 1 < U                              | 1.65 1 < U               | 3.1 1 < U        |
| SEMIVOLATILES                  | Acenaphibene                        |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < U <sup>.</sup>  | 0.62 1 < U       |
| SEMINOLATILES                  | Arenaphtiwiene                      |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | Anthracene                          |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 t < U               | 0.62 t < U       |
| SEMIVOLATILES                  | Benzo(a)enthracene                  |                   |                  | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < Ü                              | 0.33 1 < U               | 0.62 1 < U       |
| SEMINOLATILES                  | Benzo(a)ovrene                      | 1                 |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < U               | 0.62 1 < U       |
| CEMINOLATH CO                  | Benzo(h)fluozonthene                |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | Benzo(chi)nendene                   |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | Benzo(L)fluorapthone                |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES<br>SEMIVOLATILES | Benzola Asid                        |                   |                  | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U                              | 1.65 1 < U               | 3.1 1 < U        |
| SEMIVOLATILES                  | Benzolic Acid                       |                   |                  | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U                              | 0.65 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | bis/3. Chloroothaw/mathana          |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 빈                              | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | bis(2. Chiorosthuliother            |                   |                  | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | bis(2-Chloroberry)ether             |                   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 t < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | bis(2-Choroisopropy)enter           |                   |                  | 0.33 1 < 1       | 1.12 1           | 0,33 1 < U                              | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | Dis(2-Entymexy)phinalate            |                   |                  | 033 1 - 11       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | Butyi benzyi prinalate              |                   |                  | 0.33 1 4 1       | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | Chrysene<br>Dibarra (a b)anthroacha |                   |                  | 0.33 1 < 11      | 0.33 1 < U       | 0.33 1 < U                              | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | Dibenzo(a,n)anthracene              |                   |                  | 033 1 4 1        | 0.33 1 c U       | 0.33 1 < U                              | 0.33 1 < U               | 0.62 i < U       |
| SEMIVOLATILES                  | Dipenzoruran                        |                   |                  | 0.33 1 < 11      | 033 1 < 0        | 0.33 1 < U                              | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | Dietnyi phinalate                   | 1                 |                  |                  | 0.33 1 4 1       | 0.33 1 < U                              | 0.33 1 < U               | 0.82 1 < U       |
| SEMIVOLATILES                  | Dimethyl phthalate                  |                   |                  | 0.33 1 4 0       | 0.33 1 2 1       | 0.33 1 < U                              | 0.6 1                    | 0.62 1 < U       |
| SEMIVOLATILES                  | di-n-Butyi phthalate                |                   |                  | 0.93 1 4 11      | 0.33 1 4         | 0.33 1 < U                              | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | di-n-Octyl phthalate                |                   |                  |                  | 0.00 1 < 0       |   | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | Fluoranthene                        |                   |                  |                  |                  | 0.33 1 < U                              | 0.33 1 < .U              | 0.62 1 < U       |
| SEMIVOLATILES                  | Fluorene                            |                   |                  |                  |                  |   | 0.33 1 2 1               | 0.62 1 < U       |
| SEMIVOLATILES                  | Hexachlorobenzene                   |                   |                  | 0.33 1 < 0       |                  |   | 0.33 1 < U               | 0.62 1 < U       |
| SEMIVOLATILES                  | Hexachiorobutadiene                 |                   |                  | 0.33   < 0       | 0,00 i < U       | 1 0,33 1 2 11                           | 0.33 1 ∠ U               | 0.62 1 < U       |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene           |                   |                  | 0.33 1 < 0       |                  |   | 0.00 1 4 0               | 0.62 1 2 1       |
| SEMIVOLATILES                  | Hexachloroethane                    | 1                 |                  | 0.33 1 < 0       | 0.03 1 < 0       | / U.SO ( C U<br>  033 1 - 1)            | 0.33 1 - 11              | 0.62 t < U       |
| SEMIVOLATILES                  | Indeno(1,2,3-cd)pyrene              |                   |                  | 0.33 1 < U       | y 33 1 < (       | / U⊎a I < U<br>I nan < - U              | 0.33 1 - 11              |                  |
| SEMIVOLATILES                  | Isopharone                          |                   |                  | 0.33 1 < 0       | 0.33 1 < U       | / 0.00 I < U<br>\ ∆52 1 - U             | 0.00 1 < 0               | 1 0.62 1 c U     |
| SEMIVOLATILES                  | Naphthalene                         |                   |                  | 0.33 1 < 0       | 0.33 1 < 1       | , v,aa i ≂ U<br>i oaa i - <sup>it</sup> | 0.00 I C U               |                  |
| SEMIVOLATILES                  | Nitrobenzene                        |                   |                  | 0.33 1 < U       | 0.33 1 < 1       |   | 0,00 i ≤ U<br>025 t - 11 |                  |
| SEMIVOLATILES                  | n-Nilroso-di-n-propylamine          |                   |                  | 0.33 1 < U       | 0,33 1 < 0       | ) 0.33 1 < U                            | 0,00 i < U<br>005 i - U  |                  |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine              |                   |                  | 0.33 1 < U       | 0,33 1 < 1       | ) 0,33 1 < 0                            | 0,33 i < 0               | 0.02 ( < U       |

Data Evaluation Report Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



|                |                             | Concentrations of ( | Chemicals in So  | oil San | npl   | es.  | Ass | ociated      | wit   | h S | um      | p 063  |        |      |                 |        |        |     |        |        |        |               |          |
|----------------|-----------------------------|---------------------|------------------|---------|-------|------|-----|--------------|-------|-----|---------|--------|--------|------|-----------------|--------|--------|-----|--------|--------|--------|---------------|----------|
| LOCATION CODE  |                             | 47SB16              | 47SB18           | LH-C    | 0108  | 3-01 |     | LH-SC        | 63-0  | 1   |         | LH-    | \$063- | 01   |                 | LH-S   | 063-0  | 1   |        | LH     | S-3-21 |               |          |
| SAMPLE NO      |                             | 47SB16(0-0_5)       | 47SB16(1-2)      | ԼН-(    | JL06  | 3-01 |     | LH-S06       | 3-01  | _1  |         | LH-S   | 063-0  | )1_2 |                 | LH-SO  | 63-01  | _3  |        | ĻH     | S-3-21 |               |          |
| SAMPLE DATE    |                             | 6/2/2000            | 6/2/2000         | 8/      | 5/199 | 93   |     | B/5/1        | 1993  |     |         | 8/     | 5/199  | 3    |                 | 8/5    | /1993  |     |        | 1/1    | 0/1995 | 1             |          |
| DEPTH          |                             | 0 - 0.5 Ft          | 1 • 2 Ft         | 1       | • 1.5 | Ft   |     | 1+1          | .5 Ft |     |         | 2      | 2.5 F  | Ŧt   |                 | 2.5    | - 3 Ft |     |        | 0-     | 0.5 Ft |               |          |
| SAMPLE_PURPOSE |                             | REG                 | REG              |         | REG   |      |     | RE           | G     |     |         |        | REG    |      |                 | R      | IEG    |     |        | F      | REG    |               |          |
| Test Group     | Parameter (Units = mg/kg)   | Result DIL LO VQ    | Result DIL LQ VQ | Result  | DIL   | ιa   | VQ  | Result       | DIL   | LQ  | VQ      | Result | DIL    | LQ   | VQ              | Result | DIL    | ιQ  | VQ     | Result | DILL   | <u>.a va</u>  | <u>0</u> |
| SEMIVOLATILES  | Pentachlorophenol           |                     |                  | 1.65    | 1     | <    | U   | 1.65         | 1     | <   | U       | 1.65   | 1      | <    | Ų               | 1.65   | 1      | <   | 0      | 3.1    | 1      | < U           | ì        |
| SEMIVOLATILES  | Phenanthrene                |                     |                  | 0.33    | 1     | <    | Ų   | 0.33         | 1     | <   | U       | 0.33   | 1      | <    | U               | 0.33   | 1      | <   | 0      | 0.62   | 1      | < u           | ,        |
| SEMIVOLATILES  | Phenol                      |                     |                  | 0.33    | 1     | <    | U   | 0.33         | 1     | <   | U       | 0.33   | 1      | <    | U               | 0.33   | 1      | <   | 0      | 0.62   | 1      | < 0           | J        |
| SEMIVOLATILES  | Pyrene                      |                     |                  | 0.33    | 1     | ۲    | U   | 0,33         | 1     | <   | U       | 0.33   | 1      | <    | U               | 0.33   | 1      | <   | U      | 0.62   | 1      | < U           | J        |
| VOLATILES      | 1,1,1,2-Tetrachloroethane   |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 | 0.005  |        |     |        | 0.019  | •      | < 1           |          |
| VOLATILES      | 1.1.1-Trichloroethane       |                     |                  | 0.005   | 1     | <    | บ   | 0.005        | 1     | <   | U       | 0.005  | 1      | ۲    | 0               | 0.005  | 1      | <   | U<br>U | 0.009  | •      | < 1           | ر<br>۱   |
| VOLATILES      | 1.1.2.2-Tetrachloroethane   |                     |                  | 0.005   | 1     | <    | 0   | 0.005        | 1     | <   | U       | 0.005  | 1      | <    | 0               | 0.005  | 1      | <   |        | 0.009  | 1      | < 0           | ر<br>د   |
| VOLATILES      | 1,1,2-Trichloroethane       |                     |                  | 0.005   | 1     | <    |     | 0,005        | 1     | <   | 0       | 0.005  | 1      | š.   | 0               | 0.005  |        | ·   |        | 0,009  | ,      | <             | 1        |
| VOLATILES      | 1,1-Dichloroethane          |                     |                  | 0.005   | 1     | <    | 0   | 0.005        | 1     | ~   | U       | 0.005  | 1      | <    | u<br>           | 0,005  | -      | ۲   |        | 0.009  |        |               | a.       |
| VOLATILES      | 1,1-Dichloroethene          |                     |                  | 0.005   | 1     | <    | U   | 0.005        | 1     | <   | U       | 0.005  | 1      | <    | U               | 0.005  |        | <   | Ŷ      | 0.009  |        | ~ `           | a        |
| VOLATILES      | 1,2,3-Trichloropropane      |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 |        |        |     |        | 0,019  | 4      | < L<br>2 I    | у<br>П   |
| VOLATILES      | 1,2-Dibromo-3-chloropropane |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 |        |        |     |        | 0.000  | ÷      | 2 1           | á.       |
| VOLATILES      | 1,2-Dibromoethane           |                     |                  |         |       |      |     | 0.000        |       |     |         | 0.005  |        |      |                 | 0.005  | ÷      |     | 11     | 0.000  | 4      | - 1           | á.       |
| VOLATILES      | 1.2-Dichloroethane          |                     |                  | 0.005   | 1     | <    | 0   | 0.005        | 1     | ٢.  | 0       | 0.005  | 4      |      |                 | 0.005  | ÷      | )   | ň      | 0.003  | ,<br>; | ~ .           | ,        |
| VOLATILES      | 1.2-Dichloroethene          |                     |                  | 0.005   | 1     | <    | 0   | 0.005        |       | < . | 0       | 0.005  |        | ŝ    |                 | 0.005  | ÷      | 2   | ů.     | 0.1    | ì      |               | a.       |
| VOLATILES      | 1.2-Dichloropropane         | 1                   |                  | 0,005   |       | <    | 0   | 0,005        |       | < . |         | 0.005  | 4      | 5    | ů.              | 0.000  | ÷      | 2   |        | 0.003  | 1      |               | á.       |
| VOLATILES      | 2-Butanone                  |                     |                  | 0.05    | 1     | <    |     | 0.05         | ÷     | <   | U<br>17 | 0.05   | -      | Ś    | 0               | 0.00   | ÷      | 2   |        | 0.013  | 4      | 2 1           | á.       |
| VOLATILES      | 2-Ghloroethyl vinyl ether   |                     |                  | 0.01    | 1     | <    |     | 0.01         | 4     | <   | 0       | 0.01   | 4      | ÷.   | 0               | 0.07   | 4      | 2   | й      | 0,013  | 4      |               | ú.       |
| VOLATILES      | 2-Hexanone                  | l                   |                  | 0.05    | 1     | <    | 0   | 0.05         | ,     | <   | 0       | 0.05   |        | `    | u               | 0.05   |        | `   | ·      | 0.015  | 1      | $\frac{1}{2}$ | Ū.       |
| VOLATILES      | 2-Propenal                  |                     |                  |         |       |      |     | A 1          |       |     |         | 0.1    |        | ,    | 60 <sup>1</sup> | 0.1    | ſ      |     | 11     | 0.019  |        | 2             | л.       |
| VOLATILES      | Acetone                     |                     |                  | 0.1     | ł     | <    | U   | <b>Q</b> , 1 |       | ٠.  | v       | 0.1    | ,      | •    | U               | 0.1    |        | `   | ů.     | 0.019  | 1      | < 1           | LF .     |
| VOLATILES      | Acetonitrie                 |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 |        |        |     |        | 0.19   | 1      | - 1           | ű.       |
| VOLATILES      | Acrylonimie                 |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 |        |        |     |        | 0.019  | 1      | 2 1           | Ű.       |
| VOLATILES      | Aliyi chioriga              |                     |                  | 0.005   | 4     |      | н   | 0.005        | 1     |     | н       | 0.005  | 1      |      | 11              | 0.005  | 1      | ٢   | н      | 0.009  | i      | < 1           | Ū.       |
| VOLATILES      | Benzene                     |                     |                  | 0.005   | ÷     | Ĵ    | U U | 0.005        | 1     | 2   | ň       | 0.005  | ł      | Ż    | ŭ               | 0.005  | 1      | - k | ū      | 0.009  | 1      | < 1           | Ū        |
| VOLATILES      | Bromolorm                   |                     |                  | 0.000   | i     | Ì    | ŭ   | 0.000        | 1     | ~   | ŭ       | 0.005  | 1      | è    | Ŭ               | 0.005  | 1      | <   | ΰ      | 0.009  | 1      | < 1           | υ        |
| VOLATILES      | Bromomothane                |                     |                  | 0.000   |       | 2    | Ť.  | 0.000        | 1     | è   | ŭ       | 0.01   | 1      | <    | Ŭ               | 0.01   | 1      | <   | Ŭ      | 0.019  | 1      | ۲ ا           | υ        |
| VOLATILES      | Carbon disulfide            | 1                   |                  | 0.005   | i     | Ż    | ŭ   | 0.005        | 1     | Ż   | ม       | 0.005  | 1      | <    | Ŭ               | 0.005  | 1      | <   | Ű      | 0.009  | 1      | < 1           | υ        |
| VOLATILES      | Carbon tetrachloride        | 1                   |                  | 0.005   | 1     | ž    | Ū   | 0.005        | 1     | è   | Ū       | 0.005  | 1      | ć    | Ū               | 0.005  | 1      | <   | U      | 0.009  | 1      | < 1           | U        |
| VOLATILES      | Chlorobenzene               |                     |                  | 0.005   | 1     | 2    | Ŭ   | 0.005        | 1     | <   | Ū       | 0.005  | 1      | e    | U               | 0.005  | 1      | <   | U      | 0.009  | 1      | < 1           | U        |
| VOLATILES      | Chloroethane                |                     |                  | 0.01    | 1     | <    | Ū   | 0.01         | 1     | <   | U       | 0.01   | t      | <    | U               | 0.01   | 1      | <   | U      | 0.019  | 1      | < 1           | U        |
| VOLATILES      | Chloroform                  |                     |                  | 0.005   | 1     | <    | Ū   | 0.005        | 1     | <   | Ú       | 0.005  | 1      | <    | U               | 0.005  | í      | <   | υ      | 0.009  | 1      | < 1           | U        |
| VOLATILES      | Chloromethane               |                     |                  | 0.01    | 1     | <    | U   | 0.01         | 1     | <   | U       | 0.01   | 1      | <    | Ų               | 0,01   | 1      | <   | U      | 0.019  | 1      | د ا           | U        |
| VOI ATILES     | Chloroprene                 |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 |        |        |     |        | 0.19   | 1      | <             | U        |
| VOLATILES      | cis-1.3-Dichloropropene     |                     |                  | 0.005   | 1     | <    | U   | 0.005        | 1     | <   | υ       | 0.005  | 1      | ć    | U               | 0.005  | 1      | <   | U      | 0.009  | 1      | < 1           | U        |
| VOLATILES      | Dibromochioromethane        |                     |                  | 0,005   | 1     | ~    | U   | 0.005        | 1     | <   | U       | 0.005  | 1      | <    | U               | 0.005  | 1      | <   | U      | 0.009  | 1      | < 1           | U        |
| VOLATILES      | Dibromomethane              |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 |        |        |     |        | 0.038  | 1      | < '           | U        |
| VOLATILES      | Dichlorodifluoromethane     |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 |        |        |     |        | 0.038  | 1      | < 1           | Ų        |
| VOLATILES      | Ethyl methacrylate          |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 |        |        |     |        | 0.038  | 1      | < '           | U        |
| VOLATILES      | Ethylbenzene                |                     |                  | 0,005   | 1     | <    | บ   | 0.005        | 1     | <   | Ų       | 0.005  | 1      | <    | U               | 0.005  | 1      | <   | U      | 0.009  | 1      | < 1           | U        |
| VOLATILES      | IODOMETHANE                 |                     |                  |         |       |      |     |              |       |     |         |        | •      |      |                 |        |        |     |        | 0.019  | 1      | < 1           | Ų        |
| VOLATILES      | ISOBUTYL ALCOHOL            |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 |        |        |     |        | 3.8    | 1      | < '           | Ų        |
| VOLATILES      | Methacrylonitrile           |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 |        |        |     |        | 0.035  | 1      | < '           | Ų        |
| VOLATILES      | Methyl isobutyl ketone      |                     |                  | 0.05    | 1     | ۲    | U   | 0.05         | 1     | <   | U       | 0.05   | 1      | <    | ម               | 0.05   | ់      | <   | Ų      | 0.019  | 1      | < `           | Ų        |
| VOLATILES      | METHYL METHACRYLATE         |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 |        |        |     |        | 0.038  | 1      | < `           | U        |
| VOLATILES      | Methylene chloride          |                     |                  | 0.005   | 1     | <    | Ų   | 0.005        | 1     | ۲   | U       | 0.005  | 1      | <    | U               | 0.005  | 1      | <   | Ų      | 0.009  | 1      | <             | U        |
| VOLATILES      | Pentachloroethane           |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 |        |        |     |        | 0.038  | 1      | <             | Ų        |
| VOLATILES      | Propionitrile               |                     |                  |         |       |      |     |              |       |     |         |        |        |      |                 |        |        |     |        | 0.094  | 1      | <             | U        |

Table 3-63

Shaw Environmental, Inc. 00066130

### Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

|   |  | Concentrations of (                               | Chemicals in So                               | il Samples Asso   | ciated with Sun   | np 063   |  |   |
|---|--|---|---|---|---|--|--|---|
| LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH                                     |  | 475B18<br>475B16(0-0_5)<br>6/2/2000<br>0 - 0.5 Ft | 47SB16<br>47SB16(1-2)<br>6/2/2000<br>1 - 2 Ft | LH-DL063-01<br>LH-DL063-01<br>8/5/1993<br>1 - 1.5 Ft                    | LH-S063-01<br>LH-S063-01_1<br>8/5/1993<br>t - 1.5 Ft                                | LH-S063-01<br>LH-S063-01_2<br>8/5/1993<br>2 - 2.5 Ft                               | LH-S063-01<br>LH-S063-01_3<br>8/5/1993<br>2.5 - 3 Ft<br>DEco                       | LHS-3-21<br>LHS-3-21<br>1/10/1995<br>0 - 0.5 Ft<br>BEG  |
| SAMPLE_PURPOSE  | Parameter (Units - mo/km)  | HEG<br>Besult DII LO VO                           | Result DIL LO VO                              | Result DIL LQ VQ  | Result DIL LQ VO  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LO VO  |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES | Styrene<br>Tetrachicroethane<br>Toluene<br>trans-1,3-Dichloropropene<br>trans-1,4-Dichloro-2-butane<br>Trichloroethane |   |   | 0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U | 0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.0835 1 | 0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.256 1 | 0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.005 1 < U<br>0.235 1 | 0.009 1 < U<br>0.009 1 < U<br>0.009 1 < U<br>0.009 1 < U<br>0.038 1 < U<br>0.038 1 J<br>0.018 1 < U |
| VOLATILES<br>VOLATILES<br>VOLATILES   | Vinyl acetate<br>Vinyl chloride  |   |   | 0.05 1 < U<br>0.01 1 < U  | 0.05 1 < U<br>0.01 1 < U  | 0.05 1 < U<br>0.01 1 < U   | 0.05 1 < U<br>0.01 1 < U   | 0.019 i < U<br>0.019 1 < U  |
| VOLATILES   | Xylenes, Total   |   |   | 0.005 1 < U   | 0.005 1 < U   | 0.005 1 < U  | 0.005 1 < U  | 0.009 1 < 0   |

Table 3-63

Footnotes are shown on cover page to Tables Section.

Table 3-64 Concentrations of Chemicals in Soil Samples Associated with Sump 064

| ·    | SUMP] = SUMP064<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                                  | 35SUMP064-S801<br>35-SMP064-S801-01<br>9/20/2006<br>1 - 1 Ft | 35SUMP064-SB01<br>35-SMP064-SB01-02<br>9/20/2006<br>5 - 5 Ft | 47SB17<br>47SB17(0-0_5)<br>6/3/2000<br>0 - 0.5 Ft<br>PEC | 47SB17<br>47SB17(0-0_5)QC<br>6/32000<br>0 - 0.5 Ft | 47SB18<br>47SB18(0-0_5)<br>6/3/2000<br>0 - 0.5 Ft<br>BEC | 47SB33<br>47SB33(0-0_5)<br>6/3/2000<br>0 - 0.5 Ft<br>RFG | 47\$B33<br>47\$B33(1-2)<br>6/3/2000<br>1 - 2 Ft<br>BEG | LH-DL064-01<br>LH-DL064-01<br>8/5/1993<br>2 - 2.5 Ft<br>BEG | LH-DL065-01<br>LH-DL065-01 QC<br>8/5/1993<br>1.5 - 2 Ft<br>FD | LH-DL065-01<br>LH-DL065-01<br>8/5/1993<br>1.5 - 2 Ft<br>REG | LH-S064-01<br>LH-S064-01_1<br>8/5/1993<br>1.5 - 2 Ft<br>REG | LH-S064-01<br>LH-S064-01_2<br>8/5/1993<br>4 - 4.5 Ft<br>REG | LH-S064-01<br>LH-S064-01_3<br>8/5/1993<br>0.5 - 1 Ft<br>REG | LH-S064-02<br>LH-S064-02_1<br>8/5/1993<br>1 - 1.5 Ft<br>REG |
|------|---|----------------------------------|--|--|--|--|--|--|--|---|---|---|---|---|---|---|
|      | SAMPLE_PURPOSE  | Description & Lifester and the L | REG<br>Double Dill LO MO                                     |  | REG<br>Reput Dil 10 VO                                   | Result DI IO VO                                    | Result DII LO VO   | Result Dill LO VO  | Result DIL LO VO                                       | Result DIL LO VO  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DiL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  |
|      | Test Group  | Parameter (Units = mg/kg)        | Reson the LU VU  | Result DIL LU VQ   | NESUSE DIL LO VO   |  |  |  |  | 0.7 1 < U   | 0.7 1 < U   | 0.7 1 < U   | 0.7 1 < U   | 0.7 1 < U   | 0.7 1 < U   | 0.7 1 < U   |
|      | EXPLUSIVES  | 1,5,5-mailubenzene               |  |  |  |  |  |  |  | 0.5 1 < U   |   | 0.5 1 < U   | 0.5 1 < <b>ଧ</b>  | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   |
|      | EXPLOSIVES  | 2.4.6-Trinitrotoluene            |  |  |  |  |  |  |  | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   |
|      | EXPLOSIVES  | 2.4-Dinitrotoluene               |  |  |  |  |  |  |  | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   |
|      | EXPLOSIVES  | 2,6-Dinitrotoluene               |  |  |  |  |  |  |  | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   |
|      | EXPLOSIVES  | 4-Amino-2,6-dinitrotoluene       |  |  |  |  |  |  |  |   |   |   |   |   |   |   |
|      | EXPLOSIVES  | HMX                              |  |  |  |  |  |  |  | 0.9 t < U   | 0.9 1 < U   | 0.9 1 < U   | 0.9 1 < U   | 0.9 1 < U   | 0.9 1 < 0   | 0.9 1 < 0   |
|      | EXPLOSIVES  | m-Nitrotoluene                   |  |  |  |  |  |  |  | 0.9 1 < U   | 0.9 1 < U   | 0.9 1 < U   | 0.9 1 < 0   |   |   | 0 2 1 6.0   |
|      | EXPLOSIVES  | NIOBIUM                          |  |  |  |  |  |  |  | 0.6 î < U   | 0.5 1 < 0   | 0.0 1 < U   | 0.0 1 < 0   | 0.0 1 4 0   | 0.0 1 . 0   | 0.0 1 4 0   |
|      | EXPLOSIVES  | Nitrobenzene                     |  |  |  |  |  |  |  | 11 > 1 00   | 00 1 4 11   | 00 1 c U  | A9 1 < ∐  | 09 1 < 1  | 09 1 < U  | 0.9 1 < U   |
|      | EXPLOSIVES  | o-Nitrotoluene                   |  |  |  |  |  |  |  | 11 1 < 11   | 11 1 < 1  | 11 1 < 1  | 11 1 < U  | 1.1 1 < U   | 1.1 1 < U   | 1.1 1 < U   |
|      | EXPLOSIVES  | p-Nitrotoluene                   |  |  |  |  |  |  |  | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   |
|      | EXPLOSIVES  | RDA                              |  |  |  |  |  |  |  | 1.9 1 < U   | 1.9 1 < U   | 1.9 1 < U   | 1.9 1 < U   | 1.9 1 < U   | 1.9 1 < U   | 1.9 1 < U   |
|      | EAPLUSIVES<br>METALS  | (EU);<br>Aleminum                |  |  |  |  |  |  |  | 10100 1   | 6340 1  | 7670 1  | 11600 1   | 14500 1   | 7950 1  | 14000 1   |
|      | METALS  | Antimony                         |  |  |  |  |  |  |  | 3 1 < U   | 3 1 < 1   | 3 1 < U   | 3 1 < ੯   | 3 1 < U   | 31 < U  | 31 < U  |
|      | METALS  | Arsenic                          |  |  |  |  |  |  |  | 3.2 1   | 4.8 1   | 4.2 1   | 2.1 1   | 2.8 1   | 5.3 1   | 3.9 1   |
|      | METALS  | Barium                           |  |  |  |  |  |  |  | 60.4 1  | 68 1  | 90 1  | 172 1   | 734 1   | 104 1   | 535 1   |
|      | METALS  | Cadmium                          |  |  |  |  |  |  |  | 11 < U  | 11 < ⊎  | 1 1 < U   | 1 1 < 0   | 11 < U  | 1 1 < U   | 1 1 < U<br>2120 1   |
|      | METALS  | Calcium                          |  |  |  |  |  |  |  | 925 1<br>11 2 1   | 2260 1  | 1500 1  | 1830 1  | 1010 1  | 4150 1  | 193 1   |
|      | METALS  | Chromium                         |  |  |  |  |  |  |  | 34 1  | 5 1   | 7 1   | 9.9 1   | 25.3 1  | 10 1  | 15.9 1  |
|      | METALS  | Cobat                            |  |  |  |  |  |  |  | 1.6 1   | 4 1   | 3 1   | 2.8 1   | 3.7 1   | 2 1   | 2.9 1   |
|      | METALS  | Cuppes<br>Cvanide Total          |  |  |  |  |  |  |  | 0.5 1 < Ú   | 0.5 1 < U   | 0.5 1 < U   | . 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   | 0.5 1 < U   |
|      | METALS  | bron                             |  |  |  |  |  |  |  | 12800 1   | 14400 1   | 15200 1   | 8770 1  | 12800 1   | 14000 1   | 20600 1   |
|      | METALS  | Lead                             |  |  |  |  |  |  |  | 4.2 1   | 6.2 1   | 12.3 1  | 6.8 1   | 9.3 1   | 11.5 1  | 7.1 1   |
|      | METALS  | Magnesium                        |  |  |  |  |  |  |  | 595 1   | 596 1   | 466 1   | 754 T   | 1590 1  | 526 1<br>777 1  | 1290 1  |
| 2    | METALS  | Manganese                        | ŀ  |  |  |  |  |  |  | 01.9 1  | 185 1   | 320 I   | ∩1 1 < ∐  | 01 1 < U  | 0.1 1 < U   | 0.1 t < Ŭ   |
|      | METALS  | Mercury                          |  |  | · .  |  |  |  |  | 385 1   | 390 1   | 335 1   | 492 1   | 508 1   | 346 1   | 653 1   |
| ·· . |   | Potassium<br>Selenium            |  |  |  |  |  |  |  | 11 < U  | 11 < 0  | 1 1 < U   | 11 < U  | 11 < U  | 11 < U  | 11 < U  |
|      | METALS  | Silver                           |  |  |  |  |  |  |  | 11 < U  | 11 < U  | 1 1 < U   | 11 < U  | 11 < U  | 11 < U  | t 1 < U   |
|      | METALS  | Strontium                        |  |  |  |  |  |  |  | 10 1 < U  | 14 1  | 10 1  | 14.7 1  | 37 1  | 13 1  | 42 1  |
|      | METALS  | Thallium                         |  |  |  |  |  |  |  | 45  | 45 4  |   | 40.0 4  | 27 1  | 14 1  | 29 1  |
|      | METALS  | Zinc                             |  |  | 0.0305 6   |  | 0.000000 1 2 11  | 0.000011 1 × 11  | 0.00401 1 < 11   | 12 1  | 15 1  | 11 1  | 16.0 1  | 21  | 14 1  | 20 1  |
|      | PERC  | Perchiorate                      | 0.0394 4 U   | 0.0998 10 0  | 0.0395 1 3   | 0.00526 I CJ                                       | 0.00552 1 5 0  |  | 0.00001 1 4 0  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
|      | SEMBVOLATILES<br>SEMBVOLATILES  | 1,2,4-Increoropenzene            | 0.895 5 0  | 0.193 1 0  |  |  |  |  |  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
|      | SEMIVOLATILES   | 1.3-Dichlorobenzene              | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
|      | SEMIVOLATILES   | 1,4-Dichlorobenzene              | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 t < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
|      | SEMIVOLATILES   | 2,4,5-Trichlorophenol            | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < 0  | 1.65 1 < U  |
|      | SEMIVOLATILES   | 2,4,6-Trichlorophenol            | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | 0.33 1 < 0  | 0.33 T < U  | 0.33 1 < 0  | 0.33 1 < 0  | 0.33 1 < 0  | 0.33 1 < 11   | 033 1 < 1   |
|      | SEMIVOLATILES   | 2,4-Dichlorophenol               | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | 0.33 1 < 11   | 0.33 1 < 1  | 0.33 1 < U  |
|      | SEMIVOLATILES<br>SEMIVOLATILES  | 2,4-DimetryIphenol               | 0.895 5 0  | 0.193 1 0  |  |  |  |  |  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  |
|      | SEMIVOLATILES   | 2,4-Dinitrotoluene               | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
|      | SEMIVOLATILES   | 2,6-Dinitrotoluene               | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 t < U  | 0.33 1 < U  | 0.33 1 < U  |
|      | SEMIVOLATILES   | 2-Chloronaphthalene              | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < 0  | 0.33 1 < U  |
|      | SEMIVOLATILES   | 2-Chlorophenol                   | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | 0.33 1 < 0  | 0.33 1 < 0  | 0.33 1 < 0  | 0.33 1 < 1  | 0.33 1 < 1  | 0.33 1 < 1  | 0.33 1 < U  |
|      | SEMIVOLATILES   | 2-Methylnaphthalene              | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | 0.33 1 < 0  | 0.33 1 < 11   | 0.33 1 < U  |
|      | SEMIVULATILES<br>SEMIVOLATILES  | 2-Memyiphenol<br>2-Mitrophiline  | 447 5 11   | 0.195 1 0  |  |  |  |  |  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  |
|      | SEMIVOLATILES   | 2-Nitrophenol                    | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
|      | SEMIVOLATILES   | 3,3'-Dichlorobenzidine           | 1.79 5 U   | 0.385 1 U  |  |  |  |  |  | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < U  |
|      | SEMIVOLATILES   | 3-Nitroaniline                   | 4.47 5 U   | 0.963 1 U  |  |  |  |  |  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.55 1 < U  |
|      | SEMIVOLATILES   | 4,6-Dinitro-2-methylphenol       | 4.47 5 U   | 0.963 1 U  |  |  |  |  |  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < 0  | 1.65 1 < 0  | 1.05 1 < 0  | 1.00 I < U  |
|      | SEMIVOLATILES   | 4-Bromophenyl phenyl ether       | 0.895 5 U  | 0.193 1 U  |  | -  |  |  | -  | 0.33 i < U<br>1)65 f < ii                                   | 0.55 1 < 0  | 0.00 1 1 0  | 0.65 1 < 1  | 0.65 1 < 1  | 0.65 1 < 1  | 0.65 1 < U  |
|      | SEMIVOLATILES<br>SEMINOLATILES  | 4-Chioro-3-methylphenol          | 0.895 5 U  | 0.1%3 I U<br>0.193 1 H                                       |  |  |  |  |  | 0.65 1 < 1  | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < U  |
|      | SEMIVOLATILES   | 4-Chioronhenvi shervi ether      | 0.895 5 H  | 0.193 1 1  |  |  |  |  |  | 0.33 t < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
|      | SEMIVOLATILES   | 4-Methylphenol                   | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | 0.33 t < U  | 0.33 1 < U  | 0.33 t < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
|      | SEMIVOLATILES   | 4-Nitroaniline                   | 4.47 5 U   | 0.963 1 U  |  |  |  |  |  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 t < U  | 1.65 1 < U  |
|      | SEMIVOLATILES   | 4-Nitrophenol                    | 4.47 5 U   | 0.963 1 U  |  |  |  |  |  | 1.65 1 < U  | 1.65 t < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 T < U  | 1.65 1 < U  |
|      | SEMIVOLATILES   | Acenaphthene                     | 0.895 5 U  | 0.193 t U  |  |  | · · · ·  |  |  | 0.33 1 < U  | U.33 1 < U  | 0.33 1 < U  | 0.33 i < U  | 0.33 1 < U  | 0.33 t < 11   | 0.33 1 < 11   |
| N    | SEMIVOLATILES   | Acenaphthylene                   | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | _u.u.u i < U<br>0.33 1 < ⊓                                  | 0.33 1 < 11   | 0.33 1 < 11   | 0.33 1 < 1  | 0.33 t < U  | 0.33 1 < U  | 0.33 1 < U  |
|      | SEMIVOLATILES<br>SEMIVOLATILES  | Anmracene<br>Benzo(a)anthracena  | 0.895 5 11   | 0.193 i U<br>0.193 1 il                                      |  |  |  |  |  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
|      | SEMIVOLATILES   | Benzo(a)pyrene                   | 0.895 5 U  | 0.193 1 U  |  |  |  |  |  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
|      |   |                                  | •  |  |  |  |  |  |  |   |   |   |   |   |   |   |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Karnack, Texas

.

Table 3-64

|                |                                       |                      |                   |                  | Con              | centrations of Che | emicals in Soil Sam | ples Associated v | vith Sump 064    |                   |                 |                    |                                |                  |   |
|----------------|---------------------------------------|----------------------|-------------------|------------------|------------------|--------------------|---------------------|-------------------|------------------|-------------------|-----------------|--------------------|--------------------------------|------------------|---|
| LOCATION CODE  |                                       | 35SUMP064-SB01       | 35SUMP064-SB01    | 47SB17           | 47SB17           | 47SB18             | 47SB33              | 47SB33            | LH-DL064-01      | LH-DL065-01       | 1.H-DL065-01    | LH-S064-01         | LH-\$054-01                    | LH-S064-01       | LH-S064-02                              |
| SAMPLE NO      |                                       | 35-SMP064-SB01-01    | 35-SMP064-SB01-02 | 47\$B17(0-0_5)   | 47SB17(0-0_5)QC  | 47SB18(0-0_5)      | 47SB33(0-0_5)       | 47SB33(1-2)       | LH-DL064-01      | LH-DL065-01 QC    | LH-DL065-01     | LH-S064-01_1       | LH-S064-01_2                   | LH-S064-01_3     | LH-S064-02_1                            |
| SAMPLE_DATE    |                                       | 9/20/2006            | 9/20/2006         | 6/3/2000         | 6/3/2000         | 6/3/2000           | 6/3/2000            | 6/3/2000          | 8/5/1993         | 8/5/1993          | 8/5/1993        | 8/5/1993           | 8/5/1993                       | 8/5/1993         | 8/5/1993                                |
| DEPTH          |                                       | 1 - 1 Ft             | 5-5Ft             | 0 - 0.5 Ft       | 0 - 0.5 Ft       | 0 - 0.5 Ft         | 0 - 0.5 Ft          | 1-2Ft             | 2-25Ft           | 1.5 - 2 Ft        | 1.5 - 2 Ft      | 1.5 - 2 Ft         | 4 - 4.5 Ft                     | 0.5 - 1 Ft       | 1 - 1.5 Ft                              |
| SAMPLE_PURPOSE |                                       | REG                  | REG               | REG              | FD               | REG                | REG                 | REG               | REG              | FD                | REG             | REG                | REG                            | REG              | REG                                     |
| Test Group     | Parameter (Units ≂ mg/kg)             | Result DIL LO VO     | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ   | Result Dil. LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VC | ) Result DIL LQ V | Q Result DIL LQ | VQ Result DIL LQ V | Q Result DIL LQ VO             | Result DIL LQ VQ | Result DIL LQ VQ                        |
| SEMIVOLATILES  | Benzo(b)fluoranthene                  | 0.895 5 U            | 0.193 t U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 1 <          | J 0.33 1 <      | U 0.33 t < 1       | ) 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U                              |
| SEMIVOLATILES  | Benzo{ghi}perylene                    | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 i <          | J 0.33 1 <      | U 0.33 1 < U       | ) 0.33 <del>1</del> < U        | 0.33 1 < U       | 0.33 1 < U                              |
| SEMIVOLATILES  | Benzo{k}fluoranthene                  | 0.895 5 U            | 0.193 t U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 1 <          | J 0.33 1 <      | U 0.33 1 < U       | ) 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U                              |
| SEMIVOLATILES  | Benzoic Acid                          | 4.47 5 U             | 0.963 1 U         |                  |                  |                    |                     |                   | 1.65 1 < U       | 1.65 1 <          | 1 1.65 1 <      | U 1.65 1 < U       | J 1.65 1 < U                   | 1.65 1 < U       | 1.65 1 < U                              |
| SEMIVOLATILES  | Benzyl Alcohol                        | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.65 1 < U       | 0.65 1 <          | ) 0.65 1 <      | 0 0.65 1 < 0       | ) 0.65 1 < U                   | 0.65 1 < U       | 0.65 1 < U                              |
| SEMIVOLATILES  | bis{2-Chieroethoxy)methane            | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 1 <          | J 0.33 1 <      | U 0.33 1 < 0       | ∫ 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < 0                              |
| SEMIVOLATILES  | bis(2-Chloroethyl)ether               | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < 0       | 0.33 1 <          | 0.33 1 <        | U 0.33 1 < U       | ) 0.33 1 < 0                   | 0.33 1 < 0       | 0.33 1 < 0                              |
| SEMIVOLATILES  | bis{2-Chloroisopropyi)ether           | 0.895 5 U            | 0.193 1 0         |                  |                  |                    |                     |                   | ₩.33 1 < U       | 0.33 1 <          | J U.33 1 <      | U U.33 1 < 0       | ) U.33 1 < U                   | 0.33 1 < 0       | 0.33 1 < 0                              |
| SEMIVOLATILES  | Dis(2-Ethylnexy)phthalate             | 0.895 5 U            | 0.193 1 0         |                  |                  |                    |                     |                   |                  | 0.30              | U.945 I         |                    | ) (0.397  <br>• 0.23 1 - 11    | 0.33   < 0       | 0.33 1 < 0                              |
| SEMIVOLATILES  | Choicano                              | 0.093 3 0            | 0.150 1 0         |                  |                  |                    |                     |                   | 0.33 1 4 1       | 0.33 1 <          | 1 0.33 1 <      |                    | 2 0.00 2 4 4 0<br>1 033 1 4 4  | 0.33 1 < 0       | 0.33 1 < 11                             |
| SEMINULATILES  | Cill yselle<br>Dibanza/a blanthracena | 0.093 3 0            | 0.193 1. 10       |                  |                  |                    |                     |                   | 0.33 1 4 0       | 0.33 1 <          |                 |                    | ) 0.33 1 < U<br>1 033 1 < U    | 0.33 1 < 11      | 0.00 1 4 0                              |
| SEMBIOLATILES  | Dibenzofikan                          | 0.095 5 11           | 0.193 1 0         |                  |                  |                    |                     |                   | 1 > 1 50.0       | 033 f <           | 1 0.33 1 <      | 10 0.33 f < 1      | / 0.33 i < 0<br>t 0.33 1 < 0   | 0.33 1 < 11      | 0.33 t < U                              |
| SEMINOLATILES  | Diethyl ohtholote                     | 0.005 5 0            | 0.103 1 0         |                  |                  |                    |                     |                   | 0.33 1 < 1       | 033 1 <           | 1 033 1 <       | U 0.33 t < 1       | ) 033 1 < U                    | 0.33 1 < 11      | 0.33 t < U                              |
| SEMIVOLATILES  | Dimethyl nisthalate                   | 0.895 5 11           | 0.193 1 11        |                  |                  |                    |                     |                   | 0.33 t < U       | 0.33 1 <          | 0.33 1 <        | U 0.33 1 < I       | ) 0.33 1 < U                   | 0.33 1 < 1       | 0.33 1 < U                              |
| SEMIVOLATILES  | di-a-Butvi phthalate                  | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.747 1           | 0.372 1         | 0.33 t < 0         | ) 0.33 1 < U                   | 0.964 1          | 0.33 1 < U                              |
| SEMIVOLATILES  | di-n-Octyl phthalate                  | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 1 <          | ) 0.33 1 <      | U 0.33 1 < U       | ) 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U                              |
| SEMIVOLATILES  | Fluoranthene                          | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 1 <          | J 0.33 1 <      | U 0.33 1 < U       | ) 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U                              |
| \$EMIVOLATILES | Fluorene                              | 0.895 5 U            | 0.193 t U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 1 <          | J 0.33 1 <      | U 0.33 1 < U       | ) 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U                              |
| SEMIVOLATILES  | Hexachkorobenzene                     | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 1 <          | J 0.33 1 <      | U 0.33 1 < U       | ) 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U                              |
| SEMIVOLATILES  | Hexachlorobutadiene                   | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 t < U       | 0.33 1 <          | J 0.33 1 <      | U 0.33 1 < L       | ) 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U                              |
| SEMIVOLATILES  | Hexachlorocyclopentadiene             | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 1 <          | J 0.33 1 <      | U 0.33 1 < t       | ) 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U                              |
| SEMIVOLATILES  | Hexachloroethane                      | 0.895 <del>5</del> U | 0.193 t U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 1 <          | J 0.33 1 <      | U 0.33 1 < U       | J 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U                              |
| SEMIVOLATILES  | Indena(1,2,3-cd)pyrene                | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 1 <          | J 0.33 1 <      | U 0.33 1 < U       | / 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U                              |
| SEMIVOLATILES  | Isophorone                            | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 1 <          | J 0.33 1 <      | U 0.33 1 < U       | J 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U                              |
| SEMIVOLATILES  | Naphthalene                           | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 1 <          | J 0.33 1 <      | U 0.33 1 < 0       | 1 0.33 1 < 0                   | 0.33 1 < U       | 0.33 1 < U                              |
| SEMIVOLATILES  | Nitrobenzene                          | 0.895 5 0            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < 0       | 0.33 1 <          | J U.33 1 <      | 0 0.33 1 < 1       | J 0.33 1 < U                   | 0.33 1 < 0       | 0.33 1 < U                              |
| SEMIVULANLES   | n-Introso-dr-n-propylamine            | 0.693 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < 0       | 0.33              | J U.33 F <      | U U.33 F < 1       | ) 17.33 i K U<br>I 17.23 i K U | 0.33 1 4 0       |   |
| SEMIVOLATILES  | Pentachlorophonel                     | 447 5 11             | 0.153 1 0         |                  |                  |                    |                     |                   | 165 1 < 1        | 165 1 (           |                 | U 0.33 r < 1       | / 0.33 I < 0                   | 165 1 < 1        | 165 1 < 1                               |
| SEMINOLATILES  | Phenanthrepe                          | 0.895 5 11           | 0.003 1 0         |                  |                  |                    |                     |                   | 133 1 < 1        | 033 1 <           | 1 0.13 1 <      | 1 033 1 < ł        |                                | 033 1 < 11       | 033 1 < 1                               |
| SEMIVOLATILES  | Phenol                                | 0.895 5 1            | 0.193 1 11        |                  |                  |                    |                     |                   | 0.33 1 < 1       | 033 1 <           | 1 0.33 1 <      | 1 033 1 < 1        | 0.33 1 < U                     | 0.33 1 < U       | 0.33 1 < U                              |
| SEMIVOLATILES  | Pyrene                                | 0.895 5 U            | 0.193 1 U         |                  |                  |                    |                     |                   | 0.33 1 < U       | 0.33 1 <          | ) 0.33 1 <      | U 0.33 1 < 4       | J 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U                              |
| VOLATILES      | 1,1,1,2-Tetrachloroethane             |                      | 0.00493 1 U       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLATILES      | 1,1,1-Trichloroethane                 |                      | 0.00493 1 U       |                  |                  |                    |                     |                   | 0.005 1 < U      | D.005 1 < 1       | J 0.005 1 <     | U 0.005 1 < 1      | J 0.005 1 < U                  | 0.005 1 < U      | 0.005 1 < U                             |
| VOLATILES      | 1,1,2,2-Tetrachloroethane             |                      | 0.00493 1 U       |                  |                  |                    |                     |                   | 0.005 1 < U      | 0.005 1 <         | J 0.005 1 <     | U 0.005 1 < ł      | / 0.005 1 < U                  | 0.005 1 < U      | 0.005 1 < U                             |
| VOLATILES      | 1,1,2-Trichloroethane                 |                      | 0.00493 1 U       |                  |                  |                    |                     |                   | 0.005 1 < U      | 0.005 1 <         | J 0.005 1 <     | U 0.005 1 < U      | 1 0.005 1 < U                  | 0.005 1 < U      | 0.005 1 < U                             |
| VOLATILES      | 1,1-Dichloroethane                    |                      | 0.00493 1 U       |                  |                  |                    |                     |                   | 0.005 1 < U      | 0.005 1 <         | J 0.005 1 <     | U 0.005 1 < U      | ) 0.005 1 < U                  | 0.005 1 < U      | 0.005 1 < U                             |
| VOLATILES      | 1,1-Dichloroethene                    |                      | 0.00493 1 U       |                  |                  |                    |                     |                   | 0.005 1 < U      | 0.005 1 <         | ) 0.005 1 <     | U 0.005 1 < U      | J 0.005 1 < U                  | 0.005 1 < U      | 0.005 1 < U                             |
| VOLATILES      | 1,1-Dichloropropene                   |                      | 0.00493 1 U       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLATILES      | 1,2,3-Trichlorobenzene                |                      | 0.00493 1 U       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLAHLES       | 1,2,3-Inchioropropane                 |                      | 0.00493 1 U       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLANCES       | 1,2,4-Inchiorobenzene                 |                      | 0.00493 1 0       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLATILES      | 1.2 Dihama 2 chlamamana               |                      | 0.00493 1 0       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLATILES      | 1 2-Dibromoethane                     |                      | 0.00495 1 0       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLATILES      | 1 2-Dichlorobenzene                   |                      | 0.00493 1 1       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLATILES      | 1.2-Dichloroethane                    |                      | 0.00493 1 U       |                  |                  |                    |                     |                   | 0.005 1 < U      | 0.005 t < 1       | J 0.005 1 <     | U 0.005 1 < U      | i 0.005 1 < U                  | 0.005 1 < U      | 0.005 1 < U                             |
| VOLATILES      | 1,2-Dichloroethene                    |                      |                   |                  |                  |                    |                     |                   | 0.005 1 < U      | 0.005 1 <         | J 0.005 1 <     | U 0.005 1 < U      | 0.005 1 < U                    | 0.005 1 < U      | 0.005 1 < U                             |
| VOLATILES      | 1,2-Dichloropropane                   |                      | 0.00493 1 U       |                  |                  |                    |                     |                   | 0.005 1 < U      | 0.005 1 < 1       | J 0.005 1 <     | U 0.005 1 < €      | J 0.005 1 < U                  | 0.005 1 < U      | 0.005 1 < U                             |
| VOLATILES      | 1,2-Dimethylbenzene (o-Xylene)        |                      | 0.00493 1 U       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLATILES      | 1,3,5-Trimethylbenzene                |                      | 0.00493 1 U       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLATILES      | 1,3-Dichlorobenzene                   |                      | 0.00493 1 U       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLATILES      | 1,3-Dichloropropane                   |                      | 0.00493 1 U       |                  |                  |                    |                     |                   |                  | -                 |                 |                    |                                |                  |   |
| VOLATILES      | 1,4-Dichlorobenzene                   |                      | 0.00493 1 U       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLATILES      | 2,2-Dichloropropane                   |                      | 0.00493 1 U       |                  |                  | •                  |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLATILES      | 2-Butanone                            |                      | 0.00986 1 U       |                  |                  |                    |                     |                   | 0.05 1 < U       | 0.05 1 < 1        | J 0.05 1 <      | U 0.05 1 < L       | 0.05 1 < U                     | 0.05 1 < U       | 0.05 t < U                              |
| VOLATILES      | 2-Chloroethyl vinyl ether             |                      | 0.00986 1 U       |                  |                  |                    |                     |                   | 0.01 1 < U       | 0.01 1 < 1        | J 0.01 1 <      | U 0.01 1 < L       | 0.01 1 < 0                     | 0.01 1 < U       | 0.01 1 < U                              |
| VOLATILES      | 2-Chiorotoluene                       |                      | 0.00493 1 U       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  | A A 7 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 |
| VOLATILES      | 2-Hexanone                            |                      | 0.00986 1 U       |                  |                  |                    |                     |                   | 0.05 1 < 0       | 0.05 1 < 0        | J 0.05 1 <      | 0 0.05 1 < 0       | 0 0.05 1 < 0                   | 0.05 1 × 0       | 0.05 1 < 0                              |
| VOLATILES      | 2-Propenal                            |                      | 0.00400 4 41      |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
|                | Acetone                               |                      | 0.00403 1 0       |                  |                  |                    |                     |                   | 01 1 - 11        | A1 1 - 1          | I 01 1 -        | II A1 1            | F 01 1 2 11                    | 01 1 2 11        | A1 1 - 11                               |
| VOLATIES       | Acetonitule                           |                      | 0.00200 1 0       |                  |                  |                    |                     |                   |                  | v.i r ≤ 1         | , 0.1 I N       |                    |                                | v.i i 🔨 U        | v.r i * U                               |
| VOLATILES      | Acrylonitrile                         |                      |                   |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLATILES      | Alivi chloride                        |                      |                   |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |
| VOLATILES      | Benzene                               |                      | 0.00493 1 U       |                  |                  |                    |                     |                   | 0.005 1 < 1/     | 0.005 1 < 1       | J 0.005 1 <     | U 0.005 1 < 1      | 0.005 1 < 1                    | 0.005 1 < U      | 0.005 1 < U                             |
| VOLATILES      | Bromobenzene                          |                      | 0.00493 1 U       |                  |                  |                    |                     |                   |                  |                   | ,               | ,                  |                                | · · · •          | •                                       |
| VOLATILES      | Bromochloromethane                    |                      | 0.00493 1 U       |                  |                  |                    |                     |                   |                  |                   |                 |                    |                                |                  |   |

Bromoform

Bromomethane

Carbon disulfide

Chlorobenzene

Chloroethane

Chioroform

Chloromethane

Dibromomethane

Ethyl methacrylate

Hexachlorobutadier

0.00493 1 U

Ethylbenzene

Chloroprene

Carbon tetrachloride

LOCATION\_CODE

SAMPLE\_PURPOSE

SAMPLE\_NO

DEPTH

Test Group

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

VOLATILES

SAMPLE\_DATE

Table 3-64 Concentrations of Chemicals in Soil Samples Associated with Sump 064 LH-DL065-01 LH-DL064-01 LH-DL065-01 47SB33 47SB17 47SB17 47\$B18 47\$B33 35SI MP064-SR01 35SUMP064-SB01 LH-DL065-01 47SB17(0-0\_5)QC 47SB18(0-0\_5) 47SB33(0-0\_5) 47SB33(1-2) LH-DL064-01 LH-DL065-01 QC 47SB17(0-0\_5) 35-SMP064-SB01-01 35-SMP064-SB01-02 6/3/2000 8/5/1993 8/5/1993 8/5/1993 6/3/2000 6/3/2000 9/20/2006 9/20/2006 6/3/2000 6/3/2000 1.5 - 2 Ft 1.5 - 2 Ft 2-25Ft 1-2Ft 5 - 5 Ft 0-0.5Ft 0-0.5 Ft 0 - 0,5 Ft 0-0.5 Ft 1-1Ft REG REG REG REĜ FD REG FD REG REG REG Result DIL LQ VQ Result DIL LQ VQ Result DIL LQ VQ Result DIL LQ VQ Result DIL LQ Result DIL LQ VQ Result DIL LQ VQ Result DIL LQ VQ Parameter (Units = mg/kg) Result DIL LQ VQ Result Dit. LQ VQ 0.005 1 < U 0.005 1 < 0.005 1 < U 0.00493 1 U Bromodichloromethane 0.005 1 < U 0.005 1 < 0.005 1 < U 0.00493 1 U 0.01 1 < 0.01 1 < U 0.01 1 < U 0.00986 1 U 0.005 1 < U 0.005 1 < U 0.005 1 < 0.00493 1 U 0.005 1 < 0.005 1 < U 0.005 1 < U 0.00493 1 U 0.005 1 < 11 0.005 1 < 1/ 0.005 1 < 0.00493 1 U 0.01 1 < U 0.01 1 < U 0.01 1 < 0.00986 1 U 0.005 1 < U 0.005 1 < U 0.005 1 < 0.00493 1 U 0.01 1 < U 0.01 1 < U 0.01 1 < 0.00986 1 U cis-1,2-Dichloroethene 0.00493 1 U 0.005 1 < U 0.005 1 < U 0.005 1 < 0.00493 1 U cis-1,3-Dichloropropene 0.005 1 < U 0.005 1 < 0.005 1 < U 0.00493 1 U Dibromochloromethane 0.00493 1 U Dichlorodifluoromethane 0.00986 1 U 0.005 1 < U 0.005 1 < U 0.005 1 < 0.00403 1 11

| VOLATILES | IODOMETHANE                 |                |       |   |   |   |       |   |     |            |       |          |
|-----------|-----------------------------|----------------|-------|---|---|---|-------|---|-----|------------|-------|----------|
| VOLATILES | ISOBUTYL ALCOHOL            |                |       |   |   |   |       |   |     |            |       |          |
| VOLATILES | Isopropylbenzene            | 0.00493 1 U    |       |   |   |   |       |   |     |            |       |          |
| VOLATILES | m,p-Xylenes                 | 0.00493 1 U    |       |   |   |   |       |   |     |            |       |          |
| VOLATILES | Methacrylonitrile           |                |       |   |   |   |       |   |     |            | ~ ~-  |          |
| VOLATILES | Methyl isobutyl ketone      |                | 0.05  | 1 | < | U | 0.05  | 1 | < 1 | 1          | 0.05  | 1        |
| VOLATILES | METHYL METHACRYLATE         |                |       |   |   |   |       |   |     |            |       |          |
| VOLATILES | Methylene chloride          | 0.00493 1 U    | 0.005 | 1 | < | U | 0.005 | 1 | < ( | , (        | .005  | 1        |
| VOLATILES | Naphthalene                 | 0.00986 1 U    |       |   |   |   |       |   |     |            |       |          |
| VOLATILES | n-BUTYLBENZENE              | 0.00493 1 U    |       |   |   |   |       |   |     |            |       |          |
| VOLATILES | n-PROPYLBENZENE             | 0.00493 1 Ú    |       |   |   |   |       |   |     |            |       |          |
| VOLATILES | Pentachloroethane           |                |       |   |   |   |       |   |     |            |       |          |
| VOLATILES | p-ISOPROPYLTOLUENE          | 0.00493 1 U    |       |   |   |   |       |   |     |            |       |          |
| VOLATILES | Propionibile                |                |       |   |   |   |       |   |     |            |       |          |
| VOLATILES | sec-BUTYLBENZENE            | 0.00493 1 U    |       |   |   |   |       |   |     |            |       |          |
| VOLATILES | Styrene                     | 0.00493 1 U    | 0.005 | 1 | < | U | 0.005 | 1 | <   |            | .005  | 1        |
| VOLATILES | tert-BUTYLBENZENE           | 0.00493 1 U    |       |   |   |   |       |   |     |            |       |          |
| VOLATILES | Tetrachloroethene           | 0.00493 1 U    | 0.005 | 1 | < | U | 0.005 | 1 | <   |            | .005  | 1        |
| VOLATILES | Toluene                     | 0.00493 1 U    | 0.005 | 1 | < | U | 0.005 | 1 | <   |            | .085  | ĩ        |
| VOLATILES | trans-1,2-Dichloroethene    | 0.00493 1 U    |       |   |   |   |       |   |     |            |       |          |
| VOLATILES | trans-1,3-Dichloropropene   | 0.00493 1 U    | 0.005 | 1 | < | U | 0.005 | 1 | <   | J (        | .005  | 1        |
| VOLATILES | trans-1,4-Dichloro-2-butene |                |       |   |   |   |       |   |     |            | 0.005 |          |
| VOLATILES | Trichloroethene             | 0.00267 1 J J  | 0.005 | ĩ | < | U | 0.005 | 1 | ۲   | <b>,</b> , | .005  | 1        |
| VOLATILES | Trichlorofluoromethane      | 0.00986 1 U    |       |   |   |   |       |   |     |            | 0.07  |          |
| VOLATILES | Vinył acetate               | 0.00986 1 U UJ | 0.05  | 1 | < | 0 | 0.05  | 1 | <   | 1          | 0.05  | 1        |
| VOLATILES | Vinyl chloride              | 0.00986 1 U    | 0.01  | 1 | < | U | 0.01  | ĩ | <   |            | 0.01  | 1        |
| VOLATILES | Xyienes, Total              |                | 0.005 | 1 | < | U | 0.005 | 1 | <   | J (        | .005  | <u> </u> |

## 00066133

|         | Մ<br>ՄԻ<br>8  | I-S064<br>S064-I<br>V5/199 | ⊨01<br>01_1<br>}3<br>Ft |          | UH<br>UH+<br>8<br>4 | -\$064<br>\$064-<br>\/5/199<br> -4.5 | ⊢01<br>01_2<br>)3<br>Ft |          | U+<br>LH-<br>( | I-S064<br>S064-<br>3/5/19<br>).5 - 1 | 1-01<br>01_3<br>93<br>Ft |          | มห<br>เหม<br>8<br>1 | -\$064<br>3064-<br>/5/199<br>- 1.5 | ⊢02<br>02_1<br>)3<br>Ft |         |
|---------|---------------|----------------------------|-------------------------|----------|---------------------|--------------------------------------|-------------------------|----------|----------------|--------------------------------------|--------------------------|----------|---------------------|------------------------------------|-------------------------|---------|
|         |               | REG                        |                         |          |                     | REG                                  |                         |          |                | REG                                  |                          |          | <b>.</b>            | REG                                |                         |         |
| VQ      | Result        | DIL                        | LQ                      | VQ       | Result              | DIL                                  | LQ                      | VQ       | Result         | DIL                                  |                          | VQ       | Result              | DIL                                | <u></u>                 | <u></u> |
| U       | 0.005         | 1                          | <                       | Ų        | 0.005               | 1                                    | <                       | U        | 0.005          | 1                                    | <                        | U        | 0.005               | 1                                  | · ·                     | 0       |
| U       | 0.005         | 1                          | <                       | U        | 0.005               | 1                                    | <                       | 0        | 0.005          | 1                                    | <                        | 0        | 0.005               | 1                                  | 5                       | 0       |
| U       | 0.01          | 1                          | <                       | U        | 0.01                | 1                                    | ٢.                      | U        | 0.01           | 1                                    | <u>د</u>                 | 0        | 0.01                | 1                                  | 2                       | 0       |
| 0       | 0.005         | 1                          | ۲.<br>۲.                | 0        | 0.005               | 1                                    | 5                       |          | 0.005          | 1                                    | 5                        |          | 0,005               | -                                  | 2                       |         |
| U       | 0.005         | 1                          | 5                       | 0        | 0.005               | 1                                    | 2                       |          | 0.005          | 4                                    | 2                        |          | 0.000               | -                                  | 2                       | 0       |
| 0       | 0.005         | 1                          | 5                       | 0        | 0.005               | -                                    | 2                       |          | 0.000          | +                                    | 2                        |          | 0.003               | ÷                                  | ž                       | ü       |
| U       | 0.01          |                            | 5                       | 11       | 0.01                | 1                                    | 2                       | 11       | 0.01           | -                                    | 2                        |          | 0.005               | ł                                  | è                       | ы       |
| U<br>11 | 0.000         | -                          | 2                       |          | 10.0                | 1                                    | 2                       | 11       | 0.005          | 4                                    | 2                        | н        | 0.003               |                                    | - e                     | й       |
| U       | 0.01          | 1                          | Ì                       | 0        | 0.01                | 1                                    |                         | U        | 0.01           | •                                    |                          | U        | 0.01                | •                                  | •                       | Ū       |
| U.      | 0.005         | 1                          | <                       | U        | 0.005               | 1                                    | ۲                       | υ        | 0.005          | 1                                    | <                        | U        | 0.005               | 1                                  | <                       | U       |
| U       | 0.005         | 1                          | <                       | U        | 0.005               | 1                                    | <                       | U        | 0.005          | 1                                    | <                        | U        | 0.005               | 1                                  | <                       | U       |
| U       | 0.005         | 1                          | ۲                       | U        | 0.005               | 1                                    | <                       | U        | 0.005          | t                                    | ۲                        | U        | 0.005               | 1                                  | ۲                       | U       |
| U<br>U  | 0.05<br>0.005 | 1<br>1                     | <<br><                  | U<br>U   | 0.05<br>0.005       | 1                                    | <<br><                  | ប<br>ប   | 0.05<br>0.005  | 1                                    | <<br><                   | ប<br>ម   | 0.05<br>0.0111      | 1<br>1                             | <                       | ម       |
|         |               |                            |                         |          |                     |                                      |                         |          |                |                                      |                          |          |                     |                                    |                         |         |
| U       | 0.005         | 1                          | <                       | U        | 0.005               | 1                                    | <                       | U        | 0.005          | t                                    | <                        | U        | 0.005               | 1                                  | <                       | U       |
| U       | 0.005         | 1                          | <                       | U        | 0.005               | 1                                    | <                       | U        | 0.005          | 1                                    | <                        | U        | 0.005               | 1                                  | <                       | U       |
| U       | 0.005         | 1                          | <                       | U        | 0.005               | 1                                    | <                       | U        | 0.005          | 1                                    | <                        | U        | 0.005               | 1                                  | <                       | U       |
| U       | 0.005         | 1                          | <                       | U        | 0.005               | 1                                    | <                       | U        | 0.005          | 1                                    | <                        | U        | 0.005               | 1                                  | <                       | U       |
| ป       | 0.005         | 1                          | <                       | U        | 0.005               | 1                                    | <                       | U        | 0.005          | 1                                    | <                        | U        | 0.005               | 1                                  | <                       | U       |
|         |               |                            |                         |          |                     |                                      |                         |          | 0.07           |                                      | ,                        |          | 0.05                |                                    |                         |         |
| U       | 0.05          | 1                          | <                       | 0        | 0.05                | 1                                    | Ś                       | 0        | 0.05           | 1                                    | 2                        | 0        | 0.05                |                                    | 2                       | U<br>11 |
| U       | 0.01          | 1                          | <u>ڊ</u>                | 0        | 10.0                |                                      |                         | v        | 0.01           | •                                    | Ì                        |          | 0.01<br>0.02        | -                                  |                         |         |
| U       | 0.005         | 1                          | <.                      | <u> </u> | 0.005               | 1                                    | <u>&lt;</u>             | <u> </u> | 0.005          | +                                    | <                        | <u> </u> | 0.005               |                                    | <u> </u>                |         |

<

<

<

Table 3-64 Concentrations of Chemicals in Soil Samples Associated with Sump 064

| [SUMP] = SUMP064               |                                 |                    |                          |               |                       |                         |              |                          |                          |                       |                         |
|--------------------------------|---------------------------------|--------------------|--------------------------|---------------|-----------------------|-------------------------|--------------|--------------------------|--------------------------|-----------------------|-------------------------|
| LOCATION_CODE                  |                                 | LH-S064-02         | LH-S054-02               | LH-\$065-01   | LH-S065-01            | LH-S065-01              | LH-S065-02   | LH-S065-02               | LH-S065-02               | LHS-3-20              | LHS-3-20                |
| SAMPLE_NO                      |                                 | LH-S064-02_2       | LH-S064-02_3             | LH-\$065-01_1 | LH-S065-01_2          | LH-S065-01_3            | LH-S065-02_1 | LH-\$065-02_2            | LH-S065-02_3             | LHS-3-20 QC           | LHS-3-20                |
| SAMPLE_DATE                    |                                 | 8/5/1993           | 8/5/1993                 | 8/5/1993      | 8/5/1993              | 8/5/1993                | 8/5/1993     | 8/5/1993                 | 8/5/1993                 | 1/10/1995             | 1/10/1995               |
| Depth                          |                                 | 2.5-3Ft            | 4 - 4.5 Ft               | 0.5-1Ft       | 2-25H                 | 4-4.5Ht                 | 0.5-114      | 3-3.5 H                  | 4-4.511                  | U-0.5FL               | U-U.S FL                |
| SAMPLE_PURPOSE                 | D ( 01.1 ) ( 1.1                | REG                | REG<br>Bauris Dire to Mo | REG NO. 10    | NEG Result Dill LO MO | REG<br>Deauth DIE LO VO |              | RCG<br>Recoil: Dit LO VO | REG<br>Peruk Dil (A MA   | Rocut DU LO VO        | Result Dil 10 VO        |
| Test Group                     | Parameter (Units = mg/kg)       |                    | RESUR DIE LO VO          | AT S C II     | A7 1 2 1              | A7 1 C II               | 0.7 1 < 11   |                          | A7 1 < 11                | 0.21 1 < 11           | 0.21 1 < 11             |
| EXPLOSIVES<br>EYEI OSIVES      | 1 3 Divitmber zere              | 0.7 1 < 0          | 0.7 1 < 0                | 05 1 < U      | 0.5 1 < 1             | 0.5 1 < U               | 0.5 1 < U    | 0.5 1 < U                | 0.5 1 < U                | 0.21 t < U            | 0.21 1 < U              |
| EXPLOSIVES                     | 2.6.6-Trinitrololuene           | 0.5 1 < 0          | 0.5 t < U                | 0.5 1 < U     | 0.5 1 < U             | 0.5 1 < U               | 0.5 1 < U    | 0.5 1 < U                | 0.5 1 < U                | 0.21 1 < U            | 0.21 t < U              |
| EXPLOSIVES                     | 2.4-Dinitrotoluene              | 0.5 1 < U          | 0.5 1 < 0                | 0.5 1 < U     | 0.5 1 < U             | 0.5 1 < U               | 0.5 1 < U    | 0.5 1 < U                | 0.5 1 < U                | 0.21 1 < U            | 0.21 1 < U              |
| EXPLOSIVES                     | 2,6-Dinitrotoluene              | 0.5 1 < U          | 0.5 1 < U                | 0.5 t < U     | 0.5 1 < U             | 0.5 1 < U               | 0.5 1 < U    | 0.5 1 < U                | 0.5 1 < U                | 0.23 1 < U            | 0.23 1 < U              |
| EXPLOSIVES                     | 4-Amino-2,6-dinitrotoluene      |                    |                          |               |                       |                         |              |                          |                          | 0.44 1 < U            | 0.44 1 < U              |
| EXPLOSIVES                     | HMX                             | 0.9 1 < U          | 0.9 1 < U                | 0.9 1 < U     | 0.9 1 < U             | 0,9 1 < U               | 0.9 1 < U    | 0.9 1 < U                | 0.9 1 < U                | 1.9 1 < U             | 1.9 1 < U               |
| EXPLOSIVES                     | m-Nitrotoluene                  | 0.9 1 < U          | 0.9 1 < U                | 0.9 1 < U     | 0.9 1 < U             | 0.9 1 < U               | 0.9 1 < U    | 0.9 1 < U                | 0.9 1 < U                | 0.88 1 < U            | 0.88 1 < U              |
| EXPLOSIVES                     | NIOBIUM                         | 0.6 1 < U          | 0.6 1 < U                | 0.6 1 < U     | 0.6 1 < U             | 0.6 1 < U               | 0.6 1 < U    | 0.6 1 < U                | 0.6 1 < U                | Am + - 11             | 502 4 <i>x</i> 11       |
| EXPLOSIVES                     | Nstrobenzene                    |                    |                          |               |                       | 50 4 <i>4</i> 11        | 00 t - 11    | 00 4 4 11                | 00 1 4 11                |                       | 0.23 1 4 0              |
| EXPLOSIVES                     | o-Nitrotoluene                  | 0.9 1 < 0          | 0.9 7 < 0                | U.9 1 < U     |                       |                         |              | 11 1 4                   | 11 1 < 1                 | 26 1 < 1              | 27 1 < 1                |
| EXPLOSIVES                     | p-wooloodene                    |                    |                          | 1.1 1 5 0     | A5 1 < U              | 05 t < U                | 05 1 < 1     | 05 1 < 0                 | 0.5 1 < U                | 0.95 1 < U            | 0.96 1 < U              |
| EXPLOSIVES                     | Ternet                          | 191 < 1            | 19 1 < 1                 | 19 1 < 1      | 1.9 1 < U             | 1.9 1 < U               | 1.9 1 < U    | 1.9 1 < 1                | 1,9 1 < U                | 0.65 1 < U            | 0.65 1 < U              |
| METALS                         | Akminum                         | 12000 1            | 17900 1                  | 16300 1       | 16700 1               | 11000 1                 | 7010 1       | 9830 1                   | 6590 1                   | 7830 1                | 5010 1                  |
| METALS                         | Antimony                        | 31 < U             | 3 1 < U                  | 3 1 < U       | 31 < U                | 31 < U                  | 3 t < U      | 3 1 < U                  | 3 1 < U                  | 10.7 1 < UJ           | 9.5 1 < UJ              |
| METALS                         | Arsenic                         | 2.5 1              | 1.9 1                    | 3 1           | 4,1 1                 | 4.1 1                   | 4.7 t        | 3.6 1                    | 3.9 1                    | 31 J                  | 1.9 1 J                 |
| METALS                         | Barium                          | 124 1              | 472 1                    | 131 1         | 850 1                 | 378 1                   | 73 1         | 110 1                    | 134 1                    | 75.8 1                | 61.6 1                  |
| METALS                         | Cadmium                         | 11 < U             | 11 < U                   | 11 < U        | 11 < U                | 1 t < U                 | 11 < U       | 11 < U                   | 11 < U                   | 1.1 1 < U             | 0.95 1 < U              |
| METALS                         | Calcium                         | 958 1              | 1500 1                   | 2550 1        | 2570 1                | 974 1                   | 1660 1       | 4180 1                   | 1460 1                   | 1800 1                | 1/30/1                  |
| METALS                         | Chromium                        | 12.6 1             | 13.3 1                   | 15.2 1        | 17.6 1                | 10 1                    | 19 1         | 13 1                     | 11 1                     | 11.0 I J<br>6.1 1     | 6.0 I J                 |
| METALS                         | Cobat                           | 5.4 1              | 13.0                     | 11.1 1        | 25 1                  | 12 1                    | 21           | 3 1                      | 8 i<br>7 1               | 273 1                 | 765 1                   |
| METALS                         | Copper<br>Ovanida Total         | 3.2 I<br>05 1 r II | 0.5 t < 1                | 3.0 1         | 05 1 < 11             | 4 I<br>05 1 < 11        | 05 1 < 11    | 051 < 11                 | 05 1 < 1                 |                       |                         |
| METALS                         | Iron                            | 11300 1            | 13400 1                  | 14400 1       | 18800 1               | 12800 1                 | 21500 1      | 11700 1                  | 10100 1                  | 8140 t                | 5830 1                  |
| METALS                         | Lead                            | 6.1 1              | 5.3 1                    | 5.7 1         | 10.4 1                | 10 1                    | 8.7 1        | 5.7 1                    | 5.9 1                    | 30.4 1                | 47.7 1                  |
| METALS                         | Magnesium                       | 908 1              | 1610 1                   | 1100 1        | 1950 1                | 1120 1                  | 330 1        | 874 1                    | 521 1                    | 638 1                 | 459 1                   |
| METALS                         | Manganese                       | 358 1              | 385 1                    | 228 1         | 368 1                 | 205 1                   | 145 1        | 780 1                    | 581 1                    | 158 1                 | 247 1                   |
| METALS                         | Mercury                         | 0.1 1 < U          | 0.1 1 < U                | 0.1 1 < U     | 0.1 t < U             | 0.1 1 < U               | 0.1 1 < U    | 0.1 1 < U                | 0.1 1 < U                | 0.12 1 < U            | 0.13 1 < U              |
| METALS                         | Potassium                       | 408 1              | 644 1                    | 690 1         | 830 1                 | 366 1                   | 276 1        | 463 1                    | 234 1                    | 504 1                 | 307 1                   |
| METALS                         | Selenium                        | 11 < U             | 11 < U                   | 11 < 0        | 11 < 0                | 11 < 0                  | 11 < 0       | 11 < 0                   |                          | 0.31 1 J              | 0.35 1 J                |
| METALS                         | Silver                          | 11 < 0             | 11 < 0                   | 11 < 0        | 11 < U                | 11 < 0                  | 1 1 < 0      | 1 1 × U<br>19 1          | 11 1                     | 107 1 < 11            | 95 1 < 1                |
| METALS                         | Stontum                         | 16.4 1             | 30.1 1                   | 20.2 1        | 32.0 E                | 21 1                    | <i>,</i> ,   | 10 1                     |                          | 534 1 < 11            | 47.3 1 < U              |
| METALS                         | Zinc                            | 17 1               | 25 1                     | 23 1          | 31 1                  | 16 1                    | 18 1         | 18 1                     | 10 1                     | 64.8 1                | 173 1                   |
| PERC                           | Perchlorate                     |                    |                          |               |                       |                         |              |                          |                          |                       |                         |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene          | 0.33 1 < U         | 0.33 1 < U               | 0.33 1 < U    | 0.33 1 < U            | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.5 1 < U             | 0.45 1 < U              |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene             | 0.33 t < ⊔         | 0.33 1 < U               | 0.33 1 < U    | 0.33 1 < U            | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.5 t < U             | 0.45 1 < U              |
| SEMIVOLATILES                  | 1,3-Dichlorobenzene             | 0.33 1 < U         | 0.33 1 < U               | 0.33 1 < U    | 0.33 1 < U            | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.5 1 < 0             | 0.45 1 < 0              |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene             | 0.33 1 < U         | 0.33 1 < U               | 0.33 1 < U    | 0.33 1 < 0            | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < 0               | 0.33 1 < 0               | 0.5 1 < 0             | 1.45 1 < 0              |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenol           | 1.65 1 < 0         | 1.65 1 < U               | 1.05 1 < U    | 1.65 1 < 0            | 1.05 1 < 0              | 1.05 1 < 0   | 1.05 I < U               | 1.05 I < U               | 23 I V U              | 2.3 1 < 0               |
| SEMIVULATILES                  | 2,4,0-1 Inchorophenol           |                    | 0.33 1 < 0               | 0.33 1 < 1    | 0.33 1 < 11           | 0.33 1 < 1              | 0.33 1 < 11  | 633 1 < N                | 0.33 1 < U               | 0.5 1 < 0             | 0.45 1 < U              |
| SEMIVOLATILES                  | 2.4-Diractivipschol             | 0.33 1 < 1         | 0.33 1 < 1               | 0.33 1 < 1    | 0.33 1 < 11           | 0.33 1 < 1              | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.5 1 < U             | 0.45 1 < U              |
| SEMIVOLATILES                  | 2,4-Dinitrophenol               | 1.65 1 < U         | 1.65 1 < U               | 1.65 1 < U    | 1.65 1 < U            | 1.65 1 < U              | 1.65 1 < U   | 1.65 1 < U               | 1.65 1 < U               | 2.5 1 < U             | 2.3 1 < U               |
| SEMIVOLATILES                  | 2,4-Dinitrotoluene              | 0.33 1 < U         | 0.33 1 < U               | 0.33 f < U    | 0.33 1 < U            | 0.33 t < U              | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.5 1 < U             | 0.45 t < U              |
| SEMIVOLATILES                  | 2,6-Dinitrotoluene              | 0.33 1 < U         | 0.33 1 < U               | 0.33 1 < U    | 0.33 1 < U            | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.5 1 < U             | Q.45 1 < U              |
| SEMIVOLATILES                  | 2-Chloronaphthalene             | 0.33 1 < U         | 0.33 1 < U               | 0.33 1 < U    | 0.33 1 < U            | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.5 1 < U             | 0.45 1 < U              |
| SEMIVOLATILES                  | 2-Chlorophenol                  | 0.33 1 < U         | 0.33 1 < U               | 0.33 t < U    | 0.33 1 < U            | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.5 1 < 0             | 0.45 1 < 0              |
| SEMIVOLATILES                  | 2-Methylnaphthalene             | 0.33 1 < U         | 0.33 1 < U               | 0.33 1 < U    | 0.33 1 < U            | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < 0               | 0.5 1 < U             | 0.45 1 < 0              |
| SEMIVOLATILES                  | 2-Methylphenol                  | 0.33 1 < U         | 0.33 1 < U               | 0.33 1 < 0    | 0.33 1 < U            | 0.33 T < U              | 0.33 1 < 0   | 1.55 1 4 1               | 165 1 C 1                | 9.5 r ≤ U<br>95 1 < U | 0.45 I × U<br>23 I × II |
| SEMIVULATILES<br>SEMINULATILES | 2-Niu Qalibine<br>2-Nitrophonol | 1.05 1 < 0         | 1.00 I < U               | 1.03 1 < U    | 1.00 F < U            | 033 1 < 11              | 1.00 1 < 10  | 033 1 < 1                | 033 1 < U                | 0.5 1 < U             | 0.45 1 < U              |
| SEMINOLATILES                  | 3 3'-Dichlorohonzirfine         |                    | 0.55 1 < 0               | 0.65 1 < 0    | 0.55 1 < 1            | 0.65 1 < 1              | 065 1 < U    | 0.55 1 < U               | 0.65 1 < U               | 0.99 1 < U            | 0.91 1 < U              |
| SEMIVOLATILES                  | 3-Nitroaniline                  | 1.65 1 < L         | 1.65 1 < U               | 1.65 1 < U    | 1.65 1 < U            | 1.65 1 < U              | 1.65 1 < U   | 1.65 1 < U               | 1.65 1 < U               | 2.5 1 < U             | 2.3 1 < U               |
| SEMIVOLATILES                  | 4.6-Dinitro-2-methylohenol      | 1.65 1 < U         | 1.65 1 < U               | 1.65 1 < U    | 1.65 1 < U            | 1.65 1 < U              | 1.65 1 < U   | 1.65 1 < U               | 1.65 1 < U               | 2.5 1 < U             | 2.3 1 < U               |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether      | 0.33 1 < U         | 0.33 1 < U               | 0.33 1 < U    | 0.33 t < U            | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.5 1 < U             | 0.45 1 < U              |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol         | 0.65 1 < U         | 0.65 1 < U               | 0.65 1 < U    | 0.65 1 < U            | 0.65 1 < U              | 0.65 t < U   | 0.65 1 < U               | 0.65 1 < U               | 0.5 1 < U             | 0.45 1 < U              |
| SEMIVOLATILES                  | 4-Chloroaniline                 | 0.65 1 < U         | 0.65 1 < U               | 0.65 1 < U    | 0.65 1 < U            | 0.65 1 < U              | 0.65 1 < U   | 0.65 1 < U               | 0.65 1 < U               | 0.5 t < U             | 0.45 1 < U              |
| SEMIVOLATILES                  | 4 Chlorophenyl phenyl ether     | 0.33 1 < U         | 0.33 1 < U               | 0.33 1 < U    | 0.33 1 < U            | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.5 1 < U             | 0.45 1 < U              |
| SEMIVOLATILES                  | 4-Methylphenol                  | 0.33 1 < U         | 0.33 1 < U               | 0.33 1 < U    | 0.33 1 < U            | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.5 1 < 0             | 0.45 1 < U              |
| SEMIVOLATILES                  | 4-Nitroaniline                  | 1.65 1 < U         | 1.65 1 < U               | 1.65 1 < U    | 1.65 1 < U            | 1.65 1 < U              | 1.65 1 < U   | 1.65 7 < U               | 1.65 1 < U               | 2.5 1 < U             | 2.3 T < U<br>23 1 - 11  |
| SEMIVOLATILES                  | 4-Mitrophenol                   | 1.55 1 < U         | 1.00 T < U               | 1.05 7 < U    | 1.00 T < U            | 1.00 1 < U              | 1 × 1 co.i   | 1.00 I < U               | 1.00 i ≤ U<br>1\33 1 ∠ U | 2.0 r > U<br>05 1 < 1 | ∠JI < U<br>0.45 1 < ₩   |
|                                | Acenaphilliene                  | 0.33 1 4 0         | 0.33 1 < U               | 0.33 1 < U    | 0.33 1 2 11           | 0.33 1 2 11             | 0.33 1 < 11  | 0.33 1 < 11              | 0.33 1 < 11              | 0.5 1 < 1             | 0.45 1 < 11             |
| SEMIVOLATILES                  | Anthracene                      | 0.33 1 < 11        | 0.33 1 < 11              | 0.33 1 < 11   | 0.33 1 < 11           | 0.33 1 < 13             | 0.33 1 < 11  | 0.33 1 < 11              | 0.33 1 < U               | 0.5 1 < U             | 0.45 t < U              |
| SEMIVOLATILES                  | Benzo(a)anthracene              | 0.33 1 < 1         | 0.33 1 < 1               | 0.33 1 < U    | 0.33 1 < U            | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U               | 0.33 1 < U               | 0.5 1 < U             | 0.45 1 < U              |
| SEMIVOLATILES                  | Benzo(a)pyrene                  | 0.33 t < U         | 0.33 1 < U               | 0.33 1 < U    | 0.33 1 < U            | 0.33 1 < U              | 0.33 1 < U   | 0.33 1 < U               | 0.33 t < U               | 0.5 1 < U             | 0.45 1 < U              |
|                                |                                 |                    |                          |               |                       |                         |              |                          |                          |                       |                         |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-64 Concentrations of Chemicals in Soil Samples Associated with Sump 064

|                |                                |            |        |         |          |                    | Conc | enuau      | ions c   | я сп    | ienncar   | s m a   | 2011 2  | ampies               | S AS                 | social  | ea wia       | n əun    | ih oo- | ŧ        |         |        |          |            |         |            |                |      |                |                |             |
|----------------|--------------------------------|------------|--------|---------|----------|--------------------|------|------------|----------|---------|-----------|---------|---------|----------------------|----------------------|---------|--------------|----------|--------|----------|---------|--------|----------|------------|---------|------------|----------------|------|----------------|----------------|-------------|
| LOCATION _CODE |                                | LH-SO      | 64-02  |         | LH-S     | 064-02             |      | LH-SO      | 65-01    |         | LH-SC     | 65-01   |         | LH-SC                | 065-01               |         | LH-S         | S065-02  |        | LH-S     | 065-02  |        | LH-S     | \$065-02   |         | LH         | IS-3-20        |      | Ľ              | HS-3-20        |             |
| SAMPLE_NO      |                                | LH-S06     | 4-02_2 |         | LH-SO    | 64-02_3            |      | LH-S06     | 5-01_1   |         | LH-SOE    | i5-01_2 |         | LH-SOX               | 65-01_3              |         | LH-S         | 065-02_1 |        | LH-SO    | 65-02_2 |        | LH-S     | 065-02_3   |         | LHS        | -3-20 QC       | ;    | L              | HS-3-20        |             |
| SAMPLE DATE    |                                | 8/5/1      | 1993   |         | 8/5/     | 1993               |      | 8/5/1      | 993      |         | 8/5/      | 1993    |         | 8/5/                 | 1993                 | -       | 8/3          | 5/1993   |        | 8/5      | 1993    |        | 8/       | 5/1993     |         | 1/         | 10/1995        |      | 1              | 10/1995        |             |
| DEPTH          |                                | 25-        | 3Ft    |         | 4-4      | .5 Ft              |      | 0.5 -      | 1 Ft     |         | 2-2       | 5Ft     |         | 4-4                  | 1.5 Ft               |         | 0.9          | 5 - 1 Ft |        | 3-       | 3.5 Ft  |        | 4-       | 4.5 Ft     |         | 0          | - 0.5 Ft       |      | C              | -0.5 Ft        |             |
| SAMPLE PURPOSE |                                | RE         | G      |         | R        | EG                 |      | RE         | G        |         | R         | G       |         | R                    | EG                   |         | 1            | REG      |        | R        | EG      |        | 1        | REG        |         |            | FD             |      |                | REG            |             |
| Test Grown     | Parameter (Linits ≈ mo/ko)     | Result Dil | L LO   | VO      | Result D | 1. 10              | VO I | Result Dil | LQ       | vo      | Result DI | L 10    | vo      | Result D             | L LQ                 | VQ      | Result I     | DIL LQ   | VQ     | Result D | IL LQ   | VQ     | Result I | DIŁ LQ     | VQ      | Result     | DIL LO         | a vo | Result         | DIL L          | Q VQ        |
| SEMIVOLATILES  | Benzo(b)fluoranthene           | 0.33 1     | <      | U       | 0.33     | <                  | U    | 0.33 1     | <        | U       | 0.33 1    | <       | U       | 0.33 1               | <                    | U       | 0.33         | 1 <      | U      | 0.33     | i <     | U      | 0.33     | 1 <        | U       | 0.5        | 1 <            | U    | 0.45           | 1 •            | < U         |
| SEMIVOLATILES  | Benzo(ghi)gerviene             | 0.33 1     | <      | Ŭ       | 0.33     | <                  | U    | 0.33 1     | <        | Ű       | 0.33 1    | < ۱     | U       | 0.33 1               | <ul> <li></li> </ul> | U       | 0.33         | 1 <      | U      | 0.33     | ۲ ۱     | U      | 0.33     | 1 <        | U       | 0.5        | 1 <            | U    | 0.45           | 1 •            | < U         |
| SEMIVOLATILES  | Benzo(k)fluoranthene           | 0.33 1     | <      | Ū       | 0.33 1   | <                  | Ð    | 0.33 1     | <        | U       | 0.33 1    | <       | U       | 0.33 1               | <                    | U       | 0.33         | 1 <      | ម      | 0.33     | 1 <     | υ      | 0.33     | 1 <        | U       | 0.5        | 1 <            | U :  | 0.45           | 1 •            | < U         |
| SEMIVOLATILES  | Benzoic Acid                   | 1.65 1     | <      | Ŭ       | 1.65 1   | <                  | U    | 1.65 1     | <        | U       | 1.65 1    | <       | U       | 1.65 1               | <                    | U       | 1.65         | 1 <      | U      | 1.65     | t <     | υ      | 1.65     | 1 <        | U       | 2.5        | 1 <            | ម    | 2.3            | 1 .            | < U         |
| SEMIVOLATILES  | Benzyl Alcohol                 | 0.65 1     | <      | Ŭ       | 0.65 1   | <                  | U    | 0.65 1     | <        | U       | 0.65 1    | <       | U       | 0.65 1               | <                    | U       | 0.65         | i <      | ម      | 0.65     | + ۲     | U      | 0.65     | 1 <        | U       | 0.5        | 1 <            | บ    | 0.45           | 1 4            | < U         |
| SEMINOLATILES  | his(2-Chiomethory)methane      | 0.33 1     | <      | Ŭ       | 0.33     | ंद                 | Ū.   | 0.33 1     | <        | ti      | 0.33 1    | <       | ย       | 0.33 1               |                      | Ū       | 0.33         | 1 <      | ย      | 0.33     | 1 <     | U      | 0.33     | 1 <        | U       | 0.5        | 1 <            | U    | 0.45           | 1 .            | < U         |
| SEMIVOLATILES  | bis/2-Chlorpethylether         | 0.33 1     | <      | Ŭ       | 0.33 1   | <                  | U    | 0.33 1     | <        | Ū       | 0.33 1    | <       | U       | 0.33 1               | <                    | U       | 0.33         | 1 <      | U      | 0.33     | 1 <     | U      | 0.33     | 1 <        | U       | 0.5        | 1 <            | : U  | 0.45           | 1 •            | < U         |
| SEMIVOLATILES  | his/2-Chlornisonmylether       | 0.33 1     | <      | Ū       | 0.33     |                    | Ð    | 0.33 1     | <        | U       | 0.33 1    | <       | u .     | 0.33 1               | · <                  | Ū       | 0.33         | 1 <      | U      | 0.33     | 1 <     | U      | 0.33     | 1 <        | U       | 0.5        | 1 <            | U    | 0.45           | 1 4            | < U         |
| SEMIVOLATILES  | his/2-Ethylherylinhthalate     | 0.33 1     | <      | Ū       | 0.33     |                    | Ū    | 0.33 1     | <        | U       | 0.33 1    | <       | U       | 0.33 1               | -<br>                | U       | 0.33         | 1 <      | U      | 0.634    | 1       |        | 0.33     | 1 <        | U       | 0.5        | 1 <            | U    | 0.45           | 1 .            | < U         |
| SEMIVOLATILES  | Rutvi benzvi obthalate         | 0.33 1     | <      | Ŭ       | 0.33     |                    | Ū.   | 0.33 1     | <        | U       | 0.33 t    | <       | U U     | 0.33 1               |                      | U       | 0.33         | 1 <      | U      | 0.33     | t <     | U      | 0.33     | 1 <        | U       | 0.5        | 1 <            | U U  | 0.45           | 1 .            | < U         |
| SEMIVOLATILES  | Chrysene                       | 033 1      | <      | ii ii   | 0.33     |                    | Ū.   | 0.33 1     | <        | H       | 0.33 t    | <       | u -     | 0.33 1               |                      | U.      | 0.33         | 1 <      | Ű      | 0.33     | 1 <     | U      | 0.33     | 1 <        | U       | 0.5        | 1 <            | U I  | 0.45           | 1 •            | < U         |
| SEMIVOLATILES  | Dihenzo/a hlanthracene         | 0.33 1     | < C    |         | 0.33     |                    | U U  | 0.33 1     | <        | ŭ       | 0.33 1    | <       | Ŭ       | 0.33 1               | <                    | U.      | 0.33         | 1 <      | Ū      | 0.33     | 1 <     | Ū      | 0.33     | 1 <        | U       | 0.5        | 1 <            | Ū    | 0.45           | 1 .            | < U         |
| SEMINOLATILES  | Dibenzofican                   | 0.33 1     | ć      | u.      | 0.33     |                    | ŭ    | 0.33 1     | <        | ň       | 0.33 1    | <       | Ŭ       | 0.33 1               | i <                  | U.      | 0.33         | 1 <      | Ū      | 0.33     | 1 <     | U      | 0.33     | 1 <        | Ū       | 0.5        | 1 <            |      | 0.45           | 1 .            | < U         |
| SEMINOLATILES  | Diothyl ohtholata              | 0.00 1     | č      | 11      | 0.33     | l c                |      | 0.33 1     | <        | й       | 0.33 1    | <       | ň       | 633 1                | · ·                  |         | 0.33         | 1 <      | ŭ      | 0.33     | 1 <     | U      | 0.33     | 1 <        | Ŭ       | 0.5        | 1 <            | : 0  | 0.45           | 1 4            | < U         |
| SEMINOLATRES   | Dimothyl phtholoto             | 0.00 1     | 2      | 11      | 0.33     |                    | ň    | 0.33 1     | č        | ы<br>н  | 0.00      | è       | ň       | 633 1                |                      |         | 0.00         | 1 <      | ŭ      | 033      | 1 <     |        | 0.33     | ,<br>1 <   | 11      | 0.5        |                |      | 0.45           | 1 4            | < 11        |
|                | di n Dubd nhtholata            | 0.00 1     |        | 11      | 0.00     |                    | ů.   | 0.33 1     | 2        |         | 0.32 1    |         | ň       | 0.454 1              |                      |         | 0.695        | 1        | č      | 0.00     | •       | -      | 0.831    | 1          | •       | 0.5        | 1 4            | - UT | 0.45           | 1 .            | < Î         |
| SEMPLOLATILES  | di n Ontri n beh alata         | 0.23 1     | 2      | U<br>11 | 0.00     |                    | ň    | 0.30 1     | 2        |         | 0.33 1    |         |         | 0.32 1               |                      |         | 0.003        |          |        | 0.73     |         |        | 0.001    | ÷ -        | 11      | 0.5        | 1              | . н  | 0.45           | 1.             | < 11        |
| SEMINULATILES  | Chevenations                   | 0.33 1     |        | 0       | 0.33     |                    | 0    | 0.33 1     | 2        |         | 0.33 1    | 2       | 0       | 0.33 1               |                      | U<br>11 | 0.33         | 1 2      | U<br>U | 0.33     |         | 0      | 0.33     | 1 2        | 11      | 0.5        | ; ;            | · 0  | 0.45           | 1 .            | < 11        |
| SEMIYULATILES  | FILCE STREET                   | 0.33 1     | ×      | 0       | 0.33     |                    |      | 0.03 1     | 2        | U<br>11 | 0.33 1    |         | 0       | 1 \$2.10<br>1 \$2.10 | . <                  |         | 0.33<br>0.33 |          | U<br>U | 0.33     |         | 11     | 0.00     | · ·        | 11      | 0.0<br>A E | 1              | . U  | 0.43<br>0.46   | 1              | - U<br>2 II |
| SEMIVULATILES  | riuorene                       | 0.33 1     | <      | U       | 0.33     |                    | 0    | 0.35 1     | <u>د</u> | 0       | U.J3 1    | ۲<br>-  | U<br>II | 0.33 1               | · ·                  |         | 0.33         | 1 4      | 0      | 0.33     |         | о<br>и | 0.33     | 1 ×        | U<br>11 | 0.5        | + •            | . U  | 10.40<br>A.A.C | 1              | ~ 0         |
| SEMIVULATILES  | Hexachiorobenzene              | 0.33 1     | <      | 0       | 0.33     |                    | U    | 0.33 1     | <        | U<br>   | 0.33 1    | <       | U<br>U  | 0.33 1               | . <                  | 0       | 0.33         |          | U      | 0.33     |         |        | 0.33     | 1 <<br>1 - | U<br>14 | 0.5        | 4 4            |      | 0.45           | 1 <sup>4</sup> | · U         |
| SEMIVULATILES  | Hexachlorobutadiene            | 0.33 1     | <      | 0       | 0.33     | <                  | 0    | 0.33 1     | <        | U<br>U  | 0.33 1    | <       | U<br>I  | 0.33 1               | . <                  | U<br>   | 0.33         |          | U<br>  | 0.33     |         |        | 0.33     |            | 0       | 0.5        | 4              |      | 0.45           | +              |             |
| SEMIVOLATILES  | Hexachlorocyclopentadiene      | 0.33 1     | <      | U       | 0.33     | <                  | U    | 0.33 1     | <        | U       | 0.33 1    | <       | U       | 0.33 1               | <pre></pre>          | 0       | 0.33         | 1 <      |        | 0.33     |         | 0      | 0.33     | 1 5        |         | 0.5        | 1 4            |      | 0.45           | 1 .            | ευ<br>      |
| SEMIVOLATILES  | Hexachioroethane               | 0.33 1     | <      | U       | 0.33     | <                  | U    | 0.33 1     | <        | 0       | 0.33 1    | <       | U       | 0.33 1               |                      | 0       | 0.33         | 1 <      | U      | 0.33     |         |        | 0.33     | 1 4        | 0       | 0.5        | 1 4            |      | 0.45           |                | ×υ<br>      |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene         | 0.33 1     | <      | U       | 0.33 1   | ! <                | U    | 0.33 1     | <        | U       | 0.33 1    | <       | U       | 0.33 1               | · <                  | 0       | 0.33         | 1 <      | U      | 0.33     |         | 0      | 0.33     | 1 <        | 0       | 0.5        | 1 4            |      | 0.45           |                |             |
| SEMIVOLATILES  | Isophorane                     | 0.33 1     | <      | U       | 0.33     | <                  | U    | 0.33 1     | <        | U       | 0.33 1    | <       | U       | 0.33 1               | i <                  | U       | 0.33         | 1 <      | U      | 0.33     | 1 <     | U      | 0.33     | 1 <        | U       | 0.5        | T . <          |      | 0.45           | 1 4            | < 0         |
| SEMIVOLATILES  | Naphthalene                    | 0.33 1     | <      | U       | 0.33     | <                  | U    | 0.33 1     | <        | U       | 0.33 1    | <       | U       | 0.33 1               | <                    | U       | 0.33         | 1 <      | U      | 0.33     | 1 <     | U      | 0.33     | 1 <        | 0       | 0.5        | 1 <            | . 0  | 0.45           | 1 .            | < 0         |
| SEMIVOLATILES  | Nitrobenzene                   | 0.33 1     | <      | U       | 0.33     | <                  | U    | 0.33 1     | <        | U       | 0.33 1    | <       | U       | 0.33 1               | <                    | U       | 0.33         | 1 <      | U      | 0.33     | 1 <     | U      | 0.33     | 1 <        | U       | 0.5        | 1 <            | : 0  | 0.45           | 1 1            | < U         |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine     | 0.33 1     | <      | U       | 0.33     | <                  | U    | 0.33 1     | <        | U       | 0.33 1    | <       | U       | 0.33 1               | <                    | . 6     | 0.33         | 1 <      | U      | 0.33     | 1 <     | U      | 0.33     | 1 <        | 0       | 0.5        | 1 <            |      | 0.45           | 1 .            | < U         |
| SEMIVOLATILES  | n-Nitrosodiphenylamine         | 0.33 1     | <      | U       | 0.33     | <                  | U    | 0.33 1     | <        | U       | 0.33 1    | <       | บ       | 0.33 1               | <                    | U       | 0.33         | 1 <      | U      | 0.33     | 1 <     | U      | 0.33     | 1 <        | U       | 0.5        | 1 <            | 0    | 0.45           | 1 .            | < 0         |
| SEMIVOLATILES  | Pentachlorophenol              | 1.65 1     | <      | U       | 1.65 1   | <                  | U    | 1.65 1     | <        | U       | 1.65 1    | <       | U       | 1.65 1               | <                    | U       | 1.65         | 1 <      | U      | 1.65     | 1 <     | U      | 1.65     | 1 <        | U       | 2.5        | 1 <            | . 0  | 2.3            | 1 4            | < U         |
| SEMIVOLATILES  | Phenanthrene                   | 0.33 1     | <      | U       | 0.33     | <                  | U    | 0.33 1     | <        | U       | 0.33 1    | <       | Ð       | 0.33 1               | <                    | U       | 0.33         | 1 <      | U      | 0.33     | 1 <     | U      | 0.33     | 1 <        | U       | 0.5        | 1 <            | U    | D.45           | 1 .            | < U         |
| SEMIVOLATILES  | Phenol                         | 0.33 1     | <      | U       | 0.33 1   | <                  | U    | 0.33 1     | <        | U       | 0.33 1    | <       | U       | 0.33 1               | <                    | Ð       | 0.33         | 1 <      | U      | 0.33     | 1 <     | U      | 0.33     | 1 <        | U       | 0.5        | 1 <            | U    | 0.45           | 1 .            | < 0         |
| SEMIVOLATILES  | Pyrene                         | 0.33 1     | <      | U       | 0.33     | <                  | U    | 0.33 1     | <        | U       | 0.33 1    | <       | U       | 0.33 1               | i <                  | U       | 0.33         | 1 <      | U      | 0.33     | 1 <     | U      | 0.33     | 1 <        | U       | 0.5        | 1 <            | U    | 0.45           | 1 .            | < U         |
| VOLATILES      | 1,1,1,2 Tetrachloroethane      |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         | 0.015      | 1 <            | : U  | 0.014          | 1 .            | < U         |
| VOLATILES      | 1,1,1-Trichloroethane          | 0.005 1    | <      | U       | 0.005    | i <                | U    | 0.005 1    | <        | U       | 0.005 1   | <       | U       | 0.005 1              | <                    | U       | 0.005        | 1 <      | U      | 0.005    | 1 <     | U      | 0.005    | 1 <        | U       | 0.008      | 1 <            | : U  | 0.007          | 1 .            | < U         |
| VOLATILES      | 1,1,2,2-Tetrachloroethane      | 0.005 1    | <      | U       | 0.005    | <                  | ย    | 0.005 1    | <        | U       | 0.005 1   | <       | U       | 0.005 1              | <                    | U       | 0.005        | 1 <      | U      | 0.005    | 1 <     | U      | 0.005    | 1 <        | U       | 0.008      | t <            | U    | 0.007          | t ·            | < ប         |
| VOLATILES      | 1,1,2-Trichloroethane          | 0.005 1    | <      | U       | 0.005    | i <                | ບ    | 0.005 1    | <        | U       | 0.005 1   | <       | U       | 0.005 1              | < <                  | U       | 0.005        | 1 <      | U      | 0.005    | 1 <     | U      | 0.005    | 1 <        | U       | 0.008      | 1 <            | : U  | 0.007          | 1 •            | < U         |
| VOLATILES      | 1,1-Dichloroethane             | 0.005 1    | <      | U       | 0.005    | <                  | U    | 0.005 1    | <        | U       | 0.005 1   | <       | U       | 0.005 1              | <                    | U       | 0.005        | 1 <      | ប      | 0.005    | 1 <     | U      | 0.005    | 1 <        | U       | 0.008      | 1 <            | : U  | 0.007          | 1 •            | < U         |
| VOLATILES      | 1,1-Dichloroethene             | 0.005 1    | <      | U       | 0.005    | <                  | U    | 0.005 1    | <        | U       | 0.005 1   | <       | U       | 0.005 1              | <                    | U       | 0.005        | 1 <      | U      | 0.005    | 1 <     | U      | 0.005    | 1 <        | U       | 0.008      | 1 <            | : U  | 0.007          | 1 .            | < U         |
| VOLATILES      | 1,1-Dichloropropene            |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         |            |                |      |                |                |             |
| VOLATILES      | 1,2,3-Trichlorobenzene         |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         |            |                |      |                |                |             |
| VOLATILES      | 1,2,3-Trichloropropane         |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         | 0.015      | 1 <            | U    | 0.014          | 1 •            | < U         |
| VOLATILES      | 1,2,4-Trichlorobenzene         |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         |            |                |      |                |                |             |
| VOLATILES      | 1,2,4-Trimethylbenzene         |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         |            |                |      |                |                |             |
| VOLATILES      | 1,2-Dibromo-3-chloropropane    |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         | 0.03       | 1 <            | : U  | 0.027          | 1 .            | < ប         |
| VOLATILES      | 1,2-Dibromoethane              |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         | 0.03       | 1 <            | : U  | 0.027          | 1 .            | < U         |
| VOLATILES      | 1,2-Dichlorobenzene            |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         |            |                |      |                |                |             |
| VOLATILES      | 1,2-Dichloroethane             | 0.005 1    | <      | U       | 0.005    | <ul><li></li></ul> | U    | 0.005 1    | <        | ป       | 0.005 1   | <       | ម       | 0.005 1              | <ul><li></li></ul>   | U       | 0.005        | 1 <      | U      | 0.005    | 1 <     | U      | 0.005    | 1 <        | U       | 0.008      | 1 <            | : U  | 0.007          | 1 •            | < 1)        |
| VOLATILES      | 1.2-Dichloroethene             | 0.005 1    | <      | U       | 0.005    | <                  | U    | 0.005 1    | <        | U       | 0.005 1   | <       | U       | 0.005 1              | <                    | U       | 0.005        | 1 <      | Ð      | 0.005    | 1 <     | U      | 0.005    | 1 <        | U       | 0.008      | 1 <            | U :  | 0.007          | 1 •            | < U         |
| VOLATILES      | 1,2-Dichloropropane            | 0.005 1    | <      | U       | 0.005    | <                  | U    | 0.005 1    | <        | U       | 0.005 1   | <       | U       | 0.005 1              | <                    | U       | 0.005        | 1 <      | U      | 0.005    | 1 <     | U      | 0.005    | 1 <        | U       | 0.008      | t <            | : U  | 0.007          | 1 .            | < U         |
| VOLATILES      | 1.2-Dimethy/benzene (o-Xylene) |            |        | -       |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         |            |                |      |                |                |             |
| VOLATILES      | 1.3.5-Trimethylbenzene         |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         |            |                |      |                |                |             |
| VOLATILES      | 1.3-Dichlorobenzene            |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         |            |                |      |                |                |             |
| VOLATILES      | 1.3-Dichloropropage            |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         |            |                |      |                |                |             |
| VOLATILES      | t d-Dichlombenzene             |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         |            |                |      |                |                |             |
| VOLATILES      | 2 2 Dichiaropronone            |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         |            |                |      |                |                |             |
| VOLATHES       | 2.Bidanana                     | 0.05 1     |        | 11      | 0.05     |                    |      | 0.05 1     | ~        |         | 0.05 1    |         | н       | 0.05 1               |                      | 11      | 6.05         | 1 c      | 18     | 0.05     | 1 e     | 11     | 0.05     | 1 6        | в       | 0.015      | 1 4            | . 11 | 0.014          | 1.             | < 11        |
| VOLATILES      | 2 Chlereethul view other       | 0.00 1     | -      |         | 0.00     |                    |      | 0.00 1     |          |         | 0.00 7    |         |         | 0.00 1               |                      | ň       | 0.00         |          | **     | 0.00     | 1 2     | u v    | 6.00     | 1 2        | ŭ       | 0.015      |                | · .  | 0.014          | ·<br>• ·       | < 11        |
| VOLATILES      | 2-Chiloroeutyi varyi easel     | 0.01 1     | `      | U       | 0.01     |                    | Ū.   | 0.01       |          | U       | 0.01 1    | `       | 0       | 0.01                 |                      | 0       | 0.01         | , 、      | 0      | 0.01     | , `     | v      | 0.01     |            | v       | 0.015      |                | , U  | 0.014          | •              | ` '         |
| VOLATILED      |                                | 0.05       | -      |         | 0.02     |                    | п    | 6.0F 4     |          |         | 6.0C 4    | ,       |         | 0.05                 |                      |         | 8.05         |          |        | 0.00     |         |        | 0.04     | 1 /        |         | 8.016      | + -            |      | 0.014          | ۲.             | с н         |
| YOLATILES      |                                | U.U5 1     | <      | U       | 0.05     |                    | U    | 0.03 1     |          | U       | 0.00 1    | •       | U       | 0.05 7               | · · ·                | U       | 0.05         | 1 <      | U      | 0.05     |         | 0      | 0.05     |            | U       | 0.015      | 1 <sup>4</sup> |      | 0.014          | 1<br>1         | - U<br>2 II |
| VULAIILES      | Z-Propenal                     |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         | V./b       | I 4            | U U  | 0.68           |                | ×υ          |
| VULAIRES       | 4-Chlorotoluene                | _          |        |         | • /      |                    |      |            |          |         |           |         |         | • -                  |                      |         | • •          |          |        |          |         |        |          |            |         |            |                |      |                |                |             |
| VOLATILES      | Acetone                        | 0.1 1      | <      | U       | 0.1      | <                  | U    | 0.1 1      | <        | U       | 0.1 1     | <       | U       | 0.1 1                | <                    | U       | 0.1          | 1 <      | U      | 0.1      | 1 <     | U      | 0.t      | 1 <        | U       | 0.015      | 1 <            | : U  | 0.014          | 1 '            | < U         |
| VOLATILES      | Acetonitrile                   |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          | -      |          |         |        |          |            |         | 0.15       | 1 4            | - U  | 0.14           | 1 1            | × U         |
| VOLATILES      | Acrylonitile                   |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         | 0.15       | 1 <            | : 0  | 0.14           | 1              | < U         |
| VOLATILES      | Allyl chloride                 |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         | 0.015      | 1 <            | C U  | 0.014          | 1 •            | < U         |
| VOLATILES      | Benzene                        | 0.005 1    | <      | U       | 0.005    | <                  | ย    | 0.005 1    | <        | Û       | 0.005 1   | <       | U       | 0.005 1              | <                    | U.      | 0.005        | 1 <      | U      | 0.005    | 1 <     | U      | 0.005    | 1 <        | - U     | 0.008      | 1 <            | U    | 0.007          | 1              | < U         |
| VOLATILES      | Bromobenzene                   |            |        |         |          |                    |      | -          |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         |            |                |      |                |                |             |
| VOLATILES      | Bromochloromethane             |            |        |         |          |                    |      |            |          |         |           |         |         |                      |                      |         |              |          |        |          |         |        |          |            |         |            |                |      |                |                |             |

Shaw Environmental, Inc.



## Table 3-64 Concentrations of Chemicals in Soil Samples Associated with Sump 064

|                |                             |       |        |        |    |        |         |      | 00 | icenti | auc     | 115  |    | neunc  | <b>d</b> 15 | m    | 2011 | painh  | 621     | 433  | UCIAI |        | ui s    | -4111 | h 00 |        |        |      |    |        |         |     |     |
|----------------|-----------------------------|-------|--------|--------|----|--------|---------|------|----|--------|---------|------|----|--------|-------------|------|------|--------|---------|------|-------|--------|---------|-------|------|--------|--------|------|----|--------|---------|-----|-----|
| LOCATION _CODE |                             | L     | H-SO   | 64-02  |    | L      | I-S064  | -02  |    | U      | I-S065  | -01  |    | LH     | I-S065      | 5-01 |      | U      | H-S065  | -01  |       | U      | I-S065  | -02   |      | LH     | I-S065 | -02  |    | LH     | I-S065- | 02  |     |
| SAMPLE_NO      |                             | ւ     | I-S06/ | 4-02_2 | 2  | LH     | S064-   | 02_3 |    | LH-    | S065-(  | 01_1 |    | 1H-9   | S065-       | 01_2 |      | LH     | -\$065- | 01_3 |       | 1.H    | S065-   | 02_1  |      | 114-   | S065-  | 02_2 |    | LH     | \$065-0 | 2_3 |     |
| SAMPLE_DATE    |                             |       | 8/5/1  | 993    |    | i      | 8/5/199 | 3    |    | 1      | 3/5/199 | 3    |    | 8      | /5/19       | 93   |      |        | 8/5/19  | 33   |       | 1      | 8/5/199 | 33    |      | 8      | /5/199 | 33   |    | 8      | V5/199  | 3   |     |
| Depth          |                             |       | 2.5-   | 3 Ft   |    |        | 4 - 4.5 | Ft   |    | (      | ).5 - 1 | Ft   |    | 2      | - 2.5       | Ft   |      |        | 4 - 4.5 | Ft   |       | 1      | 0.5 - 1 | Ft    |      | 3      | - 3.5  | Ft   |    | 4      | - 4.5 F | t   |     |
| SAMPLE_PURPOSE |                             |       | RE     | G      |    |        | REG     |      |    |        | REG     |      |    |        | REG         | ;    |      |        | REG     |      |       |        | REG     |       |      |        | REG    |      |    |        | REG     |     |     |
| Test Group     | Parameter (Units = mg/kg)   | Resul | t DIL  | L LQ   | VQ | Result | DIL     | LQ   | VQ | Result | DIL     | LQ   | VQ | Result | DIL         | LQ   | VQ   | Result | DIL     | tQ   | VQ    | Result | DIL     | LQ    | VQ   | Result | DIL    | LQ   | VQ | Result | DIL.    | tQ  | VQ  |
| VOLATILES      | Bromodichloromethane        | 0.005 | 5 1    | <      | U  | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1           | <    | U    | 0.005  | 1       | <    | U     | 0.005  | 1       | <     | U    | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U   |
| VOLATILES      | Bromoform                   | 0.005 | 5-1    | <      | U  | 0.005  | 1       | <    | บ  | 0.005  | 1       | <    | IJ | 0.005  | 1           | <    | U    | 0.005  | 1       | <    | U     | 0.005  | 1       | <     | U    | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U   |
| VOLATILES      | Bromomethane                | 0.01  | 1 1    | <      | U  | 0.01   | f       | <    | U  | 0.01   | 1       | <    | Ð  | 0.01   | 1           | <    | U    | 0.01   | 1       | <    | U     | 0.01   | 1       | <     | U    | 0.01   | 1      | <    | U  | 0.01   | 1       | <   | U   |
| VOLATILES      | Carbon disulfide            | 0.005 | 51     | <      | U  | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1           | <    | U    | 0.005  | 1       | <    | U     | 0.005  | 1       | <     | U    | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U   |
| VOLATILES      | Carbon tetrachloride        | 0.005 | 5 1    | <      | U  | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | Ð  | 0.005  | 1           | <    | U    | 0.005  | 1       | <    | υ     | 0.005  | 1       | <     | U    | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U   |
| VOLATILES      | Chlorobenzene               | 0.005 | 51     | <      | U  | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1           | <    | U    | 0.005  | 1       | <    | U     | 0.005  | 1       | <     | U    | 0.005  | t      | <    | U  | 0.005  | 1       | <   | U   |
| VOLATILES      | Chioroethane                | 0.01  | 1      | <      | U  | 0.01   | 1       | <    | U  | 0.01   | 1       | <    | U  | 0.01   | 1           | <    | U    | 0.01   | 1       | <    | U     | 0.01   | 1       | <     | Ų    | 0.01   | 1      | <    | U  | 0.01   | t       | <   | U   |
| VOLATILES      | Chloroform                  | 0.005 | 51     | <      | U  | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | ป  | 0.005  | 1           | <    | U    | 0.005  | 1       | <    | U     | 0.005  | 1       | <     | U    | 0.005  | 1      | <    | U  | 0.005  | t       | <   | U   |
| VOLATILES      | Chloromethane               | 0.01  | 1      | <      | U  | 0.01   | 1       | <    | U  | 0.01   | 1       | <    | U  | 0.01   | ŧ           | <    | U    | 0.01   | 1       | <    | U     | 0.01   | 1       | <     | U    | 0.01   | 1      | <    | U  | 0.01   | 1       | <   | U   |
| VOLATILES      | Chloroprene                 |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILE\$     | cis-1,2-Dichloroethene      |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | cis-1,3-Dichloropropene     | 0.00  | 51     | <      | U  | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1           | <    | U    | 0.005  | 1       | <    | U     | 0.005  | 1       | <     | U    | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U   |
| VOLATILES      | Dibromochloromethane        | 0.005 | 51     | <      | U  | 0.005  | 1       | <    | Ű  | 0.005  | 1       | <    | บ  | 0.005  | 1           | <    | U    | 0.005  | 1       | <    | U     | 0.005  | 1       | <     | U    | 0.005  | 1      | <    | U  | 0.005  | t       | <   | U   |
| VOLATILES      | Dibromomethane              |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | Dichlorodifluoromethane     |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | Ethyl methacrylate          |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | Ethvibenzene                | 0.005 | 5 1    | <      | U  | 0.005  | 1       | <    | tt | 0.005  | 1       | <    | U  | 0.005  | ŧ           | <    | U    | 0.005  | 1       | <    | U     | 0.005  | 1       | <     | IJ   | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U   |
| VOLATILES      | Hexachlorobutadiene         |       |        |        | •  |        |         |      | •  |        |         |      | •  |        |             |      | •    | •••••  |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | IODOMETHANE                 |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | ISOBUTYL ALCOHOL            | [     |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | Isopropylbenzene            |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       | -      |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | m.p-Xvienes                 |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | Methacrylonitrie            |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | Methyl isobutyl ketone      | 0.05  | 51     | <      | U  | 0.05   | 1       | <    | U  | 0.05   | 1       | <    | ŧ  | 0.05   | 1           | <    | u    | 0.05   | 1       | <    | ับ    | 0.05   | 1       | <     | U    | 0.05   | 1      | <    | U  | 0.05   | 1       | <   | U   |
| VOLATILES      | METHYL METHACRYLATE         | 1     |        |        | -  |        | -       |      | -  |        | -       |      | -  |        | -           |      | -    |        | -       |      | -     |        |         |       | -    |        |        |      | -  |        | -       |     | -   |
| VOLATILES      | Methylene chloride          | 0.005 | 51     | <      | U  | 0.005  | 1       | <    | ប  | 0.005  | 1       | <    | U  | 0.005  | 1           | <    | U    | 0.005  | 1       | <    | U     | 0.005  | 1       | <     | U    | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U   |
| VOLATILES      | Naphthajene                 |       |        |        | -  |        |         |      | -  |        | -       |      | -  |        |             |      | -    |        |         |      | -     |        |         |       | -    |        |        |      | -  |        | -       |     | -   |
| VOLATILES      | n-BUTYLBENZENE              |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | n-PROPYLBENZENE             | ł     |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | Pentachioroethane           |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | D-ISOPROPYLTOLUENE          |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | Propionitrile               |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | sec-BUTYL8ENZENE            |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | Styrene                     | 0.005 | 51     | <      | U  | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1           | <    | U    | 0.005  | 1       | <    | U     | 0.005  | 1       | <     | บ    | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U   |
| VOLATILES      | tert-BUTYLBENZENE           |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | Tetrachioroethene           | 0.005 | 51     | <      | U  | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1           | <    | U    | 0.005  | 1       | <    | U     | 0.005  | 1       | <     | U    | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U   |
| VOLATILES      | Toluene                     | 0.005 | 5 1    | <      | U  | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | Ð  | 0.005  | 1           | <    | U    | 0.005  | 1       | <    | U     | 0.005  | 1       | <     | Ð    | 0.005  | 1      | <    | Ð  | 0.005  | 1       | <   | ·IJ |
| VOLATILES      | trans-1,2-Dichlomethene     |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | trans-1.3-Dichloropropene   | 0.005 | 5 1    | <      | υ  | 0.005  | 1       | <    | IJ | 0.005  | 1       | <    | U  | 0.005  | 1           | <    | U    | 0.005  | 1       | <    | U     | 0.005  | 1       | <     | U    | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | U   |
| VOLATILES      | trans-1.4-Dichloro-2-butene |       |        |        |    |        |         |      |    |        |         |      |    |        |             |      |      |        |         |      |       |        |         |       |      |        |        |      |    |        |         |     |     |
| VOLATILES      | Trichloroethene             | 0.005 | 5 1    | <      | U  | 0.005  | 1       | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1           | <    | U    | 0.005  | ť       | <    | U     | 0.005  | 1       | <     | υ    | 0.005  | 1      | <    | υ  | 0.005  | 1       | <   | U   |
| VOLATILES      | Trichlorofluoromethane      | 1     |        |        | -  |        | -       |      | -  |        | ~       |      | -  |        | ,           |      | 2    |        | •       |      | -     |        |         |       | 2    |        | -      |      | 2  |        |         |     | 2   |
| VOLATILES      | Vinyl acetate               | 0.05  | 5 1    | <      | U  | 0.05   | 1       | <    | U  | 0.05   | 1       | <    | U  | 0.05   | 1           | <    | U    | 0.05   | t       | <    | U     | 0.05   | 1       | <     | ប    | 0.05   | 1      | <    | U  | 0.05   | 1       | <   | U   |
| VOLATILES      | Vinyl chloride              | 0.01  | 1 1    | <      | Ð  | 0.01   | 1       | <    | U  | 0.01   | 1       | <    | Ū  | 0.01   | 1           | <    | Ū    | 0.01   | 1       | <    | Ū     | 0.01   | 1       | <     | Ū    | 0.01   | t      | <    | บ  | 0.01   | 1       | <   | Ð   |
| VOLATILES      | Xylenes, Total              | 0.005 | 5 1    | <      | U  | 0.005  | 1       | <    | Ū  | 0.005  | 1       | <    | Ū  | 0.005  | ſ           | <    | Ū    | 0.005  | 1       | <    | Ū     | 0.005  | t       | <     | Ū    | 0.005  | 1      | <    | U  | 0.005  | 1       | <   | Ū   |
|                |                             |       |        |        | -  |        | -       |      | -  |        | -       |      | -  |        |             |      | -    |        | -       |      | -     |        | -       |       | -    |        | -      |      | -  |        | -       |     | -   |

Footnoles are shown on cover page to Tables Section.

Page 6 of 6

Shaw Environmental, Inc.



| เ<br>เห<br>1<br>( | HS-3-20<br>S-3-20<br>/10/19<br>D- 0.5 | 20<br>IQC<br>95<br>Ft |     | և<br>Լ<br>1։ | HS-3-<br>HS-3-<br>/10/19<br>) - 0.5 | 20<br>20<br>195<br>Ft |       |
|-------------------|---------------------------------------|-----------------------|-----|--------------|-------------------------------------|-----------------------|-------|
| Denuk             | - FU                                  | 10                    | 10  | Decult       | DI                                  |                       | 20    |
| Result            | UIL                                   | tu                    |     | A DOZ        |                                     |                       |       |
| 0.008             |                                       |                       | 0   | 0.007        | 1                                   |                       |       |
| 0.008             | 1                                     | <                     | 0   | 0.007        | 1                                   | <                     | U     |
| 0.015             | 1                                     | <                     | 0   | 0.014        | 1                                   | <                     | U<br> |
| 0.008             | 1                                     | <                     | U   | 0.007        | 1                                   | <                     | Ų     |
| 0.008             | 1                                     | <                     | U   | 0.007        | 1                                   | <                     | U     |
| 0.008             | 1                                     | <                     | U   | 0.007        | 1                                   | <                     | U     |
| 0.015             | 1                                     | <                     | U   | 0.014        | 1                                   | <                     | U     |
| 0.008             | 1                                     | <                     | U   | 0.007        | 1                                   | <                     | U     |
| 0.015             | 1                                     | <                     | U   | 0.014        | 1                                   | <                     | U     |
| 0.15              | 1                                     | <                     | U   | 0.14         | 1                                   | <                     | U     |
| 0.008             | 1                                     | <                     | U   | 0.007        | t                                   | <                     | U     |
| 800.0             | 1                                     | <                     | U   | 0.007        | 1                                   | <                     | U     |
| 0.03              | 1                                     | <                     | U   | 0.027        | 1                                   | <                     | U     |
| 0.03              | 1                                     | <                     | U   | 0.027        | 1                                   | <                     | U     |
| 0.03              | 1                                     | <                     | U   | 0.027        | 1                                   | <                     | U     |
| 800.0             | i                                     | <                     | U   | 0.007        | 1                                   | <                     | U     |
| 0.015             | 1                                     | <                     | н   | 0.614        | 1                                   | ć                     |       |
| 0.01.0            | 1                                     | è                     | ii. | 27           |                                     | ć                     | ы.    |
| 3                 | ſ                                     |                       | U   | 2.1          | •                                   |                       | Ŭ     |
| 0.03              | 1                                     | <                     | U   | 0.027        | 1                                   | <                     | U     |
| 0.015             | 1                                     | <                     | U   | 0.014        | 1                                   | <                     | U     |
| 0.03              | 1                                     | <                     | U   | 0.027        | 1                                   | <                     | U     |
| 0,008             | 1                                     | <                     | U   | 0.007        | 1                                   | <                     | U     |
|                   |                                       |                       |     |              |                                     |                       |       |
|                   |                                       |                       |     |              |                                     |                       |       |
| 0.03              | 1                                     | <                     | U   | 0.027        | 1                                   | <                     | υ     |
| 0.076             | 1                                     | <                     | U   | 0.068        | 1                                   | <                     | U     |
| 0.008             | 1                                     | ۲                     | U   | 0.007        | 1                                   | <                     | U     |
| 0.008             | 1                                     | <                     | U   | 0.007        | 1                                   | <                     | υ     |
| 0.008             | 1                                     | <                     | U   | 0.007        | 1                                   | <                     | U     |
|                   |                                       |                       |     |              |                                     |                       |       |
| 0.008             | 1                                     | <                     | U   | 0.007        | 1                                   | <                     | U     |
| 0.03              | 1                                     | <                     | U   | 0.027        | 1                                   | <                     | U     |
| 0.008             | 1                                     | <                     | U   | 0.007        | 1                                   | <                     | U     |
| 0.015             | 1                                     | <                     | U   | 0.014        | 1                                   | <                     | U     |
| 0.015             | 1                                     | <                     | U   | 0.014        | 1                                   | <                     | Ű     |
| 0.015             | 1                                     | <                     | Ű   | 0.014        | 1                                   | <                     | U     |
| 0.008             | 1                                     | <                     | Ū   | 0.007        | 1                                   | <                     | Ū     |

Table 3-65 Concentrations of Chemicals in Soil Samples Associated with Sump 065

| [SUMP] = SUMP065 |                             |                   |                   |                  |                  |                  |                  | 170000           |                         |                        |             | LU COSA M               | 111 2024 01     | I H SOSA M       | 111.5058.02      |
|------------------|-----------------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|-------------------------|------------------------|-------------|-------------------------|-----------------|------------------|------------------|
| LOCATION_CODE    |                             | 35SUMP064-SB01    | 35SUMP064-SB01    | 47SB17           | 47SB17           | 47SB18           | 4/SB33           | 4/5833           |                         | LIN-DLU00-VI           |             | ( LIP-SU04-01           | LI-3004-01      | 14.5054.01 9     | 1415064-02       |
| SAMPLE_NO        |                             | 35-SMP064-SB01-01 | 35-SMP064-SB01-02 | 47SB17(0-0_5)    | 47SB17(0-0_5)QC  | 4/SB18(0-0_5)    | 4/5833(0-0_5)    | 4/5833(1-2)      | 0////002                | LIT-UL003-01 QC        | 0/2/1002    | 9/5/1602                | 8/6/1003        | 8/5/1003         | 8/5/1903         |
| SAMPLE_DATE      |                             | 9/20/2006         | 9/20/2006         | 6/3/2000         | 6/3/2000         | 6/3/2000         | 6/3/2000         | 0/3/2000         | 0/0/1993                | 0/0/1993               | 0/3/1993    | 15.25                   | 8.45Ft          | 05-18            | 1-15Ft           |
| Depth            |                             | 1-1Ft             | 5-5Ft             | 0-0.5 Ft         | 0-0.5 M          | 0-0.5Ht          | 0-0.5 Ft         | 1-21             | 2-23-1                  | 1.3-2 m                | 1.3-2.FL    | PEC                     | PEC             | REG              | REG              |
| SAMPLE_PURPOSE   |                             | REG               | REG               | REG              | FD               | KEG              | REG              |                  | REG<br>Result Dil LO VO | FU<br>Dom/# DII IO 3/0 |             | NLO<br>Decult DIL IO VO | Recult DI LO VO | Result DII LO VO | Result DIL FO VO |
| Test Group       | Parameter (Units = mg/kg)   | Result Dil LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LU VU | Result DIL LQ VQ | Result DIL LU VU | RESUL DIL LU VU         |                        |             |                         | 07 1 < 11       | 07 1 < 11        | 07 t < U         |
| EXPLOSIVES       | 1,3,5-Trinitrobenzene       |                   |                   |                  |                  |                  |                  |                  |                         | 0.7 1 2 0              |             | 0.1 1 × 0<br>05 1 < 11  | 05 1 < 1        | 05 1 < 1         | 05 1 < U         |
| EXPLOSIVES       | 1,3-Dinitrobenzene          |                   |                   |                  |                  |                  |                  |                  | 0.5 1 < 0               |                        | 0.5 1 < 0   | 0.51 < 0                | 0.5 1 < U       | 0.5 1 < U        | 05 1 < 1         |
| EXPLOSIVES       | 2,4,6-Trinitrotoluene       |                   |                   |                  |                  |                  |                  |                  | 0.5 1 < 0               | 0.5 1 < 0              |             |                         | 0.51 < 0        |                  |                  |
| EXPLOSIVES       | 2,4-Dinitrotoluene          |                   |                   |                  |                  |                  |                  |                  | 0.5 1 < 0               | 0.5 1 < 0              | 0.5 1 < 0   |                         | 0.5 1 < 0       |                  |                  |
| EXPLOSIVES       | 2,6-Dinitrotoluene          |                   |                   |                  |                  |                  |                  |                  | 0.5 1 < 0               | 0.5 1 < 0              | 0.5 1 < 0   | 0.5 1 < 0               | 0.5 1 < 0       | 0.5 1 4 0        | 0.5 1 5 0        |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene  |                   |                   |                  |                  |                  |                  |                  |                         |                        |             |                         |                 |                  |                  |
| EXPLOSIVES       | HMIX                        |                   |                   |                  |                  |                  |                  |                  | 0.9 1 < U               | 0.9 1 < U              | 0.9 1 < 0   | 0.9 1 < 0               | 0.9 1 < 0       | 0.9 1 < 0        | 0.9 1 < 0        |
| EXPLOSIVES       | m-Nitrotoluene              |                   |                   |                  |                  |                  |                  |                  | 0.9 1 < U               | 0.9 1 < U              | 0.9 1 < U   | 0.9 1 < 0               | 0.9 1 < 0       | 0.9 1 < U        | 0.9 1 < 0        |
| EXPLOSIVES       | NIOBIUM                     |                   |                   |                  |                  |                  |                  |                  | 0.6 1 < U               | 0.6 1 < U              | 0.6 1 < U   | 0.6 1 < U               | 0.6 1 < U       | 0.6 1 < U        | 0.6 1 < U        |
| EXPLOSIVES       | Nitrobenzene                |                   |                   |                  |                  |                  |                  |                  |                         |                        |             |                         |                 |                  |                  |
| EXPLOSIVES       | o-Nitrotoluene              |                   |                   |                  |                  |                  |                  |                  | 0.9 1 < U               | 0.9 1 < U              | 0.9 t < U   | 0.9 1 < U               | 0.9 1 < U       | 0.9 1 < U        | 0.9 1 < U        |
| EXPLOSIVES       | p-Nitratoluene              |                   |                   |                  |                  |                  |                  |                  | 1.1 1 < U               | 1.1 1 < U              | 1.1 1 < U   | 1.1 1 < U               | 1,1 1 < U       | 1.1 1 < U        | 1.1 1 < U        |
| EXPLOSIVES       | RDX                         |                   |                   |                  |                  |                  |                  |                  | 0.5 1 < U               | 0.5 1 < ป              | 0.5 1 < U   | 0.5 1 < U               | 0.5 1 < U       | 0.5 1 < U        | 0.5 1 < U        |
| EXPLOSIVES       | Tetry                       |                   |                   |                  |                  |                  |                  |                  | 1.9 1 < U               | 1.9 1 < U              | 1.9 1 < U   | 1,9 1 < U               | 1.9 1 < U       | 1.9 1 < U        | 1.9 1 < U        |
| METALS           | Aleminum                    |                   |                   |                  |                  |                  |                  |                  | 10100 1                 | 6340 1                 | 7670 1      | 11600 1                 | 14500 1         | 7950 1           | 14000 1          |
| NETALO           | Antimony                    |                   |                   |                  |                  |                  |                  |                  | 31 < U                  | 3 1 < U                | 31 < U      | 31 < U                  | 31 < U          | 31 < U           | 3 1 < U          |
| METALO           | Amonio                      |                   |                   |                  |                  |                  |                  |                  | 3.2 1                   | 4.8 1                  | 4.2 1       | 2.1 1                   | 28 1            | 5.3 1            | 3.9 1            |
| METALO           | Puscing                     |                   |                   |                  |                  |                  |                  |                  | 60.4 1                  | 68 1                   | 90 1        | 172 1                   | 734 1           | 104 1            | 535 1            |
| METALO           |                             |                   |                   |                  |                  |                  |                  |                  | 1 1 < U                 | 11 < U                 | 11 < U      | 11 < U                  | 11 < U          | 11 < U           | 11 < 0           |
| METALS           | Cathlorn                    |                   |                   |                  |                  |                  |                  |                  | 925 1                   | 2260 1                 | 1500 1      | 1830 1                  | 1510 1          | 4150 1           | 3130 1           |
| METALS           | Cacium                      | 1                 |                   |                  |                  |                  |                  |                  | 11.3 1                  | 11 1                   | 15 1        | 13.8 1                  | 11.8 1          | 14 1             | 19.3 1           |
| METALS           | Chromum                     |                   |                   |                  |                  |                  |                  |                  | 34 1                    | 5 1                    | 7 1         | 99 1                    | 25.3 1          | 10 1             | 15.9 1           |
| METALS           | Cobart                      |                   |                   |                  |                  |                  |                  |                  | 16 1                    | A 1                    | 31          | 28 1                    | 37 1            | 2 1              | 29 1             |
| METALS           | Copper                      |                   |                   |                  |                  |                  |                  |                  |                         | 05 1 C IL              | 051 < 11    |                         | 65 1 < II       | 05 1 < ti        | 05 t < U         |
| METALS           | Cyanide, Total              |                   |                   |                  |                  |                  |                  |                  | 12800 1                 | 11400 1                | 15200 1     | 8770 1                  | 12800 1         | 14000 1          | 20500 1          |
| METALS           | Iron                        |                   |                   |                  |                  |                  |                  |                  | 12000 1                 | 14400 1                | 122 1       | 6710 1<br>E9 1          | 03 1            | 11.5 1           | 71 1             |
| METALS           | Lead                        |                   |                   |                  |                  |                  |                  |                  | 4.2 1                   | 0.2 1                  | 12.3        | 754 1                   | 1.00 1          | 526 1            | 1208 t           |
| METALS           | Magnesium                   |                   |                   |                  |                  |                  |                  |                  | 395 1                   | 590 i                  | 400 1       | 104 1                   | 1390 I          | 777 1            | 638 1            |
| METALS           | Manganese                   | ]                 |                   |                  |                  |                  |                  |                  | 61.9 1                  | 185 1                  | 320 1       | 30 1                    |                 |                  |                  |
| METALS           | Mercury                     |                   |                   |                  |                  |                  |                  |                  | 0.1 1 < 0               | 0.1 1 < 0              | 0.1 1 < 0   |                         | 0.1 1 < 0       | 0.1 1 4 0        | 0.1 1 ~ 0        |
| METALS           | Potassium                   | 1                 |                   |                  |                  |                  |                  |                  | 385 1                   | 390 1                  | 335 1       | 492 1                   | 508 1           | 346 1            | 053 1            |
| METALS           | Selenium                    |                   |                   |                  |                  |                  |                  |                  | 11 < U                  | 11 < 0                 | 11 < 0      | 11 < U                  | 11 < 0          | 11 < 0           | 11 < 0           |
| METALS           | Silver                      |                   |                   |                  |                  |                  |                  |                  | 11 < U                  | 1 1 < U                | 11 < 0      | 11 < 0                  | 11 < 0          | 11 < 0           | 11 < 0           |
| METALS           | Strontium                   |                   |                   |                  |                  |                  |                  |                  | 10 1 < U                | 14 1                   | 10 1        | 14.7 1                  | 37 1            | 13 1             | 42 1             |
| METALS           | Thallium                    |                   |                   |                  |                  |                  |                  |                  |                         |                        |             |                         |                 |                  | ·                |
| METALS           | Zinc                        |                   |                   |                  |                  |                  |                  |                  | 12 1                    | 15 1                   | 11 1        | 18.8 1                  | 27 1            | 14 1             | 28 1             |
| PERC             | Perchlorate                 | 0.0394 4 U        | 0.0998 10 U       | 0.0395 1 J       | 0.00528 1 < UJ   | 0.00552 1 < U    | 0.00611 1 < U    | 0.00601 1 < U    |                         |                        |             |                         |                 |                  |                  |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene      | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U  | 0.33 1 < U              | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 1.2-Dichlorobenzene         | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U  | I 0.33 1 ≺ U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 1.3-Dichlorobenzene         | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U  | 0.33 1 < U              | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 1.4-Dichlorobenzene         | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U  | U 0.33 1 < U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2.4.5-Trichlorophenol       | 0.895 5 U         | 0.193 t U         |                  |                  |                  |                  |                  | 1.65 1 < U              | 1.65 1 < U             | 1.65 t < U  | / 1.65 1 < U            | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | 2.4.6-Trichkronhenol        | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U  | I 0.33 1 < U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMINOLATILES    | 2 4-Dichlorophenol          | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 t < U             | 0.33 1 < U  | I 0.33 1 < U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOR ATHES    | 2 4 Dimethylphenol          | 0.895 5 U         | 0.193 1 1         |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U  | I 0.33 1 < U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMBICIANIES     | 2 A.Disitronhenni           | 447 5 11          | 0.963 1 11        |                  |                  |                  |                  |                  | 1.65 1 < U              | 1.65 1 < U             | 1.65 1 < U  | ∣ 1.65 1 < U            | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | 2 & Divitrate/rease         | 0.895 5 11        | 0.103 1 11        |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U  | I 0.33 1 < U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
|                  | 2.6 Disitotoluone           | 0.805 5 11        | 0.103 1 11        |                  |                  |                  |                  |                  | 0.33 f < U              | 0.33 1 < U             | 0.33 1 < U  | ) 0.33 1 < U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2,0-Dinio obloche           | 0.000 5 0         | A 103 1 11        |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U  | / 0.33 t < U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    |                             | 0.005 5 0         | 0.103 1 11        |                  |                  |                  |                  |                  | 033 1 < U               | 0.33 1 < U             | 0.33 1 < U  | ∪ 0.33 1 < U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2-CIRCIOPIEIRO              | 0.093 5 0         | 0.100 1 11        |                  |                  |                  |                  |                  | 0.33 1 < 11             | 0.33 1 < 11            | 0.33 1 < U  | 0.33 1 < U              | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Memyinaphmalene           | 0.095 5 0         | 0.193 1 U         |                  |                  |                  |                  |                  | 0.00 1 × U              | 0.33 1 < 1             | 0.33 1 < 11 | 033 1 < U               | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Memylphenol               | 0.895 5 0         | 0.193 1 U         |                  |                  |                  |                  |                  | 165 1 < 11              | 165 1 < 1              | 165 1 < 1   | 165 1 < 1               | 165 1 < 11      | 165 1 < 1        | 1.65 1 < U       |
| SEMIVOLATILES    | 2-Nitroaniline              | 4.47 5 U          | 0.963 1 U         |                  |                  |                  |                  |                  | 0.22 1 4 11             | 033 1 < 1              | 033 1 < 1   | 033 1 < 1               | 0.33 1 < U      | 0.33 1 < 1       | 033 1 < U        |
| SEMIVOLATILES    | 2-Nitrophenol               | 0.895 5 0         | 0,193 1 U         |                  |                  |                  |                  |                  | 0.5 1 20.0              | 0.55 1 < 11            | 0.00 1 2 1  | U > 1 220 1             | 0.65 1 < 1      | 0.65 1 < 1       | 065 1 < U        |
| SEMIVOLATILES    | 3,3-Dichlorobenzidine       | 1.79 5 0          | 0.385 1 U         |                  |                  |                  |                  |                  | 0.03 1 1 0              |                        | 162 1 4 1   | 1 165 1 4 1             | 165 1 2 11      | 165 1 4 11       | 165 1 4 1        |
| SEMIVOLATILES    | 3-Nitroanifine              | 4.47 5 U          | 0.953 1 U         |                  |                  |                  |                  |                  | 1,05 1 4 0              | 1.05 1 4 0             | 1.05 1 0    |                         | 100 1 4 0       | 1.03 1 4 0       | 1.65 1 4 11      |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol  | 4.47 5 U          | 0.963 1 U         |                  |                  |                  |                  |                  | 1.55 T < U              | 1.105 1 < U            | 1.00 1 < U  | , i.co, i ≤ U           | 1.00 E S U      | 1.03 1 5 0       | 0.02 1 1 0       |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |                  | 0.33 T < U              | 0.33 1 < U             | 0.33 1 < 0  | / U.33 1 < U            | U.33 1 < U      | 0.50 1 5 0       |                  |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |                  | 0.65 1 < U              | 0.65 1 < U             | 0.05 1 < U  | u.u.u.s 1 < U           | 0.05 1 < U      | U > 1 60.0       | 0.00 1 4 0       |
| SEMIVOLATILES    | 4-Chloroaniline             | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |                  | 0.65 1 < U              | 0.65 1 < U             | 0.65 1 < U  | 0.65 1 < U              | 0.65 1 < U      | 0.65 1 < 0       | U.05 1 < U       |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U  | ) 0.33 1 < U            | 0.33 t < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Methylphenol              | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 t < U  | ) 0.33 1 < U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Nitroaniline              | 4.47 5 U          | 0.963 1 U         |                  |                  |                  |                  |                  | 1.65 1 < U              | 1.65 1 < U             | 1.65 1 < U  | ) 1.65 1 < U            | 1.65 t < U      | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | 4-Nitrophenol               | 4,47 5 U          | 0.963 1 U         |                  |                  |                  |                  |                  | 1.65 1 < U              | 1.65 1 < U             | 1.65 t < U  | 1.65 1 < U              | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVO: ATILES   | Acenaohthene                | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 t < U  | J 0.33 1 < U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMINO: ATHES    | Aceraohthylene              | 0.895 5 11        | 0.193 1 11        |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U  | J 0.33 1 < U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMINOI ATHES    | Anthracene                  | 0.895 5 11        | 0.193 1 11        |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 t < U  | J 0.33 t'< U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 t < U       |
|                  | Renzola)aothracene          | 0.895 5 11        | 0193 1 1          |                  |                  |                  |                  |                  | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U  | J 0.33 1 < ⊎            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| JUNITOLATILED    | PONEO(O)0000 00000          | 0.000 0 0         | 4.104 1 6         |                  |                  |                  |                  |                  |                         | -                      |             |                         |                 |                  |                  |

Shaw Environmental, Inc.

- († 12 - )

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-65

## Concentrations of Chemicals in Soil Samples Associated with Sump 065

|                                |   |                   |                   |                  | Concentrations             | of Chemicals in  | Son Samples A           | SSUCIALEU WILLI       |                  |                 |                  | 111 DOG# 01         | 111 5064 01      | 11.5064.01       | 14.5064.02       |
|--------------------------------|---|-------------------|-------------------|------------------|----------------------------|------------------|-------------------------|-----------------------|------------------|-----------------|------------------|---------------------|------------------|------------------|------------------|
| LOCATION_CODE                  |   | 35SUMP064-SB01    | 35SUMP064-SB01    | 47SB17           | 47SB17                     | 47SB18           | 475B33<br>475B33(0.0 5) | 475B33<br>475B33(1-2) | LH-UL064-01      | LH-DL065-01 O   | LH-DL065-01      | LH-S064-01_1        | LH-\$054-01_2    | LH-S064-01_3     | LH-S064-02_1     |
| SAMPLE_NO                      |   | 35-SMP064-SB01-01 | 35-SMP064-SB01-02 | 475017(0-0_5)    | 473617(0-0_5)00<br>6/02000 | 6/3/2000         | 6/3/2000                | 6/3/2000              | 8/5/1993         | 8/5/1993        | 8/5/1993         | 8/5/1993            | 8/5/1993         | 8/5/1993         | 8/5/1993         |
| SAMPLE_DATE                    |   | 5/20/2000         | 5-5Ft             | 0-0.5 Ft         | 0-0.5Ft                    | 0-0.5 Ft         | 0-0.5 Ft                | 1-2Ft                 | 2-2.5 Ft         | 1.5 - 2 Ft      | 1.5 - 2 Ft       | 1.5 - 2 Ft          | 4 - 4.5 Ft       | 0.5 - 1 Ft       | 1 - 1.5 Ft       |
| SAMPLE PURPOSE                 |   | REG               | REG               | REG              | FD                         | REG              | REG                     | REG                   | REG              | FD              | REG              | REG                 | REG              | REG              | REG              |
| Test Group                     | Parameter (Units = mg/kg)                   | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ           | Result DIL LQ VQ | Result DIL LQ VQ        | Result DIL LO VO      | Result DIL LQ VO | 2 Result DIL LQ | VQ Result DIL LQ | /Q Result DIL LQ VC | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ |
| SEMIVOLATILES                  | Benzo(a)pyrene                              | 0.895 5 U         | 0.193 t U         |                  |                            |                  |                         |                       | 0.33 1 < 0       | 0.33 1 <        | 0 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES                  | Benzo(b)fluoranthene                        | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < 0       | 0.33 1 4        | 0 0.33   <       | U 0.33 I K U        | 633 1 < 0        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Benzo{ghi}perylene                          | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < 1       | 0.33 1 <        | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Benzo(k)fluoranthene                        | 0.895 5 0         | 0.193 1 U         |                  |                            |                  |                         |                       | 1.65 1 < 0       | 1.65 1 <        | U 1.65 1 <       | บ 1.65 1 < บ        | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES                  | Benzok Alcohol<br>Benzul Alcohol            | 0.895 5 1/        | 0.193 1 U         |                  |                            |                  |                         |                       | 0.65 1 < U       | 0.65 1 <        | U 0.65 1 <       | บ 0.65 1 < ป        | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES                  | bis/2-Chloroethoxy)methane                  | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < U       | 0.33 1 <        | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether                     | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < U       | 0.33 1 <        | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether                 | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < U       | 0.33 1 <        | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthalate                  | 0.895 5 U         | 0.193 t U         |                  |                            |                  |                         |                       | 0.33 1 < U       | 1 U.36 1        | 0.945 1          | 0.33 1 < 0          | 0.337 1          | 0.33 1 < 1       | 0.33 1 < U       |
| SEMIVOLATILES                  | Butyl benzyl phthalate                      | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < 0       | 0.33 1 <        | 0 0.33 1 <       | 0 0.33 i < 0        | 0.33 1 < 1       | 0.33 t < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Chrysene                                    | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 t < U       | 0.33 1 <        | 0 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Dibenzo(a,n)anmracene                       | 0.095 5 U         | 0.193 1 0         |                  |                            |                  |                         |                       | 0.33 1 < 1       | 0.33 1 <        | U 0.33 1 <       | ป 0.33 1 < ป        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES<br>SEMIVOLATILES | Diethyl obthalate                           | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < 🛛       | 0.33 1 <        | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Dimethyl ohthalate                          | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < U       | 0.33 1 <        | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | di-n-Butyl phthalate                        | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < U       | 0.747 1         | 0.372 1          | 0.33 1 < U          | 0.33 1 < U       | 0.964 1          | 0.33 1 < U       |
| SEMIVOLATILES                  | di-n-Octyl phthalate                        | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < L       | 0.33 1 <        | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES                  | Fluoranthene                                | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < 1       | 0.33 1 <        | U 0.33 1 <       | U U.33 1 < U        | 0.33 1 < 0       |                  | 0.33 1 < U       |
| SEMIVOLATILES                  | Fluorene                                    | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       |                  | 0.33 1 <        | 0 0.33 1 <       | U 0.33 I < U        | 0.33 1 < 1       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Hexachtorobenzene                           | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < L       | 0.33 1 <        | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES                  | Hexachtoroputadiene                         | 0.895 5 U         | 0.193 1 0         |                  |                            |                  |                         |                       | 0.33 1 < 1       | 0.33 1 <        | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES<br>SEMIVOLATILES | Hexachiorocyclopenaulene                    | 0.895 5 1         | 0.193 1 1         |                  |                            |                  |                         |                       | 0.33 1 < L       | J 0.33 1 <      | U 0.33 1 <       | ⊎ 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Indeno(1.2.3-cd)pyrene                      | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 t < t       | J 0.33 1 <      | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Isophorone                                  | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < 1       | 0.33 1 <        | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Naphthalene                                 | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < 1       | ) 0.33 1 <      | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < 0       |                  | 0.33 1 < 0       |
| SEMIVOLATILES                  | Nitrobenzene                                | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < 0       | 1 033 1 <       |                  | U U.33 I N U        | 0.33 1 < 1       | 1 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine                  | 0.895 5 0         | 0.193 1 U         |                  |                            |                  |                         |                       | 033 1 < 1        | 0.33 1 <        | U 0.33 t <       | U 0.33 1 < U        | i 0.33 1 < U     | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | n-Natrosodiphenylamine<br>Pastachiaraphonal | 4.695 5 U         | 0.193 1 0         |                  |                            |                  |                         |                       | 1.65 1 < L       | 1.65 1 <        | U 1.65 1 <       | U 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES<br>SEMIVOLATILES | Phenanthrene                                | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < L       | ) 0.33 1 <      | U 0.33 t <       | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Phenol                                      | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < L       | J 0.33 1 <      | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                  | Ругеле                                      | 0.895 5 U         | 0.193 1 U         |                  |                            |                  |                         |                       | 0.33 1 < L       | J 0.33 1 <      | U 0.33 1 <       | U 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| VOLATILES                      | 1,1,1,2-Tetrachloroethane                   |                   | 0.00493 1 U       |                  |                            |                  |                         |                       |                  |                 |                  | N 0.005 4 - N       | 0.005 1 -4 1     | 1 0.005 1 < 11   | U > 2 3000       |
| VOLATILES                      | 1,1,1-Trichloroethane                       |                   | 0.00493 1 U       |                  |                            |                  |                         |                       | 0.005 1 < 0      |                 | 0 0.005 1 <      |                     | 1 0.005 1 < 0    | 0.005 1 < 0      | 0.005 1 < U      |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane                   |                   | 0.00493 1 U       |                  |                            |                  |                         |                       | 0.005 1 < 1      | 1 0.005 1 <     | U 0.005 1 <      | U 0.005 1 < U       | J 0.005 1 < U    | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES                      | 1,1,2-1RCnoroemane                          |                   | 0.00493 1 0       |                  |                            |                  |                         |                       | 0.005 1 < U      | 1 0.005 1 <     | U 0.005 1 <      | U 0.005 1 < U       | J 0.005 1 < U    | J 0.005 1 < U    | 0.005 1 < U      |
| VOLATILES<br>VOLATILES         | 1 1-Dichioroethene                          |                   | 0.00493 1 U       |                  |                            |                  |                         |                       | 0.005 1 < L      | ) 0.005 1 <     | ⊎ 0.005 1 <      | U 0.005 1 < U       | J 0.005 1 < U    | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES                      | 1.1-Dichloropropene                         |                   | 0.00493 1 U       |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLATILES                      | 1,2,3-Trichlorobenzene                      |                   | 0.00493 1 U       |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLATILES                      | 1,2,3-Trichloropropane                      |                   | 0.00493 1 U       |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLATILES                      | 1,2,4-Trichlorobenzene                      | ļ                 | 0.00493 1 U       |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLATILES                      | 1,2,4-Trimethylbenzene                      |                   | 0.00493 1 U       |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLATILES                      | 1,2-Dibromo-3-chioropropane                 |                   | 0.00493 1 0       |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLATILES<br>VOLATILES         | 1,2-Disblombenzene                          |                   | 0.00493 1 U       |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLATILES                      | 1.2-Dichloroethane                          |                   | 0.00493 1 U       |                  |                            |                  |                         |                       | 0.005 1 < t      | J 0.005 1 <     | U 0.005 1 <      | U 0.005 1 < U       | ) 0.005 t < L    | i 0.005 1 ≺ U    | 0.005 1 < U      |
| VOLATILES                      | 1,2-Dichloroethene                          |                   |                   |                  |                            |                  |                         |                       | 0.005 1 < L      | J 0.005 1 <     | U 0.005 t <      | U 0.005 1 < 1       | J 0.005 1 < L    | ) 0.005 t < U    | 0.005 1 < U      |
| VOLATILES                      | 1,2-Dichloropropane                         |                   | 0.00493 1 U       |                  |                            |                  |                         |                       | 0.005 1 < 0      | J 0.005 1 <     | U 0.005 1 <      | U 0.005 1 < U       | 1 0.005 1 < L    | ) 0.005 1 < 0    | 0.005 1 < U      |
| VOLATILES                      | 1,2-Dimethylbenzene (o-Xylene)              |                   | 0.00493 1 U       |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLATILES                      | 1,3,5-Trimethylbenzene                      |                   | 0.00493 1 U       |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLATILES                      | 1,3-Dichlorobenzene                         |                   | 0.00493 1 U       |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLANILES<br>VOLATIRES         | 1,3-Dichloropropane                         |                   | 0.00493 1 U       |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLATILES                      | 2 2-Dichlorontonane                         |                   | 0.00493 1 U       |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLATILES                      | 2-Butanone                                  |                   | 0.00986 1 U       |                  |                            |                  |                         |                       | 0.05 1 < 1       | J 0.05 t <      | U 0.05 1 <       | U 0.05 1 < U        | J 0.05 1 < €     | ) 0.05 1 < U     | 0.05 t < U       |
| VOLATILES                      | 2-Chloroethyl vinyl ether                   |                   | 0.00986 1 U       |                  |                            |                  |                         |                       | 0.01 1 < 1       | J 0.01 1 <      | U 0.01 1 <       | U 0.01 1 < 1        | J 0.01 1 < l     | ) 0.01 1 < U     | 0.01 1 < U       |
| VOLATILES                      | 2-Chiorotoluene                             |                   | 0.00493 1 U       |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  | 0.05 1 4 11      |
| VOLATILES                      | 2-Hexanone                                  |                   | 0.00986 1 U       |                  |                            |                  |                         |                       | 0.05 1 < 1       | J 0.05 t <      | U 0.05 1 <       | U 0.05 1 < (        | ו ע.ט⊿ ⊺ < U     | J U.US 1 < U     | 0.00 i < U       |
| VOLATILES                      | 2-Propenai                                  |                   |                   |                  |                            |                  |                         |                       | -                |                 |                  |                     |                  |                  |                  |
| VOLATILES                      | 4-Chicrotoluene                             |                   | 0.00493 1 U       |                  |                            |                  |                         |                       | A1 1 - 1         | i At 1 -        | 1) 01 t -        | U 011 < 1           | ; 0,1 1 < I      | J 0,1 1 < IJ     | 0.1 1 < U        |
| VOLATILES                      | Acetone                                     |                   | 0.00986 T U       |                  |                            |                  |                         |                       | v.i r • 1        |                 | J 9.1 F V        |                     |                  | · · · · · ·      | . •              |
|                                | Acetonimie                                  | 1                 |                   |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLATILES                      | Allvi chlošde                               |                   |                   |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |
| VOLATILES                      | Benzene                                     |                   | 0.00493 1 U       |                  |                            |                  |                         |                       | 0.005 1 < 1      | J 0.005 t <     | U 0.005 1 <      | U 0.005 1 < N       | J 0.005 1 < 🛿    | J 0.005 1 < U    | 0.005 1 < U      |
|                                |   | •                 |                   |                  |                            |                  |                         |                       |                  |                 |                  |                     |                  |                  |                  |

Table 3-65

Concentrations of Chemicals in Soil Samples Associated with Sump 065

| Display         Display <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th>450040</th><th>170000</th><th>170033</th><th>10.004.04</th><th></th><th></th><th>111 2064 01</th><th>14 506/ 01</th><th>1415064.01</th><th>1115064-02</th></t<>  |                |                             |                   |                   |                  |                       | 450040          | 170000             | 170033            | 10.004.04         |                  |                  | 111 2064 01        | 14 506/ 01       | 1415064.01        | 1115064-02       |
|--|----------------|-----------------------------|-------------------|-------------------|------------------|-----------------------|-----------------|--------------------|-------------------|-------------------|------------------|------------------|--------------------|------------------|-------------------|------------------|
| Dubbit         Dubbit<  | LOCATION_CODE  |                             | 35SUMP064-SB01    | 35SLMP064-SB01    | 47SB17           | 4/581/                | 4/5818          | 4/5833             | 4/0000            |                   |                  |                  |                    | LH-SOSA ST 2     | LH-SD64-01 3      | 11.5064.02 1     |
| Description       Descrin       Descrin       Descrin       De   | SAMPLE_NO      |                             | 35-SMP064-SB01-01 | 35-SMP064-SB01-02 | 47SB17(0-0_5)    | 4/SB1/(0-0_5)OC       | 4/5618(0-0_5)   | 4/5833(0-0_5)      | 4/5033(1-2)       | LT-UL004-01       | 8/2/1002-01 QC   | elemona          | 0/5/1003           | 8/6/1003         | 8/6/1003          | RIS/1993         |
| Chronic Depart (10 - 10 0)         Feb (1 0 0)         Point (10 - 10 0)   | SAMPLE_DATE    |                             | 9/20/2006         | 9/20/2006         | 6/3/2000         | 6/3/2000              | 6/3/2000        | 6/3/2000           | 6/3/2000          | 0/0/1883          | 6/0/1990         | 16 25            | 15.25+             | A_A5 Fr          | 0.6.1.5t          | 1.156            |
| Datability         Tends         Dots   | Depth          |                             | 1-1Ft             | 5-5H              | 0-0.5 Ft         | 0-0.5H                | 0-0.5 Ft        | 0-0.5 FL           | 1-2FL             | Z-ZJR             | 55-271           | REC              | REG                | REG              | REG               | REG              |
| Instruction       Particle (1)       Paritel (1)       Particle (1)       P  | SAMPLE_PURPOSE |                             | REG               | REG               | REG              | FU<br>Regult DH LO MO |                 |                    | Recult Dit IO VO  | Result DI LO VO   | Result DII 10 VO | Result DII 10 VO | Result Dill. LO VO | Result DIL LO VO | Result Dil. LO VO | Result DIL LQ VQ |
| WALLES       Discretion       Constrained       strained< th="">       &lt;</thconstrained<>   | Test Group     | Parameter (Units = mg/kg)   | Result DIL LQ VQ  | Result DIL LQ VQ  | RESULT DIL LO VO | Result DIL LQ VQ      | hesua dil Lu vu | Nesuli Dir. Luz Va | TICOUL DIC LOC TO | THESHIE DIE EN FO |                  |                  |                    |                  | ,                 |                  |
| MALES       BOME MERLING       BOME M  | VOLATILES      | Bromobenzene                |                   | 0.00493 ( U       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| Martine       1       0       1       0       1       0       1       0       1       0       0.00       1       0 </th <th>VOLATILES</th> <th>Bromocnioromemane</th> <th></th> <th>0.00493 7 0</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>0.005.1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th>  | VOLATILES      | Bromocnioromemane           |                   | 0.00493 7 0       |                  |                       |                 |                    |                   | 0.005.1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |
| MALARS        | VOLATILES      | Bromodichloromethane        |                   | 0.00493 1 0       |                  |                       |                 |                    |                   | 0.005 1 < 3       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 t < U      | 0.005 1 < U       | 0.005 1 < U      |
| MARIES       Observation       0.00000       1       0       0.000   | VOLATILES      | Branciom                    |                   | 0.00493 1 0       |                  |                       |                 |                    |                   | 001 1 < 13        | 0.01 1 < U       | 0.01 1 < U       | 0.01 t < U         | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U       |
| WALKS       Constant       Co  | VOLANLES       | Bromomethane                |                   | 0.00900 1 U       |                  |                       |                 |                    |                   | 0.005 1 < 13      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |
| Number         Observation         Observation <t< th=""><th>VOLATILES</th><th>Carbon distance</th><th></th><th>0.00493 1 0</th><th></th><th></th><th></th><th></th><th></th><th>0.005 1 &lt; U</th><th>0.005 t &lt; U</th><th>0.005 1 &lt; U</th></t<>  | VOLATILES      | Carbon distance             |                   | 0.00493 1 0       |                  |                       |                 |                    |                   | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 t < U       | 0.005 1 < U      |
| Number         Descention         Digit 1         Cui 1         Cui 1         Cui 1         Cui 1         Cui 0         Distribution         Distri         Distri         Distributio </th <th>VOLATILES</th> <th>Carbon tetrachionce</th> <th></th> <th>0.00455 1 0</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>0.005 t &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th>   | VOLATILES      | Carbon tetrachionce         |                   | 0.00455 1 0       |                  |                       |                 |                    |                   | 0.005 t < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |
| WARES       Openation  | VOLATILES      | Chipropenzene               |                   | 0.00495 1 0       |                  |                       |                 |                    |                   | 0.01 1 < U        | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U         | 0.01 1 < U       | 0.01 t < U        | 0.01 1 < U       |
| Display        | VOLABLES       | Chloroferm                  |                   | 0.00300 1 0       |                  |                       |                 |                    |                   | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |
| UQUALIES       Observation       Outset of the second of the seco  | VOLATILES      | Chiorosofta                 |                   | 0.00433 1 0       |                  |                       |                 |                    |                   | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U         | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U       |
| WARES       0.0093       1       0         WARES       0.0093       1       0       0.0005       1       0       0.005       1 <th>VOLATILES</th> <th>Chloromestane</th> <th></th> <th>0.00300 1 0</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>  | VOLATILES      | Chloromestane               |                   | 0.00300 1 0       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| ULAILES       00000 1 < U  | VOLATILES      | Chioroprene                 |                   | 0.00402 1 11      |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| WARKES         Constraint         Constra         Constraint <th>VOLATILES</th> <th>cis-1,2-Dichloroemene</th> <th></th> <th>0.00493 1 0</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.005 1 &lt; U</th>   | VOLATILES      | cis-1,2-Dichloroemene       |                   | 0.00493 1 0       |                  |                       |                 |                    |                   | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |
| WARES       United Managementance       Outstan  | VOLATILES      | cis-1,3-Dichaoropropene     |                   | 0.00403 1 U       |                  |                       |                 |                    |                   | 0.005 1 < U       | 0.005 1 < U      | 0.005 t < U      | 8.005 1 < U        | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < ∜      |
| WULLILIS         Distance  | VOLATILES      | Dibromochioromethane        |                   | 0.00493 1 0       |                  |                       |                 |                    |                   | 0.005 1 0 0       |                  | 0.000 0          |                    |                  |                   |                  |
| WUARLES       Build control and maines       Constant   | VOLATILES      | Diplomomethane              |                   | 0.00495 1 U       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| Wathlinks/see         Dubbes         Dubbes         Dubbes         Dubbes         State         Dubbes         State         U         Dubbes         State         State <th< th=""><th>VOLATILES</th><th>Dicatoroginuorometnane</th><th></th><th>0.00300 1 0</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>   | VOLATILES      | Dicatoroginuorometnane      |                   | 0.00300 1 0       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| UUNIRES       Englementarie       0.0043       1       0         VULIRES       Normalitation       0.0041       1       0         VOLATLES       ISOBUTVALCONOL       -  | VOLATILES      | Emy menacyate               |                   | 0.00/03 1 11      |                  |                       |                 |                    |                   | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |
| VOLATLES         MODERINANE         OUNDERINANE         <  | VOLATILES      | Eurypenzene                 |                   | 0.00493 1 11      |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| VOLATILES       INDUME TAUCONOL         VOLATILES       ISOURDY-BALCONOL         VOLATILES       ISOURDY-BALCONOL         VOLATILES       ISOURDY-BALCONOL         VOLATILES       ISOURDY-BALCONOL         VOLATILES       Methacylonbile         VOLATILES       Methacylonbile         VOLATILES       Methacylonbile         VOLATILES       Methylesolchide         VOLATILES       PholPUBENZENE         VOLATILES       PholPUBENZENE         VOLATILES       PholPUBENZENE   | VOLATILES      | IODONCTUMNE                 |                   | 0.00425 1 0       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| VOLATLES       1000/11_CAURACHAC         VOLATLES       mp-Xylens       0.00443       1         VOLATLES       mp-Xylens       0.005       1       0       0.05       1       0 <td< th=""><th>VOLATILES</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>  | VOLATILES      |                             |                   |                   |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| VOLATILES       isplayDytentication       0.0005 1       0       0.005 1       0   | VOLATILES      |                             |                   | 0.00403 1 11      |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| VOLATILES         Indu-synetis         Control   | VOLATILES      | Sopropymenzene              |                   | 0.00/03 1 11      |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| Notality Solution       Notality Solution       0.0096       1       U       0.009       1       V       0.005       1<  | VOLATILES      | ni,p-Aylenes                |                   | 0.00455 1 0       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| YOUCHILES       Methylinetalina       Collore       Collor       Collor       Collor   | VOLANLES       | Mathud isobutud katana      |                   | 0.00986 1 11      |                  |                       |                 |                    |                   | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U         | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U       |
| NOLATILES       Methylene (hoide)       0.0043 1       U       0.0043 1       U       0.005 1       U  | VOLATILES      | METHY METHACRY ATE          |                   | 0.00000 1 0       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| VOLATILES       Naphtalene       0.00965       1       U         VOLATILES       n-BUTVLEENZENE       0.00493       1       U         VOLATILES       n-PROPYLEENZENE       0.00493       1       U         VOLATILES       p-ISOPROPYLTOLUENE       0.00493       1       U         VOLATILES       sec-BUTYLBENZENE       0.00493       1       U         VOLATILES       sec-BUTYLBENZENE       0.00493       1       U         VOLATILES       sec-BUTYLBENZENE       0.00493       1       U         VOLATILES       ter-BUTYLBENZENE       0.00493       1       U         VOLATILES       ter-BUTYLBENZENE       0.00493       1       U       0.00493       1       U         VOLATILES       ter-BUTYLBENZENE       0.00493       1       U       0.00493       1       U       0.00493       1       U  | VOLATILES      | Methylene chloride          |                   | 0.00493 1 1/      |                  |                       |                 |                    |                   | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U       | 0.0111 1         |
| YOLATILES       n-PROPYLBENZENE       0.00493       1       U         YOLATILES       n-PROPYLBENZENE       0.00493       1       U         YOLATILES       p-ISOPROPYLTOLUENE       0.00493       1       U         YOLATILES       strene       0.00493       1       U         YOLATILES       ter-BUTYLBENZENE       0.00493       1       U         YOLATILES       ter-BUTYLBENZENE       0.00493       1       U  | VOLATILES      | Nanhthaiene                 |                   | 0.00986 1 U       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| NONACC       n-PROPYLEENCE       0.00493 1 U         VOLATILES       Pentachloroethane         VOLATILES       p-SOPROPYLOLUENE         0.00493 1 U         VOLATILES         vOLATILES         sec-eUTYLEENZENE         0.00493 1 U         VOLATILES         sec-eUTYLEENZENE         0.00493 1 U         VOLATILES         sec-eUTYLEENZENE         0.00493 1 U         VOLATILES         Styrene         0.00493 1 U         VOLATILES         tert-BUTYLEENZENE         0.00493 1 U   | VOLATILES      |                             | ·                 | 0.00493 1 LI      |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| Note that     Note that       VOLATILES     Pentachiorethane       VOLATILES     p.SOPROPYLTQLUENE       0.00493     1       VOLATILES     repointible       VOLATILES     sec-RUTYLBENZENE       0.00493     1       VOLATILES     Styrene       0.00493     1       VOLATILES     tert-BUTYLBENZENE       0.00493     1       VOLATILES     tert-BUTYLBENZENE       0.00493     1  | VOLATILES      | n-PROPYI BENZENE            |                   | 0 00493 1 U       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| VOLATILES       PISOPROPYLTOLUENE       0.00493 1 U         VOLATILES       Propionitrile         VOLATILES       sec-RUTYLBENZENE         0.00493 1 U         VOLATILES       Styrene         0.00493 1 U         VOLATILES         tert-BUTYLBENZENE         0.00493 1 U         0.00493 1 U   | VOLATILES      | Pentachkypethane            |                   |                   |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| VOLATILES         Propionitrile           VOLATILES         Sec-BUTYLBENZENE           VOLATILES         sec-BUTYLBENZENE           0.00493         U           VOLATILES         Styrene           0.00493         U           VOLATILES         tert-BUTYLBENZENE           0.00493         U           VOLATILES         tert-BUTYLBENZENE           0.00493         U  | VOLATILES      | n-ISOPROPYLTOLUENE          | [                 | 0.00493 1 U       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| VOLATILES         sec-BUTYLBENZENE         0.00493         1         U           VOLATILES         sec-BUTYLBENZENE         0.00493         1         U           VOLATILES         Styrene         0.00493         1         U         0.005         1  | VOLATILES      | Pronionitrile               |                   |                   |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| VOLATIRES         Styrene         0.00493 1 U         0.00493 1 U         0.00493 1 U           VOLATIRES         tert-BUTYLBENZENE         0.00493 1 U         0.00493 1 U  | VOLATILES      | sec-BLITYI BENZENIF         | 1                 | 0.00493 1 U       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
|  | VOLATILES      | Storene                     |                   | 0.00493 1 U       |                  |                       |                 |                    |                   | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |
|  | VOLATILES      | tert-BUTYI BENZENE          |                   | 0.00493 1 U       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| VCILATILES Tetrachingoetheae 0.00493 1 U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0 | VOLATILES      | Tetrachloroethene           |                   | 0.00493 1 U       |                  |                       |                 |                    |                   | 0.005 1 < U       | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |
| 0.00493 1 U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005  | VOLATILES      | Toluene                     |                   | 0.00493 1 U       |                  |                       |                 |                    |                   | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U        | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |
|  | VOLATILES      | trans-1 2-Dicbloroethene    |                   | 0.00493 1 U       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005  | VOLATILES      | tracs-1 3-Dichloropropene   |                   | 0.00493 1 U       |                  |                       |                 |                    |                   | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |
| VOLATUES trans-14-Dichloro-2-butene  | VOLATILES      | trans-1.4-Dichloro-2-butene |                   |                   |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| VOLATILES Trichloroethene 0.00267 1 J J 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0.005 1 < U 0. | VOLATILES      | Trichloroethene             |                   | 0.00267 1 J J     |                  |                       |                 |                    |                   | 0.005 t < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |
| VOLATLES Trichloroftuoromethane 0.00966 1 U  | VOLATILES      | Trichlorofiuoromethane      |                   | 0.00986 1 U       |                  |                       |                 |                    |                   |                   |                  |                  |                    |                  |                   |                  |
| 0.005 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U 0.05 1 < U | VOLATILES      | Vinvl acetate               |                   | 0.00986 1 U UJ    |                  |                       |                 |                    |                   | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | ∙0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U       |
| VOLATILES         Vinvichloride         0.0986         1         U         0.01         1         U<  | VOLATILES      | Vinyt chloride              | · ·               | 0.00986 1 U       |                  |                       |                 |                    |                   | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U         | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U       |
| VOLATILES Xytenes, Total   | VOLATILES      | Xylenes, Total              | }                 |                   |                  |                       |                 |                    |                   | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-65 Concentrations of Chemicals in Soil Samples Associated with Sump 065

| SUMP) = SUMP065 |  |                  |                    |                  |                       |              |                         |                         |                       |                         |             |
|-----------------|--|------------------|--------------------|------------------|-----------------------|--------------|-------------------------|-------------------------|-----------------------|-------------------------|-------------|
| OCATION_CODE    |  | LH-S064-02       | LH-S064-02         | LH-S065-01       | LH-S065-01            | LH-S065-01   | LH-\$065-02             | LH-S065-02              | LH-\$065-02           | LHS-3-20                | LHS-3-20    |
| SAMPLE_NO       |  | LH-S064-02_2     | LH-S064-02_3       | LH-S065-01_1     | LH-S065-01_2          | LH-S065-01_3 | LH-S065-02_1            | LH-\$065-02_2           | LH-S065-02_3          | LHS-3-20 QC             | LHS-3-20    |
| SAMPLE_DATE     |  | 8/5/1993         | 8/5/1993           | 8/5/1993         | 8/5/1993              | 8/5/1993     | 8/5/1993                | 8/5/1993                | 8/5/1993              | 1/10/1995               | 1/10/1995   |
| DEPTH           |  | 2.5 - 3 Ft       | 4-4.5Ft            | 0.5 - 1 Ft       | 2-2.5 Ft              | 4-4.5 Ft     | 0.5+1+t                 | 3-3.5 Ft                | 4-4.5 Ft              | 0-0.571                 | 0-0.5 H     |
| SAMPLE_PURPOSE  | P  | REG              | REG NO.            | REG              | REG<br>Decut DI LO MA | REG No. 30   | REG<br>Regult Dil LO VO | REG<br>Receit DII LO MO | REG<br>Decut DILLO VO | FU<br>Recult OIL LO, VO |             |
| est Group       | Parameter (Units = mg/kg)  | Result UIL LQ VQ | AZ 1 C 11          | Result DIL LU VU | Result DIL LU VU      |              |                         | A7 1 < 1                |                       | 0.21 1 < 11             |             |
| -XPLUSIVES      | 1,3,5-Innitropenzene   |                  | 0.7 1 < 0          | 0.7 1 < 0        |                       | 0.1 1 < 0    |                         | 0.5 1 < 1               | 0.5 1 < 1             | 821 1 < U               | 0.21 1 < U  |
| CAPEUGIVEG      | 1,3-Diniotopenzene   |                  | 0.5 1 4 4          | 0.5 1 < 0        | 0.5 1 < 1             | 0.5 1 < 1    | 0.5 1 < 1               | 051 < 1                 | 0.5 1 < 0             | 0.21 1 < 1              | 021 1 < U   |
|                 | 2.4.0- massourceme   | 0.5 1 < 11       | 051 < 1            | 051 < 0          | 051 < 1               | 05 1 < 1     | 05 1 < U                | 0.5 1 < U               | 0.5 1 < U             | 0.21 1 < U              | 0.21 1 < U  |
| EXPLOSIVES      | 2.6-Dinitrotoluene   | 051 < U          | 051 < 0            | 0.5 1 < U        | 0.5 1 < 0             | 0.5 1 < 1    | 0.5 1 < 1               | 0.5 1 < U               | 0.5 1 < U             | 0.23 1 < U              | 0.23 1 < U  |
| EXPLOSIVES      | 4-Amino-2 6-dinitrotoluene   |                  |                    |                  |                       |              |                         |                         |                       | 0.44 1 < U              | 0.44 t < U  |
| EXPLOSIVES      | HMX  | 0.9 1 < U        | 0.9 1 < U          | 0.9 1 < U        | 0.9 1 < U             | 0.9 1 < U    | 0.9 1 < U               | 0.9 1 < U               | 0.9 1 < U             | 1.9 1 < U               | 1.9 1 < U   |
| EXPLOSIVES      | m-Nitrotoluene   | 0.9 1 < U        | 0.9 1 < U          | 0.9 1 < U        | 0.9 1 < U             | 0.9 1 < U    | 0.9 1 < U               | 0.9 1 < U               | 0.9 t < U             | 0.88 1 < U              | 0.88 1 < U  |
| EXPLOSIVES      | NIOBIUM  | 0.6 1 < U        | 0.6 1 < U          | 0.6 1 < U        | 0.6 1 < ⊍             | 0.6 1 < U    | 0.6 1 < U               | 0.6 1 < U               | 0.6 1 < U             |                         |             |
| EXPLOSIVES      | Nitrobenzene   |                  |                    |                  |                       |              |                         |                         |                       | 0.23 1 < U              | 0.23 1 < U  |
| EXPLOSIVES      | o-Nitrotoluene   | 0.9 t < U        | 0.9 1 < U          | 0.9 1 < U        | 0.9 1 < U             | 0.9 1 < U    | 0.9 1 < U               | 0.9 1 < U               | 0.9 1 < U             | 0.88 1 < U              | 0.88 1 < U  |
| EXPLOSIVES      | p-Nitrotoluene   | 1.1 1 < U        | 1.1 1 < U          | 1.1 1 < U        | 1.1 1 < U             | 1.1 1 < U    | 1.1 1 < U               | 1.1 1 < U               | 1.1 1 < U             | 2.6 1 < U               | 2.7 1 < U   |
| EXPLOSIVES      | RDX  | 0.5 1 < U        | 0.5 1 < U          | 0.5 1 < U        | 0.5 1 < U             | 0.5 1 < U    | 0.5 1 < U               | 0.5 1 < U               | 0.5 1 < U             | 0.95 1 < U              | 0.96 1 < U  |
| EXPLOSIVES      | Tetryi   | 1.9 1 < U        | 1.9 1 < U          | 1.9 1 < U        | 1.9 1 < U             | 1.9 1 < U    | 1.9 1 < U               | 1.9 1 < U               | 1.9 1 < U             | 0.65 1 < U              | 0.65 1 < U  |
| METALS          | Aluminum   | 12000 1          | 17900 1            | 16300 1          | 16700 1               | 11000 1      | 7010 1                  | 9830 1                  | 6590 1                | 7830 1                  | 5010 1      |
| METALS          | Antimony   | 31 < U           | 3 1 < U            | 31 < U           | 31 < U                | 3 1 < U      | 31 < 0                  | 31 < 0                  | 31 < 0                | 10.7 1 < UJ             | 9.5 1 < UJ  |
| METALS          | Arsenic  | 2.5 1            | 1.9 1              | 3 1              | 4.1 1                 | 4.1 1        | 4.7 1                   | 3.6 1                   | 3.9 1                 | 3 T J                   | 1,9 1 J     |
| METALS          | Barium   | 124 1            | 472 1              | 131 1            | 850 1                 | 378 1        | 73 1                    |                         | 134 1                 | (5.8 1                  |             |
| METALS          | Cadmium  | 11 < 0           | 1 1 < U            | 11 < U           | 11 < 0                | 11 < 0       | 1 1 < U                 | 1 t < U                 | 1460 K                | 1.1 1 ~ 10              | 1720 1      |
| METALS          | Caicium  | 958 1            | 1500 1             | 2000 1           | 25/0 1                | 9/4 1        | 1000 1                  | 4100 1                  | 1400 1                | 11.6 1 1                | 86 1 .      |
| METALS          | Cabol  | 12.0 I           | 13.5 1             | 10.2 1           | 25 1                  | 10 1         | 5 1                     | 13 1                    | 8 1                   | 01 1                    | 62 1        |
|                 | Copper   | 3.4 3            | 38 1               | 36 1             | 52 1                  | 4 1          | 2 1                     | 3 1                     | 2 1                   | 27.3 1                  | 76.5 1      |
|                 | Copper<br>Ovanide Total  | 0.5 1 < U        | 0.5 1 < 1          | 05 1 < 1         | 051 < 1               | 05 1 < 1     | 05 1 < U                | 0.5 1 < 1               | 0.5 1 < U             |                         | 10.0        |
| VETALS          | ing in the second s | 11300 1          | 13400 1            | 14400 1          | 18800 1               | 12800 1      | 21500 1                 | 11700 1                 | 10100 1               | 8140 1                  | 5830 1      |
| METALS          | Lead   | 6.1 1            | 5.3 1              | 5.7 1            | 10.4 1                | 10 1         | 8.7 1                   | 5.7 1                   | 5.9 1                 | 30.4 1                  | 47.7 1      |
| METALS          | Magnesium  | 908 1            | 1610 1             | 1100 1           | 1950 1                | 1120 f       | 330 1                   | 874 1                   | 521 1                 | 638 1                   | 459 1       |
| METALS          | Manganese  | 358 1            | 385 1              | 228 1            | 368 1                 | 205 1        | 145 1                   | 780 1                   | 581 1                 | 158 1                   | 247 1       |
| METALS          | Мегсину  | 0.1 1 < U        | 0.1 t < U          | 0.1 1 < U        | 0.1:1 < ∛             | 0.1 1 < U    | 0.1 1 < U               | 0.1 1 < U               | 0.1 1 < U             | 0.12 1 < U              | 0.13 1 < U  |
| METALS          | Potassium  | 408 1            | 644 1              | 690 1            | 830 1                 | 366 1        | 276 1                   | 463 1                   | 234 1                 | 504 1                   | 307 1       |
| METALS          | Selenium   | 11 < U           | 11 < U             | 11 < U           | 11 < U                | 1 1 < U      | 11 < 10                 | 11 < U                  | 11 < U                | 0.31 1 J                | 0.36 1 J    |
| METALS          | Silver   | 11 < ⊍           | 1 1 < U            | 11 < U           | t 1 < U               | 1 1 < U      | 11 < ប                  | 11 < U                  | 1 t < U               | 1.1 1 < U               | 0.95 1 < U  |
| METALS          | Strontium  | 18.7 1           | 36.1 1             | 26.2 1           | 32.8 1                | 21 t         | 7 1                     | 18 1                    | 11 1                  | 10.7 1 < U              | 9.5 1 < U   |
| METALS          | Thailium   |                  |                    |                  |                       |              |                         |                         |                       | 53.4 1 < U              | 47.3 1 < 0  |
| METALS          | Zinc   | 17 1             | 25 1               | 23 1             | 31 1                  | 16 1         | 18 1                    | 18 1                    | 10 1                  | 64.8 1                  | 1/3 1       |
| PERC            | Perchiorate  |                  |                    |                  |                       | 0.00 4 4 11  | 0.00 4 - 11             | 0.00 d - U              | 0.92 6 4 11           |                         |             |
| SEMIVOLATILES   | 1,2,4-Inchorobenzene   | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < 0            | 0.33 1 < 0   | 0.33 1 < 0              | 0.33 1 < 0              |                       |                         | 0.45 1 4 1  |
| SEMIVOLATILES   | 1,2-Dichloropenzene  | 0.33 1 4 0       | 0.33 1 4 0         | 0.33 1 < 0       | 0.33 1 < 0            |              |                         | 0.33 1 < 11             | 0.33 1 2 0            | 0.5 1 < U               | 0.45 1 < 1  |
|                 | 1,5-Dichlorobenzene  |                  | 0.33 1 < 0         |                  | 0.33 1 < 11           | 0.33 1 < 1   | 0.33 1 < 0              | 0.33 1 < 11             | 0.33 1 < 1            | 05 1 < 1                | 0.45 1 < 1  |
| SEMINOLATILES   | 2 4 5 Tricheronhanol   | 165 t < II       | 165 1 < 1          | 165 1 < 11       | 165 1 < U             | 165 1 < 1    | 165 1 < 8               | 165 1 < U               | 165 1 < 1             | 2.5 1 < U               | 2.3 1 < 1   |
| SEMIVOLATILES   | 2 4 6-Trichlorophenol  | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < U               | 0.45 t < U  |
| SEMIVOLATILES   | 2 4-Dichloroobenol   | 0.33 t < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < U               | 0.45 1 < U  |
| SEMIVOLATILES   | 2,4-Dimethylphenol   | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 t < U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < U               | 0.45 1 < 반  |
| SEMIVOLATILES   | 2,4-Dinitrophenol  | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U            | 1.65 1 < U   | 1.65 1 < U              | 1.65 1 < U              | 1.65 1 < U            | 2.5 1 < U               | 2.3 1 < U   |
| SEMIVOLATILES   | 2,4-Dinitrotoluene   | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < U               | 0.45 1 < U  |
| SEMIVOLATILES   | 2,6-Dinitrotoluene   | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < U               | 0.45 1 < U  |
| SEMIVOLATILES   | 2-Chloronaphthaiene  | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 t < U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < U               | 0.45 1 < U  |
| SEMIVOLATILES   | 2-Chlorophenol   | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < ⊎       | 0.33 1 < U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < U               | 0.45 1 < U  |
| SEMIVOLATILES   | 2-Methyinaphthalene  | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 t < U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < U               | 0.45 1 < U  |
| Semivolatiles   | 2-Methylphenol   | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < 0               | 0.45 1 < U  |
| SEMIVOLATILES   | 2-Nitroaniline   | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U            | 1.65 1 < U   | 1.65 1 < U              | 1.65 1 < U              | 1.65 1 < U            | 2.5 1 < 0               | 2.3 1 < 0   |
| SEMIVOLATILES   | 2-Nitrophenol  | 0.33 1 < U       | 0.33 1 < U         | -0.33 1 < U      | 0.33 1 < U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < 0               | 0.45 1 < 0  |
| SEMIVOLATILES   | 3,3'-Dichlorobenzidine   | 0.65 1 < 0       | 0.65 1 < U         | 0.65 1 < U       | 0.65 1 < 0            | 0.65 1 < U   | 0.65 1 < 0              | 0.65 1 < 0              | 0.65 1 < 0            | 0.99 1 < 0              | 0.91 1 < 0  |
|                 | 3-Nitroaniline   | 1.05 1 < 0       | 1.05 1 < 0         | 1.00 1 4 1       | 1.00 1 < 0            | 1.05 1 4 1   | 1.05 1 < 0              | 1.00 1 < 0              | 1.05 1 < 0            | 25 1 < 1                | 2.3 1 < 0   |
|                 | 4,o-Dinitro-2-mensylphenoi   |                  | 1.00 1 4 1         | 1.60 1 4 1       | 0.00 1 < 0            | 1.00 1 C U   | 0.03 1 4 11             | 1.03 1 < 11             | 1.00 1 4 0            |                         | 0.45 1 < 11 |
|                 | 4-biomognenys pnenys emer  |                  | 0.55 1 < 0         |                  | 0.55 1 < 0            | 0.55 1 < 0   | 0.55 1 < 0              | 0.05 1 < 1              | 0.05 1 < 1            | 051 < 0                 | 645 1 < 1   |
|                 | 4 Chlomonitino   | 0.65 1 < 1       | 0.65 1 < 11        | 0.65 1 < 11      | 0.05 1 < 0            | 0.03 1 < 0   | 0.05 1 < 1              | 0.65 1 < 12             | 0.65 1 < 1            | 0.5 1 < 0               | 0.45 1 < 11 |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether  | 0.33 1 < 11      | 0.33 1 < 11        | 0.33 1 < 11      | 0.33 1 < 11           | 0.33 1 < 1   | 0.33 1 < 11             | 0.33 1 < 11             | 0.33 1 < 11           | 0.5 1 < U               | 0.45 1 < U  |
| SEMIVOLATILES   | 4-Methytahenol   | 0.33 1 < 11      | 0.33 1 < 11        | 0.33 1 < 11      | 0.33 1 < 11           | 0.33 1 < 11  | 0.33 1 < 11             | 0.33 1 < 11             | 0.33 1 < 1            | 0.5 1 < U               | 0.45 1 < U  |
| SEMIVOLATILES   | 4-Nitroaniline   | 1.65 1 < 1       | 1.65 1 < 1         | 1.65 1 < 1       | 1.65 1 < U            | 1.65 1 < 11  | 1.65 1 < U              | 1.65 1 < U              | 1.65 1 < U            | 2.5 1 < U               | 2.3 1 < U   |
| SEMIVOLATILES   | 4-Nitrophenol  | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U            | 1.65 1 < U   | 1.65 1 < U              | 1.65 1 < U              | 1.65 1 < U            | 2.5 1 < U               | 2.3 1 < U   |
| SEMIVOLATILES   | Acenaphthene   | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 × U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < U               | 0.45 1 < U  |
| SEMIVOLATILES   | Acenaphthylene   | 0.33 1 < U       | 0.33 1 < 8         | 0.33 1 < U       | 0.33 1 < U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < U               | 0.45 1 < U  |
| SEMIVOLATILES   | Anthracene   | 0.33 1 < U       | ้0.33 1 < <b>บ</b> | 0.33 1 < U       | 0.33 1 < U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < U               | 0.45 1 < U  |
| SEMIVOLATILES   | Benzo(a)anthracene   | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U            | 0.33 1 < U   | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U            | 0.5 1 < U               | 0.45 1 < U  |
|                 | ,  |                  |                    |                  |                       |              |                         |                         |                       |                         |             |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas

Shaw Environmental, Inc.


Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

### Table 3-65

|                                |  | C                      | Concentrations         | of Chemicals i         | n Soil Samples         | Associated w        | vith Sump 065          |                        |                                       |                                   |                         |
|--------------------------------|--|------------------------|------------------------|------------------------|------------------------|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|-------------------------|
| LOCATION _CODE                 |  | LH-S064-02             | LH-S064-02             | LH-S065-01             | LH-S065-01             | LH-S065-01          | LH-S065-02             | LH-\$065-02            | LH-S065-02                            | LHS-3-20                          | LHS-3-20                |
| SAMPLE_NO                      |  | LH-S064-02_2           | LH-S064-02_3           | LH-S065-01_1           | LH-S065-01_2           | LH-S065-01_3        | LH-S065-02_1           | LH-S065-02_2           | LH-S065-02_3                          | LHS-3-20 QC                       | LHS-3-20                |
| SAMPLE_DATE                    |  | 8/5/1993<br>2.5 - 3.5t | 8/5/1993<br>A . 4 5 Et | 8/5/1993               | 5/5/1993<br>2 - 2 5 Ft | 8/5/1993<br>4-45 Ft | 0/5/1993<br>0.5 - 1.Ft | 8/5/1993<br>3 - 3 5 Ft | 4-45Ft                                | 0+05Ft                            | 0-0.5Ft                 |
| SAMPLE PURPOSE                 |  | REG                    | REG                    | REG                    | REG                    | REG                 | REG                    | REG                    | REG                                   | FD                                | REG                     |
| Test Group                     | Parameter (Units = mg/kg)                  | Result DIL LQ VQ       esuft DIL LQ VQ       | Result DIL LQ VO       | Result DIL LQ VQ                      | Result DIL LQ VQ                  | Result DIL LQ VQ        |
| SEMIVOLATILES                  | Benzo(a)pyrene                             | 0.33 1 < U             .33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Benzo(b)fluoranthene                       | 0.33 1 < U             | 0.33 1 < U             | 0.33 1 < U             | 0.33 1 < 0             | 0.33 1 < 0          | 0.33 1 < 0             | 0.33 1 < 0             | 0.33 1 < 0                            | 0.5 1 < 0                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Benzokitikoranthene                        | 0.33 1 < 0             | 0.33 1 < 0             | 0.33 1 < 0             | 0.33 1 < 0             | 0.33 1 < U          | 0.33 1 < U             | 0.33 1 < U             | 0.33 1 < 9                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Benzoic Acid                               | 1.65 1 < U             | 1.65 1 < U             | 1.65 1 < U             | 1.65 t < U             | 1.65 1 < U          | 1.65 1 < U             | 1.65 1 < U             | 1.65 1 < U                            | 2.5 1 < U                         | 2.3 t < U               |
| SEMIVOLATILES                  | Benzyl Alcohol                             | 0.65 1 < U             | 0.65 1 ≺ U             | 0.65 1 < U             | 0.65 1 < U             | 0.65 t < U          | 0.65 1 < U             | 0.65 1 < U             | 0.65 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane                 | 0.33 1 < U             .33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether                    | 0.33 1 < 0             | 0.33 1 < 0             | 0.33 1 < 0             | 0.33 1 < U             | 0.33 1 < 0          | 0.33 1 < 0             | 0.33 1 < 0             | 0.33 1 < 0                            | 0.5 1 < 0                         | 0.45 1 < U              |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)ahthalate                 | 0.33 1 < U             | 0.33 1 < 0             | 0.33 1 < 0             | 0.33 1 < U             | 0.33 1 < U          | 0.33 1 < U             | 0.634 1                | 0.33 1 < U                            | 0.5 1 < 0                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Butyl benzyl phthalate                     | 0.33 1 < U             .33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Chrysene                                   | 0.33 1 < U             .33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Dibenzo(a,h)anthracene                     | 0.33 1 < U             | 0.33 t < U             | 0.33 t < U             | 0.33 1 < U             | 0.33 1 < U          | 0.33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Dibenzofuran<br>District states            | 0.33 1 < 0             | 0.33 1 < U             | 0.33 1 < U             | 0.33 1 < U             | 0.33 1 < 0          | 0.33 1 < 0             | 0.33 1 < 0             | 0.33 1 < U                            | 0.5 1 < 0                         | 0.45 1 < U<br>∩A5 1 < B |
| SEMIVOLATILES                  | Dismethyl photolate                        | 0.33 1 < U             .33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < 0                         | 0.45 1 < U              |
| SEMIVOLATILES                  | di-n-Butyl phthalate                       | 0.33 1 < U             | 0.454 1             | 0.685 1                | 0.75 1                 | 0.831 1                               | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | di-n-Octyl phthalate                       | 0.33 1 < U             .33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Fluoranthene                               | 0.33 1 < U             | 0.33 t < U             | 0.33 1 < U             | 0.33 1 < U             | 0.33 1 < U          | 0.33 t < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Fluorene                                   | 0.33 1 < 0             | 0.33 t < U             | 0.33 1 < U             | 0.33 1 < U             | 0.33 1 < 0          | 0.33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < 0                         | 0.45 1 < 0              |
| SEMIVOLATILES<br>SEMIVOLATILES | Rexachlorobutadiene                        | 0.33 1 < U             | 0.33 1 < 0          | 0.33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene                  | 0.33 1 < U             .33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Hexachloroethane                           | 0.33 1 < U             .33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Indeno(1,2,3-cd)pyrene                     | 0.33 1 < U             .33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES<br>SEMIVOLATILES | Isophorone<br>Nanhthalene                  | 0.33 1 < U             | 0.33 1 < 0             | 0.33 1 < 0             | 0.33 1 < 0             | 0.33 1 < 0          | 0.33 1 < 0             | 0.33 1 < 0             | 0.33 1 < 1                            | 0.5 1 < 1                         | 0.45 1 < 0              |
| SEMIVOLATILES                  | Nitrobenzene                               | 0.33 1 < U             .33 1 < U             | 0.33 t < U             | 0.33-1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine                 | 0.33 1 < U             .33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine                     | 0.33 1 < U             .33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Pentachlorophenol                          | 1.65 1 < U             .65 1 < U             | 1.65 t < U             | 1.65 1 < U                            | 2.5 1 < U                         | 23 1 < U                |
| SEMIVULATILES<br>SEMIVOLATILES | Phenanthrene<br>Phenol                     | 0.33 1 < 0             | 0.33 1 < 0             | 0.33 1 < 11            | 0.33 1 < U             | 0.33 1 < U          | 0.33 1 < 0             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 1 < U              |
| SEMIVOLATILES                  | Pyrene                                     | 0.33 t < U             | 0.33 1 < U             | 0.33 1 < U             | 0.33 1 < U             | 0.33 1 < U          | 0.33 1 < U             | 0.33 1 < U             | 0.33 1 < U                            | 0.5 1 < U                         | 0.45 t < U              |
| VOLATILES                      | 1,1,1,2-Tetrachloroethane                  |                        |                        |                        |                        |                     |                        |                        |                                       | 0.015 1 < U                       | 0.014 1 < U             |
| VOLATILES                      | 1,1,1-Trichloroethane                      | 0.005 1 < U            .005 1 < U            | 0.005 1 < U            | 0.005 1 < U                           | 0.008 1 < U                       | 0.007 1 < U             |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane                  | 0.005 1 < 0            | 0.005 1 < U            | 0.005 1 < U            | 0.005 1 < 0            | 0.005 1 < 0         | 0.005 1 < 0            | 0.005 1 < 0            | 0.005 1 < 0                           | 0.008 1 < U                       | 0.007 1 < U             |
| VOLATILES                      | 1.1-Dichloroethane                         | 0.005 t < U            | 0.005 1 < U            | 0.005 1 < U            | 0.005 1 < U            | 0.005 1 < U         | 0.005 1 < U            | 0.005 t < U            | 0.005 1 < U                           | 0.008 1 < U                       | 0.007 1 < U             |
| VOLATILES                      | 1,1-Dichloroethene                         | 0.005 1 < U            .005 1 < U            | 0.005 t < U            | 0.005 1 < U                           | 0.008 1 < U                       | 0.007 1 < U             |
| VOLATILES                      | 1,1-Dichloropropene                        |                        |                        |                        |                        |                     |                        |                        |                                       |                                   |                         |
| VOLATILES                      | 1,2,3-Trichlorobenzene                     |                        |                        |                        |                        |                     |                        |                        |                                       | 0.015 1 4 11                      | 0.014 1 < 11            |
| VOLATILES<br>VOLATILES         | 1,2,3-Frichloropenzene                     |                        |                        |                        |                        |                     |                        |                        |                                       |                                   | 0.014 1 4 0             |
| VOLATILES                      | 1,2,4-Trimethylbenzene                     |                        |                        |                        |                        |                     |                        |                        |                                       |                                   |                         |
| VOLATILES                      | 1,2-Dibromo-3-chloropropane                |                        |                        |                        |                        |                     |                        |                        |                                       | 0.03 1 < U                        | 0.027 1 < U             |
| VOLATILES                      | 1,2-Dibromoethane                          |                        |                        |                        |                        |                     |                        |                        |                                       | 0.03 t < U                        | 0.027 1 < U             |
| VOLATILES                      | 1,2-Dichlorobenzene                        | 0.005 1 4 11           | 0.005 1 < 11           | 0.005 t < 11           | 0.005 t < U            | 0.005 t < 11        | 0.005 1 < 1            | 0.005 1 < 11           | 0.005 1 4 11                          | 0.008 1 < 11                      | 0.007 1 c II            |
| VOLATILES<br>VOLATILES         | 1,2-Dichloroethene                         | 0.005 1 < 0            | 0.005 1 < 0            | 0.005 1 < 0            | 0.005 1 < 0            | 0.005 1 < U         | 0.005 1 < U            | 0.005 1 < 0            | 0.005 1 < U                           | 0.008 1 < U                       | 0.007 1 < U             |
| VOLATILES                      | 1,2-Dichloropropane                        | 0.005 1 < U            .005 1 < U            | 0.005 1 < U            | 0.005 1 < U                           | 0.008 t < U                       | 0.007 1 < U             |
| VOLATILES                      | 1,2-Dimethylbenzene (o-Xylene)             |                        |                        |                        |                        |                     |                        |                        |                                       |                                   |                         |
| VOLATILES                      | 1,3,5-Trimethylbenzene                     |                        |                        |                        |                        |                     |                        |                        |                                       |                                   |                         |
| VOLATILES                      | 1,3-Dichlorobenzene                        |                        |                        |                        |                        |                     |                        |                        |                                       |                                   |                         |
| VOLATILES                      | 1,5-Dicheoropropane<br>1 4-Dicheorobenzene |                        |                        |                        |                        |                     |                        |                        |                                       |                                   |                         |
| VOLATILES                      | 2,2-Dichloropropane                        |                        |                        |                        |                        |                     |                        |                        |                                       |                                   |                         |
| VOLATILES                      | 2-Butanone                                 | 0.05 1 < U             .05 1 < U             | 0.05 1 < U             | 0.05 1 < U                            | 0.015 1 < U                       | 0.014 1 < U             |
| VOLATILES                      | 2-Chloroethyl vinyl ether                  | 0.01 1 < U             .01 1 < U             | 0.01 1 < U             | 0.01 1 < U                            | 0.015 1 < U                       | 0.014 1 < U             |
| VOLATILES                      | 2-Chlorotoluene                            | 0.05 1 - 11            | 0.05 4 2 11            | 0.05 1 c <sup>11</sup> | 0.05 1 2 11            | 0.05 1 - 11         | 0.05 1 - 11            | 0.05 1 2 11            | 0.05 1 < 11                           | 0.015 1 2 11                      | 0.014 1 < H             |
| VOLATILES                      | 2-ricxanoae<br>2-Propenal                  | 0.02 1 5 0             | ບ.ນວ່≀ ເປ              | ່ນແລະເປັ               | 0.05 1 < 0             | 0.03 1 < 0          | 0.00 1 5 0             | V.U0 I S U             | 0.00 1 1 0                            | 0.76 1 < U                        | 0.68 1 < U              |
| VOLATILES                      | 4-Chlorotoluene                            |                        |                        |                        |                        |                     |                        |                        |                                       | . •                               | -                       |
| VOLATILES                      | Acetone                                    | 0.1 1 < U              | 0.1 1 < ⊍              | 0.1 1 < V              | 0.1 t < U              | 0.1 1 ≺ U           | 0.1 t < U              | 0.1 1 < U              | 0.1 1 < U                             | 0.015 1 < U                       | 0.014 1 < U             |
| VOLATILES                      | Acetonitrile                               |                        |                        |                        |                        |                     |                        |                        |                                       | 0.15 1 < U                        | 0.14 1 < U              |
| VOLATILES                      | Acrytonitrile                              |                        |                        |                        |                        |                     |                        |                        |                                       | 0.15 1 < U                        | 0.14 1 < U              |
| VOLATILES<br>VOLATILES         | ниу споле                                  | A 005 1 - 11           | 1)005 1 < 11           | 0.005 1 < 11           | 0.005 1 < !!           | 0.005 1 < 1         | 0.005 t < !/           | 0005 t < +             | 0.005 1 < 11                          | 0.010 1 < 0                       | 0.007 1 < 1             |
|                                |  | ····· · · · ·          |                        |                        | · · · ·                |                     |                        | · ·                    | ····· · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · | . •                     |



### Table 3-65

|               |                             | C                | concentrations   | of Chemicals i   | n Soil Samples   | Associated w     | vith Sump 065    |                  |                  |                  |                  |
|---------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| OCATION_CODE  |                             | LH-S064-02       | LH-S064-02       | LH-S065-01       | LH-S065-01       | LH-S065-01       | LH-S065-02       | LH-S065-02       | LH-S065-02       | LH\$-3-20        | LHS-3-20         |
| AMPLE NO      |                             | LH-\$064-02_2    | LH-S064-02_3     | LH-S065-01_1     | LH-S065-01_2     | LH-S065-01_3     | LH-S065-02_1     | LH-S065-02_2     | LH-S065-02_3     | LHS-3-20 QC      | LHS-3-20         |
| AMPLE DATE    |                             | 8/5/1993         | 8/5/1993         | 8/5/1993         | 8/5/1993         | 8/5/1993         | 8/5/1993         | 8/5/1993         | 8/5/1993         | 1/10/1995        | 1/10/1995        |
| DEPTH         |                             | 2.5 - 3 Ft       | 4 - 4.5 Ft       | 0.5 - 1 Ft       | 2-2.5 Ft         | 4 - 4.5 Ft       | 0.5 - 1 Ft       | 3 - 3.5 Ft       | 4 - 4.5 Ft       | 0 - 0.5 Ft       | 0~0.5 Ft         |
| AMPLE PURPOSE |                             | REG              | FD               | REG              |
| est Group     | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| OLATILES      | Bromobenzene                | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| OLATILES      | Bromochloromethane          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| OLATILES      | Bromodichloromethane        | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.007 1 < U      |
| OLATILES      | Bromoform                   | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.007 1 < U      |
| OLATILES      | Bromomethane                | 0.01 1 < U       | 0.015 1 < U      | 0.014 1 < U      |
| OLATILES      | Carbon disultide            | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.007 1 < U      |
| OLATILES      | Carbon tetrachloride        | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.007 1 < U      |
| OLATILES      | Chlorobenzene               | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.008 1 < U      | 0.007 1 < U      |
| OLATILES      | Chloroethane                | 0.01 1 < U       | 0.015 1 < U      | 0.014 1 < U      |
| OLATILES      | Chloroform                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.008 1 < U      | 0.007 1 < U      |
| OLATILES      | Choromethane                | 0.01 1 < U       | 0.01 f < U       | 0.01 1 < U       | 0.01 1 < U       | 0.015 1 < U      | 0.014 1 < U      |
| /OLATILES     | Chloroprene                 |                  |                  |                  |                  |                  |                  |                  |                  | 0.15 1 < U       | 0.14 1 < U       |
| OLATILES      | cis-1,2-Dichloroethene      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| OLATILES      | cis-1,3-Dichloropropene     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 f < U      | 0.008 1 < U      | 0.007 1 < U      |
| OLATILES      | Dibromochloromethane        | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 9.005 1 < U      | 0.008 1 < U      | 0.007 1 < U      |
| OLATILES      | Dibromomethane              |                  |                  |                  |                  |                  |                  |                  |                  | 0.03 1 < U       | 0.027 1 < U      |
| OLATILES      | Dichlorodifluoromethane     |                  |                  |                  |                  |                  |                  |                  |                  | 0.03 1 < U       | 0.027 1 < U      |
| OLATILES      | Ethyl methacrylate          |                  |                  |                  |                  |                  |                  |                  |                  | 0.03 1 < U       | 0.027 1 < U      |
| OLATILES      | Ethylbenzene                | 0.005 1 < U      | 0.005 1 < 빈      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.007 1 < U      |
| OLATILES      | Hexachlorobutadiene         |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| OLATILES      | IODOMETHANE                 |                  |                  |                  |                  |                  |                  |                  |                  | 0.015 1 < U      | 0.014 1 < U      |
| OLATILES      | ISOBUTYL ALCOHOL            |                  |                  |                  |                  |                  |                  |                  |                  | 31 < U           | 2.7 1 < U        |
| /OLATILE\$    | Isopropylbenzene            |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| OLATILES      | m,p-Xylenes                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| /OLATILES     | Methacrylonitrile           |                  |                  |                  |                  |                  |                  |                  |                  | 0.03 1 < U       | 0.027 1 < U      |
| /OLATILES     | Methyl isobutyl ketone      | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.015 1 < U      | 0.014 1 < U      |
| /OLATILES     | METHYL METHACRYLATE         |                  |                  |                  |                  |                  |                  |                  |                  | 0.03 1 < U       | 0.027 1 < U      |
| OLATILES      | Methylene chloride          | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.007 1 < U      |
| /OLATILES     | Naphthalene                 | ŀ                |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| OLATILES      | n-BUTYLBENZENE              |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| OLATILES      | n-PROPYLBENZENE             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| /OLATILES     | Pentachloroethane           |                  |                  |                  |                  |                  |                  |                  |                  | 0.03 t < U       | 0.027 1 < U      |
| /OLATILES     | p-ISOPROPYLTOLUENE          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| /OLATILES     | Propionitrile               |                  |                  |                  |                  |                  |                  |                  |                  | 0.076 t < U      | 0.068 1 < U      |
| /OLATILES     | sec-BUTYLBENZENE            |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| /OLATILES     | Styrene                     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.007 1 < U      |
| /OLATILES     | tert-BUTYLBENZENE           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| /OLATILES     | Tetrachloroethene           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.008 1 < U      | 0.007 1 < U      |
| /OLATILES     | Toluene                     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.007 1 < U      |
| /OLATILES     | trans-1,2-Dichtoroethene    |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| /OLATILES     | trans-1,3-Dichloropropene   | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 I < U      | 0.007 1 < U      |
| /OLATILES     | trans-1,4-Dichloro-2-butene |                  |                  |                  |                  |                  |                  |                  |                  | 0.03 1 < U       | 0.027 1 < U      |
| /OLATILES     | Trichloroethene             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.007 1 < U      |
| OLATILES      | Trichlorofluoromethane      |                  |                  |                  |                  |                  |                  |                  |                  | 0.015 1 < U      | 0.014 1 < U      |
| /OLATILES     | Viny! acetate               | 0.05 1 < U       | 0.05 t < U       | 0.05 1 < U       | 0.05 1 < U       | 0.015 1 < U      | 0.014 1 < U      |
| /OLATILES     | Vinyl chloride              | 0.01 1 < U       | 0.015 1 < U      | 0.014 1 < U      |
| OLATILES      | Xylenes, Total              | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      | 0.007 1 < U      |

Footnotes are shown on cover page to Tables Section.



Table 3-66 Concentrations of Chemicals in Soil Samples Associated with Sump 066

| [SUMP] = SUMP066 |  |                                | 470000                    | 170000                | 470003                      | 476003                                  | 179219           | #79910           | 47SR20           | 475820           | LHS-3-22         |
|------------------|--|--------------------------------|---------------------------|-----------------------|-----------------------------|---|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |  | 35SUMP066-SB01                 | 47SB02                    | 4/SBUZ<br>475802/2.51 | 475802<br>C_47580201 519807 | 4/5002<br>C_475802(0-0_5)-9812          | 475B19(0-0 5)    | 47SB19(1-2)      | 47SB20(0-0 5)    | 47SB20(1-2)      | LHS-3-22         |
| SAMPLE_NO        |  | 30-5MP000-5001-02<br>9/20/2006 | 4/ 3002(1-3)<br>7/27/1998 | 7/27/1998             | 7/27/1998                   | 12/1/1998                               | 6/2/2000         | 6/2/2000         | 6/2/2000         | 6/2/2000         | 1/10/1995        |
| SAMPLE_UATE      | 7                                      | 5-55                           | 1-3 Ft                    | 3-5Ft                 | 0-058                       | 0-0.5Ft                                 | 0-0.5 Ft         | 1-2Ft            | 0-0.5 Ft         | 1-2Ft            | 0 - 0.5 Ft       |
|                  |  | REG                            | REG                       | REG                   | REG                         | REG                                     | REG              | REG              | REG              | REG              | REG              |
| Test Grain       | Parameter (Units = mo/ko)              | Result DIL LQ VQ               | Result Dil. LQ VO         | Result DIL LQ VQ      | Result DIL LQ VQ            | Result DIL LQ VQ                        | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| DIOXINS FURANS   | 1.2.3.4.6.7.8-Heptachlorodibenzofuran  |                                | 0.000000986 1 < UJ        | 0.000000104 1 < U     |                             | 0.000001086 1 < UJ                      |                  |                  |                  |                  |                  |
| DIOXINS FURANS   | 1,2,3,4,6,7,8-HpCDD                    |                                | 0.000028282 1             | 0.000002905 1         |                             | 0.000030909 1                           |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | 1,2,3,4,7,8,9 Heptachlorodibenzofuran  |                                | 0.000000188 1 < U         | 0.000000122 1 < U     |                             | 0.000000685 1 < U                       |                  |                  |                  | •                |                  |
| DIOXINS_FURANS   | 1,2,3,4,7,8-Hexachlorodibenzofuran     |                                | 0.00000138 1 < UJ         | 0.000000157 1 < U     |                             | 0.0000058 1 < U                         |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin |                                | 0.000000254 1 < U         | 0.00000164 1 < U      |                             | 0.000000721 1 < 0                       |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | 1,2,3,6,7,8-Hexachlordibenzo-p-dioxin  |                                | 0.000000191 1 < U         | 0.000000123 1 < U     |                             | 0.000000402 1 < 0                       |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | 1,2,3,6,7,8-Hexachlorodibenzofuran     |                                | 0.000000203 1 < U         | 0.00000135 1 < U      |                             |   |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | 1,2,3,7,8,9-Hexachlord/benzo-p-dioxin  |                                | 0.000002 1 < 0            | 0.00000129 1 < 0      |                             |   |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | 1,2,3,7,8,9-Mexachiorobenzonuran       |                                | 0.00000200 1 < 0          | 0.000000165 1 < 1     |                             | 0.00000621 1 < U                        |                  |                  |                  |                  |                  |
| DIDAINS_FURANS   | 1,2,3,7,0+PerildCilloluberizo-p-uolini |                                | 0.000000233 1 - 0         | 0.000000132 1 < U     |                             | 0.000000498 1 < U                       |                  |                  |                  |                  |                  |
| DIOXING_FORMING  | 2 3 4 6 7 8-Hexachiorodibenzoluran     |                                | 0.000000258 1 < U         | 0.000000172 1 < U     |                             | 0.000000567 t < U                       |                  |                  |                  |                  |                  |
| DIOXINS FURANS   | 2.3.4.7.8-Pentachlorodibenzofuran      |                                | 0.00000203 1 < U          | 0.000000128 1 < U     |                             | 0.00000052 1 < U                        |                  |                  |                  |                  |                  |
| DIOXINS FURANS   | 2.3.7.8-TCDD                           |                                | 0.00000262 1 < U          | 0.00000017 1 < U      |                             | 0.000000581 1 < U                       |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | 2,3,7,8-TCDF                           |                                | 0.000000219 1 < U         | 0.000000171 1 < U     |                             | 0.000000424 1 < U                       |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | Heptachlorodibenzofuran                |                                | 0.00000016 1 < U          | 0.000000104 1 < U     |                             | 0.000000513 1 < U                       |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | Heptachkorodibenzo-p-dioxin            |                                | 0.000062511 1             | 0.000005624 1         |                             | 0.000071806 1                           |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | Hexachloridibenzo-p-dioxin             |                                | 0.00000416 1              | 0.000000123 1 < U     |                             | 0.00000402 1 < U                        |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | Hexachlorodibenzofuran                 |                                | 0.00000061 1              | 0.000000135 1 < U     |                             | 0.0000000000000000000000000000000000000 |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | Octachlorodibenzofuran                 |                                | 0.000002822 1 < 0.        | U.000000151 1 < U     |                             | 0.001024011 1                           |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | Octachlorodibenzo-p-dioxin             |                                | 0.002400302 F D           | 0.0000234366 1        |                             | 0.00000052 1 < U                        |                  |                  |                  |                  |                  |
| DIOXINS_FURANS   | Penadikologidenzo.a.dioxin             |                                | 0.000000255 1 < 1         | 0.000000165 1 < U     |                             | 0.000000621 1 < U                       |                  |                  |                  |                  |                  |
| DIOXING_FURANS   | Tetrachiorodihenzofirran Total         |                                | 0.000000219 1 < U         | 0.000000171 1 < U     |                             | 0.000000424 1 < U                       |                  |                  |                  |                  |                  |
| DIOXINS FURANS   | Tetrachlorodibenzo-o-dioxin            |                                | 0.000000262 1 < U         | 0.00000017 1 < U      |                             | 0.000000581 1 < U                       |                  |                  |                  |                  |                  |
| EXPLOSIVES       | 1,3,5-Trinitrobenzene                  |                                | 0.15 1 < U                | 0.15 1 < U            | 0.15 1 < U                  |   |                  |                  |                  |                  | 0.22 1 < U       |
| EXPLOSIVES       | 1,3-Dinitrobenzene                     |                                | 0.05 1 < U                | 0.05 1 < U            | 0.05 1 < U                  | -                                       |                  |                  |                  |                  | 0.22 1 < U       |
| EXPLOSIVES       | 2,4,6-Trinitrotokuene                  |                                | 0.1 1 < U                 | 0.1 1 < U             | 0.1 1 < U                   |   |                  |                  |                  |                  | 0.22 1 < 0       |
| EXPLOSIVES       | 2,4-Dinitrotoluene                     |                                | 0.1 1 < U                 | 0.1 t < U             | 0.1 1 < U                   |   |                  |                  |                  |                  | 0.22 1 4 0       |
| EXPLOSIVES       | 2,6-Dinitrotokuene                     |                                | 0.1 1 < 0                 | 0.1 t < U             | 0.1 1 < 0                   |   |                  |                  |                  |                  | 024 i - 0        |
| EXPLOSIVES       | 2-Amino-4,6-dinitrotoluene             |                                | 0.05 1 < 0                |                       | 0.00 I C U                  |   |                  |                  |                  |                  | 0.46 t < U       |
| EXPLOSIVES       | 4-Amino-2,6-dinitrololuene             |                                | 0.00 1 < 0                |                       | 011 < 1                     |   |                  |                  |                  |                  | 2 1 < U          |
| EXPLUSIVES       | n Mitroioluana                         |                                | 011 < 1                   | 0.1 1 < U             | 0.1 1 < U                   |   |                  |                  |                  |                  | 0.93 t < U       |
| EXPLOSIVES       | NIOBUM                                 |                                |                           |                       |                             |   |                  |                  |                  |                  |                  |
| EXPLOSIVES       | Nitrobenzene                           |                                | 0.1 1 < U                 | 0.1 1 < U             | 0.1 1 < U                   |   |                  |                  |                  |                  | 0.24 1 < U       |
| EXPLOSIVES       | o-Nitrotoluene                         |                                | 0.1 1 < U                 | 0.1 1 < U             | 0.1 1 < U                   |   |                  |                  |                  |                  | 0.93 1 < U       |
| EXPLOSIVES       | p-Nitrotoluêne                         |                                | 0.1 1 < U                 | 0.1 1 < U             | 0.1 1 < U                   |   |                  |                  |                  |                  | 2.8 1 < 0        |
| EXPLOSIVES       | RDX                                    |                                | 0.1 1 < U                 | 0.1 1 < U             | 0.1 1 < U                   |   |                  |                  |                  |                  |                  |
| EXPLOSIVES       | Tebyl                                  |                                | 0.1 1 < R                 | 0.1 1 < R             | 0.1 1 < R                   |   |                  |                  |                  |                  | 9810 1           |
| METALS           | Aluminum                               |                                | 5500 1 J                  | 13000 1<br>603 1 < P  | 3400 1 J                    |   |                  |                  |                  |                  | 15.9 1 < UJ      |
| METALS           | Antenno                                |                                | 326 1                     | 4 31 1                | 326 1                       |   |                  |                  |                  |                  | 4.9 1 J          |
| METALO           | Arsenic<br>Barburn                     |                                | 110 1 3                   | 77 1                  | 63 1 J                      |   |                  |                  |                  |                  | 63.3 1           |
| METALS           | Beryllum                               |                                | 0.769 1 J                 | 0.7 1                 | 0.549 1 < U                 |   |                  |                  |                  |                  |                  |
| METALS           | Cadmium                                |                                | 0.542 1 < U               | 0.577 1 < U           | 0.549 1 < ⊎                 |   |                  |                  |                  |                  | 1.6 1 < U        |
| METALS           | Calcium                                |                                | 1100 1 J                  | 1100 1                | 1500 1 J                    |   |                  |                  |                  |                  | 1230 1           |
| METALS           | Chromiem                               |                                | 13 1 J                    | 13 1                  | 11 1 J                      |   |                  |                  |                  |                  | 25.1 J           |
| METALS           | Cobalt                                 |                                | 18 1 J                    | 6.9 1                 | 8.6 1 J                     |   |                  |                  |                  |                  | 4.7 1            |
| METALS           | Copper                                 |                                | 3.71 1 J                  | 4.81 1                | 3.88 1 J                    |   |                  |                  |                  |                  | 100 1            |
| METALS           | Cyanide, Total                         |                                | (2000 4                   | 12000 1               | 44000 4 t                   |   |                  |                  |                  |                  | 19100 1          |
| METALS           | Iron                                   |                                | 10000 T J                 | 13000 1               | 11000 1 J                   |   |                  | · ·              |                  |                  | 79.5 1           |
| METALS           | Lead                                   |                                | 12.3 L<br>540 f c L       | 0.23 1                | 550 1 < 1                   |   |                  | •                |                  |                  | 454 i            |
| METALS           | Magnesium                              |                                | 540 I - U<br>637 1 - U    | 106 1                 | 263 1 - 1                   |   |                  |                  |                  |                  | 72.9 1           |
| METALS           | Mailyailese                            |                                | 011 1 < 1                 | 0.12 1 < U            | 0.11 1 < U                  |   |                  |                  |                  |                  | 0.17 1 < U       |
| METALS           | Nickel                                 |                                | 7.6 1                     | 9.9 1                 | 6.6 1 J                     |   |                  |                  |                  |                  |                  |
| METALS           | Potassium                              |                                | 1000 1                    | 1160 1                | 670 1                       |   |                  |                  |                  |                  | 447 1            |
| METALS           | Selenium                               | 1                              | 1.72 1                    | 1.54 1                | 1.49 1                      |   |                  |                  |                  |                  | 0.93 1 J         |
| METALS           | Silver                                 |                                | 1.1 1 < U                 | i 1.1 f < U           | 1,1 1 < U                   |   |                  |                  | :                |                  | 1.6 1 < U        |
| METALS           | Sodium                                 |                                | 540 1 < U                 | 580 1 < U             | 550 1 < U                   |   |                  |                  |                  |                  |                  |
| METALS           | Strontium                              |                                | 6.7 1                     | 8.3 1                 | 5.5 1 < U                   |   |                  |                  |                  |                  | 15.9 1 < U       |
| METALS           | Thallium                               |                                | 0.542 1 < U               | 0.577 t < U           | 0.549 1 < U                 |   |                  |                  |                  |                  | /3.0 1 4 0       |
| METALS           | Vanadium                               |                                | 21 1 J                    | 28 1                  | 20 1 J                      |   |                  |                  |                  |                  | 207 1            |
| METALS           | Zinc                                   | 1                              | 13 1 3                    | 18 1                  | 17 I J                      |   | -                |                  |                  |                  | 20, ,            |



· · · —

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-66 Concentrations of Chemicals in Soil Samples Associated with Sump 066

| LOCATION_CODE                  |                                       | 35SUMP066-SB01          | 47SB02                   | 47SB02                    | 47SB02              | 47SB02              | 47SB19           | 47SB19           | 47SB20           | 47SB20           | LHS-3-22         |
|--------------------------------|---------------------------------------|-------------------------|--------------------------|---------------------------|---------------------|---------------------|------------------|------------------|------------------|------------------|------------------|
| SAMPLE_NO                      |                                       | 35-SMP066-SB01-02       | 475802(1-3)<br>2/07/4008 | 4/ SBU2(3-5)<br>7/37/(009 | 5/10/2(0-0_0)-9001  | 12/11008            | 473019(0-0_3)    | 4/30/9(1-2)      | 6/2/2000         | 6/2/2008         | 1/10/1995        |
| SAMPLE_DATE                    |                                       | 9/20/2006               | 112/11998                | 7/2//1998                 | 112/11990           | 0.055               | 0,212000         | 1_2 51           | 0.0551           | 1_250            | 0-05Ft           |
| DEPTH                          |                                       | 5-51                    | 1-31                     | 3-31                      | 0-0.3 FL            | PEC                 | PEG              | REG              | REG              | REG              | REG              |
| SAMPLE_PURPOSE                 | D                                     | REG<br>Desuit DIL LO MO |                          |                           | Result Dill I.O. VO | Result Dill I.O. VO | Result DII 10 VO | Result Dil 10 VO | Result DII IO VO | Result DIL LO VO | Result DIL LO VO |
| Test Group                     | Parameter (Units = mg/kg)             | Result Dile Lot Vol     |                          | Result Dit Lo Vo          |                     |                     |                  |                  |                  |                  |                  |
| PCBS                           | Aroclor 1016                          |                         | 0.035 1 < 0              | 0.038 1 < 0               | 0.037 1 < 0         |                     |                  |                  |                  |                  |                  |
| PCBS                           | Aroclor 1221                          |                         | 0.072 1 < 0              | 0.077 1 < U               | 0.0/3 1 < U         |                     |                  |                  |                  |                  |                  |
| PCBS                           | Aroclor 1232 *                        |                         | 0.036 1 < U              | 0.038 1 < U               | 0.037 1 < U         |                     |                  |                  |                  |                  |                  |
| PCBS                           | Aroctor 1242 °                        |                         | 0.036 1 < U              | 0.038 1 < U               | 0.037 1 < U         |                     |                  |                  |                  | · · · ·          |                  |
| PCBS                           | Arocior 1248 d                        |                         | 0.036 t < U              | 0.038 1 < U               | 0.037 1 < U         |                     |                  |                  |                  |                  |                  |
| PCBS                           | Arockir 1254 *                        |                         | 0.036 1 < U              | 0.038 1 < U               | 0.037 1 < U         |                     |                  |                  |                  |                  |                  |
| PCBS                           | Arockir 1260 "                        |                         | 0.036 1 < U              | 0.038 1 < U               | 0.037 t < U         |                     |                  |                  |                  |                  |                  |
| PERC                           | Perchlorate                           | 0.01 1 U                |                          |                           |                     |                     | 0.136 1          | 0.00591 1 < U    | 0.00587 1 < U    | 0.222 1          |                  |
| PESTICIDES                     | 4,4'-DDD                              |                         | 0.0036 t < U             | 0.0038 1 < U              | 0.0036 1 < U        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | 4,4'-DDE                              |                         | 0.0036 1 < U             | 0.0038 t < U              | 0.0036 1 < U        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | 4,4'-DDT                              |                         | 0.0036 1 < U             | 0.0038 1 < U              | 0.0036 1 < U        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | Aldrin                                |                         | 0.0018 1 < U             | 0.0019 1 < U              | 0.0018 1 < U        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | alpha-BHC                             |                         | 0.0018 1 < U             | 0.0019 1 < U              | 0.0018 1 < U        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | beta-BHC                              |                         | 0.0018 1 < U             | 0.0019 1 < U              | 0.0018 1 < U        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | Chlordane                             |                         | 0.036 1 < 0              | 0.038 t < U               | 0.037 1 < 0         |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | detta-BHC                             |                         | 0.0018 1 < 0             | 0.0019 1 < U              | 0.0018 1 < U        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | Diekinn                               |                         | 0.0036 1 < 0             | 0.0038 1 < 0              | 0.0036 1 < 0        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | Endosulfan I                          |                         |                          | 0.0019 1 < 0              | 0.0026 1 < 1        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | Endosultan II                         |                         | 0.0036 1 < 0             | 0.0038 1 < 0              | 0.0006 1 < U        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | Endosultan Sultate                    |                         |                          | 0.0036 1 < 0              | 0.0036 1 < 1        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | Enorm<br>Endrin eldebude              |                         |                          | 0.0038 1 < 11             | 0.0036 1 < 1        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | Endrin katana                         |                         | 0.0036 1 < 11            | 0.0038 1 < 11             | 0.0036 1 < 1        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | Entrin Ketone                         |                         | 0.0018 1 < 11            | 0.0019 1 < U              | 0.0018 1 < U        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | Hentachlor                            |                         | 0.0018 t < U             | 0.0019 1 < U              | 0.0018 1 < U        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | Hentachior enoxide                    |                         | 0.0018 1 < U             | 0.0019 1 < U              | 0.0018 t < U        |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | METHOXYCHLOR                          |                         | 0.018 1 < U              | 0.019 1 < U               | 0.018 t < U         |                     |                  |                  |                  |                  |                  |
| PESTICIDES                     | Toxaphene                             |                         | 0.036 1 < U              | 0.038 1 < U               | 0.037 1 < U         |                     |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene                |                         | 0.36 1 < U               | 0.38 1 < U                | 0.37 1 < 1/         |                     |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene                   |                         | 0.36 t < U               | 0.38 1 < ⊍                | 0.37 t < U          |                     |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 1,3-Dichiorobenzene                   |                         | 0.36 1 < U               | 0.38 1 < U                | 0.37 1 < U          |                     |                  |                  |                  |                  | 0.74 t < U       |
| SEMIVOLATILES                  | t,4-Dichiorobenzene                   |                         | 0.36 1 < U               | 0.38 f < U                | 0.37 1 < U          |                     |                  |                  |                  |                  | 0.74 t < U       |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenol                 |                         | 0.9 1 < U                | 0.96 t < U                | 0.91 1 < U          |                     |                  |                  |                  |                  | 3.7 1 < U        |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol                 |                         | 0.36 1 < U               | 0.38 1 < U                | 0.37 1 < U          |                     |                  |                  |                  |                  | U./4 1 < U       |
| SEMIVOLATILES                  | 2,4-Dichlorophenol                    |                         | 0.36 1 < U               | 0.38 1 < U                | 0.37 1 < U          |                     |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 2,4-Dimethylphenot                    |                         | 0.36 1 < 0               | 0.38 1 < U                | 0.3/ 1 < U          |                     |                  |                  |                  |                  | 37 4 < 11        |
| SEMIVOLATILES                  | 2,4-Dintrophenol                      |                         | 0.9 1 < 0                | 0.96   < 0                | 0.91 / < U          |                     |                  |                  |                  |                  | 074 1 < 1        |
| SEMIVULATILES                  | 2,4-Dinitrolouene                     |                         |                          | 0.30 1 < 0                | 0.37 1 < 1          |                     |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2,0-L/IIIIUU(Oluerie                  |                         | 0.30 1 < 0               | 0.30 1 4 0                | 0.37 1 < 1          |                     |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2-Chlorontrona)                       |                         | 0.36 1 < 11              | 0.38 1 < 1/               | 0.37 t < U          |                     |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2-Methylosohthalene                   |                         | 0.36 t < U               | 0.38 1 < U                | 0.37 1 < U          |                     |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2-Methylobenol                        |                         | 0.36 1 < U               | 0.38 1 < U                | 0.37 1 < U          |                     |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2-Nitroaniline                        |                         | 0.9 1 < U                | 0.96 1 < U                | 0.91 1 < U          |                     |                  |                  |                  |                  | 3.7 1 < U        |
| SEMIVOLATILES                  | 2-Nitrophenol                         |                         | 0.36 † < U               | 0.38 1 < U                | 0.37 1 < U          |                     |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzidine                |                         | 0.36 1 < U               | 0.38 1 < U                | 0.37 1 < U          |                     |                  |                  |                  |                  | 1.5 1 < U        |
| SEMIVOLATILES                  | 3-Nitroaniline                        |                         | 0.9 1 < U                | 0.96 1 < U                | 0.91 1 < U          |                     |                  |                  |                  |                  | 3.7 f < U        |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol            |                         | 0.9 t < U                | 0.96 1 < U                | 0.91 1 < U          |                     |                  |                  |                  |                  | 3.7 1 < U        |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether            |                         | 0.36 1 < U               | 0.38 1 < U                | 0.37 1 < U          |                     |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol               |                         | 0.36 1 < U               | 0.38 t < U                | 0.37 t < U          |                     |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 4-Chloroaniline                       |                         | 0.36 1 < U               | 0.38 1 < U                | 0.37 1 < U          |                     |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 4-Chlorophenyl phenyl ether           |                         | 0.36 1 < U               | 0.38 1 < U                | 0.37 1 < U          |                     |                  |                  | 1 A.             |                  | 0.74 1 < 0       |
| SEMIVOLATILES                  | 4-Methylphenol                        |                         | 0.36 1 < U               | 0.38 1 < U                | 0.37 1 < U          |                     |                  |                  | :                |                  | 0.74 1 < 0       |
| SEMIVOLATILES                  | 4-Nitroaniline                        |                         | 0.9 1 < U                | 0.96 1 < U                | 0.91 1 < U          |                     |                  |                  |                  |                  | 3./ 1 < 0        |
| SEMIVOLATILES                  | 4-Nitrophenol                         |                         | 0.9 1 < U                | 0.96 1 < U                | 0.91 1 < U          |                     |                  |                  |                  |                  | 074 1 - 12       |
| SEMIVOLATILES                  | Acenaphthene                          |                         | 0.36 1 < U               | 0.38 1 < 0                | 0.37 1 < 0          |                     |                  |                  |                  |                  | 0.74 1 4 1       |
| SEMIVOLATILES                  | Acenaphthylene                        |                         | 0.36 1 < 0               | 0.38 1 < 0                | 0.37 1 < U          |                     |                  |                  |                  |                  | 0.74 1 4 0       |
| SEMIVOLATILES                  | Anthracene                            |                         | 0.36 1 < 0               | 0.38 1 < U                | 0.37 1 < 0          |                     |                  |                  |                  |                  | 0.74 1 < 1       |
| SEMIVOLATILES                  | Benzo(a)anthracene                    |                         | 0.46 4 4 44              | 0.38 1 4 0                | 0.37 1 < 0          |                     |                  |                  |                  |                  | 0.74 1 < U       |
| SEMBYOLATILES<br>SEMBYOLATILES | perzu(ajpyrene<br>Repro/bituerenthene |                         | 0.10 1 4 0               | 0.13 1 2 1                | 0.10 1 2 0          |                     |                  |                  |                  |                  | 0.17 1 .         |
| SEMBYOLATILES<br>SEMBYOLATILES | perzotabilizandone                    |                         | 0.00 i × 0<br>036 1 ≤ 11 | 0.38 1 < II               | 0.37 t < U          |                     |                  |                  |                  |                  | 0.74 1 < U       |
|                                | Denzo(k)filipersethene                |                         | 0.00 1 ≤ 0               | 0.38 1 < 11               | 0.37 1 < 11         |                     |                  |                  | :                |                  | 0.076 1 J        |
| SEMIVOLATILES                  | Renzoic Acid                          |                         | 0.9 t < U                | 0.96 1 < 11               | 0.91 1 < U          |                     |                  |                  |                  |                  | 3.7 t < U        |
| SEMIVOLATILES                  | Benzvi Akohol                         |                         | 0.9 1 < 1/               | 0.96 1 < 1                | 0.91 1 < U          |                     |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | bis/2-Chloroethoxy)methane            |                         | 0.36 1 < U               | 0.38 1 < U                | 0.37 1 < U          |                     |                  |                  |                  |                  | 0.74 t < U       |
|                                |                                       |                         |                          |                           |                     |                     |                  |                  |                  |                  |                  |



Table 3-66 Concentrations of Chemicals in Soil Samples Associated with Sump ()66

|                |                                 |                   | Concerniau         | UIS UI Chemica    | s in Son Samples As  | Sociated with Sump ( |                  |                  |                  |                  | Ŭ                |
|----------------|---------------------------------|-------------------|--------------------|-------------------|----------------------|----------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION CODE  |                                 | 35SUMP066-SB01    | 47SB02             | 47SB02            | 47SB02               | 47SB02               | 47SB19           | 47SB19           | 47SB20           | 47SB20           | LHS-3-22         |
|                |                                 | 35-SMP066-SR01-02 | 475802(1-3)        | 47SR02(3-5)       | C-47SB02(0-0 5)-9807 | C-47SB02(0-0 5)-9812 | 47SB19(0-0 5)    | 47SB19(1-2)      | 47SB20(0-0_5)    | 47SB20(1-2)      | LHS-3-22         |
| SAMPLE_NO      |                                 | 0000000000        | 7/77/4000          | 7/07/4000         | 7/27/1008            | 12/1/1908            | 6/2/2000         | 6/2/2000         | 6/2/2000         | 6/2/2000         | 1/10/1995        |
| SAMPLE_DATE    |                                 | 9/20/2000         | 112111998          | 1/2//1996         | 112111990            | 12/11/1350           | 0222000          | 1 2 5            | 0.05500          | 1 2 5+           | 0.05 Et          |
| DEPTH          |                                 | 5-5Ft             | 1-3Ft              | 3-5H              | 0-0.5 Ft             | 0-0.5+1              | 0-0.5 Ft         | 1-21             | 0-0.371          | 1-21             | 0-0.311          |
| SAMPLE_PURPOSE |                                 | REG               | REG                | REG               | REG                  | REG                  | REG              | REG              | REG              | REG              | REG              |
| Test Group     | Parameter (Units ≂ mg/kg)       | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VQ     | Result DIL LQ VQ     | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| SEMIVOLATILES  | bis/2-Chloroethyl)ether         |                   | 0.36 1 < U         | 0.38 1 < U        | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 1 < U       |
| SEMILO ATHES   | his/2-ChloroisonronyBether      |                   | 0.36 i < U         | 0.38 1 < U        | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 1 < U       |
|                | bio/2 Ethubon (Jobtholata       |                   | 036 t < 11         | 038 1 < 1         | 0.37 1 < 11          |                      |                  |                  |                  |                  | 0.17 1 J         |
| SEMIVOLATILES  | DIS(2-EDIVAREXY/philipakate     |                   |                    | 0.00 1 4 11       |                      |                      |                  |                  |                  |                  | 074 1 < U        |
| SEMIVOLATILES  | Butyi benzyi primalale          |                   | 0.30 1 0           | 0.36 1 4 1        |                      |                      |                  |                  |                  |                  |                  |
| SEMIVOLATILES  | Carbazole                       |                   | 0.36 1 < 0         | 0.38 1 < 0        | 0.37 1 < 0           |                      |                  |                  |                  |                  | 074 + - 11       |
| SEMIVOLATILES  | Chrysene                        |                   | 0.36 1 < U         | 0.38 1 < U        | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 1 0         |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene          |                   | 0.36 1 < U         | 0.38 1 < U        | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 3 < 0       |
| SEMIVOLATILES  | Dibenzofuran                    |                   | 0.36 1 < U         | 0.38 1 < U        | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 1 < 0       |
| SEMIVOLATILES  | Diethvi ohthalate               |                   | 0.36 t < U         | 0.38 t < U        | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES  | Dimethyl phthalate              |                   | 0.36 t < U         | 0.38 t < U        | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 1 < U       |
| SEMBIOLATILES  | di.n. Ruthd phthalste           |                   | 0.36 1 < 11        | 038 t < U         | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 1 < U       |
|                | dia Osta abitalata              |                   | 0.26 1 < 1         | 0.38 t < U        | 037 1 < II           |                      |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES  | dHI-OCIYI pilotaate             |                   |                    | 0.20 1 - 0        | 0.37 1 4 1           |                      |                  |                  |                  |                  | n74 1 < IJ       |
| SEMIVOLATILES  | Huoranthene                     |                   | 0.36 1 4 0         | 0.36 1 < 0        |                      |                      |                  |                  |                  |                  | 074 1 < 1        |
| SEMIVOLATILES  | Fluorene                        |                   | 0.36 1 < 0         | 0.38 1 < 0        | 0.37 1 < 0           |                      |                  |                  |                  |                  | 0.74 1 4 11      |
| SEMIVOLATILES  | Hexachlorobenzene               |                   | 0.18 1 < U         | 0.19 1 < U        | 0.18 1 < 0           |                      |                  |                  | -                |                  | 0.74 1 4 0       |
| SEMIVOLATILES  | Hexachlorobutadiene             |                   | 0.36 1 < U         | 0.38 1 < U        | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 1 < 0       |
| SEMIVOLATILES  | Hexachkorocyclopentadiene       |                   | 0.36 1 < U         | 0.38 1 < U        | 0.37 t < U           |                      |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES  | Hexachloroethane                |                   | 0.36 1 < U         | 0.38 1 < U        | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 1 < U       |
| SENIMOLATILES  | Indenci 1 2 3-crilmvrene        |                   | 0.36 1 < U         | 0.38 1 < Li       | 0.37 t < U           |                      |                  |                  |                  |                  | 0.74 1 < U       |
| SEMINON ATHER  | Isophorene                      |                   | 0.36 1 < 11        | 0.38 1 < 11       | 0.37 1 < 1           |                      |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES  | Isopholone .                    |                   |                    | 0.39 1 < 1)       | 0.37 1 < 11          |                      |                  |                  |                  |                  | 0_74, 1 < U      |
| SEMIVULATILES  | Naphulaene                      |                   |                    | 0.00 1 4 0        | 0.27 1 < 1           |                      |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES  | Nitrobenzene                    |                   | 0.35 1 < 0         | 0.36 1 4 0        | 0.37 1 4 0           |                      |                  |                  |                  |                  |                  |
| SEMIVOLATILES  | n-Nitrosodimethylamine          |                   | 0.36 1 < 0         | 0.38 1 < 0        | 0.37 1 < 0           |                      |                  |                  |                  |                  | 0.74 6 4 11      |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine      |                   | 0.36 1 < U         | 0.38 1 < U        | 0.37 1 < U           |                      |                  |                  |                  |                  |                  |
| SEMIVOLATILES  | n-Nitrosodiphenylamine          |                   | 0.36 f < U         | 0.38 1 < U        | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 1 < 0       |
| SEMIVOLATILES  | Pentachlorophenol               |                   | 0.18 1 < U         | 0.19 t < U        | 0.18 1 < U           |                      |                  |                  |                  |                  | 3.7 1 < 0        |
| SEMIVOLATILES  | Phenanthrene                    |                   | 0.36 1 < U         | 0.38 1 < U        | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 t < U       |
| SEMIVOLATILES  | Phenol                          |                   | 0.36 1 < U         | 0.38 t < 1/       | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIMOLATILES  | Purene                          |                   | 0.36 1 < U         | 0.38 1 < U        | 0.37 1 < U           |                      |                  |                  |                  |                  | 0.74 1 < U       |
| VOLATRES       | 4 1 1 7 Tetrephereothana        | A 00495 1 U       | 0.0054 1 < H       | 0.0058 1 < 11     | 0.0055 1 < 11        |                      |                  |                  |                  |                  | 0.022 t < U      |
| VOLATRES       |                                 |                   |                    | 0.0000 1 - 0000.0 | 8,0055 1 < 1         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VULATILES      | 1, I, I- Inchoroemane           | 0.00495 1 0       | 0.0034 1 < 0       |                   |                      |                      |                  |                  |                  |                  | 0.011 1 < 11     |
| VOLATILES      | 1,1,2,2-Tetrachloroethane       | U.UU495 1 U       | 0.0054 1 < 0       | 0.0056 E < 0      | 0.0055 1 < 0         |                      |                  |                  |                  |                  | 0.011 1 - 11     |
| VOLATILES      | 1,1,2-Trichloroethane           | 0.00495 1 U       | 0.0054 1 < U       | 0.0058 1 < 0      | 0.0055 1 < 0         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | 1,1-Dichloroethane              | 0.00495 1 U       | 0.0054 1 < U       | 0.0058 1 < U      | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < 0      |
| VOLATILES      | 1,1-Dichloroethene              | 0.00495 1 U       | 0.0054 t < U       | 0.0058 1 < U      | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < 0      |
| VOLATILES      | 1,1-Dichloropropene             | 0.00495 1 U       | 0.0054 t < U       | 0.0058 1 < U      | 0.0055 1 < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | 1.2.3-Trichlorobenzene          | 0.00495 1 U       | 0.0054 1 < U       | 0.0058 1 < U      | 0.0055 1 < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | 1.2.3-Trichkompropane           | 0.00495 t U       | 0.016 1 < U        | 0.017 1 < U       | 0.016 1 < U          |                      |                  |                  |                  |                  | 0.022 1 < U      |
| VOLATILES      | t 2 4 Trichlombarstere          | 0.00495 1 11      | 0.0054 1 < 11      | 0.0058 1 < U      | 0.0055 1 < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | 1.2.4 Trimethylangono           | 0.00405 1 11      | 0.0054 1 < 1       | 0.0058 1 < N      | 0.0055 1 < 11        |                      |                  |                  |                  |                  |                  |
| VOLATILES      | 1,2,4-Thuseniyberizene          | 0.00405 1 11      |                    | 0.000 1 - U       |                      |                      |                  |                  |                  |                  | 0-044 1 < U      |
| VOLATILES      | 1,2-Dibromo-3-chloropropane     | 0.00495 1 0       | 0.011 1 < 0        | 0.012 1 4 0       |                      |                      |                  |                  |                  |                  | 0.044 1 < 11     |
| VOLATILES      | 1,2-Dibromoethane               | 0.00495 1 U       | $0.0054 \ 1 \ < 0$ | 0.0058 1 < 0      | 0.0055 1 < 0         |                      |                  |                  |                  |                  | 0.044 1 4 0      |
| VOLATILES      | 1,2-Dichlorobenzene             | 0.00495 1 U       | 0.0054 1 < U       | 0.0058 1 < U      | 0.0055 1 < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | 1,2-Dichloroethane              | 0.00495 1 U       | 0.0054 1 < U       | 0.0058 1 < U      | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < 0      |
| VOLATILES      | 1,2-Dichloroethene              |                   |                    |                   |                      |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | 1.2-Dichloropropane             | 0.00495 1 U       | 0.0054 1 < U       | 0.0058 1 < U      | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOI ATH ES     | 1.2-Dimethylberizede (o-Xylene) | 0.00495 1 U       |                    |                   |                      |                      |                  |                  | -                |                  |                  |
| VOLATILES      | 135 Trimethylhenzene            | 0.00495 1 11      | 0.0054 1 < 13      | 0.0058 1 < 1      | 0.0055 1 < U         |                      |                  |                  |                  |                  |                  |
| VOLATIES       | 1 3 Disblashesses               | 0.00405 1 11      | 0.0054 1 4         | 0.0059 1 4 11     | 0.0055 1 < 11        |                      |                  |                  |                  |                  |                  |
| VOLATILES      | r, 3-Dichtorobenzene            | 0.00495 1 0       | 0.0054 4 4 11      |                   |                      |                      |                  |                  |                  |                  |                  |
| VULATILES      | 1,3-Uichiolopropane             | 0.00495 1 0       | 0.0034 1 0         | 0.0000 1 1 0      |                      |                      |                  |                  |                  |                  |                  |
| VOLATILES      | 1,4-Dichloro-2-butene           |                   | 0.0054 1 < 0       | 0.0058 1 < 0      | 0.0055 1 < 0         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | 1,4-Dichlorobenzene             | 0.00495 1 U       | 0.0054 1 < U       | 0.0058 1 < U      | 0.0055 1 < 0         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | 1,4-Dioxane                     | •                 | 1.1 1 < U          | 1.2 1 < U         | 1.1 1 < U            |                      |                  |                  |                  |                  |                  |
| VOLATILES      | 2,2-Dichloropropane             | 0.00495 1 U       | 0.016 1 < U        | 0.017 1 < U       | 0.016 1 < U          |                      | -                |                  |                  |                  |                  |
| VOLATILES      | 2-Butanone                      | 0.00991 1 U       | 0.022 t < U        | 0.023 1 < U       | 0.022 1 < U          |                      | ·                |                  |                  |                  | 0.022 1 < U      |
| VOI ATH FS     | 2-Chloroethyl vinyl ether       | 0.00991 1 U       |                    |                   |                      |                      |                  |                  |                  |                  | 0.022 1 < U      |
| VOI ATH ES     | 2-Chlorotokuene                 | 0.00495 1 U       | 0.0054 1 < U       | 0.0058 1 < H      | 0.0055 t < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | 2-Heranone                      | 0.00991 1 11 111  | 1022 f < 11        | 0.023 1 < 11      | 0.022 1 < 11         |                      |                  |                  |                  |                  | 0.022 1 < U      |
|                |                                 | 0.00001 1 0 00    |                    | 0.12 1 - 11       | 011 1 - 1            |                      |                  |                  |                  |                  | 1.1 1 < 0        |
| VULATILES      | 2-Fropena                       | 0.00405 4 **      |                    | v.iz I < U        |                      |                      |                  |                  |                  |                  |                  |
| VOLATILES      | 4-Uniorotatuene                 | 0.00495 1 U       | 0.0054 1 < U       | 0.0058 1 < U      | U.U.0000 1 < U       |                      |                  |                  |                  |                  | 0.000 4 - 17     |
| VOLATILES      | Acetone                         | 0.00991 1 U       | 0.022 1 < U        | 0.023 1 < U       | 0.022 1 < U          |                      |                  |                  |                  |                  | 0.022 1 < 0      |
| VOLATILES      | Acetonitrile                    |                   |                    |                   |                      |                      |                  |                  |                  |                  | 0.22 1 < 0       |
| VOLATILES      | Acrylonitrile                   |                   | 0.11 1 < U         | 0.12 1 < U        | 0.11 1 < U           |                      |                  |                  |                  |                  | 0.22 1 < U       |
| VOLATILES      | Allyi chloride                  |                   |                    |                   |                      |                      |                  |                  | :                |                  | 0.022 1 < U      |
| VOLATILES      | Benzene                         | 0.00495 1 U       | 0.0054 1 < U       | 0.0058 1 < U      | 0.0055 t < ⊍         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOI ATILES     | Bromobenzene                    | 0.00495 1 U       | 0.0054 t < U       | 0.0058 1 < U      | 0.0055 t < U         |                      |                  |                  |                  |                  |                  |
| VOLATIES       | Bromachloromathane              | 0.00495 1 11      | 0.0054 1 < 13      | 0.0058 1 < 1      | 0.0055 t < H         |                      |                  |                  |                  |                  |                  |
| TUCARLO        | or ymychilol folicai defe       | 9.90709 F U       |                    |                   |                      |                      |                  |                  |                  |                  |                  |

## 00066145

÷.,

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-66 Concentrations of Chemicals in Soil Samples Associated with Sump 066

|                |                             | 2220WL000-2001                        | 4/SB02                  | 475802           | 47SB02               | 47SB02               | 4/5819           | 4/5819           | 4/SB20           | 475820           | LHS-3-22         |
|----------------|-----------------------------|---------------------------------------|-------------------------|------------------|----------------------|----------------------|------------------|------------------|------------------|------------------|------------------|
| SAMPLE_NO      |                             | 35-SMP066-SB01-02                     | 47SB02(1-3)             | 47SB02(3-5)      | C-47SB02(0-0_5)-9807 | C-47SB02(0-0_5)-9812 | 47SB19(0-0_5)    | 47SB19(1-2)      | 47SB20(0-0_5)    | 47SB20(1-2)      | LHS-3-22         |
| SAMPLE_DATE    |                             | 9/20/2006                             | 7/27/1998               | 7/27/1998        | 7/27/1998            | 12/1/1998            | 6/2/2000         | 6/2/2000         | 6/2/2000         | 6/2/2000         | 1/10/1995        |
| DEPTH          |                             | 5 - 5 Ft                              | 1 - 3 Ft                | 3-5Ft            | 0 - 0.5 Ft           | 0 - 0.5 Ft           | 0 - 0.5 Ft       | 1-2Ft            | 0~0.5 Ft         | 1-2Ft            | 0 - 0.5 Ft       |
| SAMPLE_PURPOSE |                             | REG                                   | REG                     | REG              | REG                  | REG                  | REG              | REG              | REG              | REG              | REG              |
| Test Group     | Parameter (Units = mg/kg)   | Resuft DIL LQ VQ                      | Result DIL LQ VQ        | Result DIL LQ VQ | Result DIL LQ VQ     | Result DIL LQ VQ     | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| VOLATILES      | Bromodichloromethane        | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | Bromoform                   | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | Bromomethane                | 0.00991 1 U                           | 0.011 1 < U             | 0.012 1 < U      | 0.011 1 < U          |                      |                  |                  |                  |                  | 0.022 1 < U      |
| VOLATILES      | Carbon disulfide            | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | Carbon tetrachloride        | 0.00495 1 U                           | 0.011 1 < U             | 0.012 1 < U      | 0.011 1 < U          |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | Chlorobenzene               | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | Chloroethane                | 0.00991 1 U                           | 0.011 1 < U             | 0.012 1 < U      | 0.011 1 < U          |                      |                  |                  |                  |                  | 0.022 1 < U      |
| VOLATILES      | Chloroform                  | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | Chloromethane               | 0.00991 1 U                           | 0.011 1 < U             | 0.012 1 < U      | 0.011 1 < U          |                      |                  |                  |                  |                  | 0.022 1 < U      |
| VOLATILES      | Chloroprene                 | }                                     |                         |                  |                      |                      |                  |                  |                  |                  | 0.22 1 < U       |
| VOLATILES      | cis-1,2-Dichloroethene      | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | cis-1,3-Dichloropropene     | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | Dibromochloromethane        | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 t < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | Dibromomethane              | 0.00495 1 U                           | 0.011 1 < U             | 0.012 1 < U      | 0.011 1 < U          |                      |                  |                  |                  |                  | 0.044 1 < U      |
| VOLATILES      | Dichlorodifluoromethane     | 0.00991 1 U                           | 0.01 <del>6</del> 1 < U | 0.017 1 < U      | 0.016 1 < U          |                      |                  |                  |                  |                  | 0.044 1 < U      |
| VOLATILES      | Ethyl methacrylate          |                                       | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.044 1 < U      |
| VOLATILES      | Ethylibenzene               | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | Hexachlorobutadiene         | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | IODOMETHANE                 |                                       | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.022 1 < U      |
| VOLATILES      | ISOBUTYL ALCOHOL            |                                       | 1.1 1 < U               | 1.2 1 < U        | 1.1 1 < U            |                      |                  |                  |                  |                  | 4.4 1 < U        |
| VOLATILES      | Isopropyibenzene            | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 t < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | m,p-Xylenes                 | 0.00495 1 U                           |                         |                  |                      |                      |                  |                  |                  |                  |                  |
| VOLATILES      | Methacrylonitrile           |                                       | 0.11 1 < U              | 0.12 1 < U       | 0.11 1 < U           |                      |                  |                  |                  |                  | 0.044 1 < U      |
| VOLATILES      | Methyl isobutyl ketone      | 0.00991 1 U                           | 0.022 1 < U             | 0.023 1 < U      | 0.022 1 < U          |                      |                  |                  |                  |                  | 0.022 1 < U      |
| VOLATILES      | METHYL METHACRYLATE         |                                       | 0.054 1 < U             | 0.058 1 < U      | 0.055 1 < U          |                      |                  |                  |                  |                  | 0.044 1 < U      |
| VOLATILES      | Methylene chloride          | 0.0022 1 J B                          | 0.0054 1 < U            | 0.0058 t < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | Naphthalene                 | 0.00991 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U⊧        |                      |                  |                  |                  |                  |                  |
| VOLATILES      | n-BUTYLBENZENE              | 0.00495 1 U                           | €.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | n-PROPYLBENZENE             | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | Pentachloroethane           |                                       | 0.011 t < U             | 0.012 1 < U      | 0.011 1 < U          |                      |                  |                  |                  |                  | 0.044 1 < U      |
| VOLATILES      | p-ISOPROPYLTOLUENE          | 0.00495 1 U                           | 0.0054 t < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | Propionitrile               |                                       | 0.11 1 < U              | 0.12 1 < U       | 0.11 1 < U           |                      |                  |                  |                  |                  | 0.11 1 < U       |
| VOLATILES      | sec-BUTYLBENZENE            | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | Styrene                     | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | test-BUTYLBENZENE           | 0.00495 1 U                           | 0.0054 t < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | Tetrachloroethene           | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | Toluene                     | 0.00495 1 U                           | 0.0054 t < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | trans-1,2-Dichloroethene    | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  |                  |
| VOLATILES      | trans-1,3-Dichloropropene   | 0.00495 1 U                           | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | trans-1,4-Dichloro-2-butene |                                       |                         |                  |                      |                      |                  |                  |                  |                  | 0.044 1 < U      |
| VOLATILES      | Trichloroethene             | 0.00495 1 U                           | 0.011 <b>1 &lt;</b> U   | 0.012 t < U      | 0.011 1 < U          |                      |                  |                  |                  |                  | 0.011 1 < U      |
| VOLATILES      | Trichlorofluoromethane      | 0.00991 1 U                           | 0.011 1 < U             | 0.012 t < U      | 0.011 1 < U          |                      |                  |                  |                  |                  | 0.022 1 < U      |
| VOLATILES      | Vinyl acetate               | U U t tee00.0                         | 0.022 1 < U             | 0.023 1 < U      | 0.022 1 < U          |                      |                  |                  |                  |                  | 0.022 1 < U      |
| VOLATILES      | Vinyt chloride              | 0.00991 1 U                           | 0.011 1 < U             | 0.012 1 < U      | 0.011 1 < U          |                      |                  |                  |                  |                  | 0.022 1 < U      |
| VOLATILES      | Xylenes, Total              | · · · · · · · · · · · · · · · · · · · | 0.0054 1 < U            | 0.0058 1 < U     | 0.0055 1 < U         |                      |                  |                  |                  |                  | 0.011 1 < U      |

Shaw Environmental, Inc.

# 00066146

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

|                          |   |       |          |            |        |         |            |                | ា      | able    | e 3-66         |         | _      |         |         |            | _      |        |            |         |     |    |             |         |       |    |             |                    |        |    |
|--------------------------|---|-------|----------|------------|--------|---------|------------|----------------|--------|---------|----------------|---------|--------|---------|---------|------------|--------|--------|------------|---------|-----|----|-------------|---------|-------|----|-------------|--------------------|--------|----|
| ISLIMP1 = SUMP066        |   | Co    | ncen     | trati      | ons    | of (    | Chem       | icals          | s in   | Soil    | i Sam          | ples    | Ass    | soci    | ated v  | with       | Sur    | np 0   | 66         |         |     |    |             |         |       |    |             |                    |        |    |
| LOCATION _CODE           |   |       | U        | 1-S66-0    | t      |         | U          | H-S664         | 01     |         | ι              | H-\$66- | 01     |         | ι       | LH-S66     | -02    |        | L          | H-S66   | 02  |    | ម           | ł-S67-( | 01    |    | U           | 1-S67-0            | 1      |    |
| SAMPLE_NO                |   |       | LHK      | 566-01     | QC.    |         | LH         | -S66-0         | 1_1    |         | u              | -\$66-0 | 1_2    |         | U       | H-S66-(    | 02_1   |        | LH         | I-S66-0 | 2_2 |    | ĹH          | S67-0   | 1_1   |    | LH          | S67-01             | _2     |    |
| SAMPLE_DATE              |   |       | 8        | /5/1993    |        |         | 1          | B/5/199        | 3      |         |                | 8/5/199 | 3      |         |         | 8/5/19     | 93     |        |            | 8/5/199 | 3   |    | 8           | 6/199   | 3     |    | 8           | /6/1993<br>7 E E • |        |    |
| DEPTH<br>SAMPLE DIPPOSE  |   |       | 0        | 5-21<br>FD |        |         | L.         | 1.3~2 r<br>RFG | FL.    |         |                | REG     | L      |         |         | REG        | . FL   |        |            | REG     | ι.  |    |             | REG     | ι.    |    |             | REG                |        |    |
| Test Group               | Parameter (Units = mg/kg)                   |       | Result   | DIL        | LQ     | VQ      | Result     | DIL            | LQ     | VQ      | Result         | DIL     | LQ     | VQ      | Result  | DIL        | LQ     | VQ     | Result     | DIL     | LQ  | VQ | Result      | DIL     | LQ    | VQ | Result      | DIL                | LQ     | VQ |
| DIOXINS_FURANS           | 1,2,3,4,6,7,8-Heptachlorodibenzofuran       |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | 1,2,3,4,6,7,8-HpCDD                         |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | 1,2,3,4,7,8,9-Heptachkorodibenzofuran       |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | 1,2,3,4,7,6-Hexachlorodibenzo-p-dioxin      |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | 1,2,3,6,7,8-Hexachlorofibenzo-p-dioxin      |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | 1,2,3,6,7,8-Hexachlorodibenzofuran          |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | 1,2,3,7,8,9-Hexachlordibenzo-p-dioxin       |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | 1,2,3,7,8,9-Hexachlorodibenzoturan          |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | 1.2.3.7.8-Pentachkorodibenzofuran           |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | 2,3,4,6,7,8-Hexachlorod@enzofuran           |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | 2,3,4,7,8-Pentachlorodibenzofuran           |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | 2,3,7,8-TCDD                                |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | 2,3,7,8-100F<br>Hentachlorodihenzofiiran    |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | Heptachlorodibenzo-p-dioxin                 |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | Hexachloridibenzo-p-dioxin                  |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | Hexachlorodibenzofuran                      |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | Octachlorodibenzofuran                      |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXING_FURANS           | Pentachlorodibenzofuran                     |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | Pentachlorodibenzo-p-dioxim                 |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | Tetrachiorodibenzofuran, Total              |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| DIOXINS_FURANS           | Tetrachlorodibenzo-p-dioxin                 |       |          |            |        |         |            |                |        |         | A <del>7</del> |         |        |         | 07      |            |        | *1     | 67         | 4       |     |    | 07          |         |       | н  | 07          | 4                  |        |    |
| EXPLOSIVES<br>EXPLOSIVES | 1,3,5-1 mitrobenzene<br>1 3. Ainitrobenzene |       | 0.7      | 1          | <      | U       | 0.7        | 1              | د<br>د | U<br>U  | 0.7            | 1       | . <    | U<br>U  | 0.7     | 1          | ~      | U<br>U | 0.7        | 1       | ~   | U  | 0.7         | 1       | <br>< | U  | 0.7         | t                  | < l    | U  |
| EXPLOSIVES               | 2,4,6-Trinitrotoluene                       |       | 0.5      | 1          | <      | U       | 0.5        | 1              | <      | U       | 0.5            | 1       | <      | Ŭ       | 0.5     | 1          | <      | U      | 0.5        | 1       | <   | U  | 0.5         | 1 -     | <     | U  | 0.5         | 1                  | <      | U  |
| EXPLOSIVES               | 2,4-Dinitrotoluene                          |       | 0.5      | 1          | <      | U       | 0.5        | 1              | <      | U       | 0.5            | 1       | <      | U       | 0.5     | 1          | <      | U      | 0.5        | 1       | <   | U  | 0.5         | 1       | <     | U  | 0.5         | 1                  | <      | U  |
| EXPLOSIVES               | 2,6-Dinitrotoluene                          |       | 0.5      | t          | <      | U       | 0.5        | 1              | <      | U       | 0.5            | 1       | <      | U       | 0.5     | 1          | <      | U      | 0.5        | 1       | <   | U  | 0.5         | 1       | <     | U  | 0.5         | 1                  | <      | U  |
| EXPLOSIVES               | 2-Amino-4,6-dinitrotoluene                  |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| EXPLOSIVES               | HMX   |       | 0.9      | 1          | <      | U       | 0.9        | 1              | <      | U       | 0.9            | 1       | <      | U       | 0.9     | 1          | <      | U      | 0.9        | 1       | <   | U  | 0.9         | 1       | <     | U  | 0.9         | 1                  | <      | U  |
| EXPLOSIVES               | m-Nitrotoluene                              |       | 0.9      | 1          | <      | U       | 0.9        | 1              | <      | U       | 0.9            | 1       | <      | U       | 0.9     | 1          | <      | U      | 0.9        | 1       | <   | U  | 0.9         | 1       | <     | บ  | 0.9         | 1                  | <      | U  |
| EXPLOSIVES               | NIOBIUM                                     |       | 0.6      | 1          | <      | U       | 0.6        | 1              | <      | U       | 0.6            | 1       | <      | U       | 0.6     | i 1        | <      | U      | 0.6        | 1       | <   | U  | Ð.6         | 1       | <     | U  | 0.6         | 1                  | <      | U  |
| EXPLOSIVES               | Nitrobenzene                                |       |          |            |        |         | 0.0        |                |        | 11      | 0.0            | 1       |        |         | 0.0     |            |        |        | 0.0        | ł       |     | н  | no          |         |       | 11 | ۵û          | 1                  |        |    |
| EXPLOSIVES               | o-Nitrotoluene                              |       | 11       | 1          | ~      | ы<br>19 | 1.1        | 1              | <<br>< | บ<br>บ  | 1.1            | 1       | ~      | U       | 1.1     | 1          | <      | U      | 1.1        | 1       | ~   | U  | 1.1         | 1       | ~     | ŭ  | 1.1         | 1                  | ۲<br>۲ | U  |
| EXPLOSIVES               | RDX   |       | 0.5      | t          | <      | Ŭ       | 0.5        | 1              | <      | υ       | 0.5            | 1       | <      | U       | 0.5     | 1          | <      | U      | 0.5        | 1       | <   | U  | 0.5         | 1       | <     | U  | 0.5         | 1                  | <      | U  |
| EXPLOSIVES               | Tetryf                                      |       | 1.9      | 1          | <      | U       | 1.9        | 1              | <      | U       | 1.9            | 1       | <      | U       | 1.9     | 1          | <      | ប      | 1.9        | 1       | <   | U  | 1.9         | 1       | <     | ប  | 1.9         | 1                  | <      | U  |
| METALS                   | Aluminum                                    |       | 16300    | 1          |        |         | 14600      | 1              |        |         | 20900          | 1       |        |         | 15000   | 1          |        |        | 15700      | 1       |     |    | 11400       | 1       |       |    | 20000       | 1                  |        |    |
| METALS                   | Antimony                                    |       | 3        | 1          | <      | U       | 3<br>46    | 1              | <      | U       | 3<br>28        | 1       | <      | U       | 3<br>23 | 6 7<br>1 1 | ۲      | U      | 3<br>25    | 1       | <   | U  | 4.2<br>10.7 | 1       |       |    | 4.9<br>3.5  | 1<br>1             |        |    |
| METALS                   | Barium                                      |       | 87       | 1          |        |         | 74.2       | 1              |        |         | 77.2           | 1       |        |         | 66.2    | 2 1        |        |        | 61.6       | 1       |     |    | 70.9        | 1       |       |    | 81.5        | 1                  |        |    |
| METALS                   | Beryflium                                   |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| METALS                   | Cadmium                                     |       | 1        | 1          | <      | U       | 1          | 1              | <      | U       | 1              | 1       | <      | U       | 1       | 1          | <      | U      | 1          | 1       | <   | U  | 1           | 1       | <     | U  | 1           | 1                  | <      | U  |
| METALS                   | Calcium                                     |       | 1170     | 1          |        |         | 1390       | 1              |        |         | 1620           | 1       |        |         | 1750    | 1          |        |        | 1210       | 1       |     |    | 1860        | 1       |       |    | 1530        | 1                  |        |    |
| METALS                   | Cobait                                      | - I - | 79       | 1          |        |         | 91         | 1              |        |         | 10.2           | 1       |        |         | 6.9     | 1          |        |        | 5.7        | 1       |     |    | 42.3        | 1       |       |    | 6.5         | 1                  |        |    |
| METALS                   | Copper                                      |       | 2.9      | 1          |        |         | 3.7        | 1              |        |         | 4.5            | 1       |        |         | 4.7     | 1          |        |        | 3.9        | 1       |     |    | 5.9         | 1       |       |    | 6.3         | 1                  |        |    |
| METALS                   | Cyanide, Total                              |       | 0.5      | 1          | <      | U       | 0.5        | 1              | <      | U       | 0.5            | 1       | <      | U       | 0.5     | i 1        | <      | U      | 0.5        | 1       | <   | U  | 0.5         | 1       | <     | U  | 0.5         | 1                  | <      | U  |
| METALS                   | lron  |       | 14000    | 1          |        |         | 13400      | 1              |        |         | 15900          | 1       |        |         | 15300   | 1          |        |        | 20700      | 1       |     |    | 29700       | 1       |       |    | 17400       | 1                  |        |    |
| METALS                   | Lead<br>Magnesium                           |       | 5<br>766 | 1          |        |         | 0.4<br>756 | 1              |        |         | 3./<br>955     | 1       |        |         | 12.7    | 1<br>5 1   |        |        | 9.3<br>853 | 1       |     |    | 713         | 1       |       |    | 0.4<br>1040 | 1                  |        |    |
| METALS                   | Manganese                                   |       | 273      | 1          |        |         | 257        | • 1            |        |         | 99.8           | 1       |        |         | 84.8    | 1          |        |        | 84.6       | 1       |     |    | 296         | 1       |       |    | 205         | 1                  |        |    |
| METALS                   | Mercury                                     |       | 0.1      | 1          | <      | U       | 0.1        | 1              | <      | U       | 0.1            | 1       | <      | U       | 0.1     | 1          | <      | U      | 0.1        | 1       | <   | U  | 0.1         | 1       | <     | U  | 0.1         | 1                  | <      | U  |
| METALS                   | Nickel                                      |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| METALS                   | Potassium                                   |       | 811      | 1          | ,      | 0       | 665        | 1              |        | ы       | 1240           | 1       |        |         | 860     | 1          |        | FI     | 894        | 1       | ,   | 11 | 440         | 1       |       | ы  | 1070<br>4   | 1                  | <      | п  |
| METALO<br>METALO         | Silver                                      |       | 1        | 1          | ۰<br>۲ | บ<br>ย  | 1          | 1<br>1         | 、<br>、 | U<br>El | T<br>1         | 1       | `<br>< | 0<br>11 | 1       | • •        | ×<br>× | U      | 1          | 1.      | Ì   | U  | 1           | 1       | ~     | U  | 1           | 1                  | <      | U  |
| METALS                   | Sodium                                      |       |          | •          |        | -       |            | •              | -      | -       |                | ·       | -      | -       |         | •          |        | -      | '          |         |     | -  | ,           |         |       |    |             |                    |        | -  |
| METALS                   | Strontium                                   |       | 9        | 1          |        |         | 8.9        | 1              |        |         | 10.5           | 1       |        |         | 10.2    | 1          |        |        | 10.4       | 1       |     |    | 10.1        | 1       |       |    | 10.9        | 1                  |        |    |
| METALS                   | Thattum                                     |       |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |
| METALS                   | Vanadium                                    |       | 40 F     | •          |        |         | 40.4       |                |        |         | -              |         |        |         | 10.0    | ÷ 4        |        |        | 95 7       | 4       |     |    | 67          | 1       |       |    | <b>38 3</b> | 4                  |        |    |
| METALS                   | កម្មាក<br>Aroclor 1016                      | ł     | 18.5     | . •        |        |         | 18.4       | 1              |        |         | 26             | 1       |        |         | 23.2    |            |        |        | 23.1       | ľ       |     |    | 03          | 1       |       |    | 20.3        | • •                |        |    |
| , 666                    |   | 1     |          |            |        |         |            |                |        |         |                |         |        |         |         |            |        |        |            |         |     |    |             |         |       |    |             |                    |        |    |

Shaw Environmental, Inc.



Shaw Project No. 117591 7/11/2007

. V

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

|                                |  |    |              |                   |                     |         |        |                  | Ta         | ble 3    | -66          |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
|--------------------------------|--|----|--------------|-------------------|---------------------|---------|--------|------------------|------------|----------|--------------|------------------|-------|------------|----------------|--|---------|--------------|-----------------------|----------|---------|---------|--------------------|---------|----------|------------|---------|
|                                |  | Co | ncer         | trati             | ons (               | of Cl   | nemi   | cals             | in S       | oil Sa   | ampl         | es A             | ssoci | iated      | wit            | h Su   | mp 0(   | 66           |                       | ~        |         |         |                    |         |          | 007.04     |         |
| LOCATION _CODE                 |  |    | L            | H-S66-0           | 1                   |         | U      | -S66-01          | 1          |          | 101-9        | S66-01           |       |            | LH-S           | 66-02  | -       | 1            | H-S66-(               | J2       |         | LH      | -55/-01            |         | 105      | 56/-01     |         |
| SAMPLE_NO                      |  |    | LH           | S66-01            | 1C                  |         | LH-S   | 566-01_          | 1          |          | LH-S         | 66-01_2<br>20002 |       | I          | 0/E/4          | 6-02_1   |         | υ            | 1-500-04<br>0/2/14001 | <u>,</u> |         | LH-:    | 507-01_1<br>6/1002 |         | 64113    | 51-01_2    |         |
| SAMPLE_DATE                    |  |    | 1            | ຊອງງອງ<br>ເຊິ່ງ ແ |                     |         | 84     | 5/1993<br>5/1993 |            |          | 643          | 6 54             |       |            | 0/3/1          | 1993<br>2 Et   |         |              | A - 6 Ft              | 2        |         | or<br>D | 0/1999<br>5 - 7 Ft |         | 3        | - 5 Ft     |         |
| CANDIE DIIDDOGE                |  |    | . '          | 50 2 FD           |                     |         | ν.     | REG              |            |          | F.           | REG              |       |            | RF             | -6   |         |              | REG                   | -        |         | 0.      | REG                |         | 1        | REG        |         |
| Test Crown                     | Parameter (I Inits = molen)                      |    | Result       | DII               | in v                | 0       | Result | nti I            |            | D R      | lesuit C     | NIL LO           | ov c  | Rese       | at Di          | L 10   | VQ      | Result       | DIL                   | ια       | vo      | Result  | DIL LO             | VQ      | Result [ | JIL LC     | vQ      |
| DCDC                           | Amelor 1221 d                                    | I  | ·            | DIE               |                     |         |        |                  |            | <u> </u> |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| r GDG<br>RCRC                  | Aroclar 1232 d                                   |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| FUDJ                           | Aractor 12/2 <sup>d</sup>                        |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PUD0                           | Acades 1242                                      | 1  |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PUD0                           | Aradiar 1250                                     | 1  |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| POBS                           | Arocles 4360 d                                   | 1  |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PUBS                           | Percharata                                       |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PERG                           |  |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | 4 4*-DDF   |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | 4.4-DDT  |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | Aldrin   |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | alpha-BHC  |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | beta-BHC   |    | -            |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | Chlordane  |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | delta-BHC  |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | Diekdnin   |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | Endosultan 1                                     |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | Endosultan II                                    |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | Enclosulari Sunale                               |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | Endrin aldehyde                                  | ł  |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | Endrin ketone                                    |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | gamma-BHC (Lindane)                              |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | Heptachlor                                       |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | Heptachlor epoxide                               |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | METHOXYCHLOR                                     |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| PESTICIDES                     | Toxaphene  |    |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         | 0.00     |            |         |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene                           |    | 0.33         | 1                 | < (                 | J       | 0.33   | 1                | < 1        | ,        | 0.33         | 1 <              |       | 0.3        | 13 1<br>12 4   | <br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br> | U-      | 0.33         | 1                     | <        | 0       | 0.33    | 1 4                | U       | 0.33     | 1 2        | U<br>11 |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene                              |    | 0.33         | 1                 | < (                 | ,       | 0.33   | 1                | < (        | ;        | 0.33         | 1 5              |       | 0.3        | ))  <br>)<br>) |  | 11      | 0.33         | - F                   | 2        | 0       | 0.33    | 1 2                | 1       | 0.33     | 1 <        | 1       |
| SEMIVULATILES<br>SEMIVALATILES | 1 A.Dichiorobenzene                              |    | 0.33         | 1                 | <ul><li>I</li></ul> | 3       | 0.33   | 1                | < 1        | ,<br>,   | 0.33         | 1 4              | . U   | 0.3        | 33 1           |  | U U     | 0.33         | 1                     | <<br><   | ŭ       | 0.33    | 1 <                | Ŭ       | 0.33     | 1 <        | Ű       |
| SEMIVOLATILES                  | 2 4 5-Trichlorophenol                            |    | 1.65         | 1                 | < 1                 | J       | 1.65   | 1                | < L        | j        | 1.65         | 1 <              | . U   | 1.6        | 55 1           | <  | Ŭ       | 1.65         | 1                     | <        | Ŭ       | 1.65    | 1 <                | U       | 1.65     | 1 <        | υ       |
| SEMIVOLATILES                  | 2.4.6-Trichlorophenoi                            | 1  | 0.33         | 1                 | < i                 | J       | 0.33   | 1                | ۔<br>جار   | j        | 0.33         | 1 <              | : U   | 0.3        | 33 1           | <  | U       | 0.33         | 1                     | <        | U       | 0.33    | 1 <                | U       | 0.33     | 1 <        | U       |
| SEMIVOLATILES                  | 2,4-Dichloropheno!                               |    | 0.33         | 1                 | < (                 | j       | 0.33   | 1                | < 1        | }        | 0.33         | 1 <              | : U   | 0.3        | 13 1           | <  | U       | 0.33         | 1                     | <        | U       | 0.33    | 1 <                | U       | 0.33     | 1 <        | U       |
| SEMIVOLATILES                  | 2,4-Dimethylphenol                               |    | 0.33         | 1                 | < (                 | J       | 0.33   | 1                | < ເ        | J        | 0.33         | 1 <              | : U   | 0.3        | 33 1           | <  | U       | 0.33         | 1                     | <        | U       | 0.33    | 1 <                | U       | 0.33     | 1 <        | U       |
| SEMIVOLATILES                  | 2,4-Dinitrophenol                                |    | 1.65         | 1                 | < ા                 | J       | 1.65   | 1                | < t        | l        | 1.65         | 1 <              | : U   | 1.6        | 55 1           | <  | U       | 1.65         | 1                     | <        | U       | 1.65    | 1 <                | U       | 1.65     | 1 <        | U       |
| SEMIVOLATILES                  | 2,4-Dinitrotoluene                               | Ĩ  |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         |         |                    |         |          |            |         |
| SEMIVOLATILES                  | 2,6-Dinitrotoluene                               | -  |              |                   |                     |         |        |                  |            |          |              |                  |       |            |                |  |         |              |                       |          |         | 0.00    |                    |         |          |            |         |
| SEMIVOLATILES                  | 2-Chloronaphthalene                              |    | 0.33         | 1                 | < (                 | J       | 0.33   | 1                | < (        | J        | 0.33         | 1 <              | : U   | 0.3        | 13 I<br>17 I   |  | 0       | 0.33         | 1                     | ~        | U       | 0.33    | .  S               | 11      | 0.33     | 1 2        |         |
| SEMIVOLATILES                  | 2-Uniorophenol                                   |    | 0.33         | 1                 | < (                 |         | 0.33   | 1                | < (        | ן<br>ז   | 0.33         | 1 2              |       | 0.0        | 22 I<br>22 I   |  | 1       | 0.33         | 1                     | Ì        | n       | 0.33    | 1 4                | U<br>(1 | 0.33     | , ,<br>t c | и<br>10 |
| SEMIVOLATILES<br>SEMIVOLATILES | 2-Methylitapilitaleite<br>2-Methylitapilitaleite |    | 0.55         | 1                 | > 1<br>< 1          | U<br>ił | 0.33   | 1                | < 1        | ,<br>I   | 0.33         | 1 <              | . U   | 0.3        | 33 1           |  | U U     | 0.33         | 1                     | <        | Ŭ       | 0.33    | 1 <                | บั      | 0.33     | 1 <        | U       |
| SEMIVOLATILES                  | 2-Nitroapiline                                   | ŀ  | 1.65         | ť                 | < 1                 | U U     | 1.65   | 1                | < 1        | }        | 1.65         | 1 <              | ະບັ   | 1.6        | 55 1           | <  | Ŭ       | 1.65         | 1                     | <        | U       | 1.65    | 1 <                | U       | 1.65     | 1 <        | U       |
| SEMIVOLATILES                  | 2-Nitrophenol                                    |    | 0.33         | 1                 | < (                 | U       | 0.33   | 1                | < (        | J        | 0.33         | 1 <              | : U   | 0.3        | 33 1           | <  | U       | 0.33         | 1                     | <        | U       | 0.33    | 1 <                | U       | 0.33     | 1 <        | U       |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzidine                           |    | 0.65         | 1                 | < (                 | U       | 0.65   | 1                | < (        | J        | 0.65         | 1 <              | U U   | 0.6        | 55 1           | <  | U       | 0.65         | 1                     | <        | U       | 0.65    | 1 <                | U       | 0.65     | 1 <        | U       |
| SEMIVOLATILES                  | 3-Nitroaniline                                   |    | 1.65         | 1                 | < ۱                 | U       | 1.65   | 1                | < ເ        | ţ        | 1.65         | 1 <              | ម     | 1.6        | 55 1           | <  | U       | 1.65         | 1                     | <        | U       | 1.65    | 1 <                | U       | 1.65     | 1 <        | U       |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol                       |    | 1.65         | 1                 | < (                 | U       | 1.65   | 1                | < ເ        | J        | 1.65         | t <              | ម     | 1.6        | 65 1           | <  | U       | 1.65         | 1                     | <        | U       | 1.65    | 1 <                | U       | 1.65     | 1 <        | U       |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether                       | 1  | 0.33         | 1                 | < l                 | U       | 0.33   | 1                | < ເ        | J        | 0.33         | 1 <              | C U   | 0.3        | 33 1           | <  | U       | 0.33         | 1                     | <        | U       | 0.33    | 1 <                | U       | 0.33     | 1 <        | 0       |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol                          |    | 0.65         | 1                 | < (                 | U       | 0.65   | 1                | < 1        |          | 0.65         | 1 <              | : U   | 0.6        | 65 <b>1</b>    | <  | 0       | 0.65         | 1                     | <        | U       | 0.65    | 1 <                | 0       | 0.65     | 1 <        | 0       |
| SEMIVOLATILES                  | 4 Chloroaniline                                  | 1  | 0.65         | 1                 | < 1                 | 8       | 0.65   | 1                | < 1        | ,        | 0.65         |                  |       | 0.0        | 1 CC           |  | U       | 0.05         | 1                     | ~        | 0       | 0.00    | 1 4                |         | 0.00     | 1 2        | 0       |
| SEMIVOLATILES                  | 4-Chiorophenyi phenyi ether                      | 1  | 0.33         | 1                 | < (                 |         | 0.33   | 1                | < L        | ,        | 0.33         | • •              |       | 0.0        | 33 I           |  | 0       | 0.55         | 1                     | 2        | U<br>FF | 0.33    | 1 4                | 11      | 0.33     | 1 4        | 1       |
| SEMIVOLATILES                  | 4 Metryphenol                                    | ļ. | 1.65         | 1                 | ~ 1                 |         | 1.65   | 1                | ~ 1        | ,<br>1   | 1.65         | 1 4              |       | 1.6        | 55 1           |  |         | 1.65         | 1                     | è.       | N N     | 1.65    | 1 <                | U U     | 1.65     | 1 <        | ŭ       |
| SEMIVOLATILES                  | 4-Nitronhenol                                    |    | 1.65         | 1                 | < 1                 | 1       | 1.65   | 1                | < 1        | ,        | 1.65         | 1 <              | : 11  | 1.6        | 65 1           | <  | ŭ       | 1.65         | 1                     | <        | Ū       | 1.65    | 1 <                | Ŭ       | 1.65     | 1 <        | Ū       |
| SEMIVOLATILES                  | Acenaphthene                                     | 1  | 0.33         | 1                 | < 1                 | -<br>13 | 0.33   | 1                | < 1        | -<br>}   | 0.33         | 1 <              | : U   | 0.3        | 33 1           | <  | Ŭ       | 0.33         | 1                     | <        | U       | 0.33    | 1. <               | U       | 0.33     | 1 <        | U       |
| SEMIVOLATILES                  | Acenaphthylene                                   |    | 0.33         | 1                 | < 1                 | U       | 0.33   | 1                | < 1        | J        | 0.33         | 1 <              | . U   | 0.3        | 33 1           | <  | U       | 0.33         | 1                     | <        | U       | 0.33    | 1 <                | U       | 0.33     | 1 <        | U       |
| SEMIVOLATILES                  | Anthracene                                       |    | 0.33         | 1                 | < 1                 | U       | 0.33   | 1                | < 1        | J        | 0.33         | 1 <              | េម    | 0.3        | 33 f           | <  | U       | 0.33         | 1                     | <        | U       | 0.33    | 1 <                | U       | 0.33     | 1 <        | ប       |
| SEMIVOLATILES                  | Benzo(a)anthracene                               | ł  | 0.33         | 1                 | < 1                 | U       | 0.33   | 1                | < 1        | J        | 0.33         | 1 <              | េប    | 0.3        | 33 1           | <  | U       | 0.33         | 1                     | <        | U       | 0.33    | 1 <                | U       | 0.33     | 1 <        | Ð       |
| SEMIVOLATILES                  | Benzo(a)pyrene                                   |    | 0.33         | 1                 | < 1                 | U       | 0.33   | 1                | < t        | J        | 0.33         | 1 <              | េប    | 0.3        | 33 1           | <  | U       | 0.33         | 1                     | <        | U       | 0.33    | 1 <                | U       | 0.33     | 1 <        | U       |
| SEMIVOLATILES                  | Benzo(b)fluoranthene                             |    | 0.33         | 1                 | < 1                 | U       | 0.33   | 1                | < ເ        | J        | 0.33         | 1 <              | : U   | 0.3        | 33 1           | <  | U       | 0.33         | 1                     | <        | U       | 0.33    | 1 <                | U       | 0.33     | 1 <        | U       |
| SEMIVOLATILES                  | Benzo(ghi)perylene                               |    | 0.33         | 1                 | < l                 | U       | 0.33   | 1                | < ເ        | 3        | 0.33         | 1 <              | : U   | 0.3        | 33 t           | <  | U       | 0.33         | 1                     | <        | U       | 0.33    | t <                | U       | 0.33     | 1 <        | 8       |
| SEMIVOLATILES                  | Benzo(k)fluoranthene                             |    | 0.33         | 1                 | < 1                 | U       | 0.33   | 1                | < L        | J        | 0.33         | 1 <              | ្រ    | 0.3        | 33 <b>1</b>    | <  | U       | 0.33         | 1                     | <u>۲</u> | U       | 0.33    | 1 4                | 0       | 0.33     | 1 <        | U       |
| SEMIVOLATILES                  | Benzoic Acid                                     |    | 1.65         | 1                 | < 1                 | U       | 1.65   | 1                | < 1        | j<br>z   | 1.65         | 1 4              | : U   | 1.6        | 1 00           | · ·  | Ų<br>V  | 1.65         | 1                     | <<br>/   | 0       | 1.65    | 1 4                | U<br>11 | CU.1     | · ·        | U<br>H  |
| SEMIVOLATILES                  | Benzyl Alcohor                                   |    | 0.65         | 1                 | < l                 | U<br>La | 0.00   | 1                | < L        | ,<br>,   | 0.00<br>0.30 | 1 <<br>1 -       | . U   | U.t        | x0 1<br>22 4   | · ·  | U<br>II | 0.05<br>0.22 | 1                     | Ì        | U<br>H  | 0.03    | 1 -                | 0       | 0.00     | 1 4        | U<br>U  |
| SEMIVULATILES<br>SEMBIOLATILES | us(2-Choroetholethor                             |    | V.JJ<br>6 22 | 1                 | < 1                 | v<br>N  | 0.33   | 1                | - L<br>- L | ,<br>1   | 0.33         | 1                |       | 0.3<br>D 3 | 1<br>33 1      | · `  | 11      | 0.55         | 1                     | ç        |         | 0.33    | 1                  | 11      | 0.33     | 1 <        | u       |
| SEMIVOLATILES                  | bis(2-Chloroisopronullether                      | 1  | 0.33         | 1                 | < 1                 | U<br>U  | 0.33   | 1                | < 1        | J        | 0.33         | 1 <              | : U   | 0.3        | 33 t           |  | บ       | 0.33         | 1                     | <        | Ũ       | 0.33    | 1                  | Ŭ       | 0.33     | 1 <        | Ū       |
|                                |  | i  | 2.00         |                   |                     | -       |        |                  |            |          |              |                  | -     |            |                |  |         |              |                       |          | -       |         |                    |         |          |            |         |



|                |                                |       |       |            |         |          |            | -           | Tabl   | e 3-66 |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
|----------------|--------------------------------|-------|-------|------------|---------|----------|------------|-------------|--------|--------|---------------------|----------|-----|----------|--------|----------|---------|--------------|-----------------|--------|--------|--------|--------------------|----------|---------|---------|---------|----------|---------|
|                |                                | Conc  | entr  | atio       | ns of   | Chen     | nica       | ls in       | I Soi  | l Samı | ples                | As       | soc | iated w  | /ith   | Sum      | p 0(    | 66           |                 |        |        |        |                    |          |         |         |         | •-       |         |
| LOCATION _CODE |                                |       | - (H3 | 66-01      |         |          | LH-S6      | 6-01        |        | e      | H-S66               | -01      |     | 1        | 1-S66- | D2       | •       | 114-         | 366-02          | •      |        | 11     | 1-567-0            | 1<br>( 1 |         | 11      | 1-S67-0 | 1 2      |         |
| SAMPLE_NO      |                                |       | LH-S6 | 6-01 Q(    | ;       | L        | H-S66      | -01_1       |        | LH     | 1-506-1<br>0///1404 | J1_2     |     | LH-<br>0 | -566-0 | 2_1<br>2 |         | LH-S<br>9/4  | 00-02_<br>/1003 | 2      |        | 201-   | -507-01<br>16/1007 | -        |         | -س<br>۲ | 001-00  | 1_2<br>3 |         |
| SAMPLE_UAIE    |                                |       | 0.5   | 2 54       |         |          | 0.5-2      | 993<br>7 Ft |        |        | 8-61                | 93<br>5t |     | 0        | 15-26  | ।<br>भ   |         | 4            | 6 Ft            |        |        | Ő      | 5-2F               | t        |         | -       | 3-5F    | ť        |         |
| SAMPLE PURPOSE |                                |       | 0.0   | -211<br>-D |         |          | REC        | G           |        |        | REG                 |          |     |          | REG    |          |         |              | EG              |        |        |        | REG                |          |         |         | REG     |          |         |
| Test Group     | Parameter (Units = mg/kg)      | Res   | ult D | 1L LC      | vq      | Resut    | t DIL      | LQ          | VQ     | Result | DIL                 | LQ       | VQ  | Result   | DIL    | LQ       | VQ      | Result I     | HL Ł            | Q      | VQ     | Result | DIL                | LQ       | VQ      | Result  | DIL.    | LQ       | VQ      |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate     | 0.    | 33    | 1 <        | U       | 0.33     | 3 1        | <           | U      | 0.33   | 1                   | <        | U   | 0.33     | 1      | <        | U       | 0.33         | 1               | <      | U      | 0.33   | 1                  | <        | Ų       | 0.33    | 1       | <        | U       |
| SEMIVOLATILES  | Butyl benzyl phthalate         | 0.    | 33    | 1 <        | U       | 0.33     | 31         | <           | U      | 0.33   | 1                   | <        | U   | 0.33     | 1      | <        | U       | 0.33         | 1               | c      | U      | 0.352  | 1                  |          |         | 0.33    | 1       | <        | U       |
| SEMIVOLATILES  | Carbazole                      |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| SEMIVOLATILES  | Chrysene                       | 0.    | .33   | 1 <        | U       | 0.33     | 31         | <           | U      | 0.33   | 1                   | <        | U   | 0.33     | 1      | <        | U       | 0.33         | 1               | ¢      | 0      | 0.33   | 1                  | <        | 0       | 0.33    | 1       | <        | U       |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene         | 0.    | .33   | 1 <        | U       | 0.33     | 31         | <           | U      | 0.33   | 1                   | <        | 0   | 0.33     | 1      | <        | U       | 0.33         | 1               | <<br>- | U      | 0.33   | 1                  | <        | U<br>U  | 0.33    | 1       | Ś        | U<br>11 |
| SEMIVOLATILES  | Dibenzofuran                   | 0.    | 33    | 1 <        | U       | 0.33     | 31         | <           | U      | 0.33   | 1                   | ~        | 0   | 0.33     | 1      | ~        | U<br>It | U.JJ<br>0.22 | 1               | ~      | 0      | 0.33   | 1                  | 2        | U<br>II | 0.33    | 1       | Ż        |         |
| SEMIVOLATILES  | Diethyl phthalate              | 0.    | 33    | 1 <        | U<br>11 | 0.33     | 5 I<br>2 4 | Ż           | U<br>U | 0.33   | 1                   | Ì        | 11  | 0.33     | t<br>t | 2        | U U     | 0.33         | 1               | 2      | 8      | 0.33   | 1                  | < l      | 8       | 0.33    | 1       | ~        | ü       |
| SEMIVOLATILES  | di.o. Butul obthalate          |       | <br>  | 1. 4       | 11      | 0.3      | 3 1        | š           | 11     | 0.33   | 1                   | ,<br>,   | Ц   | 0.33     | 1      | <        | Ŭ       | 0.33         | 1               | <      | Ŭ      | 0.33   | 1                  | <        | บ       | 0.33    | 1       | <        | Ū       |
| SEMIVOLATILES  | di-n-Octvi priblade            | 0     | 33    | 1 <        | Ŭ       | 0.3      | 31         | <           | Ŭ      | 0.33   | 1                   | <        | U   | 0.33     | 1      | <        | Ū       | 0.33         | 1               | <      | U      | 0.33   | 1                  | <        | U       | 0.33    | 1       | <        | U       |
| SEMIVOLATILES  | Fluoranthene                   | l o   | .33   | 1 <        | U       | 0.3      | 3 1        | <           | U      | 0.33   | 1                   | <        | U   | 0.33     | 1      | <        | U       | 0.33         | 1               | <      | U      | 0.33   | 1                  | <        | U       | 0.33    | 1       | <        | U       |
| SEMIVOLATILES  | Fluorene                       | 0.    | .33   | 1 <        | U       | 0.3      | 31         | <           | U      | 0.33   | 1                   | <        | U   | 0.33     | 1      | <        | U       | 0.33         | 1               | <      | U      | 0.33   | 1                  | <        | U       | 0.33    | t       | <        | ម       |
| SEMIVOLATILES  | Hexachlorobenzene              | 0.    | .33   | 1 <        | U       | 0.3      | 31         | <           | U      | 0.33   | 1                   | <        | U   | 0.33     | 1      | <        | U       | 0.33         | 1               | <      | U      | 0.33   | 1                  | <        | U       | 0.33    | 1       | <        | υ       |
| SEMIVOLATILES  | Hexachtorobutadiene            | 0.    | .33   | i <        | U       | 0.33     | 31         | <           | U      | 0.33   | 1                   | <        | U   | 0.33     | 1      | <        | U       | 0.33         | 1               | <      | U      | 0.33   | 1                  | <        | U       | 0.33    | 1       | <        | U       |
| SEMIVOLATILES  | Hexachlorocyclopentadiene      | 0.    | .33   | 1 <        | IJ      | 0.3      | 31         | <           | U      | 0.33   | 1                   | <        | υ   | 0.33     | 1      | <        | U       | 0.33         | t               | <      | U      | 0.33   | 1                  | <        | U       | 0.33    | 1       | <        | U       |
| SEMIVOLATILES  | Hexachloroethane               | 0.    | .33   | 1 <        | U       | 0.33     | 31         | <           | U      | 0.33   | 1                   | <        | ŋ   | 0.33     | 1      | <        | U       | 0.33         | 1               | <      | U      | 0.33   | 1                  | <        | U       | 0.33    | 1       | <        | U       |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene         | 0.    | .33   | 1 <        | U       | 0.3      | 31         | <           | U      | 0.33   | 1                   | <        | U   | 0.33     | 1      | <        | 0       | 0.33         | 1               | <      | 0      | 0.33   | 1                  | <        | U       | 0.33    | 1       | <        | D<br>H  |
| SEMIVOLATILES  | Isophorone                     | 0.    | .33   | 1 <        | 0       | 0.3      | 3 1        | <           | U      | 0.33   | 1                   | <        |     | 0.33     | 1      | <        | U       | 0.33         | 1               | <      | U<br>H | 0.33   | 1                  | ~        | 0       | 0.33    | 1       | -        | U<br>H  |
| SEMIVOLATILES  | Naphthalene                    | 0     | .33   | 1 <        |         | U.J.     | 31         | ×           | 0      | 0.33   | 1                   |          |     | 0.33     | 1      | 2        | U<br>IF | 0.33         | •               | 2      | ы      | 0.33   | 1                  | 2        | U<br>H  | 0.33    | -       | è        | ri<br>I |
| SEMIVOLATILES  | Nitrobenzene                   | u     | .33   | 1 <        | U       | 0.3.     | 3 1        | ۲.          | U      | 0.33   | '                   | •        | U   | 0.33     |        | •        | U       | 0.35         | •               |        | U      | 0.35   | 1                  | -        | 0       | 0.50    |         |          | v       |
| SEMIVOLATILES  | n-Natosodanetnyamine           |       | 22    | 1 .        |         | 0.3      | 3 1        | ~           | 11     | 0 33   | f                   | ۲        | и   | 0.33     | 1      | <        | 15      | 0.33         | f               | <      | U      | 0.33   | 1                  | <        | U       | 0.33    | 1       | <        | U       |
| SEMIVOLATILES  | n-Nitrosortinhemdamine         |       | 33    | 1 4        | ŭ       | 0.3      | 3 1        | <           | Ŭ      | 0.33   | ŕ                   | <        | Ŭ   | 0.33     | ť      | <        | Ŭ       | 0.33         | 1               | <      | Ū      | 0.33   | 1                  | <        | U       | 0.33    | 1       | <        | U       |
| SEMIVOLATILES  | Pentachioronhenni              |       | .65   | 1 <        | Ū       | 1.6      | 5 1        | <           | Ŭ      | 1.65   | 1                   | <        | Ū   | 1.65     | 1      | <        | U       | 1.65         | 1               | <      | U      | 1.65   | 1                  | <        | U       | 1.65    | 1       | <        | U       |
| SEMIVOLATILES  | Phenanthrene                   | 0     | .33   | 1 <        | U       | 0.3      | 31         | <           | U      | 0.33   | 1                   | <        | U   | 0.33     | 1      | <        | U       | 0.33         | 1               | <      | U      | 0.33   | 1                  | <        | U       | 0.33    | 1       | <        | U       |
| SEMIVOLATILES  | Phenol                         | 1 0   | .33   | 1 <        | U       | 0.3      | 31         | <           | U      | 0.33   | 1                   | <        | U   | 0.33     | 1      | <        | U       | 0.33         | 1               | <      | U      | 0.33   | 1                  | <        | U       | 0.33    | 1       | <        | U       |
| SEMIVOLATILES  | Pyrene                         | 0     | .33   | 1 <        | U       | 0.3      | 31         | <           | U      | 0.33   | 1                   | <        | U   | 0.33     | 1      | <        | U       | 0.33         | 1               | <      | U      | 0.33   | 1                  | <        | U       | 0.33    | 1       | <        | U       |
| VOLATILES      | 1,1,1,2-Tetrachioroethane      |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 1,1,1-Trichloroethane          | 0.0   | 005   | 1 <        | U       | 0.00     | 51         | <           | U      | 0.005  | 1                   | <        | U   | 0.005    | 1      | <        | U       | 0.005        | 1               | <      | U      | 0.005  | 1                  | <        | U       | 0.005   | 1       | <        | U       |
| VOLATILES      | 1,1,2,2-Tetrachloroethane      | 0.0   | )05   | 1 <        | U       | 0.00     | 51         | <           | U      | 0.005  | 1                   | <        | U   | 0.005    | 1      | <        | U       | 0.005        | 1               | <      | U ·    | 0.005  | 1                  | <        | U       | 0.005   | 1       | <        | U       |
| VOLATILES      | 1,1,2-Trichloroethane          | 0.0   | 005   | 1 <        | U       | 0.00     | 5 1        | <           | U      | 0.005  | 1                   | <        | U   | 0.005    | 1      | <        | U       | 0.005        | 1               | <      | U      | 0.005  | 1                  | <        | U       | 0.005   | 1       | <        | 0       |
| VOLATILES      | 1,1-Dichloroethane             | 0.0   | 005   | 1 <        | U       | 0.00     | 51         | <           | U      | 0.005  | 1                   | <        | 0   | 0.005    | 1      | <        | U       | 0.005        | 1               | <      | U      | 0.005  | 1                  | ~        | 0       | 0.005   | 1       | ~        | U       |
| VOLATILES      | 1,1-Dichloroethene             | 0.0   | 005   | 1 <        | U       | 0.00     | 5 1        | <           | U      | 0.005  | 1                   | <        | U   | 0.005    | 1      | ¢        | U       | 0.005        |                 | •      | 0      | 0.005  | •                  | `        | U       | 0.003   | •       |          | 0       |
| VOLANLES       | 1,1-Dichioropropene            | ŀ     |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 1,2,3-Tichlorogropape          | ļ     |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 1.2.3- micholophopane          |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 1.2.4-Trimethylbenzene         | 1     |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 1,2-Dibromo-3-chloropropane    | Í     |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 1,2-Dibromoethane              |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 1,2-Dichlorobenzene            |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 1,2-Dichloroethane             | 0.0   | 005   | 1 <        | េប      | 0.00     | 51         | <           | U      | 0.005  | 1                   | <        | ប   | 0.005    | 1      | <        | U       | 0.005        | 1               | <      | U      | 0.005  | 1                  | <        | U       | 0.005   | 1       | <        | U       |
| VOLATILES      | 1,2-Dichloroethene             | 0.0   | 005   | 1 •        | : U     | 0.00     | 51         | <           | U      | 0.005  | 1                   | <        | ប   | 0.005    | 1      | <        | U       | 0.005        | 1               | <      | U      | 0.005  | 1                  | <        | U       | 0.005   | 1       | <        | U       |
| VOLATILES      | 1,2-Dichloropropane            | 0.0   | 005   | 1 •        | : U     | 0.00     | 51         | <           | U      | 0.005  | 1                   | <        | U   | 0.005    | 1      | <        | U       | 0.005        | 1               | <      | U      | 0.005  | 1                  | <        | U       | 0.005   | 1       | <        | U       |
| VOLATILES      | 1,2-Dimethylbenzene (o-Xylene) |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 1,3,5-Trimethylbenzene         |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 1,3-Dichlorobenzene            |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
|                | 1 A Dichloro 2 buteno          |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 1 4 Dichlorohanzana            |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 1 4-Diorane                    |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 2.2-Dichloropronane            |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 2-Butanone                     | 0     | .05   | 1 •        | : U     | 0.0      | 5 1        | <           | U      | . 0.05 | 1                   | <        | U   | 0.05     | 1      | <        | U       | 0.05         | 1               | <      | U      | 0.05   | 1                  | <        | U       | 0.05    | 1       | <        | U       |
| VOLATILES      | 2-Chloroethyl vinyl ether      | . 0   | .01   | 1 •        | : U     | 0.0      | 1 1        | <           | U      | 0.01   | t                   | <        | U   | 0.01     | 1      | <        | U       | 0.01         | 1               | <      | U      | 0.01   | 1                  | <        | U       | 0.01    | 1       | <        | U       |
| VOLATILES      | 2-Chlorotoluene                |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 2-Hexanone                     | 0     | .05   | 1 •        | : U     | 0.0      | 51         | <           | U      | 0.05   | 1                   | <        | Ŭ   | 0.05     | 1      | <        | U       | 0.05         | 1               | <      | U      | 0.05   | 1                  | <        | U       | 0.05    | 1       | <        | U       |
| VOLATILES      | 2-Propenal                     |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | 4-Chlorotoluene                |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | Acetone                        | l     | 0.1   | 1 •        | U P     | 0.       | .1 1       | <           | U      | 0.1    | t                   | <        | U   | 0.1      | t      | <        | U       | 0.1          | 1               | <      | U      | 0.1    | 1                  | <        | U       | 0.1     | 1       | <        | U       |
| VOLATILES      | Acetonitrile                   |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | Acrytonitrile                  | [     |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | Allyl chloride                 |       |       |            |         | <b>.</b> |            | _           |        |        |                     | _        |     | c        | ,      |          |         | 0.000        |                 |        |        | 0.005  |                    | ,        | 12      | 0.00r   |         |          |         |
| VOLATILES      | Benzene                        | 0.0   | 005   | 1 .        | : 0     | 0.00     | 15 1       | <           | U      | 0.005  | 1                   | <        | U   | 0.005    | £      | <        | U       | 0.005        | ł               | <      | U      | 0.005  | 1                  | `        | U       | ¢.005   | ı       | •        | υ.      |
| VULATILES      | Bromooblergene                 |       |       |            |         |          |            |             |        |        |                     |          |     |          |        |          |         |              |                 |        |        |        |                    |          |         |         |         |          |         |
| VOLATILES      | Bromodichloramethane           |       | 0.05  | 1          | н       | 0.00     | 5 1        |             | 41     | ሰ በበዳ  | 1                   | ~        | 11  | 0.005    | 1      | <        | U       | 0.005        | t               | <      | IJ     | 0.005  | 1                  | <        | U       | 0.005   | 1       | <        | U       |
| VOLATILES      | Bromotorm                      |       | 005   |            | : 11    | 0.00     | 5 1        | č           | 0      | 0.005  | 1                   | ~        | 11  | 0,005    | f      | <        | ยั      | 0.005        | i.              | <      | Ū      | 0.005  | 1                  | <        | U       | 0.005   | 1       | <        | U       |
|                |                                | 1 0.1 |       | •          |         | 0.00     |            | -           |        | 0.000  | •                   |          | *   |          | -      |          | -       |              | -               |        |        |        | -                  |          | -       |         |         |          |         |



- 전 - 한

Data Evaluation Report Chemical Concentrations in Soit Associated with LHAAP-35/36 Sumps

|                |                             |        |         |      |      |        |        | ٦    | Table | e 3-66 |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
|----------------|-----------------------------|--------|---------|------|------|--------|--------|------|-------|--------|---------|------|------|--------|---------|------|------|--------|--------|------|----|--------|-------|-----|----|----------|
|                |                             | Concer | ntra    | tion | s of | Chemi  | cal    | s in | Soil  | Samp   | bles    | As   | soci | ated w | vith    | Sui  | np ( | 66     |        |      |    |        |       |     |    |          |
| LOCATION_CODE  |                             | ι      | .H-S66  | -01  |      | L)-    | I-S66- | 01   |       | D      | 1-S66   | -01  |      | U      | 1-\$66  | -02  | -    | 1.     | 1-S65- | -02  |    | U-     | -56/- | 01  |    |          |
| SAMPLE_NO      |                             | LH     | -\$66-0 | 1 00 |      | LH-    | S66-0  | 1_1  |       | LH     | -\$66-0 | 11_2 |      | LH     | -\$66-( | 12_1 |      | LH-    | 566-0  | 12_2 |    | LH-    | 567-0 | 1_1 |    |          |
| SAMPLE_DATE    |                             |        | 8/5/19  | 93   |      | 8      | /5/199 | 3    |       | 8      | V5/19   | 93   |      | 8      | V5/199  | 93   |      | 8      | /5/199 | 3    |    | 8      | 6/199 | 3   |    |          |
| DEPTH          |                             |        | 0.5 - 2 | Ft   |      | 0      | .5-2F  | ft   |       |        | 4-6F    | t    |      | C      | 1.5 - 2 | Ft   |      |        | 4-61   | ť    |    | 0      | 5-21  | -t  |    |          |
| SAMPLE_PURPOSE |                             |        | FD      |      |      |        | REG    |      |       |        | REG     |      |      |        | REG     |      |      |        | REG    |      |    |        | REG   |     |    |          |
| Test Group     | Parameter (Units = mg/kg)   | Result | DIL     | LQ   | VQ   | Result | DIL    | LQ   | VQ    | Result | Dil     | LQ   | VQ   | Result | DIL     | LQ   | VQ   | Result | DIL    | LQ   | VQ | Result | Dit,  | LQ  | VQ | <u> </u> |
| VOLATILES      | Bromomethane                | 0.01   | 1       | <    | U    | 0.01   | 1      | <    | U     | 0.01   | 1       | <    | U    | 0.01   | 1       | <    | 0    | 0.01   | 1      | <    | U  | 0.01   | 1     | <   | 0  |          |
| VOLATILES      | Carbon disulfide            | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U     | 0.005  | 1       | <    | U    | 0.005  | 1       | . <  | U    | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  |          |
| VOLATILES      | Carbon tetrachloride        | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U     | 0.005  | f       | <    | U    | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | 0  |          |
| VOLATILES      | Chlorobenzene               | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U     | 0.005  | 1       | <    | U    | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  |          |
| VOLATILES      | Chloroethane                | 0.01   | 1       | <    | U    | 0.01   | 1      | <    | U     | 0.01   | 1       | <    | U    | 0.01   | 1       | <    | U    | 0.01   | 1      | <    | U  | 0.01   | 1     | <   | U  |          |
| VOLATILES      | Chloroform                  | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U     | 0.005  | 1       | <    | U    | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  |          |
| VOLATILES      | Chloromethane               | 0.01   | 1       | <    | U    | 0.01   | 1      | <    | U     | 0.01   | 1       | <    | U    | 0.01   | 1       | <    | U    | 0.01   | 1      | <    | U  | 0.01   | 1     | <   | U. |          |
| VOLATILES      | Chloroprene                 |        |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | cis-1,2-Dichloroethene      |        |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | cis-1,3-Dichloropropene     | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U     | 0.005  | 1       | <    | U    | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | ម  | 0.005  | 1     | <   | U  |          |
| VOLATILES      | Dibromochloromethane        | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U     | 0.005  | 1       | <    | U    | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  |          |
| VOLATILES      | Dibromomethane              | I      |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | Dichlorodifluoromethane     |        |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | Ethyl methacrylate          | ]      |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | Ethylbenzene                | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | ٠U    | 0.005  | 1       | <    | U    | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  |          |
| VOLATILES      | Hexachlorobutadiene         | 1      |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | IODOMETHANE                 | 1      |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | ISOBUTYL ALCOHOL            | 1      |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | IsopropyBenzene             | }      |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | m,p-Xylenes                 | 1      |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | Methacrylonitrile           | 1      |         |      |      |        |        |      |       |        |         |      | -    |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | Methyl isobutyl ketone      | 0.05   | 1       | <    | U    | 0.05   | 1      | <    | U     | 0.05   | 1       | <    | Ų    | 0.05   | t       | <    | U    | 0.05   | 1      | <    | U  | 0.05   | 1     | <   | U  |          |
| VOLATILES      | METHYL METHACRYLATE         |        |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | Methylene chloride          | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U     | 0.005  | 1       | <    | U    | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  |          |
| VOLATILES      | Naphthalene                 |        |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | n-BUTYLBENZENE              |        |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | n-PROPYLBENZENE             |        |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | Pentachloroethane           | · .    |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | p-ISOPROPYLTOLUENE          | -      |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | Propionitrile               | E E    |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | sec-BUTYLBENZENE            |        |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | Styrene                     | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U     | 0.005  | 1       | <    | U    | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  |          |
| VOLATILES      | tert-BUTYLBENZENE           |        |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | Tetrachloroethene           | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U     | 0.005  | ſ       | <    | U    | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  |          |
| VOLATILES      | Toluene                     | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U     | 0.005  | 1       | <    | U    | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  |          |
| VOLATILES      | trans-1,2-Dichtoroethene    |        |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | trans-1,3-Dichloropropene   | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U     | 0.005  | t       | <    | U    | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  |          |
| VOLATILES      | trans-1,4-Dichloro-2-butene | •      |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | Trichloroethene             | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U     | 0.005  | 1       | <    | U    | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  |          |
| VOLATILES      | Trichloroffuoromethane      |        |         |      |      |        |        |      |       |        |         |      |      |        |         |      |      |        |        |      |    |        |       |     |    |          |
| VOLATILES      | Vinyl acetate               | 0.05   | 1       | <    | U    | 0.05   | 1      | <    | U     | 0.05   | 1       | <    | U    | 0.05   | 1       | <    | U    | 0.05   | 1      | <    | U  | 0.05   | 1     | <   | U  |          |
| VOLATILES      | Vinyt chloride              | 0.01   | 1       | <    | U    | 0.01   | 1      | <    | U     | 0.01   | 1       | <    | U    | 0.01   | 1       | <    | U    | 0.01   | 1      | <    | U  | 0.01   | 1     | <   | U  |          |
| VOLATILES      | Xylenes, Total              | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U     | 0.005  | 1       | <    | U    | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1     | <   | U  |          |

Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Karnack, Texas

Shaw Environmental, Inc.



| U<br>LH<br>8 | H-S67<br>-S67-(<br>)/6/19<br>3 - 5 f | -01<br>)1_2<br>93<br>Ft |    |
|--------------|--------------------------------------|-------------------------|----|
|              | REG                                  | i                       |    |
| Result       | DIL                                  | LQ                      | VQ |
| 0.01         | 1                                    | <                       | U  |
| 0.005        | 1                                    | <                       | U  |
| 0.005        | 1                                    | <                       | U  |
| 0.005        | 1                                    | <                       | U  |
| 0.01         | 1                                    | <                       | U  |
| 0.005        | 1                                    | <                       | U  |
| 0.01         | 1                                    | <                       | U  |
| 0.005        |                                      |                         |    |
| 0.005        | 2                                    | 5                       |    |
| 0.005        | 1                                    | ¢                       |    |
| 0.005        | 1                                    | <                       | U  |
| 0.05         | 1                                    | ۲                       | U  |
| 0.005        | 1                                    | <                       | υ  |
|              |                                      |                         |    |
| 0.005        | 1                                    | <                       | U  |
| 0.005        | 1                                    | <                       | U  |
| 0.005        | 1                                    | ۲                       | U  |
| 0.005        | 1                                    | ۲                       | U  |
| 0.005        | 1                                    | ۲                       | U  |
| 0.05         | 1                                    | <                       | U  |
| 0.01         | 1                                    | <                       | U  |
| 0.005        | 1                                    | <                       | U  |

.

Table 3-67 Concentrations of Chemicals in Soil Samples Associated with Sump 067

| [SUMP] = SUMP067 |  |                   |                      |                   |   |                      |                  |                  |                  |                 |             |
|------------------|--|-------------------|----------------------|-------------------|---|----------------------|------------------|------------------|------------------|-----------------|-------------|
| LOCATION _CODE   |  | 35SUMP066-SB01    | 47SB02               | 475802            | 47SB02  | 47SB02               | 47SB19           | 47SB19           | 47SB20           | 4/SB20          | LHS-3-22    |
| SAMPLE_NO        |  | 35-SMP066-SB01-02 | 47SB02(1-3)          | 47SB02(3-5)       | C-47SB02(0-0_5)-9807  | C-47SB02(0-0_5)-9812 | 47SB19(0-0_5)    | 4/SB19(1-2)      | 4/5820(0-0_5)    | 4/SB20(1-2)     | 1/10/1005   |
| SAMPLE_DATE      |  | 9/20/2006         | 7/27/1998            | 7/27/1998         | 7/27/1998   | 12/1/1998            | 6/2/2000         | 6/2/2000         | 6/2/2000         | 6/2/2000        | 0.055       |
| DEPTH            |  | 5-5Ft             | 1-3Ft                | 3-5Ft             | 0-0.5Ft   | 0-0.5Ft              | 0~0.5H           | 1-2H             | 0-0.5 Ft         | 1~2FL           | 0-0.5 Ft    |
| SAMPLE_PURPOSE   |  | REG               | REG                  | REG               | REG   | REG                  | REG              | REG              |                  |                 |             |
| Test Group       | Parameter (Units = mg/kg)              | Result DIL LQ VQ  | Result DIL LQ VQ     | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LU VQ     | Result Dil La Va | Result DIL EQ VQ | Result DIE LQ VQ | RESUR DIL LA VA |             |
| DIOXINS_FURANS   | 1,2,3,4,6,7,8-Heptachkorodibenzofuran  |                   | 0.000000986 1 < UJ   | 0.00000104 1 < 0  |   | 0.00000000 1 < 03    |                  |                  |                  |                 |             |
| DIOXINS_FURANS   | 1,2,3,4,6,7,8-HPGUU                    |                   |                      | 0.000002303       |   | 0.000000685 1 < 11   |                  |                  |                  |                 |             |
| DIOXINS_FURANS   | 1,2,3,4,7,8,9-Heptachkologisenzoluran  |                   |                      |                   |   | 0.00000058 1 < 11    |                  |                  |                  |                 |             |
| DIOXINS_FURANS   | 1,2,3,4,7,8-Hexacticologicenzolulari   |                   | 0.00000136 1 < 03    |                   |   | 0.000000721 1 < H    |                  |                  |                  |                 |             |
|                  | 1 2 2 5 7 8 Horeshierdiherrys a diario | 1                 | 0.000000254 1 < 0    | 0.000000104 1 < 0 |   | 0.000000402 1 < 1    |                  |                  |                  |                 |             |
| DIOXING_FURANG   | 1,2,3,0,7,0-riekaulujuateleo-p-utukit  |                   | 0.000000000101 1 < 0 | 0.000000125 1 < 1 |   | 0.000000387 1 < U    |                  |                  |                  |                 |             |
| DIOXINS FURANS   | 1 2 3 7 8 9 Heyachlord benzon-diaxin   |                   | 0.0000002 1 < U      | 0.000000129 1 < U |   | 0.000000478 1 < U    |                  |                  |                  |                 |             |
| DIOXINS FURANS   | 123789-Hexachlorodibenzofuran          |                   | 0.000000268 1 < U    | 0.000000178 1 < U |   | 0.000000631 1 < U    |                  |                  |                  |                 |             |
| DIOXINS FURANS   | 1.2.3.7.8-Pentachlordibenzo-p-dioxin   |                   | 0.000000255 1 < U    | 0.000000165 1 < U |   | 0.000000621 1 < U    |                  |                  |                  |                 |             |
| DIOXINS FURANS   | 1.2.3.7.8-Pentachlorodibenzofuran      |                   | 0.00000021 1 < U     | 0.000000132 1 < U |   | 0.000000498 1 < U    |                  |                  |                  |                 |             |
| DIOXINS FURANS   | 2.3.4.6.7.8-Hexachlorodibenzofuran     |                   | 0.000000258 1 < U    | 0.000000172 1 < U |   | 0.000000567 1 < U    |                  |                  |                  |                 |             |
| DIOXINS_FURANS   | 2,3,4,7,8-Pentachlorodibenzofuran      |                   | 0.000000203 1 < U    | 0.000000128 1 < U |   | 0.00000052 1 < U     |                  |                  |                  |                 |             |
| DIOXINS_FURANS   | 2,3,7,8-TCDD                           |                   | 0.000000262 1 < U    | 0.00000017 1 < U  |   | 0.000000581 1 < U    |                  |                  |                  |                 |             |
| DIOXINS_FURANS   | 2,3,7,8-TCDF                           |                   | 0.000000219 1 < U    | 0.000000171 1 < U |   | 0.000000424 1 < U    |                  |                  |                  |                 |             |
| DIOXINS_FURANS   | Heptachlorodibenzofuran                | ļ                 | 0.00000016 t < U     | 0.000000104 1 < U |   | 0.000000513 1 < U    |                  |                  |                  |                 |             |
| DIOXINS_FURANS   | Heptachlorodibenzo-p-dioxin            |                   | 0.000062511 1        | 0.000005624 1     |   | 0.000071806 1        |                  |                  |                  |                 |             |
| DIOXINS_FURANS   | Hexachloridibenzo-p-dioxin             |                   | 0.00000416 1         | 0.000000123 1 < U |   | 0.000000402 1 < U    |                  |                  |                  |                 |             |
| DIOXINS_FURANS   | Hexachlorodibenzofuran                 |                   | 0.00000061 1         | 0.000000135 1 < U |   | 0.00000387 1 < U     |                  | •                |                  |                 |             |
| DIOXINS_FURANS   | Octachlorodibenzofuran                 |                   | 0.000002822 1 < UJ   | 0.000000151 1 < U |   | 0.000004419 1        |                  |                  |                  |                 |             |
| DIOXINS_FURANS   | Octachlorodibenzo-p-dioxin             |                   | 0.002406362 1 B      | 0.000294586 1     |   |                      |                  |                  |                  |                 |             |
| DIOXINS_FURANS   | Pentachlorodibenzofuran                | 1                 |                      | 0.000000128 1 < 0 |   |                      |                  |                  |                  |                 |             |
| DIOXINS_FURANS   | Pentachiorodibenzo-p-dioxin            |                   | 0.000000235 1 < 0    |                   |   | 0.00000021 + < 0     |                  |                  |                  |                 |             |
| DIOXING_FURANS   | Tetrasharadihenzo a dioxin             |                   | 0.000000213 1 < 0    | 0.00000017 1 < 11 |   | 0.000000581 1 < U    |                  |                  |                  |                 |             |
| EXPLOSIVES       | 135 Trinitrobenzene                    |                   | 0.15 1 < U           | 0.15 1 < U        | 0.15 1 < U  |                      |                  |                  |                  |                 | 0.22 1 < U  |
| EXPLOSIVES       | 1.3-Dinitrobenzene                     |                   | 0.05 1 < U           | 0.05 t < U        | 0.05 1 < U  |                      |                  |                  |                  |                 | 0.22 1 < U  |
| EXPLOSIVES       | 2,4,6-Trinitrotoluene                  |                   | 0.1 t < U            | 0.1 1 < U         | 0.1 1 < U   |                      |                  |                  |                  |                 | 0.22 1 < U  |
| EXPLOSIVES       | 2,4-Dinitrotoluene                     |                   | 0.1 1 < U            | 0.1 1 < U         | 0.1 1 < U   |                      |                  |                  |                  |                 | 0.22 1 < U  |
| EXPLOSIVES       | 2,6-Dinitrotoluene                     |                   | 0.1 1 < U            | 0.1 1 < U         | 0.1 1 < U   |                      |                  |                  |                  |                 | 0.24 1 < U  |
| EXPLOSIVES       | 2-Amino-4,6-dinitrotoluene             |                   | 0.05 1 < U           | 0.05 t < U        | 0.05 1 < U  |                      |                  |                  |                  |                 |             |
| EXPLOSIVES       | 4 Amino-2,6-dinitrotoluene             |                   | 0.05 1 < U           | 0.05 1 < U        | 0.05 1 < U  |                      |                  |                  |                  |                 | 0.46 1 < U  |
| EXPLOSIVES       | нмх                                    |                   | 0.1 1 < U            | 0.1 1 < U         | 0.1 1 < U   |                      |                  |                  |                  |                 | 2 1 < 0     |
| EXPLOSIVES       | m-Nitrotoluene                         |                   | 0.1 i < U            | 0.1 1 < 0         | 0.1 1 < U   |                      |                  | •                |                  |                 | 0.93 1 < 0  |
| EXPLOSIVES       | NIOBIUM                                |                   |                      |                   | 01 1 4 11   |                      |                  |                  |                  |                 | 0.24 1 < ∐  |
| EXPLOSIVES       | Nitrobenzene                           |                   |                      |                   |   |                      |                  |                  |                  |                 | 0.93 1 < 1  |
| EXPLUSIVES       | o-Nillololuesie                        |                   |                      |                   | 0.1 1 < 1   |                      |                  |                  |                  |                 | 2.8 1 < U   |
| EXPLOSIVES       | BDX                                    |                   | 0.1 1 < 1            | 0.1 1 < U         | 011 <u< th=""><th></th><th></th><th></th><th></th><th></th><th>1 1 &lt; U</th></u<> |                      |                  |                  |                  |                 | 1 1 < U     |
| EXPLOSIVES       | Tetryl                                 |                   | 0.1 1 < R            | 0.1 1 < R         | 0.1 1 < R   |                      |                  |                  |                  |                 | 0.69 1 < U  |
| METALS           | Aluminum                               |                   | 5500 1 J             | 13000 1           | 5400 1 J  |                      |                  |                  |                  |                 | 9810 1      |
| METALS           | Antimony                               |                   | 6.51 1 < R           | 6.93 1 < R        | 6.59 1 < R  |                      |                  |                  |                  |                 | 15.9 1 < UJ |
| METALS           | Arsenic                                |                   | 3.34 1               | 4.31 1            | 3.26 1  |                      |                  |                  |                  |                 | 4.9 1 J     |
| METALS           | Barium                                 |                   | 110 1 J              | 77 1              | 63 1 J  |                      |                  |                  |                  |                 | 63.3 t      |
| METALS           | Beryllium .                            |                   | 0.769 1 J            | 0.7 1             | 0.549 1 < U   |                      |                  |                  |                  |                 |             |
| METALS           | Cadmium                                |                   | 0.542 1 < U          | 0.577 1 < U       | 0.549 1 < U   |                      |                  |                  |                  |                 | 1.6 1 < U   |
| METALS           | Calcium                                |                   | 1100 1 J             | 1100 1            | 1500 1 J  |                      |                  |                  |                  |                 | 1230 1      |
| METALS           | Chromium                               |                   | 13 1 J               | 13 1              |   |                      |                  |                  |                  |                 | 2J.1 F J    |
| METALS           | Copar                                  |                   | 10 I J<br>271 1 J    | 0.5 1             | 0.0 i J<br>349 1 i  |                      |                  |                  |                  |                 | 168 t       |
| METALO           | Cupper<br>Cupple                       |                   | 3.7 1 5              | 4.61 1            | 0.00 i J  |                      |                  |                  |                  |                 |             |
| METALS           | ling                                   |                   | 10000 1 ./           | 13000 1           | 11000 t J   |                      |                  |                  |                  |                 | 19100 1     |
| METALS           | tead                                   |                   | 12.3 1               | 8.23 1            | 15.1 1  |                      |                  |                  |                  |                 | 79.5 1      |
| METALS           | Magnesium                              |                   | 540 1 < U            | 940 1             | 550 1 < U   |                      |                  |                  |                  |                 | 464 1       |
| METALS           | Manganese                              |                   | 637 1 J              | 106 1             | 263 1 J   |                      |                  |                  |                  |                 | 72.9 1      |
| METALS           | Mercury                                |                   | 0.11 1 < U           | 0.12 1 < U        | 0.11 1 < U  |                      |                  |                  |                  |                 | 0.17 1 < U  |
| METALS           | Nickel                                 |                   | 7.6 1 J              | 9.9 1             | 6.6 1 J   |                      |                  |                  |                  |                 |             |
| METALS           | Potassium                              |                   | 1000 1               | 1100 1            | 670 t   |                      |                  |                  |                  |                 | 447 1       |
| METALS           | Selenium                               |                   | 1.72 1               | 1.54 1            | 1.49 1  |                      |                  |                  |                  |                 | 0.93 1 J    |
| METALS           | Silver                                 |                   | 1.1 1 < U            | 1.1 1 < U         | 1.1 1 < U   |                      |                  |                  |                  |                 | 1.6 1 < U   |
| METALS           | Sodium                                 |                   | 540 1 < U            | 580 1 < Ų         | 550 1 < U   |                      |                  |                  |                  |                 |             |
| METALS           | Strontium                              |                   | 6.7 1                | 8.3 1             | 5.5 1 < U   |                      |                  |                  |                  |                 | 15.9 1 < U  |
| METALS           | Thallium                               |                   | 0.542 1 < U          | 0.577 1 < U       | 0.549 1 < U   |                      |                  |                  |                  |                 | 79.6 1 < U  |
| METALS           | Vanadium                               | • ·               | 21 1 J               | 28 1              | 20 1 J  |                      |                  |                  |                  |                 |             |

# 00066151

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

----

Table 3-67

of Chamicals in Sail Samples Associated with Sump (167 ontratio ~

|                                |                             |                   | Conc             | entrations of Chemi | icals in Soil Sample | es Associated with St | ump vo <i>r</i>  |                  |                  |                  |                  |
|--------------------------------|-----------------------------|-------------------|------------------|---------------------|----------------------|-----------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE                 |                             | 35SUMP066-SB01    | 475802           | 47SB02              | 47SB02               | 47SB02                | 47SB19           | 47SB19           | 47SB20           | 47SB20           | LHS-3-22         |
| SAMPLE, NO                     |                             | 35-SMP066-SB01-02 | 47SB02(1-3)      | 47SB02(3-5)         | C-47SB02(0-0_5)-9807 | C-47SB02(0-0_5)-9812  | 47SB19(0-0_5)    | 47SB19(1-2)      | 47SB20(0-0_5)    | 47SB20(1-2)      | LHS-3-22         |
| SAMPLE_DATE                    |                             | 9/20/2006         | 7/27/1998        | 7/27/1998           | 7/27/1998            | 12/1/1998             | 6/2/2000         | 6/2/2000         | 6/2/2000         | 6/2/2000         | 1/10/1995        |
| DEPTH                          |                             | 5-5Ft             | 1 - 3 Ft         | 3-5Ft               | 0 - 0.5 Ft           | 0-0.5 Ft              | 0 - 0.5 Ft       | 1-2Ft            | 0 - 0.5 Ft       | 1-2Ft            | 0-0.5 Ft         |
| SAMPLE PURPOSE                 |                             | REG               | REG              | REG                 | REG                  | REG                   | REG              | REG              | REG              | REG              | REG              |
| Test Group                     | Parameter (Units = mg/kg)   | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ    | Result DIL LQ VQ     | Result DIL LQ VQ      | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| METALS                         | Zinc                        |                   | 13 t J           | 18 1                | 17 1 J               |                       |                  |                  |                  |                  | 207 t            |
| PCBS                           | Arockor 1016 °              |                   | 0.036 1 < U      | 0.038 1 < U         | 0.037 1 < U          |                       |                  |                  |                  |                  |                  |
| PCBS                           | Aroclor 1221 °              |                   | 0.072 1 < U      | 0.077 1 < U         | 0.073 1 < U          |                       |                  |                  |                  |                  |                  |
| PCBS                           | Aroclar 1232 °              |                   | 0.036 1 < U      | 0.038 1 < U         | 0.037 1 < U          |                       |                  |                  |                  |                  |                  |
| PCBS                           | Aroclor 1242 °              | 1                 | 0.036 1 < U      | 0.036 1 < U         | 0.037 1 < U          |                       |                  |                  |                  |                  |                  |
| PCBS                           | Arocior 1248 <sup>a</sup>   |                   | 0.036 1 < U      | 0.038 t < U         | 0.037 1 < U          |                       |                  |                  |                  |                  |                  |
| PCBS                           | Aroclor 1254 "              |                   | 0.036 t < U      | 0.038 1 < U         | 0.037 1 < U          |                       |                  |                  |                  |                  |                  |
| PCBS                           | Aroclor 1260 <sup>a</sup>   |                   | 0.036 1 < U      | 0.038 1 < U         | 0.037 1 < U          |                       |                  |                  |                  |                  |                  |
| PERC                           | Perchlorate                 | 0.01 1 U          |                  |                     |                      |                       | 0.136 1          | 0.00591 1 < U    | 0.00587 1 < U    | 0.222 1          |                  |
| PESTICIDES                     | 4,4'-DDD                    |                   | 0.0036 1 < U     | 0.0038 1 < U        | 0.0036 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | 4.4'-DDE                    |                   | 0.0036 1 < U     | 0.0038 1 < U        | 0.0036 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | 4,4'-DDT                    |                   | 0.0036 1 < U     | 0.0038 1 < U        | 0.0036 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | Aldrin                      |                   | 0.0018 1 < U     | 0.0019 1 < U        | 0.0018 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | alpha-BHC                   |                   | 0.0018 1 < U     | 0.0019 1 < U        | 0.0018 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | beta-BHC                    |                   | 0.0018 1 < U     | 0.0019 1 < U        | 0.0018 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | Chlordane                   |                   | 0.036 1 < U      | 0.038 t < U         | 0.037 1 < U          |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | delta-BHC                   |                   | 0.0018 t < U     | 0.0019 1 < U        | 0.0018 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | Diektrin                    |                   | 0.0036 1 < U     | 0.0038 1 < U        | 0.0036 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | Endosulfan I                |                   | 0.0018 1 < U     | 0.0019 1 < U        | 0.0018 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | Endosulfan li               |                   | 0.0036 t < U     | 0.0038 1 < U        | 0.0036 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | Endosulfan Sutfate          |                   | 0.0036 1 < U     | 0.0038 1 < U        | 0.0036 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | Endrin                      |                   | 0.0036 1 < U     | 0.0038 1 < U        | 0.0036 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | Endrin aldehyde             |                   | 0.0036 1 < U     | 0.0038 1 < U        | 0.0036 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | Endrin ketone               |                   | 0.0036 1 < U     | 0.0038 1 < U        | 0.0035 1 < 0         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | gamma-BHC (Lindane)         |                   | 0.0018 1 < 0     | 0.0019 1 < U        | 0.0018 1 < 0         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | Heptachlor                  |                   | 0.0018 1 < 0     | 0.0019 1 < 0        | 0.0018 1 < 0         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | Heptachlor epoxide          |                   | 0.0018 1 < 0     | 0.0019 1 < 0        | 0.0018 1 < U         |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | METHOXYCHLOR                |                   | 0.035 1 < 0      | 0.019 1 < 0         |                      |                       |                  |                  |                  |                  |                  |
| PESTICIDES                     | ioxaphene                   |                   | 0.000 1 < 0      |                     | 0.037 1 < 11         |                       |                  |                  |                  |                  | 074 1 < 1        |
| SEMIVULATILES                  | 1,2,4-Inchlorobenzene       |                   |                  |                     | 0.37 1 < 1           |                       |                  |                  |                  |                  | 074 1 < 1        |
| SEMIVULATILES                  | 1,2-Dichkrobenzene          |                   | 0.36 1 < 11      | 0.38 1 < 0          | 0.37 1 < 1           |                       |                  |                  |                  |                  | 074 1 < U        |
| SEMIVOLATILES<br>SEMIVOLATILES | 1,5-Dichorobenzene          |                   | 0.36 1 < 1       | 0.38 1 < 11         | 0.37 t < 1           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2 # 5-Techlorophenol        |                   | 091 < U          | 0.96 1 < U          | 0.91 1 < U           |                       |                  |                  |                  |                  | 3.7 1 < U        |
| SEMIVOLATILES                  | 2.4.6.Trichlorophenol       |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 t < U           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2 4-Dichlorophenol          |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2.4-Dimethylphenol          |                   | 0.36 1 < U       | 0.38 t < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2.4-Dinitrophenol           |                   | 0.9 1 < U        | 0.96 1 < U          | 0.91 1 < U           |                       |                  |                  |                  |                  | 3.7 1 < U        |
| SEMIVOLATILES                  | 2,4-Dinitrotoluene          |                   | 0.36 1 < U       | 0.38 t < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2,6-Dinitrotokvene          |                   | 0.36 t < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2-Chloronaphthalene         |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2-Chlorophenol              |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2-Methyinaphthalene         |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2-Methylphenol              |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 2-Nitroaniline              |                   | 0.9 1 < U        | 0.96 1 < U          | 0.91 1 < U           |                       |                  |                  |                  |                  | 3.7 1 < U        |
| SEMIVOLATILES                  | 2-Nitrophenol               |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzidine      |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 1.5 1 < U        |
| SEMIVOLATILES                  | 3-Nitroaniline              |                   | 0.9 1 < U        | 0.96 1 < U          | 0.91 1 < U           |                       |                  |                  |                  |                  | 3.7 1 < U        |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol  |                   | 0.9 1 < U        | 0.96 1 < U          | 0.91 1 < U           |                       |                  |                  |                  |                  | 3.7 1 < 0        |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether  |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol     |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  | ÷                |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 4-Chloroaniline             |                   | 0.36 1 < U       | 0.38 t < U          | 0.37 t < U           |                       |                  |                  |                  |                  | 0.74 t < U       |
| SEMIVOLATILES                  | 4-Chiorophenyl phenyl ether |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 t < U           |                       |                  |                  | -                |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 4-Methylphenol              |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | 4-Nitroaniline              |                   | 0.9 1 < U        | 0.96 1 < U          | 0.91 t < U           |                       |                  |                  |                  |                  | 3.7 1 < U        |
| SEMIVOLATILES                  | 4-Nitrophenol               |                   | 0.9 1 < U        | 0.96 1 < U          | 0.91 t < U           |                       |                  |                  |                  |                  | 3.7 1 < U        |
| SEMIVOLATILES                  | Acenaphthene                |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0./4 1 < U       |
| SEMIVOLATILES                  | Acenaphthylene              |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.74 T < U       |
| SEMIVOLATILES                  | Anthracene                  | }                 | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.74 1 < 0       |
| SEMIVOLATILES                  | Benzo(a)anthracene          |                   | 0.36 1 < U       | 0.38 t < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | U./4 1 < U       |
| SEMIVOLATILES                  | Benzo(a)pyrene              |                   | 0.18 1 < U       | 0.19 1 < U          | 0.18 1 < U           |                       |                  |                  |                  |                  | 0.74 1 < U       |
| SEMIVOLATILES                  | Benzo(b)fluoranthene        |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.17 1 J         |
| SEMIVOLATILES                  | Benzo(ghi)perylene          |                   | 0,36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0./4 1 < U       |
| SEMIVOLATILES                  | Benzo(k)fiuoranthene        |                   | 0.36 1 < U       | 0.38 1 < U          | 0.37 1 < U           |                       |                  |                  |                  |                  | 0.0/6 1 J        |
| SEMIVOLATILES                  | Benzoic Acid                | 1                 | 0.9 t < U        | 0.96 t < U          | 0.91 1 < U           |                       |                  |                  |                  |                  | 3.7 1 < U        |



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-67

| Concentrations of Chemicals in Soil Samples Associated with Sur | np 067 |
|---|--------|

| Concentrations of Chemicals in Soil Samples Associated with Sump 067 |                                |                   |                     |                  |                      |                      |                         |                   |                   |                    |                  |  |
|--|--------------------------------|-------------------|---------------------|------------------|----------------------|----------------------|-------------------------|-------------------|-------------------|--------------------|------------------|--|
| LOCATION CODE  |                                | 35SUMP066-SB01    | 47\$B02             | 47SB02           | 47SB02               | 47SB02               | 47SB19                  | 47SB19            | 47SB20            | 47SB20             | LHS-3-22         |  |
| SAMPLE NO  |                                | 35-SMP066-SB01-02 | 2 47SB02(1-3)       | 47SB02(3-5)      | C-47SB02(0-0 5)-9807 | C-47SB02(0-0 5)-9812 | 47SB19(0-0 5)           | 47SB19(1-2)       | 47SB20(0-0_5)     | 47SB20(1-2)        | LHS-3-22         |  |
| CAMPLE_NO  |                                | 0/20/2006         | 7/07/1998           | 7/27/1998        | 7/27/1998            | 12/1/1998            | 6/2/2000                | 6/2/2000          | 6/2/2000          | 6/2/2000           | 1/10/1995        |  |
| DAMPLE_DATE  |                                | 5/20/2000         | 1 25                | 2 5 5            | 0.055                | 0.055                | 8-05Ft                  | 1.2Et             | 0-0551            | 1_251              | 0_05Ft           |  |
|  |                                | 3-371             | 1-31                | 3-3FL            | 0-0.5 PL             | 0-0.5H               | DEC                     | PEC               | DEC.              | PEC                | DEC              |  |
| SAMPLE_PURPOSE   |                                | REG               | REG                 | REG              | REG                  |                      | REG<br>Desuit Dil LO VO |                   |                   |                    |                  |  |
| Test Group   | Parameter (Units = mg/kg)      | Result DIL LQ     | VQ Result DIE EQ VQ | Result DIL LQ VQ | Result DiL LQ VQ     | Kesuit Uil Lu Vu     | Result DAL LO VO        | Result Dil. LQ VQ | Result DIL LUZ VU | Result Die Log Vor | Result Dil EQ VQ |  |
| SEMIVOLATILES  | Benzyi Alcohol                 |                   | 0.9 1 < U           | 0.96 1 < U       | 0.91 1 < 0           | -                    |                         |                   |                   |                    | 0.74 1 < 0       |  |
| SEMIVOLATILES  | bis(2-Chioroethoxy)methane     |                   | 0.36 1 < U          | 0.38 1 < U       | 0.37 1 < 0           |                      |                         |                   |                   |                    | U.74 1 < U       |  |
| SEMIVOLATILES  | bis(2-Chloroethyi)ether        |                   | 0.36 1 < U          | 0.38 1 < U       | 0.37 1 < 0           |                      |                         |                   |                   |                    | 0.74 1 < 0       |  |
| SEMIVOLATILES  | bis(2-Chloroisopropyl)ether    |                   | 0.36 1 < U          | 0.38 1 < U       | 0.37 1 < U           |                      |                         |                   |                   |                    | 0.74 1 < U       |  |
| SEMIVOLATILES  | bis{2-Ethylhexyl]phthalate     |                   | 0.36 t < U          | 0.38 1 < U       | 0.37 1 < U           |                      |                         |                   |                   |                    | 0.17 1 J         |  |
| SEMIVOLATILES  | Butyl benzyl phthalate         |                   | 0.36 1 < U          | 0.38 1 < U       | 0.37 1 < U           |                      |                         |                   |                   |                    | Q.74 1 < U       |  |
| SEMIVOLATILES  | Carbazole                      |                   | 0.36 1 < U          | 0.38 1 < U       | 0.37 1 < U           |                      |                         |                   |                   |                    |                  |  |
| SEMIVOLATILES  | Chrysene                       |                   | 0.36 1 < U          | 0.38 t < U       | 0.37 1 < U           |                      |                         |                   |                   |                    | 0.74 1 < U       |  |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene         |                   | 0.36 1 < U          | 0.38 1 < U       | 0.37 1 < U           |                      |                         |                   |                   |                    | 0.74 1 < U       |  |
| SEMIVOLATILES  | Dibenzofuran                   |                   | 0.36 t < U          | 0.38 1 < U       | 0.37 t < U           |                      |                         |                   |                   |                    | 0.74 1 < U       |  |
| SEMIVOLATILES  | Diethyl phthalate              |                   | 0.36 1 < U          | 0.38 1 < U       | 0.37 1 < U           | -                    |                         |                   |                   |                    | 0.74 1 < U       |  |
| SEMIVOLATILES  | Dimethyl phthalate             |                   | 0.36 1 < U          | 0.38 1 < U       | 0.37 1 < U           |                      |                         |                   |                   |                    | 0.74 1 < U       |  |
| SEMIVOLATILES  | di-n-Butvl phthalate           |                   | 0.36 1 < U          | 0.38 1 < U       | 0.37 1 < U           |                      |                         |                   |                   |                    | 0.74 1 < U       |  |
| SEMIVOLATILES  | di-n-Octvl onthalate           |                   | 0.36 1 < U          | 0.38 1 < U       | 0.37 1 < U           |                      |                         |                   |                   |                    | 0.74 1 < U       |  |
| SEMIVOLATILES  | Fkioranthene                   |                   | 0.36 1 < U          | 0.38 t < U       | 0.37 1 < U           |                      |                         |                   |                   |                    | 0.74 1 < U       |  |
| SEMINOLATILES  | Fkiprene                       |                   | 0.36 1 < 11         | 038 t < U        | 0.37 1 < U           |                      |                         |                   |                   |                    | 0.74 1 < U       |  |
| SEMINOLATILES  | Herechiscohenzene              |                   | 0.18 1 < 11         | 019 1 < 11       | 018 1 < 1            |                      |                         |                   |                   |                    | 0.74 1 < U       |  |
| SEMIVOLATILES  | Heverblorobutadiana            |                   | 0.36 1 < 11         | 0.38 1 < 1       | 0.37 1 < 11          |                      |                         |                   |                   |                    | 0.74 1 < U       |  |
| SEMINOLATH ES  | Hexachtemartenontationa        |                   | 0.36 1 4 11         |                  | 0.37 1 < 11          |                      |                         |                   |                   |                    | 074 1 < tt       |  |
| SEMIVOLATILES  | Recardiorocyclopentaciene      |                   |                     |                  | 0.37 1 < 11          |                      |                         |                   |                   |                    | 074 1 < 11       |  |
| SEMIVOLATILES  | nexacinologilable              |                   |                     |                  |                      |                      |                         |                   |                   |                    | 0.74 1 < li      |  |
| SEMIVULATILES  | indeno(1,2,3-ca)pyrene         |                   |                     |                  | 0.07 1 - 11          |                      |                         |                   |                   |                    |                  |  |
| SEMIVOLATILES  | Isophorone                     |                   | 0.36 1 < 0          | 0.36 1 < 8       |                      |                      |                         |                   |                   |                    |                  |  |
| SEMIVOLATILES  | Naphthalene                    |                   | 0.36 1 < U          | 0.38 1 < 0       | 0.37 1 < 0           |                      |                         |                   |                   |                    | 0.74 1 < 0       |  |
| SEMIVOLATILES  | Nitrobenzene                   |                   | 0.36 1 < 0          | 0.36 1 < 0       | 0.37 1 < 0           |                      |                         |                   |                   |                    | 0.74 1 5 0       |  |
| SEMIVOLATILES  | n-Nitrosodimethylamine         |                   | 0.36 1 < 0          | 0.38 1 < 0       | 0.3/ 1 < 0           |                      |                         |                   |                   |                    | 0.74 4 - 14      |  |
| SEMIVOLATILES  | n-Nitroso-di-n-propytamine     |                   | 0.36 1 < 0          | 0.38 1 < U       | 0.37 1 < 0           |                      |                         |                   |                   |                    | 0.74 1 1 0       |  |
| SEMIVOLATILES  | n-Nitrosodiphenylamine         |                   | 0.36 1 < 0          | 0.38 1 < 0       | 0.37 1 < 0           |                      |                         |                   |                   |                    | 0.74 1 < 0       |  |
| SEMIVOLATILES  | Pentachlorophenol              |                   | 0.18 1 < U          | 0.19 f < U       | 0.18 1 < 0           |                      |                         |                   |                   |                    | 3./ 1 < 0        |  |
| SEMIVOLATILES  | Phenanthrene                   |                   | 0.36 1 < U          | 0.38 t < U       | 0.37 1 < U           |                      |                         |                   |                   |                    | 0.74 1 < U       |  |
| SEMIVOLATILES  | Phenol                         |                   | 0.36 1 < U          | 0.38 1 < U       | 0.37 1 < U           |                      |                         |                   |                   |                    | 0.74 1 < 0       |  |
| SEMIVOLATILES  | Pyrene                         |                   | 0.36 1 < U          | 0.38 1 < U       | 0.37 1 < U           |                      |                         |                   |                   |                    | 0.74 1 < U       |  |
| VOLATILES  | 1,1,1,2-Tetrachloroethane      | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    | 0.022 1 < U      |  |
| VOLATILES  | 1,1,1-Trichloroethane          | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 t < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    | 0.011 1 < U      |  |
| VOLATILES  | 1,1,2,2-Tetrachloroethane      | 0.00495 t U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    | 0.011 1 < U      |  |
| VOLATILES  | 1,1,2-Trichloroethane          | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    | 0.011 1 < U      |  |
| VOLATILES  | f,1-Dichloroethane             | 0.00495 1 U       | 0.0054 1 < U        | 0.0958 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    | 0.011 1 < U      |  |
| VOLATILES  | 1,1-Dichloroethene             | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    | 0.011 1 < U      |  |
| VOLATILES  | 1,1-Dichloropropene            | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    |                  |  |
| VOLATILES  | 1,2,3-Trichlorobenzene         | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    |                  |  |
| VOLATILES  | 1,2,3-Trichloropropane         | 0.00495 1 U       | 0.016 1 < U         | 0.017 1 < U      | 0.016 1 < U          |                      |                         |                   |                   |                    | 0.022 1 < U      |  |
| VOLATILES  | 1,2,4-Trichlorobenzene         | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    |                  |  |
| VOLATILES  | 1,2,4-Trimethylbenzene         | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    |                  |  |
| VOLATILES  | 1,2-Dibiomo-3-chloropropane    | 0.00495 1 U       | 0.011 1 < U         | 0.012 1 < U      | 0.011 1 < U          |                      |                         |                   |                   |                    | 0.044 1 < U      |  |
| VOLATILES  | 1,2-Dibromoethane              | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    | 0.044 1 < U      |  |
| VOLATILES  | 1,2-Dichlorobenzene            | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   | ·                 |                    |                  |  |
| VOLATILES  | 1.2-Dichloroethane             | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    | 0.011 1 < U      |  |
| VOLATILES  | 1.2-Dichloroethene             |                   |                     |                  |                      |                      |                         |                   |                   |                    | 0.011 1 < U      |  |
| VOLATILES  | 1.2-Dichloropropane            | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    | 0.011 1 < U      |  |
| VOLATILES  | 1.2-Dimethylbenzene (o-Xylene) | 0.00495 1 U       |                     |                  |                      |                      |                         |                   |                   |                    |                  |  |
| VOLATILES  | 135 Trimethylbenzene           | 0.00495 1 11      | 10054 1 < ∐         | 0.0058 1 < 1     | 0.0055 1 < 1/        |                      |                         |                   |                   |                    |                  |  |
| VOLATILES  | 1 3 Dichlorohonzone            | 0.00495 1 1       | 0.0054 1 < 1        | 0.0058 1 < 1     | 0.0055 1 < 1         |                      |                         |                   |                   |                    |                  |  |
| VOLATILES  | 1 3 Dichiotopropage            | 0.00455 1 0       | 0.0054 1 < 1        | 0.0059 1 < 1     | 0.0055 1 < 11        |                      |                         |                   |                   |                    |                  |  |
|  | 1 6 Dichloro 2 butoco          | 0.00455 1 0       |                     | 0.0050 1 < 0     | 0.0055 1 < 11        |                      |                         |                   |                   |                    |                  |  |
| VOLATILES  | f, 4 Diskleyshanzanz           | 0.00406 4 11      | 0.000               |                  | 0.0055 1 < 1         |                      |                         |                   |                   |                    |                  |  |
| VOLATILES  | 1,4-Diciniorabenzenie          | 0.00493 1 0       | 0.0054 1 < 0        |                  |                      |                      |                         |                   |                   |                    |                  |  |
| VOLATILES  |                                | 0.00405 4 21      | 1.1 i < U           |                  |                      |                      |                         |                   |                   |                    |                  |  |
| VOLATILES  | 2,2-Dichoropropane             | 0.00495 1 0       | 0.016 i < U         | 0.002            | U.U.D I < U          |                      |                         |                   |                   |                    | 6000 t - 11      |  |
| VOLATILES  | 2-dutanone                     | 0.00991 1 0       | 0.022 1 < U         | 0.023 T < U      | 0.022 1 < 0          |                      |                         |                   |                   |                    | 0.022 I S U      |  |
| VOLATILES  | 2-Chloroethyl vinyl ether      | 0.00991 1 U       |                     |                  | A                    |                      |                         |                   |                   |                    | 0.022 1 < 0      |  |
| VOLATILES  | 2-Chlorotoluene                | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    |                  |  |
| VOLATILES  | 2-Hexanone                     | 0.00991 t U       | UJ 0.022 1 < U      | 0.023 1 < U      | 0.022 1 < U          |                      |                         |                   |                   |                    | 0.022 T < U      |  |
| VOLATILES  | 2-Propenal                     |                   | 0.11 1 < U          | 0.12 1 < U       | 0.11 1 < U           |                      |                         |                   |                   |                    | 1.1 1 < U        |  |
| VOLATILES  | 4-Chlorotoluene                | 0.00495 1 U       | 0.0054 1 < U        | 0.0058 1 < U     | 0.0055 1 < U         |                      |                         |                   |                   |                    |                  |  |
| VOLATILES  | Acetone                        | 0.00991 1 U       | 0.022 1 < U         | 0.023 1 < U      | 0.022 1 < U          |                      |                         |                   |                   |                    | 0.022 1 < U      |  |
| VOLATILES  | Acetonitrile                   |                   |                     |                  |                      |                      |                         |                   |                   |                    | 0.22 t < U       |  |
| VOLATILES  | Acrylonitrile                  |                   | 0.11 t < U          | 0.12 1 < U       | 0.11 1 < U           |                      |                         |                   |                   |                    | 0.22 t < U       |  |

()

Shaw Environmental, Inc.

# 00066153

Table 3-67 -

| Concentrations of Chemicals in Soil Samples Associated with Sum | p 067 |
|---|-------|

|                | Concentrations of Unertificals in Son Samples Associated with Sump vo/ |                   |                  |                             |                                       |   |                  |                  |                   |                  |                  |  |  |  |
|----------------|--|-------------------|------------------|-----------------------------|---------------------------------------|---|------------------|------------------|-------------------|------------------|------------------|--|--|--|
| LOCATION CODE  |  | 35SUMP066-SB01    | 47SB02           | 47SB02                      | 47SB02                                | 47SB02                                  | 47SB19           | 47SB19           | 47SB20            | 47SB20           | LHS-3-22         |  |  |  |
| SAMPLE NO      |  | 35-SMP066-S801-02 | 47SB02(1-3)      | 47SB02(3-5)                 | C-47SB02(0-0_5)-9807                  | C-47SB02(0-0_5)-9812                    | 47SB19(0-0_5)    | 47SB19(1-2)      | 47SB20(0-0_5)     | 47SB20(1-2)      | LHS-3-22         |  |  |  |
| SAMPLE DATE    |  | 9/20/2006         | 7/27/1998        | 7/27/1998                   | 7/27/1998                             | 12/1/1998                               | 6/2/2000         | 6/2/2000         | 6/2/2000          | 6/2/2000         | 1/10/1995        |  |  |  |
| DEPTH          |  | 5-5Ft             | 1-3Ft            | 3-5Ft                       | 0-0.5Ft                               | 0 - 0.5 Ft                              | 0 - 0.5 Ft       | 1-2Ft            | 0 - 0.5 Ft        | 1-2Ft            | 0 - 0.5 Ft       |  |  |  |
| SAMPLE PURPOSE |  | BEG               | REG              | REG                         | REG                                   | REG                                     | REG              | REG              | REG               | REG              | REG              |  |  |  |
| Test Groun     | Parameter (( Inits = mg/kg)  | Result DIL LO VO  | Result DIL LO VQ | Result DIL LQ VQ            | Result DIL LQ VQ                      | Result DIL LQ VQ                        | Result DIL EQ VQ | Result DIL LQ VQ | Result Dil. LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |  |  |  |
| VOLATILES      | Ally chloride  |                   |                  |                             | · · · · · · · · · · · · · · · · · · · | • |                  |                  |                   |                  | 0.022 1 < U      |  |  |  |
| VOLATILES      | Renzene  | 0.00495 1 U       | 0.0054 1 < U     | 0.0058 1 < U                | 0.0055 1 < U                          |   |                  |                  |                   | •                | 0.011 1 < U      |  |  |  |
| VOLATILES      | Bromobenzepe   | 0.00495 t U       | 0.0054 1 < U     | 0.0058 1 < U                | 0.0055 1 < U                          |   |                  |                  |                   |                  |                  |  |  |  |
| VOI ATILES     | Bromochloromethane   | 0.00495 1 U       | 0.0054 1 < U     | 0.0058 1 < U                | 0.0055 1 < U                          |   |                  |                  |                   |                  |                  |  |  |  |
| VOLATIEES      | Bromortichhoromethane  | 0.00495 1 U       | 0.0054 1 < U     | 0.0058 1 < U                | 0.0055 1 < U                          |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATILES      | Bromoform  | 0.00495 1 U       | 0.0054 1 < U     | 0.0058 1 < U                | 0.0055 1 < U                          |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATILES      | Bromomethane   | 0.00991 1 1       | 0011 1 < U       | 0.012 1 < U                 | 0.011 1 < U                           |   |                  |                  |                   |                  | 0.022 1 < U      |  |  |  |
| VOLATILES      | Carbon disulfide   | 0.00495 1 U       | 0.6054 1 < U     | 0.0058 1 < U                | 0.0055 1 < U                          |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATILES      | Carbon tetrachlonide   | 0.00495 1 1       | 0.011 1 < U      | 0.012 t < U                 | 0.011 1 < U                           |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATILES      | Chimbenzepe  | 0.00495 1 1       | 0.0054 1 < U     | 0.0058 1 < U                | 0.0055 1 < U                          |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATILES      | Chloroethane   | 0.00991 1 1       | 0.011 1 < U      | 0.012 1 < U                 | 0.011 1 < U                           |   |                  |                  |                   |                  | 0.022 1 < U      |  |  |  |
| VOLATILES      | Chloroform   | 0.00495 1 11      | 0.0054 1 < 11    | £0058 1 < U                 | 0.0055 1 < U                          |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATILES      | Chloromethane  | 0.00400 1 0       | 0.0001 1 < 11    | 0.012 1 < U                 | 0.011 1 < U                           |   |                  |                  |                   |                  | 0.022 1 < U      |  |  |  |
| VOLATILES      | Chlomorana   | 0.00331 1 0       | 0.011 1 4 0      |                             |                                       |   |                  |                  |                   |                  | 0.22.1 < U       |  |  |  |
| VOLATILES      | circ.1 2 Dichloraethana  | 0.00495 1 11      | 0.0054 1 < 11    | 0.0058 t < U                | 0.0055 1 < U                          |   |                  |                  |                   |                  |                  |  |  |  |
| VOLATILES      | cie 1 3 Dichloropene   | 0.00405 1 U       | 0.0054 1 < 11    | 0.0058 1 < 1                | 0.0055 1 < U                          |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATILES      | Dihmmothlesmethane   | 0.00495 1 1       | 0.0054 t < H     | 0.0058 t < U                | 0.0055 1 < U                          |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATILES      | Dibromomothana   | 0.00495 1 1       | 0.011 t < 11     | 0.012 1 < 1                 | 0.011 1 < 11                          |   |                  |                  |                   |                  | .0.044 1 < U     |  |  |  |
| VOLATILES      | Dichlorodifueromethane   | 0.00991 1 1       | 0.016 1 < 11     | 0.017 1 < 1                 | 0.016 1 < 1                           |   |                  |                  |                   |                  | 0.044 1 < U      |  |  |  |
| VOLATILES      | Ethel methoandata  | 0.00331 1 0       | 0.0054 1 < H     | 0.0058 1 < U                | 0.0055 1 < 1                          |   |                  |                  |                   |                  | 0.044 1 < U      |  |  |  |
| VOLATILED      | Ethylonzono  | 0.00405 1 11      | 0.0054 1 < 1     | 0.0058 1 < 1                | 0.0055 1 < 11                         |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATILES      | Lavashlarshutadiana  | 0.00495 1 11      | 0.0054 1 < 1     | 0.0058 1 < 11               | 0.0055 1 < 11                         |   |                  |                  |                   |                  |                  |  |  |  |
| VOLATILES      |  | 0.00433 1 0       | 0.0054 1 < 1     | 0.0058 1 < 11               | 0.0055 1 < 1                          |   |                  |                  |                   |                  | 0.022 1 < U      |  |  |  |
| VOLATILES      |  |                   |                  | 12 1 < 1                    | 11 1 < 11                             |   |                  |                  |                   |                  | 4.4 1 < U        |  |  |  |
| VOLATILES      | ISODUTIE ALCONOL   | 0.00495 1 11      | 0.0054 1 < 11    | 0.0058 1 < 11               | 0.0055 1 < 11                         |   |                  |                  |                   |                  |                  |  |  |  |
| VOLATILES      | nsopropyweitzene   | 0.00495 1 0       | 0.0034 1 4 0     | 0.0000 1 - 0                | 0.0001                                |   |                  |                  |                   |                  |                  |  |  |  |
| VOLATILES      | HI, proviences   | 0.00435 1 0       |                  | D12 1 < ∐                   | 011 1 < 11                            |   |                  |                  |                   |                  | 0.044 1 < U      |  |  |  |
| NOLATILES      | Moundary Annula  | 0.00004 1 14      | 0.022 1 < 11     | 0.023 1 < 1                 | 0.022 1 < 1                           |   |                  |                  |                   |                  | 0.022 1 < U      |  |  |  |
| VOLATILES      |  | 0.0031 1 6        | 0.022 1 4 0      | 0.058 1 < 1                 | 0.055 1 < 1                           |   |                  |                  |                   |                  | 0.044 1 < U      |  |  |  |
| VOLATILES      | Methidene chlaride   | 0.0022 1 1 8      | 0.054 1 < 11     | 0.0058 1 < 1                | 0.0055 1 < 1                          |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATILLO      | Nonhibatana  | 8,0322 1 5 1      | 0.0054 t < 11    | 0.0058 1 < 1                | 0.0055 1 < 1                          |   |                  |                  |                   |                  |                  |  |  |  |
| VOLATICES      |  | 0.00051 1 0       | 0.0054 t < 11    | 0.0058 1 < 11               | 0.0055 1 < 1                          | -                                       |                  |                  |                   |                  |                  |  |  |  |
| VOLATILES      | PDOPYLESNZENE  | 0.00495 1 0       | 0.0054 1 < 11    | 0.0058 1 < 1                | 0.0055 1 < 1                          |   |                  |                  |                   |                  |                  |  |  |  |
| VOLATILES      | Pentschlaroothano  | 0.00455 1 0       | 0.0034 1 4 0     | 0.012 1 < 11                | 0011 1 < U                            | -                                       |                  |                  |                   |                  | 0.044 1 < U      |  |  |  |
| VOLATILES      | SOPDODVETOFLIENE   | 8 00/05 1 11      | 0.0054 1 < 11    | 0.0058 1 < 11               | 0.0055 1 < 1                          |   |                  |                  |                   |                  |                  |  |  |  |
| VOLATILES      | Propionitrila  | 0.00495 1 0       | 0.0004 1 < 0     | 0.0000 1 < 0<br>0.12 1 < 11 | 011 1 < 1                             |   |                  |                  |                   |                  | 0.11 1 < U       |  |  |  |
| VOLATILES      | ego BLITVI BENZENE   | 0.00495 1 11      | 0.0054 1 < 11    | 0.0058 1 < 11               | 0.0055 1 < 1                          |   |                  |                  |                   |                  |                  |  |  |  |
| VOLATILES      | Shana  | 0.00495 1 0       | 0.0054 1 < 1     | 0.0058 1 < U                | 0.0055 1 < 13                         |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATIES       | tort REPORDENTZENE   | 0.00495 2 11      | 0.0054 1 < 1     | A 0358 1 < 1                | 0.0055 1 < 11                         |   |                  |                  |                   |                  |                  |  |  |  |
| VOLATILES      | Tetrachleroothero  | 0.00495 1 11      | 0.0054 1 < 0     | 0.0058 1 < 11               | 0.0055 1 < 11                         |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATILES      | Takapa   | 0.00495 1 11      | 0.0054 1 < 11    | 0.0058 1 < 11               | 0.0055 1 < 11                         |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATILES      | tracte 12 Diskloresthans   | 0.00493 1 0       |                  | 0.0058 1 < 1                | 0.0055 1 < 11                         |   |                  |                  |                   |                  |                  |  |  |  |
|                | trans-1,2-Dishlarananana   | 0.00403 1 0       | 0.0054 1 < 1     | 0.0058 1 < 1                | 0.0055 1 < 11                         |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
|                | trans 1 4 Diabloro 2 hutana  | 0.00453 1 0       | 0.0004 1 - 0     |                             |                                       |   |                  |                  |                   |                  | 0.044 1 < U      |  |  |  |
|                | uona-r,4-Dichioto-z-Dol8199  | 0.00495 1 14      | 0.044 1 < 21     | £0.012 1 ≤ 11               | 0.011 1 < 11                          |   |                  |                  |                   |                  | 0.011 1 < U      |  |  |  |
| VOLATILEO      | Trichlerofuscemethero  | 0.0001 1 1        |                  | 0.012 1 - 0                 | 0.011 1 2 11                          |   |                  |                  |                   |                  | 0.022 1 < U      |  |  |  |
| VULATILES      | Transformeriane  | 0.00001 1 11 111  |                  | 0.012 1 - 0                 | 0.017 1 - H                           |   |                  |                  |                   |                  | 0.022 1 < U      |  |  |  |
| VOLATILES      | Visiyi ducidile  | 0.00001 1 12      |                  | 0.020 1 4 0                 | 0.022 1 2 11                          |   |                  |                  |                   |                  | 0.022 1 < U      |  |  |  |
| VULATILES      | Velopae Tetol  | 0.00991 1 0       |                  | 0.012 1 - 0                 |                                       |   |                  |                  |                   |                  | 0.011 t < U      |  |  |  |
| A OTH HITED    | Ayicuds, Fular   |                   | 0.0004 1 5 0     | 0.0000 1 5 0                | 0.0000 1 1 0                          |   |                  |                  |                   |                  |                  |  |  |  |

# 00066154

Table 3-67 Concentrations of Chemicals in Soil Samples Associated with Sump 067

| [SUMP] = SUMP067         |   |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
|--------------------------|---|-------------|-------------------|-------------|----------|---------|-----------|---------|----------|-----------------|-----|----------|----------|------------------|----------|---------|----------|--------|--------------|----|---------------|----------|-----|---|
| LOCATION _CODE           |   | 11          | 1-S66-0<br>566 01 | 1<br>00     | L<br>IL  | H-S664  | 01<br>1 1 |         | EHS      | 566-01<br>66.01 | 1   |          | 11       | 1-S66-1<br>S66 0 | 02<br>วง |         | El<br>FD |        | 5-02<br>กว่า |    |               | -S67-01  | 4   |   |
| SAMPLE_NO                |   | <u>د</u> م- | V5/1993           |             | u        | 8/5/199 | 3         |         | 8/5      | /1993           | -   |          | بري<br>ع | V5/199           | (_)<br>3 |         | 8/5/1993 |        |              |    | 8/6/1993      |          |     |   |
| DEPTH                    |   | C           | .5 - 2 F          | t           | ł        | 0.5 - 2 | Ft        |         | 4        | -6 Ft           |     |          | 0        | 5-21             | ŧ        |         |          | 4-6    | Ft           |    | 0.            | 5-2Ft    |     |   |
| SAMPLE_PURPOSE           |   |             | FD                |             |          | REG     |           |         | F        | REG             |     |          |          | REG              |          |         |          | REC    | 3            |    |               | REG      |     |   |
| Test Group               | Parameter (Units = mg/kg)                                     | Result 1    | DAL 1             | <u>Q</u> VI | 2 Result | DIL     | LQ        | VQ Re   | suit Di  | L L             | Q 1 | VQ       | Result I |                  | LQ       | VQ      | Result   | DIL    | LQ           | VQ | Result D      | IL LO    | Q V | Q |
| DIOXINS_FURANS           | 1,2,3,4,5,7,8-Heptachlorodiberzoturan<br>1,2,3,4,6,7,8-Ho/CDD |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | 1.2.3.4.7.8.9-Heptachlorodibenzofuran                         |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | 1,2,3,4,7,8-Hexachlorodibenzofuran                            |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin                        |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | 1,2,3,6,7,8-Hexachlordibenzo-p-dioxin                         |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FORANS           | 1,2,3,5,7,6-Hexachlordibenzonuran                             |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | 1,2,3,7,8,9-Hexachlorodibenzofuran                            |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | 1,2,3,7,8-Pentachlordibenzo-p-dioxin                          |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | 1,2,3,7,8-Pentachlorodibenzofuran                             |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | 2,3,4,6,7,8-Hexachiorodibenzofuran                            |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS FURANS           | 2.3.7.8-TCDD  |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | 2,3,7,8-TCDF  |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | Heptachlorodibenzofuran                                       |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | Heptachlorodibenzo-p-dioxin                                   |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | Hexachiongioenzo-p-ciloxin<br>Hexachioroffibenzofaran         |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     | - |
| DIOXINS_FURANS           | Octachlorodibenzofuran  |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | Octachlorodibenzo-p-dioxin                                    |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | Pentachlorodibenzofuran                                       |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | Pentachlorodibenzo-p-dioxin                                   |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| DIOXINS_FURANS           | Tetrachkrodibenzo-o-dioxin                                    |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| EXPLOSIVES               | 1,3,5-Trinitrobenzene   | 0.7         | 1 <               | U           | 0.7      | 1       | < 1       | U       | 0.7      | 1 <             | i   | U        | 0.7      | 1                | <        | U       | 0.7      | 1      | <            | U  | 0.7           | 1 <      | U   | 1 |
| EXPLOSIVES               | 1,3-Dinitrobenzene  |             |                   |             | 0.5      | 1       | < 1       | U       | 0.5      | 1 <             | 1   | U        | 0.5      | 1                | <        | U       | 0.5      | 1      | <            | U  | 0.5           | 1 <      | U   |   |
| EXPLOSIVES               | 2,4,6-Trinitrotoluene   | 0.5         | 1 <               | U           | 0.5      | 1       | < !       | U       | 0.5      | 1 <             | l   | U        | 0.5      | 1                | <        | U       | 0.5      | 1      | <            | U  | 0.5           | 1 <      | ·U  |   |
| EXPLUSIVES<br>EXPLOSIVES | 2,4-Uinfootoluene   | 0.5         | 1 <               | : U<br>: II | 0.5      | 1       | < i       | UF      | 0.5      | 1 <             | 1   | U .<br>U | 0.5      | 1                | <        | U<br>II | 0.5      | 1      | <            | 0  | 0.5           | 1 <      | 0   |   |
| EXPLOSIVES               | 2-Amino-4,6-dinitrotoluene                                    | 0.5         |                   | . 0         | V.J      |         |           | 0       | 0.5      |                 | ``  | 0        | 0.0      | •                |          | •       | 0.0      | •      |              | 0  | 0.5           |          | U   |   |
| EXPLOSIVES               | 4-Amino-2,6-dinitrotoluene                                    |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| EXPLOSIVES               | НМХ   | 0.9         | 1 <               | U           | 0.9      | 1       | < 1       | IJ      | 0.9      | 1 <             | U   | U        | 0.9      | 1                | <        | U       | 0.9      | 1      | <            | U  | 0.9           | 1 <      | U   |   |
| EXPLOSIVES               | m-Nitrololuene  | 0.9         | 1 <               | 0           | 0.9      | 1       | <  <br>-  | U       | 0.9      | 1 <             |     | U<br>IV  | 0.9      | 1                | <        | U       | 0.9      | 1      | <            | U  | 0.9           | 1 <      | U   |   |
| EXPLOSIVES               | Nitrobenzene  | 0.0         |                   | 0           | 0.0      | •       | · ·       | 0       | 0.0      |                 |     | U        | 0.0      | •                | •        | 0       | 0.6      | ľ      | `            | U  | 0.0           | : `      | U   |   |
| EXPLOSIVES               | o-Nitrotoluene  | 0.9         | 1 <               | U           | 0.9      | 1       | < 1       | U       | 0.9      | 1 <             | ţ   | U        | 0.9      | 1                | <        | U       | 0.9      | t      | <            | U  | 0.9           | 1 <      | U   |   |
| EXPLOSIVES               | p-Nitrotoluene  | 1.1         | 1 <               | บ           | 1.1      | 1       | < 1       | U       | 1.1      | 1 <             | ι   | U        | 1.1      | 1                | <        | U       | 1.1      | 1      | <            | U  | 1.1           | 1 <      | U   |   |
| EXPLOSIVES               | RDX   | 0.5         | 1 <               | U           | 0.5      | 1       | < 1       | U       | 0.5      | 1 <             | 1   | U        | 0.5      | 1                | <        | U       | 0.5      | 1      | <            | U  | 0.5           | 1 <      | U   |   |
| EXPLUSIVES<br>METALS     | Leoyi<br>Aluminum   | 1.9         | 1 <               | B           | 1.9      | 1       | < 1       | U<br>20 | 1.9      | 1 <             | ,   | U        | 15000    | 1                | < C      | ម       | 15700    | l<br>f | <            | U  | 1.9           | 1 <      | U   |   |
| METALS                   | Antimony  | 3           | 1 <               | U           | 3        | 1       | < 1       | J       | 3        | '<br>1 <        | l   | U        | 3        | 1                | <        | U       | 3        | 1      | <            | U  | 4.2           | 1        |     |   |
| METALS                   | Arsenic   | 2.8         | 1                 |             | 4.6      | 1       |           |         | 2.8      | 1               |     |          | 2.3      | i                |          |         | 2.5      | 1      |              |    | 10.7          | 1        |     |   |
| METALS                   | Barium  | 87          | 1                 |             | 74.2     | 1       |           | 1       | 7.2      | 1               |     |          | 66.2     | 1                |          |         | 61.6     | 1      |              |    | 70.9          | 1        |     |   |
| METALS                   | Beryllium   |             | 1 .               |             | •        |         |           | 2       | 1        |                 |     |          |          | 4                |          | ы       | 4        |        |              | н  |               |          |     |   |
| METALS                   | Calcium   | 1170        | 1                 | 0           | 1390     | 1       |           | J<br>1  | ı<br>620 | 1               |     | U        | 1750     | 1                | •        | U       | 1210     | 1      | ٠.           | U  | 1860          | 1        | U   |   |
| METALS                   | Chromium  | 17.3        | 1                 |             | 15.1     | t       |           | 1       | 18.2     | 1               |     |          | 15.1     | 1                |          |         | 16.8     | 1      |              |    | 42.3          | 1        |     |   |
| METALS                   | Cobatt  | 7.9         | 1                 |             | 9.1      | t       |           |         | 5.5      | 1               |     |          | 6.9      | 1                |          |         | 5.7      | 1      |              |    | 6.1           | 1        |     |   |
| METALS                   | Copper  | 2.9         | 1                 |             | 3.7      | 1       |           |         | 4.5      | 1               |     |          | 4.7      | 1                |          |         | 3.9      | 1      |              |    | 5.9           | 1        |     |   |
| METALS                   | Cyankoe, Lotar<br>Iron  | 14000       | 1 <<br>. f        | U           | 13600    | 1       | < (       | J<br>15 | 0.5      | 1 <<br>t        | ,   | U        | 0.5      | 1                | ¢        | U       | 20700    | 1      | <            | U  | 10.5<br>29700 | 1 <      | U   |   |
| METALS                   | Lead  | 5           | 1                 |             | 6.4      | 1       |           | 13      | 3.7      | 1               |     |          | 12.7     | 1                |          |         | 9.3      | t      |              |    | 23700<br>60   | 1        |     |   |
| METALS                   | Magnesium   | 766         | 1                 |             | 756      | 1       |           |         | 955      | 1               |     |          | 865      | 1                |          |         | 883      | 1      |              |    | 713           | 1        |     |   |
| METALS                   | Manganese   | 273         | 1                 |             | 257      | 1       |           | ş       | 9.8      | 1               |     |          | 84.8     | 1                |          |         | 84.6     | t      |              |    | 296           | 1        |     |   |
| METALS                   | Mercury   | 0.1         | 1 <               | U           | 0.1      | 1       | < 1       | J       | 0.1      | 1 <             | ۱   | U        | 0.1      | 1                | <        | U       | 0.1      | 1      | <            | U  | 0.1           | 1 <      | U   |   |
| METALS                   | Nickel  | 811         | 1                 |             | 665      | 1       |           | 4       | 240      | 1               |     |          | 960      |                  |          |         | 90.4     |        |              |    | 640           | 1        |     |   |
| METALS                   | Setenium  | 1           | 1 <               | U           | 1        | 1       | < 1       | J       | 1        | 1 <             | 1   | U        | 1        | 1.               | <        | U       | 034<br>1 | 1      | <            | U  | 440           | '<br>1 < | ŧ   |   |
| METALS                   | Silver  | 1           | 1 <               | U           | 1        | 1       | < 1       | J       | 1        | 1 <             | i   | U        | 1        | 1                | <        | บ       | 1        | t      | <            | U  | 1             | 1 <      | U   |   |
| METALS                   | Sodium  |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |
| METALS                   | Steontium   | 9           | 1                 |             | 8.9      | 1       |           | 1       | 0.5      | 1               |     |          | 10.2     | 1                |          |         | 10.4     | 1      |              |    | 10.1          | 1        |     |   |
| METALS<br>METALS         | Trailium<br>Vanadium  |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     | - |
|                          |   |             |                   |             |          |         |           |         |          |                 |     |          |          |                  |          |         |          |        |              |    |               |          |     |   |



| LH-S6      |    |    |  |  |  |  |  |  |  |  |
|------------|----|----|--|--|--|--|--|--|--|--|
| LH-S67     |    |    |  |  |  |  |  |  |  |  |
| 8/6/19     |    |    |  |  |  |  |  |  |  |  |
| 3 - 5 Ft   |    |    |  |  |  |  |  |  |  |  |
| REG        | G  |    |  |  |  |  |  |  |  |  |
| Result DIL | LQ | VQ |  |  |  |  |  |  |  |  |

| 0.7   | 1 | < | U |
|-------|---|---|---|
| 0.5   | 1 | < | U |
| 0.5   | 1 | < | U |
| 0.5   | 1 | < | U |
| 0.5   | 1 | < | U |
|       |   |   |   |
|       |   |   |   |
| 0.9   | 1 | < | U |
| 0.9   | 1 | < | U |
| 0.6   | 1 | < | U |
|       |   |   |   |
| 0.9   | 1 | < | U |
| 1.1   | 1 | < | U |
| 0.5   | 1 | < | U |
| 1.9   | 1 | < | U |
| 20000 | 1 |   |   |
| 4.9   | 1 |   |   |
| 3.5   | 1 |   |   |
| 81.5  | 1 |   |   |
|       |   |   |   |
| 1     | 1 | < | U |
| 1530  | 1 |   |   |
| 24    | 1 |   |   |
| 6.5   | t |   |   |
| 6.3   | 1 |   |   |
| 0.5   | 1 | < | ប |
| 17400 | 1 |   |   |
| 6.4   | 1 |   |   |
| 1040  | 1 |   |   |
| 205   | 1 |   |   |
| 0.1   | t | < | U |
|       |   |   |   |
| 1070  | 1 |   |   |
| 1     | 1 | < | U |
| 1     | 1 | < | U |
|       |   |   |   |
| 10.9  | ŧ |   |   |

ί.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-67

|                |                                    | Concentrations    | of Chemicals in | Soil Samples Ass  | sociated with Sun | ith Sump 067      |                  |  |  |  |  |  |  |  |
|----------------|------------------------------------|-------------------|-----------------|-------------------|-------------------|-------------------|------------------|--|--|--|--|--|--|--|
| LOCATION_CODE  |                                    | LH-S66-01         | LH-S66-01       | LH-S66-01         | LH-S66-02         | LH-\$66-02        | LH-S67-01        |  |  |  |  |  |  |  |
| SAMPLE NO      |                                    | LH-S66-01 QC      | LH-S66-01_1     | LH-\$66-01_2      | LH-S66-02_1       | LH-\$66-02_2      | LH-S67-01_1      |  |  |  |  |  |  |  |
| SAMPLE DATE    |                                    | 8/5/1993          | 8/5/1993        | 8/5/1993          | 8/5/1993          | 8/5/1993          | 8/6/1993         |  |  |  |  |  |  |  |
| DEPTH          |                                    | 0.5-2.Ft          | 0.5 - 2 Ft      | 4-6 Ft            | 0.5 - 2 Ft        | 4-6 Ft            | 0.5 - 2 Ft       |  |  |  |  |  |  |  |
|                |                                    | FD                | REG             | REG               | REG               | REG               | REG              |  |  |  |  |  |  |  |
| Tart Group     | Parameter (t )nits = ma/ka)        | Result DII I O VO | Result DN IO VO | Result Dill 10 VO | Result Dit 10 VO  | Result Dil. LO VO | Result DIL LO VO |  |  |  |  |  |  |  |
| METALS         |                                    | 185 1             | 184 1           | 26 1              | 25.2 1            | 257 1             | 83 1             |  |  |  |  |  |  |  |
| DODO           | Arocior 1016 °                     | 10.2              | 10.4            | 20 1              |                   |                   |                  |  |  |  |  |  |  |  |
| rubo           | Arcelor 1221 °                     |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| P685           | Arodor 1727 °                      |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PCBS           | Amolar 1262                        |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PCBS           | Anador 1242                        |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PCBS           | Alocol 1246                        |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PCBS           | Arockor 1254                       |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PCBS           | Arocior 1260                       |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PERC           | Perchlorate                        |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     | 4,4-000                            |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     | 4,4'-DDE                           |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     | 4,4'-DDT                           |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     | Aldrin                             |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     | alpha-BHC                          |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     | beta-BHC                           |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     | Chlordane                          |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     | delta-BHC                          |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     | Dieldrin                           |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     | Endosulfan I                       |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     | Endosulfan II                      |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     | Endosulfan Sulfate                 |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     | Endrin                             |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| DESTICIDES     | Endrin aldehude                    |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| DESTICIDES     | Endrin ketono                      |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| DECTICIDES     | annon PHC (Lindana)                |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| RECTIONES      | yoninko biro (Lunanc)<br>Vastashar |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| DECTICIDES     | Heptachlor opsylds                 |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTIGUES      |                                    |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTIGIDES     |                                    |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| PESTICIDES     |                                    | 0.22 4 4 11       | 0.22 4 - 11     | 0.22 1 4 11       | 0.32 1 - 11       | 0.22 1 < 11       | 0.32 f c 11      |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 1,2,4-1 nchlorobenzene             | 0.33 1 < 0        | 0.33 1 < 0      | 0.33 1 4 11       | 0.33 1 < 0        | 0.00 1 < 0        |                  |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 1,2-Dichlorobenzene                | 0.33 1 < 0        | 0.33 1 < 0      | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 5 0       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 1,3-Dichlorobenzene                | 0.33 1 < 0        | 0.33 1 < 0      | U.33 1 < U        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 4 0       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 1,4-Dichlorobenzene                | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 2,4,5-Trichlorophenol              | t.65 1 < U        | 1.65 1 < U      | 1.65 1 < 0        | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < 0       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 2,4,6-Trichlorophenol              | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < 0       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 2,4-Dichlorophenol                 | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 2,4-Dimethylphenol                 | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 2,4-Dinitrophenol                  | 1.65 1 < U        | 1.65 1 < U      | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 2,4-Dinitrotoluene                 |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 2,6-Dinitrotoluene                 |                   |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 2-Chloronaphthalene                | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 2-Chlorophenol                     | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 2-Methylnaphthalene                | 0.33 t < U        | 0.33 1 < U      | 0.33 t < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 2-Methylphenol                     | 0.33 1 < U        | 0.33 1 < U      | 0.33 t < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 2-Nitroaniline                     | 1.65 1 < U        | 1.65 1 < U      | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 2-Nitrophenol                      | 0.33 1 < U        | 0.33 t < U      | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 3.3'-Dichlorobenzidine             | 0.65 1 < U        | 0.65 t < U      | 0.65 1 < U        | 0.65 1 < U        | 0.65 1 < U        | 0.65 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 3-Nitroaniline                     | 1.65 1 < U        | 1.65 1 < U      | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 4 6-Dinitro-2-methylohenol         | 1.65 1 < 11       | 1.65 1 < 1      | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U       |  |  |  |  |  |  |  |
| SEMILYOLATILES | d.Bromohenvi ohervi efter          | 033 1 < H         | 033 1 < 11      | 033 1 < 11        | 033 1 < 1         | 0.13 1 < 11       | 0.33 1 < 11      |  |  |  |  |  |  |  |
| CENINGLATILES  | A Chiven 3 methylaboool            |                   | 0.65 1 < 1      | 0.65 1 < 11       | 0.65 1 < 11       | 0.65 1 < 11       | 0.65 1 < 1       |  |  |  |  |  |  |  |
| CENTROLATILES  |                                    |                   | 0.65 1          | 0.65 1 - 11       | 0.65 1 20.0       | 865 1 4 11        |                  |  |  |  |  |  |  |  |
| CENTROLATILES  | A Chiwanhand ahand athar           | 0.00 1 4 0        | 0.00 1 4 0      |                   | 0.33 1 < 1        | 11 > 1 60.0       | 0.33 1 < 1       |  |  |  |  |  |  |  |
| CENINOLATILED  | A Mothedobanal                     | 0.33 4 - 11       |                 | 0.32 4 2 11       | 0.32 4 - 11       | 0.32 1 - 11       | 0.00 i ~ 0       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 4-Menyiphendi                      | 0.53 1 < 0        | 0.55 1 4 0      |                   |                   |                   | 1.05 1 - 10      |  |  |  |  |  |  |  |
| SEMIVOLATILES  |                                    | 1.00 1 < U        | 1.00 I < U      | 1.00 L < U        |                   | 1.03 1 4 10       |                  |  |  |  |  |  |  |  |
| SEMIVOLATILES  | 4-mropheno:                        | 1.05 1 < U        | 1.00 1 < U      | 1.00 I < U        | 1.00 1 < U        | 1.00 1 < U        | 1.00 I K U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | Acenaphthene                       | 0.33 1 < U        | 10.33 T < U     | U.33 1 < U        | U.33 1 < U        | 0.33 1 < U        | U.33 7 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | Acenaphthylene                     | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U        | 0.33 T < U        | 0.33 1 < U        | 0.33 1 < 0       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | Anthracene                         | 0.33 t < U        | 0.33 1 < U      | 0.33 t < U        | 0.33 t < U        | 0.33 1 < U        | 0.33 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | Benzo(a)anthracene                 | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U        | 0.33 f < U        | 0.33 1 < U        | 0.33 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | Benzo(a)pyrene                     | 0.33 1 < U        | 0.33 t < U      | 0.33 1 < U        | 0.33 f < U        | 0.33 t < U        | 0.33 t < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | Benzo(b)fluoranthene               | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | Benzo(ghi)perylene                 | 0.33 1 < U        | 0.33 t < U      | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | Benzo(k)fkioranthene               | 0.33 i < U        | 0.33 1 < U      | -0.33 1 < U       | 0.33 t < U        | 0.33 1 < U        | 0.33 t < U       |  |  |  |  |  |  |  |
| SEMIVOLATILES  | Benzoic Acid                       | 1.65 1 < U        | 1.65 1 < U      | 1.65 1 < ⊍        | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U       |  |  |  |  |  |  |  |
|                |                                    | •                 |                 |                   |                   |                   |                  |  |  |  |  |  |  |  |

Shaw Environmental, Inc.



LH-\$67-01 LH-S67-01\_2 8/6/1993 3 - 5 Ft REG Result DIL LQ VQ 28.3 1

| 0.33 | 1 | < | U  |
|------|---|---|----|
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 1.65 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | IJ |
| 1.65 | 1 | < | U  |
|      |   |   |    |
|      |   |   |    |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 1.65 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 0.65 | 1 | < | U  |
| 1.65 | 1 | < | U  |
| 1.65 | i | < | U  |
| 0.33 | 1 | < | U  |
| 0.65 | 1 | < | U  |
| 0.65 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 1.65 | 1 | < | U  |
| 1.65 | 1 | ۲ | υ  |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 0.33 | 1 | < | U  |
| 1,65 | 1 | < | U  |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-67

|                | Concentrations of Chemicals in Soil Samples Associated with Sump 067 |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
|----------------|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--|--|--|--|--|
| LOCATION _CODE |  | LH-\$66-01       | LH-S66-01        | LH-S66-01        | LH-\$66-02       | LH-S66-02        | LH-S67-01        | LH-S67-01        |  |  |  |  |  |
| SAMPLE_NO      |  | LH-S66-01 QC     | LH-S66-01_1      | LH-S66-01_2      | LH-\$66-02_1     | LH-S66-02_2      | LH-S67-01_1      | LH-S67-01_2      |  |  |  |  |  |
| SAMPLE_DATE    |  | 8/5/1993         | 8/5/1993         | 8/5/1993         | 8/5/1993         | 8/5/1993         | 8/6/1993         | 8/6/1993         |  |  |  |  |  |
| DEPTH          |  | 0.5 - 2 Ft       | 0.5 - 2 Ft       | 4-6Ft            | 0.5 - 2 Ft       | 4 - 6 Ft         | 0.5 - 2 Ft       | 3-5Ft            |  |  |  |  |  |
| SAMPLE_PURPOSE |  | FD               | REG              | REG              | REG              | REG              | REG              | REG              |  |  |  |  |  |
| Test Group     | Parameter (Units = mg/kg)  | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ |  |  |  |  |  |
| SEMIVOLATILES  | Benzyl Alcohol   | 0.65 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | bis(2-Chloroethyl)ether  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 - 1 < U     | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | bist2-Chiotoisopropyljemer   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 T < U       | 0.33 1 < 0       |  |  |  |  |  |
| SEMIVOLATILES  | DIS(2-CUIVIIIEXVI)philiteate   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 4 11      | 0.33 1 4 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       |  |  |  |  |  |
| SEMIVOLATILES  | Carbazola  | 0.55 1 4 0       | 0.33 1 1 0       | 0.35 1 ~ 0       | 0.35 1 4 0       | 0.35 1 1 0       | 0.302 1          | 0.00 1 4 0       |  |  |  |  |  |
| SEMIVOLATILES  | Chrysene   | 0.33 1 < 11      | 033 1 < U        | 033 1 < 11       | 033 1 < 1        | 033 1 < 11       | 033 1 < ∐        | 033 1 < II       |  |  |  |  |  |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | Dibenzofuran   | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | Diethyl phthalate  | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | Dimethyl phthalate   | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | di-n-Butyl phthalate   | 0.33 1 < U       | 0.33 t < U       |  |  |  |  |  |
| SEMIVOLATILES  | di-n-Octyl phthalate   | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | Fluoranthene   | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | Fluorene   | 0.33 1 < 0       | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLANEES   | Hexachiorobenzene  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |  |  |  |  |  |
| SEMIVOLATILES  | Hexachlorocyclopentactione   |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| SEMIVOLATILES  | Hexachioroethane   | 0.33 + < 0       | 0.33 1 < 11      | 033 1 < 1        | 0.33 1 < 0       | 0.33 1 < 11      | 033 1 < 1        | 0.33 1 < 11      |  |  |  |  |  |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene   | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | Isophorone   | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | Naphthalene  | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | Nitrobenzene   | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | n-Nitrosodimethylamine   |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine   | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | n-Nitrosodiphenylamine   | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | Pentachlorophenol  | 1.65 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | Phenal   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       |  |  |  |  |  |
| SEMIVOLATILES  | Purpose  | 0.33 I < U       | 0.33 1 4 1       | 0.33 1 < 0       | 0.33 1 < 11      |                  | 0.33 1 < 0       | 0.33 1 < 1       |  |  |  |  |  |
| VOLATILES      | 1.1.1.2-Tetrachloroethage  |                  | 0.00 1 4 0       | 0.00 1 4 0       | 0.33 1 5 0       | 0.53 1 4 0       |                  | 0.33 1 4 0       |  |  |  |  |  |
| VOLATILES      | 1,1,1-Trichloroethane  | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.0-05 1 < U     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |  |
| VOLATILES      | 1,1,2,2-Tetrachloroethane  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |  |
| VOLATILES      | 1,1,2-Trichloroethane  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |  |
| VOLATILES      | 1,1-Dichloroethane   | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |  |
| VOLATILES      | 1,1-Dichloroethene   | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |  |
| VOLATILES      | 1,1-Dichloropropene  |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 1,2,3-Trichlorobenzene   |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 1,2,3-Inchloropropane  |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 1.2.4- (RCROTODERZENE  |                  |                  |                  |                  |                  | ÷                |                  |  |  |  |  |  |
| VO! ATILES     | 1 2-Dibromo-3-chlorogranane  |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 1.2-Dibromoethane  |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 1,2-Dichlorobenzene  |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 1,2-Dichloroethane   | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |  |
| VOLATILES      | 1,2-Dichloroethene   | 0.005 1 < ⊍      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |  |
| VOLATILES      | 1,2-Dichloropropane  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |  |  |  |  |  |
| VOLATILES      | 1,2-Dimethylbenzene (o-Xylene)                                       |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 1,3,5-Trimethylbenzene   |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 1,3-Dichlorobenzene  |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 1.4 Disklars 2 buttons   |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
|                | 1 A Dichlorobenzene  |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 1 4-Diorane  |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 2.2-Dichloropropane  |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 2-Butanone   | 0.05 t < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |  |  |  |  |  |
| VOLATILES      | 2-Chloroethyl vinyl ether  | 0.01 1 < U       | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |  |  |  |  |  |
| VOLATILES      | 2-Chlorotoluene  |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 2-Hexanone   | 0.05 t < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U       | 0.05 1 < U       |  |  |  |  |  |
| VOLATILES      | 2-Propenal   |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | 4-Chlorotoluene  | • • •            |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | Acetone  | 0.1 1 < U        | 0.1 1 < ⊍        | 0.1 1 < U        | 0.1 1 < U        |  |  |  |  |  |
| VOLATILES      | Acetonitrile   |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
| VOLATILES      | Auyonuce   |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |
|                |  |                  |                  |                  |                  |                  |                  |                  |  |  |  |  |  |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Karnack, Texas



Table 3-67 Concentrations of Chemicals in Soil Samples Associated with Sump 067

•

| LCATLEY         LL-SAGE / L         LL-SAGE / L <thl-sage l<="" th=""> <thl-sage l<="" th=""> <thl-< th=""><th></th><th></th><th>CONC</th><th>CIRI</th><th>auviis</th><th>VI QIR</th><th></th><th>ais III</th><th></th><th>annh</th><th>neg i</th><th>~330</th><th>Jesaics</th><th></th><th></th><th>111p 001</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></thl-<></thl-sage></thl-sage> |                       |                                 | CONC     | CIRI    | auviis | VI QIR   |          | ais III  |        | annh    | neg i | ~330 | Jesaics  |          |      | 111p 001 |          |      |          |         |    |          |         |    |
|--|-----------------------|---------------------------------|----------|---------|--------|----------|----------|----------|--------|---------|-------|------|----------|----------|------|----------|----------|------|----------|---------|----|----------|---------|----|
| Dubble LDD         Link State JOC         Link State  | LOCATION _CODE        |                                 | LH       | S65-01  |        | LH       | S66-01   | i        | L      | 1-S66-  | 01    |      | ĻΗ       | -\$66-02 | 2    | L        | I-S66-02 |      | LH       | S67-01  |    | LH-      | 567-01  |    |
| Subset_LONE         Bortland   | SAMPLE_NO             |                                 | LH-S     | 66-01 Q | C      | LH-S     | 666-01   | <u>1</u> | LH     | -S66-0  | 1_2   |      | LH-3     | S66-02   | 1    | LH       | S66-02_  | 2    | LH-S     | 67-01_1 |    | LH-S     | 67-01_2 | 2  |
| DETM         03.3 /r         0   | SAMPLE_DATE           |                                 | 8/       | 5/1993  |        | 8/       | 5/1993   |          | 1      | 3/5/199 | 13    |      | 8/       | 5/1993   |      | 8        | /5/1993  |      | 8/       | 6/1993  |    | 8/6      | /1993   |    |
| Sum Le (arrow 0)         Partial (a)         Part (b)         Part (b) </td <td>DEPTH</td> <td></td> <td>0.</td> <td>5-2Ft</td> <td></td> <td>0.</td> <td>5 - 2 Ft</td> <td></td> <td></td> <td>4-6F</td> <td>t</td> <td></td> <td>0.</td> <td>5-2Ft</td> <td></td> <td></td> <td>4-6 Ft</td> <td></td> <td>· 0.</td> <td>5-2Ft</td> <td></td> <td>3</td> <td>-5Ft</td> <td></td>  | DEPTH                 |                                 | 0.       | 5-2Ft   |        | 0.       | 5 - 2 Ft |          |        | 4-6F    | t     |      | 0.       | 5-2Ft    |      |          | 4-6 Ft   |      | · 0.     | 5-2Ft   |    | 3        | -5Ft    |    |
| Ind Owner         Personance (ballow methyd)         Read Dit         Co         VO         Read Dit         Lo  | SAMPLE_PURPOSE        |                                 |          | FD      |        |          | reg      |          |        | REG     |       |      |          | reg      |      |          | REG      |      |          | REG     |    | 1        | REG     |    |
| Waltedie         Addension         Loop         1         V         Date                  Date         V </td <td>Test Group</td> <td>Parameter (Units = mg/kg)</td> <td>Result D</td> <td>L LQ</td> <td>VQ</td> <td>Result D</td> <td>LU</td> <td>Q VQ</td> <td>Result</td> <td>DIL</td> <td>LQ V</td> <td>/Q</td> <td>Result D</td> <td>IL L</td> <td>Q VQ</td> <td>Result I</td> <td>DIL LO</td> <td>a va</td> <td>Result C</td> <td>fl EQ</td> <td>VQ</td> <td>Result D</td> <td>L LO</td> <td>VQ</td>  | Test Group            | Parameter (Units = mg/kg)       | Result D | L LQ    | VQ     | Result D | LU       | Q VQ     | Result | DIL     | LQ V  | /Q   | Result D | IL L     | Q VQ | Result I | DIL LO   | a va | Result C | fl EQ   | VQ | Result D | L LO    | VQ |
| WALTES         Bandem         Data         V         Data         I         V         Data  | VOLATILES             | Allyl chloride                  |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| Walles         Benchanner           Walles         Benchannerhung         Boss         i         U         Boss         i<  | VOLATILES             | Benzené                         | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < ເ   | J    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | U  |
| WALTES         Base-Anomathine         Boot         1         V         U.B.D.S         1         V        U.B.D.S   | VOLATILES             | Bromobenzene                    |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| WALKES         Boundownershame         0.005         1         V         0.005   | VOLATILES             | Bromochloromethane              |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| WALTES         Bennehmen         Corp.         1         C         U         0.05         1         C        U         <  | VOLATILES             | Bromodichloromethane            | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < ເ   | J    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | U  |
| WARES         Biosenstatule         Out         1         v         U         Out         U         Out         U         Out         U         Out         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U<   | VOLATILES             | Bromoform                       | 0.005    | 1 <     | υ      | 0.005    | 1 <      | U        | 0.005  | 1       | < ເ   | J    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | Ų  |
| WARES         Cashe standarde         0.005         1         v         0.005  | VOLATILES             | Bromomethane                    | 0.01     | 1 <     | U      | 0.01     | 1 <      | U        | 0.01   | 1       | < L   | J    | 0.01     | 1 <      | Ų    | 0.01     | 1 <      | U    | 0.01     | 1 <     | U  | 0.01     | 1 <     | U  |
| WAINES         Cate instructive         0.005         1         V         0.005  | VOLATILES             | Carbon disulfide                | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < ເ   | J    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | U  |
| VDATES         Diskowane         0.00         1         v         0.00         1         v         0.000         1         v         0         0.000   | VOLATILES             | Carbon tetrachloride            | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < l   | J    | 0.005    | 1 <      | U    | 0.005    | t <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | U  |
| NCATES         Chanchane         0         1         v         0         0.01         1         v         0   | VOLATILES             | Chlorobenzene                   | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < (   | J    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | Ð  |
| VICATES         Cholonem         0.005         1         <         U         0.005         1         C   | VOLATILES             | Chloroethane                    | 0.01     | 1 <     | Ų      | 0.01     | 1 <      | U        | 0.01   | 1       | < ι   | J    | 0.01     | 1 <      | U    | 0.01     | 1 <      | U    | 0.01     | 1 <     | U  | 0.01     | 1 <     | U  |
| VDATHES         Chiorenambane         001         1         v         0         0.01         1         v         0         0.05         1         v         0  | VOLATILES             | Chloroform                      | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < 1   | J    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | U  |
| NULLIES       Obtogene       Outstand   | VOLATILES             | Chloromethane                   | 0.01     | 1 <     | U      | 0.01     | 1 <      | U        | 0.01   | 1       | < (   | J    | 0.01     | 1 <      | U    | 0.01     | 1 <      | U    | 0.01     | 1 <     | U  | 0.01     | 1 <     | U  |
| VICATES       de1-2000hoophene       0.005       1       c       U       0.005   | VOLATILES             | Chloroprene                     |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VICUATIES       et. J. Subshampenen       0.005       1       V       0.005       1  | VOLATILES             | cis-1,2-Dichloroethene          |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATELES       Disconscributionsembane       0.005       1       v       U       0.005 </td <td>VOLATILES</td> <td>cis-1,3-Dichloropropene</td> <td>0.005</td> <td>1 &lt;</td> <td>U</td> <td>0.005</td> <td>1 &lt;</td> <td>U</td> <td>0.005</td> <td>1</td> <td>&lt; l</td> <td>J</td> <td>0.005</td> <td>1 &lt;</td> <td>U</td> <td>0.005</td> <td>1 &lt;</td> <td>U</td> <td>0.005</td> <td>1 &lt;</td> <td>U</td> <td>0.005</td> <td>1 &lt;</td> <td>U</td>  | VOLATILES             | cis-1,3-Dichloropropene         | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < l   | J    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | U  |
| VDLATLES       Disknownehme       VDLATLES       Disknownehme       VDLATLES       University       VDLATLES       University       VDLATLES       Endponnehme       VDLATLES       VDLATLES       UDDMOS 1       V       VDLATLES  | VOLATILES             | Dibromochloromethane            | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < (   | J    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | U  |
| VICUATILES       Dickonditionenthane       Performance       Performanc  | VOLATILES             | Dibromomethane                  |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VELATLES       Enylowenene       0.005       1       c       U       0.005 <th< td=""><td>VOLATILES</td><td>Dichlorodifluoromethane</td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>  | VOLATILES             | Dichlorodifluoromethane         |          |         |        |          |          | -        |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATLES         Hexalthoutsdome         0.005         1         v         0.005   | VOLATILES             | Ethyl methacrylate              |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VDLATLES         Headbardbardbardbardbardbardbardbardbardba  | VOLATILES             | Ethylbenzene                    | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < l   | J    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | U  |
| VOLUNTLES       ISOCUMETHANE       IS  | VOLATILES             | Hexachiorobutadiene             |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATLES         ISOBUTY ALCOND.         VOLATLES         ISOBUTY ALCOND.           VOLATLES         m.p.3/wins           VOLATLES         Methosytokine           VOLATLES         Methytokokine           VOLATLES         PROPONTALCONNE           VOLATLES         PROPONTALCONNE           VOLATLES         PROPONTALCONNE           VOLATLES         PROPONTALCONNE           VOLATLES         PROPONTALCONNE           VOLATLES         PROPONTALCONNE           VOLATLES         Symene   | VOLATILES             | IODOMETHANE                     |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VDLATLES         mp:Xylens         volume         mp:Xylens         volume         volum         volume         volum         v  | VOLATILES             | ISOBUTYL ALCOHOL                |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATILES       Methasynohia       V  | VOLATILES             | Isopropylbenzene                |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VALUATLES       Methonylokative       Number Volume       0.05       1       <       U       0.05  | VOLATILES             | m,p-Xylenes                     |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATURES       Methyl kobunyl ketone       0.05       1       V       0.005       1       V       0  | VOLATILES             | Methacrylonitrile               |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATLES       METIMU METINADARYLATE         VOLATLES       Metrylene classical       0.005       1       <  | VOLATILES             | Methyl isobutyl ketone          | 0.05     | 1 <     | U      | 0.05     | 1 <      | U        | 0.05   | 1       | < (   | U    | 0.05     | 1 <      | υ    | 0.05     | 1 <      | U    | 0.05     | 1 <     | U  | 0.05     | 1 <     | U  |
| VOLATILES       Methylene chloriode       0.005       1       <       U       0.005  | VOLATILES             | METHYL METHACRYLATE             |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATILES       Naphthalene       Naphthalene       Naphthalene         VOLATILES       n-BUTYLEBRZENE       n-BUTYLEBRZENE       Naphthalene  | VOLATILES             | Methylene chloride              | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < (   | U    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | U  |
| VOLATILES       n-BUTYLBENZENE       n-PROPYLBENZENE         VOLATILES       n-PROPYLBENZENE   | VOLATILES             | Naphthalene                     |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATILES       n-PROPUBENZENE         VOLATILES       Pentachtoroethene         VOLATILES       Pentachtoroethene         VOLATILES       Pentachtoroethene         VOLATILES       Projenitifie         VOLATILES       Projenitifie         VOLATILES       sec-BUTYLBENZENE         VOLATILES       sec-BUTYLBENZENE         VOLATILES       Stynene       0.005       1       <       U       =""><td>VOLATILES</td><td>n-BUTYLBENZENE</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>  | VOLATILES             | n-BUTYLBENZENE                  |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATILES       Pentachloroethane       VOLATILES       p-slOPROPVITOLUENE         VOLATILES       p-slOPROPVITOLUENE       volatiles  | VOLATILES             | n-PROPYLBENZENE                 |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATILES       p-ISOPROPYLTOLUENE         VOLATILES       Propionible         VOLATILES       Signen         VOLATILES       sac-BUTYLBENZENE         VOLATILES       Signen         VOLATILES       Signen         VOLATILES       Signen         VOLATILES       Signen         VOLATILES       Signen         VOLATILES       tert-BUTYLBENZENE         VOLATILES       Tetrachtoroethene         0.005       1       <  | VOLATILES             | Pentachloroethane               |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATILES       Propionitivile         VOLATILES       see-BUTYLBENZENE         VOLATILES       Styrene       0.005       1       <  | VOLATILES             | p-ISOPROPYLTOLUENE              |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATILES       sec-BUTYLEENZENE         VOLATILES       Shyrene       0.005       1       <       U       0.005 <t< td=""><td>VOLATILES</td><td>Propionitrile</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>   | VOLATILES             | Propionitrile                   |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATILES       Styrene       0.005       1       <       U       0.005       1<   | VOLATILES             | sec-BUTYLBENZENE                |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATILES       tert-BUTYLBENZENE         VOLATILES       Tetrachioroethene       0.005       1       <  | VOLATILES             | Styrene                         | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < l   | U    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | t <     | U  |
| VOLATILES       Tetrachloroethene       0.005       1       <       U       0.005  | VOLATILES             | tert-BUTYLBENZENE               |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATILES       Toluene       0.005       1 <       U       0.005       1 <  | VOLATILES             | Tetrachloroethene               | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < 1   | U    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | U  |
| VOLATILES       trans-1,2-Dichloroethene         VOLATILES       trans-1,3-Dichloropropene       0.005       1       V   | VOLATILES             | Toluene                         | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < ા   | U    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | υ  | 0.005    | 1 <     | U  |
| VOLATILES       trans-1,3-Dichloropropene       0.005       1 < U       0.005  | VOLATILES             | trans-1,2-Dichloroethene        |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATILES       trans-1,4-Dichloro-2-butene       0.005       1 < U       0.005  | VOLATILES             | trans-1,3-Dichloropropene       | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < 1   | U    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | U  |
| VOLATILES       Trichloroethene       0.005       1 < U  | VOLATILES             | trans-1,4-Dichloro-2-butene     |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATILES         Trichlorofluoromethane           VOLATILES         Vinyl acetate         0.05         1 < U  | VOLATILES             | Trichloroethene                 | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | 1       | < (   | U    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | U  |
| VOLATILES         Vinyl acetate         0.05         1 <         U         0.01         1 <         U         0.005         1 <         U         0.005         1 < <t< td=""><td>VOLATILES</td><td>Trichlorofluoromethane</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>   | VOLATILES             | Trichlorofluoromethane          |          |         |        |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |
| VOLATILES         Vinyl chloride         0.01         1 < U         0.005         1 < U         0.005 <th1< td=""><td>VOLATILES</td><td>Vinyl acetate</td><td>0.05</td><td>1 &lt;</td><td>U</td><td>0.05</td><td>1 &lt;</td><td>U</td><td>0.05</td><td>1</td><td>&lt; 1</td><td>U</td><td>0.05</td><td>1 &lt;</td><td>U</td><td>0.05</td><td>1 &lt;</td><td>U</td><td>0.05</td><td>1 &lt;</td><td>U</td><td>0.05</td><td>1- &lt;</td><td>U</td></th1<>   | VOLATILES             | Vinyl acetate                   | 0.05     | 1 <     | U      | 0.05     | 1 <      | U        | 0.05   | 1       | < 1   | U    | 0.05     | 1 <      | U    | 0.05     | 1 <      | U    | 0.05     | 1 <     | U  | 0.05     | 1- <    | U  |
| VOLATILES         Xylenes, Total         0.005         1 < U         0.005 <th1 <="" th="" u<="">         0.005         0<td>VOLATILES</td><td>Vinvl chloride</td><td>0.01</td><td>1 &lt;</td><td>U</td><td>0.01</td><td>1 &lt;</td><td>U</td><td>0.01</td><td>1</td><td>&lt; 1</td><td>U</td><td>0.01</td><td>1 &lt;</td><td>U</td><td>0.01</td><td>1 &lt;</td><td>U</td><td>0.01</td><td>1 &lt;</td><td>U</td><td>0.01</td><td>1 &lt;</td><td>U</td></th1>   | VOLATILES             | Vinvl chloride                  | 0.01     | 1 <     | U      | 0.01     | 1 <      | U        | 0.01   | 1       | < 1   | U    | 0.01     | 1 <      | U    | 0.01     | 1 <      | U    | 0.01     | 1 <     | U  | 0.01     | 1 <     | U  |
| Footnotes are shown on cover page to Tables Section.   | VOLATILES             | Xylenes, Total                  | 0.005    | 1 <     | U      | 0.005    | 1 <      | U        | 0.005  | t       | < 1   | U    | 0.005    | 1 <      | U    | 0.005    | 1 <      | U    | 0.005    | 1 <     | U  | 0.005    | 1 <     | U  |
|  | Footnotes are shown o | n cover page to Tables Section. |          |         | -      |          |          |          |        |         |       |      |          |          |      |          |          |      |          |         |    |          |         |    |



Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-68   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 068 |

| (SUMP) = SUMP068 |                            |        |       |        |      |          |         |          |       |             |        |      |    |        |        |      |        |        |         |      |        |        |        |    |         |
|------------------|----------------------------|--------|-------|--------|------|----------|---------|----------|-------|-------------|--------|------|----|--------|--------|------|--------|--------|---------|------|--------|--------|--------|----|---------|
| LOCATION _CODE   |                            | U      | HS-3- | 14     |      | LH       | -S68-6  | 51       |       | LH          | -S68   | -01  |    | 11     | I-S68  | -01  |        | LH     | -S68-   | -02  |        | . LH-  | S68-(  | )2 |         |
| SAMPLE_NO        |                            | ម      | HS-3- | -14    |      | LH-S     | 68-01   | QC       |       | LH⊀         | \$68-0 | 21_1 |    | ĻΗ     | S68-(  | )1_2 |        | LH-S   | 68-02   | 2 QC |        | LH     | S68 (  | 2  |         |
| SAMPLE_DATE      |                            | 1/     | 10/19 | 995    |      | 8/       | 6/199   | 3        |       | 8           | 6/19   | 93   |    | 8      | /6/199 | 93   |        | 8/     | 6/199   | 93   |        | 8/     | 3/1993 | 3  |         |
| DEPTH            |                            | 0      | • 0.5 | Ft     |      | 0.       | 5 - 2 8 | ł        |       | 0.          | 5 - 2  | Ft   |    |        | 5-7F   | ۰t   |        | 0.5    | 5 - 1.5 | Ft   |        | 0.5    | - 1.5  | Ft |         |
| SAMPLE_PURPOSE   |                            |        | REG   | 6      |      |          | FD      |          |       |             | REG    |      |    |        | REG    |      |        | •      | FD      |      |        |        | ЧËG    |    |         |
| Test Group       | Parameter (Units = mg/kg)  | Result | DIL   | LQ     | VQ   | Result   | DIL     | LQ       | VQ    | Result      | DIL    | LQ   | VQ | Result | DIL    | ίQ   | VQ     | Result | DIL     | LQ   | VQ     | Result | DIL    | ΕQ | VQ      |
| EXPLOSIVES       | 1.3.5-Trinitrobenzene      | 0.24   | 1     | <      | U    |          |         |          |       |             |        |      |    |        |        |      |        |        |         |      |        |        |        |    |         |
| EXPLOSIVES       | 1,3-Dinitrobenzene         | 0.24   | 1     | <      | U    |          |         |          |       |             |        |      |    |        |        |      |        |        |         |      |        |        |        |    |         |
| EXPLOSIVES       | 2,4,6-Trinitrotoluene      | 0.24   | 1     | <      | U    |          |         |          |       |             |        |      |    |        |        |      |        |        |         |      |        |        |        |    |         |
| EXPLOSIVES       | 2,4-Dinitrotoluene         | 0.24   | 1     | <      | U    | 0.33     | 1       | <        | U     | 0.33        | 1      | <    | U  | 0.33   | 1      | <    | υ      | 0.33   | 1       | <    | U      | 0.33   | 1      | <  | Ų       |
| EXPLOSIVES       | 2,6-Dinitrotoluene         | 0.26   | 1     | <      | U    | 0.33     | 1       | <        | U     | 0.33        | 1.     | <    | U  | 0.33   | 1      | <    | U      | 0.33   | 1       | <    | Ų      | 0.33   | 1      | <  | U       |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene | 0.5    | 1     | <      | U    |          |         |          |       |             |        |      |    |        |        |      |        |        |         |      |        |        |        |    |         |
| EXPLOSIVES       | HMX                        | 2.2    | 1     | <      | υ    |          |         |          |       |             |        |      |    |        |        |      |        |        |         |      |        |        |        |    |         |
| EXPLOSIVES       | m-Nitrotoluene             | 1      | 1     | <      | Ų    |          |         |          |       |             |        |      |    |        |        |      |        |        |         |      |        |        |        |    |         |
| EXPLOSIVES       | Nitrobenzene               | 0.26   | 1     | <      | U    |          |         |          |       |             |        |      |    |        |        |      |        |        |         |      |        |        |        |    |         |
| EXPLOSIVES       | o-Nitrotoluene             | 1      | 1     | <      | U    |          |         |          |       |             |        |      |    |        |        |      |        |        |         |      |        |        |        |    |         |
| EXPLOSIVES       | n-Nitrotoluene             | 3      | 1     | <      | Ū.   |          |         |          |       |             |        |      |    |        |        |      |        |        |         |      |        |        |        |    |         |
| EXPLOSIVES       | 80X                        | 1.1    | 1     | ć      | Ū    |          |         |          |       |             |        |      |    |        |        |      |        |        |         |      |        |        |        |    |         |
| EXPLOSIVES       | Tetrvi                     | 0.74   | 1     | ,<br>K | υ    |          |         |          |       |             |        |      |    |        |        |      |        |        |         |      |        |        |        |    |         |
| METALS           | Aluminum                   | 14500  | 1     |        | -    | 4440     | ŧ       |          |       | 4150        | 1      |      |    | 2920   | ١      |      |        | 6320   | 1       |      |        | 4560   | 1      |    |         |
| METALS           | Antimony                   | 11.6   | 1     | ~      | 11.1 | 3        | 1       | <        | u     | 3           | 1      | <    | U  | 3      | 1      | <    | υ      | 3      | 1       | <    | U      | 3      | 1      | <  | υ       |
| METALS           | Arsenic                    | 3.9    | 1     |        | J    | 1.5      | 1       |          | •     | 1.3         | 1      |      |    | 1      | 1      | <    | U      | 2,8    | 1       |      |        | 2.8    | 1      |    |         |
| METALS           | Barium                     | 66.8   | 1     |        | -    | 36.7     | i       |          |       | 28.4        | 1      |      |    | 22.2   | 1      |      |        | 84     | 1       |      |        | 40,7   | 1      |    |         |
| METALS           | Cadmium                    | 12     | 1     |        | н    | 1        | 1       | ę        | U     | 1           | 1      | <    | υ  | 1      | 1      | <    | U      | 1      | 1       | <    | U      | 1      | 1      | <  | U       |
| METALO           | Calcium                    | 1530   | ť     |        | Ŷ    | 1020     | i       |          | č     | 655         | 1      | -    | •  | 359    | 1      |      | -      | 5620   | 1       |      |        | 888    | 1      |    |         |
| METALS           | Chromium                   | 17.9   | •     |        | .1   | 15.8     | 1       |          |       | 10.4        | 1      |      |    | 6.2    | 1      |      |        | 13.5   | 1       |      |        | 14,7   | 1      |    |         |
| METALO           | Coball                     | 4.2    | i     |        | Ŭ    | 1        | ÷       | ,        | 0     | , UI 1<br>1 | ł      | e    | u  | 1      | 1      | <    | ŭ      | 2.4    | 1       |      |        | 1      | 1      | <  | U       |
| METALD           | Copper                     | 4,2    | 4     |        |      | 75       | 1       | -        | ũ     | 4.3         | ÷      | •    | Ū  | 3.7    | ÷.     | -    | -      | 23.3   | i       |      |        | 3      | ۱      |    |         |
| METALO           | lion                       | 12800  | 1     |        |      | 10000    | 4       |          |       | 7970        | ì      |      |    | 3560   | í      |      |        | 14700  | 1       |      |        | 12900  | 1      |    |         |
| METALO           | 1 and                      | 12000  | 1     |        |      | 10000    | ,       |          |       | 33          | i      |      |    | 2.5    | 1      |      |        | 4.1    | 1       |      |        | 3.9    | 1      |    |         |
| METALO           | Magnesium                  | 054    | 1     |        |      | ,<br>248 |         |          |       | 203         | •      |      |    | 149    | , i    |      |        | 952    | 1       |      |        | 192    | 1      |    |         |
| METALO           | Magnesian                  | 70.8   | •     |        | .1   | 105      | •       |          |       | 71.8        | 1      |      |    | 31     | 1      |      |        | 455    | 1       |      |        | 104    | 1      |    |         |
| METALO           | Margun                     | 0.13   | 1     |        | ň    | 0.1      | ÷       |          | 11    | 0.1         | i      |      | IF | 0.1    | 1      | ~    | u      | 0.1    | 1       | <    | U      | 0.1    | ٢      | <  | U       |
| METALO           | Bobasium                   | 797    | 1     |        | Ų    | 247      | 4       | `        | •     | 230         | 4      |      | ũ  | 180    | 1      | •    | Ŷ      | 364    | ł       |      | -      | 264    | 1      |    |         |
| NETALO           | Celesium                   | 0.26   | 1     |        | ,    | 247      |         | ,        | ш     | 1           | ,      |      | n  | 100    |        | 2    | в      | 1      | ì       | ć    | н      | 1      | 1      | ~  | U       |
| METALO           | Ciluar                     | 0.23   | 4     |        | 11   | , ,      |         | Ĵ        | й     | •           | ,<br>1 | 2    | ŭ  | 1      |        | Ż    | ŭ      |        | 1       | è    | Ū.     | 1      | 1      | <  | ΰ       |
| METALO           | Stratium                   | 146    | ł     |        | 0    | 50       | 1       | `        | Ū.    | 76          | 1      | `    | Ũ  | 73     | 1      | `    | Ŭ      | 19     | 1       |      | ·      | 6.6    | 1      |    | •       |
| METALO           | Theffirm                   | 50.0   |       |        | н    | 5.5      | ,       |          |       |             |        |      |    |        | •      |      |        |        |         |      |        |        |        |    |         |
| METALS           | 7:00                       | 30.1   | ÷     | ``     | Ŷ    | 22.2     | 1       |          |       | 12.0        | 4      |      |    | 84     | 1      |      |        | 10.8   | 1       |      |        | 12.2   | 1      |    |         |
| METALS           |                            | 41.1   |       |        | 11   | 20.0     | -       |          | ш     | 13.0        | 4      |      | 11 | 0.7    | i      |      | н      | 0.07   | ÷       | ,    | в      | 0.33   | •      | e  | п       |
| SEMIVOLATILES    | 1,2,4-1 noniorobenzene     | 0.51   |       | · •    |      | 0,00     | ;       | Ĵ        |       | 0.00        | ;      | 2    | ň  | 0.00   | ÷      | 2    | ŭ      | 0.00   | ł       | Ì    | ň      | 0.33   | ,<br>t | Ż  | ŭ       |
| SEMIVOLATILES    | 1,2-Dichlorobenzene        | 0.51   | 1     | <      | 0    | 0.00     | 1       | 5        | 0     | 0.00        |        |      |    | 0.00   | 4      | 2    |        | 0.00   |         | 2    | i i    | 0.00   | ÷      | 2  | ň       |
| SEMIVOLATILES    | 1,3-Dichlorobenzene        | 0.51   | 1     | <      | 0    | 0.33     | 1       | <u>د</u> | 0     | 0.33        |        |      |    | 0.00   | 4      | 2    |        | 0.00   | 4       | 2    | 11     | 0.00   | í      | Ì  | ñ       |
| SEMIVOLATILES    | 1,4-Dichloropenzene        | 0.51   |       | <      |      | 0.33     | 1       | <        | 9     | 0,33        | 4      |      |    | 1.05   | 4      | Ś    | 0      | 1 45   |         | 2    |        | 1 65   | ÷      | Ì  | 1       |
| SEMIVOLATILES    | 2,4,5 Frichlorophenol      | 2.5    | 1     | <      |      | 1.65     | }       | <        | 0     | 1.05        |        | <    | 0  | 0.00   |        | 5    |        | 0.93   |         |      | Н      | 0.22   | ÷      | C  | v<br>a  |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol      | 0.51   | 1     | <      | U    | 0,33     | 1       | <        | 0     | 0.33        | 1      | <    |    | 0.33   | 1      | <    | 0      | 0.33   | 1       | <    | И      | 0.00   | +      | \$ | u<br>u  |
| SEMIVOLATILES    | 2,4-Dichlorophenol         | 0.51   | 1     | <      | Ų    | 0.33     | 1       | <        | U     | 0.33        | 1      | <    | 0  | 0.33   | 1      | ۲    | U<br>N | 0.33   | 1       | <    | U<br>U | 0.33   | 1      | 5  | н       |
| SEMIVOLATILES    | 2,4-Dimethylphenol         | 0,51   | 1     | <      | U    | 0.33     | 1       | <        | Ų<br> | 0.33        | 1      | <    | U  | 0,33   | 1      | <    | 0      | 0.33   | 1       | <    | 0      | 0.33   | 1      | Ś  | U<br>11 |
| SEMIVOLATILES    | 2,4-Dinitrophenol          | 2.5    | 1     | <      | U    | 1.65     | 1       | <        | U     | 1.65        | 1      | <    | U  | 1.65   | 1      | <    | U      | 1,85   | 1       | <    | 0      | 1.65   | ţ      | <  | ų       |
| SEMIVOLATILES    | 2,4-Dinitrotoluene         | 0.51   | 1     | <      | U    |          |         |          |       |             |        |      |    |        |        |      |        |        |         |      |        |        |        |    |         |

### Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

. . . . . . . . .



|                |                             |          |       |     |      | Та       | ible   | e 3- | 68 |        |       |      |      |        |       |     |     |        |       |      |    |        |        |    |    |
|----------------|-----------------------------|----------|-------|-----|------|----------|--------|------|----|--------|-------|------|------|--------|-------|-----|-----|--------|-------|------|----|--------|--------|----|----|
|                | Concentr                    | ations o | f C   | her | nica | ls in \$ | Soil   | Sa   | mp | les A  | ssc   | ocia | ated | with   | Su    | mp  | 068 | 3      |       |      |    |        |        |    |    |
| LOCATION _CODE |                             | Ļ        | HS-3- | 14  |      | LH       | -S68-I | 21   |    | LΗ     | -\$68 | -01  |      | ĻH     | -S68- | 01  |     | ĻH     | -S68- | 02   |    | LH     | -S68-0 | )2 |    |
| SAMPLE_NO      |                             | L        | HS-3- | 14  |      | LH-S     | 68-01  | QC   |    | LH-    | S68-0 | 01_1 |      | LH-    | S68-0 | 1_2 |     | LH-S   | 68-02 | 2 QC |    | LH     | S68-0  | 2  |    |
| SAMPLE_DATE    |                             | 1.       | 10/19 | 195 |      | 8        | 6/199  | 3    |    | 8      | /6/19 | 93   |      | 8      | 6/199 | 3   |     | 8/     | 6/199 | 3    |    | 8/4    | 3/1993 | 3  |    |
| DEPTH          |                             | Ç        | - 0.5 | Ft  |      | 0.       | 5-2F   | t    |    | 0.     | 5-2   | Ft   |      | 5      | 5-7F  | l   |     | 0.5    | - 1,5 | Ft   |    | 0,5    | - 1,5  | Ft |    |
| SAMPLE_PURPOSE |                             |          | ЯEG   |     |      |          | FD     |      |    |        | REG   |      |      |        | REG   |     |     |        | FD    |      |    | :      | REG    |    |    |
| Test Group     | Parameter (Units = mg/kg)   | Result   | DIL   | LQ  | VQ   | Result   | DIL    | LQ   | VQ | Result | DIL   | LQ   | VQ   | Result | DIL   | LQ  | VQ  | Result | DIL   | LQ   | VQ | Result | DIL    | LQ | VQ |
| SEMIVOLATILES  | 2,6-Dinitrotoluene          | 0.51     | 1     | <   | U    |          |        |      |    |        |       |      |      |        |       |     |     |        |       |      |    |        |        |    |    |
| SEMIVOLATILES  | 2-Chloronaphthalene         | 0,51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0,33   | 1     | <    | Û    | 0,33   | 1     | <   | Ų   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | Ų  |
| SEMIVOLATILES  | 2-Chlorophenol              | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | Ų   | 0,33   | 1     | <    | U  | 0.33   | 1      | <  | υ  |
| SEMIVOLATILES  | 2-Methylnaphthalene         | 0.51     | 1     | <   | U    | 0.33     | 1      | ۲    | U  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | Ų   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | 2-Methylphanol              | 0.51     | 1     | <   | Ų    | 0.33     | 1      | ۲    | Ų  | 0,33   | 1     | <    | Ų    | 0,33   | 1     | <   | U   | 0.33   | ١     | <    | Ų  | 0.33   | 1      | <  | Ų  |
| SEMIVOLATILES  | 2-Nitroaniline              | 2.5      | 1     | <   | U    | 1.65     | 1      | <    | Ų  | 1.65   | 1     | <    | U    | 1.65   | 1     | <   | Ų   | 1.65   | 1     | <    | U  | 1.65   | 1      | <  | U  |
| SEMIVOLATILES  | 2-Nitrophenol               | 0.51     | 1     | <   | Ų    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | U    | 0,33   | 1     | <   | U   | 0.33   | 1     | <    | Ų  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine      | 1        | 1     | <   | U    | 0.65     | 1      | <    | U  | 0.65   | 1     | <    | Ų    | 0.65   | í     | <   | U   | 0,65   | 1     | <    | บ  | 0.65   | 1      | <  | U  |
| SEMIVOLATILES  | 3-Nitroaniline              | 2,5      | 1     | <   | U    | 1.65     | 1      | ۲    | Ų  | 1.65   | 1     | <    | U    | 1.65   | 1     | <   | U   | 1.65   | 1     | <    | U  | 1.65   | 1      | <  | Ų  |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol  | 2.5      | 1     | <   | U    | 1.65     | 1      | <    | U  | 1.65   | 1     | <    | U    | 1,65   | 1     | <   | ប   | 1.65   | 1     | <    | Ų  | 1.65   | 1      | <  | U  |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether  | 0.51     | 1     | <   | υ    | 0.33     | 1      | <    | υ  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | Ų   | 0,33   | 1     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | 4-Chloro-3-methylphenol     | 0.51     | 1     | <   | Ų    | 0,65     | 1      | <    | υ  | 0,65   | 1     | <    | U    | 0.65   | 1     | <   | U   | 0.65   | 1     | <    | Ų  | 0.65   | ١      | <  | U  |
| SEMIVOLATILES  | 4-Chloroaniline             | 0,51     | 1     | <   | Ų    | 0.65     | 1      | <    | U  | 0,65   | 1     | <    | U    | 0.65   | 1     | ۲   | U   | 0.65   | 1     | <    | U  | 0,65   | 1      | <  | Ų  |
| SEMIVOLATILES  | 4-Chlorophenyl phenyl ether | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | 4-Methylphenol              | 0.51     | 1     | ۲   | Ų    | 0.33     | 1      | <    | Ų  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | 4-Nitroaniline              | 2.5      | 1     | <   | U    | 1.65     | 1      | <    | U  | 1.65   | 1     | <    | U    | 1.65   | 1     | <   | U   | 1,65   | 1     | <    | υ  | 1.65   | 1      | <  | U  |
| SEMIVOLATILES  | 4-Nitrophenol               | 2.5      | 1     | <   | U    | 1.65     | 1      | <    | U  | 1.65   | 1     | <    | U    | 1.65   | 1     | <   | U   | 1,65   | 1     | <    | U  | 1.65   | 1      | <  | U  |
| SEMIVOLATILES  | Acenaphthene                | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0.33   | 1     | · <  | Ų    | 0.33   | 1     | <   | Ų   | 0.33   | t     | <    | U  | 0.33   | 1      | <  | Ų  |
| SEMIVOLATILES  | Acenaphthylene              | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0.33   | ١     | <    | U    | 0.33   | 1     | <   | Ų   | 0.33   | ŧ     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | Anthracene                  | 0.51     | 1     | <   | U    | 0,33     | 1      | <    | U  | 0.33   | 1     | <    | Ų    | 0,33   | 1     | <   | Ų   | 0.33   | 1     | <    | Ų  | 0.33   | 1      | <  | Ų  |
| SEMIVOLATILES  | Benzo(a)anthracene          | 0.15     | 1     |     | J    | 0.33     | 1      | <    | υ  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | U  | 0.33   | i      | <  | U  |
| SEMIVOLATILES  | Benzo(a)pyrene              | 0.15     | 1     |     | J    | 0.33     | 1      | <    | υ  | 0.33   | ١     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | ា     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | Benzo(b)fluoranthene        | 0.3      | 1     |     | ł    | 0.33     | 1      | <    | υ  | 0,33   | 1     | <    | U    | 0.33   | 1     | <   | Ų   | 0.33   | í     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | Benzo(ghi)perylene          | 0.51     | 1     | <   | U    | 0.33     | ſ      | <    | U  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | V   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | Senzo(k)/luoranthene        | 0.11     | 1     |     | J    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | Ų  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | Benzoic Acid                | 2.5      | 1     | <   | U    | 1.65     | 1      | <    | U  | 1,65   | 1     | <    | U    | 1.65   | 1     | ۲   | U   | 1.65   | 1     | <    | U  | 1.65   | 1      | <  | U  |
| SEMIVOLATILES  | Benzyl Alcohol              | 0.51     | 1     | <   | υ    | 0.65     | 1      | <    | U  | 0.65   | 1     | <    | V    | 0.65   | 1     | <   | Ų   | 0.65   | 1     | <    | U  | 0.65   | ែ      | <  | U  |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane  | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0.33   | i     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | υ  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | bis(2-Chloroethyl)ether     | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | Ų   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | bis(2-Chloroisopropyl)ether | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | Ų  | 0.33   | 1      | <  | υ  |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate  | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | Ų  | 0.33   | 1      | <  | Ų  |
| SEMIVOLATILES  | Butyl benzyl phthalate      | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0.33   | i     | <    | υ    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | Chrysene                    | 0.21     | 1     |     | J    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | υ    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene      | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | U    | 0.33   | í     | <   | U   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | Dibenzofuran                | 0.51     | 1     | <   | U    | 0.33     | វ      | <    | U  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | Ų  |
| SEMIVOLATILES  | Diethyl phthalate           | 0.51     | 1     | <   | U    | 1.03     | 1      |      |    | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | Dimethyl phthalate          | 0.51     | 1     | <   | Ų    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | Ų   | 0.33   | 1     | <    | Ų  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | di-n-Butyl phthalate        | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | di-n-Octyl phthalate        | 0.51     | 1     | <   | υ    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | Ų  | 0.33   | í      | ¢  | Ų  |
| SEMIVOLATILES  | Fluoranthene                | 0.47     | 1     |     | J    | 0.33     | 1      | <    | υ  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | ¢    | U  | 0.33   | 1      | <  | Ų  |
| SEMIVOLATILES  | Fluorene                    | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | U    | 0,33   | 1     | <   | U   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | Hexachlorobenzene           | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | IJ | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | υ   | 0.33   | 1     | <    | Ų  | 0,33   | 1      | <  | U  |
| SEMIVOLATILES  | Hexachlorobutadiene         | 0.51     | 1     | <   | Ų    | 0.33     | 1      | <    | U. | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | U  | 0.33   | 1      | <  | U  |
| SEMIVOLATILES  | Hexachlorocyclopentadiene   | 0.51     | 1     | <   | U    | 0.33     | 1      | <    | U  | 0.33   | 1     | <    | U    | 0.33   | 1     | <   | U   | 0.33   | 1     | <    | Ų  | 0.33   | 1      | <  | Ų  |

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

|                | Concentr                    | ations o | f C   | her | nica   | ls in t | Soll  | Sa   | Imp   | les As       | 5Ś(   | ocia | ited   | with   | Su    | mp   | 068   | 3      |       |    |       |        |       |    |       |
|----------------|-----------------------------|----------|-------|-----|--------|---------|-------|------|-------|--------------|-------|------|--------|--------|-------|------|-------|--------|-------|----|-------|--------|-------|----|-------|
| LOCATION _CODE |                             | Ļ        | HS-3- | 14  |        | LH      | -S68- | 01   |       | LH           | -\$68 | -01  |        | LH     | -S68  | -01  |       | LH     | S68-  | )2 |       | LH-    | S68-( | 02 |       |
| SAMPLE_NO      |                             | L        | HS+3- | 14  |        | LH-S    | 68-01 | QC I |       | LH-          | S68-0 | 01_1 |        | LH-    | S68-0 | )1_2 |       | LH-S   | 68-02 | QC |       | LH.    | S68-( | 02 |       |
| SAMPLE_DATE    |                             | 1        | 10/19 | 95  |        | 8       | 6/199 | 13   |       | 8/           | 6/19  | 93   |        | 8      | /6/19 | 33   |       | 8/     | 6/199 | 3  |       | 8/8    | /199  | 3  |       |
| DEPTH          |                             | C        | - 0.5 | Ft  |        | 0.      | 5-2   | Ft   |       | 0.           | 5•2   | Ft   |        |        | 5-7F  | it i |       | 0.5    | - 1.5 | Ft |       | 0,5    | - 1.5 | Ft |       |
| SAMPLE_PURPOSE |                             |          | REG   |     |        |         | FD    |      |       |              | REG   | i    |        |        | REG   |      |       |        | FD    |    |       | I      | REG   |    |       |
| Test Group     | Parameter (Units = mg/kg)   | Result   | DIL   | LQ  | VQ     | Result  | DIL   | LQ   | VQ    | Result       | Dil   | LQ   | VQ     | Result | DIL   | LQ   | VQ    | Result | DIL   | ٤Q | VQ    | Result | DIL   | LQ | VQ    |
| SEMIVOLATILES  | Hexachloroethane            | 0.51     | 1     | <   | U      | 0.33    | 1     | <    | U     | 0.33         | 1     | <    | U      | 0.33   | 1     | <    | U     | 0.33   | 1     | <  | U     | 0.33   | 1     | <  | U     |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene      | 0.51     | 1     | <   | U      | 0.33    | 1     | <    | U     | 0.33         | 1     | <    | U      | 0.33   | 1     | <    | U     | 0.33   | 1     | <  | U     | 0.33   | 1     | <  | U     |
| SEMIVOLATILES  | Isophorone                  | 0.51     | 1     | <   | U      | 0.33    | 1     | <    | U     | 0.33         | 1     | <    | U      | 0.33   | 1     | <    | υ     | 0.33   | 1     | <  | Ų     | 0.33   | 1     | <  | U     |
| SEMIVOLATILES  | Naphthalene                 | 0.51     | 1     | <   | U      | 0.33    | 1     | <    | Ų     | 0.33         | 1     | <    | Ų      | 0.33   | 1     | <    | Ų     | 0.33   | 1     | <  | U     | 0.33   | 1     | <  | Ų     |
| SEMIVOLATILES  | Nitrobenzene                | 0.51     | 1     | <   | U      | 0.33    | 1     | <    | U     | 0.33         | 1     | <    | u      | 0.33   | 1     | <    | U     | 0.33   | 1     | <  | Ų     | 0.33   | 1     | <  | U     |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine  | 0.51     | 1     | <   | U      | 0.33    | 1     | <    | U     | 0.33         | 1     | <    | Ų      | 0.33   | 1     | <    | U     | 0.33   | 1     | <  | U     | 0.33   | 1     | <  | U.    |
| SEMIVOLATILES  | n-Nitrosodiphenylamine      | 0.51     | 1     | <   | U      | 0.33    | 1     | <    | U     | 0.33         | 1     | <    | Ų      | 0.33   | 1     | <    | U     | 0.33   | 1     | ۲  | U     | 0.33   | 1     | <  | Ų     |
| SEMIVOLATILES  | Penlachlorophenol           | 2.5      | 1     | <   | Ų      | 1.65    | 1     | <    | U     | 1.65         | 1     | <    | Ų      | 1.65   | 1     | ۲    | U     | 1.65   | 1     | <  | υ     | 1.65   | 1     | <  | U     |
| SEMIVOLATILES  | Phenanthrene                | 0.24     | 1     |     | J      | 0.33    | 1     | <    | υ     | 0.33         | 1     | <    | U      | 0.33   | 1     | <    | Ų     | 0,33   | 1     | <  | U     | 0,516  | 1     |    |       |
| SEMIVOLATILES  | Phenol                      | 0,51     | 1     | <   | Ų      | 0.33    | 1     | <    | U     | 0.33         | 1     | <    | Ų      | 0.33   | 1     | <    | U     | 0.33   | 1     | <  | υ     | 0.33   | 1     | <  | U     |
| SEMIVOLATILES  | Pyrene                      | 0.63     | 1     |     |        | 0.33    | 1     | <    | Ų     | 0.33         | 1     | <    | U      | 0,33   | ٢     | <    | Ų     | 0.33   | 1     | <  | U     | 0.33   | 1     | <  | Ų     |
| VOLATILES      | 1,1,1,2-Tetrachloroethane   | 0.015    | 1     | <   | U      |         |       |      |       |              |       |      |        |        |       |      |       |        |       |    |       |        |       |    |       |
| VOLATILES      | 1,1,1-Trichloroethane       | 0.008    | 1     | <   | Ų      | 0.005   | 1     | <    | U     | 0,005        | 1     | <    | U      | 0.005  | 1     | <    | U     | 0.005  | 1     | ۲  | Ų     | 0,005  | 1     | <  | U     |
| VOLATILES      | 1,1.2,2-Tetrachloroethane   | 0.008    | 1     | <   | Ð      | 0.005   | 1     | <    | U     | 0.005        | 1     | <    | Ų      | 0.005  | 1     | <    | Ų     | 0.005  | 1     | ۲  | U     | 0.005  | 1     | <  | IJ    |
| VOLATILES      | 1,1,2-Trichloroethane       | 0.008    | 1     | <   | U      | 0,005   | 1     | <    | U     | 0.005        | 1     | <    | Ų      | 0,005  | 1     | <    | U     | 0.005  | 1     | <  | Ų     | 0,005  | 1     | <  | U     |
| VOLATILES      | 1,1-Dichloroethane          | 0.008    | 1     | <   | U      | 0.005   | 1     | <    | U     | <u>0.005</u> | ١     | <    | Ų      | 0,005  | 1     | <    | U     | 0.005  | 1     | <  | U     | 0.005  | 1     | <  | U     |
| VOLATILES      | 1,1-Dichloroethene          | 0.008    | 1     | <   | U      | 0,005   | 1     | <    | U     | 0.005        | 1     | <    | Ų      | 0,005  | ſ     | <    | U     | 0,005  | 1     | <  | U     | 0.005  | 1     | <  | Ų     |
| VOLATILES      | 1,2,3-Trichloropropane      | 0.015    | 1     | ۲   | U      |         |       |      |       |              |       |      |        |        |       |      |       |        |       |    |       |        |       |    |       |
| VOLATILES      | 1,2-Dibromo-3-chloropropane | 0.03     | 1     | ۲   | U      |         |       |      |       |              |       |      |        |        |       |      |       |        |       |    |       |        |       |    |       |
| VOLATILES      | 1,2-Dibromoethane           | 0.03     | 1     | <   | U      |         |       |      |       |              |       |      |        |        |       |      |       |        |       |    |       |        |       |    |       |
| VOLATILES      | 1,2-Dichloroethane          | 0.008    | 1     | <   | υ      | 0.005   | 1     | <    | U     | 0.005        | 1     | <    | U      | 0.005  | 1     | <    | Ų     | 0.005  | 1     | <  | Ų     | 0.005  | 1     | <  | U     |
| VOLATILES      | 1.2-Dichloroethene          | 0.008    | 1     | <   | U      | 0.005   | 1     | <    | U     | 0.005        | 1     | <    | Ų      | 0.005  | 1     | <    | U     | 0.005  | 1     | <  | U     | 0.005  | 1     | <  | U     |
| VOLATILES      | 1,2-Dichloropropane         | 0.008    | 1     | <   | U      | 0.005   | 1     | <    | U     | 0.005        | ſ     | <    | U      | 0.005  | 1     | <    | U     | 0.005  | 1     | <  | U     | 0.005  | 1     | <  | U     |
| VOLATILES      | 2-Butanone                  | 0.015    | 1     | <   | U      | 0.05    | 1     | <    | U     | 0.05         | 1     | <    | U      | 0.05   | 1     | <    | Ų     | 0.05   | 1     | <  | U     | 0.05   | 1     | ۲  | U     |
| VOLATILES      | 2-Chloroethyl vinyl ether   |          |       |     |        | 0.01    | 1     | <    | U     | 0,01         | 1     | <    | U      | 0.01   | 1     | <    | Ų     | 0.01   | 1     | <  | U     | 0.01   | 1     | <  | U     |
| VOLATILES      | 2-Hexanone                  | 0.015    | 1     | <   | U      | 0.05    | 1     | <    | υ     | 0.05         | 1     | <    | U      | 0.05   | 1     | <    | U     | 0.05   | 1     | <  | U     | 0.05   | 1     | <  | U     |
| VOLATILES      | 2-Propenal                  | 0.76     | 1     | <   | U      |         |       |      |       |              |       |      |        |        |       |      |       |        |       |    |       |        |       |    |       |
| VOLATILES      | Acetone                     | 0.015    | 1     | <   | U      | 0.1     | 1     | <    | U     | 0.1          | 1     | <    | U      | 0.1    | 1     | <    | U     | 0,1    | 1     | <  | 0     | 0.1    | 1     | <  | Ų     |
| VOLATILES      | Acetonitrile                | 0.15     | 1     | <   | U      |         |       |      |       |              |       |      |        |        |       |      |       |        |       |    |       |        |       |    |       |
| VOLATILES      | Acrylonitrile               | . 0.15   | 1     | <   | U      |         |       |      |       |              |       |      |        |        |       |      |       |        |       |    |       |        |       |    |       |
| VOLATILES      | Aliyi chloride              | 0.03     | 1     | <   | U      |         |       |      |       |              |       |      |        |        |       |      |       |        |       |    |       |        |       |    |       |
| VOLATILES      | Benzene                     | 0,008    | 1     | <   | U      | 0.005   | 1     | <    | U     | 0.005        | 1     | <    | Ų      | 0.005  | 1     | <    | U     | 0.005  | 1     | <  | U     | 0,005  | 1     | <  | U     |
| VOLATILES      | Bromodichloromethane        | 0.008    | 1     | <   | U      | 0.005   | 1     | <    | U     | 0,005        | 1     | <    | 0      | 0.005  | 1     | <    | 0     | 0.005  | 1     | <  | U     | 0.005  | 1     | <  | U     |
| VOLATILES      | Bromoform                   | 0.008    | 1     | <   | U      | 0.005   | 1     | <    | U     | 0.005        | 1     | <    | U      | 0.005  | 1     | <    | 0     | 0.005  | 1     | <  | U     | 0.005  | 1     | <  | 0     |
| VOLATILES      | Bromomethane                | 0,015    | 1     | <   | U      | 0,01    | 1     | <    | U     | 0.01         | 1     | <    | U      | 0.01   | 1     | <    | U     | 0.01   | 1     | <  | U     | 0.01   | 1     | <  | U     |
| VOLATILES      | Carbon disultide            | 0.008    | 1     | <   | U      | 0.005   | 1     | <    | U     | 0.005        | 1     | <    | U      | 0.005  | 1     | <    | U     | 0.005  | 1     | <  | U     | 0.005  | 1     | <  | Ų     |
| VOLATILES      | Carbon tetrachioride        | 0.008    | 1     | <   | 0      | 0.005   | 1     | <    | U     | 0.005        | 1     | <    | U      | 0.005  | 1     | <    | U     | 0.005  | 1     | <  | U     | 0.005  | 1.    | <  | U<br> |
| VOLATILES      | Chlorobenzene               | 0.008    | 1     | <   | U      | 0.005   | 1     | <    | U<br> | 0.005        | 1     | <    | U<br>  | 0.005  | 1     | <    | U<br> | 0.005  | 1     | <  | U     | 0.005  | 1     | <  | U     |
| VOLATILES      | Unioroethane                | 0,015    | 1     | <   | 0      | 0.01    | 1     | <    | U     | 0.01         | 1     | <    | U      | 0.01   | 1     | <    | U<br> | 0.01   | 1     | <  | U     | 0.01   | 1     | <  | U     |
| VOLATILES      | Chlorolorm                  | 0.008    | 1     | <   | U<br>  | 0.005   | 1     | <    | Ų     | 0.005        | 1     | <    | U<br>U | 0.005  | 1     | <    | U     | 0.005  | 1     | <  | U     | 0,005  | 1     | <  | U     |
| VOLATILES      |                             | 0.015    | 1     | <   | U<br>U | 0,01    | 1     | <    | U     | 0.01         | 1     | <    | U      | 0.01   | 1     | <    | U     | 0.01   | 1     | <  | U     | 0.01   | 1     | <  | U     |
| VOLAHLES       | Unioroprene                 | 0.15     | 1     | ۲   | U      |         |       |      |       |              |       |      |        | a aa-  |       |      |       |        |       |    |       |        |       |    |       |
| VOLAHLES       | cis-1.3-Dichloropropene     | 0.008    | 1     | <   | U      | 0.005   | 1     | <    | u     | 0,005        | 1     | <    | Ų      | 0.005  | 1     | <    | 0     | 0.005  | 1     | <  | U<br> | 0,005  | 1     | <  | U     |
| VULAHUES       | ulpromocnioromethane        | 800,0    | 1     | <   | U      | 0.005   | 1     | <    | U     | 0.005        | 1     | <    | Ų      | 0.005  | 1     | <    | U     | 0.005  | 1     | <  | U     | 0.005  | 1     | <  | Ų     |



|                |                             |         |       |     |      | T        | abl    | e 3 | -68 |        |         |      |      |        |        |      |    |        |         |      |    | ÷      |         |    |    |
|----------------|-----------------------------|---------|-------|-----|------|----------|--------|-----|-----|--------|---------|------|------|--------|--------|------|----|--------|---------|------|----|--------|---------|----|----|
|                | Concentra                   | tions o | fC    | hen | nica | ils in l | Soi    | Sa  | amp | les A  | sse     | ocia | ated | with   | Su     | mp   | 06 | 8      |         |      |    |        |         |    |    |
| LOCATION _CODE |                             | L       | HS-3- | 14  |      | Lł       | I-S68- | 01  | -   | Lł     | I-S68   | 3-01 |      | u      | H-S68  | -01  |    | U      | I-S68   | -02  |    | LH     | -S68-   | 02 |    |
| SAMPLE_NO      |                             | L       | HS-3- | 14  |      | LH-S     | 568-0  |     |     | LH     | -568-   | 01 1 |      | เห     | -S68-( | )1 2 |    | LH-S   | \$68-0  | 2 QC |    | LH     | -S68-   | 02 |    |
| SAMPLE_DATE    |                             | 1,      | 10/19 | 95  |      | 8        | /6/199 | 3   |     | 8      | /6/19   | 93   |      | 8      | /6/19  | 93   |    | 8      | /6/199  | 93   |    | 8      | 6/199   | 3  |    |
| DEPTH          |                             | 0       | • 0.5 | Ft  |      | 0        | 5 - 2  | Ft  |     | 0      | 1.5 - 2 | Ft   |      |        | 5 - 7  | ŧ    |    | 0.     | 5 - 1.5 | Ft   |    | 0.5    | 5 - 1,5 | Ft |    |
| SAMPLE_PURPOSE |                             |         | REG   |     |      |          | FD     |     |     |        | REG     | 3    |      |        | REG    | i    |    |        | FD      |      |    |        | REG     |    |    |
| Test Group     | Parameter (Units = mg/kg)   | Result  | DIL   | LQ  | VQ   | Result   | DIL    | LQ  | VQ  | Result | DiL     | LQ   | VQ   | Result | DIL    | LQ   | VQ | Result | DiL     | LQ   | VQ | Result | DIL     | ٤Q | VQ |
| VOLATILES      | Dibromomethane              | 0.015   | 1     | <   | ับ   |          |        |     |     |        |         |      |      |        |        |      |    |        |         |      |    |        |         |    |    |
| VOLATILES      | Dichlorodifluoromethane     | 0.03    | 1     | <   | U    |          |        |     |     |        |         |      |      |        |        |      |    |        |         |      |    |        |         |    |    |
| VOLATILES      | Ethyl methacrylate          | 0.03    | 1     | <   | U    |          |        |     |     |        |         |      |      |        |        |      |    |        |         |      |    |        |         |    |    |
| VOLATILES      | Ethylbenzene                | 0.008   | 1     | <   | U    | 0.005    | 1      | <   | Ų   | 0.005  | 1       | <    | Ų    | 0.005  | 1      | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1       | <  | Ų  |
| VOLATILES      | IODOMETHANE                 | 0.015   | 1     | <   | U    |          |        |     |     |        |         |      |      |        |        |      |    |        |         |      |    |        |         |    |    |
| VOLATILES      | ISOBUTYL ALCOHOL            | 3       | 1     | <   | υ    |          |        |     |     |        |         |      |      |        |        |      |    |        |         |      |    |        |         |    |    |
| VOLATILES      | Methacrylonitrile           | 0.03    | 1     | <   | U    |          |        |     |     |        |         |      |      |        |        |      |    |        |         |      |    |        |         |    |    |
| VOLATILES      | Methyl Isobutyl ketone      | 0.015   | 1     | <   | U    | 0.05     | 1      | <   | U   | 0.05   | 1       | <    | U    | 0.05   | 1      | <    | U  | 0.05   | 1       | <    | U  | 0.05   | 1       | <  | Ų  |
| VOLATILES      | METHYL METHACRYLATE         | 0,03    | 1     | <   | U    |          |        |     |     |        |         |      |      |        |        |      |    |        |         |      |    |        |         |    |    |
| VOLATILES      | Methylene chloride          | 0.008   | 1     | <   | Ų    | 0.005    | 1      | <   | U   | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | Ų  | 0.005  | 1       | <    | U  | 0.005  | 1       | <  | U  |
| VOLATILES      | Pentachloroethane           | 0.03    | 1     | <   | U    |          |        |     |     |        |         |      |      |        |        |      |    |        |         |      |    |        |         |    |    |
| VOLATILES      | Propionitrile               | 0.076   | i     | <   | U    |          |        |     |     |        |         |      |      |        |        |      |    |        |         |      |    |        |         |    |    |
| VOLATILES      | Styrene                     | 0.008   | 1     | <   | U    | 0.005    | 1      | <   | U   | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1       | <    | Ų  | 0.005  | 1       | <  | U  |
| VOLATILES      | Tetrachloroethene           | 0.008   | 1     | <   | U    | 0.005    | 1      | <   | U   | 0.005  | 1       | <    | Ų    | 0,005  | 1      | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1       | <  | U  |
| VOLATILES      | Toluene                     | 0.008   | 1     | <   | Ų    | 0.005    | 1      | ۲   | U   | 0.005  | 1       | <    | U    | 0.005  | 1      | <    | Ų  | 0.005  | 1       | <    | Ų  | 0.005  | 1       | <  | Ų  |
| VOLATILES      | trans-1,3-Dichloropropene   | 0,008   | 1     | <   | Ų    | 0.005    | 1      | ۲   | U   | 0.005  | 1       | <    | U    | 0,005  | 1      | <    | U  | 0.005  | 1       | <    | U  | 0.005  | 1       | <  | U  |
| VOLATILES      | trans-1.4-Dichloro-2-butene | 0.03    | 1     | <   | U    |          |        |     |     |        |         |      |      |        |        |      |    |        |         |      |    |        |         |    |    |
| VOLATILES      | Trichloroethene             | 0.008   | 1     | <   | U    | 0.005    | 1      | <   | U   | 0,005  | ١       | <    | U    | 0.005  | 1      | <    | U  | 0.005  | 1       | <    | U  | 0.005  | t       | <  | U  |
| VOLATILES      | Trichlorofluoromethane      | 0,015   | 1     | <   | U    |          |        |     |     |        |         |      |      |        |        |      |    |        |         |      |    |        |         |    |    |
| VOLATILES      | Vinyl acetate               | 0.015   | 1     | <   | U    | 0.05     | 1      | <   | U   | 0.05   | 1       | <    | υ    | 0.05   | 1      | <    | U  | 0.05   | 1       | <    | υ  | 0.05   | t       | <  | U  |
| VOLATILES      | Vinyl chloride              | 0.015   | 1     | <   | U    | 0.01     | 1      | <   | U   | 0.01   | i       | <    | U    | 0.01   | 1      | <    | U  | 0.01   | 1       | <    | U  | 0.01   | í       | <  | υ  |
| VOLATILES      | Xylenes, Total              | 0.008   | 1     | <   | U    | 0,005    | 1      | <   | U   | 0.005  | 1       | <    | Ų    | 0,005  | ١      | <    | Ų  | 0.005  | 1       | <    | U  | 0.005  | 1       | <  | U  |

Footnotes are shown on cover page to Tables Section,

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-69   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 069 |

| (SUMP) = SUMP069<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE |                                  | 35SUMP069-SB01-0<br>35-SMP069-SB01-0<br>9/21/2005 | 35SUMP069-SB01<br>1 35-SMP069-SB01-0<br>9/21/2006 | LH-DL69<br>LH-DL69<br>6/26/199 | -01<br>-01<br>33 | LH-S69-01<br>LH-S69-01 QC<br>6/26/1993 |         | LH-S69-01<br>LH-S69-01_1<br>6/26/1993<br>0.5-1.5.51 | LH-S69-01<br>LH-S59-01_2<br>6/26/1993<br>4 - 4 5 Ft | LH-\$69-01<br>LH-\$69-01_3<br>6/26/1993<br>5.5 - 6 Ft | LH-S69-02<br>LH-S69-02_1<br>6/28/1993<br>0.5 - 1.5 Ft | LH-569-02<br>LH-569-02_2<br>6/26/1993<br>4.5 + 6 Fl |
|--|----------------------------------|---|---|--------------------------------|------------------|--|---------|---|---|---|---|---|
| DEPTH  |                                  | 0.5 - 0.5 Ft                                      | 0.0 - 0.0 FI                                      | 2,3*3                          | F1               | FD                                     |         | REG   | REG   | REG   | REG   | REG   |
| SAMPLE_PURPOSE   | no a destra confusió             | REG<br>Desuit Dia 10                              | nco<br>د الات الحمية                              | VO Rosell Dil                  |                  | Besult DH LO V                         | /0 Br   | esult DIL LO VO                                     | Result DIL LO VO                                    | Result DIL LO VO                                      | Result DIL LO VO                                      | Result DIL LO VO                                    |
| Test Group   | Parameter (Units = mg/kg)        | Result pir ru                                     | VG HESDA DAL LO                                   | 1 149 1                        | ~ 11             | 1.136 1 <                              | U 1     | 136 1 < U   | 1.176 1 < U   | 1,176 1 < U   | 1.163 1 < U   | 1.235 1 < U   |
| EXPLOSIVES   | 2,4-Dinkrototuene                |   |   | 1 149 1                        | ເປັ              | 1.135   <                              | 0 1     | .136 1 < U  | 1,176 1 < U   | 1.176 1 < U   | 1,163 1 < U   | 1,235 1 < U   |
| EXPLOSIVES   | 2.6-Entiliptionente              |   |   | 6830 1                         |                  | 4530 1                                 | . 6     | 5860 1  | 8220 1  | 6790 1  | 10700 1   | 9950 1  |
| METALS   | Ántimony.                        |   |   | 2.98 1                         | < 0              | 4.82 1 <                               | U       | 3,44 1 < U  | 4.64 t < U  | 5.38 1 < U  | 4.8 1 < U   | 3.5 1 < U   |
| METALS   | Arennin                          |   |   | 1.07 1                         |                  | 0.844 1                                | E       | 2.44 1  | 1.35 1  | 0.672 1 E   | 1.1 1   | 1.58 1  |
| METALO   | Barium                           |   |   | 77.9 1                         | < U              | 42.9 1 <                               | U       | 55.4 t < U  | 62.5 1 < U  | 58.7 1 < U  | 74,2 1 < U  | 74.3 1 < U  |
| METALS   | Cadmium                          |   |   | 1,94 1                         | < U              | 1.2 1 <                                | υ       | 3,16 1 < U  | 2.92 1 < U  | 1.78 1 < U  | 3.5 1 < U   | 4.04 1 < U  |
| METALS   | Calcium                          |   |   | 1050 1                         |                  | 701 1                                  |         | 1090 1  | 1000 t  | 1190 1  | 1890 1  | 1480  |
| METALS   | Chromium                         |   |   | 10.7 1                         |                  | 7.86 1                                 |         | 12.7 1  | 19 1  | 14,2 1  | 11.3  | 11.7 1  |
| METALS   | Cobali                           |   |   | 2.82 1                         |                  | 2.58                                   |         | 5.09 i  | 5.B5 1  | 4,84 1  | 3.77 1  | 6.52 I  |
| METALS   | Copper                           |   |   | 4,72 1                         | < U              | 4.82 1 <                               | U       | 3.66 1 < U  | 4.99 1 < U  | 5.95 1 < U  | 9.41 I K U  | 10.07 1 4 0   |
| METALS   | Iron                             |   |   | 8660 1                         |                  | 4200 1                                 | 1.      | 3200 1  | 11900   | 7010 1  | 11000 L   | 20 8 t  |
| METALS   | Lead                             |   |   | 13.6 1                         |                  | 7.23 1 <                               | U       | 15.8 1  | 15,3 1  | 31.5 1  | 405 1   | 897 1   |
| METALS   | Magnesium                        |   |   | 402 1                          |                  | 181 1                                  |         | 404 1   | 4/5 1   | 367 1   | 82.3 1  | 156 1   |
| METALS   | Manganese                        |   |   | 111 1                          |                  | 75.2 1                                 |         | 209 1   | 150 1   | 001   | 0.048 t < 1   | 0.06 1 < U  |
| METÁLS   | Mercury                          |   |   | 0.054 1                        | < ()             | 0.049 <                                | 0 (     | 0.047 1 < 0   | 0.052 1 4 0   | 1 236   | 4R4 1   | 480 1   |
| METALS   | Potassium                        |   |   | 381 1                          |                  | 277 1                                  |         | 292 1   | 0.464 1 - 11  | 0538 1 2 1  | 148 1 < U   | 0.35 1 < U  |
| METALS   | Selenium                         |   |   | 0.298 1                        | < 0              | 0.482 1 <                              | 0 0     | 0,344 1 < 0   | 0.023 1 < 1   | 0.027 1 < U   | 0.024 1 < U   | 0,019 1 < U   |
| METALS   | Silver                           |   |   | 0.021 1                        | < U              | 0.024 1 <                              | 0 1     |   | 14 1 4 1  | 10.2 1 < U  | 15.1 1 < U  | 16.1 1 < U  |
| METALS   | Strontium                        |   |   | 20.9                           | < 0              | 10.6 1                                 | 0       | 213 1   | 16.1 1  | 16.1 1  | 19.2 1  | 22.1 1  |
| METALS   | Zinc                             |   |   | 13.6                           |                  | 12.0                                   |         | 21.0  |   |   |   |   |
| PERC   | Perchlorate                      | 0.05 5 0  | 0 0.04 4 0  | 1 149 1                        | r 11             | 1 135 1 <                              | บ       | 1.136 1 < U   | 1.176 1 < U   | 1,176 1 < U   | 1.163 1 < U   | 1.235 1 < U   |
| SEMIVOLATILES  | 1,2,4-Trichlorobenzene           |   |   | 1 149                          | e U              | 1.136 1 <                              | ŭ ·     | 1.136 1 < U   | 1,175 1 < U   | 1,176 t < U   | 1,163 1 < U   | 1,235 t < U   |
| SEMIVOLATILES  | 1.2-Dichlorobenzene              | 1   |   | 1 149 1                        | ~ U              | t.136 1 <                              | Ŭ       | 1,136 1 < U   | 1,176 1 < U   | 1,176 1 < U   | 1.163 1 < U   | 1.235 1 < U   |
| SEMIVOLATILES  | 1,3-Dichloropenzens              |   |   | 1.149 1                        | ເ                | 1.136 1 <                              | Û       | 1,136 1 < U   | 1.176 1 < U   | 1.176 1 < U   | 1.163 1 < U   | 1.235 1 < U   |
| SEMIVOLATILES  | 1,4-contoropenzene               |   |   | 1,149 1                        | < U              | 1.136 1 <                              | ΰ       | 1.135 1 < U   | 1.176 1 < U   | 1.176 1 < U   | 1,163 1 < U   | 1.235 1 < U   |
|  | 2.4.5 Trichlorophenol            |   |   | 1.149 1                        | < U              | 1.136 1 <                              | U       | 1,136 1 < U   | 1.175 t < U   | 1.176 1 < U   | 1,163 1 < U   | 1.235 1 < U   |
| SEMINOLATILES  | 2 4-Dichlorophenol               |   |   | 1,149 1                        | < 0              | 1.136 1 <                              | U       | 1.136 1 < U   | i,175 1 < U   | 1.176 t < U   | ,1.163 1 < U  | 1.235 1 < U   |
| SEMIVOLATILES  | 2.4-Dimethylohenni               |   |   | 0.575 1                        | < U              | 0.568 1 <                              | U       | 0.568 1 < U   | 0.588 1 < U   | 0.588 î < U   | 0.581 1 < 0   | 0.617 1 < 0   |
| SEMIVOLATILES  | 2,4-Dinitrophenol                |   |   | 11.494 1                       | < U              | 11,384 1 <                             | U 1     | 1.364 1 < U   | 11.765 1 < U  | 11.765 1 < U  | 11.628 1 < U  | 12,346 1 < U  |
| SEMIVOLATILES  | 2-Chloronaphthalene              |   |   | 0.345 1                        | < U              | 0.341 1 <                              | U       | 0,341 1 < U   | 0.353 1 < U   | 0.353 1 < U   | 0.349 1 < U   | Q.37 1 < U  |
| SEMIVOLATILES  | 2-Chlorophenol                   |   |   | 0.575 1                        | < U              | 0.568 i <                              | U       | 0.568 1 < U   | 0.588 1 < U   | 0.588 1 < U   | 0.581 1 < U   | 0.517 1 < U   |
| SEMIVOLATILES  | 2-Methylnaphthalena              |   |   | 0.345 1                        | < U              | 0.341 1 <                              | U ·     | 0.341 1 < U   | 0.353 I < U   | 0.353 1 < 0   | 0.349 t < U   | 0.37 1 < 0  |
| SEMIVOLATILES  | 2-Methylphenol                   |   |   | 0.575 1                        | < U              | 0.568 1 <                              | U       | 0.568 1 < 0   | 0.588 \ < U   | 0.588 1 < 0   | 0.061 1 < 0   | 3704 1 < 1  |
| SEMIVOLATILES  | 2-Nitroaniline                   |   |   | 3.448 1                        | < 0              | 3.409 1 <                              | 0       | 3.409 1 < 0   | 3.529 1 < 0   | 3.529 1 4 0   | 1162 1 < 1  | 1235 1 2 1  |
| SEMIVOLATILES  | 2-Nitrophenol                    |   |   | 1,149 1                        | < 0              | 1,138 1 <                              | U       | 1.136 1 < U   | 0,699 1 4 1   |   | 0.581 1 < 1   | 0.617 1 < U   |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine           |   |   | 0.575 1                        | < U              | 0.568 1 <                              | 0       | 0.008 1 < 0   | 0.000 I < U   | 3529 1 < 1  | 3.488 1 < U   | 3.704 1 < U   |
| SEMIVOLATILES  | 3-Nitroaniline                   |   |   | 3,448 1                        | < U              | 3,408 1 <                              | ů.      | 5,409 I < 0   | 5882 1 2 1  | 5.882 1 < 11  | 5.814 1 < U   | 6.173 1 < U   |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol       |   |   | 5,747 1                        | ς U<br>2 Π       | 3,006 1 <                              | v<br>II | 1196 1 2 11   | 1.176 1 e U   | 1,176 1 < U   | 1.163 1 < U   | 1.235 1 < U   |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether       |   |   | 1.149                          | - 11             | 0.569 1 <                              | u<br>u  | 0.568 1 < 0   | 0.588 1 < U   | 0.588 1 < U   | 0.581 1 < U   | 0.517 1 < U   |
| SEMIVOLATILES  | 4-Unioro-3-meinyiphenoi          |   |   | 2.575                          | - 11             | 3409 1 <                               | ŭ       | 3.409 1 < U   | 3.529 1 < U   | 3.529 1 < U   | 3.488 1 < U   | 3.704 1 < U   |
| SEMIVOLATILES  | 4-Untoroanime                    |   |   | 1 149 1                        | - 11             | 1,136 1 <                              | ŭ       | 1.136 1 < U   | 1,176 1 < U   | 1,176 t < U   | t,163 t < Ų   | 1.235 1 < U   |
| SEMIVOLATILES  | 4-Cmordonenyi prenyi emer        |   |   | 0.575                          | 2 U              | 0.568 1 <                              | Ū       | 0.568 1 < U   | 0,588 1 < U   | 0.588 1 < U   | 0.581 1 < U   | 0.617 1 < U   |
| SEMIVOLATILES<br>CENIVOLATILES                                 | 4-MBINYIDHEROL<br>4-MBINODOJIINE |   |   | 5.747                          | ت ب<br>تا >      | 5.582 1 <                              | Ũ       | 5.682 1 < U   | 5.882 1 < U   | 5.882 1 < U   | 5,814 1 < U   | 6.173 1 ≺ U   |
| CENTROLATILES  | A-Miroshanol                     |   |   | 5.747 1                        | < U              | 5.682 1 <                              | υ       | 5.682 1 < U   | 5.882 1 < U   | 5.882 1 < U   | 5.814 1 < U   | 6.173 1 < U   |
| SEMINOLATILES  | Acenaphibane                     |   |   | 0.345 1                        | < Ū              | 0.341 1 <                              | U       | 0.341 1 < U   | 0.353 i < U   | 0.353 t < U   | 0.349 1 < U   | 0.37 t < U  |
| SEMIVOLATILES  | Acenaniihvlane                   |   |   | 0.575                          | < U              | 0.568 1 <                              | U       | 0.568 1 < U   | 0.588 1 < U   | 0.568 1 < U   | 0.581 1 < U   | 0.617 1 < U   |
| SEMIVOLATILES  | Anthracene                       | 1   |   | 0.575 1                        | < V              | 0.568 1 <                              | U       | 0,568 t < U   | 0,588 1 < U   | 0.588 1 < U   | 0,581 1 < U   | 0,617 1 < U   |
| SEMIVOLATILES  | Benzo(a)anthracene               |   |   | 0.345 1                        | < U              | 0.341 1 <                              | U       | 0.341 1 < U   | 0.353 1 < U   | 0.353 1 < U   | 0.349 1 < U   | 0.37 1 < U  |
| SEMIVOLATILES  | Benzo(a)pyrane                   |   |   | 0.575 1                        | < U              | 0.566 1 <                              | Ų       | 0.568 1 < U   | 0.568 1 < U   | 0.588 1 < U   | 0,581 1 < U   | 0.617 1 < U   |
| SEMIVOLATILES  | Benzo(b)fluoranthene             |   |   | 1,149 1                        | < U              | 1,136 1 <                              | U       | 1,136 1 < U   | 1.176 1 < U   | 1,176 t < U   | 1,163 1 < U   | 1.236 1 < U   |
| SEMIVOLATILES  | Benzo(ghi)perylene               |   |   | 2.299 1                        | < U              | 2.273 1 <                              | U       | 2.273 1 < U   | 2.353 1 < U   | 2.353 1 < 0   | 2.325 1 < U   | - 2,409 1 < U<br>1598 ( → U                         |
| SEMIVOLATILES  | Benzo(k)fluoranthene             |   |   | 1.149 1                        | < U              | 1.138 1 <                              | U       | 1.136 1 < 0   | 1.176 1 < U   | 1.1/0 1 < U   | 1,103 1 4 0   | 1.200   |

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-36/36 Sumps



| Table 3-69   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sumn 869 |

| LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                                | 35SUMP069-SB01<br>35-SMP069-SB01-01<br>9/21/2006<br>0,5 - 0.5 FI<br>BEG | 35SUMP069-SB01<br>35-SMP069-SB01-02<br>9/21/2006<br>6:5 - 6:5 Ft<br>BEG | LH-DL69-01<br>LH-DL69-01<br>6/26/1993<br>2.5 - 3 Ft<br>BEG | LH-S69-01<br>LH-S69-01 QC<br>6/26/1993<br>0.5 - 1.5 Ft<br>5D | LH-\$69-01<br>LH-\$69-01_1<br>8/26/1993<br>0.5 - 1.5 Fl<br>BEG | LH-S69-01<br>LH-S69-01_2<br>6/28/1993<br>4 - 4,5 Ft<br>BEC | LH-S69-01<br>LH-S69-01_3<br>6/26/1993<br>5.5 - 6 Fl<br>BEG | LH-S69-02<br>LH-S69-02_1<br>6/26/1993<br>0.5 - 1.5 Ft<br>BFG | LH-S69-02<br>LH-S69-02_2<br>6/26/1993<br>4.5 - 6 Ft<br>BEG |
|--|--------------------------------|---|---|--|--|--|--|--|--|--|
| Test Group   | Parameter (Units = mo/kg)      | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LO VO   | Result DIL LQ VQ   | Result DIL LO VO   | Result DIL LO VO   |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane     |   |   | 0.575 1 < U  | 0.568 i < U  | 0.568 1 < U  | 0.588 1 < U  | 0.588 1 < U  | 0.581 1 < U  | 0,617 1 < U  |
| SEMIVOLATILES  | bis(2-Chloroethyllether        |   |   | 0.575 1 < U  | 0.558 î < U  | 0.568 1 < U  | 0.588 1 < U  | 0.588 1 < U  | 0.581 1 < U  | 0.617 1 < U  |
| SEMIVOLATILES  | bis(2-Chlorolsopropyl)ether    |   |   | 1.149 1 < U  | 1.136 1 < U  | 1.136 1 < U  | 1.176 1 < U  | 1.176 1 < U  | 1.163 1 < U  | 1.235 1 < U  |
| SEMIVOLATILES  | bis(2-Ethylhaxyl)phthatate     |   |   | 0.575 1 < U  | Q.17 1 J   | 0.125 1 J  | 0.247 1 J  | 0.141 J  | 0.581 1 < U  | 0.148 1 J  |
| SEMIVOLATILES  | Butyl benzyl phihalale         |   |   | 0.575 1 < U  | 0.568 1 < U  | 0.568 1 < U  | 0.588 1 < U  | 0.588 1 < U  | 0.581 1 < U  | 0.617 1 < U  |
| SEMIVOLATILES  | Carbazole                      |   |   | 1.149 1 < U  | 1.136 1 < U  | 1.138 1 < U  | 1,176 1 < U  | 1.176 1 < U  | 1.163 1 < U  | 1.236 1 < U  |
| SEMIVOLATILES  | Chrysene                       |   |   | 5.747 I < U  | 5.682 1 < U  | 5.682 1 < U  | 5.882 1 < 0  | 5.882 1 < 0  | 5.814 1 < U  | 6.173 1 < U  |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene         |   |   | 2.299 \ < U  | 2.273 1 < U  | 2.273 1 < 0  | 2.353 1 < U  | 2,353 1 < 0  | 2.326 1 < 0  | 2.469 1 < U  |
| SEMIVOLATILES<br>SEMINOLATILES                                       | Dietitul obligate              |   |   | 1,149 1 4 0  | 1,136 1 < U  | 1.136 1 < U  | 1.1/6 1 < U  | 0.599 1 4 1  | 1.103 I < U  | 1.235 I < U  |
| SEMINOLATILES  | Directly primate               |   |   | 0.575 1 < 0  | 0.669 1 4 0  | 0.568 1 < 1  | 0.569 1 < 1  | 0.505 ( < 0  | 0.110   0  | 0.130  |
| SEMIVOLATILES  | di-o-Britel obthalate          |   |   | 3 195 1  | 0.345 1 2 0  | 0.341 1 2 1  | 3,553 1  | 4.247 1  | 5.93 1   | 4 988 1  |
| SEMIVOLATILES  | di-n-Octyl phibalate           |   |   | 0.575 1 < U  | 0.568 1 < 1  | 0.568 1 < U  | 0.588 1 < U  | 0.588 1 < U  | 0.581 1 < U  | 0.517 1 < U  |
| SEMIVOLATILES  | Fluoranthene                   |   |   | 0.575 1 < U  | 0.568 1 < U  | 0.568 1 < U  | 0.588 1 < U  | 0.588 1 < U  | 0.581 1 < U  | 0.617 1 < U  |
| SEMIVOLATILES  | Fluorène                       |   |   | 0.575 1 < U  | 0.568 1 < U  | 0.568 1 < U  | 0.588 1 < U  | 0.588 1 < U  | 0,581 1 < U  | 0.617 1 < U  |
| SEMIVOLATILES  | Hexachlorobenzene              |   |   | 1.149 1 < U  | 1.136 1 < U  | 1.136 1 < U  | 1,176 1 < U  | 1.176 1 < U  | 1.163 t < U  | 1.235 t < U  |
| SEMIVOLATILES  | Hexachlorobutadiene            |   |   | 3.448 1 < U  | 3.409 1 < U  | 3.409 1 < U  | 3.529 i < U  | 3.529 1 < U  | 3.488 I < U  | 3.704 1 < U  |
| SEMIVOLATILES  | Hexachlorocyclopentadiene      |   |   | 3.448 1 < U  | 3.409 1 < U  | 3.409 1 < U  | 3.529 1 < U  | 3.529 1 < U  | 3.488 1 < U  | 3.704 t < U  |
| SEMIVOLATILES  | Hexachloroethane               |   |   | 1,149 1 < U  | 1.136 1 < U  | 1.136 1 < U  | 1.176 1 < U  | 1.176 i < U  | 1.163 1 < U  | 1.235 1 < U  |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene         |   |   | 1.149 1 < U  | 1.136 1 < U  | 1.136 1 < U  | 1,176 1 < U  | 1.176 1 < U  | 1,163 t < U  | 1.235 t < U  |
| SEMIVOLATILES  | Isophorone                     |   |   | 0.575 1 < U  | 0.568 1 < U  | 0.568 1 < 0  | 0.588 1 < 0  | 0.588 1 < 0  | 0.581 1 < U  | 0.617 1 < U  |
| SEMIVOLATILES<br>SEMIVOLATILES                                       | Naphihaiene                    |   |   | 0.345 1 < 0  | 0.341 1 < U  | 0.341 1 < 0  | 0.353 1 < U  | 0.353 1 < U  | 0,349 1 < 0  | 0.37 t < U   |
| SEMINOLATILES  | n Nitroca di n promitaman      |   |   | 1140 1 - 11  | 1135 1 < 1   | 1,008 1 < U  | 0.588 I < U  | 1176 1 4 1   | 1.60 1 < 0   | 1225 1 ~ 1   |
| SEMIVOLATILES  | n-Nitrosodinhenvlamine         |   |   | 0.575 1 < 11   | 0.568 1 2 11   | 0.588 1 2 1  | 0.588 1 < 11   | 0.588 1 - 11   | 0.581 t < 0  | 0.617 1 c U  |
| SEMIVOLATILES  | Pantachlorophenol              |   |   | 5.747 1 < U  | 5.682 1 < U  | 5.682 1 < U  | 5.882 1 < U  | 5.882 1 < U  | 5.814 t < U  | 6.173 1 < U  |
| SEMIVOLATILES  | Phenanthrene                   |   |   | 0.575 1 < U  | 0.568 1 < U  | 0.568 1 < U  | 0.588 1 < 0  | 0.588 1 < U  | 0.581   < U  | 0,617 1 < U  |
| SEMIVOLATILES  | Phenol                         |   |   | 0.575 1 < U  | 0.568 t < U  | 0.568 1 < U  | 0.588 1 < U  | 0.588 1 < U  | 0.581 1 < U  | 0.617 1 < U  |
| SEMIVOLATILES  | Pyrene                         |   |   | 0.575 1 < U  | 0.568 i < U  | 0.568 1 < U  | 0.588 1 < U  | 0.588 1 < U  | 0.581 I < U  | 0.617 1 < U  |
| VOLATILES  | 1, 1, 1, 2-Tetrachloroelhane   |   | 0.00568 1 U U   |  |  |  |  |  |  |  |
| VOLATILES  | 1.1.1.Trichloroethane          |   | 0.00568 1 U U   | 0.005 1 < U  | 0.006 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  |
| VOLATILES  | 1,1,2,2-Tetrachloroethane      |   | 0.00568 1 U U   | 0.006 1 < U  | 0,006 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0,006 1 < U  | 0.006 I < U  | 0.006 1 < U  |
| VOLATILES  | 1,1,2-i nonioroeinane          | ļ   | 0.00568 1 U U   | 0.006 1 < U  | 0.025 1 < U  | 0.005 1 < 0  | 0.005 1 < U  | 0.006 1 < 0  | 0.006 1 < U  | 0,006 1 < U  |
| VOLATILES  | 1 1-Dichioroethene             |   | 0.00366 1 U U   |  |  | 0.005 1 < 0  | 0.005 1 < 0  | 0.006 1 < 1  | 0.006 1 < 0  | 0.006 1 < 1  |
| VOLATILES  | 1.1-Dichloropropena            |   | 0.00568 1 U U   | 0.000 1 4 0  | 0.000 1 4 0  | 0,000 1 2 0  | 0.000  |  | 0.000 1 2 0  | 0.000  |
| VOLATILES  | 1,2,3 Trichlorobenzene         |   | 0.00568 1 U U   |  |  |  |  |  |  |  |
| VOLATILES  | 1,2,3-Trichloropropane         |   | 0.00568 1 U U   |  |  |  |  |  |  |  |
| VOLATILES  | 1,2,4-Trichlorobenzene         |   | 0.00568 1 U U   |  |  |  |  |  |  |  |
| VOLATILES  | 1.2.4-Trimelhylbenzene         |   | 0.00568 1 U U   |  |  |  |  |  |  |  |
| VOLATILES  | 1,2-Dibramo-3-chloropropane    |   | 0.00568 1 U U   |  |  |  |  |  |  |  |
| VOLATILES  | 1,2-Dibromosthane              |   | 0.00568 1 U U   |  |  |  |  |  |  |  |
| VOLATILES  | 1,2-Dichlorobenzene            |   | 0.00568 1 U U   |  |  |  | 6.005 / J  | A 405 ( ) ()   |  | 5 500 A  |
| VOLATILES  | 1.2-Dichloroethere             |   | 0,00568 1 0 0   | 0.006 1 < 0  | 0.006 1 < 0  | 0.005 1 < 0  | 0.005 1 < 0  |  | 0.006 1 < 0  |  |
| VOLATILES  | 1.2-Dichloropropage            |   | 0.00568 1 11 11   | 0.006 1 < U  | 0.006 1 < 0  | 0.005 1 < U  | 0.005 1 < 0  | 0.006 1 < 0  | 0.008 1 < 0  | 0.008 1 < 0  |
| VOLATILES  | 1.2-Dimethylbenzene (o-Xylene) | ł   | 0.00568 1 U U   | 0.000  | 0.000  | 4.440 · · · · ·  | 0.000 1 4 0  | 0000   |  |  |
| VOLATILES  | 1.3,5-Trimethylbenzene         |   | 0.00568 1 U U   |  |  |  |  |  |  |  |
| VOLATILES  | 1 3-Dichlorobanzena            |   | 0.00568 1 U U   |  |  |  |  |  |  |  |
| VOLATILES  | 1,3-Dichloropropane            | ł   | 0.00568 t U U   |  |  |  |  |  |  |  |
| VOLATILES  | 1,4-Dichlorobenzene            |   | 0.00568 1 U U   |  |  |  |  |  |  |  |
| VOLATILES  | 2,2-Dichloropropane            |   | 0.00568 1 U U   |  |  |  |  |  |  |  |
| VOLATILES  | 2-Butanone                     |   | 0.0114 1 U U  | 0,12 1 < U   | 0,11 1 < U   | 0.1 1 < U  | 0.11 1 < U   | 0.12 1 < U   | 0.11 1 < U   | 0.12 t < U   |
| VOLATILES  | 2-Chloroethyl vinyl ether      |   | 0.0114 1 U U  |  |  |  |  |  |  |  |
| VOLATILES<br>VOLATILES   |                                |   | 0.00568 1 U U   | 0.050 (  | 0.0F7 1  | A 07 ( ) 1   |  | A 44 4 4 4 1   | D.000 A  | A ATO 1 4  |
| VULATILES  | 2-mexandria                    | I   | 0.0114 1 U U  | 0.059 1 < 0  | 0.057 1 < U  | 0.05 1 < 0   | U.U54 1 < U  | 0.06 1 < 0   | 0.035 1 < 0  | 0.058 1 < 0  |

Shaw Environmental, Inc. 00066165

|                        |   |                   |                   | <b></b>                   |                  |                        |                  |                  |                 | 00000            |
|------------------------|---|-------------------|-------------------|---------------------------|------------------|------------------------|------------------|------------------|-----------------|------------------|
|                        |   | 0                 |                   | logi<br>In Seite in Seite | e 3-69<br>  S    | alimba di sedila Grana |                  |                  |                 |                  |
|                        |   | Cor               | icentrations of C | nemicals in Sol           | Samples Asso     | clated with Sum        | ib 06a           |                  |                 |                  |
| LOCATION _CODE         |   | 35SUMP059-SB01    | 35SUMP069-SB01    | LH-DL89-01                | LH-S69-01        | LH-S69-01              | LH-569-01        | LH-S69-01        | LH-569-02       | LH-S69-02        |
| SAMPLE_NO              |   | 35-SMP069-SB01-01 | 35-SMP069-SB01-02 | LH-DL69-01                | LH-\$69-01 QC    | LH-S69-01_1            | LH-S69-01_2      | LH-S69-01_3      | LH-\$69-02_1    | LH-S69-02_2      |
| SAMPLE_DATE            |   | 9/21/2006         | 9/21/2006         | 6/26/1993                 | 6/26/1993        | 6/26/1993              | 6/26/1993        | 6/26/1993        | 6/26/1993       | 6/26/1993        |
| DEPTH                  |   | 0.5 - 0.5 FI      | 6.5 + 6.5 Ft      | 2.5 - 3 Ft                | 0.5 - 1.5 Ft     | 0.5 - 1.5 Ft           | 4 • 4.5 F1       | 5.5 - 6 Fl       | 0.5 - 1.5 Fl    | 4.5 - 6 Ft       |
| SAMPLE_PURPOSE         |   | REG               | REG               | REG                       | FD               | REG                    | REG              | REG              | HEG             | REG              |
| Tesl Group             | Parameter (Units ≂ mg/kg)                     | Result DIL LQ VQ  | Result DIL LO VO  | Result DIL LO VO          | Result DIL LO VO | Result DIL LQ VO       | Result OIL LO VO | Hesuit DIL LO VO | Hesun Dil LO VO | Hesult DIL LO VO |
| VOLATILES              | 4-Chlorotoluena                               |                   | 0.00568 1 1 0     |                           |                  |                        |                  | 047 ( . V        | A42 4 . 12      | 0.12 1 - 11      |
| VOLATILES              | Acetone                                       |                   | 0.0114 1 0 0      | 0,12 1 < 0                | 0.11 1 4 0       | 0.1 1 2 0              | 0,11 1 < U       | 0,12 1 < 0       | 0.00 1 - 1      |                  |
| VOLATILES              | Benzene                                       |                   | 0.00568 1 0 0     | 0.006 1 < 0               | 0.006 1 < 0      | 0.005 1 < 0            | 0.005 } < 0      | 0.006 1 < 0      | 0.000 1 < 0     | 0.000 1 4 0      |
| VOLATILES<br>VOLATILES |   |                   |                   |                           |                  |                        |                  |                  |                 |                  |
| VOLATILES              | promoçniorumeshane<br>Premodite la remetience |                   | 0.00568 1 U U     |                           | 6.000 1 × 11     | 0.005 1                | 0.005 1 4 11     | 0.006 1 4 11     | 0.006 ( - 1)    | 0.006 (          |
| VOLATILES              | Bromolocitickometriane                        |                   | 0.00508 1 0 0     | 0.006 1 < 0               | 0.006 1 < 0      | 0.005 1 < 0            |                  | 0.000 1 < 0      | 0.006 1 < 0     | 0.000 1 4 0      |
| VOLATILES              | Bromononia                                    |                   |                   | 0.006 1 < 0               | 0.000 1 2 0      | 0.005 1 < U            | 0.005 1 4 0      | 0.006 1 4 11     | 0.000 1 4 0     | 0.006 ( - ()     |
| VOLATILES              | Gronometriane<br>Carboo disultido             |                   | 0.0114 1 0 0      | 0.006 1 2 0               | 0.006 1 < 0      | 0.005 1 < 0            | 0.005 1 4 0      |                  | 0.000 1 4 00.0  | 0.006 1 4 0      |
| VOLATILES              | Carbon follocable tide                        |                   | 0.00568 1 0 0     | 0.000 1 < U               | 0.000 1 < 0      | 0.005 1 - U            | 0.005 1 4 1      | 0.000 / < 0      | 0.000 1 4 0     |                  |
| VOLATILES              | Carbon remachionide                           |                   | 0.00366 1 0 0     | 0.006 1 4 0               | 0,000 1 4 0      | 0.005 1 4 0            | 0.005 1 4 11     | 0.000 1 4 11     | 0.000 1 4 11    |                  |
| VOLATILES              | Chloroothano                                  |                   | 0.00306 1 0 0     | 0.000 1 4 0               | 0.006 1 4 1      |                        | 0.005 1 4 0      | 0.006 1 < 0      | 0.006 1 < 1     | 0.006 1 < 0      |
| VOLATILES              | Chloroferm                                    |                   | 0.0014 1 0 0      | 0.000 1 < 0               | 0.005 1 < 0      | 0.005 1 2 1            | 0.005 1 < /      | 0.006 1 4 11     | 0.006 1 < 1     | 0.006 1 < 0      |
| VOLATILES              | Chloromathaga                                 |                   | 0.00008 1 0 0     | 0.006 1 < U               | 0.006 1 < U      | 0.005 1 - 1            | 0.005 1 < 8      | 0.008 1 4 1      | 0.006 1 4 1     | 0.005 1 < 11     |
| VOLATILES              | circ-1 2-Dichleronthone                       |                   |                   | 0.000 1 4 0               | 0.000 1 2 0      | 9.995 1 2 9            | 0.005 1 4 6      |                  | 0.000           | 0.000 0          |
| VOLATILES<br>VOLATILES | cis-1 2-Dichlerapropaga                       |                   | 0.00568 1 0 0     | 0.000 1 × 1               | 0.006 1 - 11     | 0.005 t - B            | 0.005 5 2 11     | 0.006 1 4 11     | 0.006 3 2 11    | 0.006 1 4 11     |
| VOLATILES<br>VOLATILES | Dibramachlaramathana                          |                   | 0.00568 1 0 0     | 0.006 1 - 1               | 0.006 1 < U      | 0.005 1 2 1            | 0.005 1 4 1      | 0.006 1 < 0      | 0.006 1 < 1     | 0.005 1 < 1      |
| VOLATILES              | Dibromomethane                                |                   | 0.00568 1 0 0     | 0.000 1 1 0               | 0.000            | 0.003 / 1 0            | 0.000            | 0.000            | 0.000           |                  |
| VOLATILES              | Dickleredifunramethane                        |                   | 0.00366 1 0 0     |                           |                  |                        |                  |                  |                 |                  |
| VOLATUES               | Ethulbenzone                                  |                   | 1 1 1 99900       | 0.006 1 - 1               |                  | 0.005 3 4 11           | 0.005 1 2 11     | 0.005 1 - 11     | 0.008 1 × H     | 0.006 1 × U      |
| VOLATILES              | Hexachlarabuladiana                           |                   | 0.00568 1 0 0     | 0.000 / 0                 | 0.000            | 0.000                  | 0.003 7 4 0      | 0.000 1 4 0      | 0.000           | 0.000            |
| VOLATILES              | Isonovibenzene                                |                   | 0.00568 1 1 1     |                           |                  |                        |                  |                  |                 |                  |
| VOLATILES              | m o-Yvienos                                   |                   | 0.00568 1 1 1     |                           |                  |                        |                  |                  |                 |                  |
| VOLATILES              | Mathul icohubil kajana                        |                   | 0.000000 1 0 0    | 0.050 1 - 11              | 0.057 1 - 11     | 0.05 1 2 11            | 0.054 1 - 15     | 0.06 1 2 11      | 0.058 1 < U     | 0.059 1 < 0      |
| MOLATILES              | Methylese sheride                             |                   |                   | 0.035 1 4 0               | 0,007 1 4 0      | 0.005 1 4 11           | 0.005 1 4 11     | 0.006 1 < 0      | 0.006 1 < 1     | 0.006 1 4 6      |
| VOLATILES<br>MOLATILES | Nachthalana                                   |                   |                   | 0.000 1 4 0               | 0.000 / 0 0      | 0,003 1 4 0            | 0.000 1 4 0      | 0.000 1 4 0      | 0.000           |                  |
| VOLATILES              | n-BITVI BENZENE                               |                   | 0.00689 1 11      |                           |                  |                        |                  |                  |                 |                  |
| VOLATILES              | n-DBORVI BENZENE                              |                   | 0.00569 1 11 11   |                           |                  |                        |                  |                  |                 |                  |
| VOLATILES              | NISOPBOPYI TOLLIENE                           |                   | 0.00568 1 1 1     |                           |                  |                        |                  |                  |                 |                  |
| VOLATILES              | SAC-BITYI BENZENE                             |                   | 0.00568 1 11 11   |                           |                  |                        |                  |                  |                 |                  |
| VOLATILES              | States  |                   | 0.00568 1 [] []   | 0.006 1 - 1               | 0.005 1 2 1      | 0.005 1 < 1            | 0.005 1 < 11     | 0.006 1 × 1J     | 0.006 1 ∉ U     | 0.006 1 < U      |
| VOLATILES              | tert-SI ITVI BENZENE                          |                   | 0.00568 1 11 11   | 0.000 1 4 0               | 0.000            | 0.000                  | 0.000            |                  |                 |                  |
| VOLATILES              | Tetrachioroeibene                             |                   | 0.00568 1 1 1     | 0.006 1 - 0               | 0.006 1 < U      | 0.005 i ∈ U            | 0.005 1 < U      | 0.006 1 < U      | 0.006 1 < U     | 0.005 1 < U      |
| VOLATILES              | Toluene                                       |                   | 0.00568 1 1/ 1/   | 0.006 1 4 1               | 0.005 1 4 11     | 0.005 1 < 11           | 0.005 1 < U      | 0.005 1 < U      | 0.006 1 < U     | 0.006 1 < U      |
| VOLATILES              | Irans-1 2-Dichlomethene                       |                   | 0.00568 1 1 1     | 51000 / 4 6               |                  |                        |                  |                  |                 |                  |
| VOLATILES              | trans-1.3-Dichloropropane                     |                   | 0.00568 1 U U     | 0.006 1 < U               | 0.006 í < U      | 0.005 1 < 년            | 0.005 1 < U      | 0.006 1 < U      | 0.008 1 < U     | 0.006 i < U      |
| VOLATILES              | Trichloroethens                               |                   | 0.00568 1 U U     | 0.006 1 < U               | 0.006 1 < 1      | 0.005 1 < U            | 0.005 1 < U      | 0.006 1 < U      | 0.006 1 < U     | 0.006 1 < U      |
| VOLATILES              | Trichlorofuoromethane                         |                   | 0.0114 1 U H      |                           |                  |                        |                  |                  |                 |                  |
| VOLATILES              | Vinvi acelale                                 |                   | 0.0114 1 U UU     |                           |                  |                        |                  |                  |                 |                  |
| VOLATILES              | Vinyl chloride                                |                   | 0.0114 1 U U      | 0.006 1 < U               | 0.006 1 < U      | 0.005 1 < U            | 0.005 1 < U      | 0.006 i < U      | 0.006 1 < U     | 0.005 1 < U      |
| VOLATILES              | Xvlenes, Total                                |                   |                   | 0.006 1 < U               | 0.006 1 < U      | 0.005 1 < U            | 0.005 1 < U      | 0.006 1 < U      | 0,006 1 < 0     | 0.006 1 < U      |
|                        | · · · · · · · · · · · · · · · · · · ·         |                   |                   |                           |                  |                        |                  |                  |                 |                  |

Footnotes are shown on cover page to Tables Section.



 Table 3-70

 Concentrations of Chemicals In Soil Samples Associated with Sump 070

| (SUMP] = SUMP070                |                               |                  |                  |                  |                  |                       |                         |  |                 | 111 220 42       | 111 070 00        |
|---------------------------------|-------------------------------|------------------|------------------|------------------|------------------|-----------------------|-------------------------|--|-----------------|------------------|-------------------|
| LOCATION _CODE                  |                               | 35SUMP070-SB01   | 35SUMP070-SB02   | 35SUMP070-SB02   | 47SB23           | 475823                | LHS-3-02                | LH-S70-01                                      | LH-570-01       | LH-S70-02        | 10002             |
| SAMPLE_NO                       |                               | 35-SMP70-SB01-02 | 35-SMP70-SB02-01 | 35-SMP70-SB02-02 | 47\$823(0-0_5)   | 47SB23(1-2)           | LHS-3-02                | UH-570-01_1                                    | UH-570-01_2     | 204/10/02_1      | 7/04/1000         |
| SAMPLE_DATE                     |                               | 9/14/2006        | 9/14/2005        | 9/14/2006        | 6/3/2000         | 6/3/2000              | 1/9/1895                | 7724(1993                                      | 7/24/1993       | A 5 3 5          | 7.05              |
| DEPTH                           |                               | 8 - 8 Fl         | 0.5 - 0.5 FI     | 8 - 8 Fl         | 0-0,5 Ft         | 1-2 FL                | 0-0,5 Pt                | 9.5 - 2 -                                      | 7-3-C           | 0.3 * 2 * 1      | 9FG               |
| SAMPLE_PURPOSE                  |                               | REG              | REG              | HEG              | REG              | HEG<br>Drawk DH LO VO | HEU<br>Brault Oll LO VO | Registre I I I I I I I I I I I I I I I I I I I | Breut Dil LO VO | Result Did LO VO | Result OIL LO VO  |
| Test Group                      | Parameter (Units = mg/kg)     | Result DIL LQ VO | Result DIL LO VQ | Hesuli Dil La Va | Hesuli DIL LO VO | Hesuit DIL LO VO      | Hesula DIL LU VU        | Hespit Die Log Vo                              |                 |                  | Hoddin pie eta ta |
| EXPLOSIVES                      | 1.3,5-1 milrobenzene          |                  |                  |                  |                  |                       | 0.22 1 < 0              |  |                 |                  |                   |
| EXPLUSIVES                      | 1,3-UIRIITODENZENG            |                  |                  |                  |                  |                       | 0.22 1 C U              |  |                 |                  |                   |
| EXPLUSIVES                      | 2,4,6+1190(D000000            |                  |                  |                  |                  |                       | 0.22 1 < 1              | 0.33 1 c U                                     | 0.33 1 < U      | 0.33 t < U       | 0.33 1 < U        |
| EXPLUSIVES                      | 2.4 Disitratelyana            |                  |                  |                  |                  |                       | 0.22 1 < U              | 0.33 1 < U                                     | 0.33 1 < U      | 0.33 t < U       | 0.33 1 < U        |
| EXPLUSIVES                      | A. Aming. 2 B. digitratelyane |                  |                  |                  |                  |                       | 0.46 1 < 1              |  |                 |                  |                   |
| EXPLOSIVES                      | HMY                           |                  |                  |                  |                  |                       | 21 < U                  |  |                 |                  |                   |
| EXPLOSIVES                      | m-Nitrotoluene                |                  |                  |                  |                  |                       | 0.93 1 < U              |  |                 |                  |                   |
| EXPLOSIVES                      | Nirobenzene                   |                  |                  |                  |                  |                       | 0.24 1 < U              |  |                 |                  |                   |
| EXPLOSIVES                      | o-Nitrotoluene                |                  |                  |                  |                  |                       | 0.93 1 < U              |  |                 |                  |                   |
| EXPLOSIVES                      | p-Nitrololuena                |                  |                  |                  |                  |                       | 2.8 1 < U               |  |                 |                  |                   |
| EXPLOSIVES                      | RDX                           |                  |                  |                  |                  |                       | 11 < ⊍                  |  |                 |                  |                   |
| EXPLOSIVES                      | Tetryl                        |                  |                  |                  |                  |                       | 0,69 1 < U              |  |                 |                  |                   |
| METALS                          | Aluminum                      | 7520 1           | 5700 1           | 6620 1           |                  |                       | 14100 1                 | 17000 1 < U                                    | 11900 î < U     | 7150 1 < U       | 8330 1 < V        |
| METALS                          | Antimony                      | 0.107 1 U        | 0.106 1 U        | 0.107 1 U        |                  |                       | 17.2 1 < UJ             | 31 < U   | 31 < U          | 3 1 < U          | 3 1 < U           |
| METALS                          | Arsenic                       | 0.32 1 U         | 1.12 1           | 0.322 f U        |                  |                       | 4.4 1 J                 | 3.1 1  | 1.4 1           | 1.6 1            | 2 1               |
| METALS                          | Barium                        | 35.1 1           | 74.2 1           | 35.1             |                  |                       | 117 1                   | 102 1  | 77.5 1          | 49.6 1           | 173 1             |
| METALS                          | Beryllium                     | 0.789 1          | 0.387 1          | 0.629 1          |                  |                       |                         |  |                 |                  |                   |
| METALS                          | Cadmium                       | 0.126 t J J      | 0.174 1 J J      | 0.0733 1 J J     |                  |                       | 1.7 1 < U               | 11 < U   |                 | 11 < U           | 11 < U            |
| METALS                          | Calcium                       | 1190 t           | 928 1            | 1040 1           |                  |                       | 1460 1                  | 1820 1   | 1100 1          | 1020 1           | 1210 1            |
| METALS                          | Chromium                      | 9.42 1           | 10,1 1           | 7.77 1           |                  |                       | 14,6 1 J                | 19,1 1   | 17 1            | 9.6 1            | 13.2 1            |
| METALS                          | Cobali                        | 23.6 1           | 4.96 1           | 4.74             |                  |                       | 8 1                     | 7.5  | 12.8            | 20 1             | 25 1              |
| METALS                          | Copper                        | 4,7 1            | 5.07             | 2.49             |                  |                       | 9.5 1                   | 16700 1 2 11                                   | 1 P             | 7940 1 2 11      | 10800 1 c U       |
| METALS                          | iron                          | 6990             | 8130             | 4720             |                  |                       | 26.4 1                  | 15/00 1 2 0                                    | 27 1            | 38 1             | 44 1              |
| METALS                          | Lead                          | 4,45             | 17 1             | 1.51             |                  |                       | 20.4 1                  | 1120 1   | 1670 1          | 352 1            | 972 1             |
| METALS                          | Magnesium                     | 146 1            | 921 1            | 1070 1           |                  |                       | 273 1                   | 175 1  | 261 1           | 96.1 1           | 147 1             |
| METALS                          | Manganese                     | 0.0110 1 1 2     | 0.0235 ( 1 1     | 0.249 1 11       |                  |                       | 0.21 1 < 0              | 0.1 1 < 0                                      | 0.1 1 < U       | 0.1 1 < U        | 0.1 1 < U         |
| METALS                          | histol                        | 196 1            | 304 1            | 19 1             |                  |                       |                         |  | ••••            |                  |                   |
| METALS                          | Potessium                     | 520 1            | 224              | 331 1            |                  |                       | 686 1                   | 1010 1   | 776 1           | 370 1            | 486 1             |
| METALS                          | Selenium                      | 0.309 1          | 0.247 1          | 0.215 1 U        |                  |                       | 0.46 1 J                | 11 < U   | 11 < 1          | 11 d U           | 0.1 1 < U         |
| METALS                          | Silver                        | 1.69 1 U         | 1.54 F U         | 1.59 I U         |                  |                       | 26.9 1                  | 11 < U   | 11 < U          | 11 < U           | 0.1 1 < U         |
| METALS                          | Sodium                        | 813 1            | 16.8 1 J J       | 667 1            |                  |                       |                         |  |                 |                  |                   |
| METALS                          | Strontium                     |                  |                  |                  |                  |                       | 17.2 1 < U              | 20.4 1   | 32.5 \$         | 8.5 1            | 23.1 1            |
| METALS                          | Thallium                      | 0.0569 1         | 0.0495 1         | 0.0447 1         |                  |                       | 85.9 1 < U              |  |                 |                  |                   |
| METALS                          | Vanadium                      | 9.25 t           | 17.9 1           | 4.98 1           |                  |                       |                         |  |                 |                  |                   |
| METALS                          | Zinc                          | 68.6             | 24.6 1           | 29.4 1           |                  |                       | 59 1                    | 31.6 1   | 49,1 1          | 11.8 1           | 25.7 1            |
| PERC                            | Perchlorate                   |                  |                  |                  | 0.0196 1         | 0.00642 1 < U         |                         |  |                 |                  |                   |
| SEMIVOLATILES                   | 1,2,4-Trichlorobenzene        |                  |                  |                  |                  |                       | 0.68 1 < U              | 0.33 1 < U                                     | 0.33 1 < U      | 0,33 1 < U       | 0.33 1 < 0        |
| SEMIVOLATILES                   | 1.2-Dichlorobenzene           |                  |                  |                  |                  |                       | 0.68 1 < U              | 0.33 1 < 0                                     | 0.33 1 < 0      | 0.33 1 < U       | 0.33 1 < 0        |
| SEMIVOLATILES                   | 1,3-Dichlorobenzene           |                  |                  |                  |                  |                       | 0.68 1 < 0              | 0.33 1 < 0                                     | 0.33 1 < 0      | 0.33 1 4 0       | 0.33 1 < 0        |
| SEMIVOLATILES                   | 1,4-Dichlorobenzene           |                  |                  |                  |                  |                       | 0.68 1 < U              | 0.33 1 < 0                                     | 0.33 1 4 0      | 0.33 1 2 0       | 1.65 1 - 11       |
| SEMIVOLATILES                   | 2,4,5 Trichlorophenol         |                  |                  |                  |                  |                       | 3.4 1 < 0               | 1.00 I < U                                     | 1.00 I K V      | 000 1 4 0        | 0.99 t - 11       |
| SEMIVOLATICES                   | 2,4,6-1 RCNorophenol          |                  |                  |                  |                  |                       | 0.00 1 < 0              | 0.33 1 4 1                                     | 0.03 1 < 0      | 0.00 1 4 1       | 0.33 1 < 1        |
| SEMIVOLATILES                   | 2,4-Ulchiorophenol            |                  |                  |                  |                  |                       |                         | 0.33 1 < 0                                     | 0.33 1 2 11     | 0.33 1 2 1       | 0.33 1 < U        |
| SEMIVOLATILES<br>SELLIVOLATILES | 2,4-Dimetriyiphenoi           |                  |                  |                  |                  |                       | 34 1 < 1                | 185 1 - 11                                     | 1.65 1 < 1      | 1.65 1 c U       | 1.65 1 < U        |
| SEMIVOLATILES                   | 2.4 Distrotekone              |                  |                  |                  |                  |                       |                         |  |                 |                  |                   |
| SEMIVOLATILES                   | 2 6-Dinitrolokene             | 1                |                  |                  |                  |                       | 0.68 1 < 1              |  |                 |                  |                   |
| SEMIVOLATILES                   | 2-Chloronaphihalepe           |                  |                  |                  |                  |                       | 0.68 1 < U              | 0.33 1 < U                                     | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES                   | 2-Chlorophenol                |                  |                  |                  |                  |                       | 0,68 1 < U              | 0.33 1 < U                                     | 0.33 1 < U      | 0.33 î < U       | 0.33 1 < U        |
| SEMIVOLATILES                   | 2-Melhvinaphthalene           | ļ                |                  |                  |                  |                       | 0.6B 1 < U              | 0.33 1 < U                                     | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < V        |
| SEMIVOLATILES                   | 2-Methylphenol                |                  |                  |                  |                  |                       | 0.68 1 < U              | 0.33 1 < U                                     | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES                   | 2-Nitroanitine                |                  |                  |                  |                  |                       | 3.4 1 < U               | 1,65 1 < U                                     | 1.65 1 < U      | 1.65 1 < 빈       | 1.65 f < U        |
| SEMIVOLATILES                   | 2-Nitrophenol                 |                  |                  |                  |                  |                       | 0.68 1 < U              | 0.33 1 < U                                     | 0.33 1 < Ü      | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES                   | 3.3'-Dichlorobenzidine        |                  |                  |                  |                  |                       | 1,4 1 e U               | 0.85 1 < U                                     | 0.65 1 < U      | 0.65 1 < U       | 0.65 1 < U        |
| SEMIVOLATILES                   | 3-Niroaniine                  | ļ                |                  |                  |                  |                       | 3,4 1 < U               | 1.65 1 < U                                     | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U        |
|                                 |                               |                  |                  |                  |                  |                       |                         |  |                 |                  |                   |



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

00066167

|                |   |                  |                  |                  | Table 3-               | 70               |               |         |                  |                           |                          |                  |
|----------------|---|------------------|------------------|------------------|------------------------|------------------|---------------|---------|------------------|---------------------------|--------------------------|------------------|
|                |   |                  | Concent          | trations of Cher | nicals in Soil Sa      | mples Associate  | ed with Sum   | ip 070  |                  |                           |                          |                  |
| LOCATION _CODE |   | 35SUMP070-SB01   | 35SUMP070-\$802  | 35SUMP070-SB02   | 47SB23                 | 47\$B23          | LHS-3-02      |         | LH-S70-01        | LH-S70-01                 | LH-S70-02                | LH-570-02        |
| SAMPLE_NO      |   | 35-SMP70-SB01-02 | 35-SMP70-SB02-01 | 35-SMP70-SB02-02 | 47SB23(0-0_5)          | 475623(1-2)      | LHS-3-02      |         | LH-\$70-01_1     | LH-\$70-01_2<br>7/24/1002 | LH-570-02_1<br>7/94/1003 | 104/1002_2       |
| SAMPLE_DATE    |   | 9/14/2005        | 9/14/2005        | 9/14/2005        | 6/3/2000<br>0 - 0 5 E) | 5.25             | 0.05 Ft       |         | 0.5 - 2 Ft       | 7 - 9 Fl                  | 0.5 + 2 FI               | 7 9 Ft           |
| SAMPLE PURPOSE |   | BEG              | REG              | BEG              | REG                    | REG              | REG           |         | REG              | REG                       | REG                      | REG              |
| Test Group     | Parameter (Units = mg/kg)                   | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO       | Result DIL LO VO | Result DIL LQ | VQ      | Result DIL LO VO | Result DIL LO VO          | Result DIL LO VO         | Result DIL LO VO |
| SEMIVOLATILES  | 4.6-Dinitro-2-methylphenol                  |                  |                  |                  |                        |                  | 3.4 1 <       | Ü       | 1.65 1 < U       | 1.65 1 < U                | 1.65 1 < Ų               | 1.65 1 < U       |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether                  |                  |                  |                  |                        |                  | 0,68 1 <      | U       | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | 4-Chloro-3-methylphenöl                     |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0.65 1 < U       | 0.65 1 < U                | 0.65 1 < 0               | 0.65 1 < U       |
| SEMIVOLATILES  | 4-Chlorosorine                              |                  |                  |                  |                        |                  | 0.65 1 <      | U<br>11 | 0.00 1 < 0       | 0.65 1 < 0                | 0.03 1 < 1               | 0.03 1 4 0       |
| SEMINOLATILES  | 4-Gridophanyi pianyi easr<br>4-Matovinbenni |                  |                  |                  |                        |                  | 0.58 1 <      | ŭ       | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | 4-Nitroaniline                              |                  |                  |                  |                        |                  | 3.4 1 <       | Ū       | 1.65 1 < U       | 1,65 1 < U                | 1,65 1 < U               | 1.65 1 < U       |
| SEMIVOLATILES  | 4-Nitrophenol                               |                  |                  |                  |                        |                  | 3.4 1 <       | u       | 1.65 1 < U       | 1.65 î < U                | 1,65 î < U               | 1,65 1 < U       |
| SEMIVOLATILES  | Acenaphinene                                |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0.33 .1 < U      | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Acenaphihylene                              |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0.33 1 < U       | 0.33 1 < U                | 0,33 1 < U               | 0.33 { < U       |
| SEMIVOLATILES  | Anthracene                                  |                  |                  |                  |                        |                  | 0,68 1 <      | U       | 0,33 1 < U       | 0.33 1 < U                | 0.33 1 < 0               | 0.33 1 < 0       |
| SEMIVOLATILES  | Benzo(a)Bninracene                          |                  |                  |                  |                        |                  | 0.68 1 <      | ы<br>11 | 0.33 1 < U       | 0.33 1 < 0                | 0.33 1 4 0               | 0.33 1 2 1       |
| SEMIVOLATILES  | Benzofb)Buoranthene                         |                  |                  |                  |                        |                  | 0.11 1        | J       | 0.33 1 < U       | 0.33 1 < 0                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Benzo(ghi)perviene                          |                  |                  |                  |                        |                  | 0.68 1 <      | Ū       | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Benzo(k)fluoranthene                        |                  |                  |                  |                        |                  | 0,68 1 <      | Ų       | 0.33 1 < U       | 0.33 1 < U                | 0,33 1 < Ų               | 0.33 1 < U       |
| SEMIVOLATILES  | Benzoic Acld                                |                  |                  |                  |                        |                  | 3.4 1 <       | U       | 1.65 1 < U       | 1.65 1 < U                | 1.65 1 < U               | 1.65 1 < U       |
| SEMIVOLATILES  | Benzyl Alcohol                              |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0.65 1 < U       | 0.65 1 < U                | 0.65 1 < U               | 0.65 1 < U       |
| SEMIVOLATILES  | his{2-Chloroethoxy)methane                  |                  |                  |                  |                        |                  | 0.58 1 <      | U       | 0.33 1 < 0       | 0.33 1 < 0                | 0.33 1 < U               | 0.33 1 < 0       |
| SEMIVOLATILES  | bis(2-Chloroethyi)ether                     |                  |                  |                  |                        |                  | 0.68 1 <      | 11      | 0.33 1 < U       | 0.33 1 < 0                | 0.33 1 < 1               | 0.33 1 < 0       |
| SEMIVOLATILES  | his/2-Criotolsopropyjetriei                 |                  |                  |                  |                        |                  | 0.68 1 <      | 0       | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Butvi banzvi obihalata                      |                  |                  |                  |                        |                  | 0.68 1 <      | Ū       | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Chrysene                                    |                  |                  |                  |                        |                  | 0.11 1        | J       | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene                      |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Oibenzoluran                                |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0.33 1 < U       | 0,33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Diathyl phthalate                           |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Dimethyl ohthalate                          |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0,33 1 < U       | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < 0       |
| SEMIVOLATILES  | di-n-Ochi obtholato                         |                  |                  |                  |                        |                  | 0.68 1 <      | 0       | 0.33 1 < 0       | 0.33 1 < 0                | 0.33 1 4 0               | 0.33 1 ¢ U       |
| SEMIVOLATILES  | Fluoranthene                                |                  |                  |                  |                        |                  | 0.18 1        | 1       | 0.33 1 < U       | 0.33 1 < U                | 0.33 f < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Fluorena                                    |                  |                  |                  |                        |                  | 0.68 1 <      | Ū.      | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Hexachlorobenzene                           |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0,33 1 < U       | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Hexachlorobuladiene                         |                  |                  |                  |                        |                  | 0.68 i <      | U       | 0.33 1 < U       | 0.33 1 < U                | 0.33 î < U               | 0,33 1 < U       |
| SEMIVOLATILES  | Hexachlorocyclopentadiene                   |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0,33 1 < U       | 0.33 1 < U                | 0.33 f < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Hexachloroethane                            |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0.33 1 < 0       | 0.33 1 < 0                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | indeno(1,2,3-cd)pyrene                      |                  |                  |                  |                        |                  | 0.65 1 <      | U<br>11 | 0.33 1 < 0       | 0.33 1 < 0                | 0.33 1 < 0               | 0.33 1 < 0       |
| SEMIVOLATILES  | Nachthalene                                 |                  |                  |                  |                        |                  | 0.68 1 <      | ŭ       | 0.33 1 < 0       | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Nirobenzena                                 |                  |                  |                  |                        |                  | 0.68 1 <      | Ū       | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine                  |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0.33 1 < Ü       | 0.33 i < U                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | n-Nitrosodiphenylamine                      |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0,33 1 < U       | 0.33 1 < U                | 0,33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Pentachlorophenol                           |                  |                  |                  |                        |                  | 3.4 1 <       | Ų       | 1.65 1 < U       | 1.65 1 < U                | 1,65 1 < U               | 1.65 i < U       |
| SEMIVOLATILES  | Phenanthrène                                |                  |                  |                  |                        |                  | 0.68 1 <      | 0       | 0.33 1 < U       | 0.33 1 < 0                | 0.33 1 < U               | 0.33 1 < U       |
| SEMIVOLATILES  | Phenol                                      |                  |                  |                  |                        |                  | 0.68 1 <      | U       | 0.33 1 < U       | 0.33 1 < 0                | 0.33 1 < 0               | 0.33 1 < 0       |
| TRY            | TOTAL HYDROCARBONS"                         |                  |                  |                  |                        |                  | 0.10          | Ļ       | 55 1 × 0         | 27 1                      | 43 1                     | 27 1             |
| VOLATILES      | 1.1.1.2-Tetrachloroelhane                   |                  |                  |                  |                        |                  | 0.021 1 <     | U       |                  | -                         |                          | -                |
| VOLATILES      | 1,1,1-Trichloroethane                       |                  |                  |                  |                        |                  | 0.01 1 <      | U       | 0.032 1          | 0.123 1                   | 0.005 1 < U              | 0.005 1 < U      |
| VOLATILES      | 1.1.2.2-Tetrachloroethane                   |                  |                  |                  |                        |                  | 0.01 1 <      | V       | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U              | 0.005 î < U      |
| VOLATILES      | 1.1.2-Trichlomethane                        | 1                |                  |                  |                        |                  | 0.01 1 <      | U       | 0.005 1 < U      | 0,005 1 < U               | 0.005 1 < U              | 0.005 f. < U     |
| VOLATILES      | 1,1-Dichlorosthans                          |                  |                  |                  |                        |                  | 0.01 1 <      | U<br>   | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U              | 0.005 1 < U      |
| VOLATILES      | 1,1-Dichloroethene                          |                  |                  |                  |                        |                  | 0.01 1 <      | U       | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U              | 0.005 1 < U      |
| VOLATILES      | 1.2,3+1 rcnioropropane                      |                  |                  |                  |                        |                  | 0.021 1 <     | U U     |                  |                           |                          |                  |
| VOLATILES      | 1.2-Dibromoelhane                           |                  |                  |                  |                        |                  | 0.041 1 <     | มี      |                  |                           |                          |                  |
| VOLATILES      | 1,2-Dichloroelhane                          | 1                |                  |                  |                        |                  | 0.01 1 <      | Ū       | 0.005 1 < U      | 0.005 1 < U               | 0,005 1 < U              | 0.005 1 < U      |
| VOLATILES      | 1.2-Dichloroethene *                        |                  |                  |                  |                        |                  | 0.01 1 <      | U       | 0.005 1 < U      | 0,005 1 < 0               | 0.005 1 < U              | 0.005 f < U      |

-

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

| ** | ironmonial ir |  |
|----|---------------|--|
|    | 2             |  |
|    |               |  |

| Table 3-70   |
|--|
| Concentrations of Chemicals in Soll Samples Associated with Sump 070 |

| LOCATION _CODE<br>SAMPLE NO |                             | 35SUMP070-SB01<br>35-SMP70-SB01-02 | 35SUMP070-S802<br>35-SMP70-S802-01 | 35SUMP070-SB02<br>35-SMP70-SB02-02 | 47SB23<br>47SB23(0-0 5) | 475B23<br>475B23(1-2) | LHS-3-0<br>LHS-3-0 | 2     | LH-S70<br>LH-S70- | -01<br>01_1 | ·      | LH-\$70-<br>H-\$70-( | 01    | ւ։<br>Լե | 1-\$70-0<br>\$70-02 | 2_1  | LR-:<br>LH-\$ | 970-02<br>70-02_2 |          |
|-----------------------------|-----------------------------|------------------------------------|------------------------------------|------------------------------------|-------------------------|-----------------------|--------------------|-------|-------------------|-------------|--------|----------------------|-------|----------|---------------------|------|---------------|-------------------|----------|
| SAMPLE_DATE                 |                             | 9/14/2006                          | 9/14/2006                          | 9/14/2006                          | 6/3/2000                | 6/3/2000              | 1/9/199            | 5     | 7/24/15           | 93          |        | 7/24/19              | 93    | 7/       | 24/1993             | 1    | 7/2           | /1993             |          |
| DEPTH                       |                             | 8 • 8 Ft                           | 0.5 - 0.5 FI                       | 8 - 8 FI                           | 0 - 0.5 Ft              | 1 • 2 F1              | 0 - 0.5 F          | -     | 0.5 - 2           | FL          |        | 7 • 9 P              | t t   | 0        | .5 - 2 Ft           |      | 7             | 9 Ft              |          |
| SAMPLE_PURPOSE              |                             | REG                                | REG                                | REG                                | REG                     | REG                   | REG                |       | REC               | i           |        | REG                  |       |          | REG                 |      | F             | IEG               |          |
| Test Group                  | Parameter (Units = mg/kg)   | Result DIL LO VO                   | Result DIL LO VO                   | Result DIL LO VO                   | Result DIL LO VO        | Result OIL LO VO      | Result DIL         | LO VO | Result Di         | L LO VI     | Q Resi | JI DIL               | LO VO | Result   | DIL                 | a va | Result        | DI IO             | VQ       |
| VOLATILES                   | 1,2-Dichloropropane         |                                    |                                    |                                    |                         |                       | 0.01 1             | < U   | 0.005 1           | < 1         | 0.0    | )5 1                 | < 0   | 0.005    | 1                   | < 0  | 0.005         | 1 <               | U        |
| VOLATILES                   | 2-Butanone                  |                                    |                                    |                                    |                         |                       | 0.021 1            | < U   | 0.05 1            | < l         | J 0.0  | 1 20                 | < U   | 0.05     | 1                   | < U  | 0.05          | i <               | U        |
| VOLATILES                   | 2-Chioroethyl vinyl ether   |                                    |                                    |                                    |                         |                       |                    |       | 0.01 1            | < L         | J 0.   | )t t                 | < 0   | 0.01     | 1                   | < U  | 0.01          | 1 <               | U        |
| VOLATILES                   | 2-Hexanone                  |                                    |                                    |                                    |                         |                       | 0.021 1            | < U   | 0.05 1            | < 1         | 0.0    | )5 1                 | < U   | 0.05     | 1                   | < U  | 0.05          | t <               | υ        |
| VOLATILES                   | 2-Propanal                  |                                    |                                    |                                    |                         |                       | 1 1                | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Acetone                     |                                    |                                    |                                    |                         |                       | 0.021 1            | < U   | 0,1 1             | < ل         | , 0    | d 1                  | < U   | 0.1      | 1                   | < ປ  | 0.1           | 1 <               | Ų        |
| VOLATILES                   | Acetonitrile                |                                    |                                    |                                    |                         |                       | 0.21 1             | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Acrylonitrile               |                                    |                                    |                                    |                         |                       | 0.21 1             | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Aliyi chloride              |                                    |                                    |                                    |                         |                       | 0.041 1            | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Benzene                     |                                    |                                    |                                    |                         |                       | 0.01 1             | < U   | 0.005 1           | < L         | 0.0 L  | 05 1                 | < U   | 0.005    | 1                   | < ک  | 0.005         | 1 <               | U        |
| VOLATILES                   | Bromodichloromethane        |                                    |                                    |                                    |                         |                       | 0,01 1             | < U   | 0.005 1           | < L         | 0.0    | 05 1                 | < U   | 0.005    | 1                   | < U  | 0.005         | 1 <               | Ų        |
| VOLATILES                   | Bramolorm                   |                                    |                                    |                                    |                         |                       | 0.01 1             | < U   | 0.005 1           | < i         | 0.0    | 05 1                 | < V   | 0.005    | 1                   | < Ų  | 0.005         | 1 <               | U        |
| VOLATILES                   | Bromomethane                |                                    |                                    |                                    |                         |                       | 0.021 1            | < U   | 0.01 1            | < i         | J 0.   | 21 1                 | < U   | 0,01     | 1                   | < U  | 0.01          | 1 <               | U        |
| VOLATILES                   | Carbon disullide            |                                    |                                    |                                    |                         |                       | 0.01 1             | < U   | 0.005             | < (         | ) 0.04 | 5 1                  | < U   | 0.005    | 1                   | < U  | 0.005         | 1 <               | U        |
| VOLATILES                   | Carbon tetrachloride        |                                    |                                    |                                    |                         |                       | 0.01 1             | < U   | 0.005             | ι           | J 0,0  | 5 1                  | ح U   | 0.005    | 1                   | < U  | 0.005         | 1 <               | U        |
| VOLATILES                   | Chlorobenzené               |                                    |                                    |                                    |                         |                       | 0.01 1             | < ⊍   | 0.005 1           | εl          | J 0.0  | 05 1                 | < U   | 0.005    | 1                   | < U  | 0.005         | 1 <               | Ų        |
| VOLATILES                   | Chloroethane                |                                    |                                    |                                    |                         |                       | 0.021 1            | < U   | 0.01              | < L         | J 0.1  | 1 1                  | < Ų   | 0.01     | 1                   | < U  | 0,01          | 1 c               | U        |
| VOLATILES                   | Chloroform                  |                                    |                                    |                                    |                         |                       | 0.01 1             | < U   | 0,005 1           | < (         | 0.0    | 05 1                 | < U   | 0.005    | 1                   | < U  | 0.005         | 1 K               | υ        |
| VOLATILES                   | Chloromethane               |                                    |                                    |                                    |                         |                       | 0.021 1            | < U   | 0.01 1            | < L         | J 0,   | 01 1                 | < U   | 0.01     | 1                   | < U  | 0.01          | 1 <               | υ        |
| VOLATILES                   | Chloroprene                 |                                    |                                    |                                    |                         |                       | 0.21 1             | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | cls-1,3-Dichloropropene     |                                    |                                    |                                    |                         |                       | 0.01 1             | < U   | 0.005             | < l         | 1 0'0  | 05 1                 | < U   | 0.005    | 1                   | < U  | 0.005         | 1 <               | U        |
| VOLATILES                   | Dibromochloromethane        |                                    |                                    |                                    |                         |                       | 0.01 1             | < U   | 0.005 1           | < (         | ) 0.04 | 05 1                 | < U   | 0.005    | 1                   | < U  | 0.005         | 1 <               | U        |
| VOLATILES                   | Dibromomethane              |                                    |                                    |                                    |                         |                       | 0.021 1            | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Dichlorodilluoromethane     |                                    |                                    |                                    |                         |                       | 0.041 1            | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Ethyl methacrylate          |                                    |                                    |                                    |                         |                       | 0,041 1            | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Ethylbenzene                |                                    |                                    |                                    |                         |                       | 0.01 1             | < U   | 0,005             | < 1.        | J 0.0  | 05 1                 | < Ų   | 0.005    | 1                   | < ∪  | 0.005         | 1 <               | U        |
| VOLATILES                   | IODOMETHANE                 |                                    |                                    |                                    |                         |                       | 0,021 1            | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | ISOBUTYL ALCOHOL            |                                    |                                    |                                    |                         |                       | 4,1 1              | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Methacrylonitrile           |                                    |                                    |                                    |                         |                       | 0.041 1            | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Mathyl isobutyl katone      |                                    |                                    |                                    |                         |                       | 0.021 1            | < U   | 0,05              | < L         | 1 01   | 05 เ                 | < U   | 0.05     | 1                   | < Ų  | 0.05          | <b>، د</b>        | υ        |
| VOLATILES                   | METHYL METHACRYLATE         |                                    |                                    |                                    |                         |                       | 0.041 1            | < V   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Mathylena chloride          | }                                  |                                    |                                    |                         |                       | 0.01 1             | < U   | 0.005             | < L         | J 0.0  | 05 1                 | < U   | 0.005    | 1                   | < U  | 0.005         | 1 <               | U        |
| VOLATILES                   | Pentachloroelhane           |                                    |                                    |                                    |                         |                       | 0.041 1            | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Propionitrite               |                                    |                                    |                                    |                         |                       | 0.1 1              | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Styrene                     |                                    |                                    |                                    |                         |                       | 0,01 1             | < U   | 0.005             | i < l       | J 0.0  | 05 1                 | < U   | 0.005    | 1                   | < U  | 0.005         | 1 <               | U        |
| VOLATILES                   | Tetrachloroelhene           |                                    |                                    |                                    |                         |                       | 0.01 1             | < U   | 0.005             | < L         | 0.0    | 05 1                 | < U   | 0,005    | 1                   | < U  | 0.005         | 1 <               | U        |
| VOLATILES                   | Toluene                     |                                    |                                    |                                    |                         |                       | 0,01 1             | < 1)  | 0.005             | < (         | J 0.0  | 05 1                 | < U   | 0.005    | 1                   | < 0  | 0.005         | 1 <               | Ų        |
| VOLATILES                   | trans-1,3-Dichloropropene   |                                    |                                    |                                    |                         |                       | 0.01 1             | < U   | 0.005             | < (         | 1 0.0  | 05 1                 | < V   | 0.005    | 1                   | < 1J | 0.005         | 1 <               | U        |
| VOLATILES                   | trans-1.4-Qichloro-2-bulene |                                    |                                    |                                    |                         |                       | 0,041 1            | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Trichlorgelhene             |                                    |                                    |                                    |                         |                       | 0.01 1             | < U   | 0.005             | ં           | J 0.0  | 05 1                 | < U   | 0.005    | \$                  | < U  | 0.005         | 1 <               | Ų        |
| VOLATILES                   | Frichlorofluoromethane      |                                    |                                    |                                    |                         |                       | 0.021 1            | < U   |                   |             |        |                      |       |          |                     |      |               |                   |          |
| VOLATILES                   | Vinyl acetate               |                                    |                                    |                                    |                         |                       | 0.021 1            | < U   | 0.05              | < 1         | J 0.   | 05 1                 | < U   | 0.05     | 1                   | × U  | 0.05          | 1 4               | U        |
| VOLATILES                   | Vinyl chloride              |                                    |                                    |                                    |                         |                       | 0.021 1            | < U   | 0,01              | l           | ) 0.   | 01 t                 | < V   | 0.01     | 1                   | < U  | 0.01          | 1 <               | U        |
| VOLATILES                   | Xylenes, Total              | 1                                  |                                    |                                    |                         |                       | 0,01 1             | < U   | 0.005             | < 1         | J 0.0  | 05 t                 | < U   | 0.005    | 1                   | < U  | 0.005         | 1 <               | <u> </u> |

VOLATILES Xylenes, Total Footnotes are shown on cover page to Tables Section.

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



 Table 3-71

 Concentrations of Chemicals in Soil Samples Associated with Sump 071

| [SUMP] = SUMP071 |                            |                   |                  |                  |                   |                  |                  | · · · · · · · · · · · · · · · · · · · |                  |                  | 111.071.00       |
|------------------|----------------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|---------------------------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                            | 35SUMP071-SB01    | 35SUMP071-SB01   | LH-DL71-01       | LHS-3-01          | LH-S71-01        | LH-\$71-01       | LH-\$71-01                            | LH-571-02        | LH-S71-02        | LH-S/1-U2        |
| SAMPLE_NO        |                            | 35-SMP71-\$B01-01 | 35-SMP71-SB01-02 | LH-DL71-01       | LHS-3-01          | LH-S71-01_1      | LH-S71-01_2      | LH-S71-01_3                           | LH-S71-02_1      | LH-571-02_2      | LH-S71-02_3      |
| SAMPLE_DATE      |                            | 9/14/2005         | 9/14/2006        | 7/24/1993        | 1/9/1995          | 7/24/1993        | 7/24/1993        | 7/24/1993                             | 7/24/1993        | 7/24/1993        | 7/24/1993        |
| DEPTH            |                            | 0.5 · 0.5 FI      | 7 • 7 FI         | 2 - 3 Ft         | 0 - 0.5 Ft        | 1 - 1,5 FI       | 3 - 3.5 Ft       | 4.5 - 6 Ft                            | 1 - 1,5 Ft       | 3 - 3.5 Ft       | 5 - 6.5 Ft       |
| SAMPLE_PURPOSE   |                            | REG               | REG              | REG              | REG               | REG              | REG              | REG                                   | REG              | REG              | REG              |
| Test Group       | Parameter (Units = rng/kg) | Result DIL LO VO  | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO  | Result OIL LO VO | Result DIL LO VO | Result DIL LO VO                      | Result DIL LO VO | Result DIL LO VO | Result DIL LO VQ |
| EXPLOSIVES       | 1,3,5-Trinitrobenzene      |                   |                  |                  | 0.23 1 < U        |                  |                  |                                       | 1                |                  |                  |
| EXPLOSIVES       | 1,3-Dinitrobenzene         |                   |                  |                  | 0.23 1 < U        |                  |                  |                                       |                  |                  |                  |
| EXPLOSIVES       | 2,4,6-Trinitratoluene      |                   |                  |                  | 0.23 1 < U        |                  |                  |                                       |                  |                  |                  |
| EXPLOSIVES       | 2,4-Dinitrotoluene         |                   |                  | 0.33 1 < U       | 0.23 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| EXPLOSIVES       | 2.6-Dinitrotoluane         |                   |                  | 0.33 1 < U       | 0.25 i < U        | 0,33 i < U       | 0.33 1 < U       | 0.33 i < U                            | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       |
| EXPLOSIVES       | 4-Amina-2.6-dinitratoluane |                   |                  |                  | 0.48 t < U        |                  |                  |                                       |                  |                  |                  |
| EXPLOSIVES       | HMX                        |                   |                  |                  | 2.1 1 < U         |                  |                  |                                       |                  |                  |                  |
| EXPLOSIVES       | m-Nitrotoluene             |                   |                  |                  | 0.96 1 < U        |                  |                  |                                       |                  |                  |                  |
| EXPLOSIVES       | Nitrabenzane               |                   |                  |                  | 0.25 1 < U        |                  |                  |                                       |                  |                  |                  |
| EXPLOSIVES       | o-Nitrotaluane             |                   |                  |                  | 0.96 1 < U        |                  |                  |                                       |                  |                  |                  |
| EXPLOSIVES       | p-Nitrotaluene             |                   |                  |                  | 2.9 1 < U         |                  |                  |                                       |                  |                  |                  |
| EXPLOSIVES       | RDX                        |                   |                  |                  | 1 <b>i &lt;</b> U |                  |                  |                                       |                  |                  |                  |
| EXPLOSIVES       | Tetryt                     |                   |                  |                  | 0.71 t < U        |                  |                  |                                       |                  |                  |                  |
| METALS           | Aluminum                   |                   |                  | 17500 1 < U      | 7840 1            | 13400 1 < U      | 17000 1 < U      | 27900 1 < U                           | 19300 1 < U      | 20900 1 < U      | 16400 1 < 0      |
| METALS           | Antimony                   |                   |                  | 3 i < U          | 30.7 1 < UJ       | 3 1 < U          | 3 t < U          | 31 < U                                | 3 1 < Ų          | 31 < U           | 31 < U           |
| METALS           | Arsenic                    |                   |                  | 2.7 1            | 11.6 1 J          | 2.1              | 1.6 1            | 11 < U                                | 11 < U           | 3 1              | 11 e U           |
| METALS           | Banum                      |                   |                  | 81.8 1           | 70.5 1            | 65.4 1           | 178 1            | 364 1                                 | 131 1            | 85.8 1           | 253 1            |
| METALS           | Cadmium                    |                   |                  | 11 < U           | 3.1 1 < U         | 11 < U           | 1 1 < ∜          | 11 < U                                | 11 < U           | 11 < V           | t 1 < U          |
| METALS           | Calcium                    |                   |                  | 1500 1           | 4050 1            | 2550 1           | 4440 1           | 1520 1                                | 2260 1           | 1470 1           | 952 1            |
| METALS           | Chromium                   |                   |                  | 21.8 1           | 14,7 1 J          | 17.3 1           | 21.4 1           | 27.2 1                                | 20.6 1           | 25.6             | 18.1 1           |
| METALS           | Cobalt                     |                   |                  | 7 1              | 6.1 1 < U         | 6.4 1            | 12.2 1           | 14.2 1                                | 9.3 1            | 8.9 1            | 15.8 1           |
| METALS           | Copper                     |                   |                  | 3.7 1            | 28.2 1            | 6.2              | 17.1             | 7.8 1                                 | 5,5              | 4,4 1            | 6 1              |
| METALS           | Iron                       |                   |                  | 15100 1 < U      | 14500 i           | 14900 t < U      | 20600 1 < U      | 22400 i < U                           | 17400 i < U      | 26500 1 < U      | 16700 I < U      |
| METALS           | Lead                       |                   |                  | 7 1              | 36 1              | 12.1 1           | 12.3 1           | 11.5 1                                | 7,6 1            | 5.4 1            | 6.5 1            |
| METALS           | Magnesium                  |                   |                  | 982 1            | 521 1             | 927 1            | 905 1            | 2100 1                                | 1090 1           | 1070 1           | 1640 1           |
| METALS           | Manganese                  |                   |                  | 153 1            | 311 1 J           | 99.8 1           | 791 1            | 240 1                                 | 317 1            | 166 1            | 104 1            |
| METALS           | Mercury                    |                   |                  | 0.1 1 < U        | 0.29 1 < U        | 0.1 1 < 번        | 0.1 1 < U        | 0,1 1 < U                             | 0.1 F < U        | 0.1 1 < U        | 0.1 1 < U        |
| METALS           | Polassium                  |                   |                  | 959 1            | 613 1 < U         | 783 t            | 797 1            | 1440 1                                | 814 1            | 910 1            | 761 1            |
| METALS           | Selenium                   |                   |                  | 11 < U           | 0.61 1 J          | it < U           | 11 < U           | 11< U                                 | 11 < U           | 11 < U           | 11 < U           |
| METALS           | Silver                     |                   |                  | 11 < 0           | 3.1 1 < U         | t 1 < U          | 11 < U           | 11 < U                                | 11 < 0           | 1 I < U          | 1.1 < 0          |
| METALS           | Strontium                  |                   |                  | 15.3 1           | 30.7 1 < U        | 17 1             | 21.5             | 38.3 1                                | 22.7 1           | 18.1             | 38.1 1           |
| METALS           | Thallium                   |                   |                  |                  | 153 1 < U         |                  |                  |                                       |                  |                  |                  |
| METALS           | Zinc                       | 1                 |                  | 25.4 t           | t20 1             | 30.9 1           | 31.4 1           | 56.2 1                                | 31 1             | 26.9 1           | 41.9 1           |
| PERC             | Perchlorate                | 0.05 5 U          | 0.2 20 U         |                  |                   |                  |                  |                                       |                  |                  | ·                |
| SEMIVOLATILES    | 1,2,4 Trichlorobenzene     |                   |                  | 0.33 I < U       | 1.2 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                            | 0.33 I < U       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | 1.2-Dichlorobenzene        |                   |                  | 0.33 1 < U       | 1.2 1 ≺ U         | 0,33 t < U       | 0.33 1 < U       | 0.33 I < U                            | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | 1,3-Dichlorobenzene        |                   |                  | 0.33 I < U       | 1.2 1 < 0         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                            | 0.33 1 < 0       | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES    | 1,4-Dichlorobenzene        |                   |                  | 0.33 I < U       | 1.2 t < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < 0       | 0.33 V < U       |
| SEMIVOLATILES    | 2.4.5 Trichlarophenol      |                   |                  | 1.65 1 < U       | 6.2 t < U         | 1,65 1 < U       | 1,65 1 < U       | 1,65 1 < U                            | 1.65 1 < U       | 1,65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | 2,4.6 Trichlorophanol      |                   |                  | 0.33 1 < Li      | 1,2 1 < U         | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U                            | 0.33 1 < 0       | 0,33 \ < U       | 0.33 t < U       |
| SEMIVOLATILES    | 2.4-Dichlorophenel         | ļ                 |                  | 0.33 1 < U       | 1.2 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                            | 0.33 1 < U       | 0.33 { < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2.4-Dimethylphenol         |                   |                  | 0.33 1 < U       | 1.2 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | 2.4-Dinitrophenol          |                   |                  | 1.65 1 < U       | 6.2 1 < U         | 1.65 1 < U       | 1.65 I < U       | 1.65 1 < U                            | 1,65 1 < U       | 1.65 1 < U       | 1.65 T < U       |
| SEMIVOLATILES    | 2.4-Dinitrotoluene         |                   |                  |                  | 1.2 1 < V         |                  |                  |                                       |                  |                  |                  |
| SEMIVOLATILES    | 2,6-Dinitrotoluene         |                   |                  |                  | 1.2 1 < U         |                  |                  |                                       |                  |                  |                  |
| SEMIVOLATILES    | 2-Chioronaphthalene        |                   |                  | 0.33 1 < U       | 1.2 1 < Ų         | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Chiorophenol             |                   |                  | 0.33 1 < U       | 1.2 1 < U         | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U                            | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Methylnaphthalene        | 1                 |                  | 0.33 1 < U       | 1.2 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U                            | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Methylphenol             |                   |                  | 0.33 1 < U       | 1,2 i < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                            | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Nitroaniline             |                   |                  | 1.65 1 < U       | 6.2 t < U         | 1.65 i < U       | 1.65 1 < 비       | 1.65 1 < U                            | 1.65 1 < U       | 1,65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | 2-Nitrophenol              |                   |                  | 0.33 1 < U       | 1.2 i < U         | 0.33 I < U       | 0.33 1 < U       | 0,33 1 < U                            | 0.33 1 < U       | 0.33 1 < U       | 0.33 i < U       |
| SEMIVOLATILES    | 3.3 Dichlorobenzidine      |                   |                  | 0.65 1 < U       | 2.5 t < U         | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U                            | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES    | 3-Nitroaniline             |                   |                  | 1.65 1 < U       | 6.2 1 < U         | 1.65 1 < U       | 1,65 t < U       | 1.65 1 < U                            | 1.65 1 < U       | 1.65 t < U       | 1.65 i < U       |
| SEMIVOLATILES    | 4,5-Dinitro-2-methylphanol | 1                 |                  | 1.65 1 < U       | 6.2 1 < U         | 1.65 1 < U       | 1.65 1 ≺ U       | 1.65 I < U                            | 1.65 1 < U       | 1.65 i < U       | 1,65 1 < U       |
| SEMIVOLATILES    | 4-Bromophenyi phenyi other |                   |                  | 0.33 1 < U       | 1.2 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U                            | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       |

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



Shaw Environmental, Inc.

00066170

Page 2 of 3

Data Evaluation Report





|                |                             |  | Co               | ncentrations of        | Chemicals in So  | il Samples Associ | ated with Sump ( | 071              |                  |                  |                  |
|----------------|-----------------------------|--|------------------|------------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION CODE  |                             | 35S1 MP071-S801  | 35SUMP071-SB01   | LH-0L71-01             | LHS-3-01         | LH-S71-01         | LH-571-01        | LH-S71-01        | LH-S71-02        | LH-S71-02        | 1.H-S71-02       |
| SAMPLE NO      |                             | 35-SMP71-SB01-01   | 35-SMP71-SB01-02 | LH-DL71-01             | LHS-3-01         | LH-S71-01_1       | LH-S71-01_2      | LH-\$71-01_3     | LH-\$71-02_1     | LH-\$71-02_2     | LH-S71-02_3      |
| SAMPLE DATE    |                             | 9/14/2005  | 9/14/2006        | 7/24/1993              | 1/9/1995         | 7/24/1993         | 7/24/1993        | 7/24/1993        | 7/24/1993        | 7/24/1993        | 7/24/1993        |
| DEPTH          |                             | 0.5 - 0.5 FI   | 7 . 7 Ft         | 2 - 3 Ft               | 0 - 0.5 Ft       | 1 • 1.5 Fi        | 3 - 3.5 FI       | 4.5 • 6 Ft       | 1 - 1.5 Ft       | 3 - 3.5 Ft       | 5 - 6.5 Ft       |
| SAMPLE PURPOSE |                             | REG  | REG              | REG                    | REG              | REG               | REG              | REG              | REG              | REG              | REG              |
| Test Group     | Parameter (Units = mo/ko)   | Result DIL LQ VQ   | Result OIL LO VO | Result DIL LO VO       | Result DIL LO VO | Result DIL LO VO  | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO |
| VOLATILES      | 2-Bulanone                  | 1  |                  | 0.05 1 < U             | 0.038 1 < U      | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < 0       | 0.05 1 < U       |
| VOLATILES      | 2-Chloroethyl vinvl ether   | 1 contractions of the second s |                  | 0.01 1 < U             |                  | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 0       | 0.01 1 < 0       |
| VOLATILES      | 2-Hexanone                  |  |                  | 0.05 1 < U             | 0.038 1 < U      | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 i < U       | 0.05 1 < U       |
| VOLATILES      | 2-Propenal                  |  |                  |                        | 1.9 1 < U        |                   |                  |                  |                  |                  |                  |
| VOLATILES      | Acetone                     |  |                  | 0.1 1 < U              | 0.038 1 < U      | 0.1 i < U         | 0,1 1 < U        | 0.1 t < U        | 0.1 t < U        | 0.1 1 < ⊍        | Q.1 1 < U        |
| VOLATILES      | Acetonitrite                |  |                  |                        | 0.38 1 < U       |                   |                  |                  |                  |                  |                  |
| VOLATILES      | Acrytonitrile               |  |                  |                        | 0.38 1 < U       |                   |                  |                  |                  |                  |                  |
| VOLATILES      | Allyl chloride              |  |                  |                        | 0.075 1 < U      |                   |                  |                  |                  |                  |                  |
| VOLATILES      | Benzene                     | 1 I  |                  | 0.005 1 < U            | 0.019 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0,005 1 < U      | 0.005 1 < 0      |
| VOLATILES      | Bromodichloromethane        |  |                  | 0.005 1 < U            | 0.019 1 < U      | 0.005 i < U       | 0.005 I < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      |
| VOLATILES      | Bromotorm                   |  |                  | 0.005 1 < U            | 0.019 i < U      | 0.005 1 < U       | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | Bromomelhane                |  |                  | 0.01 t < U             | 0.038 1 < U      | 0.01 1 < Ü        | 0.01 f < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 0       | 0.01 1 < U       |
| VOLATILES      | Carbon disulfide            |  |                  | 0.005 1 < U            | 0.019 1 < U      | 0.005 f < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | Carbon tetrachipride        |  |                  | 0.005 I < U            | 0,019 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | Chlorobenzene               |  |                  | 0.005 1 < U            | 0,019 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 i < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U      |
| VOLATILES      | Chloroelhane                |  |                  | 0.01 1 < U             | 0.038 1 < U      | 0,01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0,01 1 < 0       | 0.01 1 < U       |
| VOLATILES      | Chloroform                  |  |                  | 0.005 1 < U            | 0.019 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0,005 1 < U      | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | Chipromethane               |  |                  | 0.01 1 < U             | 0.038 1 < U      | 0.01 1 < U        | 0.01 F < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U       |
| VOLATILES      | Chloroprene                 |  |                  |                        | 0.38 1 < U       |                   |                  |                  |                  |                  |                  |
| VOLATILES      | cis-1.3-Dichloropropane     |  |                  | 0.005 1 < U            | 0.019 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | Dibromochloromethane        |  |                  | 0.005 1 < U            | 0.019 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | Dibromomethane              |  |                  |                        | 0.038 1 < U      |                   |                  |                  |                  |                  |                  |
| VOLATILES      | Dichlorodilluoromelbane     |  |                  |                        | 0.076 1 < U      |                   |                  |                  |                  |                  |                  |
| VOLATILES      | Elinvi methacrylate         |  |                  |                        | 0,076 t < U      |                   |                  |                  |                  |                  |                  |
| VOLATILES      | Ethylbenzene                |  |                  | 0.005 1 < U            | 0.019 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      |
| VOLATILES      | IODOMETHANE                 |  |                  |                        | 0.038 1 < U      |                   |                  |                  |                  |                  |                  |
| VOLATILES      | ISOBUTYL ALCOHOL            |  |                  |                        | 7.6 1 < U        |                   |                  |                  |                  |                  |                  |
| VOLATILES      | Methacrylonitrile           |  |                  |                        | 0.076 1 < U      |                   |                  |                  |                  |                  |                  |
| VOLATILES      | Methyl isobutyl ketone      |  |                  | 0.05 1 < U             | 0.038 t < U      | 0.05 t < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < 0       |
| VOLATILES      | METHYL METHACRYLATE         |  |                  |                        | 0.076 1 < U      |                   |                  |                  |                  |                  |                  |
| VOLATILES      | Mathylane chioride          |  |                  | 0.005 1 < U            | 0.019 1 < U      | 0.005 1 < U       | 0.005 t < U      | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      |
| VOLATILES      | Pentachloroethane           |  |                  |                        | 0.076 1 < U      |                   |                  |                  |                  |                  |                  |
| VOLATILES      | Propionitrile               |  |                  |                        | 0.19 1 < U       |                   |                  |                  |                  |                  |                  |
| VOLATILES      | Stytene                     |  |                  | 0.005 I < U            | 0.019 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 t < 0      |
| VOLATILES      | Tetrachioroethene           |  |                  | 0.005 1 < U            | 0.019 i < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < 0      |
| VOLATILES      | Toluena                     |  |                  | 0.005 t < U            | 0.019 1 < U      | 0.005 1 < U       | 0.005 i < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      |
| VOLATILES      | trans-1,3-Dichlompropena    |  |                  | 0.005 <sup>t</sup> < U | 0.019 1 < U      | 0.005 1 < U       | 0.005 i < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0,005 1 < 0      |
| VOLATILES      | trans-1,4-Dichloro-2-butena |  |                  |                        | 0.076 1 < U      |                   |                  |                  |                  |                  | A 007 1 - 11     |
| VOLATILES      | Trichloroelhene             |  |                  | 0.005 1 < U            | 0.019 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      |
| VOLATILES      | Trichlorofluoromethane      |  |                  |                        | 0.038 î < U      |                   |                  |                  |                  |                  |                  |
| VOLATILES      | Viny! acetate               |  |                  | 0.05 1 < U             | 0.038 1 < U      | 0.05 1 < U        | 0.05 I < U       | 0.05 1 < U       | 0.05 1 < 0       | U.U5 t < U       |                  |
| VOLATILES      | Vinyi chlaride              |  |                  | 0.01 1 < U             | 0.038 1 < U      | 0.01 1 < U        | 0.01 î < U       | 0.01 1 < U       | 0.01 1 < 0       | 0.01 1 < 0       |                  |
| 101.171.50     | M. Isaa a Tabal             | 1  |                  | 0.005 1 - 13           | 0.010 1 - 11     | D 005 1 - U       | 0.005 1 < U      | 0.005 I < U      | 0.005 1 < 0      | 1 < U            | 0.000            |

Table 3-71

VOLATILES Xylenes, Total Footnotes are shown on cover page to Tables Section.



| Table 3-72   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 072 |

`

| (SUMPL - \$FMP072 |                            |                  |                        |              |              |                   |                 |                 |                   |                  |
|-------------------|----------------------------|------------------|------------------------|--------------|--------------|-------------------|-----------------|-----------------|-------------------|------------------|
|                   |                            | 35SUMP072-S801   | 35SUMP072,SB01         | H-01072-01   | LH-S072-01   | LH-S072-01        | LH-S072-01      | LH-S072-02      | LH-\$072-02       | LH-\$072-02      |
|                   |                            | 25.5MD72.5D01.01 | 25.SUP72.SB01.02       | LH-DL072-01  | 1H-S072-01_1 | LH-S072-01_2      | LH-S072-01_3    | LH-S072-02 1    | LH-S072-02 2      | LH-S072-02 3     |
| CAMPLE_NO         |                            | 0/14/1006        | 0/14/20001-02          | 9/4/1003     | 9///1003     | 8//1003           | 8/4/1993        | R/4/1993        | 8/4/1993          | 8/4/1993         |
| SAMFLE_DATE       |                            | 3/14/2000        | 3/14/2000              | 0/4/13/33    | 05.15        | 0-3-5 Et          | 8-65FI          | 05-15           | 3.5 - 4 FI        | 6 - 6.5 Ft       |
|                   |                            | 0.0 - 0.0 -      | / · / r(               | 2-2.0 Ft     | 0.01174      | PEC               | BEG             | REG             | REG               | REG              |
| SAMPLE_PUHPUSE    |                            | REG NO           | HEG<br>Devit Dil LO NO |              |              | Barult Dill LO VO | Read DI 10 VO   | Recuit DN 10 VO | Besult Dill 10 VO | Besult DR. LO VO |
| Test Group        | Parameter (Units = mg/kg)  | Hesus Die CO VO  | HESON UIL LA VA        | 6700 1 LO VO |              | 14800 1           | 27400 1         | 12800 1         | 9230 1            |                  |
| METALS            | Aluminum                   |                  |                        | 0/00 1       | 9000 1       | 1 1               | 21400           | 3 5 - 11        | 3 1 2 11          |                  |
| METALS            | Anumony                    |                  |                        | 31 < 0       | 31 < 0       |                   | 5 1 X V         | 11 1            | 25 1              |                  |
| METALS            | Arsenic                    |                  |                        | 2.7 1        | 2,7 1        | 2,0               | 97 1            | 70 1            | 74 1              |                  |
| METALS            | Banum                      |                  |                        | 47 1         |              | 44 1              | 97 I<br>1 1 2 1 | 11.             |                   |                  |
| METALS            | Gadmium                    |                  |                        | 11 < U       | 11 < U       |                   | 1000 1          | 1470 1          | 1000 1            |                  |
| METALS            | Galcium                    |                  |                        | 656 1        | 706 1        | 996 1             | 1020 1          | 1470 1          | 12 1              |                  |
| METALS            | Chromium                   |                  |                        | 12 1         | 16 1         | 15 1              | 24 1            | 10 1            | 10 I              |                  |
| METALS            | Cobali                     |                  |                        | 6 1          | 6 1          | 3 1               | 10 1            |                 | 6 1               |                  |
| METALS            | Copper .                   |                  |                        | 3 1          | 4 1          | 3 1               | 7 1             | 5 1             | 3 1               |                  |
| METALS            | kron                       |                  |                        | 7360 1       | 10400 1      | 9650 1            | 22800           | 12300           | 8970 1            |                  |
| METALS            | Lead                       |                  |                        | 3.8 1        | 6.3 1        | 3.7 1             | 6.6 1           | 5.8 1           | 4.3 1             |                  |
| METALS            | Magnesium                  |                  |                        | 294 1        | 531 1        | 564 1             | 1450 1          | 641 1           | 406 1             |                  |
| METALS            | Manganese                  |                  |                        | 175 1        | 80 1         | 157 1             | 45 1            | 290 1           | 195 1             |                  |
| METALS            | Mercury                    |                  |                        | 0.1 1 < U    | 0.1 1 < U    | 0.1 1 < U         | 0.1 1 < U       | 0.1 1 < U       | 0.1 1 < U         |                  |
| METALS            | Potassium                  |                  |                        | 302 1        | 355 1        | 619 1             | 1320 1          | 596 1           | 407 1             |                  |
| METALS            | Selenium                   |                  |                        | 11 < U       | 1 1 < U      | 1 t < U           | 11 < U          | 11 < U          | 11 < U            |                  |
| METALS            | Silver                     |                  |                        | 11 e U       | 1 < U        | 11 < U            | 11 < U          | 11 < U          | 11 < U            |                  |
| METALS            | Strontium                  |                  |                        | 7 1          | 7 1          | <del>9</del> 1    | 22 1            | 12 1            | 11 1              |                  |
| METALS            | Zinc                       |                  |                        | 24 1         | 55 1         | 21 1              | 40 1            | 22 1            | 16 1              |                  |
| PERC              | Perchiorale                | 0,04 4 U         | 0.01 1 U               |              |              |                   |                 |                 |                   |                  |
| SEMIVOLATILES     | 1.2,4-Trichlorobenzene     |                  |                        | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U        | 0.33 1 < U      | 0,33 1 < U      | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES     | 1,2-Dichlorobenzene        |                  |                        | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < 단        | 0.33 1 < U       |
| SEMIVOLATILES     | 1,3-Dichlorobenzene        |                  |                        | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES     | 1,4-Dichlorobenzene        |                  |                        | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES     | 2.4.5 Trichlarophenol      |                  |                        | 1,65 1 < U   | 1.65 t < U   | 1.65 1 < U        | 1.65 1 < U      | 1.65 1 < U      | 1.65 1 < U        | 1.65 î < U       |
| SEMIVOLATILES     | 2.4.6 Trichlorophenol      |                  |                        | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES     | 2.4 Dichlorophenol         |                  |                        | 0.33 í < U   | 0.33 1 < .U  | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES     | 2.4-Dimethylphenol         |                  |                        | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES     | 2.4-Dinitrophenol          |                  |                        | 1.65 1 < U   | 1.65 1 < U   | 1.65 1 < U        | 1.65 1 < U      | 1.65 1 < U      | 1.65 1 < U        | 1.65 1 < U       |
| SEMIVOLATILES     | 2.4-Dinitrotaluene         |                  |                        | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < Ų      | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES     | 2.6-Dinitrotoluene         |                  |                        | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES     | 2-Chipronaphihalene        |                  |                        | 0.33 1 < U   | 0,33 1 < U   | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U      | 0.33 î < Ü        | 0,33 1 < U       |
| SEMIVOLATILES     | 2-Chiprophenol             |                  |                        | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U      | 0.33 i < U        | 0.33 1 < U       |
| SEMIVOLATILES     | 2-Methylnaphthalene        |                  |                        | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U      | 0.33 î < U        | 0.33 1 < U       |
| SEMIVOLATILES     | 2-Methylphenol             |                  |                        | 0.33 1 < U   | 0,33 1 < U   | 0.33 1 ≺ U        | 0.33 1 < U      | 0.33 1 < U      | 0,33 1 < U        | 0.33 i < U       |
| SEMIVOLATILES     | 2-Nitroaniline             |                  |                        | 1.55 1 < U   | 1.65 1 < U   | 1.65 1 < U        | 1.65 1 < U      | 1.65 1 < U      | 1.65 1 < U        | 1.65 1 < U       |
| SEMIVOLATILES     | 2-Nitrophenol              |                  |                        | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES     | 3 3'-Dichlorobenzidine     |                  |                        | 0.65 1 < U   | 0.65 1 < U   | 0.65 1 < U        | 0.65 1 < U      | 0.65 1 < U      | 0.65 1 < U        | 0.65 1 < U       |
| SEMIVOLATILES     | 3-Nitroaniline             |                  |                        | 1.65 1 < U   | 1.65 1 < U   | 1.65 1 < U        | 1.65 1 < U      | 1.65 1 < U      | 1.65 1 < U        | 1.65 1 < U       |
| SEMIVOLATILES     | 4.6-Dinitro-2-methylohenol |                  |                        | 1.65 1 < U   | 1.65 1 < U   | 1.65 1 < U        | 1.65 1 < U      | 1.65 1 < U      | 1,65 1 < U        | 1.65 1 < U       |
| SEMIVOLATILES     | 4-Bromonhenvi obenvi ether |                  |                        | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U        | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES     | 4-Chloro-3-methylohenol    |                  |                        | 0.65 1 < U   | 0.65 1 < U   | 0.65 1 < U        | 0.55 1 < U      | 0.65 1 < U      | 0.65 1 < U        | 0.65 1 < U       |
| SEMINOLATILES     | 4-Chloroaniline            |                  |                        | 0.65 1 < 1   | 0.65 1 < U   | 0.65 1 < U        | 0.65 1 < U      | 0.65 1 < U      | 0.65 1 < U        | 0.65 1 < U       |
| SEMINOLATILES     | 4.Chivonhenyi ohenyi ether |                  |                        | 0.33 1 - 11  | 0.33 1 c U   | 0.33 1 < 1/       | 0.33 1 < U      | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES     | 4-Methylohenol             |                  |                        | 0.33 1 2 0   | 0.33 1 < 1   | 0.33 1 < U        | 0.33 1 ¢ U      | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U       |
| SEMINOLATILES     | 4.Nitroaniline             |                  |                        | 165 1 2 1    | 1.65 1 < 11  | 1.65 1 < U        | 1.65 1 ¢ U      | 1.65 1 < U      | 1.65 1 < U        | 1.65 t < U       |
| SELINA ATILES     | 4-Nikonhenol               |                  |                        | 165 1 - 11   | 165 1 2 1    | 1.65 1 - 1        | 1.65 1 - 11     | 1.65 1 e U      | 1.65 1 < 1        | 1.65 1 < LI      |
| SEMINOLATHES      | Acenanthene                |                  |                        | 0.33 1 2 1   | 0.33 1 2 11  | 0.33 1 2 11       | 0.33 1 4 U      | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U       |
|                   | Acensolthulana             |                  |                        | 0.33 1 2 1   | 033 1 2 11   | 033 1 2 11        | 0.33 1 < 11     | 0.33 1 < U      | 0.33 1 < U        | 0.33 1 < U       |
|                   | Anthraenne                 |                  |                        | 0.00 1 4 0   |              | 0.33 1 - 11       | 0.33 1 - 11     | 0.33 1 2 11     | 0.33 1 2 11       | 0.33 1 < 0       |
|                   | Presso (S) solar sage      |                  |                        | 0.00 1 4 11  | 033 1 - 11   |                   | 0.33 1 4 11     | 0.33 1 c II     | 0.33 1 < 11       | 0.33 1 < U       |
|                   | Denze (a) murane           |                  |                        | 0.00 I K U   |              |                   | 013 1 2 11      | 0.33 1 2 11     | 0.33 1 < 11       | 0.33 1 0         |
| OCIVINA VLA VLEO  | neusofathätelle            | 1                |                        | 9.00 i < U   | 0.00 1 4 0   | 9.99 · • • 0      |                 | 5,00 , 4 0      |                   |                  |

Page 1 of 3



| Table 3-72   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 072 |

| SLOCATION      |  | 35SUMP072-SB01  | 35SUMP072-SB01   | LH-DL072-01      | LH-\$072-01      | LH-S072-01       | LH-S072-01       | LH-5072-02       | LH-\$072-02      | LH-S072-02       |
|----------------|--|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| SAMPLE_NO      |  | 35-SMP72-SB01-01  | 35-SMP72-SB01-02 | LH-DL072-01      | LH-S072-01_1     | LH-S072-01_2     | LH-S072-01_3     | LH-5072-02_1     | LH-5072-02_2     | LH-S072-02_3     |
| SAMPLE_DATE    |  | 9/14/2006   | 9/14/2006        | 8/4/1993         | 8/4/1993         | 8/4/1993         | 8/4/1993         | 8/4/1993         | 6/4/1993         | 8/4/1993         |
| DEPTH          |  | 0.5 - 0.5 Ft  | 7 - 7 Ft         | 2 - 2.5 Ft       | 0.5 • 1 Ft       | 3 • 3.5 Fl       | 6 - 6.5 FI       | 0,5 - 1 Ft       | 3.5 · 4 Ft       | 6 - 6.5 Ft       |
| SAMPLE_PURPOSE |  | REG   | REG              | REG              | REG              | REG              | REG              | REG              | REG              | REG              |
| Test Group     | Parameter (Units = mg/kg)                | Result DIL LO VO  | Result DIL LO VO | Result DIL LO VO | Resull DIL LQ VQ | Result DIL LO VQ | Result DIL LO VO | Result DIL LO VO | Result Dil LO VO | Result DIL LO VO |
| SEMIVOLATILES  | Benzo(b)//uoranthene                     |   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES  | Benzo(ghi)perylene                       |   |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES  | Benzo(k)fluoranthene                     |   |                  | 0.33 1 < 0       | 0.33 1 < U       | 0,33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0,33   < 0       |
| SEMIVOLATILES  | Benzoic Acid                             |   |                  | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 0       | 1,55 i < U       | 1.65 1 < U       | 1.65 1 < U       |                  |
| SEMIVOLATILES  | Benzyt Alconal                           |   |                  | 0.65 1 < U       | 0.55 1 < 0       | 0.55 I < U       | 0.65 1 < 0       | 0.05 1 < 0       | 0.03 1 < 0       | 0.00 1 4 0       |
| SEMIVOLATILES  | bis(2-Chlorosthoxy)methane               |   |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES  | Dis(2-Chlorbeinyl)ainer                  |   |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 2 1       | 0.33 1 4 0       | 0.33 1 < 0       |
| SEMIVOLATILES  | bis(2-Chloroisopropyi)ether              |   |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 2 0       |                  |                  |
| SEMIVOLATILES  | Dis(2-Einvinexyi)phinalate               |   |                  | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 11      | 0.33 1 < 1       |
| SEMIVOLATILES  | Buryi benzyi primalare                   |   |                  | 0.33 1 < 0       | 0.33 1 < U       |                  |                  | 0.33 1 < 0       | 0.00 1 4 0       | 0.00 1 < 0       |
| SEMIVOLATILES  | Chrysene<br>Discourse (a b) and based    |   |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 2 0       | 0.33 1 < 0       | 0.00 1 4 0       | 0.03 1 4 11      | 0.33 1 < 11      |
| SEMIVOLATILES  | Dibenzo(a.njampracene                    |   |                  | 0.33 4 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 < 11      | 0.33 1 4 11      | 0.33 1 - 11      |
| SEMIVOLATILES  | Diethologia                              |   |                  | 0.00 1 < 0       | 0.00 1 < 1       | 0.03 1 < 0       | 0.33 1 2 1       | 0.33 1 < 11      |                  | 0.33 1 - 11      |
| SEMIVOLATILES  | Dienty prinalate                         |   |                  | 0.33 1 < 0       |                  | 0.00 1 < 0       | 0.33 1 < 0       | 0.00 1 4 1       | 0.00 1 4 0       | 0.33 1 - 11      |
| SEMIVOLATILES  | Umethyl phthalate                        |   |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 2 0       | 0.00 1 < 0       | 033 1 4 1        | 0.33 1 < 1       |
| SEMIVOLATILES  | din-oquyi phinalate                      |   |                  | 0.33 1 4 0       | 0.00 1 4 0       | 0.00 1 4 0       | 0.33 1 < 0       | 0.00 1 < 0       | 0.00 1 4 0       | 0.39 1 < 11      |
| SEMIVOLATILES  | Gi-n-Octyl phinalate                     |   |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 4 0       |                  | 0.33 1 4 1       | 0.33 1 4 11      |                  |
| SEMIVOLATICES  | Fluorannese                              |   |                  | 0.00 1 < 0       | 0.00 1 < 0       |                  | 0.33 1 < 0       | 0.00 1 4 0       | 0.00 1 2 0       | 0.00 1 4 0       |
| SEMIVOLATILES  | >iuorene                                 |   |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 : < 0       |                  | 0.33 1 < 0       | 0.00 1 4 11      |                  |
| SEMIVOLATILES  | Hexachiaroberizene                       |   |                  | 0,33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.00 1 4 0       |                  |
| CENTROLATILES  | Hexactworodukadiene                      |   |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.00 1 < 0       | 0.33 1 < 0       | 0.33 1 < 1       | 0.33 1 < 1       | 0.33 1 < 1       |
| SEMINOLATILES  | Hexachiorocyclopentaciene                |   |                  | 0.33 1 < 0       | 0.33 1 2 0       | 0.33 1 < 0       | 0.00 I K U       | 0.00 1 4 1       | 0.33 1 - 11      | 0.33 1 < 11      |
| SEMINOLATILES  |  |   |                  | 0.00 1 < U       | 0.33 1 < 0       |                  | 0,00 1 < 0       |                  | 0.03 1 4 11      | 0.33 1 < 1       |
| SEMIVOLATILES  | Interio(1,2.3-cd)pyrene                  |   |                  | 0.00 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.00 1 < 0       | 0.00 1 2 1       | 0.33 1 < 1       | 0.33 1 4 1       |
| SEMIVOLATILES  | biophipsiano                             |   |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 4 11      | 0.00 1 < 0       | 0.33 1 < 0       | 0.33 1 - 11      | 0.33 1 < 11      |
| CENINOLATILES  | Nirabanzana                              |   |                  | 0.03 1 4 1       | 0.00 1 4 1       |                  | 0.33 1 4 11      | 0.33 1 - 11      | 039 1 4 1        | 0.33 1 4 11      |
| CEMINOLATILES  | nuiopenzene<br>n-Mirosa-di-n-propulamina |   |                  | 0.00 1 4 11      | 0.33 1 2 1       | 0.33 1 4 10      | 0.33 1 - 11      | 0.33 1 4 1       | 0.33 1 < 11      | 0.33 1 < U       |
| SEMINOLATILES  | n-Nitrosodinhenviemine                   |   |                  | 0.33 1 4 11      | 0.33 1 < 1       | 0.33 1 - 11      | 0.33 1 4 1       | 0.33 1 < 11      | 0.33 1 4 13      | 0.33 1 < U       |
| SEMIVOLATILES  | Perinchlorophanal                        | f in the second s |                  | 166 1 4 11       | 165 1 < 1        | 165 1 4 11       | 165 1 ~ 1        | 165 1 ~ 1        | 185 1 2 11       | 165 1 < U        |
| SEMINOLATILES  | Phananbrena                              |   |                  | 0.33 1 2 8       | 0.33 1 < 1       | 0.33 1 c 12      | 0.33 1 2 11      | 033 1 < 1        | n33 1 × U        | 0.33 1 < U       |
| SEMIVOLATILES  | Phenol                                   |   |                  | 0.33 1 < 1       | 0.33 1 2 1       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 1       | 0.33 t < U       | 0.33 1 < U       |
| SEMIVOLATILES  | Pyrene                                   |   |                  | 0.33 1 4 1       | 0.33 1 < 11      | 033 1 < U        | 0.33 1 2 1       | 0.33 1 c U       | 0.33 t c U       | 0.33 1 < U       |
| VOLATILES      | 1 1 Trichloroethane                      |   |                  | 0.00 1 4 1       | 0.005 1 < 1      | 0.005 1 < U      | 0.005 1 < 1      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | 1 1 2 2 Tetrachlomethane                 |   |                  | 0.005 1          | 0.005 1 ¢ U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | 1.1.2 Trichlorgethane                    |   |                  | 0.005 1 < 1      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | 1.1-Dicbloroethane                       |   |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | 1.1-Dichloroethene                       |   |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES      | 1.2-Dichloroethane                       |   |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | 1.2-Dichloroethene                       |   |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 f < U      |
| VOLATILES      | 1.2-Dichloropropane                      |   | •                | 0.005 f < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | 2-Butanone                               |   |                  | 0.05 1 < U       | 0.05 1 < U       | .0.05 1 < U      | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES      | 2-Chloroethyl vinyl ether                |   |                  | 0.01 1 < U       |
| VOLATILES      | 2-Hexanone                               |   |                  | 0.05 1 < U       |
| VOLATILES      | Agetone                                  |   |                  | 0.1 1 < U        | 0.1 1 < U        | 0.1 t < U        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 e U        |
| VOLATILES      | Benzene                                  | ĺ   |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | Bromodichioromethane                     |   |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | Bromoform                                |   |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | Bromomethane                             |   |                  | 0.01 1 < U       | 0.01 1 < U       | 0,01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES      | Carbon disulfide                         |   |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | Carbon tetrachloride                     |   |                  | 0.005 f < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | Chlorobenzene                            |   |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES      | Chloroelhane                             |   |                  | 0.01 i < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |

shaw Environmental Inc. 00066174

1.1

|                                       |                           | · C   | oncentrations of                                | Chemicals in S                         | oil Samples Ass                        | ociated with Sum                       | p 072                                  |  |  |  |
|---------------------------------------|---------------------------|---|---|--|--|--|--|--|--|--|
| SLOCATION<br>SAMPLE_NO<br>SAMPLE_DATE |                           | 35SUMP072-SB01<br>35-SMP72-SB01-01<br>9/14/2006 | 35SUMP072-SB01<br>35-SMP72-SB01-02<br>9/14/2006 | LH-DL072-01<br>LH-DL072-01<br>B/4/1993 | LH-S072-01<br>LH-S072-01_1<br>8/4/1993 | LH-S072-01<br>LH-S072-01_2<br>8/4/1993 | LH-S072-01<br>LH-S072-01_3<br>8/4/1993 | LH-S072-02<br>LH-S072-02_1<br>8/4/1993 | LH-S072-02<br>LH-S072-02_2<br>8/4/1993 | LH-S072-02<br>LH-S072-02_3<br>8/4/1993 |
| DEPTH                                 |                           | 0.5 - 0.5 FI                                    | 7 - 7 FI  | 2 - 2.5 Ft                             | 0.5 • 1 Ft                             | 3 • 3.5 Ft                             | 6 - 6.5 Ft                             | 0.5 - 1 FI                             | 3.5 - 4 FI                             | 6 - 6.5 FI                             |
| SAMPLE_PURPOSE                        |                           | REG   | REG   | REG                                    | REG                                    | REG                                    | REG                                    | REG                                    | REG                                    | REG                                    |
| Test Group                            | Parameter (Units = mg/kg) | Result DIL LO VO                                | Result DIL LO VO                                | Result DIL LO VO                       | Result DIL LQ VQ                       | Result DIL LO VQ                       | Result DIL LO VO                       |
| VOLATILES                             | Chlorolorm                |   |   | 0.005 1 < U                            | 0.005 1 < U                            | 0.0062 1                               | 0.005 1 < U                            |
| VOLATILES                             | Chloromethane             |   |   | 0.01 t < U                             | 0.01 1 < U                             | 0.01 1 < U                             | 0.01 1 < U                             | 0.01 1 < U                             | 0.01 1 < U                             | 0,01 1 < U                             |
| VOLATILES                             | cis-1,3-Dichloropropene   |   |   | 0.005 1 < U                            | 0,005 1 < U                            | 0.005 1 < U                            |
| VOLATILES                             | Dibromochloromethane      |   |   | 0.005 1 < U                            | 0.005 1 < U                            | 0.005 1 < U                            | 0,005 1 < U                            | 0.005 1 < U                            | 0.005 1 < U                            | 0.005 1 < U                            |
| VOLATILES                             | Ethylbenzene              |   |   | 0.005 1 < U                            | 0.005 1 < U                            | 0.005 1 < U                            | 0.005 f < U                            | 0.005 1 < U                            | 0.005 1 < U                            | 0.005 1 < U                            |
| VOLATILES                             | Methyl isobutyl ketone    |   |   | 0.05 1 < U                             |
| VOLATILES                             | Mathylene chlorida        |   |   | 0.005 1 < U                            | 0.005 1 < U                            | 0.005 1 < U                            | 0,005 1 < U                            | 0.005 1 < U                            | 0.005 1 < U                            | 0.005 1 < U                            |
| VOLATILES                             | Styrene                   |   |   | 0.005 1 < U                            | 0.005 1 < U                            | 0.005 i < U                            | 0.005 1 < U                            | 0.005 1 < U                            | 0.005 1 < U                            | 0.005 1 < U                            |
| VOLATILES                             | Teirachioroathana         |   |   | 0.005 1 < U                            | 0.005 1 < U                            | 0.005 t < U                            | 0.005 1 < U                            | 0.005 1 < U                            | 0.005 1 < U                            | 0.005 1 < U                            |
| VOLATILES                             | Toluene                   |   |   | 0.005 1 < U                            | 0.005 <u>1</u> < U                     |
| VOLATILES                             | trans-1,3-Dichloropropene |   |   | 0.005 1 < U                            |
| VOLATILES                             | Trichloroethene           |   |   | 0.005 1 < U                            |
| VOLATILES                             | Vinyl acetale             |   |   | 0.05 1 < U                             |
| VOLATILES                             | Vinyl chloride            |   |   | 0.01 1 < U                             | 0.01 t < U                             | 0.01 1 < U                             | 0.01 1 < U                             | 0.01 1 < U                             | 0.01 1 < U                             | 0.01 1 < U                             |
| VOLATILES                             | Xylenes, Tolai            |   |   | 0.005 1 < U                            | 0.005 i < U                            |

Table 3-72 Concentrations of Chemicals in Soil Samples Associated with Sump 072

Footnotes are shown on cover page to Tables Section.



| Table 3-73  |          |
|---|----------|
| Concentrations of Chemicals in Soil Samples Associated with S | Sump 073 |

| (SUMP) = SUMP073       |                                      |                   |                   |                     |                       |                  | 111 670 84      | 111 673 04           |
|------------------------|--------------------------------------|-------------------|-------------------|---------------------|-----------------------|------------------|-----------------|----------------------|
| SLOCATION              |                                      | 35SUMP073-SB01    | 35SUMP073-SB01    | 35SUMP073-S802      | 35SUMP073-S802        | LH-01/3-01       | LH-3/3-01       | 18.873.01.2          |
| SAMPLE_NO              |                                      | 35-SMP073-SB01-01 | 35-SMP073-SB01-02 | 35-SMP073-SB02-01   | 35-SMP073-SB02-02     | LH-DL/3-01       | LH-5/3-01_1     | £/26/1001            |
| SAMPLE_DATE            |                                      | 9/21/2006         | 9/21/2006         | 9/21/2006           | 9/21/2006             | 6/26/1993        | 0/20/1993       | 0/20/1993            |
| DEPTH                  |                                      | 0.5 - 0.5 FL      | 3 - 3 Ft          | 0.5 - 0.5 Ft        | 3.5 - 3.5 Ft          | 2-2.7 FI         | .0 · 1.0 FI     | 2.3 - 3.5 11         |
| SAMPLE_PURPOSE         |                                      | REG               | REG               | REG                 | REG                   | REG NO           | Reut Dil IO VO  | Regult DV LO VO      |
| Test Group             | Parameter (Units = mg/kg)            | Result DL LO VO   | Result OIL LO VO  | Result DIL LO VO    | Hesun DIL LO VO       | Hesuii DIL LU VU | Hesun Dit LO VO |                      |
| EXPLOSIVES             | 2,4-Dinitrotoluene                   |                   |                   |                     |                       | 1.163 2 0        | 1,130 I < U     | 1.203 1 4 0          |
| EXPLOSIVES             | 2.6 Dinitrotoluene                   |                   |                   |                     | 6070 A                | 1,153 ! < U      | 1.100 1 < 0     | 1.205 I K U .        |
| METALS                 | Aluminum                             | 13100 1           | 9520              | 10000 1             | 9960 1                | 4920             | 502 1 / 1       | 526 1 × 11           |
| METALS                 | Antimony                             | 0,117 1 U         | 0.112 1 U         | 0,122 1 0           | 0,118 1 0             | 18.4 1 < 0       | 0.90 1 4 0      | 0.40 1 1 1           |
| METALS                 | Arsenic                              | 2.02 1            | 2.2 1             | 6.48 1              | 2.3 1                 | 2.00             | 451 1 4 11      | 2,03 I<br>614 1 4 II |
| METALS                 | Barium                               | 177               | 84.4 1            | 115 1               | 59.7 1                | 30.0             | 40.1 1 1 1 0    | 31.4                 |
| METALS                 | Beryllium                            | 0.798 1           | 0.533 1           | 0.643               | 0.750 1               | 210 1 5          | 25 1            | 9 94 1               |
| METALS                 | Cadmium                              | 0.217 1 J J       | 0.16 1 J J        | 0.379 1 J J         | 0.0533 1 J J          | 0,10 F C         | 2050 1          | 1240 1               |
| METALS                 | Calcium                              | 898 1             | 2570 1            | 2390                | 1010 1                | 67 1 E           | 882 1           | 16.1 1               |
| METALS                 | Chromium                             | 12.6 1            | 11.6 1            | 13.5 1              | 63.1 I                | 0.7 I L          | 3.74 1          | 479 1                |
| METALS                 | Cobalt                               | 7.98              | 5.84 1            | 8.34                | 3,39 1                | 0.66 1           | 759 1 2 1       | 373 1 < 1            |
| METALS                 | Copper                               | 4.47 1            | 5.08 1            | 50.4                | 0.00 1                | 11800 1          | 11000 1         | 12700 1              |
| METALS                 | iron                                 | 12900 1           | 11900 1           | 13900               | 20000 1               | 17 1 4 1         | 137 1           | 15.8 1               |
| METALS                 | Lead                                 | 9.21 1            | 15.4 1            | 17.7 1              | 7,40 I<br>520 I       | 604 1            | 454 1           | 418 1                |
| METALS                 | Magnesium                            | 1290 1            | (73 )             | 904                 | 100 1                 | 476 (            | 73.6 1          | 461 1                |
| METALS                 | Manganese                            | 173 1             | 114 1             |                     |                       | 47.0 I           | 578 1           | 0.048 1 × U          |
| METALS                 | Mercury                              | 0.0257 1 J J      | 0,789 2           | 0.2/3 1 J J         | U.U444 I J J<br>E70 1 | 0.027 1 2 0      | 5.70            | 0,010                |
| METALS                 | Nickel                               | 13.2 1            | 8.25              | 9.31 1              | 3,70 1                | 307 1            | 209 1           | 371 1                |
| METALS                 | Potassium                            | 505 1             | 421 1             | 044 )               | 0.065 1               | 114 1 4 []       | 0.598 1 < 11    | 0.526 1 × U          |
| METALS                 | Selenium                             | 0.32              | 0.239 1           | 0.47 I<br>1.70 1 II | 17 1 11               | 0.057 1 < 11     | 128 1           | 0.058 1              |
| METALS                 | Silver                               | 1.69 1 0          | 1.71 1 U          | 1.76 1 U            | 546 1                 | 0.007            |                 | 0,000                |
| METALS                 | Sodium                               | 269 1             | 90.1 )            | 40.7 1              | 54.0 1                | 24.1 1           | 164 1 ⊂ U       | 15.8 f < U           |
| METALS                 | Strontium                            | 0.0723 /          | 0.0016 1          | 0.0714 1            | 0.0621 1              | <b>27</b> .1     |                 |                      |
| METALS                 | i najlium                            | 0.0733            |                   | 0.0714 1            | 447 1                 |                  |                 |                      |
| METALS                 | vanadium<br>Ziele                    | 46.9 1            | 19,1 1            | 008 1               | 17 1                  | 40.1 1           | 34.6 1          | 15.4 1               |
| DEDC                   | Zme                                  | 45.0              | 0.04              | 0.0305 4 11         | 0.0389 4 11           |                  |                 |                      |
| PERG<br>DANCE ODCANICE | Perchiorate<br>Calibra Bases C1D CDB | 0.272 4           |                   | 60.2 . 1 H          | 589 1 11              |                  |                 |                      |
| PANGE_ORGANICS         | CARDON RANCE COR COS                 | 213 1 1 1         | 297 1 9           | 60.2 1 1            | 589 1 1               |                  |                 |                      |
| PANGE OPCANICS         | Carbon Range CE C12                  | 581 f 11          | 550 1 1           | 60.2 1 U            | 58.9 1 1              |                  |                 |                      |
| RANGE_UNGANGO          | 1.2.4 Trichlombarzana                | 38.1 1 0          |                   | 00.2 1 0            |                       | 1.163 1 < U      | 1.136 1 < U     | 1.205 1 < U          |
| SEMIVOLATILES          | 1.2 Dichlorohonzono                  |                   |                   |                     |                       | 1,163 1 < U      | 1,136 1 < U     | 1.205 1 < U          |
| SEMINOLATILES          | 1.2-Dichlorobenzene                  |                   |                   |                     |                       | 1.163 1 < U      | 1.136 1 < U     | 1.205 1 < U          |
| SCHIVOLATILES          | 1.4-Dichlorobenzone                  |                   |                   |                     |                       | 1.163 1 < U      | 1.136 1 < U     | 1.205 1 < U          |
| SEMIVOLATILES          | 2.4 5-Trichlorophanol                |                   |                   |                     |                       | 1.163 1 < U      | 1.136 1 < U     | 1.205 1 < U          |
| SCHIVOLATILES          | 2.4.5 Trichlorophenoi                |                   |                   |                     |                       | 1.163 1 < U      | 1,136 1 < U     | 1.205 1 < U          |
| SEMIVOLATILES          | 2 4 Dichlorophenol                   |                   |                   |                     |                       | 1,163 1 < U      | 1.136 1 < U     | 1.205 1 < U          |
| SEMINOUNTILES          | 2.4-Dimethylahanal                   |                   |                   |                     |                       | 0.581 t < U      | 0.568 1 < U     | 0.602 1 < U          |
| CENINOLATILES          | 2.4-Dimension                        |                   |                   |                     |                       | 11.628 1 < U     | 11.364 1 < U    | 12.048 1 < U         |
| SEMINOLATILES          | 2.Chloropenhibelene                  |                   |                   |                     |                       | 0.349 1 < U      | 0.341 1 < U     | 0.361 1 < U          |
| CENIN/OLATILES         | 2-Chlorophanol                       |                   |                   |                     |                       | 0.581 1 < U      | 0.568 1 < U     | 0.602 1 < U          |
| SEMIVOLATILES          | 2-Motodanhthalana                    |                   |                   |                     |                       | 0.349 1 < U      | 0.341 1 < U     | 0.361 1 < U          |
| SCHIVOLATILES          | 2-Methylabanol                       |                   |                   |                     |                       | 0.581 1 < U      | 0.558 1 < U     | 0.602 1 < U          |
| SEMBUCE ATTERS         | 2-Mitroanilina                       |                   |                   |                     |                       | 3.488 1 < U      | 3.409 1 < U     | 3.614 1 < U          |
| SENIVOLATILES          | 2 Närophonol                         |                   |                   |                     |                       | 1,163 1 < U      | 1,136 1 < U     | 1.205 1 < U          |
| SEMIVOLATILES          | 3.3'.Dichlorohenzidine               |                   |                   |                     |                       | 0.581 1 < U      | 0.568 1 < U     | 0.602 1 < U          |
|                        | 3.Nitraniine                         |                   |                   |                     |                       | 3.488 1 < 1      | 3.409 1 < U     | 3.614 1 < U          |
| SEMINOLATILES          | 4 6.Dinitza.2.methylahenet           | 1                 |                   |                     |                       | 5.814 1 < U      | 5.682 1 < U     | 6.024 1 < U          |
|                        | 4.Bromonhenyi abesul ather           |                   |                   |                     |                       | 1.163 1 < U      | 1.136 1 < U     | 1.205 1 < U          |
| SEMIVOLATILES          | 4-Chloro-3-methylahanel              |                   |                   |                     |                       | 0.581 1 < 1      | 0.568 1 < U     | 0.602 1 < U          |
| OCIMINOLY I LES        |                                      | I                 |                   |                     |                       | •                |                 |                      |

Table 3-73

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

| Shaw Environmental, Inc. | 76 |
|--------------------------|----|

. .

| Concentrations of Chemicals in Soil Samples Associated with Sump 073 |                             |                   |                   |                   |                   |                     |                  |                  |  |
|--|-----------------------------|-------------------|-------------------|-------------------|-------------------|---------------------|------------------|------------------|--|
| SLOCATION  |                             | 35SUMP073-SB01    | 35SUMP073-SB01    | 355UMP073-SB02    | 35SUMP073-SB02    | LH-DL73-01          | LH-S73-01        | LH-\$73-01       |  |
| SAMPLE NO  |                             | 35-SMP073-SB01-01 | 35-SMP073-S801-02 | 35-SMP073-SB02-01 | 35-SMP073-SB02-02 | LH-DL73-01          | LH-573-01_1      | LH-\$73-01_2     |  |
| SAMPLE DATE  |                             | 9/21/2008         | 9/21/2006         | 9/21/2006         | 9/21/2006         | 6/26/1993           | 6/26/1993        | 6/26/1993        |  |
| DEPTH  |                             | 0.5 - 0.5 Ft      | 3 - 3 Ft          | 0.5 - 0.5 FI      | 3.5 - 3.5 Ft      | 2 - 2.7 Ft          | .5 - 1.5 Ft      | 2.5 - 3.5 FI     |  |
| SAMPLE_PURPOSE   |                             | REG               | REG               | REG               | REG               | REG                 | REG              | REG              |  |
| Test Group   | Parameter (Units = mg/kg)   | Result DIL LO. VO | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO    | Result DIL LO VO | Result DiL LO VO |  |
| SEMIVOLATILES  | 4-Chloroaniline             |                   |                   |                   | ·····             | 3.486 1 < U         | 3.409 t < U      | 3.614 1 < U      |  |
| SEMIVOLATILES  | 4-Chlorophenyl phenyl elher |                   |                   |                   |                   | 1.163 1 < U         | 1.136 1 < U      | 1.205 1 < U      |  |
| SEMIVOLATILES  | 4-Methylphenol              |                   |                   |                   |                   | 0,581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | 4-Nitroaniline              |                   |                   |                   |                   | 5.814 1 < U         | 5.682 1 < U      | 6.024 1 < U      |  |
| SEMIVOLATILES  | 4-Nitrophenol               |                   |                   |                   |                   | 5,814 1 < U         | 5.682 1 < U      | 6,024 1 < U      |  |
| SEMIVOLATILES  | Acenaphthene                |                   |                   |                   |                   | 0.349 1 < U         | 0.341 1 < U      | 0.361 1 < U      |  |
| SEMIVOLATILES  | Acenaphthylene              |                   |                   |                   |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | Anthracene                  |                   |                   | ÷                 |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | Benzo(a)anthracene          |                   |                   |                   |                   | 0.349 1 < U         | 0.341 1 < U      | 0.361 1 < U      |  |
| SEMIVOLATILES  | Benzo(a)pyrene              |                   |                   |                   |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | Benzo(b)fluoranthene        |                   |                   |                   |                   | 1.163 1 < U         | 1.136 1 < U      | 1.205 1 < U      |  |
| SEMIVOLATILES  | Benzo(ghi)perylene          |                   |                   |                   |                   | 2.328 1 < U         | 2.273 i < U      | 2,41 1 < U       |  |
| SEMIVOLATILES  | Benzo(k)fluoranthene        |                   |                   |                   |                   | 1.163 t < U         | 1,136 1 < U      | 1.205 1 < U      |  |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane  |                   |                   |                   |                   | 0.581 f < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | bis(2-Chioroelhyl)ether     |                   |                   |                   |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | bis(2-Chloroisopropyl)ether |                   |                   |                   |                   | 1,163 1 < U         | 1.136 1 < U      | 1.205 1 < U      |  |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate  |                   |                   |                   |                   | 0.326 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | Butyl benzyl phihalate      |                   |                   |                   |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | Carbazole                   |                   |                   |                   |                   | 1,163 1 < U         | 1,136 1 < U      | 1.205 1 < U      |  |
| SEMIVOLATILES  | Chrysens                    |                   |                   |                   |                   | 5.814 I < U         | 5.682 1 < U      | 6.024 1 < U      |  |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene      |                   |                   |                   |                   | 2.326 1 < U         | 2.273 1 < U      | 2,41 1 < U       |  |
| SEMIVOLATILES  | Dibenzoluran                |                   |                   |                   |                   | 1.163 \ < U         | 1.136 1 < U      | 1.205 1 < U      |  |
| SEMIVOLATILES  | Diethyl phthalate           |                   |                   |                   |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 i < U      |  |
| SEMIVOLATILES  | Dimethyl phthalate          |                   |                   |                   |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | di-n-Butyl phihalate        |                   |                   |                   |                   | 1,616 1 < U         | 1.568 1          | 3.373 1          |  |
| SEMIVOLATILES  | di-n-Octyl phihalate        |                   |                   |                   |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | Fluoranthens                |                   |                   |                   |                   | 0,581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | Fluorene                    |                   |                   |                   |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | Hexachlorobenzene           |                   |                   |                   |                   | 1.163 1 < U         | 1,136 1 < U      | 1.205 1 < U      |  |
| SEMIVOLATILES  | Hexachlorobutadiene         |                   |                   |                   |                   | 3.488 1 < U         | 3.409 1 < U      | 3.614 1 < U      |  |
| SEMIVOLATILES  | Hexachlorocyclopentadiens   |                   |                   |                   |                   | 3.485 I < U         | 3.409 1 < U      | 3.614 1 < U      |  |
| SEMIVOLATILES  | Hexachloroethane            | l                 |                   |                   |                   | 1.163 1 < U         | 1.136 1 < U      | 1.205 1 < U      |  |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene      | [                 |                   |                   |                   | 1,163 1 < U         | 1.136 1 < U      | 1.205 1 < U      |  |
| SEMIVOLATILES  | Isophorone                  | 1                 |                   |                   |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | Naphthalene                 |                   |                   |                   |                   | 0.349 1 < U         | 0.341 t < U      | 0.361 1 < U      |  |
| SEMIVOLATILES  | Nitrobenzene                |                   |                   |                   |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 1 < 0      |  |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine  | (                 |                   |                   |                   | 1.163 1 < U         | 1.136 1 < U      | 1.205 1 < 0      |  |
| SEMIVOLATILES  | n-Nitrosodiphenylamine      | ]                 |                   |                   |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | Pentachlorophenol           |                   |                   |                   |                   | 5.814 1 < U         | 5.662 1 < U      | 6.024 1 < U      |  |
| SEMIVOLATILES  | Phenanthrene                |                   |                   |                   |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | Phenol                      |                   |                   |                   |                   | 0.581 1 < U         | 0.568 1 < U      | 0.602 1 < U      |  |
| SEMIVOLATILES  | Pyrene                      |                   |                   |                   |                   | 0.581 f < U         | 0.568 1 < U      | 0.602 f < U      |  |
| VOLATILES  | 1,1,1,2-Tetrachloroethane   |                   | 0.00481 1 U       |                   | 0.00518 1 U       | · · · · · · · · · · |                  |                  |  |
| VOLATILES  | 1,1,1-Trichloroethane       |                   | 0.00481 1 U       |                   | 0.00518 1 U       | 0.006 1 < U         | 0.006 1 < U      | 0.006 1 < 0      |  |
| VOLATILES  | 1,1,2.2-Tetrachloroethane   |                   | 0.00481 1 U       |                   | 0.00518 1 U       | 0.006 1 < U         | 0.006 1 < U      | 0.006 1 < U      |  |
| VOLATILES  | 1,1,2-Trichloroethane       |                   | 0.00481 1 U       |                   | 0.00518 1 U       | 0.006 1 < U         | 0.006 1 < 0      | 0.006 1 < U      |  |
| VOLATILES  | 1,1-Dichloroethane          |                   | 0.00481 1 U       |                   | 0.00518 1 U       | 0.006 1 < U         | 0.006 1 < U      | 0.005 1 < U      |  |
| VOLATILES  | 1.2-Dichloroethene          |                   | 0.00481 1 U       |                   | 0.00518 1 U       | 0.006 1 < U         | 0.006 1 < U      | 0.006 1 < U      |  |
| VOLATILES  | 1,1-Dichloropropene         |                   | 0.00481 1 U       |                   | 0.00518 1 U       |                     |                  |                  |  |
| VOLATILES  | 1,2.3-Trichlorobenzene      | 1                 | 0.004B1 1 U       |                   | 0.00518 1 U       |                     |                  |                  |  |
| VOLATILES  | 1.2.3-Trichloropropane      |                   | 0.00481 I U       |                   | 0.00518 1 U       |                     |                  |                  |  |


|                                       |                                | Concentration     | s of Chemicals in | Soil Samples Asso | clated with Sump 0 | 73                |                  |                  |
|---------------------------------------|--------------------------------|-------------------|-------------------|-------------------|--------------------|-------------------|------------------|------------------|
| SI OCATION                            |                                | 35SUMP073-SB01    | 35SUMP073-SB01    | 35SUMP073-SB02    | 35SUMP073-SB02     | LH-DL73-01        | LH-\$73-01       | LH-\$73-01       |
| SAMPLE NO                             |                                | 35-SMP073-S801-01 | 35-SMP073-S801-02 | 35-SMP073-SB02-01 | 35-SMP073-SB02-02  | LH-DL73-01        | LH-\$73-01_1     | LH-S73-01_2      |
| SAMPLE DATE                           |                                | 9/21/2006         | 9/21/2006         | 9/21/2006         | 9/21/2006          | 6/26/1993         | 6/26/1993        | 6/26/1993        |
| DEPTH                                 |                                | 0.5 - 0.5 Ft      | 3 - 3 F1          | 0.5 - 0.5 Ft      | 3.5 - 3.5 Ft       | 2 - 2.7 Ft        | .5 • 1.5 Fl      | 2.5 - 3.5 Ft     |
| SAMPLE PURPOSE                        |                                | REG               | REG               | REG               | REG                | REG               | REG              | REG              |
| Test Group                            | Parameter (Units = mg/kg)      | Result DIL LQ VQ  | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO   | Result Dil, LO VO | Result DIL LO VO | Result DIL LO VO |
| VOLATILES                             | 1,2,4-Trichlorobenzene         | 1                 | 0.00481 I U       |                   | 0.00518 1 U        |                   |                  |                  |
| VOLATILES                             | 1,2,4-Trimelhyibenzene         |                   | 0.00481 I U       |                   | 0.00518 t U        |                   |                  |                  |
| VOLATILES                             | 1.2-Dibromo-3-chloropropane    |                   | 0.00481 1 U       |                   | 0.00518 1 U        |                   |                  |                  |
| VOLATILES                             | 1,2-Dibromoethane              |                   | 0.00481 1 U       |                   | 0.00518 I U        |                   |                  |                  |
| VOLATILES                             | 1.2-Dichlorobenzene            |                   | 0.00481 1 U       |                   | 0.00518 1 U        |                   | 0.006 1 1        | 0.006 1 - 11     |
| VOLATILES                             | 1,2-Dichloroethane             |                   | 0.00481 1 U       |                   | 0.00518 1 U        | 0.006 I < U       | 0.006 1 < 1      | 0.006 t < ti     |
| VOLATILES                             | 1,2-Dichloroethene             |                   |                   |                   |                    | 0.006 1 < 0       | 0.006 1 < 0      | 0.006 1 < 1      |
| VOLATILES                             | 1,2-Dichloropropane            |                   | 0.00481 1 U       |                   | 0.00518 1 U        | 0.006 1 < 0       | 0.000 1 K 0      | 0.000 1 4 0      |
| VOLATILES                             | 1,2-Dimethylbenzene (o-Xylene) |                   | 0.00481 1 U       |                   | 0.00518 1 0        |                   |                  |                  |
| VOLATILES                             | 1,3.5-Trimethylbenzene         |                   | 0.00481 1 U       |                   | 0.00518 1 0        |                   |                  |                  |
| VOLATILES                             | 1,3-Dichlarobenzene            |                   | 0.00481 1 U       |                   | 0.00518 1 0        |                   |                  |                  |
| VOLATILES                             | 1.3-Dichloropropane            |                   | 0,00481 1 U       |                   | 0.00518 1 U        |                   |                  |                  |
| VOLATILES                             | 1,4-Dichiorobenzene            |                   | 0.00481 1 U       |                   | 0.00518 1 0        |                   |                  |                  |
| VOLATILES                             | 2.2-Dichloropropane            |                   | 0.00481 1 U       |                   | 0.00518 1 0        | 0.050 t / II      | 0.11 1 2 11      | 012 1 ≼ U        |
| VOLATILES                             | 2-Butanone                     |                   | 0.00962 1 U       |                   | 0.0104 1 0         | 0.000 1 5 0       | 0.11 1 2 0       |                  |
| VOLATILES                             | 2-Chloroethyl vinyl ether      |                   | 0.00962 1 U       |                   | 0.0104 1 0         |                   |                  |                  |
| VOLATILES                             | 2-Chlorotoluene                |                   | 0.004B1 1 U       |                   |                    |                   | 0.056 1 × 11     | 0.06 1 < U       |
| VOLATILES                             | 2-Hexanone                     |                   | 0.00962 1 U UJ    |                   | 0,0104 1 0 00      | 0.000 1 5 0       | 0.000            |                  |
| VOLATILES                             | 4-Chlorotoluene                |                   | 0.00481 1 0       |                   |                    | 0.003 1 - 11      | 011 1 e ii       | 0.12 1 < U       |
| VOLATILES                             | Acetone                        |                   | 0.00962 1 U       |                   | 0.00518 1 1        | 0.006 1 < 11      | 0.006 1 < 11     | 0.006 1 < U      |
| VOLATILES                             | Benzene                        | ł                 | 0.00481 1 U       |                   | 0.00518 1 0        | 0.000 1 4 0       | 0,000 / 1 0      |                  |
| VOLATILES                             | Bromobenzene                   | 1                 | 0.00481 1 U       |                   | 0.00518 1 0        |                   |                  |                  |
| VOLATILES                             | Bromochloromethane             |                   | 0.00481 1 U       |                   |                    | 0.006 1 - 1       | 0.006 1 c U      | 0.006 1 < U      |
| VOLATILES                             | Bromodichloromethane           |                   | 0.00481 1 U       |                   | 0.00518 1 0        | 0.006 1 < 11      | 0.008 1 < 1      | 0.006 1 < U      |
| VOLATILES                             | Bromoform                      |                   | 0.00481 1 U       |                   |                    | 0.029 1 < 1       | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES                             | Bromomethane                   |                   | 0.00962 1 U       |                   | 0,0104 1 0         | 0.029 1 5 0       | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES                             | Carbon disulfice               | 1                 | 0.00481 1 0       |                   | 0.00518 1 0        | 0.006 1 < 11      | 0.006 1 < U      | 0.006 t < U      |
| VOLATILES                             | Carbon tetrachloride           |                   | 0.00481 1 U       |                   | 0.00010 1 0        | 0.006 1 < U       | 0.006 1 < U      | 0.006 t < U      |
| VOLATILES                             | Chlorobenzene                  |                   | 0.00481 1 0       |                   |                    | 0.000 1 < U       | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES                             | Chloroelhane                   |                   | 0.00962 1 0       |                   | 0.00518 1 1        | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES                             | Chlorolorm                     |                   | 0.00963 1 U       |                   | 0.0104 1 11        | 0.029 1 < U       | 0.006 t < U      | 0.006 1 < U      |
| VOLATILES                             | Chloromethane                  | <b>S</b>          | 0.00962 1 0       |                   | 0.00518 1 U        |                   |                  |                  |
| VOLATILES                             | cis-1,2-Dichlorpetriene        |                   | 0.00401 1 0       |                   | 0.00518 1 1        | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES                             | Cis-+,d-Dichloroproperty       |                   | 0.00481 1 1       |                   | 0.00518 1 U        | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES                             | Dibromocnioromeinane           |                   | 0.00481 1 11      |                   | 0.00518 1 U        |                   |                  |                  |
| VOLAHLES                              | Dipromomenane                  | ł                 | 0.00962 1 1       |                   | 0.0104 1 U         |                   |                  |                  |
| VOLATILES                             | Situlbarrana                   |                   | 0.00481 1 11      |                   | 0.00518 1 U        | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES                             | Lavasblarabutadiana            |                   | 0.00481 1 11      |                   | 0.00518 1 U        |                   |                  |                  |
| VOLATILES                             | hexacinorodulaciene            |                   | 0.00481 1 U       |                   | 0.00518 1 U        |                   |                  |                  |
| VOLATILES                             | n p. Viener                    |                   | 0.00481 1 U       |                   | 0.00518 1 U        |                   |                  |                  |
| VOLATICES                             | Motivi isobubil katone         |                   | 0.00962 1 U       |                   | 0.0104 1 U         | 0.058 1 < U       | 0.056 t < U      | 0.06 1 < U       |
| VOLATILES                             | Methylene chloride             |                   | 0.00481 1 U       |                   | 0.00518 1 U        | 0.005 1 < U       | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES                             | Nanithalana                    |                   | 0.00962 1 U       |                   | 0.0104 1 U         |                   |                  |                  |
| VOLATILES                             | n-RUTYLBENZENE                 |                   | 0.00481 1 U       |                   | 0.00518 1 U        |                   |                  |                  |
| VOLATHES                              | n-PROPYLBENZENE                | ļ                 | 0.00481 1 U       |                   | 0.00518 1 U        |                   |                  |                  |
| VOLATILES                             | P-ISOPROPYLTOLUENE             |                   | 0.00481 1 U       |                   | 0.00518 1 U        |                   |                  |                  |
| VOLATILES                             | sec-BUTYLBENZENE               | 1                 | 0.00481 1 U       |                   | 0.00518 1 U        |                   |                  |                  |
| VOLATILES                             | Styrene                        |                   | 0.00481 1 U       |                   | 0.00518 1 U        | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      |
| VOI ATILES                            | tert-BUTYLBENZENE              |                   | 0.00481 1 U       |                   | 0.00518 1 U        |                   |                  |                  |
| VOLATILES                             | Tetrachloroethene              |                   | 0.00481 1 U       |                   | 0.00518 1 U        | 0.006 1 < U       | 0.006 1 < U      | 0.005 1 < U      |
| · · · · · · · · · · · · · · · · · · · |                                | 1                 |                   |                   |                    |                   |                  |                  |

Table 3-73

Page 3 of 4



Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

والمحاجب والمحاجب والمستحد والمستحد والمستكر والمراجع والمحاج و

|                |                           | Concentration     | is of Chemicals in S | Soil Samples Asso | ociated with Sump ( | )73              |                  |                  |
|----------------|---------------------------|-------------------|----------------------|-------------------|---------------------|------------------|------------------|------------------|
| CLOCATION      |                           | 35SUMP073-SB01    | 35SUMP073-SB01       | 35SUMP073-SB02    | 35SUMP073-SB02      | LH-DL73-01       | LH-S73-01        | LH-S73-01        |
| SAMPLE NO      |                           | 35-SMP073-SB01-01 | 35-SMP073-SB01-02    | 35-SMP073-SB02-01 | 35-SMP073-SB02-02   | LH-DL73-01       | LH-S73-01_1      | LH-S73-01_2      |
| CANDIC DATE    |                           | 9/21/2006         | 9/21/2006            | 9/21/2006         | 9/21/2006           | 6/26/1993        | 6/26/1993        | 6/26/1993        |
| DEDTH          |                           | 0.5 - 0.5 Ft      | 3 · 3 F1             | 0.5 - 0.5 FL      | 3.5 - 3.5 Ft        | 2 - 2 7 Ft       | .5 - 1.5 FL      | 2.5 - 3.5 Ft     |
| SAMPLE PUBPOSE |                           | REG               | REG                  | REG               | REG                 | REG              | REG              | REG              |
| Test Group     | Parameter (Units ≃ mg/kg) | Result DIL LO VO  | Result DIL LO VO     | Result DIL LO VO  | Result DIL LQ VQ    | Result DIL LQ VO | Result DIL LO VO | Result DIL LO VO |
| VOLATILES      | Toluene                   |                   | 0.00481 1 U          |                   | 0.00518 1 U         | 0.006 1 < U      | 0.005 1 < 0      | 0.006 1 < 0      |
| VOLATILES      | Irans-1,2-Dichloroethene  | 1                 | 0.00481 1 U          |                   | 0.00518 1 U         |                  |                  | 0.006 i - 11     |
| VOLATILES      | Irans-1,3-Dichloropropene |                   | 0.00481 1 U          |                   | 0.00518 1 U         | 0.006 1 < 0      | 0.006 1 < 0      | 0.006 1 < 0      |
| VOLATILES      | Trichloroelhene           |                   | 0.00481 1 U          |                   | 0.00518 1 U         | 0.004 1          | 0.005 1 < 0      | 0.000 1 2 0      |
| VOLATILES      | Trichlorofluoromethane    |                   | 0.00962 1 U          |                   | 0,0104 1 U          |                  |                  |                  |
| VOLATILES      | Vinyl acetate             |                   | 0.00962 1 U UJ       |                   | 0,0104 1 U UJ       |                  | 0.005 (          | 0.006 1 - 1      |
| VOLATILES      | Viny! chloride            |                   | 0.00962 1 U          |                   | 0.0104 I U          | 0.029 1 < 0      |                  | 0.006 1 < 1      |
| VOLATILES      | Xvlenes, Tolai            |                   |                      |                   |                     | 0.006 1 < 0      | 0.008 1 < 0      | 0.000 1 1 0      |

Table 3-73

Footnotes are shown on cover page to Tables Section.

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-74   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 074 |

| (SUMP) = SUMP074 |                            | -                 |                   |                      |                   | 25511142074-5802  | 1 H-DL74-01      | LH-S74-01        |
|------------------|----------------------------|-------------------|-------------------|----------------------|-------------------|-------------------|------------------|------------------|
| SLOCATION        |                            | 35SUMP074-SB01    | 35SUMP074-SB01    | 3550MP0/4-5001       | 35308F074-5802.01 | 35-SMP074-5B02-02 | LH-DL74-01       | LH-S74-01        |
| SAMPLE_NO        |                            | 35-SMP074-SB01-01 | 35-SMP074-SB01-02 | 35-5MP0/4-5D01-02-00 | 001/0006          | 9/21/2006         | 6/26/1993        | 6/26/1993        |
| SAMPLE_DATE      |                            | 9/21/2006         | 9/21/20/06        | 9/21/2006            | 912112000         | 45-45 51          | 2 • 2.7 F1       | 2.5 - 3.5 Ft     |
| DEPTH            |                            | 0.5 0.5. FI       | 4.5 - 4.5 Ft      | 4.5 • 4.5 FL         | 0,0.*0.0.0        | REG               | REG              | REG              |
| SAMPLE_PURPOSE   |                            | REG               | REG               |                      | Baselt Dil 10 VO  | Result DIL LO VO  | Result DIL LO VO | Result DIL LO VO |
| Tesl Group       | Parameter (Units = mg/kg)  | Result DIL LO VQ  | Result DIL LO VO  | Hesan DIL CO VO      |                   |                   | 1.235 1 < U      | 1.205 1 < U      |
| EXPLOSIVES       | 2,4-Dinitrotoluene         |                   |                   |                      |                   |                   | 1.235 1 < U      | 1.205 i < U      |
| EXPLOSIVES       | 2.6-Dinitrotoluene         | ]                 |                   | 0010 1               | 0730 1            | 8810 1            | 5830 1           | 4940 1           |
| METALS           | Aluminum                   | 7340 1            | 11900 1           |                      | n 11 1 1          | 0.117 1 U         | 6.26 t < U       | 7.96 1 < U       |
| METALS           | Antimony                   | 0.113 1 U         | 0.102 1 J JL      | 0.114 1 0            | 145 1             | 075 1             | 1.82 1           | 2.51 1           |
| METALS           | Arsenic                    | 1.6 1             | 1.51 1            | 2,5                  | 100 1 1           | 698 1             | 59.4 1           | 53.3 1           |
| METALS           | Barium                     | 80 t J            | 574 i J           | 73.1 F 3             | 0645 1 1          | 0718 1            |                  |                  |
| METALS           | Beryllium                  | 0.531 1           | 0.568             | 0.44                 | 0.545 1 .1 .1     | 0.559             | 3.78 1           | 3.54 1 E         |
| METALS           | Cadmium                    | 0.158 1 J J       | 0.507 1 JL        | 0.103 1 0 0          | 1220 1            | 1100 1            | 1950 1           | 1950 1           |
| METALS           | Calcium                    | 2010              | 548 1             | /08 1                | 116 1             | 72 1              | 8.89 1           | 6.93 1           |
| METALS           | Chromium                   | 11.5 1            | 13.9 1 JH         | 11.9                 | 710 1             | 502 1             | 0.532 1 < U      | 6.45 1           |
| METALS           | Cobali                     | 6.73 1            | 5.45 1 JL         | 9.14                 | 7.12 1            | 3.08 1            | 8.89 1           | 21.7 1           |
| METALS           | Copper                     | 3.69 1            | 3.67 1            | 9.80                 | 0140 1            | 7220 1 .]         | 13300 1          | 11500 1          |
| METALS           | iron                       | 8900 1 J          | 18600 1           | 9850 1 3             | 9140 I U          | 735 1             | 13.8 1 E         | 18.3 1 E         |
| METALS           | Lead                       | 8.98 1 J          | 8.42 5 J          | 14,5 1 J             | 3.03 1 0          | 905 1             | 840 1            | 482 1            |
| METALS           | Magnesium                  | 594 1             | 745 1             | 6/2 1                | 702 i             | 803 1 .1          | 176 1            | 294 1            |
| METALS           | Manganese                  | 236 1 J           | 3650 10 J         | 241 I J              |                   | 0.281 1 1         | 0.026 1 < U      | 0.027 1 < U      |
| METALS           | Mercury                    | 0.0161 1 J J      | 0.285 I U         | 0.284 1 U            | 0.0218 1 3 3      | 0.201 1 0         | 0.020            |                  |
| METALS           | Nicket                     | 6.77 1            | 6.22 1 JH         | 7,3 1                | 0.42 )            | 3.14 1<br>356 1   | 353 1            | 287 1            |
| METALS           | Potassium                  | 267 1             | 312 1             | 282                  | 329 1             | A 239 1           | 0.626 1 < U      | 0,796 1 < U      |
| METALS           | Selenium                   | 0.221 1 J J       | 0.291 1           | 0.365                | 0.217 1 3 0       | 189 1 11          | 0.031 1 < U      | 0.04 1 < U       |
| METALS           | Silver                     | 1.74 1 U          | 1.69 1 U          | 1.59 1 U             | C.24 I U          | 470 1             |                  |                  |
| METALS           | Sodium                     | 191 1             | 330 1             | 242 1                | 320 1             |                   | 23.9 1           | 17.2 1           |
| METALS           | Strontium                  | 1                 |                   |                      | 0.0000 1          | 0.0557 1          |                  |                  |
| METALS           | Thallium                   | 0.0665 1          | 0.0754 5 J J      | 0.068                | 0.0000 1          | 121 1             |                  |                  |
| METALS           | Vanadium                   | 19.6 1 J          | 40.8 1 JL         | , 21 1 J             | 22.4 1 0          | 13.4 1            | 27.8             | 39.3 1           |
| METALS           | Zinc                       | 18.1 1            | 15.5 1 JF         | 4 21 1               | 0.01              | 0.201 20 11       |                  |                  |
| PERC             | Perchiorale                | 0.101 10 U        | 0.201 20 U        | 0.195 20 0           | 0.0903 10 0       | 5RB 1 11          |                  |                  |
| RANGE_ORGANICS   | Carbon Range C12-C28       | 56.6 1 U          | 55.9 1 0          | 56.4 1 U             | 55,4 1 0          | 588 1 11          |                  |                  |
| RANGE_ORGANICS   | CARBON RANGE C28-C35       | 56.6 1 - U        | 31 I J B          | 56.4 1 U             | 53.4 I U          | 58.8 1 11         |                  |                  |
| RANGE_ORGANICS   | Carbon Range C6-C12        | 56.6 1 U          | 55.9 1 0          | 55.4 I U             | 0019 5 11         | 0193 1 11         | 1.235 1 < U      | 1.205 1 < U      |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene     | 0.186 1 U         | Q.186 1 U         | 0.185 I U            | 0.918 5 0         | 0.193 1 11        | 1.235 1 < U      | 1,205 1 < U      |
| SEMIVOLATILES    | 1.2-Dichlorobenzene        | 0.186 1 U         | 0.185 1 U         | 0.165 1 0            | 0,918 5 0         | 0.193 1 U         | 1.235 1 < U      | 1,205 1 < U      |
| SEMIVOLATILES    | 1,3-Dichlorabenzene        | 0.186 1 U         | 0.186 1 U         | 0.185 1 U            | 0.910 5 0         | 0.193 1 1         | 1.235 1 < U      | 1.205 1 < U      |
| SEMIVOLATILES    | 1,4-Dichlorobenzena        | 0.186 1 U         | 0,186 1 0         | 0.185 1 0            | 0.918 5 0         | 0.193 1 U         | 1.235 1 < U      | 1.205 1 < U      |
| SEMIVOLATILES    | 2.4.5 Trichlorophenol      | 0,186 1 U         | 0.185 1 U         | 0.165 1 0            |                   | 0193 1 U          | 1.235 1 < U      | 1,205 1 < U      |
| SEMIVOLATILES    | 2.4,6-Trichlorophenol      | 0.186 1 U         | 0.186 1 U         | 0.05 1 0             | 0,310 5 0         | 0193 1 U          | 1.235 1 < U      | 1.205 i < U      |
| SEMIVOLATILES    | 2.4-Dichlorophenol         | 0.186 1 U         | 0186 1 U          | 0,185 1 0            | 0,818 5 11        | 0.103 1 U         | 0.617 1 < U      | 0.602 1 < U      |
| SEMIVOLATILES    | 2.4-Dimethylphenol         | 0.186 1 U         | 0,186 1 U         | 0.165 1 U            | 0.918 5 U         | 0.966 1 11        | 12.346 1 < U     | 12.048 1 < U     |
| SEMIVOLATILES    | 2,4-Dinitrophenol          | 0.931 1 U         | 0,931 1 U         | 0.923 1 0            | 4,35 5 0          | 0.193 1 11        |                  |                  |
| SEMIVOLATILES    | 2,4-Dinitrotoluene         | 0.186 1 U         | 0.186 1 U         | 0.165 1 U            | 0.310 5 0         | 0.193 1 U         |                  |                  |
| SEMIVOLATILES    | 2.6-Dinitrotoluane         | 0.186 1 U         | 0.185 1 U         | 0.165 1 0            | 0.910 5 11        | 0.193 1 1/        | 0.37 1 < U       | 0.361 1 < U      |
| SEMIVOLATILES    | 2-Chioronaphthalene        | 0.186 1 U         | 0.186 1 U         | 0.165 1 U            | 0.010 5 11        | 0.193 1 U         | 0.617 1 < U      | 0.602 1 < U      |
| SEMIVOLATILES    | 2-Chiorophenol             | 0.186 1 U         | 0,186 1 U         | 0.165 1 0            | 0.518 5 11        | 0.193 1 1         | 8.37 1 < U       | 0.361 1 < U      |
| SEMIVOLATILES    | 2-Methyinaphthalene        | 0.186 1 U         | 0.185 1 U         | 0 185 1 0            | 0,918 5 0         | 0.193 1 U         | 0.817 1 < U      | 0.502 1 < U      |
| SEMIVOLATILES    | 2-Methylphenol             | 0.186 1 U         | 0.186 I U         | 0,165 1 U            | 150 E 11          | 0.965 1 11        | 3.704 1 < U      | 3.614 1 < U      |
| SEMIVOLATILES    | 2-Nitroaniline             | 0.931 1 U         | 0.931 1 U         | 0.923 1 U            | 4.35 0 U          | 0.193 1 1         | 1.235 1 < U      | 1.205 1 < U      |
| SEMIVOLATILES    | 2-Nitrophenol              | 0.186 1 U         | 0.186 1 U         | 0.185 1 U            | 184 5 11          | 0.387 1 U         | 0.617 1 < U      | 0.602 1 < U      |
| SEMIVOLATILES    | 3,3' Dichlorobenzidine     | 0.372 1 U         | 0.373 1 U         | 0.308 1 0            | 450 5 11          | 0.966 1 11        | 3.704 1 < U      | 3.614 1 < U      |
| SEMIVOLATILES    | 3-Nitroaniline             | 0.931 U           | 0.931 1 U         | 0.923 1 0            | 459 5 11          | 0.966 1 U         | 6,173 1 < U      | 6.024 1 < U      |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol | 0.931 1 U         | 0.931 1 U         | 0.923 1 0            | 0918 5 11         | 0.193 1 U         | 1.235 1 < U      | 1.205 1 < U      |
| SEMIVOLATILES    | 4-Bromophenyl phenyl eiher | 0,186 1 U         | 0,186 1 U         | 0.100 I U            | 0.010 0 0         |                   |                  |                  |

Data Evaluation Report



| Dala Eraldater richt.                             |                  |
|---|------------------|
| Chemical Concentrations in Soil Associated with L | HAAP-35/36 Sumps |

and an an an and the second second second second second second second second second second second second second

|   |                             | Concentrations of C                              | hemicals in So                                   | il Samples Assoc                                    | iated with Sum                                   | p 074  |                                       |                                       |
|---|-----------------------------|--|--|---|--|--|---------------------------------------|---------------------------------------|
| SLOCATION<br>SAMPLE_NO                  |                             | 355UMP074-5B01<br>35-5MP074-5B01-01<br>9/21/2006 | 35SUMP074-SB01<br>35-SMP074-SB01-02<br>9/21/2006 | 35SUMP074-SB01<br>35-SMP074-SB01-02-QC<br>9/21/2006 | 35SUMP074-SB02<br>35-SMP074-SB02-01<br>9/21/2006 | 35SUMP074-SB02<br>35-SMP074-SB02-02<br>9/21/2005 | LH-DL74-01<br>LH-DL74-01<br>6/26/1993 | LH-\$74-01<br>LH-\$74-01<br>6/26/1993 |
| DEPTH                                   |                             | 0.5 0.5. Ft                                      | 4.5 • 4.5 Ft                                     | 4.5 - 4.5 FL  | 0,5 0.5. Ft                                      | 4.5 - 4.5 Ft                                     | 2 - 2.7 Fl                            | 2.5 · 3.5 Ft                          |
| SAMPLE PURPOSE                          |                             | REG  | REG  | FD  | REG  | REG  | REG                                   | REG                                   |
| Test Group                              | Parameter (Units = mg/kg)   | Result DIL LO VQ                                 | Result DIL LO VQ                                 | Result DIL LQ VQ                                    | Result DIL LO VO                                 | Result DIL LO VQ                                 | Result DIL LO VO                      | Result DIL LO VO                      |
| SEMIVOLATILES                           | 4-Chloro-3-methylphenol     | 0.185 1 U  | 0.166 f U  | 0.185 1 U   | 0,918 5 U  | 0.193 1 U  | 0.617 1 < U                           | 0.602 1 < U                           |
| SEMIVOLATILES                           | 4-Chloroaniline             | 0.185 f U  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 3.704 1 < 0                           | 3,614 I < U                           |
| SEMIVOLATILES                           | 4-Chlorophenyl phenyl elher | 0.186 î U  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 1.235 1 < 0                           | 1.205 1 < U                           |
| SEMIVOLATILES                           | 4-Melhylphenol              | 0.186 1 U  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 0  | 0.617 1 < 0                           | 0.602   < 0                           |
| SEMIVOLATILES                           | 4-Nitroaniline              | 0.931 1 U  | 0.931 1 U  | 0.923 I U   | 4.59 5 U   | 0.965 1 U  | 6.173 1 < U                           | 0.024 I < U                           |
| SEMIVOLATILES                           | 4-Nitrophenol               | 0,931 1 U  | 0.931 I U  | 0.923 1 U   | 4.59 5 U   | 0.965 1 U  | 0.1/3   < U                           | 0.024 1 < 0                           |
| SEMIVOLATILES                           | Acenaphthene                | 0,186 1 U  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 0.617 1 - 1                           |                                       |
| SEMIVOLATILES                           | Acenaphthylene              | 0.186 1 U  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 0  | 0.617 1 < U                           | 0.602 1 < U                           |
| SEMIVOLATILES                           | Anthracene                  | 0,186 1 U  | 0.186 1 U  | 0.185 1 0   | 0.918 5 U  | 0.193 1 U  | 0.017 1 < 11                          | 0.361 1 ≤ U                           |
| SEMIVOLATILES                           | Benzo(a)anthracene          | 0,186 1 U  | 0.185 1 U  | 0.185 1 0   | 0.918 5 0  | 0.133 1 0  | 0.617 1 < 1                           | 0.602 1 < U                           |
| SEMIVOLATILES                           | Benzo(a)pyrene              | 0.166 1 U  | 0.186 1 0  | 0.185   U   | 0.918 5 0  | 0.193 1 11                                       | 1235 t z U                            | 1.205 1 < U                           |
| SEMIVOLATILES                           | Benzo(b)fluoranthene        | 0.186 1 U  | 0.186 1 U  | 0.185 1 1   | 0.918 5 0  | 0.199 1 11                                       | 2.469 1 e U                           | 2.41 1 < U                            |
| SEMIVOLATILES                           | Benzo(ghi)perylené          | 0.186 1 U  | 0.186 1 0  | 0.000 1 0   | 0.919 5 0  | 0.193 1 1  | 1.235 1 < U                           | 1.205 1 < U                           |
| SEMIVOLATILES                           | Benzo(k)lluoranihene        | 0.186 1 0  | 0.185 1 0  |   | 450 5 U Hi                                       | 0.966 1 11 11                                    |                                       |                                       |
| SEMIVOLATILES                           | Benzoic Acid                |  | 0.931 1 0 03                                     | 0.923 1 0 00  | 0.018 5 11                                       | 0.193 1 U  |                                       |                                       |
| SEMIVOLATILES                           | Benzyi A'cohoi              | 0,186 0  | 0.100 1 U  | 0.185 ( 1)  | 0,918 5 U  | 0.193 1 U  | 0.617 t < U                           | 0.602 1 < U                           |
| SEMIVOLATILES                           | bis(2-Chiorbeinoxy)meinane  | 0.186 1 0  | 0.180 1 0  | 0.185 1 1   | 0.918 5 12                                       | 0.193 1 U  | 0:617 1 < U                           | 0.602 1 < U                           |
| SEMIVOLATILES                           | pis(2-Unioroginyi)ather     | 0,186 1 0  | 0,186 1 1  | 0.185 1 11  | 0.918 5 U  | 0.193 1 U  | 1,235 1 < U                           | 1.205 1 < U                           |
| SEMIVOLATILES                           | bis(2-Childroisopropy)ether | 0.188 1 0  | 0.185 1 07                                       | 0.185 1 1   | 0.918 5 U  | 0.193 1 U  | 0.173 1 < U                           | 0.265 1 < U                           |
| SEMIVOLATILES                           | Dist2-Entymexylphinatale    | 0.185  | 0.186 1 11                                       | 0.185 1 1   | 0.918 5 U  | 0.193 1 U  | 0.617 t < U                           | 0.602 1 < U                           |
| SEMIVOLATILES                           | Carbonalo                   | 0.100 / 0  | 0.000  |   |  |  | 1.235 1 < U                           | 1.205 1 < U                           |
| SEMIVOLATILES<br>CENIVOLATILES          | Charana                     | 0.186 1 11                                       | 0.185 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 6.173 1 < U                           | 6.024 1 < U                           |
| CENTROLATILES                           | Dibenzo(s b)anthracene      | 0.185 1 U  | 0.186 1 U  | 0.185 1 U   | 0.918 S U  | 0.193 1 U  | 2,469 1 < U                           | 2,41 1 < U                            |
| SEMMOLATILES                            | Dibenzoluran                | 0.186 1 1  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 1.235 1 < U                           | <b>1.205 1 &lt; U</b>                 |
| SEMIVOLATILES                           | Diethyl obthalaie           | 0.186 1 U  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 0.123 1                               | 0.502 1 < U                           |
| SEMIVOLATILES                           | Dimethyl ohthalate          | 0,186 1 U  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 0.617 1 < U                           | 0.602 t < U                           |
| SEMIVOLATILES                           | di-n-Butyl phthalate        | 0.186 1 U  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 f U  | 3.049 1 < U                           | 1.735 1 < U                           |
| SEMIVOLATILES                           | di-n-Octyl phthalate        | 0.186 1 U  | 0,185 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 0.617 1 < U                           | 0.602 1 < U                           |
| SEMIVOLATILES                           | Fluoranthene                | 0.186 1 U  | 0.185 1 U  | 0,165 1 U   | 0.918 5 U  | 0.193 1 U  | 0.617 1 < U                           | 0.602 1 < U                           |
| SEMIVOLATILES                           | Fluorene                    | 0.185 1 U  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 0.617 1 < U                           | 0.602 1 < U                           |
| SEMIVOLATILES                           | Hexachlorobenzene           | 0.186 1 U  | 0.186 1 U  | 0.185 t U   | 0.918 5 U  | 0.193 1 U  | 1.235 f < U                           | 1.205 1 < U                           |
| SEMIVOLATILES                           | Hexachlorobutadiene         | 0.186 1 U  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 3.704 1 < 0                           | 3.614 1 < U                           |
| SEMIVOLATILES                           | Hexachiorocyclopentadiene   | 0,186 1 U  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 3.704 1 < U                           | 3.614 1 < 0                           |
| SEMIVOLATILES                           | Hexachloroethane            | 0.186 1 U  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 1,235 1 < 0                           | 1.205 1 × U                           |
| SEMIVOLATILES                           | Indeno(1,2,3-cd)pyrene      | 0.186 1 U  | 0.186 I U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 0.617 1 < 1                           | 0.602 1 4 11                          |
| SEMIVOLATILES                           | Isophorone                  | 0.186 1 U  | 0.186 1 U  | 0.185 1 U   | 0,918 5 0  | 0.193 1 0  | 0.017 1 < 0                           | 0.361 1 4 1                           |
| SEMIVOLATILES                           | Naphihalene                 | 0.186 1 U  | 0.186 1 U  | 0.185 1 U   | 0.918 5 U  | 0.193 1 U  | 0.57 1 4 0                            | 0,602 1 < 1                           |
| SEMIVOLATILES                           | Nitrobenzene                | 0.186 1 U  | 0.186 1 U  | 0.185 1 0   | 0.918 5 0  | 0.150 / U  | 100011 1 2 0                          | 1205 1 c U                            |
| SEMIVOLATILES                           | n-Nitroso-di-n-propylamine  | 0.186 1 U  | 0,186 1 U  | 0,185 1 U   | 0.918 5 0  | 0.193 1 1  | 0.617 1 < 1                           | 0.602 1 < U                           |
| SEMIVOLATILES                           | n-Nitrosodiphenylamine      | 0.186 1 0  | 0.185 1 0  | 0.100 1 0   | V.918 5 0  | 0,056 1 1  | 6,011 1 < U                           | 6.024 1 < U                           |
| SEMIVOLATILES                           | Penlachiorophenol           | 0.931 1 0  | 0.931 1 U  | 0.923 1 0   | 0.018 5 11                                       | 0.193 1 11                                       | 0.617 1 < U                           | 0.602 1 < U                           |
| SEMIVOLATILES                           | Phenanthrene                | 0.186 1 U  | 0.105 1 U  | 0.100 1 0   | 0.918 5 11                                       | 0 193 1 1  | 0.617 1 < U                           | 0.602 1 < U                           |
| SEMIVOLATILES                           | Phenol                      | 0.186 1 0  | 0,100 1 0  | 0.105 1 11  | 0.918 5 11                                       | 0.193 1 U  | 0.617 1 < U                           | 0.602 1 < U                           |
| SEMIVOLATILES                           | Pyrene                      | U.100 1 U  | 0.100 1 0  | 0.00535 1 11  |  | 0.00548 1 U                                      |                                       |                                       |
| VOLATILES                               | 1,1,1,1,2+1 etrachordetnane | 1  | 0.00543 1 11                                     | 0.00535 1 11  |  | 0.00548 1 U                                      | 0.006 1 < U                           | 0.005 1 < U                           |
| VOLAHLES                                | 1.1.2.2.Totrachiaraelbanc   |  | 0.00543 1 1                                      | 0.00535 1 1/  |  | 0.00548 1 U                                      | 0.006 1 < U                           | 0.006 1 < U                           |
| VOLATILES                               | 1 1 2. Trichlarealbana      |  | 0.00543 1 1                                      | 0.00535 1 U   |  | 0.00548 1 U                                      | 0.006 1 < U                           | 0.006 1 < U                           |
| VOLATILES                               | i 1-Dichiorositiane         |  | 0.00543 1 U                                      | 0.00535 1 U   |  | 0.00548 1 U                                      | 0.006 1 < U                           | 0.006 1 < U                           |
| VOLATILES                               | 1 1-Dichloraelhene          |  | 0.00543 I U                                      | 0.00535 1 U   |  | 0.00548 1 U                                      | 0.006 1 < U                           | 0.006 1 < U                           |
| VOLATILES                               | 1.1-Dichloropropene         |  | 0.00543 1 U                                      | 0.00535 1 U   |  | 0.00548 1 U                                      |                                       |                                       |
| · • • • • • • • • • • • • • • • • • • • | 1. Charles of the second    | I  |  |   |  |  |                                       |                                       |

Table 3-74

Chemical Concentrations In Soil Associated with LHAAP-35/36 Sumps



|                |                                | Concentrations of C | nemicals in Sol   | i Samples Assoc      | nated with Sum    | p 074             |                  |                 |
|----------------|--------------------------------|---------------------|-------------------|----------------------|-------------------|-------------------|------------------|-----------------|
| SLOCATION      |                                | 35SUMP074-SB01      | 35SUMP074-SB01    | 35SUMP074-SB01       | 35SUMP074-SB02    | 35SUMP074-SB02    | LH-DL74-01       | LH-S74-01       |
| SAMPLE NO      |                                | 35-SMP074-SB01-01   | 35-SMP074-SB01-02 | 35-SMP074-SB01-02-QC | 35-SMP074-SB02-01 | 35-SMP074-SB02-02 | LH-DL74-01       | LH-\$74-01      |
| SAMPLE DATE    |                                | 9/21/2006           | 9/21/2006         | 9/21/2006            | 9/21/2006         | 9/21/2006         | 6/26/1993        | 6/26/1993       |
| DEPTH          |                                | 0.5. 0.5. Ft        | 4.5 - 4.5 Fi      | 4.5 - 4.5 FI         | 0.5 0.5. Ft       | 4.5 - 4.5 Ft      | 2 • 2,7 Ft       | 2.5 - 3.5 +1    |
| SAMPLE_PURPOSE |                                | REG                 | REG               | FD                   | REG               | REG               | REG              | HEG             |
| Test Group     | Parameter (Units = mg/kg)      | Result DIL LO VO    | Result DIL LO VO  | Result DIL LQ VQ     | Result DIL LQ VQ  | Result DIL LO VO  | Result DIL LO VO | Hesua Dic Lu VO |
| VOLATILES      | 1.2.3-Trichlorobenzene         |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       |                  |                 |
| VOLATILES      | 1,2,3-Trichloropropane         |                     | 0.00543 i U       | 0.00535 1 U          |                   | 0.00548 1 U       |                  |                 |
| VOLATILES      | 1,2,4-Trichlorobenzene         |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 0       |                  |                 |
| VOLATILES      | 1,2.4-Trimethylbenzene         |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       |                  |                 |
| VOLATILES      | 1,2-Dibromo-3-chloropropane    |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00048 1 0       |                  |                 |
| VOLATILES      | 1,2-Dibromoethane              |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00546 1 1       |                  |                 |
| VOLATILES      | 1,2-Dichlorobenzene            |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00346 1 0       | 0.005 t 2 11     | 0.006 1 < U     |
| VOLATILES      | 1,2-Dichloroethane             |                     | 0.00543 1 U       | 0.00535 1 0          |                   | 0.00346 1 0       | 0.006 1 4 U      | 0.008 1 < U     |
| VOLATILES      | 1,2-Dichlaroelhene             | }                   |                   | 0.00525 1 11         |                   | 0.00548 1 11      | 0.006 1 < U      | 0.006 1 < U     |
| VOLATILES      | 1.2-Dichloropropane            |                     | 0.00543 1 0       | 0.00535 1 0          |                   | 0.00548 1 1       | 0.000            |                 |
| VOLATILES      | 1,2-Dimethylbenzene (o-Xylene) |                     | 0.00543 1 0       | 0.00000 1 0          |                   | 0.00548 1 11      |                  |                 |
| VOLATILES      | 1.3,5-Trimelhylbenzene         |                     | 0.00543 1 U       | 0.00535 1 1          |                   | 0.00548 1 11      |                  |                 |
| VOLATILES      | 1.3-Dichlorobenzene            |                     | 0.00543 1 U       | 0.00535 1 0          |                   | 0.00548 1 11      |                  |                 |
| VOLATILES      | 1,3-Dichloropropane            |                     | 0.00543 1 0       | 0.00535 1 U          |                   | 0.00548 1 1       |                  |                 |
| VOLATILES      | 1.4-Dichlorobenzene            |                     | 0.00543 F U       | 0.000000 1 0         |                   | 0.00548 1 U       |                  |                 |
| VOLATILES      | 2.2-Dichloropane               |                     | 0.00343 1 U       | 0.00333 1 U          |                   | 0.011 1 U         | 0.03 1           | 0.067 1         |
| VOLATILES      | 2-Butanone                     |                     | 0.0109 1 0        | 0.0107 1 1           |                   | 0.011 1 U         | ****             |                 |
| VOLATILES      | 2 Ghloroethyl vinyl ether      |                     | 0.0109 1 0        | 0.0103 1 0           |                   | 0.00548 t U       |                  |                 |
| VOLATILES      | 2-Chloroloiuene                |                     | 0.00043 1 0       | 0.000000 1 0         |                   | 0.011 1 U UJ      | 0.062 1 < U      | 0.06 1 < U      |
| VOLATILES      | 2-Hexanone                     | i i                 | 0.0103 / 0 00     | 0.0105 1 1           |                   | 0.00548 1 U       |                  |                 |
| VOLATILES      | 4-Chlorotoluene                |                     | 0.00343 1 0       | 0.0107 1 1           |                   | 0.011 1 U         | 0.231 1 < U      | 0.45 1 < U      |
| VOLATILES      | Acelone                        |                     | 0.0109 1 0        | 0.00535 1 11         |                   | 0.00548 1 U       | 0.006 1 < U      | 0,006 i < U     |
| VOLATILES      | Benzene                        |                     | 0.00543 1 11      | 0.00535 1 U          |                   | 0.00548 1 U       |                  |                 |
|                | Bromobenzene                   |                     | 0.00543 1 11      | 0.00535 1 U          |                   | 0.00548 1 U       |                  |                 |
| VOLATILES      | Bromodishipromethane           |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       | 0.006 i < U      | 0.006 1 < U     |
| VOLATILES      | Bremolerm                      |                     | 0.00543 1 1       | 0.00535 1 U          |                   | 0.00548 1 U       | 0.006 1 < U      | 0.006 1 < U     |
| VOLATILES      | Bromomethane                   |                     | 0.0109 1 U        | 0.0107 1 U           |                   | 0.011 1 U         | 0.031 1 < U      | 0.03 1 < U      |
| VOLATILES      | Carbon disulfide               |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       | 0.053 1          | 0.474 1         |
| VOLATILES      | Carbon tetrachloride           |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       | 0.006 1 < U      | 0.006 1 < Ú     |
| VOLATILES      | Chlorobenzene                  |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       | 0.008 1 ⊂ U      | 0.006 1 < U     |
| VOLATILES      | Chloroelhane                   |                     | 0.0109 1 U        | 0.0107 1 U           |                   | 0.011 1 U         | 0.031 1 < U      | 0.03 1 < U      |
| VOLATILES      | Chlaraform                     |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       | 0.006 1 < U      | 0.005 t < U     |
| VOLATILES      | Chioromathane                  |                     | 0.0109 1 U        | 0.0107 1 U           |                   | 0.011 1 U         | 0.031 1 < U      | 0.03 1 < U      |
| VOLATILES      | cis-1.2-Dichloroethane         |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       |                  |                 |
| VOLATILES      | cis-1,3-Dichloropropene        |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       | 0,006 1 < U      | 0.006 1 < U     |
| VOLATILES      | Dibromochloromethane           | 1                   | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       | 0.006 1 < U      | 0.005 1 < 0     |
| VOLATILES      | Dibromomethane                 |                     | 0.00543 1 U       | 0.00535 f U          |                   | 0.00548 1 U       |                  |                 |
| VOLATILES      | Dichlorodifluoromethane        |                     | 0.0109 1 U        | 0.0107 1 U           |                   | 0,011 1 U         |                  |                 |
| VOLATILES      | Ethylbenzene                   |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       | 0.006 1 < U      | 0.006 1 < U     |
| VOLATILES      | Hexachlorobuladiene            |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       |                  |                 |
| VOLATILES      | Isopropylbenzene               | 1                   | 0.00543 1 U       | 0,00535 1 U          |                   | 0.00548 1 U       |                  |                 |
| VOLATILES      | m,p-Xylenes                    | 1                   | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       |                  |                 |
| VOLATILES      | Melhyl isobulyl kelone         |                     | 0.0109 1 U        | 0.0107 1 U           |                   | 0.011 1 U         | 0.062 1 < 0      | 0.05 1 < 0      |
| VOLATILES      | Methylene chloride             |                     | 0,00139 1 J B     | 0.00185 1 J B        |                   | 0.00548 1 U       | 0,004 1 < U      | 0.005 1 < 0     |
| VOLATILES      | Naphthalene                    |                     | 0.0109 1 U        | 0.0107 1 U           |                   | 0.011 1 U         |                  |                 |
| VOLATILES      | n-BUTYLBENZENE                 | İ                   | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       |                  |                 |
| VOLATILES      | n-PROPYL8ENZENE                |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       |                  |                 |
| VOLATILES      | p-ISOPROPYLTOLUENE             |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0,00548 1 U       |                  |                 |
| VOLATILES      | sec-BUTYLBENZENE               | ļ                   | 0.00543 1 U       | 0.00535 1 U          |                   | 0,00548 1 U       | 0.000 4 - 11     | 0.006 1 - 11    |
| VOLATIĻES      | Styrene                        |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       | 0.000 i < U      |                 |
| VOLATILES      | tert-BUTYLBENZENE              |                     | 0.00543 1 U       | 0.00535 1 U          |                   | 0.00548 1 U       |                  |                 |

Table 3-74 concentrations of Chemicals in Soil Samples Associated with Sump 074



Table 3-74

### Data Evaluation Report Chemical Concentrations In Soil Associated with LHAAP-35/36 Sumps

|                                       |                           | Concentrations of C                              | hemicals in So                                   | il Sampies Assoc                                    | ciated with Sum                                  | ıp 074   |                                       |                                     |
|---------------------------------------|---------------------------|--|--|---|--|--|---------------------------------------|-------------------------------------|
| SLOCATION<br>SAMPLE_NO<br>SAMPLE DATE |                           | 35SUMP074-SB01<br>35-SMP074-SB01-01<br>9/21/2006 | 355UMP074-SB01<br>35-SMP074-SB01-02<br>9/21/2005 | 35SUMP074-SB01<br>35-SMP074-SB01-02-QC<br>9/21/2006 | 35SUMP074-SB02<br>35-SMP074-SB02-01<br>9/21/2006 | 35SUMP074-SB02<br>35-SMP074-SB02-02<br>9/21/2006 | LH-DL74-01<br>LH-DL74-01<br>6/26/1993 | LH-S74-01<br>LH-S74-01<br>6/26/1993 |
| DEPTH                                 |                           | 0.5 0.5. FI                                      | 4.5 - 4.5 Ft                                     | 4.5 - 4.5 Ft  | 0.5 0.5. FI                                      | 4.5 - 4.5 Ft                                     | 2 • 2,7 Ft                            | 2.5 - 3.5 -1                        |
| SAMPLE PURPOSE                        |                           | REG  | REG  | FD  | REG  | REG  | REG                                   | HEG                                 |
| Test Group                            | Parameter (Units = mg/kg) | Result DIL LO VO                                 | Result DIL LO VO                                 | Result DIL LO VO                                    | Result DIL LO VO                                 | Result DIL LO VO                                 | Result Dil LQ VQ                      | Result DIL LO VO                    |
| VOLATILES                             | Tetrachloroethene         |  | 0.00543 1 U                                      | 0.00535 1 U   |  | 0.00548 1 U                                      | 0.006 1 < U                           | 0.006 1 < U                         |
| VOLATILES                             | Toluene                   |  | 0.00543 1 U                                      | 0.00535 1 U   |  | 0.00548 1 U                                      | 0.006 1 < U                           | 0.006 1 < U                         |
| VOLATILES                             | trans-1.2-Dichloroelhene  |  | 0.00543 1 U                                      | 0.00535 1 U   |  | 0.00548 1 U                                      |                                       |                                     |
| VOLATILES                             | trans-1.3-Dichloropropene |  | 0.00543 1 U                                      | 0.00535 1 U   |  | 0,00548 1 U                                      | 0.006 1 < U                           | 0.006 1 < U                         |
| VOLATILES                             | Trichlorgelbene           |  | 0.00543 1 U                                      | 0.00535 1 U   |  | 0.00548 1 U                                      | 0.006 1 < U                           | 0.006 1 < 0                         |
| VOLATILES                             | Trichloroficoromethane    |  | 0.0109 F U                                       | 0.0107 1 U  |  | 0.011 1 U  |                                       |                                     |
| VOLATILES                             | Vinvlacetate              |  | 0.0109 1 U U                                     | 0.0107 1 U UJ                                       |  | 0.011 1 U UJ                                     |                                       |                                     |
| VOLHTIEES                             | Vinyi chloride            |  | 0.0109 1 U                                       | 0.0107 1 U  |  | 0.011 1 U  | 0.031 1 < U                           | 0.03 1 < U                          |
| VOLATILES                             | Xylenes, Total            |  |  |   |  |  | 0.006 1 < U                           | 0.006 t < U                         |

Footnotes are shown on cover page to Tables Section.

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

. . . . . . . . . . . .

÷....



| Table 3-75   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 075 |

| (SUMP) = SUMP075 |                           |                   |                   |                  |                  |                  |                  |                  |
|------------------|---------------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|
| SLOCATION        |                           | 35SUMP075-SB01    | 35SUMP076-SB01    | LH-DL75-01       | LH-S75-01        | LH-S75-01        | LH-\$75-02       | LH-S75-02        |
| SAMPLE_NO        |                           | 35-SMP075-SB01-01 | 35-SMP075-SB01-02 | LH-DL75-01       | LH-S75-01_1      | LH-575-01_2      | LH-\$75-02_1     | LH-\$75-02_2     |
| SAMPLE_DATE      |                           | 9/21/2006         | 9/21/2006         | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        |
| DEPTH            |                           | 0.5 - 0.5 Ft      | 4.5 - 4.5 FI      | 2 - 2.5 Ft       | 0.5 - 1.5 Ft     | 3.5 - 4 Ft       | 0.5 - 1.5 Ft     | 3.5 - 4 Ft       |
| SAMPLE_PURPOSE   |                           | REG               | REG               | REG              | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg) | Result DIL LQ VO  | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LO VO |
| EXPLOSIVES       | 2,4-Dinitrotoluene        |                   |                   | 1.22 1 < U       | 1.163 1 < U      | 1.205 1 < U      | 1.205 1 < U      | 1.22 1 < U       |
| EXPLOSIVES       | 2.6-Dinitrotoluene        |                   |                   | 1.22 1 < U       | 1.163 1 < U      | 1.205 1 < U      | 1.205 1 < U      | 1.22 1 < 0       |
| METALS           | Aluminum                  | 5760 1            | 9670 1            | 6280 1           | 5130 1           | 6400 1           | 6970 1           | 5290 1           |
| METALS           | Antimony                  | 0.0594 1 J J      | 0.118 1 U         | 4.9 1 < U        | 5.4 1 < U        | 5.34 1 < U       | 5.84 1 < U       | 4.54 1 < V       |
| METALS           | Arsenic                   | 2.35 1            | 0.571 1           | 1.64 1           | 1.81 1           | 1.23 1           | 8.44 1           | 0.658 1 ≌        |
| METALS           | Barium                    | 78.7 1            | 69 1              | 69.2 1 < U       | 95.3 1 < U       | 116 1 < U        | 180 1 < U        | 90.2 1 < U       |
| METALS           | Beryllium                 | 0.541 1           | 0.498 1           |                  |                  |                  |                  |                  |
| METALS           | Cadmium                   | 0.543 1           | 0.0713 1 J J      | 3.92 1           | 3,43 1           | 3.2 1            | 4.88 1           | 3.04 1           |
| METALS           | Calcium                   | 1700 1            | 401 1             | 1960 1           | 60000 1          | 981 1            | 693              | 1730 1           |
| METALS           | Chromium                  | 23.4 1            | 9.53 1            | 12.B 1           | 7.83 1           | 9.29 1           | 13 1             | 7.17 1           |
| METALS           | Cobalt                    | 6.24 1            | 3.81 1            | 6.71 1           | 3.16 1           | 6.7 1            | 6.48 1           | 4,45 1           |
| METALS           | Copper                    | 35.3 1            | 4.43 1            | 8.67 1 < U       | 5.24 1 < U       | 5.95 1 < U       | 9.9 1 < U        | 7.45 1 < U       |
| METALS           | Iron                      | 16200 1           | 6110 1            | 14400 1          | 9770 1           | 10200 1          | 16900 1          | 9150 1           |
| METALS           | Lead                      | 86.3 10           | 7.37 1            | 12.7 1 E         | 21.4 1           | 32.8 1           | 18.8 1           | 11.2 1 E         |
| METALS           | Magnesium                 | 629 1             | 491 1             | 707 i            | 545 1            | 348 1            | 2230 1           | 786 1            |
| METALS           | Manganese                 | 123 1             | 198 1             | 204 1            | 639 1            | 417 1            | 92.4 1           | 59.6 1           |
| METALS           | Mercury                   | 0.263 1 U         | 0.162 1 J J       | 0.053 1 < U      | 0.051 1 < U      | 0.058 1 < U      | 0.056 1 < U      | 0.055 1 < U      |
| METALS           | Nickel                    | 7.34 1            | 4.97 1            |                  |                  |                  |                  |                  |
| METALS           | Potassium                 | 227 1             | 286 1             | 350 1            | 241 1            | 304 1            | 547 1            | 355 1            |
| METALS           | Selenium                  | 0.262 1           | 0.265 1           | 0.49 1 < U       | 0.54 1 < U       | 0.534 1 < U      | 0.584 1 < U      | 0.454 1 < U      |
| METALS           | Silver                    | 1.53 1 U          | 1.63 1 U          | 0.024 1 < U      | 0.027 1 < U      | 0.093 1          | 0.029 1 < U      | 0.073 1          |
| METALS           | Sodium                    | 106 1             | 221 1             |                  |                  |                  |                  |                  |
| METALS           | Strontium                 |                   |                   | 20.8 1 < U       | 112 1 < U        | 13.9 1 < U       | 32.1 1 < U       | 75.4 1 < U       |
| METALS           | Thallum                   | 0.0562 1          | 0.0678 1          |                  |                  |                  |                  |                  |
| METALS           | Vanadium                  | 24.7 1            | 11.3 1            |                  |                  |                  |                  |                  |
| METALS           | Zinc                      | 83.8 1            | 14.7 1            | 33.1 1           | 27.4 1           | 16.7 1           | 48.7 1           | 23.5 1           |
| PERC             | Perchlorate               | 0.0481 5 U        | 0.192 20 U        |                  |                  |                  |                  |                  |
| BANGE ORGANICS   | Carbon Range C12-C28      | 56.1 1 U          | 58.5 1 U          |                  |                  |                  |                  |                  |
| BANGE ORGANICS   | CARBON RANGE C28-C35      | 56.1 1 U          | 32.9 t J B        |                  |                  |                  |                  |                  |
| RANGE ORGANICS   | Carbon Range C6-C12       | 56.1 1 U          | 58.5 1 U          |                  |                  |                  |                  |                  |
| SEMIVOLATILES    | 1.2.4-Trichlorobenzene    |                   |                   | 1.22 1 < U       | 1.163 1 < U      | 1.205 1 < U      | 1.205 1 < U      | 1.22 1 < U       |
| SEMIVOLATILES    | 1.2-Dichlorobenzene       |                   |                   | 1.22 1 < U       | 1.163 1 < U      | 1.205 1 < U      | 1.205 1 < U      | 1.22 1 < U       |
| SEMIVOLATU ES    | 1.3-Dichlorobenzene       |                   |                   | 1.22 1 < U       | 1.163 1 < U      | 1.205 1 < U      | 1.205 1 < U      | 1.22 î < U       |
| SEMIVOLATILES    | 1.4-Dichlorobenzené       |                   |                   | 1.22 1 < U       | 1.163 1 < U      | 1.205 1 < U      | 1.205 1 < U      | 1.22 1 < U       |
| SEMIVOLATILES    | 2.4.5-Trichlorophenal     |                   |                   | 1.22 1 < U       | 1.163 1 < U      | 1.205 1 < U      | 1.205 1 < U      | 1.22 1 < U       |
| SEMIVOLATILES    | 2.4.6-Trichlorophenol     |                   |                   | 1.22 1 < U       | 1.163 1 < U      | 1.205 1 < U      | 1.205 1 < U      | 1.22 1 < U       |
| SEMIVOLATILES    | 2.4-Dichlorophenol        |                   |                   | 1,22 1 < U       | 1.163 1 < U      | 1,205 1 < U      | 1.205 1 < U      | 1.22 1 < U       |
| SEMIVOLATILES    | 2 4 Dimethylphenol        |                   |                   | 0.61 1 < U       | 0.581 1 < U      | 0.602 1 < U      | 0.602 1 < U      | 0.61 1 < U       |
| SEMIVOLATILES    | 2 4-Dinitrophenol         |                   |                   | 12.195 1 < U     | 11.528 1 < U     | 12.048 1 < U     | 12.048 1 < U     | 12.195 1 < U     |
| SEMIVOLATILES    | 2. Chioronanbihaiene      | 1                 |                   | 0.366 1 < U      | 0.349 1 < U      | 0.361 1 < U      | 0.361 1 < U      | 0.365 1 < U      |
| SEMIVOLATILES    | 2-Chloropheno!            |                   |                   | 0.61 1 < U       | 0.581 1 < U      | 0.602 1 < U      | 0.602 1 < U      | 0.61 1 < U       |
| SEMIVOLATILES    | 2-Methylpaphthalene       |                   |                   | 0.366 1 < U      | 0.349 1 < U      | 0.361 1 < U      | 0.361 1 < U      | 0.366 1 < U      |
| SEMIVOLATILES    | 2-Methylohenol            |                   |                   | 0.61 1 < U       | 0.581 1 < U      | 0.602 1 < U      | 0.602 1 < U      | 0.61 1 < U       |
| SEMINOLATILES    | 2-Nitroaniline            |                   |                   | 3.659 1 < 1      | 3.488 1 < U      | 3,814 1 < U      | 3.614 1 < U      | 3.659 1 < U      |
| SEMINOLATILES    | 2-Nitrophenol             | ł                 |                   | 1.22 1 < 1       | 1.163 1 < U      | 1.205 1 < U      | 1.205 1 < U      | 1.22 1 < U       |
| SCHIVOLATICES    | 3.3 Dichlorobenzione      |                   |                   | 0.61 1 < 11      | 0.581 1 < 1      | 0.602 1 < U      | 0.602 1 < U      | 0.61 1 < U       |
|                  | 3. Mitroandine            |                   |                   | 3 659 1 2 11     | 3,488 1 2 11     | 3.614 1 < 1      | 3.614 1 < U      | 3.659 1 < U      |
| GENINOLATILED    | 0-Mill Udi millio         | 1                 |                   | 0.000 1 4 0      | 2.100 . 1 0      |                  |                  |                  |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



# Table 3-75 Concentrations of Chemicals in Soil Samples Associated with Sump 075

| (SUMP) = SUMP075 |                             |                   |                   |                  |                  | 111 075 01       | 111 675 00       | 14-\$75.02               |
|------------------|-----------------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|--------------------------|
| SLOCATION        |                             | 35SUMP075-SB01    | 35SUMP075-SB01    | LH-DL75-01       | LH-S75-01        | LH-875-01        | LH-6/0-V2        | 10.075.02                |
| SAMPLE_NO        |                             | 35-SMP075-SB01-01 | 35-SMP075-S801-02 | LH-DL75-01       | LH-S75-01_1      | LH-5/5-01_2      | LU-9/0-02_1      | E/06/1000                |
| SAMPLE_DATE      |                             | 9/21/2006         | 9/21/2006         | 6/26/1993        | 8/26/1993        | 6/26/1993        | 0/20/1990        | 3.5 . 4.5t               |
| DEPTH            |                             | 0.5 - 0.5 Ft      | 4.5 - 4,5 Ft      | 2 - 2.5 F1       | 0.5 - 1.5 Ft     | 3.5 - 4 -1       | 0.0 + 1.3 rt     | 0.0-411<br>DEC           |
| SAMPLE_PURPOSE   |                             | REG               | REG               | REG              | REG              |                  | Result DIL 10 VO | Result Dill 10 VO        |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL, LQ VQ | Result DIL LQ VQ  | Result DIL LQ VQ | Hesuit Dil La Va | Hesuit UIL LU VU |                  |                          |
| SEMIVOLATILES    | 4.6-Dinitro-2-methylphenol  |                   |                   | 6,098 1 < 0      | 5.814 1 < U      | 5.024 I < U      | 1.205 1 < 1      | 122 1 < 1                |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  |                   |                   | 1,22 1 < U       | 1,163 1 < 0      | 1.200 I < U      | 0.602 1 < 1      | 061 1 < U                |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     |                   |                   | 0.61 1 < 0       | 0.581 1 < 0      |                  |                  | 3,659 1 < 0              |
| SEMIVOLATILES    | 4-Chloroaniline             |                   |                   | 3.659 1 < 0      | 3,488 1 < U      | 3,014 I < U      | 1 205 1 < 11     | 122 1 < 1                |
| SEMIVOLATILES    | 4 Chlorophenyl phenyl ether | ļ                 |                   | 1.22 1 < 0       | 1,163 1 < 0      | 0,000 1 < 1      | 0.602 1 < U      | 061 1 < U                |
| SEMIVOLATILES    | 4-Methylphenol              |                   |                   | 0.61 1 < 0       | 0.581 1 < U      | 6.004 1 4 1      | 6.024 1 < 1      | 6098 1 < U               |
| SEMIVOLATILES    | 4-Nitroaniline              |                   |                   | 6.098 1 < U      | 5,814 1 < U      | 6.024 t < U      | 6024 1 < 1       | 6.098 1 < U              |
| SEMIVOLATILES    | 4-Nitrophenol               |                   |                   | 6.098 1 < 0      | 5,814 1 < U      | 0.024            | 0.024 1 < 0      | 0.368 1 < U              |
| SEMIVOLATILES    | Acenaphthene                |                   |                   | 0.356 1 < U      | 0,349 1 < 0      | 0.361 1 < 0      | 0.602 1 < 1      | 0.61 1 < U               |
| SEMIVOLATILES    | Acenaphthylene              |                   |                   | 0.61 1 < 0       | 0.581 1 < 0      | 0.602 1 < 0      | 0.002 1 < 0      | 0.61 1 < 1               |
| SEMIVOLATILES    | Anthracene                  | 1                 |                   | 0.61 1 < 0       | 0.581 1 < 0      |                  | 0.002 1 200.0    | 0.366 1 < 1              |
| SEMIVOLATILES    | Benzo(a)anthracene          | ļ                 |                   | 0,366 1 < 0      | 0.349 1 < 0      | 0.301 1 < 0      | 0.001 1 < 1      | 0.000 1 < 0              |
| SEMIVOLATILES    | Benzo(a)pyrene              |                   |                   | 0.61 1 < U       | 0.581 1 < 0      | 0.602 1 < 0      | 1.005 1 < 1      | 122 1 - 1                |
| SEMIVOLATILES    | Benzo(b)fluoranihene        | 1                 |                   | 1.22 1 < U       | 1.163 1 < U      | 1,205 1 < 0      | 1.205 1 < 0      | 1.22 I C U               |
| SEMIVOLATILES    | Benzo(ghi)perylene          |                   |                   | 2.439 1 < U      | 2.326 1 < U      | 2.41 1 < 0       | 2.41 1 4 0       | 100 1 - 11               |
| SEMIVOLATILES    | Benzo(k)fluoranthene        | l.                |                   | 1.22 1 < 0       | 1.163 1 < 0      | 1.205 1 < 0      | 0.200 1 - 1      | 0.61 1 < 1               |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  | 1                 |                   | 0.61 1 < U       | 0.581 1 < 0      | 0,602 1 < 0      | 0,602 1 < 0      | 0.01 1 4 0               |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |                   |                   | 0.61 1 < U       | 0.581 1 < 0      | 0.602 1 < 0      | 0.602 1 < 0      | 120 1 ~ 1                |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether |                   |                   | 1.22 1 < U       | 1,163 1 < 0      | 1.205 1 < 0      | 1.205 1 < 0      |                          |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  | (                 |                   | 0.22 1 J         | 0.14 1           | 0.325            | 0.602 1 < 0      |                          |
| SEMIVOLATILES    | Butyl benzyl phthalate      | ĺ                 |                   | 0.61 1 < U       | 0.581 1 < 0      | 0.602 1 < 0      | 1002   < U       | 100 1 < 1                |
| SEMIVOLATILES    | Carbazole                   |                   |                   | 1.22 1 < U       | 1.163 1 < 0      | 1.205 1 < 0      | 1.205 1 < 0      | 1.22 I < Ų<br>∉000 1 + U |
| SEMIVOLATILES    | Chrysene                    |                   |                   | 8.098 1 < U      | 5.814 1 < U      | 6.024 1 < 0      | 6.024 1 < 0      |                          |
| SEMIVOLATILES    | Dibenzo(a.h)anthracene      |                   |                   | 2.439 1 < 0      | 2.326 1 < 0      | 2.41 1 < U       | 2,41 1 < U       | 2,439 1 < 0              |
| SEMIVOLATILES    | Dibenzofuran                |                   |                   | 1.22 1 < U       | 1.163 1 < U      | 1.205 1 < U      | .1.205 1 < U     | 0.124 1 4 1              |
| SEMIVOLATILES    | Diethyl phthalate           |                   |                   | 0.146 1 J        | 0.581 1 < 0      | 0.169 1          | 0,12 1           | 0.64 1 2 11              |
| SEMIVOLATILES    | Dimethyl phthalate          |                   |                   | 0.61 1 < 0       | 0.581 1 < 0      | 0.602 1 < 0      | 0.602 1 < 0      | 0.01 1 2 0               |
| SEMIVOLATILES    | di-n-Butyl phthalate        |                   |                   | 6.463 1          | 2.64 1           | 3.578            | 4.692 1          | 0.61 1 - 1               |
| SEMIVOLATILES    | di-n-Octyl phthalate        |                   |                   | 0.61 1 < 0       | 0.581 1 < U      | 0,602 1 < 0      | 0.002 1 < 0      |                          |
| SEMIVOLATILES    | Fluoranthene                |                   |                   | 0.61 1 < U       | 0,581 1 < 0      | 0.602 1 < 0      | 0.602 1 < 0      |                          |
| SEMIVOLATILES    | Fluorene                    |                   |                   | 0.61 1 < U       | 0.581 1 < 0      | 0.602 1 < 0      |                  |                          |
| SEMIVOLATILES    | Hexachlorobenzene           |                   |                   | 1.22 1 < U       | 1.163 1 < 0      | 1.205 1 < U      | 1.205 1 < 0      | 3650 1 < 11              |
| SEMIVOLATILES    | Hexachlorobutadiene         |                   |                   | 3.659 1 < 0      | 3.488 1 < U      | 3,614 I < U      | 3.614 1 < 0      | 3.655 1 < ()             |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   | 1                 |                   | 3.659 1 < U      | 3.488 1 < 0      | 3,614 1 < 0      | 3.014 I < U      | 100 1 < 1                |
| SEMIVOLATILES    | Hexachloroethane            | 1                 |                   | 1.22 1 < U       | 1.163 1 < 0      | 1.205 1 < 0      | 1.205 1 < 0      | 1.22 ) C U               |
| SEMIVOLATILES    | Indeno(1.2.3-cd)pyrene      |                   |                   | 1.22 1 < 0       | 1.163 1 < 0      | 1.205 1 < 0      | 1,205 1 < 0      |                          |
| SEMIVOLATILES    | Isophorone                  | l.                |                   | 0.61 1 < U       | 0.581 1 < 0      | 0.602 1 < U      | 0.602 1 < 0      |                          |
| SEMIVOLATILES    | Naphthalene                 |                   |                   | 0.366 1 < U      | 0.349 1 < U      | 0.361 1 < U      | 0.361 1 < U      | 0.360 1 < 0              |
| SEMIVOLATILES    | Nitrobenzene                | 1                 |                   | 0.61 1 < 0       | 0.581 1 < 0      | 0.602 1 < 0      | 0.602 1 < 0      |                          |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |                   |                   | 1.22 1 < U       | 1.163 1 < U      | 1.205 1 < 0      | 1,205 1 < 0      | 1,22 1 < 0               |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      |                   |                   | 0.61 1 < U       | 0.581 1 < U      | 0.802 1 < 0      | 0.602 1 < 0      | 0.61 1 < 0               |
| SEMIVOLATILES    | Pentachlorophenol           |                   |                   | 6.098 1 < U      | 5.814 1 < U      | 6.024 1 < U      | 6.024 1 < U      | 6.098 1 < U              |
| SEMIVOLATILES    | Phenanthrene                | 1                 |                   | 0.61 1 < U       | 0.581 1 < U      | 0.602 1 < U      | 0.602 1 < U      | 0.61 1 < 0               |
| SEMIVOLATILES    | Phenol                      |                   |                   | 0.61 1 < U       | 0.581 1 < U      | 0.602 1 < U      | 0.602 1 < U      | 0.61 1 < 0               |
| SEMIVOLATILES    | Pyrene                      |                   |                   | 0.61 1 < U       | 0.581 1 < U      | 0.502 1 < U      | 0.602 1 < U      | 0.61 1 < U               |
| VOLATILES        | 1,1,1,2-Tetrachloroethane   |                   | 0.00583 1 U       |                  |                  |                  |                  |                          |
| VOLATILES        | 1,1,1-Trichloroethane       |                   | 0.00583 1 U       |                  | 0.006 1 < U      | 0.008 1 < U      | 0.006 1 < U      |                          |



| Table | 3-75 |
|-------|------|
|-------|------|

# Concentrations of Chemicals in Soil Samples Associated with Sump 075

| (SUMP] = SUMP075 |                                |                   |                   |                  |                 |                 | 111.075.00       | 10 676 00         |
|------------------|--------------------------------|-------------------|-------------------|------------------|-----------------|-----------------|------------------|-------------------|
| SLOCATION        |                                | 35SUMP075-SB01    | 35SUMP075-S801    | LH-DL75-01       | LH-S75-01       | LM-S75-01       | LH-878-02        | 1 11.575.09.9     |
| SAMPLE_NO        |                                | 35-SMP075-SB01-01 | 35-SMP075-SB01-02 | LH-DL75-01       | LH-875-01_1     | LH-5/5-01_2     | LT-3/3-02_1      | E/16/1002_F       |
| SAMPLE_DATE      |                                | 9/21/2006         | 9/21/2006         | 6/26/1993        | 6/26/1993       | 6/26/1993       | 0/20/1995        | 26-45             |
| DEPTH            |                                | 0.5 - 0.5 Ft      | 4.5 - 4.5 Ft      | 2 - 2.5 Ft       | 0.5 - 1.5 Pt    | 3.5 · 4 F(      | 0.5 - 1.5 M      | REG               |
| SAMPLE_PURPOSE   |                                | REG               | AEG               | REG              | HEG             |                 | Regult DIL LO VO | Besult Dil LO VC  |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ | Hesun DIL LO VU | Hesuk DIL LO VO |                  | HOSDIE DIE LOU FO |
| VOLATILES        | 1,1,2.2-Tetrachloroethane      |                   | 0.00583 1 U       |                  | 0.006 1 < U     | 0.000 1 < 0     | 0.006 1 < 1      |                   |
| VOLATILES        | 1,1,2 Trichloroethane          |                   | 0.00583 1 U       |                  | 0.006 1 < 0     | 0.000 1 < 0     | 0.006 1 < 0      |                   |
| VOLATILES        | 1,1-Dichloroethane             |                   | 0.00583 1 U       |                  | 0.006 1 < 0     | 0.000 1 < 0     |                  |                   |
| VOLATILES        | 1,1-Dichloroethene             |                   | 0.00583 1 U       |                  | 0.006 1 < 0     | 0.000 1 < 0     | 0.000 1 2 0      |                   |
| VOLATILES        | 1,1-Dichloropropene            |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | 1.2.3 Trichlorobenzene         |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | 1,2,3-Trichloropropane         |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | 1,2,4-Trichlorobenzene         | 1                 | 0,00583 1 0       |                  |                 |                 |                  |                   |
| VOLATILES        | 1.2.4-Trimethylbenzena         |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | 1.2-Dibromo-3-chloropropane    | ļ                 | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | 1.2-Dibromoethane              |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | 1,2-Dichlorobenzene            |                   | 0.00583 1 U       |                  |                 | 0.000 (         | 0.000 1          |                   |
| VOLATILES        | 1.2-Dichloroethane             |                   | 0.00583 1 U       |                  | 0.006 1 < 0     | 0.006 1 < 0     | 0,006 1 < 0      |                   |
| VOLATILES        | 1.2-Dichloroethene             |                   |                   |                  | 0.006 1 < 0     | 0.006 1 < 0     | 0.006 1 < 0      |                   |
| VOLATILES        | 1,2-Dichloropropane            | {                 | 0.00583 1 U       |                  | 0.005 1 < U     | 0.006 1 < U     | 0.006 1 < 0      |                   |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | 1,3,5-Trimethylbenzene         |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | 1,3-Dichlorobenzene            |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | 1.3-Dichloropropane            |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | 1.4-Dichlorobenzene            |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | 2.2-Dichloropropane            |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | 2-Butanone                     |                   | 0.0117 1 U        |                  | 0.12 1 < U      | 0.12 1 < U      | 0.12 1 < U       |                   |
| VOLATILES        | 2-Ghloroethyl vinyl ether      |                   | 0.0117 1 U        |                  |                 |                 |                  |                   |
| VOLATILES        | 2-Chlorotoluene                |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | 2-Hexanone                     |                   | 0.0117 1 U        |                  | 0.059 1 < U     | 0.06 1 < U      | 0.061 1 < U      |                   |
| VOLATILES        | 4-Chlorotoluene                |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | Acetone                        |                   | 0.0117 1 U        |                  | 0.12 1 < U      | 0.12 1 < 0      | 0.12 1 < 0       |                   |
| VOLATILES        | Benzene                        |                   | 0.00583 1 U       |                  | 0.005 1 < U     | 0.006 1 < 0     | 0.005 1 < V      |                   |
| VOLATILES        | Bromobenzene                   |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | Bromochloromethane             |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | Bromodichloromethane           |                   | 0.00583 1 U       |                  | 0.006 1 < 0     | 0.006 1 < 0     | 0.006 1 < 0      |                   |
| VOLATILES        | Bromoform                      |                   | 0.005B3 1 U       |                  | 0.006 1 < U     | 0.006 1 < 0     | 0.006 1 < 0      |                   |
| VOLATILES        | Bromomethane                   |                   | 0.0117 1 U        |                  | 0.006 1 < U     | 0,006 1 < U     | 0.006 1 < 0      |                   |
| VOLATILES        | Carbon disulfide               |                   | 0.00583 1 U       |                  | 0.006 1 < U     | 0,006 1 < U     | 0.006 1 < 0      |                   |
| VOLATILES        | Carbon tetrachloride           |                   | 0.00583 1 U       |                  | 0.006 1 < U     | 0.006 1 < U     | 0.006 1 < U      |                   |
| VOLATILES        | Chlorobenzene                  |                   | 0.005B3 1 U       |                  | 0,006 1 < U     | 0.006 1 < U     | 0.006 1 < 0      |                   |
| VOLATILES        | Chloroethane                   |                   | 0.0117 1 U        |                  | 0.006 1 < U     | 0.006 1 < U     | 0.006 1 < 0      |                   |
| VOLATILES        | Chloroform                     |                   | 0.00583 1 U       |                  | 0.008 1 < U     | 0.006 1 < U     | 0.006 1 < 0      |                   |
| VOLATILES        | Chloromethane                  |                   | 0,0117 1 U        |                  | 0.006 1 < U     | 0.006 1 < U     | 0.006 1 < 0      |                   |
| VOLATILES        | cis-1,2-Dichloroethene         |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | cis-1,3-Dichloropropene        |                   | 0.00583 1 U       |                  | 0.006 1 < U     | 0,006 1 < U     | 0.006 1 < U      |                   |
| VOLATILES        | Dibromochloromethane           |                   | 0.00583 1 U       |                  | 0.006 1 < U     | 0.006 1 < U     | 0.006 1 < U      |                   |
| VOLATILES        | Dibromomethane                 |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | Dichlorodifluoromethane        |                   | 0.0117 1 U        |                  |                 |                 |                  |                   |
| VOLATILES        | Ethylbenzene                   |                   | 0.00583 1 U       |                  | 0.006 1 < U     | 0.006 1 < U     | 0.006 1 < U      |                   |
| VOLATILES        | Hexachlorobutadiene            |                   | 0,00583 1 U       |                  |                 |                 |                  |                   |
| VOLATILES        | isopropyibenzene               |                   | 0.00583 1 U       |                  |                 |                 |                  |                   |
|                  |                                | •                 |                   |                  |                 |                 |                  |                   |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



|  |                             | Concentrations of Cl  | Concentrations of Chemicals in Soil Samples Associated with Sump 075                         |  |  |  |  |  |  |  |  |  |  |  |
|--|-----------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|
| (SUMP) = SUMP075<br>SLOCATION<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE<br>Text Group | Parameter (  nits - mn/kra) | 35SUMP075-S801<br>35-SMP075-S801-01<br>9/21/2006<br>0.5 + 0.5 Ft<br>REG<br>Eesuit Dii LO VO | 35SUMP075-SB01<br>35-SMP075-SB01-02<br>9/21/2006<br>4.5 - 4.5 Fl<br>REG<br>Result Dil, LQ VQ | LH-DL75-01<br>LH-DL75-01<br>8/28/1993<br>2 - 2.5 Ft<br>REG<br>Result DIL LQ VQ | LH-S75-01<br>LH-S75-01_1<br>6/26/1993<br>0.5 - 1.5 Ft<br>REG<br>Result DIL LQ VQ | LH-S75-01<br>LH-S75-01_2<br>6/26/1993<br>3.5 - 4 Ft<br>REG<br>Result DIL LQ VQ | LH-S75-02<br>LH-S75-02_1<br>6/26/1993<br>0.5 - 1.5 Ft<br>REG<br>Result DIL_LQ VQ | LH-S75-02<br>LH-S75-02_2<br>6/26/1993<br>3.5 - 4 Ft<br>REG<br>Result DIL LO VO |  |  |  |  |  |  |
| VOLATILES  | m.p.Xvienes                 |   | 0.00583 1 U  |  |  |  |  |  |  |  |  |  |  |  |
| VOLATILES  | Methyl isobutyl ketone      |   | 0.0117 1 U   |  | 0.059 1 < U  | 0.06 1 < U   | 0.061 1 < U  |  |  |  |  |  |  |  |
| VOLATILES  | Methylene chloride          | 1   | 0.00346 1 J B  |  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  |  |  |  |  |  |  |  |
| VOLATILES  | Naphthalene                 |   | 0.0117 1 U   |  |  |  |  |  |  |  |  |  |  |  |
| VOLATILES  | n-BUTYLBENZENE              |   | 0.00583 1 U  |  |  |  |  |  |  |  |  |  |  |  |
| VOLATILES  | n-PROPYLBENZENE             |   | 0.00583 t U  |  |  |  |  |  |  |  |  |  |  |  |
| VOLATILES  | p-ISOPROPYLTOLUENE          |   | 0.00583 1 U  |  |  |  |  |  |  |  |  |  |  |  |
| VOLATILES  | sec-BUTYLBENZENE            |   | 0.00583 1 U  |  |  |  |  |  |  |  |  |  |  |  |
| VOLATILES  | Styrene                     |   | 0.00583 1 U  |  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  |  |  |  |  |  |  |  |
| VOLATILES  | tert-8UTYL8ENZENE           |   | 0.00583 1 U  |  |  |  |  |  |  |  |  |  |  |  |
| VOLATILES  | Tetrachloroethene           |   | 0.00583 1 U  |  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  |  |  |  |  |  |  |  |
| VOLATILES  | Toluene                     |   | 0.00583 1 U  |  | 0.006 1 < U  | 0,006 1 < U  | 0.006 1 < V  |  |  |  |  |  |  |  |
| VOLATILES  | trans-1,2-Dichloroethene    |   | 0.00583 1 U  |  |  |  |  |  |  |  |  |  |  |  |
| VOLATILES  | trans-1.3-Dichloropropene   |   | 0.00583 1 U  |  | 0.006 1 < U  | 0,006 1 < U  | 0,006 1 < 0  |  |  |  |  |  |  |  |
| VOLATILES  | Trichloroethene             |   | 0.00583 1 U  |  | 0.006 1 < U  | 0.006 1 < 0  | 0.008 1 < U  |  |  |  |  |  |  |  |
| VOLATILES  | Trichlorofluoromethane      |   | 0.0117 1 U   |  |  |  |  |  |  |  |  |  |  |  |
| VOLATILES  | Vinyl acetate               |   | 0.0117 1 U UJ  |  |  |  |  |  |  |  |  |  |  |  |
| VOLATILES  | Vinyl chloride              | 1   | 0.0117 1 U   |  | 0.006 1 < U  | 0.006 1 < U  | 0.006 1 < U  |  |  |  |  |  |  |  |
| VOLATILES  | Xvienes, Total              |   |  |  | 0.006 1 < U  | 0.006 <u>1</u> < U   | <u>0.006 1 &lt; U</u>  |  |  |  |  |  |  |  |

Table 3-75

Footnotes are shown on cover page to Tables Section.



# Table 3-76 Concentrations of Chemicals in Soil Samples Associated with Sump 076

| {SUMP} = SUMP076 |                            |                   |                   |                  |                       |                           |                            | 196304           | 18-576-01        | 1 H-S76-01       |
|------------------|----------------------------|-------------------|-------------------|------------------|-----------------------|---------------------------|----------------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                            | 35SUMP076-SB01    | 35SUMP076-SB01    | 47SB30           | 47SB30                | 4/5830                    |                            | 1 10.3.04        | 18-576-01 1      | LH-S76-01 2      |
| SAMPLE_NO        |                            | 35-SMP076-SB01-01 | 35-SMP076-SB01-02 | 475830(0-0_5)    | 475B30(0-0_5)00       | 4 ( SD30(1+2)<br>e/c/2000 | 6/26/1003                  | 1/9/1995         | 6/26/1993        | 6/26/1993        |
| SAMPLE_DATE      |                            | 9/14/2006         | 9/14/2006         | 5/5/2000         | 6/5/2000              | 0/0/2000                  | 0,055                      | 0.05 FI          | 05-155           | 2 · 2.5 Ft       |
| DEPTH            |                            | 0.5 - 0.5 Fl      | 7 - 7 Ft          | 0+0.5 Ft         | 0-0.5 Fi              |                           | PEG                        | BEG              | BEG              | REG              |
| SAMPLE_PURPOSE   |                            | REG               | REG               | NEG VO           | FU<br>Basel OIL LO VO | Regult DN LO VO           | Besrit filt I G VG         | Result DIL LO VO | Result DIL LO VO | Result DIL LO VQ |
| Test Group       | Parameter (Units = mg/kg)  | Result DIL LO VO  | Hesult DIL LQ VQ  | Result DIL LQ VQ | Result OIL LO VO      | NOSUK DIE LO VO           |                            | 0.21 1 4         |                  |                  |
| EXPLOSIVES       | 1.3,5-Trinitrobenzane      |                   |                   |                  |                       |                           |                            | 0.21 1 < U       |                  |                  |
| EXPLOSIVES       | 1.3-Dinifrobenzene         |                   |                   |                  |                       |                           |                            | 0.21 1 < U       |                  |                  |
| EXPLOSIVES       | 2.4.6-Trinitrololuene      |                   |                   |                  |                       |                           | 1.19 1 < U                 | 0.21 1 < U       | 1,149 1 < U      | 1,205 1 < U      |
| EXPLOSIVES       | 2,4-Dinfirololuene         |                   |                   |                  |                       |                           | 119 1 c U                  | 0.23 1 < U       | 1.149 1 < U      | 1.205 1 < U      |
| EXPLOSIVES       | 2.6-Dinitrololuene         |                   |                   |                  |                       |                           |                            | 0.44 1< U        |                  |                  |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene |                   |                   |                  |                       |                           |                            | 1.9 1 < U        |                  |                  |
| EXPLOSIVES       | HMX                        |                   |                   |                  |                       |                           |                            | 0.88 1 < U       |                  |                  |
| EXPLOSIVES       | m-Nitrololuene             |                   |                   |                  |                       |                           |                            | 0.23 1 < U       |                  |                  |
| EXPLOSIVES       | Nitrobenzene               |                   |                   |                  |                       |                           |                            | 0.88 1< U        |                  |                  |
| EXPLOSIVES       | o-Nitrololuene             |                   |                   |                  |                       |                           |                            | 2.5 1 < U        |                  |                  |
| EXPLOSIVES       | p-Nitrotoluene             |                   |                   |                  |                       |                           |                            | 0.95 1 < U       |                  |                  |
| EXPLOSIVES       | RDX                        |                   |                   |                  |                       |                           |                            | 0.65 1 < U       |                  |                  |
| EXPLOSIVES       | Teiryi                     |                   |                   |                  |                       |                           | 7610 1                     | 7890 1           | 7770 1           | 11800 1          |
| METALS           | Aluminum                   | 12300 1           | 13000 1           |                  |                       |                           | 405 1 - 11                 | 156 1 < U        | 5.7 1 < U        | 7.88 1 < U       |
| METALS           | Antimony                   | 0.11 10 0         | 0,116 100         |                  |                       |                           | 0.60 1 2 0                 | 42 1 J           | 3.11 1           | 3.59 1           |
| METALS           | Arsenic                    | 10.6 1            | 1.81 1            |                  |                       |                           | 534 1 2 11                 | 181 1            | 27B 1 < U        | 190 1 < U        |
| METALS           | Barium                     | 132 1             | 54.6 1            |                  |                       |                           | 00.4 1 0                   |                  |                  |                  |
| METALS           | Beryllium                  | 0.641 1           | 0.786 1           |                  |                       |                           | 164 1 6                    | 18 1 c 11        | 5.87 \$          | 5.87 1           |
| METALS           | Cadmium                    | 0.104 1 J J       | 0.0456 1 J J      |                  |                       |                           | 1,04 1 6                   | 1600 1           | 2580 1           | 1860 1           |
| METALS           | Calcium                    | 746 1             | 563 1             |                  |                       |                           | 000 1<br>000 1             | 1000 1           | 992 1            | 15.4 1           |
| METALS           | Chremium                   | 13.9 1            | 14,7 1            |                  |                       |                           | 2.02 1                     | 49 1             | 6.33 1           | 2.88 1           |
| METALS           | Cobalt                     | 7.01 1            | 7.26              |                  |                       |                           | 800 1 4 1                  | 441 1            | 858 1 < U        | 9.81 1 < U       |
| METALS           | Copper                     | 4.12 1            | 5.85              |                  |                       |                           | 6040 1                     | 0660 1           | 21800 1          | 19500 1          |
| METALS           | Iron                       | 13200             | 14300 1           |                  |                       |                           | 167 1                      | 811 1            | 15.5 1 E         | 19.6 1 E         |
| METALS           | Lead                       | 10.1 1            | 7.77 1            |                  |                       |                           | 360 1                      | 499 1            | 731 1            | 725 1            |
| METALS           | Magnesium                  | 947 1             | 1020 1            |                  |                       |                           | 300 1                      | 109 1 .1         | 117 1            | 122 1            |
| METALS           | Manganese                  | 181 1             | 48.4 1            |                  |                       |                           | 0.055 1 - 1                | 018 1 - 11       | 0.05 1 < U       | 0.053 1 < U      |
| METALS           | Mercury                    | 0.0265 1 J J      | 0.275 1 U U       |                  |                       |                           | 0.000 1 1 0                | 0.10             |                  |                  |
| METALS           | Nickel                     | 7.9 1             | 9.58              |                  |                       |                           | 227 1                      | 450 1            | 304 1            | 437 1            |
| METALS           | Potassium                  | 588 1             | 530               |                  |                       |                           | 0406 1 - 11                | 053 1 .1         | 057 i < U        | 0.788 1 < U      |
| METALS           | Selenium                   | 0.362 1           | 0.226 J J         |                  |                       |                           | 0.057 1                    | 16 1 < 1         | 0.028 1 < U      | 0.039 1 < U      |
| METALS           | Silver                     | 1.64 1 U U        | 1.71 1.0 0        |                  |                       |                           | 0.007                      |                  |                  |                  |
| METALS           | Sodium                     | 34.4 1            | 319 1             |                  |                       |                           | 14.2 1 - 11                | 94.3 1           | 236 1 c U        | 257 I< U         |
| METALS           | Strantium                  |                   |                   |                  |                       |                           | 14,0 1 4 4                 | 778 12 11        |                  |                  |
| METALS           | Thallium                   | 0.0759 1          | 0.126 1           |                  |                       |                           |                            |                  |                  |                  |
| METALS           | Vanadium                   | 24.6              | 23.9              |                  |                       |                           | 146 1                      | 128 1            | 27.2 1           | 27.3 1           |
| METALS           | Zine                       | 30,4 1            | 31.8 1            |                  |                       | 0.00500 1 - 11            | 14.0                       | 120              |                  |                  |
| PERC             | Perchiorate                |                   |                   | 0.0309 1 J       | 0.00635 1 < 00        | 0.00036 1 < 0             |                            |                  |                  |                  |
| RANGE_ORGANICS   | Carbon Range G12-C28       | 34 IJ J           | 32.7 1 J J        |                  |                       |                           |                            |                  |                  |                  |
| RANGE_ORGANICS   | CARBON RANGE C28-C35       | 35.3 1 J J        | 35 IJ J           |                  |                       |                           |                            |                  |                  |                  |
| RANGE_ORGANICS   | Carbon Range C6-C12        | 55,5 1 U U        | 57.3 10 0         |                  |                       |                           | 110 1 4 11                 | 064 1 4 11       | 1149 1 - 11      | 1205 1< U        |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzena     |                   |                   |                  |                       |                           | 110 1 1                    | 0.64 1 4 1       | 1149 1 4 11      | 1.205 1 < U      |
| SEMIVOLATILES    | 1,2-Dichlorobenzene        |                   |                   |                  |                       |                           | 1.19 1 2 0                 | 0.64 1 < 11      | 1149 1 c U       | 1.205 1 K U      |
| SEMIVOLATILES    | 1.3-Dichlorobenzene        |                   |                   |                  |                       |                           | 1,19 1 < 0                 |                  | 1149 1 < U       | 1.205 1 ≺ U      |
| SEMIVOLATILES    | 1,4-Dichlorobenzene        |                   |                   |                  |                       |                           | 110 1 - 1                  | 32 1- 11         | 1.149 1 2 11     | 1.205 1 < 1      |
| SEMIVOLATILES    | 2.4.5 Trichlorophenol      |                   |                   |                  |                       |                           | 1.10 1 - 11                | 0.84 1 - 11      | 1.149 1 2 11     | 1.205 1 < U      |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol      |                   |                   |                  |                       |                           | 110 1 - 11                 | 0.64 1 - 11      | 1.149 1 2 11     | 1,205 i < U      |
| SEMIVOLATILES    | 2,4-Dichlorophenol         |                   |                   |                  |                       |                           | i,rar t< U<br>0.505 1 ∠ !! | 0.64 1 2 11      | 0.575 1 × U      | 0.602 1 < U      |
| SEMIVOLATILES    | 2,4-Dimethylphenol         |                   |                   |                  |                       |                           | 11005 1 - U                | 32 12 11         | 11494 1 c U      | 12.048 1 < 11    |
| SEMIVOLATILES    | 2.4-Dinitrophanol          | ł                 |                   |                  |                       |                           | 11.900 TK U                | 0.64 1 - 13      |                  |                  |
| SEMIVOLATILES    | 2,4-Dinitrototuene         |                   |                   |                  |                       |                           |                            | V.04 I 4 U       |                  |                  |

| Data Evaluation Report  |
|---|
| Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps |



# Table 3-76 Concentrations of Chemicals in Soil Samples Associated with Sump 076

| (SUMP) = SUMP076 |                             |                   |                   |                   |                  |                  |                  | LUC 1      |           | 14.676.01              |           | 18.57      | 6.01           |          |
|------------------|-----------------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|------------|-----------|------------------------|-----------|------------|----------------|----------|
| LOCATION _CODE   |                             | 35SUMP076-S801    | 35SUMP076-SB01    | 47SB30            | 47SB30           | 475830           | LH-DL75-01       | 140.21     | /4<br>M   | (8.676.01              | •         | 19.576     | .01.2          |          |
| SAMPLE_NO        |                             | 35-SMP076-SB01-01 | 35-SMP076-S801-02 | 475830(0-0_5)     | 47SB30(0-0_5)QC  | 47SB30(1-2)      | LH-DL/6-01       | 1/0/17/    | уч<br>иг  | EN-370-01_             | 1         | 6/26/      | 001_2          |          |
| SAMPLE_DATE      |                             | 9/14/2006         | 9/14/2006         | 6/5/2000          | 6/5/2000         | 6/5/2000         | 6/26/1993        | 1/9/190    |           | 0/20/1890              |           | 2.2        | 5 51           |          |
| DEPTH            |                             | 0.5 - 0.5 Ft      | 7 - 7 Fl          | 0 - 0.5 Fl        | 0 - 0.5 Ft       | 1 - 2 Fl         | 2 - 2.5 PI       | 0-0.5      | F(        | 0.0 • 1,0 P            |           | 6 · 2.     | с.<br>С        |          |
| SAMPLE_PURPOSE   |                             | REG               | REG               | REG               | FD               | REG              | REG              | HEG        |           | REG<br>Describ Dille 1 | 0 10      | Danut DI   | . n. w         | ^        |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LO VO  | Result DIL LO VO  | Result DIL. LO VQ | Result DIL LO VO | Result DIL LO VQ | Result DIL LO VO | Result DIL |           | Hesun Dil L            |           | Hesuit Dit |                | <b>.</b> |
| SEMIVOLATILES    | 2,6-Dinitrolaluene          |                   |                   |                   |                  |                  |                  | 0.64       | < Q       | 0.345 1.               |           | 0.261      | 1 - 11         |          |
| SEMIVOLATILES    | 2-Chloronaphthalene         |                   |                   |                   |                  |                  | 0,357 1 < 0      | 0,64 1     | < U<br>11 | 0.040 1 4              | u v       | 0.001      | 12 0           |          |
| SEMIVOLATILES    | 2-Chlorophenol              |                   |                   |                   |                  |                  | 0.595 1 < U      | 0,64 1     | < U       | 0.070 1 <              |           | 0.002      | 1 0            |          |
| SEMIVOLATILES    | 2-Methylnaphthalene         |                   |                   |                   |                  |                  | 0.357 1 < 0      | 0.64 1     | < U       | 0.340 1 4              |           | 0.001      | 1 11           |          |
| SEMIVOLATILES    | 2-Methylphenol              |                   |                   |                   |                  |                  | 0.595 1 < U      | 0.04 1     | < U<br>   | 0.0/0                  |           | 3.614      | 12 0           | ,        |
| SEMIVOLATILES    | 2-Nitroaniline              |                   |                   |                   |                  |                  | 3.571 1 < 0      | 3,2 1      | < 0       | 3.440                  |           | 1 205      | - C - U        |          |
| SEMIVOLATILES    | 2-Nitrophenol               |                   |                   |                   |                  |                  | 1.19 1 < U       | 0.64 1     | < 0       | 0.149 14               |           | 0.602      | 12 11          |          |
| SEMIVOLATILES    | 3,3'-Dichlorobenzidine      |                   |                   |                   |                  |                  | 0.595 1 < U      | 1.3 1      | < 0       | 0.575 1 1              |           | 5 614      | 1 - 11         | 1        |
| SEMIVOLATILES    | 3-Nitroanlline              |                   |                   |                   |                  |                  | 3.571 1 < U      | 3.2 1      | < 0       | 3,440                  |           | 5.074      | 1 1            |          |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol  |                   |                   |                   |                  |                  | 5.952 1 < 0      | 3.2 1      | < 0       | 5.747 1 4              |           | 1 205      | 1. 1           |          |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  |                   |                   |                   |                  |                  | 1,19 1 < 0       | 0.64 1     | < 0       | 6.149 1                |           | 0.602      | 1. 0           | 1        |
| SEMIVOLATILES    | 4-Chloro-3-melhylphenol     |                   |                   |                   |                  |                  | 0.595 1 < U      | 0.64 1     | < U<br>   | 0.575 1 -              |           | 2.614      | 1 - 11         | 1        |
| SEMIVOLATILES    | 4-Chloroaniline             |                   |                   |                   |                  |                  | 3.571 1 < 0      | 0.64 1     | < 0       | 3.448 1                |           | 1 305      | 1 2 1          |          |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl elher |                   |                   |                   |                  |                  | 1.19 1 < U       | 0.54 3     | < 0       | 1,149 1 -              |           | 0.603      | 5 - U<br>5 - U |          |
| SEMIVOLATILES    | 4-Melhylphenol              |                   |                   |                   |                  |                  | 0.595 1 < 0      | 0.64 1     | < 0       | 0.575 1                | εu<br>. Π | C.002      | 1 2 1          | 1        |
| SEMIVOLATILES    | 4-Nitroaniline              |                   |                   |                   |                  |                  | 5.952 1 < U      | 3.2 1      | < U       | 5./4/ 1                |           | 6.024      | 1 - 1          | )<br>I   |
| SEMIVOLATILES    | 4-Nitrophenol               |                   |                   |                   |                  |                  | 5.952 1 < U      | 3.2 1      | < U       | 5.747 1                |           | 0.024      |                | /<br>E   |
| SEMIVOLATILES    | Acenaphthene                |                   |                   |                   |                  |                  | 0.357 1 < 0      | 0.54 1     | < 0       | 0.345                  |           | 0.001      | 14 6           | ,<br>t   |
| SEMIVOLATILES    | Acenaphthylene              |                   |                   |                   |                  |                  | 0.595 1 < 0      | 0.64       | < U       | 0.575 1                | 4 U       | 0.002      | ) < L<br>5. 1  | ,<br>1   |
| SEMIVOLATILES    | Anthracene                  |                   |                   |                   |                  |                  | 0.595 1 < 0      | 0.64       | < U       | 0.575                  | < U       | 0.002      |                | ,        |
| SEMIVOLATILES    | Benzo(a)anthracene          |                   |                   |                   |                  |                  | 0.357 1 < 0      | 0.64 1     | < 0       | 0.345                  | < U       | 0.001      | 1 < 6          | 1        |
| SEMIVOLATILES    | Benzo(a)pyrene              |                   |                   |                   |                  |                  | 0,595 1 < U      | 0.64 1     | < U       | 0.575 1                | < U       | 0.002      | 1 < 1          | ,        |
| SEMIVOLATILES    | Benzo(b)(luoranthene        |                   |                   |                   |                  |                  | 1,19 1 < U       | 0.64 1     | < U       | 1.149 1                | < U       | 1.205      | 1 < 4          | ł.,      |
| SEMIVOLATILES    | Benzo(ghi)perylens          |                   |                   |                   |                  |                  | 2.381 1 < U      | 0.64       | < U       | 2.299 1                | < U<br>   | 2.41       | 1 < 1          | ,        |
| SEMIVOLATILES    | Benzo(k)/luoranihene        |                   |                   |                   |                  |                  | 1.19 1 < U       | 0.64       | < U       | 1.149 1                | < U       | 1.205      | 1 < L          | ,        |
| SEMIVOLATILES    | Benzoic Acid                |                   |                   |                   |                  |                  |                  | 3.2        | < U       |                        |           |            |                |          |
| SEMIVOLATILES    | Benzyl Alcohol              |                   |                   |                   |                  |                  |                  | 0.64       | < 0       |                        |           |            |                |          |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  |                   |                   |                   |                  |                  | 0.595 1 < 0      | 0.64       | < U       | 0.575                  | < 0       | 0.502      | 1 < 1          | ,        |
| SEMIVOLATILES    | bis(2-Chloroethyl)elher     |                   |                   |                   |                  |                  | 0.595 1 < 0      | 0.64 1     | < U       | 0.575                  | < U<br>   | 0.602      | 1 < 1          | ,        |
| SEMIVOLATILES    | bis(2-Chlorolsopropyl)ether |                   |                   |                   |                  |                  | 1,19 1 < U       | 0.64       | < 0       | 1,149 1                | < U       | 1.205      | 1 < 1          |          |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalale  |                   |                   |                   |                  |                  | 0.202 1 J        | 0.15 1     | J J       | 0.276 1                | J<br>11   | 0.373      |                |          |
| SEMIVOLATILES    | Butyl benzyl phthalate      |                   |                   |                   |                  |                  | 0.595 1 < 0      | Q.54       | < Ų       | 0.575                  | < U<br>   | 0.602      | 1 4 1          | 2<br>    |
| SEMIVOLATILES    | Carbazole                   |                   |                   |                   |                  |                  | 1,19 1 < U       |            |           | 1.149 1                | < 0       | 1.205      | 1 4 1          | 2        |
| SEMIVOLATILES    | Chrysene                    |                   |                   |                   |                  |                  | 5.952 1 < U      | 0.64       | i < U     | 5.747 1                | < 0       | 0,024      | 1 4 1          |          |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      |                   |                   |                   |                  |                  | 2.381 1 < 0      | 0.64       | I< U      | 2.299                  | < U       | 6.41       | 1 < 1          |          |
| SEMIVOLATILES    | Dibenzofuran                |                   |                   |                   |                  |                  | 1,19 1 < 1       | 0.64       | I < U     | 1,149                  | < 0       | 1.205      | 1 < 1          |          |
| SEMIVOLATILES    | Diethyl phthalate           |                   |                   |                   |                  |                  | 0.155 1 J        | 0.64       | I < U     | 0.218                  | J         | 0.002      | 1 < 1          | ,<br>,   |
| SEMIVOLATILES    | Dimethyl phthalate          |                   |                   |                   |                  |                  | 0.595 1 < L      | 0.28       | 1 J       | 0.575                  | < 0       | 0.602      | < 1            | ,        |
| SEMIVOLATILES    | di-n-Butyl phthalate        |                   |                   |                   |                  |                  | 4.369 1          | 0.64       | 1 < U     | 3.563 1                |           | 6.747      |                |          |
| SEMIVOLATILES    | di-n-Octyl phthalate        |                   |                   |                   |                  |                  | 0.595 i < L      | 0.64       | 1 < U     | 0,575                  | < U       | 0.602      |                |          |
| SEMIVOLATILES    | Fluoranthene                |                   |                   |                   |                  |                  | 0.595 1 < L      | 0.078      | 1 3       | 0.575 1                | < 0       | 0.602      | 1 < 1          | ы<br>(5  |
| SEMIVOLATILES    | Fluorene                    |                   |                   |                   |                  |                  | 0.595 1 < L      | 0.64       | 1 < U     | 0.575                  | < U       | 0.602      |                | J        |
| SEMIVOLATILES    | Hexachlorobenzene           |                   |                   |                   |                  |                  | 1.19 1 < L       | 0.64       | 1 < U     | 1,149 1                | < 0       | 1.205      | 1 4 1          |          |
| SEMIVOLATILES    | Havachlorobuladlene         |                   |                   |                   |                  |                  | 3.571 1 < L      | 0.64       | 1< U      | 3.448                  | < U       | 3.514      | 1 4            |          |
| SEMIVOLATILES    | Hexachlotocyclopeniadiene   |                   |                   |                   |                  |                  | 3.571 1 < L      | 0.64       | 1 < U     | 3.448 1                | < U       | 3.614      | 1 < 1          | بر<br>۱۱ |
| SEMIVOLATILES    | Hexachlorosthane            |                   |                   |                   |                  |                  | 1.19 1 < L       | 0.64       | 1 < U     | 1.149 1                | < 0       | 1.205      | • •            | U<br>U   |
| SEMIVOLATILES    | Indeno(1.2,3-cd)pyrene      |                   |                   |                   |                  |                  | 1.19 1 < 1       | 0.64       | 1 < U     | 1,149 1                | < 0       | 1.206      | 1 <            | U<br>11  |
| SEMIVOLATILES    | Isophorone                  |                   |                   |                   |                  |                  | 0.595 i < l      | 0.64       | 1 < U     | 0.575                  | < U       | 0.602      | 1 < 1          | U        |
| SEMIVOLATILES    | Naphthalene                 |                   |                   |                   |                  |                  | 0.357 1 < 0      | 0.64       | 1 < U     | 0.345 1                | < U<br>   | 3.699      | 1              |          |
| SEMIVOLATILES    | Nitrobenzena                |                   |                   |                   |                  |                  | 0.595 1 < 0      | 0.64       | 1 < U     | 0.575 1                | < U       | 0.602      | 1 <            | v<br>    |
| SEMIVOLATILES    | n-Nitroso-dl-n-propylamine  |                   |                   |                   |                  |                  | 1.19 1 < l       | 0.64       | 1 < U     | 1,149 1                | < U       | 1.205      | : <            | v        |



Table 3-76

Concentrations of Chemicals in Soil Samples Associated with Sump 076

| (SUMP) = SUMP076       |                                |                   |                  | (76820           | 476830           | 475830           | H-DI 78-01       | 1.HS-3-04        | LH-S76-01        | LH-S76-01        |
|------------------------|--------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE         |                                | 3550MP0/6-5801    | 305UMPU/0-0001   | 470000 E)        | 475830/0-0 5\00  | 475830(1-2)      | LH-DL76-01       | LH5-3-04         | LH-\$76-01 1     | LH-S76-01_2      |
| SAMPLE_NU              |                                | 33-3MPU/0-3001-01 | 0/14/2006        | 6/5/2000         | 6/5/2000         | 6/5/2000         | 6/26/1993        | 1/9/1995         | 6/26/1993        | 6/26/1993        |
| SAMPLE_DATE            |                                | 05.055            | 7.75             | 0,05 5           | 0 - 0.5 Ft       | 1-2 Fl           | 2 · 2.5 F1       | 0 - 0.5 Ft       | 0.5 - 1.5 Ft     | 2 · 2.5 Ft       |
|                        |                                | REG               | REG              | REG              | FD               | REG              | REG              | REG              | REG              | REG              |
| Tael Group             | Parameter (Linits - mn/kn)     | Result Dil 10 VO  | Result DIL LO VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO |
| SEMIVOLATILES          | n-Nitrosodinhanvlamine         |                   |                  |                  |                  |                  | 0.595 1 < U      | 0.64 1 < U       | 0.575 1 < U      | 0.602 1 < U      |
| SEMIVOLATILES          | Peolachiorophenol              |                   |                  |                  |                  |                  | 5.952 1 < U      | 3.2 1 < U        | 5.747 1 < U      | 6.024 1 < U      |
| SEMIVOLATILES          | Phananthrene                   |                   |                  |                  |                  |                  | 0.595 1 < U      | 0.64 1 < U       | 0.575 1 < U      | 0.602 1 < U      |
| SEMIVOLATILES          | Phenol                         |                   |                  |                  |                  |                  | 0.595 1 < U      | 0.64 1 < U       | 0.575 1 < U      | 0,602 1 < U      |
| SEMIVOLATILES          | Pyrene                         |                   |                  |                  |                  |                  | 0.595 1 < U      | 0.087 1 J        | 0.575 1 < U      | 0.502 1 < 0      |
| VOLATILES              | 1,1,1,2-Tetrachlorgethane      |                   | 0.00482 1 U U    |                  |                  |                  |                  | 0.019 1 < 0      |                  |                  |
| VOLATILES              | 1,1,1-Trichloroelhane          | ł                 | 0.000851 1 J J   |                  |                  |                  | 0.006 1 < 0      | 0.01 1 < 0       |                  |                  |
| VOLATILES              | 1,1,2,2-Tetrachioroethane      |                   | 0.00482 1 U U    |                  |                  |                  | 0.006 1 < 0      | 0.01 1 < 0       |                  |                  |
| VOLATILES              | 1.1.2-Trichloroethane          |                   | 0.00482 1 U U    |                  |                  |                  | 0.006 1 < 0      | 0.01 1 < 0       |                  |                  |
| VOLATILES              | 1,1-Dichloroelhane             |                   | 0.00415 iJJ      |                  |                  |                  | 0.006 1 < 0      | 0.01 1 4 0       |                  |                  |
| VOLATILES              | 1,1-Dichlorosthene             |                   | 0.00327 1 J J    |                  |                  |                  | 0.006 1< 0       | 0.01 1 4 0       |                  |                  |
| VOLATILES              | 1,1-Dichloropropane            | 1                 | 0.00482 1 U U    |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | 1,2,3-Trichlorobenzene         |                   | 0.00482 1 U U    |                  |                  |                  |                  | 0.010 1 - 11     |                  |                  |
| VOLATILES              | 1.2,3-Trichloropropane         |                   | 0.00482 1 U U    |                  |                  |                  |                  | 0.013 1 4 0      |                  |                  |
| VOLATILES              | 1.2,4 Trichlorobenzene         |                   | 0.00482 10 0     |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | 1,2,4-Trimelhylbenzene         |                   | 0.00482 10 0     |                  |                  |                  |                  | 0.039 1 2 11     |                  |                  |
| VOLATILES              | 1,2-Dibromo-3-chloropropane    |                   | 0.00482 10 0     |                  |                  |                  |                  | 0.039 iz II      |                  |                  |
| VOLATILES              | 1,2-Dibromoelhane              |                   | 0.00482 10 0     |                  |                  |                  |                  | 0.000            |                  |                  |
| VOLATILES              | 1.2-Dichloropenzena            |                   | 0.00482 10 0     |                  |                  |                  | 0.006 1.≼ U      | 0.01 1 < U       |                  |                  |
| VOLATILES              | 1,2-Dichloroeinane             |                   | 0.00482 10 0     |                  |                  |                  | 0.006 1< U       | 0.01 1 < U       |                  |                  |
| VOLATILES              | 1,2-Dichloropinene             |                   | 0.00482 1.11     |                  |                  |                  | 0.006 1 < U      | 0.01 1 < U       |                  |                  |
| VOLATILES<br>VOLATILES | 1.2 Dimethylaszara (a. Yviena) |                   | 0.00482 1.0 0    |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | 1.3 E. Trimelbulbenzene        |                   | 0.00482 1.0.0    |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES<br>WOLATILES | 1.3.Dichlorobenzene            |                   | 0.00482 1 U U    |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | 1.3-Dichkronronane             |                   | 0.00482 1 U U    |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | 1.4-Dichlorobenzene            |                   | 0.00482 1 U U    |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | 2,2-Dichloropropane            |                   | 0.00482 1 U U    |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | 2-Butanone                     |                   | 0.00965 1 U U    |                  |                  |                  | 0,11 1 < U       | 0,019 1 < U      |                  |                  |
| VOLATILES              | 2-Chloroethyl vinyl ether      |                   | 0.00965 1 U U    |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | 2-Chlorololuane                |                   | 0.00482 1 U U    |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | 2-Hexanone                     |                   | 0.00965 1UU      |                  |                  |                  | 0.053 1 < U      | 0.019 1 < U      |                  |                  |
| VOLATILES              | 2-Propenal                     |                   |                  |                  |                  |                  |                  | 0.96 1 < 0       |                  |                  |
| VOLATILES              | 4-Chiorotoluene                |                   | 0.00482 1 U U    |                  |                  |                  | off 1 . 11       | 0.010 1 . 11     |                  |                  |
| VOLATILES              | Acetone                        |                   | 0.00965 1UU      |                  |                  |                  | 0.11 1 < 0       | 0.019 1 < 0      |                  |                  |
| VOLATILES              | Acetonitrile                   |                   |                  |                  |                  |                  |                  | 0.10 1 4 1       |                  |                  |
| VOLATILES              | Acrylonitrile                  |                   |                  |                  |                  |                  |                  | 0.039 1 - 1      |                  |                  |
| VOLATILES              | Allyl chloride                 |                   | 0.00400 1.11 1/  |                  |                  |                  | 0.006 tz U       | 0.01 t c U       |                  |                  |
| VOLATILES              | Benzene                        |                   | 0.00482 1 0 0    |                  |                  |                  | 0.000 / 4 0      |                  |                  |                  |
| VOLATILES              | Bromobenzena                   |                   | 0.00482 1.0 0    |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | Bromocniorometnane             |                   | 0.00462 10 0     |                  |                  |                  | 0.006 1 < U      | 0.01 1 < U       |                  |                  |
|                        | Bromouchioromestarie           |                   | 0.00482 1.11 11  |                  |                  |                  | 0.006 1 < U      | 0.01 1 < U       |                  |                  |
| VOLATILES              | Bramemolhane                   |                   | 0.00965 1 (1 (1  |                  |                  |                  | 0.006 1 < U      | 0.019 1 < U      |                  |                  |
| VOLATILES              | Carbon disulfide               |                   | 0.00482 1 U U    |                  |                  |                  | 0.006 1 < U      | 0.01 1 < U       |                  |                  |
| VOLATILES              | Carbon tetrachloride           |                   | 0.00482 1UU      |                  |                  |                  | 0.006 1 < U      | 0.01 1 < U       |                  |                  |
| VOLATILES              | Chlorobenzene                  | 1                 | 0.00482 1 U U    |                  |                  |                  | 0.006 1 < U      | 0.01 1 < U       |                  |                  |
| VOLATILES              | Chloroethane                   |                   | 0.00965 1 U U    |                  |                  |                  | 0.006 1 < U      | 0.019 1 < U      |                  |                  |
| VOLATILES              | Chlorolorm                     |                   | 0.00482 1 U U    |                  |                  |                  | 0.005 1 < U      | 0.01 î< U        |                  |                  |
| VOLATILES              | Chloromeihane                  |                   | 0.00965 1 U U    |                  |                  |                  | 0.006 t< U       | 0.019 1 < U      |                  |                  |
| VOLATILES              | Chloroprene                    |                   |                  |                  |                  |                  |                  | 0.19 1 < U       |                  |                  |



| Table 3-76   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 076 |

| [SUMP] = SUMP076 |                             |                   |                   |                  |                  |                  |                  |                       |                  | 111 070 04       |
|------------------|-----------------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|-----------------------|------------------|------------------|
| LOCATION _CODE   |                             | 35SUMP076-SB01    | 35SUMP076-SB01    | 47\$B30          | 47\$B30          | 47SB30           | LH-DL76-01       | LHS-3-04              | LH-S76-01        | LH-S76-01        |
| SAMPLE_NO        |                             | 35-SMP076-S801-01 | 35-SMP076-SB01-02 | 47SB30(0+0_5)    | 47SB30(0-0_5)QC  | 47SB30(1+2)      | LH-DL76-01       | LHS-3-04              | LH-S76-01_1      | LH-S75-01_2      |
| SAMPLE_DATE      |                             | 9/14/2006         | 9/14/2006         | 6/5/2000         | 6/5/2000         | 6/5/2000         | 6/26/1993        | 1/9/1995              | 6/26/1993        | 6/26/1993        |
| DEPTH            |                             | 0.5 - 0.5 Ft      | 7 7 FI            | 0 - 0.5 Ft       | 0 - 0.5 Ft       | 1 - 2 Ft         | 2 - 2.5 Fl       | 0 - 0.5 Ft            | 0.5 • 1.5 F1     | 2 - 2.5 H        |
| SAMPLE_PURPOSE   |                             | REG               | REG               | REG              | FD               | REG              | REG              | REG                   | REG              | HEG              |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VO  | Result DIL LO VO  | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO      | Result DIL LO VO | Result DIL LO VO |
| VOLATILES        | cis-1,2-Dichlorosthene      |                   | 0.00981 1         |                  |                  |                  |                  |                       |                  |                  |
| VOLATILES        | cis-1,3-Dichloropropene     |                   | 0.00482 1 U U     |                  |                  |                  | 0.006 1 < U      | 0.01 1 < U            |                  |                  |
| VOLATILES        | Dibromochloromethane        |                   | 0.00482 1 U U     |                  |                  |                  | 0.006 1 < U      | 0.01 1 < U            |                  |                  |
| VOLATILES        | Dibromomethane              |                   | 0.00482 1 U U     |                  |                  |                  |                  | 0.019 1 < U           |                  |                  |
| VOLATILES        | Dichlorodilluoromethane     |                   | 0.00965 IUU       |                  |                  |                  |                  | 0.039 i < U           |                  |                  |
| VOLATILES        | Ethyl methacrylate          |                   |                   |                  |                  |                  |                  | 0.039 1 < U           |                  |                  |
| VOLATILES        | Ethylbenzana                |                   | 0.00482 FU U      |                  |                  |                  | 0.006 1 < U      | 0.01 1 < U            |                  |                  |
| VOLATILES        | Hexachlorobuladiene         |                   | 0.00482 1 U U     |                  |                  |                  |                  |                       |                  | •                |
| VOLATILES        | IODOMETHANE                 |                   |                   |                  |                  |                  |                  | 0.019 1 < U           |                  |                  |
| VOLATILES        | ISOBUTYL ALCOHOL            |                   |                   |                  |                  |                  |                  | 3.9 1 < U             |                  |                  |
| VOLATILES        | sopropyibenzene             |                   | 0.00482 1 U U     |                  |                  |                  |                  |                       |                  |                  |
| VOLATILES        | m,p-Xylenes                 |                   | 0.00482 1 U U     |                  |                  |                  |                  |                       |                  |                  |
| VOLATILES        | Methacrylonitrile           |                   |                   |                  |                  |                  |                  | 0.039 1 < U           |                  |                  |
| VOLATILES        | Methyl isobutyl kelane      |                   | 0.00965 1UU       |                  |                  |                  | 0.053 1 < U      | 0.019 1 < U           |                  |                  |
| VOLATILES        | METHYL METHACRYLATE         |                   |                   |                  |                  |                  |                  | 0.039 1 < U           |                  |                  |
| VOLATILES        | Mathylene chloride          |                   | 0.00482 IUU       |                  |                  |                  | 0.006 i< U       | 0.01 1 < U            |                  |                  |
| VOLATILES        | Naphthalene                 |                   | 0.00965 IUU       |                  |                  |                  |                  |                       |                  |                  |
| VOLATILES        | n-BUTYLBENZENE              |                   | 0.00482 1 U U     |                  |                  |                  |                  |                       |                  |                  |
| VOLATILES        | n-PROPYLBENZENE             |                   | 0.00482 1 U U     |                  |                  |                  |                  |                       | •                |                  |
| VOLATILES        | Penlachloroethane           |                   |                   |                  |                  |                  |                  | 0.039 1 < U           |                  |                  |
| VOLATILES        | p-ISOPROPYLTOLUENE          |                   | 0.00482 1 U U     |                  |                  |                  |                  |                       |                  |                  |
| VOLATILES        | Propionitrile               |                   |                   |                  |                  |                  |                  | 0.096 1 < U           |                  |                  |
| VOLATILES        | sec-BUTYLBENZENE            |                   | 0.00482 IUU       |                  |                  |                  |                  |                       |                  |                  |
| VOLATILES        | Styrene                     |                   | 0.00482 IUU       |                  |                  |                  | 0.006 1 < U      | 0.01 1 <del>×</del> U |                  |                  |
| VOLATILES        | Int-BUTYLBENZENE            |                   | 0.00482 1UU       |                  |                  |                  |                  | ÷                     |                  |                  |
| VOLATILES        | Tetrachloroethene           |                   | 0.00409 1 J J     |                  |                  |                  | 0.006 1 < U      | 0.01 1 < 0            |                  |                  |
| VOLATILES        | Toluene                     | ļ                 | 0.00482 1 U U     |                  |                  |                  | 0.006 1 < U      | 0.01 1 < U            |                  |                  |
| VOLATILES        | trans-1.2-Dichloroethena    |                   | 0.00482 1 U U     |                  |                  |                  |                  |                       |                  |                  |
| VOLATILES        | trans-1.3-Dichloropropene   |                   | 0.00482 1 U U     |                  |                  |                  | 0.006 1 < U      | 0.01 1 < U            |                  |                  |
| VOLATILES        | Irans-1.4-Dichloro-2-butene |                   |                   |                  |                  |                  |                  | 0.039 1 < U           |                  |                  |
| VOLATILES        | Trichkroethene              |                   | 0.0282 1          |                  |                  |                  | 0.006 1 < U      | 0.01 1 < U            |                  |                  |
| VOLATILES        | Trichlorofluoromethane      |                   | 0.00965 1 U U     |                  |                  |                  |                  | 0.019 1 < U           |                  |                  |
| VOLATILES        | Vinvi acetate               |                   | 0.00965 1UU       |                  |                  |                  |                  | 0.019 1 < U           |                  |                  |
| VOLATILES        | Vinvl chorida               |                   | 0.00277 1 J J     |                  |                  |                  | 0.006 1 < U      | 0.019 1 < U           |                  |                  |
| VOI ATILES       | Xvienes Total               |                   |                   |                  |                  |                  | 0.006 1 < U      | 0.01 1 < U            |                  |                  |
|                  |                             | L                 |                   |                  |                  |                  |                  |                       |                  |                  |

Oata Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-76   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 076 |

••••

| (SUMP) = SUMP076 |  |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
|------------------|--|----------|------------|-----|--------------|---------|------------|----------|------------|----|----------|--------------|----|---------------|------------|----|----------|---------|----|
| LOCATION _CODE   |  | LH-S     | 76-01      |     | LH-S         | \$75-02 |            | LH-S     | 576-02     |    | ĻH.:     | 576-02       |    | LH-WI         | 9\$18-01   |    | LH-WF    | IS18-01 | i  |
| SAMPLE_NO        |  | LH-S7    | 6-01_3     |     | LH-S         | 76-02_1 |            | LH-S     | /6-02_2    |    | LH-S     | 76-02_3      |    | LH-WR         | S18-01_    | 1  | LH-WR    | 518-01_ | 2  |
| SAMPLE_DATE      |  | 6/26     | /1993      |     | 6/26         | /1993   |            | 6/26     | /1993      |    | 6/26     | 3/1993       |    | 6/26          | /1993      |    | 6/26     | /1993   |    |
| DEPTH            |  | 5.5      | 5.5 - 7 Ft |     | 0.5 + 1.5 FI |         | 5.5 - 6 Ft |          | 7 • 7.5 Ft |    |          | 0.5 - 1.5 FI |    |               | 3 - 3.5 Ft |    |          |         |    |
| SAMPLE_PURPOSE   |  | я        | EG         |     | F            | EG      |            | R        | EG         |    | F        | EG           |    | 8             | £G         |    | R        | EG      |    |
| Test Group       | Parameter (Units = mg/kg)                  | Result D | IL LO      | VQ  | Result D     | IL LO   | VQ         | Result D | IL LO      | VQ | Result C | IL LQ        | VQ | Result D      | ιıq        | VQ | Result D | L LO    | VQ |
| EXPLOSIVES       | 1,3,5-Trinitrobanzene                      |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| EXPLOSIVES       | 1,3-Dinitrobenzene                         |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| EXPLOSIVES       | 2.4,6 Trinitrotoluene                      |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| EXPLOSIVES       | 2.4-Dinitrotoluene                         | 1.25     | 1 <        | Ų   | 1,19         | 1 <     | u          | 1.22     | < ۲        | U  | 1.235    | 1 <          | ប  | 1.163         | 1 <        | U  | 1.22     | 1 <     | U  |
| EXPLOSIVES       | 2,6-Dinitrololuene                         | 1.25     | 1 <        | U   | 1.19         | 1 <     | U          | 1.22     | 1 <        | U  | 1.235    | 1 <          | U  | 1,163         | 1 <        | U  | 1.22     | 1 <     | U  |
| EXPLOSIVES       | 4-Amino-2,6-dinitrololuene                 |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| EXPLOSIVES       | нмх  |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| EXPLOSIVES       | m-Nitrololuene                             |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| EXPLOSIVES       | Nitrobenzene                               |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| EXPLOSIVES       | o-Nitrotoluene                             |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| EXPLOSIVES       | p-Nitrotoluene                             |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| EXPLOSIVES       | RDX  |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| EXPLOSIVES       | Tetryl                                     |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| METALS           | Aluminum                                   | 12700    | 1          |     | 13700        | 1       |            | 12700    | 1          |    | 11100    | 1            |    | 7580          | 1          |    | 12500    | 1       |    |
| METALS           | Antimony                                   | 6.02     | 1 <        | U   | 6.98         | 1 <     | U          | 5.5      | 1 <        | U  | 6.5      | 1 <          | U  | 4.94          | 1 <        | Ų  | 4.5      | 1 <     | U  |
| METALS           | Arsenic                                    | 1,44     | 1          |     | 5,55         | 1       |            | 1.16     | 1          |    | 1.76     | 1            |    | 5.53          | 1          |    | 2.52     | 1       |    |
| METALS           | Barium                                     | 64.4     | 1 <        | U   | 1430         | 1 <     | U          | 102      | 1 <        | U  | 79.8     | 1 <          | U  | 76,7          | 1 <        | υ  | 70.3     | 1 <     | Ų  |
| METALS           | Beryilium                                  |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| METALS           | Cadmium                                    | 3.97     | ſ          |     | 5.2          | 1       |            | 3.24     | 1          |    | 4,06     | 1            |    | 6,74          | 1          |    | 3.82     | 1       |    |
| METALS           | Calcium                                    | 9900     | 1          |     | 1530         | 1       |            | 860      | 1          |    | 1030     | 1            |    | 1550          | 1          |    | 756      | 1       |    |
| METALS           | Chromium                                   | 9.87     | 1          |     | 14.7         | 1       |            | 11       | 1          |    | 10.4     | 1            |    | 18.4          | 1          |    | 16,9     | 1       |    |
| METALS           | Coball                                     | 6.38     | 1          |     | 3.8          | 1       |            | 6.44     | 1          |    | 6.99     | 1            |    | 18.5          | 1          |    | 13       | 1       |    |
| METALS           | Copper                                     | 9.39     | 1 <        | U   | 8.2          | 1 <     | υ          | 10       | 1 <        | U  | 7.15     | 1 <          | U  | 4.96          | 1 <        | U  | 7.2      | 1 <     | U  |
| METALS           | lron                                       | 12300    | 1          |     | 17800        | 1       |            | 9520     | 1          |    | 12600    | 1            |    | 24100         | 1          |    | 16800    | 1       |    |
| METALS           | Lead                                       | 22.5     | 1          |     | 23.2         | 1       |            | 19,1     | 1          |    | 17.9     | 1            | Е  | 20.1          | 1          |    | 22.3     | 1       |    |
| METALS           | Magneslum                                  | 911      | 1          |     | 825          | 1       |            | 967      | 1          |    | 1100     | 1            |    | 640           | 1          |    | 671      | 1       |    |
| METALS           | Manganese                                  | 18.2     | 1          |     | 70.7         | 1       |            | 23.8     | 1          |    | 33.8     | 1            |    | 493           | 1          |    | 261      | 1       |    |
| METALS           | Mercury                                    | 0.072    | 1          | E   | 0.053        | 1 <     | U          | 0.057    | 1 <        | U  | 0.107    | 1            | E  | 0.051         | 1 <        | Ų  | 0.055    | 1 <     | U  |
| METALS           | Nickel                                     |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| METALS           | Polassium                                  | 304      | 1          |     | 485          | 1       |            | 349      | 1          |    | 364      | 1            |    | 279           | 1          |    | 432      | i i     |    |
| METALS           | Selenium                                   | 0.602    | 1          |     | 0.698        | 1 <     | U          | 0.55     | 1 <        | U  | 0.65     | 1 <          | Ų  | 0.494         | 1 <        | U  | 0.45     | 1 <     | U  |
| METALS           | Silver                                     | 1.77     | 1          |     | 0.045        | 1       | E          | 0.03     | 1          | ε  | 0.032    | 1 <          | U  | 3.88          | 1          |    | 0.025    | 1       | e  |
| METALS           | Sodium                                     |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| METALS           | Strontium                                  | 23.5     | 1 <        | U   | 890          | 1 <     | U          | 23.2     | 1 <        | U  | 30.9     | 1 <          | υ  | 16            | 1 <        | υ  | 12.4     | 1 <     | U  |
| METALS           | Thallium                                   |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| METALS           | Vanadium                                   |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| METALS           | Zinc                                       | 25.9     | 1          |     | 32.4         | 1       |            | 29.2     | 1          |    | 28.1     | 1            |    | 28.3          | 1          |    | 21.4     | i       |    |
| PERC             | Perchiorale                                |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| BANGE ORGANICS   | Carbon Rande C12-C28                       |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| BANGE ORGANICS   | CARBON BANGE C28-C35                       |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| BANGE ORGANICS   | Carbon Bange C6-C12                        |          |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |
| SEMIVOLATILES    | 1.2.4-Trichlorobenzene                     | 1.25     | 1<         | IJ  | 1.19         | 1 <     | U          | 1.22     | 1 <        | U  | 1.235    | 1 <          | U  | 1,153         | 1 <        | U  | 1.22     | 1 <     | U  |
| SEMINOLATILES    | 1.2-Dichlorobeazene                        | 125      | 1.2        | -   | 1 19         | 1 e     | ŭ          | 1.22     | 1 <        | ū  | 1.235    | 1 <          | Ű  | 1,163         | 1 <        | U  | 1,22     | 1 <     | U  |
| SEMIVOLATILES    | 1.3-Dichlorobenzene                        | 1.25     | 1 4        | Ū.  | 1.19         | 1 <     | Ū          | 1.22     | 1 <        | Ű  | 1.235    | 1 <          | U  | 1,163         | 1 <        | U  | 1.22     | 1 <     | U  |
| SEMIVOLATILES    | 1.4-Dichlorobenzene                        | 1.25     | 1 -        | Ū   | 1.19         | 1 <     | Ū          | 1.22     | 1 4        | Ū  | 1.235    | 1 <          | Ŭ  | 1.163         | 1 <        | Ū  | 1.22     | 1 <     | U  |
| SEMIVOLATILES    | 2 4 5 Trichleronhenol                      | 1 25     | 12         | ũ   | 1 19         | 1 2     | ŭ          | 1.22     | 1 0        | μ  | 1.235    | 1 -          | Ű  | 1.163         | 1 4        | Ű  | 1.22     | 1 <     | U  |
| SEMIVOLATILES    | 2.4.6.Trichlorophanal                      | 125      | 12         | ŭ   | 1 10         | 12      | ŭ          | 1.22     | 1 -        | Ŭ  | 1.235    |              | Ŭ  | 1.163         | 1 4        | ษ  | 1,22     | 1 <     | Ű  |
| SEMINOLATILES    | 2 4-Dichlorophenol                         | 1.25     | 12         | 11  | 1 10         | 1 -     | ū          | 1.22     | 1          | Ű  | 1.235    | 1 <          | ŭ  | 1.163         | 1 <        | ម  | 1.22     | 1 e     | Ű  |
| SEMILION ATTES   | 2.4. Dimethylahonal                        | 0.625    | 1.         | U U | 0.505        | 1       | ŭ          | 0.61     | 1          | ŭ  | 0.617    | 1 -          | ũ  | 0.581         | 1          | ບ  | 0.61     | 1 -     | Ū  |
|                  | 2.4-Dinizashanal                           | 12 5     | 1.5        | ň   | 11 005       | 1.4     | ŭ          | 12 105   | 1          | ŭ  | 12 346   | ÷.           | ŭ  | 11 628        | 1          | Ŭ  | 12,195   | 1 4     | Ū  |
| CENTROLATE CO    | 1 / Disitratakana                          | 16,3     |            | 0   |              |         | 2          | 10,100   |            |    | . 610 70 |              | •  | - 1 - Mileray |            | -  |          |         | 2  |
| OCIVITY OCALLICO | C <sup>1</sup> 4. Double Child Child Child | 1        |            |     |              |         |            |          |            |    |          |              |    |               |            |    |          |         |    |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-76   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 076 |

| [SUMP] = SUMP076               |   |                  |                  |                  |                  |                  |                  |
|--------------------------------|---|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE                 |   | LH-S76-01        | LH-S76-02        | LH-S76-02        | LH-S76-02        | LH-WHS18-01      | LH-WRS18-01      |
| SAMPLE_NO                      |   | LH-S78-01_3      | LH-S76-02_1      | LH-S76-02_2      | LH-S76-02_3      | LH-WRS18-01_1    | LH-WRS18-01_2    |
| SAMPLE_DATE                    |   | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        |
| DEPTH                          |   | 5.5 - 7 FI       | 0.5 - 1.5 Ft     | 5.5 · 6 Ft       | 7 • 7.5 FI       | 0.5 - 1.5 Ft     | 3 + 3.5 Ft       |
| SAMPLE_PURPOSE                 |   | REG              | REG              | REG              | REG              | REG              | REG              |
| Test Group                     | Parameter (Units = mg/kg)                           | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO |
| SEMIVOLATILES                  | 2.6-Dinitrotoluene                                  |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 2-Chioronaphthalene                                 | 0.375 1 < U      | 0.357 1 < U      | 0.366 1 < U      | 0.37 1 < U       | 0.349 1 < U      | 0.366 1 < U      |
| SEMIVOLATILES                  | 2-Chlorophenol                                      | 0.625 1 < U      | 0.595 1 < U      | 0.61 1 < U       | 0.617 1 < U      | 0.581 1 < U      | 0.61 1 < U       |
| SEMIVOLATILES                  | 2-Methylnaphihalene                                 | 0.375 1 < U      | 0.357 1 < U      | 0.366 1 < U      | 0.37 1 <  U      | 0.349 1 < U      | 0.356 1 < U      |
| SEMIVOLATILES                  | 2-Melhylphenol                                      | 0.625 1 < U      | 0.595 1 < U      | 0.61 1 < U       | 0.617 1 < U      | 0.581 1 < U      | 0.61 1 < U       |
| SEMIVOLATILES                  | 2-Nitroaniline                                      | 3.75 1 < U       | 3.571 1 < U      | 3.659 1 < U      | 3.704 1 < U      | 3.488 i < U      | 3.659 1 < U      |
| SEMIVOLATILES                  | 2-Nitrophenol                                       | 1.25 t < U       | 1.19 I < U       | 1.22 1 < U       | 1.235 1 < U      | 1.153 F < U      | 1.22 1 < U       |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzidine                              | 0.625 i < U      | 0.595 I < U      | 0.81 1 < U       | 0.617 1 < U      | 0.581 1 < U      | 0.61 1 < U       |
| SEMIVOLATILES                  | 3-Nitroaniline                                      | 3.75 1 < U       | 3.571 i< U       | 3.659 1 < U      | 3.704 1 < U      | 3.488 F< U       | 3.659 1 < U      |
| SEMIVOLATILES                  | 4.6-Dinitro-2-methylphanol                          | 6.25 1 < U       | 5.952 1 < U      | 6.098 1 < U      | 6.173 1 < U      | 5.814 t< U       | 6.098 1 < U      |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether                          | 1.25 i < U       | 1.19 I < U       | 1.22 1 < U       | 1.235 1 < U      | 1,163 I< U       | 1.22 1 < U       |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol                             | 0.625 1 < U      | 0.595 i< U       | 0.61 1 < U       | 0.617 1 < U      | 0.561 f < U      | 0.61 1 < U       |
| SEMIVOLATILES                  | 4-Chloroaniline                                     | 3.75 1 < U       | 3.571 1 < U      | 3.659 1 < U      | 3.704 1 < U      | 3.488 1 < U      | 3.659 1 < U      |
| SEMIVOLATILES                  | 4 Chlorophenvi phenvi ether                         | 1.25 I < U       | 1.19 1 < U       | 1.22 1 < U       | 1.235 1 < U      | 1.153 1 < 1      | 1.22 1 < 1       |
| SEMIVOLATILES                  | 4 Melhylohenol                                      | 0.525 1 < U      | 0.595 i < U      | 0.61 1 × U       | 0.617 1 c U      | 0.581 1 < 11     | 0.61 1 < U       |
| SEMIVOLATILES                  | 4-Nitroaniline                                      | 625 1 4 1        | 5.952 1 < U      | 6098 1 c U       | 6173 1 4 1       | 5 B14 1 < 11     | 6098 1 < U       |
| SEMIVOLATILES                  | 4-Nitrophenol                                       | 625 1 4 1        | 5.952 1 4 11     | 6.098 1 - 1      | 6173 1 - 1       | 5814 t - U       | 6.098 1 c U      |
| SEMIVOLATILES                  | Acenaphibene  | 0.375 t U        | 0.357 1 2 1      | 0.355 1 4 1      | 0.37 1 2 13      | 0.349 5 4 11     | 0.366 1 4 1      |
| SEMIVOLATEES                   | Acenaphibylene                                      | 0.625 1 4 11     | 0.595 1 < 1      | 0.61 1 < 1       | 0.617 1 - 1      | 0.581 1 2 11     | 0.61 1 < 11      |
| SEMIVOLATH ES                  | Anibracene  | 0.825 14 11      | 0.505 1 2 1      | 0.61 1 - 1       | 0.617 1 - 1      | 0.591 1 4 11     | 0.61 1 2 11      |
| SEMIVOLATILES                  | Benza(a)anthreanna                                  | 0.975 1 - 1      | 0.050 1 4 1      | 0.01 1 2 0       | 0.017 1 4 10     | 0,001 1 0        | 0.266 1 4 11     |
| SEMINOLATILES                  | Booto(a)oriena                                      | 0.515 1 4 1      | 0.007 1 4 1      | 0.61 1 - []      | 0.57 1 10.0      | 0.049 1 0        | 0.000 1 0        |
| CENIN/OF ATHES                 | Batzo(b)//uprostbaba                                | 125 1 4 11       | 110 1 - 11       | 100 14 0         |                  | 0,201 IK U       | 100 1 4          |
| CENTROLATINES                  | Benzo(ghilosandene                                  | 1.23 L C U       | 0.10 1 4 0       | 1.22 I < U       | 0.60 1 0         | 1.005 1 < U      | 1.22 I E U       |
| CENTROLATILES                  | Benzo (killussonihana                               | 2.5 I < U        | 2.361   < U      | 2.439 1 < U      | 2.909 1 < U      | 2.320 L< U       | 2,439 1 < U      |
| SEMIVOLATILES<br>SEMIVOLATILES | Benzolkinboraminene<br>Benzolkinboraminene          | 1.45 I K U       | 1.19 1 < U       | 1.22 1 < U       | 1.230 1 2 0      | 1,103   < U      | 1.24 I K U       |
| SEMIVOLATILES<br>SEMIVOLATILES | Benzois Asia<br>Benzul Altebal                      |                  |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | bis (7 Chiere should be should be                   | 0.000 1          | 0.005 1          | 0.01 1           | 0.017 1          | 0.501 1          | 0.01 1           |
| CENIVOLATILEO                  | bist2 Chloroethokymethane                           | 0.625 1 < 0      | 0.595 1 < 0      | U > 1 10.0       |                  | 0.001 1 < 0      | 0.61 1 0.0       |
| CENNIQUATILES                  | bis(2-Chioroenyi)ether                              | 0.020 1 < 0      | 0.595 1 < 0      | 0.01 1 < 0       | 0.017 1 < 0      | 0.551 1 < 0      | 0.61 1 2 0       |
| SEMIVOLATILES                  | bis(2-Ghioroisopropyi)ather                         | 1.25 1 4 0       | 1,19   < U       | 1.22 1 2 0       | 1,235 1 < U      | 1.163 < 0        | 1.22 1 < 0       |
| SEMIVOLATILES                  | Dis(2-Einyinexyi)phinalate                          | U.Z 1 J          | 0.119 1 J        | U.146 1 J        | 0.617 1 < 0      | Q, 14 1 J        | 0.61 1 < 0       |
| SEMIVOLATILES                  | Butyi benzyi phinalale                              | 0.625 1 < 0      | 0.595 1 < 0      | 0,61 1 < U       | 0.617 1 < 0      | 0,551 1 < 0      | (0.6) 1 < U      |
| SEMIVOLATILES                  | Cardazole   | 1,25 1 < U       | 1.19 1 < U       | 1,22 I < U       | 1.235 1 < 0      | 1,153 1 < U      | 1.22 1 < U       |
| SEMIVOLATILES                  | Chrysene<br>Discourse (a b) and (b) and (b) and (b) | 6.25 1 < U       | 5.952 1 < U      | 6.098 1 < U      | 0.148 1 J        | 5.814 1 < 0      | 5.098 1 < U      |
| SEMIVOLATILES                  | Dibenzo(a.n)aninracene                              | 2.5 1 < 0        | 2.381 1 < 0      | 2,439 1 < 0      | 2,469 1 < U      | 2.328 1 < 0      | 2.439 1 < U      |
| SEMIVOLATILES                  | Dibenzoluran  | 1.25 1 < 0       | 1.19 1 < 0       | 1.22 1 < U       | 1,235 1 < U      | 1.163 1 < 0      | 1.22 1 < 0       |
| SEMIVOLATILES                  | Dielnyi prinalate                                   | 0.125 1 J        | 0.595            | 0.61 1 < 0       | 0.517 1 < 0      | 0.581 1 < 0      | 0.61 1 < 0       |
| SEMIVOLATILES                  | Omethyl phihalate                                   | 0.625 1 < 0      | 0.595 1 < 0      | 0.61 1 < 0       | 0,617 1 < U      | 0.581 1 < 0      | 0.61 1 < 0       |
| SEMIVOLATILES                  | di-n-Butyi ph(halale                                | 2.45 1           | 2.929 1          | 7.951 1          | 4,235 1          | 3.895 1          | 2.463 1          |
| SEMIVOLATILES                  | di-n-Oclyt phthalate                                | 0.625 1 < U      | 0.595 1 < 0      | 0.61 1 < U       | 0.617 1 < U      | 0.581 1 < U      | 0.61 1 < U       |
| SEMIVOLATILES                  | Fluoranthens  | 0.625 1 < U      | 0.595 1 < U      | 0.61 i < U       | 0.617 1 < U      | 0.581 1 < U      | 0.61 1 < U       |
| SEMIVOLATILES                  | Fluorene  | 0.625 1 < U      | 0.595 1 < U      | 0.61 1 < U       | 0.617 1 < U      | 0.581 1 < U      | 0,61 1 < U       |
| SEMIVOLATILES                  | Hexachlorobenzene                                   | 1.25 1 < U       | 1.19 1 < U       | 1.22 1 < U       | 1.235 1 < U      | 1.163 1 < U      | 1,22 1 < U       |
| SEMIVOLATILES                  | Hexachlorobutadiene                                 | 3.75 1 ≺ U       | 3.571 1 < U      | 3.659 1 < U      | 3.704 1 <  U     | 3.488 1 < U      | 3,659 1 < U      |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene                           | 3.75 1 < U       | 3.571 1 < U      | 3.659 1 < U      | 3.704 1 < Ų      | 3.488 1< Ų       | 3,659 1 < U      |
| SEMIVOLATILES                  | Hexachloroelhane                                    | 1.25 1 < U       | 1.19 1 < U       | 1.22 1 < U       | 1.235 1 < U      | 1,163 1 < U      | 1.22 1 < U       |
| SEMIVOLATILES                  | Indena(1.2,3-cd)pyrene                              | 1.25 1 < U       | 1.19 L< U        | 1.22 1 < U       | 1.235 1 < U      | 1.163 i < U      | 1.22 1 < U       |
| SEMIVOLATILES                  | Isophorone  | 0.625 1 < U      | 0.595 1 < U      | 0.61 1 < U       | 0.617 1 < U      | 0.581 1 < U      | 0.61 1< U        |
| SEMIVOLATILES                  | Naphihalene   | 0,375 1 < U      | 0.357 1 × U      | 0,366 1 < U      | 0.37 1 < U       | 0.349 î≺ U       | 0.366 1 < U      |
| SEMIVOLATILES                  | Nitrobenzene  | 0.625 1 < U      | 0.595 1 < U      | 0.61 1 < U       | 0.617 1 < U      | 0.581 1 < U      | Q.61 1 < U       |
| SEMIVOLATILES                  | n-Nilroso-di-n-propylamine                          | 1.25 1 < U       | 1.19 1 < U       | 1.22 1 < U       | 1,235 1 < U      | 1.163 1 < U      | 1.22 1 < U       |

.

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

.



| Table 3-76   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 076 |

| (SUMP) = SUMP076 |   |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
|------------------|---|---------------|----|------------|------------|---------|----------|---------|----|-----------|------------------|---------|----------|---------|----|----------|---------|-----|
| LOCATION _CODE   |   | LH-\$75-01    |    | LH-SI      | 76-02      |         | 1.H-8    | 576-02  |    | LH-S      | 76-02            |         | LH-WI    | RS18-01 |    | LH•M     | R518-0  |     |
| SAMPLE_NO        |   | LH-S76-01_3   |    | LH-S76     | 5-02_1     |         | LH-S     | 76-02_2 |    | LH-\$7    | 6-02_3           |         | LH-WR    | S18-01_ | .1 | LH-WH    | S18-01, | 2   |
| SAMPLE_DATE      |   | 6/26/1993     |    | 6/26/      | 1993       |         | 6/26     | /1993   |    | 6/26      | 1993             |         | 6/28     | /1993   |    | 6/2      | 5/1993  |     |
| DEPTH            |   | 5.5 - 7 Ft    |    | 0.5 • 1    | 1.5 FI     |         | 5.5      | - 6 Ft  |    | 7.7       | .5 Ft            |         | Q.5 -    | 1,5 Ft  |    | 3.       | 3.5 FI  |     |
| SAMPLE_PURPOSE   |   | REG           |    | RE         | G          |         | R        | EG      |    | Ri        | EG               |         | F        | EG      |    | +        | EG      |     |
| Test Group       | Paramater (Units = mg/kg)               | Result DIL LQ | VQ | Result Dil | L LO       | VQ      | Result D | IL LQ   | VQ | Result Of | LLQ              | VQ      | Result D | L LQ    | va | Result D | UL LO   |     |
| SEMIVOLATILES    | n-Nitrosodiphenylamine                  | 0.625 t <     | U  | 0.595      | 1 <        | U       | 0.61     | 1 <     | U  | 0.617     | 1 <              | U       | 0.581    | 1 <     | U  | 0.61     | 1.5     | U   |
| SEMIVOLATILES    | Penlachlorophenol                       | 6.25 1 <      | U  | 5.952      | 1 <        | υ       | 6.098    | 1 <     | Ų  | 6.173     | 1 <              | U       | 5.814    | 1 <     | U  | 6.098    | 1 <     | U   |
| SEMIVOLATILES    | Phenanihrene                            | 0.625 1 <     | U  | 0.595      | 1 <        | U       | 0.61     | 1 <     | U  | 0.617     | 1 <              | U       | 0,581    | 1 <     | υ  | 0.61     | 1 <     | U   |
| SEMIVOLATILES    | Phenol                                  | 0.625 1 <     | U  | 0.595      | 1 <        | U       | 0.61     | 1 <     | Ų  | 0.617     | 1 <              | U       | 0.581    | ែ <     | υ  | 0.61     | 1 <     | U   |
| SEMIVOLATILES    | Pyrene                                  | 0.625 1 <     | Ų  | 0.595      | 1 <        | U       | 0.61     | 1 <     | U  | 0.617     | ۶ د              | U       | 0.581    | 1 c     | U  | 0.61     | 1 <     | U   |
| VOLATILES        | 1.1.1.2-Tetrachloroethane               |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 1, 1, 1-Trichloroethane                 |               |    | 0.006      | 1 <        | U       | 0.006    | 1 <     | U  | 0.006     | 1 <              | U       | 0.006    | 1 <     | U  | 0.005    | 1 <     | Ų   |
| VOLATILES        | 1.1.2.2-Teirachioropihane               |               |    | 0.005      | 1 <        | U       | 0.006    | 1 <     | U  | 0.006     | 1 <              | μ       | 0.006    | 1 <     | U  | 0.006    | 1 <     | Ų   |
| VOLATILES        | 1,1.2-Trichloroethane                   |               |    | 0.006      | 1 <        | U       | 0,006    | 1 <     | U  | 0.006     | 1 <              | U       | 0.006    | 1 <     | U  | 0,006    | 1 <     | U   |
| VOLATILES        | 1,1-Dichloroelhane                      |               |    | 0.006      | 1 <        | Ð       | 0.027    | 1       |    | 0.009     | 1                |         | 0.006    | 1 <     | U  | 0.006    | 1 <     | U   |
| VOLATILES        | 1,1-Dichloroelhene                      |               |    | 0.005      | 1 <        | U       | 0.006    | 1 <     | U  | 0.01      | 1                |         | 0.006    | 1 <     | U  | 0.006    | 1 <     | U   |
| VOLATILES        | 1,1-Dichloropropene                     |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 1.2.3 Trichlorobenzene                  | 1             |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 1,2,3-Trichloropropane                  |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 1.2.4-Trichlorobenzena                  |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 1.2.4-Trimethylbenzene                  |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 1.2-Dibromo-3-chioropropane             |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 1.2-Dibromoethane                       |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 1.2-Dichlorobenzene                     |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 1.2-Dichloroethane                      |               |    | 0.006      | 1 <        | U       | 0.006    | ۱ <     | U  | 0.006     | 1 <              | U       | 0.006    | 1 <     | U  | 0.006    | 1 <     | U   |
| VOLATILES        | 1 2-Dichlorgeibena                      |               |    | 0.005      | 1 <        | U       | 0.006    | 1 <     | U  | 0.006     | 1 <              | U       | 0,006    | 1 <     | U  | 0.005    | 1 <     | U   |
| VOLATUES         | 1 2-Dichloropropage                     |               |    | 0.006      | 1 <        | Ù       | 0.006    | 1 <     | υ  | 0.006     | 1 <              | U       | 0.006    | 1 <     | U  | 0.006    | 1 <     | υ   |
| VOLATIES         | 1.2-Dimelbulhenzane (n-Yulene)          |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 135.Trimethylanitane                    |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 1 3.Dichlorobenzene                     | 1             |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES.       | 1.3-Dichioropropane                     |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 1 4 Dichiorobenzene                     |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 2.2-Dichloropropage                     |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 2.Ridanana                              |               |    | 0.12       | i e        | u       | 0.061    | 1 <     | U  | 0.062     | 1 <              | U       | 0.058    | 1 <     | U  | 0.061    | 1 <     | U   |
| VOLATILES        | 2.Chloroathul your ather                |               |    | 0.70       |            | -       |          |         | •  | •••••     |                  |         |          |         |    |          |         |     |
| VOLATILES        | 2-Chloroiduana                          |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 2.Hevanope                              |               |    | 0.058      | 1 <        | Н       | 0.061    | 1 <     | ប  | 0.062     | 1 <              | U       | 0.058    | 1 <     | U  | 0.061    | 1 <     | U   |
| VOLATILES        | 2.Pronenal                              |               |    | 4/004      |            | -       |          |         | -  |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | 4-Chierateluene                         |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | Acelona                                 |               |    | 0 12       | 5 4        | U       | 0.061    | 1 <     | U  | 0.039     | 1 <              | υ       | 0.015    | 1.4     | U  | 0.027    | 1 <     | υ   |
| VOLATILES        | Acelonitrile                            |               |    |            |            |         | •        |         | -  |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | Acadonitrije                            |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | Albri obloride                          |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | Bonzone                                 |               |    | 0.006      | 1          | 41      | 0.006    | 1.0     | 11 | 0.006     | 1 <              | u       | 0.006    | 1 <     | U  | 0.006    | 1 <     | υ   |
| VOLATILES        | Bremehonzono                            |               |    | 0.000      | • •        | Ŭ       | 0,000    | , .     | •  |           |                  | •       |          |         | -  |          |         |     |
| VOLATILES        | Bronobenzene                            |               |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |
| VOLATILES        | Bromodinbiometriane<br>Responsibilities |               |    | 0.006      | 1          |         | 0.006    | 1.      | 11 | 0.006     | 1.               | 11      | 0.006    | 1.0     | п  | 0.006    | 1 <     | U   |
| VULANLES         | Bromooichioromainane                    |               |    | 0.000      |            |         | 0.000    |         | 11 | 0.000     |                  | ŭ       | 0.006    | 1.      | ň  | 0.006    | 1.      | Ξŭ. |
| VOLATILES        | Brememethane                            |               |    | 0.000      |            | 0       | 0,000    | 1.      | 11 | 0.003     | 1.               | ň       | 0.020    | 1       | ŭ  | 0.03     | 1-      | ŭ   |
| VULATILES        | Dromometnane                            |               |    | 0.000      |            | ю.<br>П | 0.00     | 14      | 11 | 0.005     | 1 -              | ü       | 0.000    | 1.      | ň  | 0.005    | 12      | ŭ   |
| VOLATILES        | Carbon OlSuride                         |               |    | 0.000      | + <<br>+ - |         | 0.000    | 14      |    | 0.000     | 14               | л<br>П  | 0.000    | 1.      | ŭ  | 0.006    | 1.      | ŭ   |
| VULATILES        | Garbon letrachioride                    |               |    | 0.000      | 1 <        |         | 0.000    | 15      | ň  | 0,000     | 14               | ii ii   | 0.000    |         | 11 | 2000     | 12      | н   |
| VOLATILES        | Chiptobanzene                           |               |    | 0.006      | 1 <        | U<br>U  | 0.00     | 14      |    | 0,000     | 1 <              |         | 0.000    | 1.      |    | 0.000    | 1.      | ň   |
| VULATILES        | Chioroethane                            |               |    | 0.006      | 1 <        | U<br>11 | 0.03     |         |    | 0,001     | - 1 <<br>- 1 - 2 |         | 0.023    | 1 4     | 11 | 0.03     | 1.4     | n   |
| VOLATILES        | Chiorotom                               |               |    | 0.005      | 1 <        | U<br>12 | 0.006    | 1 <     | 0  | 0.005     | 1 <              | U<br>11 | 0.000    | 1 <     | 1  | 0,000    | 1.4     | U U |
| VOLATILES        | Chioromethane                           |               |    | 0.006      | 1 <        | U       | 0.03     | 1 <     | Ų  | 0.031     | 1 <              | U       | 0.029    | 15      | Ŷ  | 0.03     |         | v   |
| VOLATILES        | Ghioroprena                             | 1             |    |            |            |         |          |         |    |           |                  |         |          |         |    |          |         |     |

•

## Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



|  | CONCE   | intrations of otterni | 0013 111 | 301     | 1 341 | uhies v  | 1330    | ciate |          | Jun    | ih di | Ū.        |        |    |          |        |    |
|--|---|-----------------------|----------|---------|-------|----------|---------|-------|----------|--------|-------|-----------|--------|----|----------|--------|----|
| (SUMP) = SUMP076   |   |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| LOCATION _CODE   |   | LH-S76-01             | LH-      | 576-02  |       | LH-      | S76-02  |       | LH-S     | 76-02  |       | ĻH-WR     | S18-0  | t  | LH-WE    | RS18-0 | 1  |
| SAMPLE_NO  |   | LH-\$76-01_3          | LH-S     | 76-02_1 |       | LH-S     | 76-02_2 |       | LH-S7    | 6-02_3 |       | LH-WRS    | 18-01  | 1  | LH-WR:   | S18-01 | _2 |
| SAMPLE_DATE  |   | 5/25/1993             | 6/26     | 3/1993  |       | 6/2      | 5/1993  |       | 6/26     | /1993  |       | 6/26/     | 1993   |    | 6/26     | /1993  |    |
| DEPTH  |   | 5.5 - 7 Ft            | 0.5      | 1,5 Ft  |       | 5.5      | - 6 Ft  |       | 7.       | 7.5 Ft |       | 0.5 -     | 1.5 Fl |    | 3-3      | 3.5 Ft |    |
| SAMPLE_PURPOSE   |   | REG                   | F        | EG      |       | F        | REG     |       | R        | EG     |       | R         | G      |    | R        | ËG     |    |
| Test Group   | Parameter (Units = mg/kg)   | Result DIL LQ VQ      | Result D | α LC    | VQ    | Result D | NL LO   | vo    | Result D | L LQ   | VQ    | Result DI | ιια    | va | Result D | il La  | VQ |
| VOLATILES  | cis-1,2-Dichloroelhene  |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | cis+1,3-Dichloropropene   |                       | 0.006    | 1 <     | U     | 0.006    | 1 <     | U     | 0.006    | 1 <    | Ų     | 0.006     | 1 <    | U  | 0.006    | 1 <    | Ų  |
| VOLATILES  | Dibromochloromethane  |                       | 0.005    | 1 <     | U     | 0.006    | 1 <     | U     | 0,006    | 1 <    | U     | 0,006     | 1 <    | U  | 0.005    | 1 <    | υ  |
| VOLATILES  | Dibromomethane  |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | Dichlorodifluoromelhane   |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | Elhyi melhacrylate  |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | Elhylbenzene  |                       | 0.006    | 1 <     | U     | 0.006    | 1 <     | U     | 0.006    | 1 <    | U     | 0.006     | 1 <    | U  | 0.006    | 1 <    | Ų  |
| VOLATILES  | Hexachlorobutadiene   |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | IODOMETHANE   |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | ISOBUTYL ALCOHOL  |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | Isopropylbenzene  |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | m.p-Xvienes   |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | Methacrylonitrile   |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATEES   | Methyl isobutyl ketone  |                       | 0.058    | 1 <     | U     | 0.061    | 1 <     | U     | 0.062    | 1 <    | U     | 0.058     | 1 <    | U  | 0.061    | 1 <    | U  |
| VOLATILES  | METHYL METHACHYLATE   |                       |          |         | -     |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | Melhviene chloride  |                       | 0.006    | 1 <     | U     | 0.002    | 1 <     | U     | 0.005    | 1 <    | U     | 0.003     | 1 <    | U  | 0.002    | 1 <    | U  |
| VOLATILES  | Naphinalene   |                       |          |         | -     |          |         | -     |          |        |       |           |        | •  |          |        |    |
| VOLATILES  | n-BLITYLBENZENE   | ĺ                     |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | p-PROPYLBENZENE   |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | Peniachloroethane   |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | D-ISOPBOPYLTOLUENE  |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | Propionitrile   |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | SEC-BLITY BENZENE   |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | Shirene   |                       | 0.006    | 1.      | U.    | 0.006    | 1 -     | Ð     | 0.006    | 1 .    | D.    | 0.006     | 1 e    | 11 | 0.006    | 1 <    | 11 |
| VOLATILES  | tert-BLITYI BENZENE   | 1                     | 0.000    | , .     | •     | 0.000    |         | v     | 0,000    |        | ·     |           |        | *  |          |        | •  |
| VOLATILES  | Teirachioroethene   |                       | 0.006    | 1 -     | 0     | 0.058    | 1       |       | 0.009    | 1      |       | 0.006     | 1 e    | u  | 0.006    | 1 <    | Ð  |
| VOLATHES   | Tohene  | 1                     | 0.006    | 1.      | ŭ     | 0.006    | i.      | п     | 0.006    | 50     | п     | 0.006     | 1.4    | ŭ  | 0.006    | 1 4    | ŭ  |
| VOLATILES  | Irans-1 2-Dichloroethene  |                       | 0.000    | • •     | •     | 0,000    |         | •     | 0.000    |        | •     |           |        |    |          | • •    | •  |
| VOLATHES   | traps-1 3-Dichloropropene   |                       | 0.006    | 1.2     | 11    | 0.006    | 1.4     | n     | 0.006    | 1.2    | п     | 0.006     | 12     | 11 | 0.006    | 1 c    | Ð  |
| VOLATILES  | trans-14-Dichloro-2-butene  |                       | 0.000    |         | v     | 0.000    | , ,     | v     | 4.040    | , .    | v     | 0.000     |        | Ĩ  | 0.000    |        | •  |
| VOLATILES  | Trichlorosihene   |                       | 0.006    | 1.0     | а     | 0.24     | 1       |       | 0.182    | t      |       | 0.006     | 1 <    | u  | 0.006    | 1 <    | IJ |
| VOLATILES  | Trichlorollunromethane  |                       | 0.000    | • •     | Ÿ     |          |         |       | 0,.02    |        |       | *****     |        |    |          | •••    | ~  |
| VOLATILES  | Vinul anelate   |                       |          |         |       |          |         |       |          |        |       |           |        |    |          |        |    |
| VOLATILES  | Vinyl chloride  |                       | 0.006    | 1-      |       | 0.02     | 1.4     | D.    | 0.031    | 1.     | U.    | 0.029     | 1 -    | 11 | 0.03     | 1.0    | ц  |
| VOLATILES  | Xvienes Total   |                       | 0.006    | 1.0     | u.    | 0.005    | 12      | Ň     | 0.006    | 1 2    | ŭ     | 0.006     | 1 2    | ŭ  | 0.006    | 1.     | ŭ  |
| The second state of the se | the second second second second second second second second second second second second second second second se |                       | V.V.V    |         | · · · |          |         | ~     | 0.000    |        | ~     |           |        | ~  | ~~~~     |        | ~  |

Table 3-76 Concentrations of Chemicals in Soil Samples Associated with Sump 076

Footnotes are shown on cover page to Tables Section.

.....



Table 3-77 Concentrations of Chemicals in Soil Samples Associated with Sump 077

| [SUMP] = SUMP077 |  |                   |                         |                           |                           |                              |                          |                  |                  |                          |                         |
|------------------|--|-------------------|-------------------------|---------------------------|---------------------------|------------------------------|--------------------------|------------------|------------------|--------------------------|-------------------------|
| LOCATION _CODE   |  | 35SUMP077-S801    | 35SUMP077-\$801         | LH-0L77-01                | LH-S77-01                 | LH-S77-01                    | LH-\$77-01               | LH-577-01        | LH-\$77-02       | LH-\$77-02               | LH-\$77-02              |
| SAMPLE_NO        |  | 35-SMP077-SB01-01 | 35-\$MP077-\$B01-02     | LH-DL77-01                | LH-S77-01 QC              | LH-S77-01_1                  | LH-S77-01_2              | LH-S77-01_3      | LH-S77-02_1      | LH-57/-02_2              | EP-077-02_3             |
| SAMPLE_DATE      |  | 9/14/2005         | 9/14/2006               | 6/26/1993                 | 6/26/1993                 | 6/26/1993                    | 5/26/1993                | 6/26/1993        | 6/26/1993        | 25,35                    | 6720/1993               |
| DEPTH            |  | 0.5 - 0.5 Ft      | 7+781                   | 2 - 2.5 P1                | 0,5 • 1,5 Ft              | 0.3 • 1.3 FL                 | 1,3-3 m<br>956           | BEG              | BEG              | REG                      | REG                     |
| SAMPLE_PURPOSE   | Parameter (Linite - mailed)                  |                   | HEG<br>Basult DIL LO VO | HEG<br>Besuit Oli I.O. VO | PD Besult DII 10 VO       | Result OII I O VO            | Result DIL LO VO         | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VO         | Result DIL LO VO        |
| EXPLOSIVES       | 2 4-Dinimioluone                             | HESDIF DIC EC VO  |                         | 122 1 4 1                 | 1.149 1 2 1               | 1.176 1 < U                  | 1.19 1 < U               | 1.25 1 < U       | 1.136 1 < U      | 1.22 1 < U               | 1.22 I < U              |
| EXPLOSIVES       | 2.6-Dinitroioluese                           |                   |                         | 1,22 1 < U                | 1,149 E< U                | 1.176 1 < U                  | 1.19 1 < U               | 1.25 1 < U       | 1,136 1.< U      | 1.22 1 ≼ U               | 1.22 î < U              |
| METALS           | Aluminum                                     | 6480 1            | 19600 1                 | 7540 1                    | 1140-00 1                 | 11400 1                      | 6620 1                   | 18000 1          | 8950 1           | 8630 1                   | 13800 1                 |
| METALS           | Antimony                                     | 0.103 EU U        | 0.116 1 U U             | 4.56 1 < U                | 4.98 1 < U                | 6.1 1 < U                    | 3.8 1 < U                | 6.04 i < U       | 5.04 1 < U       | 5.18 1 < U               | 6.54 1 < U              |
| METALS           | Arsenic                                      | 3.65 1            | 2.13 1                  | 1.96 1                    | 4.73 1                    | 9.12 1                       | 2.58 1                   | 1.03 1 E         | 3.28 1           | 1.55                     | 3.11 1                  |
| METALS           | Sarium                                       | 65.4 1            | 131 1                   | 75.8 ≮< U                 | 78.3 1 < U                | 73.8 1 < U                   | 136 1 < U                | 144 1.≺ U        | 62.9 1 < U       | 88.3 1 < U               | 89 1 < U                |
| METALS           | Beryllium                                    | 0.419 1           | 0.797 1                 |                           |                           |                              |                          |                  | 5.07 1           | 297 4                    | 5.36 5                  |
| WETALS           | Cadmium                                      | 0.684 1           | 0.137 1 J J             | 2.49 1                    | 8.12                      | 8.58                         | 3.00 1                   | 4.00 1           | 2200 1           | 1680 1                   | 1810 1                  |
| METALS           | Calcium                                      | 21200 10          | 392 1                   | 1380 1                    | 20.0 1                    | 225 (                        | 186 1                    | 121 1            | 13.5 1           | 9.95 1                   | 15.7 1                  |
| METALO           | Cabalt                                       | 256 1             | 5 7 1                   | 5.04 1                    | 7 57 1                    | 5.95                         | 2.7 1                    | 6.34 1           | 3.18 1           | 1.84 1                   | 7,16 1                  |
| METALS           | Conner                                       | 13.8              | 4.53 1                  | 4.54 i< U                 | 3.56 I< U                 | 5.25 1 < U                   | 5,85 1 < U               | 11,3 1 < U       | 5.07 1 < U       | 5.59 1 < U               | 10.9 1 < U              |
| METALS           | Iron   | 25500             | 16900 1                 | 8140 1                    | 30800 1                   | 33300 1                      | 9890 1                   | 12300 1          | 18500 1          | 9110 1                   | 17300 F                 |
| METALS           | Lead   | 37.1 1            | 8.91 i                  | 15,1 1                    | 25.4                      | 26.8 1                       | 17.4 1                   | 25.6 1           | 17.9 1           | 15.7 1                   | 18.4 1 E                |
| METALS           | Magnesium                                    | 410 1             | 1470 1                  | 414 1                     | 690 1                     | 545 1                        | 424 1                    | 1090 1           | 423 1            | 521 1                    | 795 1                   |
| METALS           | Manganese                                    | 137 1             | 52.3 1                  | 619 1                     | 198 1                     | 162 1                        | 98.6 1                   | 38.9 1           | 138 1            | 157 1                    | 135 1                   |
| METALS           | Mercury                                      | 0.0408 1JJ        | 0.306 1 U U             | 0.058 1 < U               | 0.051 1 K U               | 0.069 I E                    | 0.054 f < U              | 0.059 1 < U      | 0.046 1 d U      | 0.056 1 < U              | 0,055 1 < 0             |
| METALS           | Nickel                                       | 4.13 f            | 11.3 1                  |                           |                           |                              |                          |                  |                  | 455 4                    | F00 4                   |
| METALS           | Potassium                                    | 272 t             | 580 1                   | 361 1                     | 387 1                     | 355 1                        | 268 1                    | 522 1            | 417 1            | 450 1                    | 0.654 1 A H             |
| METALS           | Selenium                                     | 0.395             | 0.365 1                 | 0.465 1 < U               | 0.498 1 < U               | 0,61 1 < U                   | 0.38 1< 0                | 0.004 1< 0       | 0.304 1 < 0      | 0.016 1 2 0              | 0.033 1 c 1             |
| METALS           | Silver                                       | 1.53 10 0         | 1.78 10 0               | 0.035 1 6                 | 0.023 1 < 0               | 0.03 1< 0                    | 0.021 1 6                | (1.05) · C       | UNED IN O        | 0.060                    | 5.000                   |
| METALS           | Strantum                                     |                   | 333                     | 195 5 - 16                | 33.8 1 4 1                | 464 1 < U                    | 64 1< U                  | 18.5 1 < U       | 22.6 I< U        | 57.2 1 < U               | 28 1< U                 |
| METALS           | Thallium                                     | 0.0508 1          | 0.151 \$                | 13.3 7 4 0                | 55-6                      | 40.4                         | 04 · · · ·               |                  |                  |                          |                         |
| METALS           | Vanadium                                     | 33.8 1            | 26.9 1                  |                           |                           |                              |                          |                  |                  |                          |                         |
| METALS           | Zinc   | 97.1 1            | 32.2 1                  | 17 1                      | 30.1 1                    | 35.2 1                       | 18.7 1                   | 35,4 1           | 32.5 1           | 23.8 f                   | 32.2 1                  |
| RANGE ORGANICS   | Carbon Range C12-C28                         | 33.4 1 J J        | 60.5 1 U U              |                           |                           |                              |                          |                  |                  |                          |                         |
| RANGE ORGANICS   | CARBON RANGE C28-C35                         | 37.2 1 J J        | 60.5 1UU                |                           |                           |                              |                          |                  |                  |                          |                         |
| RANGE_ORGANICS   | Carbon Range C6-C12                          | 52.7 IL U         | 60.5 1 U U              |                           |                           |                              |                          |                  |                  |                          |                         |
| SEMIVOLATILES    | 1.2.4-Trichlorobenzene                       |                   |                         | 1.22 1 < U                | 1.149 1 < U               | 1,176 1 < U                  | 1.19 1 < U               | 1.25 E V         | 1.136 1 < U      | 1.22 1 < 12              | 1.22 1 < U              |
| SEMIVOLATILES    | 1.2-Dichlorobenzene                          |                   |                         | 1.22 1 < U                | 1,149 1 < U               | 1.176 F C                    | 1,19 1 < 0               | 1,25 E V         | 1.1.10 1 4 1     | 1.22 1 < U               | 122 14 0                |
| SEMIVOLATILES    | 1,3-Dichlorobenzene                          |                   |                         | 1.22 1 < U                | 1,149; 1 < U              | 1.1/0 I < U                  | 1.19 1 < 0               | 1.25 1 4 1       | 1136 1 4 1       | 1.22 1 e U 1             | 1.22 1 < 1              |
| SEMIVOLATILES    | 1.4-DK.bioropenzene<br>2.4.5.Trichlorophanol |                   |                         | 122 14 1                  | 1,149 1 2 U               | 1,176 1 € U                  | 1.19 1 < U               | 1.25 1 c U       | 1,136 1 < U      | 1.22 1 < U               | 1.22 1 < U              |
| SEMIVOLATILES    | 2.4.6-Trichlorophenol                        |                   |                         | 1.22 i < U                | 1,149 1 < U               | 1.176 1 < U                  | 1,19 1 < U               | 1.25 1 < U       | 1.136 1 < U      | 1.22 1 < U               | 1.22 1 <  U             |
| SEMIVOLATILES    | 2.4-Dichlorophenol                           |                   |                         | 1.22 1 K U                | 1,149 t< U                | 1,176 1 < U                  | 1,19 1 < U               | 1.25 1 < U       | 1,136 t< U       | 1.22 1.≺ U               | 1.22 1 < U              |
| SEMIVOLATILES    | 2.4-Dimethylphenol                           |                   |                         | 0.61 1 < U                | 0.575 1 < U               | 0,589 1 < U                  | 0.595 1 < U              | 0.625 1 < U      | 0.568 1 < U      | 0.61 1 < U               | 0.61 1 < U              |
| SEMIVOLATILES    | 2.4-Dinitrophenol                            |                   |                         | 12.195 1 < U              | 11,494 1 < U              | 11.765 1 < U                 | 11,905 1 < U             | 12.5 1 < U       | 11.364 1 < U     | 12.195 1 < U             | 12.195 1 < U            |
| SEMIVOLATILES    | 2-Chloronaphthalene                          |                   |                         | 0,356 1 < U               | 0.345 1 < U               | 0.353 t< U                   | 0.357 1 < U              | 0.375 i < U      | 0,341 1 < U      | 0.366 1 < U              | 0.365 1 < 0             |
| SEMIVOLATILES    | 2-Chiarophenai                               |                   |                         | 0.61 1 < U                | 0.575 1 < U               | 0,588 1 < U                  | 0.595 i < U              | 0.625 1 < U      | 0.558 1 < 0      | 0.61 1 < 0               | 0.51 1 < U              |
| SEMIVOLATILES    | 2-Methylnaphthalene                          |                   |                         | 0.366 f < U               | 0.345 1 < U               | 0.353 1 < 0                  | 0.357 1 < 0              | 0,3/5 1 < 0      | 0,34) ) < 0      | 0.300 1 4 0              | 0.300 1 4 1             |
| SEMIVOLATILES    | 2-Methylphenol                               |                   |                         | 0.61 1 < 0                | 0.575 1 < U               | 2,568 1 < 0                  | 0.555 1 < 0              | 975 1 × U        | 3409 tz 11       | 3.659 1 c U              | 3.659 1 < U             |
| SEMIVOLATILES    | 2-Nitroaniine                                |                   |                         | 3.659 1 4 1               | 3,448 I < U               | 1176 1 < 1                   | 119 1 c 11               | 125 1 c U        | 1.136 1 < U      | 1.22 1 < U               | 1.22 1 < U              |
| SEMIVOLATILES    | 2-Nittophenol                                |                   |                         | 0.61 1 4 1                | 0.575 1 < 1               | 0.588 1 < U                  | 0.595 1 < U              | 0.625 1 < U      | 0.568 1 < U      | 0.61 i< U                | 0.51 1 < U              |
| SEMIVOLATILES    | 3-Nitroanilloe                               |                   |                         | 3.659 1 < U               | 3.448 1 < U               | 3.529 1 < U                  | 3.571 1 < U              | 3.75 1 < U       | 3.409 1 < U      | 3.659 1 < U              | 3.659 1 < U             |
| SEMIVOLATILES    | 4.6-Dinitro-2-methylphenol                   |                   |                         | 6.098 1 < U               | 5.747 1 < U               | 5.882 1 < U                  | 5,952 1 < U              | 6.25 1 ≺ U       | 5.682 1 < U      | 6.098 1 < Ų              | 6.098 1 < U             |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether                   |                   |                         | 1.22 F< U                 | 1.149 1 < U               | 1.176 1 < U                  | 1.19 1 < U               | 1.25 1 c U       | 1,136 1 < U      | 1.22 1 < U               | 1.22 1 < U              |
| SEMIVOLATILES    | 4-Chiora-3-methylphenol                      |                   |                         | 0.61 1 < U                | 0.575 1 < U               | 0.588 1 < U                  | 0.595 1 < U              | 0.625 1 < U      | 0.566 t < U      | 0,61 1 < U               | 0.61 1 < U              |
| SEMIVOLATILES    | 4-Chloroaniline                              |                   |                         | 3.659 1 < U               | 3,448 îc U                | 3,529 1 < U                  | 3.571 1 < U              | 3.75 1 < U       | 3.409 1 < U      | 3.659 1 < U              | 3.659 1 < U             |
| SEMIVOLATILES    | 4-Chlorophenyl phanyl ether                  |                   |                         | 1.22 1 < U                | 1.149 1 < U               | 1.176 I < U                  | 1.19 1 < U               | 1.25 t < U       | 1.136 1 < U      | 1,22 1 < U               | 1.22 1 < 0              |
| SEMIVOLATILES    | 4-Methylphenol                               |                   |                         | 0.51 1 < U                | 0.575 1 < U               | 0.588 t< U                   | 0.595 t < U              | 0.525 1 < U      | 0.558 1 < U      | 0.61 1 < U               | 0,51 1< Ų<br>≤003 < - 1 |
| SEMIVOLATILES    | 4-Nitroaniline                               |                   |                         | 6.098 1 < U               | 5.747 1 < U               | 5.882 1 < U                  | 5.852 1 < U              | 0,43 1 < U       | 5,682 ( U        | 0,080 I× U<br>6009 1-2 U | 6098 12 0               |
| SEMIVOLATILES    | 4-Nitrophenol                                |                   |                         | U > 1 860.0               | 0.747 1K U<br>0.945 1- U  | 0.662 1 <  ↓<br>0.353 1 ×  ↓ | 0.00∠ I< U<br>0.357 I∠ H | 0.20 1 < 0       | 0.341 1 2 U      | 0.366 1 < U              | 0.356 1 < U             |
| SEMIVOLATHES     | Arenaphihulana                               |                   |                         | 0.000 FK U                | 0.040 ik U<br>0.575 tz ti | 0.588 1 c li                 | 0.595 1 < 1              | 0.625 1 < U      | 0.568 1 < U      | 0.61 1 < U               | 0.61 1 < U              |
| SEMIVOLATILES    | Anibracene                                   |                   |                         | 0.61 1 c U                | 0.575 1 < U               | 0.588 1 < U                  | 0.595 1 < U              | 0,625 I < U      | 0.568 1 < U      | 0.61 i < U               | 0.51 1 < U              |
| SEMIVOLATILES    | Benzo(a)anihracene                           |                   |                         | 0.366 1 < U               | 0.345 1 < U               | 0.353 1 < U                  | 0.357 1 < U              | 0.375 I < U      | 0.341 1 < U      | 0.366 1 < 比              | 0.356 1 < U             |
|                  |  | •                 |                         | ····· •                   |                           |                              | · •                      |                  |                  |                          |                         |



Table 3-77 Concentrations of Chemicals In Soil Samples Associated with Sump 077

| (SUMP) = SUMP077 |                                |                   |                   |                  |                  | 11 073 04               | 10.077.01      | 14.577.01        | 18-577-02        | LH-S77-02        | LH-\$77-02       |
|------------------|--------------------------------|-------------------|-------------------|------------------|------------------|-------------------------|----------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                                | 35SUMP077-SB01    | 35SUMP077-SB01    | LH-DL77-01       | LH-S77-01        | 10.077.01 1             | 14-577-01 2    | 18-877-01-3      | UH-S77-02_1      | LH-S77-02_2      | LH-\$77-02_3     |
| SAMPLE_NO        |                                | 35-SMP077-SB01-01 | 35-SMP077-SB01-02 | (H-0L77-01       | LH-S/7-01 QC     | CP+077-01_1             | E10011001_2    | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        |
| SAMPLE_DATE      |                                | 9/14/2006         | 9/14/2006         | 6/26/1993        | 6/26/1993        | 014011333               | 1 5 3 5        | 5.5.7 FI         | 0.5 - 1.5 FI     | 2.5 - 3 Ft       | 5.5 · 7 FI       |
| DEPTH            |                                | 0.5 - 0.5 Ft      | 7 - 7 Ft          | 2 • 2.5 Ft       | 0.5 - 1.5 M      | 0.5 • 1.5 FL            | 1,3+3+1        | 956              | BEG              | REG              | REG              |
| SAMPLE_PURPOSE   |                                | REG               | REG               | REG              |                  | neu<br>Dawli Dil I D VO | Real Dis LO VO | Besult Dil 10 VO | Besult DiL LO VO | Result DIL LO VO | Result DIL LO VO |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO | Result UIL LU VU | Aesult DIL LO VO        |                | 0.625 1 4 1      | 0.568 1 < U      | 0.61 1 < U       | 0.61 1 < U       |
| SEMIVOLATILES    | Benzo(a)pyrene                 |                   |                   | 0.61 1 < U       | 0.575 1 2 0      | 0,000 FC U              | 110 1 1        | 125 12 11        | 1.136 1 < U      | 1.22 I< U        | 1.22 1 < U       |
| SEMIVOLATILES    | Benzo(b)lluoranihene           |                   |                   | 1.22 1 < 0       | 1,149 1 < U      | 1.1/0 IC U              | 2 391 1 4 1    | 25 1 4 1         | 2.273 1 < U      | 2,439 1 < U      | 2.439 1 < U      |
| SEMIVOLATILES    | Benzo(ghi)perylene             |                   |                   | 2.439 1 < U      | 2.299 1 4 0      | 2.333 1 4 1             | 110 1 4 1      | 125 1 4 1        | 1.136 1 < U      | 1.22 1 < U       | 1.22 1 < U       |
| SEMIVOLATILES    | Benzo(k)iluoranthene           |                   |                   | 1.22 1 < U       | 1,149 ( C U      | n ≡00 1 × U             | 0.595 1 - 1    | 0.625 1 < U      | 0.568 1 < U      | 0.61 I< U        | 0.61 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroelhoxy)methane     |                   |                   | 0.61 1 < 0       | 0.575 1 4        |                         | 0.595 1 4 1    | 0.825 1 < 1U     | 0.568 1 < U      | 0.61 I< U        | 0.61 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether        |                   |                   | 0.51 1 < 0       | 1.140 1 - 11     | 1.000 1 4 0             | 119 1 4 1      | 1.25 1 < U       | 1.136 1 < U      | 1,22 1 < U       | 1.22 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroisopropyi)ether    |                   |                   | 1.22 1 < 1       | 1.149 I C U      | 0.199 1                 | 0.75 î J       | 0.125 1 J        | 0.568 1 < U      | 0.122 1 J        | 0.61 1 < U       |
| SEMIVOLATILES    | bis(2-Elbylhexyl)phthalale     |                   |                   | 0.61 1 4 1       | 0.004 1 0        | 0.599 1 2 11            | 0.595 1 1      | 0.625 1 < U      | 0.568 1 < U      | 0.61 1 < U       | 0.61 1 < U       |
| SEMIVOLATILES    | Bulyi benzyi phihalate         |                   |                   | 0.61 1< 0        | 1470 5 1         | 1176 1 4 1              | 119 1 4 1      | 1.25 1 < U       | 1.136 t< U       | 1,22 1 < Ų       | 1.22 1 < U       |
| SEMIVOLATILES    | Carbazole                      |                   |                   | 6.000 L. U       | 5.747 t d        | 5 RR2 1 c U             | 5.952 1 c U    | 6.25 I < U       | 5.682 i < U      | 6.098 1 < U      | 6.098 1 < U      |
| SEMIVOLATILES    | Chrysena                       |                   |                   | 6.096 I C U      | 2,747 1 0        | 2.953 1 2 1             | 2.38t 1 < U    | 2.5 1 < U        | 2.273 1 < U      | 2,439 f < U      | 2.439 1 < U      |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene         |                   |                   | 2,439 1 4 1      | 1140 1 - 11      | 1176 1 1                | 1.19 1 c U     | 1.25 i < U       | 1.136 1 < U      | t.22 f < U       | 1.22 1 < U       |
| SEMIVOLATILES    | Dibenzoluran                   |                   |                   | 0.02 1 1         | 0172 1 .         | n 129 i J               | 0.595 1 < U    | 0.163 1 J        | 0.568 1 < U      | 0.61 1 < U       | 0.61 1 < U       |
| SEMIVOLATILES    | Orethyl phinalale              |                   |                   | 0.100 1 3        | 0.575 1 2 1      | 0.588 1 - U             | 0.595 1 < U    | 0.625 1 < U      | 0.568 1 < U      | 0.61 1 < U       | 0.61 (< U        |
| SEMIVOLATILES    | Dimetnyi pritnalare            |                   |                   | 7517 1           | 6 245 1          | 5 471 1                 | 3.036 1        | 2.775 1          | 3.273 1          | 0.365 1 < U      | 3.768 1          |
| SEMIVOLATILES    | di-n-Bulyi onthaiate           |                   |                   | 061 1 - 1        | 0.575            | 0.588 1 c il            | 0.595 1 < U    | 0.625 1 < U      | 0.568 i< U       | 0.61 1 < U       | 0.51 1.< U       |
| SEMIVOLATILES    | di-n-Octyl phinalate           |                   |                   | 0.61 1 4 11      | 0.575 1 < U      | 0.588 I < U             | 0.595 1 < U    | 0.625 t < U      | 0.568 1 < U      | 0.61 ≭< Ü        | 0.61 1 < U       |
| SEMIVOLATILES    | Fluoraninene                   |                   |                   | 0.51 1 2 1       | 0.575 1 c U      | 0.588 1 < 12            | 0.595 t < U    | 0.625 t < U      | 0.568 1 < U      | 0.61 1 < U       | 0.61 1 < U       |
| SEMIVOLATILES    | Fillorene                      |                   |                   | 122 1 4          | 1149 1 c U       | 1.176 1 K U             | 1,19 1 < U     | 1.25 1 < Ų       | 1.136 1 < U      | 1.22 1 < U       | 1.22 I < U       |
| SEMIVOLATILES    | Hevachtorogenzene              |                   |                   | 3659 1 4 1       | 3.448 1< U       | 3.529 1 < U             | 3.571 1 < U    | 3.75 1 < U       | 3.409 i < U      | 3.659 1 < U      | 3.659 1 < U      |
| SEMIVOLATILES    | Hexachiorobulaciene            |                   |                   | 3.650 1 2 1      | 3.44R 1 < 1      | 3.529 1 < U             | 3.571 1 < U    | 3.75 t < U       | 3.409 1 < U      | 3.659 1 < U      | 3.659 < U        |
| SEMIVOLATILES    | Hexacriorocycloperatulene      |                   |                   | 122 1 c U        | 1.149 1 < U      | 1,176 1 < U             | 1,19 1 c U     | 1.25 i < U       | 1.136 1 < U      | 1.22 f < U       | 1.22 I< U        |
| SEMIVOLATILES    | Hexachiologinans               |                   |                   | 122 1 4 1        | 1.149 1 c U      | 1.175 î< U              | 1.19 î < U     | 1,25 1 < U       | 1.136 1 < U      | 1.22 1 < U       | 1,22 1 < U       |
| SEMIVOLATILES    | Indend 1,2,3-cupyrene          |                   |                   | 0.61 €< U        | 0.575 f < U      | 0.588 1 < U             | 0.595 1 < U    | 0.625 1 < U      | 0.568 1 < U      | 0.61 1 < U       | 0.61 ic U        |
| SEMIVOLAHLES     | Naphthelese                    |                   |                   | 0.366 1 U        | 0.345 1 < U      | 0,353 1 < U             | 0.357 1 < U    | 0.375 t < U      | 0.341 1 < U      | 0.366 t< U       | 0.365 1 < U      |
| SEMINULATILES    | hitobanaono                    |                   |                   | 0.61 1< U        | 0.575 i < U      | 0.588 1 < U             | 0.595 1 < U    | 0.625 1 < U      | 0.568 I< U       | 0.61 I< U        | 0.61 1 < U       |
| SEMMOLATILES     | n Nitrosovijanjne              |                   |                   | 1.22 1 < U       | 1,149 1 c U      | 1.176 t < U             | 1.19 t< U      | 1.25 1 < U       | 1.136 1 < U      | 1.22 1 < U       | 1.22 1 < U       |
| SEMINOLATILES    | n-Nitrosodinhanvlatning        |                   |                   | 0.51 f < U       | 0.575 1 < U      | 0.586 1 < U             | 0.595 1 < U    | 0.625 1 d U      | 0.568 1 < U      | 0.61 1 < U       | 0.61 i < U       |
| SEMIVOLATILES    | Penjachlorophenol              |                   |                   | 6.098 1 < U      | 5.747 t< U       | 5.882 1 < U             | 5.952 1 <  U   | 6.25 1 < U       | 5.682 1 < U      | 6.098 1 < U      | 6.098 1 < U      |
| SEMIVOLATILES    | Phenanihrepe                   |                   |                   | 0.61 1 < U       | 0.575 t< U       | 0,588 1 < U             | 0.595 1 < U    | 0.625 1 < U      | 0.558 1 < U      | 0.61 1 < U       | 0.61 1 < 0       |
| SEMMOLATILES     | Phenol                         |                   |                   | 0.5t 1 < U       | 0.575 1 < U      | 0.588 1 < U             | 0.595 1 < U    | 0.625 i < U      | 0.568 1 < U      | 0.61 1 < U       | 0.61 1 < U       |
| SEMIVOLATILES    | Pyresa                         |                   |                   | 0.61 1 < U       | 0.575 1 < U      | 0.588 i< U              | 0.595 1 < U    | 0.625 1 < U      | 0.568 1 < U      | 0.61 1 < U       | 0.61 I < U       |
| VOLATILES        | t.1.1.2 Tetrachlorgethane      |                   | 0.00515 VUU       |                  |                  |                         |                |                  |                  |                  |                  |
| VOLATILES        | 1.1.1-Trichlorgethane          |                   | 0.00515 1 U U     | 0.006 1 d U      | 0.005 1 < U      | 0.006 1 < U             | 0.006 1 < U    | 0.006 1 < 간      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1.1.2.2-Tetrachloroethane      |                   | 0.00515 1 U U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U             | 0.006 1 < U    | 0.006 t < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 I < U      |
| VOLATILES        | 1,1,2-Trichloroethane          |                   | 0.00515 1 U U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 t< U              | 0.006 t< U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 4 U      |                  |
| VOLATILES        | 1,1-Dichloroethane             |                   | 0.00515 1 U U     | 0.006 1 < U      | 0,006 1 < U      | 0.006 1 < U             | 0.006 1 < U    | 0.006 1 < U      | 0.006 1 2 0      | 0.006 1 < 0      | 0.006 1 4 1      |
| VOLATILES        | 1,1-Dichloroethene             |                   | 0.00515 1 U U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U             | 0.006 1 < U    | 0.005 1 < U      | 0.006 1 < 0      | 0,006 1 2 0      | 0.000 (< 0       |
| VOLATILES        | 1.1-Dichloropropene            |                   | 0.00515 1 U U     |                  |                  |                         |                |                  |                  |                  |                  |
| VOLATILES        | 1.2.3-Trichlorobenzene         |                   | 0.00515 1 U U     |                  |                  |                         |                |                  |                  |                  |                  |
| VOLATILES        | 1.2.3 Trichloropropane         |                   | 0.00515 1 U U     |                  |                  |                         |                |                  |                  |                  |                  |
| VOLATILES        | 1,2,4-Trichtorobenzena         |                   | 0.00515 IUU       |                  |                  |                         |                |                  |                  |                  |                  |
| VOLATILES        | t,2.4-Trimethylbenzene         |                   | 0.00515 EU U      |                  |                  |                         |                |                  |                  |                  |                  |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    |                   | 0.00515 1 U U     |                  |                  |                         |                |                  |                  |                  |                  |
| VOLATILES        | 1,2-Dibromosthane              |                   | 0.00515 1 U U     |                  |                  |                         |                |                  |                  |                  |                  |
| VOLATILES        | 1.2-Dichlorobenzene            |                   | 0.00515 1 U U     |                  |                  |                         | 0.000 4 11     | 5 006 1 4 U      | 0.006 1.2 1      | 0.006 1.c U      | 0.006 i< U       |
| VOLATILES        | 1.2-Dichloroethane             |                   | 0.00515 IUU       | 0.006 I < U      | 0.006 1 < U      | 0.006 I < U             | 0.006 1 < 0    | 0.000 1 0        | 0.006 1 2 11     | 0.006 1 4 1      | 0.006 1 < U      |
| VOLATILES        | 1,2-Dichloroethene             |                   |                   | 0.006 1 < U      | 0.006 1 < U      | Q.006 1 < U             | 0.006 1 < 0    | 0.000 1 0        | 0.000 1 4 0      | 0.005 1 4 11     | 0.006 1 < U      |
| VOLATILES        | 1.2-Dichloropropane            |                   | 0.00515 tUU       | 0.005 1 < U      | 0.006 / < U      | 0.006 1 < U             | 0.006 1< 0     |                  | 0.000 1 0        | 0,000 1 0        |                  |
| VOLATILES        | 1.2-Dimethylbenzene (o-Xylene) |                   | 0.00515 1 U U     |                  |                  |                         |                |                  |                  |                  |                  |
| VOLATILES        | 1,3,5-Trimethylbenzena         |                   | 0.00515 1 U U     |                  |                  |                         |                |                  |                  |                  |                  |
| VOLATILES        | 1,3-Dichlorobenzane            |                   | 0.00515 1 U U     |                  |                  |                         |                |                  |                  |                  |                  |
| VOLATILES        | 1,3-Dichloropropane            |                   | 0.00515 IUU       |                  |                  |                         |                |                  |                  |                  |                  |
| VOLATILES        | 1,4-Dichlorobenzene            |                   | 0.00515 1 U U     |                  |                  |                         |                |                  |                  |                  |                  |
| VOLATILES        | 2,2-Dichloropropane            | 1                 | 0.00515 1 U U     | 0.001            | 0.057            | 0.050                   | 0.08 1 - 1     | 0.063 K v U      | 0.057 1 ∢ U      | 0.061 1 < U      | 0.061 1 < U      |
| VOLATILES        | 2-Butanone                     | 1                 | 0.0103 1 U U      | 0.061 1 < U      | 0.057 1 < 0      | 0.008 I C U             | 0.00   K Q     |                  |                  |                  | -                |
| VOLATILES        | 2-Chloroethyl vinyl ether      |                   | 0.0103 1 U U      |                  |                  |                         |                |                  |                  |                  |                  |



| Table 3-77   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 077 |

|                  |                               |                   | -                 |                  |                 |                  |                          |                  |                           |                   |                  |
|------------------|-------------------------------|-------------------|-------------------|------------------|-----------------|------------------|--------------------------|------------------|---------------------------|-------------------|------------------|
| (SUMP) = SUMP077 |                               |                   |                   | LL DI WAR        | 111 077 04      | 14.033.67        | 14 277 04                | 14 577 61        | 19.677.09                 | 14.677.49         | : H.S77.02       |
| LOCATION_CODE    |                               | 35SUMP077-SB01    | 35SUMP077-S801    |                  | LH-577-01       |                  |                          | 10 677 61 2      | 14 877 00 4               | LH-517-05 2       | 14-577-02 3      |
| SAMPLE_NO        |                               | 35-5MP077-5B01-01 | 35-SMP077-S801-02 | LH-DL77-01       | EH-S77-01 QU    | LH-S/7-01_1      | LR-577-01_2              | LU-01/1-01_3     | E/1-07/-02_1              | 6/16/1002         | 6/28/1009        |
| SAMPLE_DATE      |                               | 9/14/2005         | 9/14/2006         | 6/26/1993        | 6/26/1993       | 0126/1993        | 0/20/1993                | 0/20/1553        | 012011333                 | 7.5 - 3.50        | 55.7 5           |
| DEPTH            |                               | 0.5 - 0.5 F1      | 7 · 7 FI          | 2 - 2.5 M        | 0.5 • 1.5 FT    | 0.3 • 1,5 FI     | 1.3 • 3 • 1              | 0.0 . / / /      | 0.0 - 1.0 - 1             | PEC               | REG              |
| SAMPLE_PURPOSE   |                               | REG               | REG               | HEG              |                 | REG NO VO        | Reg<br>Basell Dill LO VO | Result DN J G VO | Regist Dil LO VO          | Baerilt Dil LO VO | Result DIL LO VO |
| Test Group       | Parameter (Units = mg/kg)     | Result DH, LO VO  | Hesuit UIL LO VO  | HESLIN UIL LO VO | HESDE DIL LO VO | HESUIT UIL CU VU | Mesuli Dic CO VO         | Hesun Die La va  |                           |                   |                  |
| VOLATILES        | 2-Chlorotoluena               |                   | 0.00515 1 U U     |                  |                 | 0.070 d (1       | 6.00 A . U               | 0.000 (          | 0.057 1 4 11              | 0.021 1 2 1       | 0.051 1 - 11     |
| VOLATILES        | 2-Hexanone                    |                   | 0.0103 1 U U      | 0.061 1 < U      | 0.057 1 < 0     | 0.059 1 < 0      | 0.04 1 < 0               | 0,003 1 < 0      | 0.03/ ( < 0               |                   | 0.0d1 1 C C      |
| VOLATILES        | 4-Chiorololuene               |                   | 0.00515 10 0      |                  |                 |                  | 0.005 (                  | 0.097 1          | 0.059 1 4 11              | 0.03 1 4 11       | 0.065 1 - 1      |
| VOLATILES        | Acelone                       |                   | 0.0103 1 0 0      | 0.03 1 < 0       | 0.02/ 1 < U     | 0,023 1 < U      | 0.025 1 < 0              | 0.037 1 4 0      | 0.013 1 4 1               | 0.006 1 4 1       | 0.005 1 4 1      |
| VOLATILES        | Benzene                       |                   | 0.00515 1 U U     | 0.006 1 < 0      | 0.005 1 < 0     | 0.006 1 < Q      | 0.006 1 < 0              | 0.006 / K D      | 0.000 7 4 0               | 0,000 / 0         | 0.000 1 4 0      |
| VOLATILES        | Bromobenzane                  |                   | 0.00515 1 0 0     |                  |                 |                  |                          |                  |                           |                   |                  |
| VOLATILES        | Bromochloromethane            |                   | 0.00515 1 0 0     | 0.005            | 0.000           | 0.005 4 . 1)     | 0.000 5 4 11             | 0.006 5 4 11     | 0.006 1 4 1               | 0.006 1 < 11      | 0.006 1 < U      |
| VOLATILES        | Bromodicnioromeinane          |                   | 0.00515 10 0      | 0.005 1 < 0      | 0.005 I C U     | 0.006 1 4 0      | 0.006 1 4 0              | 0.000 1 4 0      | 0.000 1 0                 | 0.006 1 < 11      | 0.006 1 4 1      |
| VOLATILES        | Bromotorm                     |                   | 0.00515 1 U U     | UUU5 I < U       | 0,005 1 < 0     | 0.006 1 < 0      | 0.006 1< 0               | 0.000 1 4 0      | 0.000 1 4 1               | 0.000 1 < 0       | 0.03 1 4 11      |
| VOLATILES        | Sromomethane                  |                   | 0.0103 1 0 0      | 0.03 1 < 0       | 0.029 1 < 0     | 0.029 1 < 0      |                          | 0.031 1 4 0      | 0.020 1 2 1               | 0.06 1 < U        | 0.006 1 < 10     |
| VOLATILES        | Carbon disullide              |                   | 0.00515 1 U U     | 0.006 1 < 0      | 0.006 1 < 0     | 0.006 1 < 0      | 0.006 1 4 1              | 0.000 1 4 1      | 0.000 1 4 0               | 0.000 1 < U       | 0.006 1 < U      |
| VOLATILES        | Caroon letrachtoride          |                   | 0.00515 10 0      | 0.006 1 < 0      | 0.006 1 2 0     | 0.006 1 4 0      | 0.000 1 4 0              | 0,000 14 0       | 0.000 1 2 11              | 0.005 1 < 0       | 0.006 1 < U      |
| VOLAFILES        | Chioropenzene                 |                   | 0.00515 10 0      |                  | 0.006 1 4 0     | 0.000 1 < 0      |                          | 0.020 1 4 1      | 0.000 1 4 1               | 0.03 1 4 1        | 0.03 1 < U       |
| VOLATILES        | Chioroeinane                  |                   |                   | 0.03 1 < U       | 0.029 1 4 0     | 0.005 1 4 1      |                          | 0.001 1 4 1      | 0.006 1 4 11              | 0.005 1 4 1       | 0.006 1 < U      |
| VULATILES        | Chioraiann<br>Chioraiann      |                   | 0.00515 10 0      | 0.006 1 < 0      | 0.000 1 4 11    | 0.000 14 11      | 0.000 1 4 11             | 0.031 1 - 1      | 0.028 1 4 1               | 0.03 1 < 1        | 0.03 1 c U       |
| VOLATILES        | Unioromethane                 |                   |                   | 0.03 1 < 0       | 0.029 1 4 0     | 0.020 1 4 0      | 0.03 1 4 0               | 0.001 1 1 0      |                           |                   |                  |
| VOLATILES        | cis+1,2-Dichloroetheoa        |                   |                   | 0.000            | 0.000 1 - 11    | 0.002 t - U      | 0.006 1 - 13             | 0.006 1 / 1      | 0.006 1 2 11              | 0.006 1 < U       | 0.006 í< U       |
| VOLATILES        | cis-1,3 Uigoloropropene       |                   | 0.00515 10 0      | 0.008 F< U       |                 | 0.006 1 4 0      | 0.006 1 4 0              | 0.000 1 < 0      | 0.006 1 4 1               | 0.006 1 c U       | 0.006 1 < U      |
| VOLATILES        | Disconcentrate                |                   | 0.00315 10 0      | 0.006 1 2 0      | 0.006 1 < 0     | 0.000            | 0,000 1 4 0              | 0.000 14 0       |                           |                   |                  |
| VOLATILES        | District of the second second |                   |                   |                  |                 |                  |                          |                  |                           |                   |                  |
| VOLATILES        | City the second               |                   | 0.0103 10 0       | 0.005 1          | 0.000 1 - 11    | 0.006 1 - 1      | 0.006 1 4 11             | 0.006 1 4 11     | 0.006 1 × U               | 0.006 t< U        | 0.006 1 < U      |
| VOLANLES         | Envigenzene                   |                   |                   | 0.006 1 4 0      |                 | 0.000 10 0       | 0.000 1 2 0              | 0,000 1 0 0      |                           |                   |                  |
| VOLATILES        | Hexacrioroggiagiene           |                   | 0.00313 10 0      |                  |                 |                  |                          |                  |                           |                   |                  |
| VOLATILES        | isopropyidenzene              |                   | 0.00015 FU U      |                  |                 |                  |                          |                  |                           |                   |                  |
| VOLATILES        | Noted websited values         |                   | 0.00313 1.0 0     | 0.001 1 - 11     | 0.057 1 - 11    | 0.050 1 4 11     | 0.06 1 4 1               | 0.063 1 2 1      | 0.057 1 c U               | 0.061 1 < U       | 0.061 f < U      |
| VOLATILES        | Melling Subday Celone         | }                 |                   | 0.005 1 1        | 0.007 1 1       | 0.006 1 < 1      | 0.00 1 < U               | 0.006 1 4 U      | 0.004 1 4 1               | 0.006 1 < U       | 0.031 1 < U      |
| VOLATILES        | Nanhthalana                   |                   | 0.00313 7 0 0     | 0.000 7 6 0      | 0.007 7 4 0     | 0,000 1 0 0      | 0.000                    | 0.000            |                           |                   |                  |
| VOLATILES        | n-BUTYI BENZENE               |                   | 0.00515 1 (1 11   |                  |                 |                  |                          |                  |                           |                   |                  |
| VOLATILES        | a DOODYL BENZENG              |                   | 0.00515 1 1 1     |                  |                 |                  |                          |                  |                           |                   |                  |
| VOLATILES        | SORDOPYI TOLLIENE             |                   | 0.00515 1 1 1     |                  |                 |                  |                          |                  |                           |                   |                  |
| VOLATILES        | COLUMN RENZENE                |                   | 0.00515 1 0 0     |                  |                 |                  |                          |                  |                           |                   |                  |
| VOLATILES        | Shrane                        |                   | 0.00515 111 11    | 0.005 1 c 11     | 0.005 1 < 13    | 0.006 1 < 12     | 0.005 1 < U              | 0.006 t < U      | 0.006 1 < U               | 0.006 1 < U       | 0,006 1 < U      |
| VOLATIEES        | tort-BUTVI BENZENE            |                   | 0.00515 1.11 1    | 0.000 1 0        | 0.000           | 0.000            | 0.000                    |                  |                           |                   |                  |
| VOLATILES        | Tetrachioroalhano             |                   | 0.00515 1.12 11   | 0.006 1 4 1      | 0.006 1 × U     | 0.006 1 < 11     | 0.006 1 < U              | 0.006 1 < U      | 0.006 1 < U               | 0.006 1 < U       | 0.006 1 < U      |
| VOLATILES        | Takene                        |                   | 0.00515 1.11 1    | 0.006 1 - 1      | 0.006 1 × U     | 0.006 1 < U      | 0.006 1 < U              | 0.006 1 < U      | 0.006 1 < U               | 0.006 1 < U       | 0.006 I< U       |
| VOLATILES        | Irans-1.2-Dictiloroethere     |                   | 0.00515 1 1/ 1/   | store is v       | 5.000 · · · · · |                  |                          |                  |                           |                   |                  |
| VOLATICES        | trans 1 3 Dichloronropene     |                   | 0.00515 1 1 1     | 0.006 1.2 17     | 0.006 tz H      | 0.006 1 < 1      | 0.006 1 < 1              | 0.006 1 c U      | 0.006 t <del>&lt;</del> U | 0.006 1 < U       | 0.006 t < U      |
| VOLATHES         | Trinklomethene                |                   | 0.00206 1.1 1     | 0.006 (2 1)      | 0.006 1 < U     | 0.006 1 < 1      | 0.006 1 < 1              | 0.006 1 < 1      | 0.006 1 < U               | 0.006 1 < U       | 0.006 1 < U      |
| VOLATILES        | Trichlorofluoromethane        |                   | 0.0103 111 11     |                  |                 |                  |                          |                  |                           |                   |                  |
| VOLATILES        | Vinvi acetate                 |                   | 0.0103 tH H       |                  |                 |                  |                          |                  |                           |                   |                  |
| VOLATILES        | Vinvi colonde                 |                   | 0.0103 1 U U      | 0.03 1 < 17      | 0.029 t< U      | 0.029 1 < Li     | 0.03 1 < U               | 0.031 1 < U      | 0.028 1 < U               | 0.03 1 <  U       | 0.03 1 < U       |
| VOLATILES        | Yvienes Total                 |                   |                   | 0.00 1 2 0       | 0.005 Ec 11     | 0.006 1 < U      | 0.006 1 < U              | 0.006 1 < 1      | 0.006 i< U                | 0.006 1 < U       | 0,006 1 < U      |

Footnotes are shown on cover page to Tables Section.

| 1999 - P              |    |
|-----------------------|----|
| Shaw Environment of 1 | 98 |

|   | Concentrations of              | of Chemic      | als i           | n Soi  | il Samp     | les /             | Assc | ciated      | with                | ı Sur  | np 078          |                   |        |               |                   |           |
|---|--------------------------------|----------------|-----------------|--------|-------------|-------------------|------|-------------|---------------------|--------|-----------------|-------------------|--------|---------------|-------------------|-----------|
| ISUMPJ = SUMPU/S<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE |                                | LH-S<br>LH-S7  | 78-01<br>8-01_1 |        | ԼH-<br>ԼH-Տ | 578-01<br>78-01_1 | 2    | ԼH-<br>ԼH-Տ | -678-01<br>578-01_3 | 3      | ี (H-ง<br>(H-S) | 579-01<br>79-01_1 |        | (H-(<br>LH-S) | 379-01<br>79-01_2 | 2         |
| SAMPLE_DATE   |                                | 7/24/          | 1993            |        | 7/2         | 4/1993            |      | 7/2         | 4/1993              |        | 7/24            | 1/1993            |        | 7/24          | /1993             |           |
|   |                                | 0.5 -          | 2 Ft            |        | 3           | - 5 Ft            |      | 15          | - 17 Ft             |        | 0,5             | - 2 Ft            |        | 3 -           | 5 Ft              |           |
| SAMPLE_PURPUSE  | Democratica (Unite and Date)   | HE<br>December | 4G              |        |             | REG               |      |             | REG                 |        | ۶<br>           | IEG               |        | A LA          | EG                |           |
| EXDI OSIVES   | Parameter (Units = mg/kg)      | Hesult L       |                 | 1 10   | Result L    |                   |      | Résult [    |                     | VQ     | Result D        | UL LO             | vo     | Result D      |                   | <u>vo</u> |
| EXPLOSIVES  | 2.6-Dinitrotokiene             | 0.00           | 1 <             | U      | 0.33        | 1<                | 0    | 0.33        | 1 <                 | 0      | 0.33            | 1 <               | 0      | 0.33          | 1 <               | 0         |
| METALS  | Aluminum                       | 22200          | 14              | 0      | 4790        | 14                | 0    | 0.33        | 1<                  | 0      | 10200           | 14                | 0      | 11500         | 1 <               | 0         |
| METALS  | Antimony                       | 00555          | 1.              |        | 4760        | 1 4               | 1    | 4300        | 1 4                 |        | 12300           | 1 <               | 0      | 11500         | 1 <               |           |
| METALS  | Arsenic                        | 3              | 1               | 0      | 26          | 1                 | 0    | ა<br>ა      | 1 4                 | Ų      | 22              | 1 <               | U      | 3             | 1 <               | U         |
| METALS  | Barium                         | 86.1           | i               |        | 10.1        | ť                 |      | 373         | 1                   |        | 174             | 4                 |        | 117           |                   |           |
| METALS  | Cadmium                        | 1 1            | 1.0             | U      | 10.1        |                   | D.   | 1           |                     | 11     | 174             |                   | н      | 117           |                   | н         |
| METALS  | Calcium                        | 2030           | 1               | 0      | 241         | 1                 | v    | 668         | 1                   | U      | 1350            | 4                 | 0      | 716           | ,                 | U         |
| METALS  | Chromium                       | 35.4           | 1               |        | 12.4        | ŕ                 |      | 75          | ì                   |        | 58 0            | ÷                 |        | 39.3          | ÷                 |           |
| METALS  | Cobalt                         | 4              | 1               |        | 1           | ,<br>t e          | U    | 6.9         | 1                   |        | 52              | í                 |        | 72            | ŕ                 |           |
| METALS  | Copper                         | 16.5           | 1               |        | 2.8         | i.                | •    | 2.9         | 1                   |        | 194             | ŕ                 |        | 65            | ÷                 |           |
| METALS  | Iron                           | 35000          | 1 <             | U      | 12100       | 1 <               | ឋ    | 13900       | ां र                | U      | 23900           | 1 <               | Ð      | 20300         | İe                | Ð         |
| METALS  | Lead                           | 8.1            | 1               | -      | 2.4         | 1                 | -    | 3           | 1                   | •      | 40.6            | 1                 | ~      | 8.4           | i                 | 0         |
| METALS  | Magnesium                      | 1540           | 1               |        | 166         | 1                 |      | 711         | 1                   |        | 563             | 1                 |        | 611           | 1                 |           |
| METALS  | Manganese                      | 103            | i               |        | 18.1        | 1                 |      | 223         | 1                   |        | 211             | 1                 |        | 356           | 1                 |           |
| METALS  | Mercury                        | 0.1            | 1 <             | U      | 0.1         | 1 <               | U    | 0,1         | 1 <                 | U      | 0.1             | 1 <               | U      | 0.1           | 1 <               | U         |
| METALS  | Potassium                      | 970            | 1               |        | 782         | 1                 |      | 271         | ٢                   |        | 827             | 1                 |        | 1390          | 1                 | •         |
| METALS  | Selenium                       | 1              | 1 <             | U      | 1           | 1 <               | U    | 1           | 1 <                 | U      | 1               | 1<                | υ      | 1             | 1 <               | U         |
| METALS  | Silver                         | 1              | 1 <             | U      | 1           | 1 <               | U    | 1           | 1 <                 | U      | 1               | 1 <               | Ű      | 9.6           | 1                 |           |
| METALS  | Strontium                      | 17.8           | 1               |        | 3.6         | 1                 |      | 15.2        | 1                   |        | 13.9            | 1                 |        | 10.8          | 1                 |           |
| METALS  | Zinc                           | 50.9           | 1               |        | 5.9         | 1                 |      | 27.2        | 1                   |        | 206             | i                 |        | 150           | 1                 |           |
| SEMIVOLATILES   | 1,2.4-Trichlorobenzene         | 0.33           | 1 <             | U      | 0.33        | 1 <               | U    | 0.33        | 1 <                 | U      | 0.33            | 1 <               | U      | 0.33          | 1 <               | U         |
| SEMIVOLATILES   | 1.2-Dichlorobanzene            | 0.33           | 1 <             | U      | 0.33        | 1 <               | U    | 0.33        | 1 <                 | U      | 0.33            | 1 <               | U      | 0.33          | 1 <               | U         |
| SEMIVOLATILES   | 1,3-Dichlorobenzene            | 0.33           | 1 <             | U      | 0.33        | 1 <               | U    | 0.33        | 1 <                 | U      | 0.33            | 1 <               | U      | 0.33          | 1 <               | U         |
| SEMIVOLATILES   | 1.4-Dichlorobenzene            | 0.33           | 1 <             | U      | 0.33        | 1 <               | U    | 0.33        | 1 <                 | U      | 0.33            | 1 <               | IJ     | 0.33          | 1 <               | U         |
| SEMIVOLATILES   | 2.4.5-Trichlarophenol          | 1.65           | 1 <             | U      | 1.65        | 1 <               | U    | 1.65        | 1 <                 | U      | 1,65            | 1 <               | U      | 1.65          | 1 <               | U         |
| SEMIVOLATILES   | 2.4,6-Trichlorophenol          | 0.33           | 1 <             | U      | 0.33        | 1 <               | U    | 0.33        | 1 <                 | U      | 0.33            | 1 <               | U      | 0.33          | 1 <               | U         |
| SEMIVOLATILES   | 2,4-Dichlorophenol             | 0.33           | 1 <             | U      | 0.33        | 1 <               | U    | 0.33        | 1 <                 | U      | 0.33            | 1 <               | U      | 0.33          | 1 <               | U         |
| SEMIVOLATILES   | 2.4-Dimethylphenol             | 0.33           | 1 <             | U      | 0.33        | 1 <               | U    | 0.33        | 1 <                 | U      | 0.33            | 1 <               | U      | 0,33          | 1 <               | U         |
| SEMIVOLATILES   | 2,4-Dinitrophenol              | 1.65           | 1 <             | U      | 1.65        | 1 <               | U    | 1.65        | 1 <                 | U      | 1.65            | 1 <               | U      | 1.65          | 1 <               | U         |
| SEMIVOLATILES   | 2-Chloronaphthalene            | 0.33           | 1 <             | U      | 0.33        | 1 <               | U    | 0.33        | 1 <                 | U      | 0.33            | 1 <               | U      | 0.33          | 1 <               | U         |
| SEMIVOLATILES   | 2-Chlorophenol                 | 0.33           | 1 <             | U      | 0.33        | 1 <               | U    | 0.33        | 1 <                 | Ų      | 0.33            | 1 <               | U      | 0.33          | 1 <               | U         |
| SEMIVOLATILES   | 2-Melhyinaphthalane            | 0.33           | 1 <             | U      | 0.33        | 1 <               | U    | 0.33        | 1 <                 | Ų      | 0.33            | 1 <               | U      | 0.33          | 1 <               | U         |
| SEMIVOLATILES   | 2-Methylphenol                 | 0.33           | ۱٢              | IJ     | 0.33        | 1 <               | U    | 0.33        | 1 <                 | U      | 0.33            | 1 <               | U      | 0.33          | 1 <               | U         |
| SEMIVOLATILES   | 2-Nitroaniline                 | 1.65           | 1 <             | U      | 1,65        | 1 <               | U    | 1,65        | 1 <                 | U      | 1,65            | 1 <               | Ų      | 1.65          | 1 <               | U         |
| SEMIVOLATILES   | 2-Nitrophenol                  | 0.33           | 1 <             | U      | 0.33        | 1 <               | U    | 0.33        | 1 <                 | U      | 0.33            | 1 <               | U      | 0.33          | 1 <               | U         |
| SEMIVOLATILES   | 3,3-Dichlorobenzidine          | 0.65           | 1 <             | U      | 0.65        | 1 <               | U    | 0.65        | ۲ <                 | U      | 0.65            | 1 <               | U      | 0.65          | 1 <               | ป         |
| SEMIVOLATILES   | 3-Nitroanitine                 | 1.65           | 1 <             | Ų      | 1.65        | 1 <               | U    | 1.65        | 1 <                 | U      | 1.65            | 1 <               | υ      | 1,65          | 1 <               | U         |
| SEMIVOLATILES   | 4.6-Dinitro-2-methylphenol     | 1.65           | 1 <             | ų      | 1.85        | 1 <               | U    | 1.65        | 1 <                 | U      | 1.65            | 1 <               | Ų      | 1.65          | 1 <               | U         |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether     | 0.33           | 1 <             | U      | 0.33        | 1 <               | U    | 0.33        | 1 <                 | U      | 0.33            | 1 <               | U      | 0.33          | 1 <               | U         |
| SEMIVOLATILES   | 4-Chloro-3-methylphenol        | 0.65           | 1 <             | U      | 0.65        | 1 <               | U    | 0.65        | 1 <                 | U      | 0.65            | 1 <               | U      | 0.65          | 1 <               | U         |
| SEMINOLATILES   | 4-Chicrophonyl alternal attend | 0.65           | 1 <             | U      | 0.65        | 1 <               | U    | 0.65        | 1 <                 | U      | 0.65            | 1 <               | U      | 0.65          | 1 <               | U         |
| SEMIVOLATILES   | ++Uniorophenyi phenyi ether    | 0.33           | 1<              | U<br>U | 0.33        | 1 <               | 0    | 0.33        | 1 <                 | U      | 0.33            | 1 <               | U      | 0.33          | 1 <               | U         |
|   | 4-Nitroonillon                 | 0.33           | 1 <             | U<br>U | 0.33        | 1 <               | 0    | 0.33        | 1 <                 | 0      | 0.33            | 1 <               | U      | 0.33          | 1 <               | U         |
| SEMIVOLATILES   |                                | 1,65           | 1 <             | U<br>U | 1.65        | 1 <               | U    | 1.65        | 1 <                 | U<br>U | 1.65            | 1 <               | U      | 1.65          | 1 <               | U         |
| SEMIVOLATILES   | Acenantitiene                  | 0.22           | 1 <             | U<br>H | 0.00        | * .               |      | 20.1        | 1 <                 | U<br>U | 1.05            | 1 K               | U<br>L | 1.65          | 1 <               | U         |
|   | - wondprintene                 | 1 0.00         | 1 <             | U      | 0.00        | I <               | v    | 0,33        | 1 <                 | U      | 0,33            | 1 <               | U      | 0.33          | 1 <               | U         |



# Table 3-78 Concentrations of Chemicals in Soil Samples Associated with Sump 078

| 100101 1# 00101 010      |   |          |       |          |          |         |      |          |         |      |          |                      |      |          |        |    |
|--------------------------|---|----------|-------|----------|----------|---------|------|----------|---------|------|----------|----------------------|------|----------|--------|----|
| LOCATION CODE            | 1H-S7   | 8-01     |       | LH-S     | S78-01   |         | LH-S | S78-01   |         | LH-8 | 679-01   |                      | LH-S | 79-01    |        |    |
| SAMPLE NO                |   | LH-578   | -01 1 |          | LH-S     | 78-01 2 |      | LH-S     | 78-01_3 |      | LH-SI    | 7 <del>9</del> -01_1 |      | LH-S7    | 9-01_2 |    |
| SAMPLE DATE              |   | 7/24/1   | 003   |          | 7/2      | 4/1993  | -    | 7/2      | 4/1993  |      | 7/24     | /1993                |      | 7/24     | /1993  |    |
| DEPTH                    |   | 0.5 -    | 2 Ft  |          | 3        | - 5 Ft  |      | 15       | - 17 Ft |      | 0.5      | • 2 Ft               |      | 3.       | 5 Ft   |    |
|                          |   | BF       | c.    |          | F        | REG     |      | F        | REG     |      | R        | IEG                  |      | R        | EG     |    |
| Test Group Paramete      | r (Linits = ma/ka)  | Result D | L LQ  | vo       | Result D | IL LO   | VQ   | Result D | IL LO   | VQ   | Result D | IL LO                | VQ   | Result D | IL LQ  | VQ |
| SEMIVOLATILES Acenanti   | hvlene  | 0.33     | 1 -   | <u> </u> | 0.33     | 1 <     | u    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Anthracer  | ng chic   | 0.33     | 1 4   | ũ        | 0.33     | 1 <     | υ    | 0.33     | 1 <     | Ū    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | υ  |
| SEMIVOLATILES Benzo(a)   | anthracene  | 0.33     | 1 <   | Ū        | 0.33     | 1 <     | Ű    | 0.33     | 1 <     | U    | 0.33     | i <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Benzo(a)   | vrene   | 0.33     | 1 <   | Ū        | 0.33     | 1 <     | U    | 0.33     | 1 <     | ົບ   | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Benzo(b)   | luoranthene   | 0.33     | 1 <   | Ū.       | 0.33     | 1 <     | U    | 0.33     | 1 <     | Ð    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Benzo(oh   | Dnerviene   | 0.33     | 1 <   | Ū        | 0.33     | 1 <     | U    | 0.33     | 1 <     | U    | 0,33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Benzo(k)   | kioranthene   | 0.33     | 1 <   | Ū        | 0.33     | 1 <     | Ű    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Benzoic &  | acid  | 1.65     | 1 <   | U        | 1.65     | 1 <     | U    | 1.65     | 1 <     | U    | 1.65     | 1 <                  | U    | 1.65     | 1 <    | υ  |
| SEMIVOLATILES Benzul Al  | cohol   | 0.65     | 1 <   | ŭ        | 0.65     | 1 <     | Ŭ    | 0.65     | 1 <     | U    | 0.65     | 1 <                  | U    | 0.65     | 1 <    | U  |
| SEMIVOLATILES bis(2-Chi  | proethoxy)methane   | 0.33     | 1 <   | ū        | 0.33     | 1 <     | Ŭ    | 0.33     | 1 <     | υ    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES bis(2-Chir | proethvliether  | 0.33     | 1 <   | ū        | 0.33     | 1 <     | Ð    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0,33     | 1 <    | U  |
| SEMIVOLATILES bis(2-Chk  | proisonronyBether   | 0.33     | 1 <   | U        | 0.33     | 1 <     | Ů    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | υ    | 0.33     | 1 <    | U  |
| SEMIVOLATILES bis(2-Eth  | lhevybohthalate   | 0.33     | 1 <   | Ū        | 0.33     | 1 <     | Ū    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Butylben   | zvi ohthalate   | 0.33     | 12    | Ū        | 0.33     | 1 <     | Ū    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Chorsens   |   | 0.33     | 1 2   | U        | 0.33     | 1 <     | Ū    | 0.33     | i٢      | Ú    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Dihenzoli  | h)anthracene  | 0.33     | 1.    | ŭ        | 0.33     | 1 <     | Ū.   | 0.33     | 1 <     | Ū    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | υ  |
| SEMIVOLATILES Dibenzoli  | ingh in a cons  | 0.33     | 12    | ŭ        | 0.33     | 1.0     | Ŭ    | 0.33     | 1<      | Ū    | 0.33     | 1<                   | Ů    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Diethol ni | alialia   | 0.33     | 12    | 1        | 0.33     | 1 -     | ŭ    | 0.33     | 14      | U U  | 0.33     | 1 <                  | Ú    | 0.33     | 1 <    | U  |
| SCHIVOLATILES Dimethyl   | nhinalata   | 0.00     | 10    |          | 0.33     | 12      | ů    | 0.33     | 14      | Ū    | 0.33     | 1 <                  | Ű    | 0.33     | 1 <    | Ų  |
| SEMINOLATILES di-p-Bub/  | nhthalate   | 0.33     | 1 2   | ŭ        | 0.33     | 1 <     | Ū    | 0.33     | 1 <     | Ů    | 0.33     | 1 <                  | Ų    | 0.33     | 1 <    | ប  |
| SEMIVOLATILES dl-p-Octv  | i ohthalate   | 0.33     | 1 e   | ů        | 0.33     | 1 <     | Ū.   | 0.33     | 1 <     | Ů    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Elitoranth | ene   | 0.33     | 1 e   | Ŭ.       | 0.33     | 1 <     | Ŭ    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Eluprane   |   | 0.33     | 12    | ŭ        | 0.33     | 1<      | Ū    | 0.33     | 1<      | Ú    | 0.33     | 1 <                  | ų    | 0,33     | 1 <    | U  |
| SEMIVOLATILES Hevenha    | rohenzene   | 0.33     | 1 <   | ū        | 0.33     | 1 <     | Ð    | 0.33     | 1 <     | υ    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Herachin   | rohutadiene   | 0.33     | 1 <   | U        | 0.33     | 1 <     | U    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Hexachin   | rocyclopentadiene   | 0.33     | 1 <   | Ŭ        | 0.33     | 1 <     | Ū    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Hevachin   | roethane  | 0.33     | 1 <   | Ū        | 0.33     | 1 <     | Ű    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Indeno(1   | 2.3-cd)ovrene   | 0.33     | 1 <   | Ū        | 0.33     | 1 <     | ΰ    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Isophoro   | ne  | 0.33     | 1 <   | U        | 0.33     | 1 <     | U    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Naphthal   | ene   | 0.33     | 1 <   | IJ       | 0.33     | 1 <     | Ű    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Nitroben:  | zene  | 0.33     | 1 <   | U        | 0.33     | 1 <     | U    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES n-Nitroso  | -di-n-propylamine   | 0.33     | 1 <   | U        | 0.33     | 1 <     | ป    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | υ  |
| SEMIVOLATILES n-Nitroso  | dinhenvlamine   | 0.33     | 1 <   | Ū        | 0.33     | 1 <     | U    | 0,33     | 1 <     | U    | 0.33     | 1 र                  | IJ   | 0.33     | 1 <    | U  |
| SEMIVOI ATILES Pentachi  | prophenoi   | 1.65     | 1 <   | Ū        | 1.65     | 1 <     | U    | 1.65     | 1 <     | υ    | 1.65     | 1 <                  | U    | 1.65     | 1 <    | Ð  |
| SEMIVOLATILES Phenanti   | rene  | 0.33     | 1 <   | ป        | 0.33     | 1 <     | Ű    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | U    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Phenol     |   | 0.33     | 1 <   | Ű        | 0.33     | 1 <     | Ū    | 0.33     | 1 <     | U    | 0,33     | 1 <                  | υ    | 0.33     | 1 <    | U  |
| SEMIVOLATILES Pyrane     |   | 0.33     | 1 <   | Ū        | 0.33     | 1 <     | Ŭ    | 0.33     | 1 <     | U    | 0.33     | 1 <                  | Ų    | 0.33     | 1 <    | U  |
| VOLATILES 1.1.1-Tric     | thioroethane  | 0.005    | 1 <   | Ū        | 0.005    | 1 <     | Û    | 0.005    | 1 <     | U    | 0.005    | 1 <                  | U    | 0.005    | 1 <    | U  |
| VOLATILES 1.1.2.2.T      | etrachloroelbane  | 0.005    | 1 <   | ย        | 0.005    | 1 <     | U    | 0.005    | 1 <     | U    | 0.005    | 1 <                  | U    | 0.005    | 1 <    | Ų  |
| VOLATILES 11.2-Tri       | thioroethane  | 0.005    | 1 <   | U        | 0.005    | 10      | U    | 0.005    | 1 <     | υ    | 0.005    | 1 <                  | U    | 0.005    | 1 <    | U  |
| VOLATILES 1.1-Dich       | oroethane   | 0.005    | 1 <   | U        | 0.005    | 1 <     | U    | 0.005    | 1 <     | U    | 0.005    | 1 <                  | U    | 0.005    | 1 <    | U  |
| VOLATILES 1.1-Dich       | oroethene   | 0.005    | 1 <   | Ű        | 0.005    | 1 <     | U    | 0.005    | 1 <     | U    | 0.005    | 1 <                  | IJ   | 0.005    | 1 <    | U  |
| VOLATILES 1.2-Dich       | oroethane   | 0.005    | 1 <   | Ū        | 0.005    | 1 <     | Ŭ    | 0.005    | 1 <     | U    | 0.005    | 1 <                  | U    | 0.005    | 1 <    | U  |
| VOLATILES 12-Dich        | broethene   | 0.005    | 1 6   | Ū        | 0.005    | 1 e     | Ū    | 0.005    | 1 <     | U    | 0.005    | 1 <                  | U    | 0.005    | 1 <    | U  |
| VOLATILES 1 2-Dicki      | bropropane  | 0.005    | 1 <   | Ũ        | 0.005    | 1 <     | บ    | 0.005    | 1 <     | Ü    | 0.005    | 1 <                  | U    | 0.005    | 1 <    | U  |
| VOLATILES 2-Butan        | ine in the second second second second second second second second second second second second second second se | 0.05     | 1 <   | Ū        | 0.05     | 1 <     | Ū    | 0.05     | 1 <     | U    | 0.05     | † <                  | U    | 0.05     | 1 <    | U  |
| VOLATILES 2-Chioro       | ethvl vlnvl ether   | 0.01     | 1 <   | U        | 0.01     | 1 <     | U    | 0,01     | 1 <     | U    | 0.01     | 1 <                  | U    | 0.01     | 1 <    | U  |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

|                                    | Concentrations             | or onemiou | 9.111 | 001     |           |        |    | •        |        |    | •        |        |    |          |        |    |
|------------------------------------|----------------------------|------------|-------|---------|-----------|--------|----|----------|--------|----|----------|--------|----|----------|--------|----|
| (SUMP) = SUMP078<br>LOCATION _CODE |                            | LH-S78     | -01   |         | LH-S      | 78-01  |    | LH-8     | 78-01  |    | LH-S     | 79-01  |    | LH-S     | 79-01  |    |
| CONTION _COUL                      |                            | LH-S78-    | 01 1  |         | LH-\$7    | 8-01_2 |    | Լեթյ     | 8-01_3 |    | LH-S7    | 9-01_1 |    | Լዝ-Տ7    | 9-01_2 |    |
| SAMPLE_NU                          |                            | 7/24/19    | 93    |         | 7/24      | /1993  |    | 7/24     | /1993  |    | 7/24     | /1993  |    | 7/24     | 1993   |    |
| SAMPLE_DATE                        |                            | 0.5 - 2    | Ft    |         | 3.        | 5 Ft   |    | 15 -     | 17 Et  |    | 0.5      | - 2 Ft |    | 3-       | 5 Ft   |    |
|                                    |                            | REG        |       |         | R         | EG     |    | Ŕ        | EG     |    | R        | EG     |    | я        | EG     |    |
| SAMPLE_PURPUSE                     | Parameter (Linits = m(/kg) | Result Dil | . ια  | va      | Result Di | IL LO  | VQ | Result D | IL LQ  | VQ | Result D | IL LQ  | VQ | Result D | L LO   | va |
| LIDEATE CO                         | 2. Hevenoze                | 0.05       | 1 <   | ΰ       | 0.05      | 1 <    | Ú  | 0.05     | 1 <    | υ  | 0.05     | 1 <    | U  | 0.05     | 1 <    | U  |
| VOLATILES                          | Acetopo                    | 0.1        | 1 <   | U       | 0.1       | 1 <    | U  | 0.1      | 1 <    | U  | 0.1      | 1 <    | υ  | 0,1      | 1 <    | U  |
| VOLATILES                          | Benzona                    | 0.005      | 1 <   | Ú       | 0,005     | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  |
| VOLATILES                          | Bramadichlaramathane       | 0.005      | 1 <   | U       | 0.005     | 1 <    | U  | 0.005    | 1 <    | U  | 0,005    | 1 <    | Ų  | 0.005    | i <    | U  |
| VOLATILES                          | Bremeterm                  | 0.005      | 1 <   | U       | 0.005     | 1 <    | U  | 0,005    | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  |
| VOLATILES                          | Bromonotha be              | 0.01       | 1 <   | Ū.      | 0.01      | 1 <    | υ  | 0.01     | 1 <    | U  | 0.01     | 1 <    | Ų  | 0.01     | 1 <    | U  |
| VOLATILES                          | Carbon diguilide           | 0.005      | 1 <   | U       | 0.005     | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | Ų  | 0.005    | 1 <    | Ų  |
| VOLATILES                          | Carbon totrachlorida       | 0.005      | 1 <   | U       | 0.005     | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  |
| VOLATILES                          | Chlorobezzeze              | 0.005      | 1 <   | U       | 0.005     | 1 <    | υ  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  |
| VOLATILES                          | Chlomathana                | 0.01       | 1 <   | Ū       | 0.01      | 1 <    | Ų  | 0.01     | 1 <    | U  | 0.01     | 1 <    | U  | 0.01     | 1 <    | Ų  |
| VOLATILES                          | Chieroform                 | 0.005      | 1 <   | U       | 0.005     | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  |
| VOLATILES                          | Chloromethana              | 0.01       | 1 <   | U       | 0.01      | 1 <    | Ų  | 0.01     | 1 <    | Ų  | 0.01     | 1 <    | U  | 0.01     | 1 <    | U  |
| VOLANCES                           | chicronenane               | 0.005      | 1 <   | Ū       | 0.005     | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  |
| VOLATILES                          | Disconstitute              | 0.005      | 1 <   | ū       | 0.005     | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  |
| VOLANLES                           | Distribution               | 0.005      | 1 <   | υ       | 0.005     | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  |
| VOLATILES                          | Enyberizene                | 0.05       | 1 2   | Ū       | 0.05      | 1 <    | U  | 0.05     | i <    | U  | 0.05     | 1 <    | U  | 0.05     | 1 <    | U  |
| VOLATILES                          | Methyl Isobolyl Xelone     | 0.005      | 1 6   | ย้      | 0.005     | 1 <    | U  | 0,005    | 1 <    | Ð  | 0.005    | 1 <    | Ų  | 0.005    | 1 <    | U  |
| VOLATILES                          | Methylene chichice         | 0.005      | 1 6   | Ŭ       | 0.005     | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  |
| VOLATILES                          | Styrene                    | 0.005      | 1     | ŭ       | 0.005     | 1 <    | Ð  | 0,005    | 1 <    | υ  | 0,005    | 1 <    | Ų  | 0.005    | 1 <    | U  |
| VOLATILES                          | Tetrachioroemene           | 0.005      | 1.2   | Ű.      | 0.005     | 1 <    | Ú  | 0,005    | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | Ų  |
| VOLATILES                          | Toluene                    | 0.005      | 12    | ы.<br>П | 0.005     | 1 <    | ù  | 0,005    | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  |
| VOLATILES                          | trans-1,3-Dichloropropene  | 0.005      | 1.    | ŭ       | 0.005     | 1 <    | Ũ  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  |
| VOLATILES                          |                            | 0.005      | 12    | 11      | 0.05      | 1 <    | Ū  | 0.05     | 1 <    | U  | 0.05     | 1 <    | υ  | 0.05     | 1 <    | U  |
| VOLATILES                          |                            | 0.05       | 12    | ы       | 0.01      | 1 <    | Ū  | 0.01     | 1 <    | U  | 0.01     | 1 <    | U  | 0.01     | 1 <    | U  |
| VOLATILES                          | vinyi chionae              | 0.005      | 12    | ů       | 0.005     | 1 <    | Ŭ  | 0.005    | 1 <    | υ  | 0.005    | 1 <    | U  | 0.005    | 1 <    | U  |
| VOLAGES                            | AVIENES, I QIAI            | 0.000      |       |         |           |        | -  |          |        |    |          |        |    |          |        |    |

Table 3-78 Concentrations of Chemicals in Soll Samples Associated with Sump 078

Footnotes are shown on cover page to Tables Section.

.



Table 3-79 Concentrations of Chemicals in Soil Samples Associated with Sump 079

| (SUMP) = SUMP079 |                             |          |        |    |           |             |    |          |         |       | _        |        |        |           |        |        |
|------------------|-----------------------------|----------|--------|----|-----------|-------------|----|----------|---------|-------|----------|--------|--------|-----------|--------|--------|
| LOCATION _CODE   |                             | LH-S     | 78-01  |    | LH-S      | 78-01       |    | LH-6     | \$78-01 |       | LH S     | 79-01  |        | LH-S      | 79-01  |        |
| SAMPLE_NO        |                             | LH-S76   | 3-01_1 |    | LH-S7     | 8-01_2      |    | LH-S     | 78-01_3 |       | LH-S7    | 9-01_1 |        | LH-87     | 9-01_2 |        |
| SAMPLE_DATE      |                             | 7/24/    | 1993   |    | .7/24     | /1993       |    | 7/24     | /1993   |       | 7/24     | /1993  |        | 7/24      | 1993   |        |
| DEPTH            |                             | .5 -     | 2 F1   |    | 3 -       | 5 Ft        |    | 15 -     | 17 Ft   |       | .5 -     | 2 Ft   |        | 3.        | 5 Ft   |        |
| SAMPLE_PURPOSE   |                             | R        | G      |    | A         | EG          |    | R        | IEG     |       | 8        | EG     |        | N Dawa Di | 20     | vo     |
| Test Group       | Parameter (Units = mg/kg)   | Result D | IL LO  | VQ | Result Di | <u>L LQ</u> | VQ | Result D |         | VQ    | Result D |        | va     | Result On |        |        |
| EXPLOSIVES       | 2.4-Dinitrololuene          | 0.33     | 1 <    | U  | 0.33      | 1 <         | U  | 0.33     | 1<      | 0     | 0.33     | 14     | U<br>1 | 0.33      |        | 11     |
| EXPLOSIVES       | 2.6-Dinitrotoluene          | 0.33     | 1 <    | U  | 0.33      | 1 <         | 0  | 0.33     | I C     | U<br> | 0.33     | 14     | U U    | 0.00      |        | 11     |
| METALS           | Aluminum                    | 22200    | 1 <    | U  | 4780      | 1 <         | U  | 4350     | 1<      | U     | 12300    | 1 <    |        | 11200     | 1.     |        |
| METALS           | Antimony                    | 3        | 1 <    | U  | 3         | 1 <         | U  | 3        | 1 <     | U     | 3        | 1 <    | U      | 3         | 1 <    | U      |
| METALS           | Arsenic                     | 3        | ۱      |    | 2.5       | 1           |    | 2        | 1       |       | 3.3      |        |        | 3.0       |        |        |
| METALS           | Barium                      | 86.1     | 1      |    | 10.1      | 1           |    | 37.3     | 1       |       | 174      | 1      |        | 107       |        |        |
| METALS           | Cadmium                     | 1        | 1 <    | IJ | 1         | 1 <         | U  | 1        | 1 <     | U     | 1        | 1 <    | U      | ,         | 1 <    | 0      |
| METALS           | Calcium                     | 2030     | 1      |    | 241       | 1           |    | 668      | 1       |       | 1350     | 1      |        | /10       |        |        |
| METALS           | Chromium                    | 35.4     | 1      |    | 12.4      | 1           |    | 7,5      | 1       |       | 58.9     | 1      |        | 38.3      | 2      |        |
| MĘTALŚ           | Cobalt                      | 4        | 1      |    | 1         | 1 <         | U  | 6.9      | 1       |       | 5.2      | }      |        | 7.2       |        |        |
| METALS           | Copper                      | 16.5     | 1      |    | 2,8       | 1           |    | 2.9      | 1       |       | 194      |        |        | 60        |        | ы      |
| METALS           | Iron                        | 35000    | 1 <    | U  | 12100     | 1 <         | υ  | 13900    | 1 <     | U     | 23900    | 1 <    | 0      | 20300     | 1 <    | U      |
| METALS           | Lead                        | 8.1      | 1      |    | 2.4       | 1           |    | 3        | 1       |       | 40,6     | 1      |        | 6,4       | 1      |        |
| METALS           | Magnesium                   | 1540     | 1      |    | 166       | 1           |    | 711      | 1       |       | 563      | 1      |        | 611       | 1      |        |
| METALS           | Manganese                   | 103      | 1      |    | 18.1      | 1           |    | 223      | 1       |       | 211      | 1      |        | 356       | 1      |        |
| METALS           | Mercury                     | 0.1      | 1 <    | U  | 0.1       | 1 <         | U  | 0,1      | 1 <     | U     | 0.1      | 1 <    | υ      | 0.1       | 1 <    | Ų      |
| METALS           | Potassium                   | 970      | 1      |    | 782       | 1           |    | 271      | 1       |       | 827      | 1      |        | 1390      | 1      |        |
| METALS           | Selenium                    | 1        | 1 <    | Ų  | 1         | 1 <         | U  | 1        | 1 <     | U     | 1        | 1 <    | U      | 1         | 1 <    | Ų      |
| METALS           | Silver                      | 1 1      | 1 <    | U  | 1         | 1 <         | U  | 1        | 1 <     | Ų     | 1        | 1 <    | U      | 9.6       | 1      |        |
| METALS           | Strontium                   | 17.8     | 1      |    | 3.6       | í           |    | 15.2     | 1       |       | 13.9     | 1      |        | 10.8      | 1      |        |
| METALS           | Zinc                        | 50.9     | 1      |    | 5.9       | 1           |    | 27.2     | 1       |       | 206      | 1      |        | 150       | 1      |        |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene      | 0,33     | 1 <    | υ  | 0,33      | 1 <         | Ų  | 0.33     | 1 <     | U     | 0.33     | 1 <    | U      | 0.33      | 1 <    | 0      |
| SEMIVOLATILES    | 1,2-Dichlorobenzene         | 0.33     | 1 <    | IJ | 0.33      | 1 <         | U  | 0.33     | 1 <     | U     | 0.33     | 1 <    | U      | 0.33      | 1 <    | U      |
| SEMIVOLATILES    | 1.3-Dichlorobenzene         | 0.33     | 1 <    | U  | 0.33      | 1 <         | U  | 0.33     | 1 <     | U     | 0.33     | 1 <    | υ      | 0.33      | 1 <    | U      |
| SEMIVOLATILES    | 1.4-Dichlorobenzene         | 0.33     | 1 <    | U  | 0.33      | 1 <         | U  | Q.33     | 1 <     | U     | 0,33     | 1 <    | U      | 0.33      | 1<     | U      |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol       | 1.65     | 1 <    | U  | 1,65      | 1 <         | Ų  | 1.65     | 1 <     | U     | 1.65     | 1 <    | U      | 1.65      | 1 <    | U      |
| SEMIVOLATILES    | 2,4.6-Trichlorophenol       | 0.33     | 1 <    | U  | 0.33      | 1 <         | Ų  | 0.33     | 1 <     | U     | 0.33     | 1 <    | U      | 0.33      | 1 <    | U<br>  |
| SEMIVOLATILES    | 2,4-Dichlorophenol          | 0.33     | 1 <    | U  | 0.33      | 1 <         | U  | 0.33     | 1 <     | Ų     | 0.33     | 1 <    | U      | 0.33      | 1 <    | U<br>  |
| SEMIVOLATILES    | 2.4-Dimethylphenol          | 0.33     | 1 <    | U  | 0,33      | 1 <         | U  | 0.33     | 1 <     | U     | 0.33     | 1 <    | 0      | 0.33      | 1 <    | 0      |
| SEMIVOLATILES    | 2,4-Dinitrophenol           | 1.65     | 1 <    | Ų  | 1.65      | 1 <         | U  | 1,65     | 1 <     | U     | 1,65     | 1 <    | U      | 1.65      | 1 <    | U      |
| SEMIVOLATILES    | 2-Chloronaphthalene         | 0.33     | 1 <    | U  | 0.33      | 1 <         | U  | 0.33     | 1 <     | U     | 0.33     | 1 <    | U      | 0.33      | 1 <    | U      |
| SEMIVOLATILES    | 2-Chlorophenol              | 0,33     | 1 <    | U  | 0.33      | 1 <         | U  | 0.33     | 1 <     | U     | 0.33     | 1<     | 0      | 0.33      | 1 <    | 0      |
| SEMIVOLATILES    | 2-Methylnaphthalene         | 0.33     | 1 <    | U  | 0.33      | 1 <         | U  | 0.33     | 1 <     | U     | 0.33     | 1 <    | 0      | 0.33      | 1 <    | 0      |
| SEMIVOLATILES    | 2-Methylphenol              | 0.33     | 1 <    | υ  | 0.33      | 1 <         | U  | 0.33     | 1 <     | U     | 0.33     | 1 <    | U      | 0.33      | 1 <    | 0      |
| SEMIVOLATILES    | 2-Nitroaniline              | 1.65     | 1 <    | IJ | 1.65      | 1 <         | U  | 1.65     | 1 <     | U     | 1.65     | 1 <    | U      | 1.65      | 1 <    | U      |
| SEMIVOLATILES    | 2-Nitrophenol               | 0.33     | 1 <    | Ų  | 0.33      | 1 <         | U  | 0.33     | 1 <     | U     | 0.33     | 1 <    | U      | 0.33      | 1 <    | U      |
| SEMIVOLATILES    | 3,3'-Dichlorobenzidine      | 0.65     | 1 <    | U  | 0,65      | 1 <         | ប  | 0.65     | 1 <     | U     | 0.65     | 1 <    | U      | 0.65      | 1 <    | 0      |
| SEMIVOLATILES    | 3-Nitroaniline              | 1.65     | 1 <    | Ų  | 1,65      | 1 <         | U  | 1,65     | 1 <     | Ų     | 1.65     | 1 <    | 0      | 1.65      | 1 <    | U      |
| SEMIVOLATILES    | 4.6-Dinitro-2-methylphenol  | 1.65     | 1 <    | U  | 1.65      | 1 <         | U  | 1.65     | 1 <     | U     | 1.65     | 1 <    | U      | 1.65      | 1 <    | 0      |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  | 0.33     | 1 <    | U  | 0,33      | 1 <         | U  | 0.33     | 1 <     | Ų     | 0.33     | 1 <    | U<br>  | 0.33      | 1 <    | U U    |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     | 0.65     | 1 <    | U  | 0.65      | 1 <         | U  | 0.65     | 1 <     | U     | 0.65     | 1 <    | 0      | 0.65      | 1 <    | 0      |
| SEMIVOLATILES    | 4-Chloroaniline             | 0.65     | 1 <    | U  | 0.65      | 1 <         | U  | 0.65     | 1 <     | U     | 0.65     | 1 <    | U      | 0.65      | . <    | 11     |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether | 0.33     | 1 <    | υ  | 0.33      | 1 <         | Ų  | 0.33     | 1 <     | U     | 0.33     | 1 <    | U      | 0.33      | 1 <    | บ<br>ม |
| SEMIVOLATILES    | 4-Methylphenol              | 0.33     | 1 <    | Ų  | 0.33      | 1 <         | U  | 0.33     | 1 <     | U     | 0.33     | 1 <    | 0      | 0,33      | 14     |        |
| SEMIVOLATILES    | 4-Nitroaniline              | 1.85     | 1 <    | IJ | 1.65      | 1 <         | U  | 1.65     | 1 <     | U     | 1.65     | 1 <    | V.     | 1.05      | 14     | U<br>H |
| SEMIVOLATILES    | 4-Nitrophenol               | 1.65     | 1 <    | Ų  | 1.65      | 1 <         | U  | 1.65     | 1<      | V<br> | 1,65     | 1 <    | U      | 1.05      | 14     | 0      |
| SEMIVOLATILES    | Acenaphthene                | 0.33     | 1 <    | U  | 0.33      | 1 <         | Ų  | 0.33     | 1 <     | U     | 0.33     | 1 <    | U      | 0.33      | 1 <    | Ų      |

Data Evaluation Report Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



| Table 3-79   |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 079 |  |  |  |  |  |  |  |  |  |  |

| (SUMP) = \$UMP079 |                             |           |        |    |          |         |        |            |         |    |             |       |    |             |        |       |
|-------------------|-----------------------------|-----------|--------|----|----------|---------|--------|------------|---------|----|-------------|-------|----|-------------|--------|-------|
| LOCATION _CODE    |                             | LH-S7     | 78-01  |    | LH-R     | S78-01  |        | LH+        | 578-01  |    | LH-\$79-01  |       |    | LH-S79-01   |        |       |
| SAMPLE_NO         |                             | LH-\$78   | 9-01_1 |    | LH-S     | 78-01_2 |        | LH-S       | 78-01_3 |    | LH-S79-01_1 |       |    | LH-S79-01_2 |        |       |
| SAMPLE_DATE       |                             | 7/24/     | 1993   |    | 7/24     | 1/1993  |        | 7/2        | 4/1993  |    | 7/24/1993   |       |    | 7/2-        | 4/1993 |       |
| DEPTH             |                             | .5 - 1    | 2 Ft   |    | 3 -      | 5 Ft    |        | 15 - 17 Ft |         |    | .5 - 2 Ft   |       |    | 3 - 5 Ft    |        |       |
| SAMPLE_PURPOSE    |                             | RE        | G      |    | F        | REG     |        | REG        |         |    | REG         |       |    | REG         |        |       |
| Test Group        | Parameter (Units = mg/kg)   | Result Di | ເຼເດ   | VQ | Result D | IL LQ   | VQ     | Result D   | YIL LQ  | VQ | Result D    | IL LQ | VO | Aesult D    | IL LQ  | VQ    |
| SEMIVOLATILES     | Acenaphthylene              | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | Ų  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Anthracene                  | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Benzo(a)anthracene          | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Benzo(a)pyrene              | 0.33      | 1 <    | U  | 0.33     | 1 <     | IJ     | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Benzo(b)fluoranthene        | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Benzo(ghi)perylene          | 0,33      | 1 <    | U  | 0,33     | 1 <     | U      | 0.33       | 1 <     | Ņ  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Benzo(k)fluoranthene        | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Benzoic Acid                | 1.65      | 1 <    | u  | 1.65     | 1 <     | Ų      | 1.65       | 1 <     | U  | 1.65        | 1 <   | U  | 1.65        | 1 <    | U     |
| SEMIVOLATILES     | Benzyl Alcohol              | 0.65      | 1 <    | IJ | 0.65     | 1 <     | U      | 0.65       | 1 <     | υ  | 0.65        | 1 <   | U  | 0.65        | 1 <    | U     |
| SEMIVOLATILES     | bis(2-Chloroethoxy)methane  | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | bis(2-Chloroethyl)ether     | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | Ų  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | bis(2-Chloroisopropyi)ether | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | bis(2-Ethylhexyl)phthalate  | 0.33      | 1 <    | U  | 0.33     | 1 <     | υ      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Butyl benzyl phthalate      | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Chrysene                    | 0.33      | 1 <    | Ų  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0,33        | 1 <    | U     |
| SEMIVOLATILES     | Dibenzo(a,h)anthracene      | 0.33      | ۱ <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Dibenzofuran                | 0.33      | 1 <    | Ð  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Diethyl phthalate           | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0,33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | Ų     |
| SEMIVOLATILES     | Dimethyl phthalate          | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | Ų  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | di-n-Butyl phthalate        | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | Ų  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | di-n-Octyl phthalate        | 0.33      | 1 <    | U  | 0.33     | 1 <     | V      | 0.33       | 1 <     | Ų  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Fluoranthene                | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | Ų  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Fluorene                    | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | Ų     |
| SEMIVOLATILES     | Hexachiorobenzene           | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Hexachlorobutadiene         | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | υ  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Hexachlorocyclopentadiene   | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Hexachloroethane            | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | ย  | 0.33        | 1 <    | ป     |
| SEMIVOLATILES     | Indeno(1,2,3-cd)pyrene      | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Isophorone                  | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | υ  | 0.33        | 1 <   | บ  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Naphhalene                  | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Nitrobenzene                | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | n-Nitroso-di-n-propylamine  | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | n-Nitrosodiphenylamine      | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | υ  | 0.33        | 1 <   | U  | 0.33        | 1 <    | υ     |
| SEMIVOLATILES     | Pentachlorophenol           | 1.65      | 1 <    | ប  | 1.65     | 1 <     | U      | 1.65       | 1 <     | U  | 1,65        | 1 <   | U  | 1.65        | 1 <    | U     |
| SEMIVOLATILES     | Phenanthrene                | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | υ  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Phenol                      | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1<    | U  | 0.33        | 1 <    | U     |
| SEMIVOLATILES     | Pyrene                      | 0.33      | 1 <    | U  | 0.33     | 1 <     | U      | 0.33       | 1 <     | U  | 0.33        | 1 <   | U  | 0.33        | 1 <    | U     |
| VOLATILES         | 1,1,1-Trichloroethane       | 0.005     | 1<     | U  | 0.005    | 1 <     | U      | 0.005      | 1<      | U  | 0.005       | 1 <   | U  | 0.005       | 1 <    | U     |
| VOLATILES         | 1.1,2,2-Tetrachloroethane   | 0.005     | 1 <    | υ  | 0.005    | 1 <     | υ      | 0.005      | 1 <     | U  | 0.005       | 1 <   | U  | 0.005       | 1 <    | Ų     |
| VOLATILES         | 1,1,2-Trichloroethane       | 0.005     | 1 <    | 8  | 0.005    | 1 <     | U      | 0.005      | 1 <     | U  | 0.005       | 1 <   | U  | 0.005       | 1<     | U     |
| VOLATILES         | 1,1-Dichloroethane          | 0.005     | 1 <    | U  | 0.005    | 1 <     | Ų      | 0.005      | 1 <     | U  | 0.005       | 1 <   | U  | 0.005       | 1 <    | U     |
| VOLATILES         | 1,1-Dichloroethene          | 0.005     | 1 <    | 0  | 0,005    | 1 <     | U      | 0.005      | 1<      | U  | 0.005       | 1 <   | U  | 0.005       | 1<     | 0     |
| VOLATILES         | 1,2-Dichloroethane          | 0.005     | 1 <    | U  | 0.005    | 1 <     | U      | 0.005      | 1 <     | Ų  | 0.005       | 1 <   | U  | 0.005       | 1 <    | 0     |
| VOLATILES         | 1,2-Dichloroethene          | 0.005     | 1 <    | U  | 0.005    | 1 <     | 0      | 0.005      | 1 <     | U  | 0.005       | 1 <   | U  | 0.005       | 1 <    | 0     |
| VOLATILES         | 1,2-Dichloropropane         | 0.005     | 1 <    | U  | 0.005    | 1 <     | U      | 0.005      | 1 <     | U  | 0.005       | 1 <   | 0  | 0.005       | 1 <    | 0     |
| VOLATILES         | 2-Butanone                  | 0.05      | 1 <    | U  | 0.05     | 1 <     | U<br>V | 0.05       | 1 <     | U  | 0,05        | 1 <   | U  | 0.05        | 1 <    | U<br> |
| VOLATILES         | 2-Chloroethyl vinyl ether   | 0.01      | 1 <    | U  | 0.01     | 1 <     | U      | 0.01       | 1 <     | U  | 0.01        | 1 <   | U  | 0,01        | 1 <    | U     |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-79   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 079 |

| (SUMP) = SUMP079 |                           |            |            |    |           |             |     |          |             |    |           |              |    |           |              |    |  |
|------------------|---------------------------|------------|------------|----|-----------|-------------|-----|----------|-------------|----|-----------|--------------|----|-----------|--------------|----|--|
| LOCATION _CODE   |                           | LH-S78-0   | 31         |    | LH-S      | 78-01       |     | ЦH-8     | 78-01       |    | LH-S79-01 |              |    | LH-S79-01 |              |    |  |
| SAMPLE_NO        |                           | LH-S78-01  | 1_1        |    | LH-S7     | LH-S78-01_2 |     |          | LH-S78-01_3 |    |           | LH-\$79-01_1 |    |           | LH-\$79-01_2 |    |  |
| SAMPLE_DATE      |                           | 7/24/199   | 3          |    | 7/24      | 7/24/1993   |     |          | 7/24/1993   |    |           | 7/24/1993    |    |           | 4/1993       |    |  |
| DEPTH            |                           | .5 + 2 Fi  | !          |    | 3.        | 5 Ft        |     | 15 -     | 17 Ft       |    | .5 -      | 2 Ft         |    | 3         | - 5 Ft       |    |  |
| SAMPLE_PURPOSE   |                           | REG        |            |    | REG       |             |     | B        | REG         |    |           | REG          |    |           | REG          |    |  |
| Test Group       | Parameter (Units = mg/kg) | Result DIL | LQ         | VQ | Result Di | ւ ւն        | VQ  | Result D | L LQ        | VQ | Result D  | ιιQ          | VQ | Result D  | L LQ         | VQ |  |
| VOLATILES        | 2-Hexanone                | 0.05 1     | <          | U  | 0.05      | 1 <         | Û   | 0.05     | 1 <         | U  | 0.05      | 1 <          | Û. | 0.05      | 1 <          | U  |  |
| VOLATILES        | Acetone                   | 0.1 1      | <          | U  | 0,1       | 1 <         | U   | 0.1      | 1 <         | U  | 0.1       | 1 <          | U  | 0,1       | 1 <          | U  |  |
| VOLATILES        | Benzene                   | 0.005 1    | <          | U  | 0.005     | 1 <         | U   | 0.005    | 1 <         | U  | 0.005     | 1 <          | υ  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Bromodichloromethane      | 0.005 1    | <          | U  | 0.005     | 1 <         | U   | 0,005    | 1 <         | U  | 0.005     | 1 <          | U  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Bromoform                 | 0.005 1    | <          | U  | 0.005     | 1 <         | U   | 0.005    | 1 <         | U  | 0.005     | 1 <          | U  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Bromomethane              | 0.01 1     | <          | U  | 0.01      | 1 <         | U   | 0.01     | 1 <         | Ų  | 0.01      | 1 <          | U  | 0.01      | 1 <          | U  |  |
| VOLATILES        | Carbon disulfide          | 0.005 1    | <          | U  | 0.005     | 1 <         | U   | 0.005    | 1 <         | U  | 0.005     | 1 <          | U  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Carbon tetrachloride      | 0.005 1    | <          | U  | 0.005     | 1 <         | U   | 0.005    | 1 <         | U  | 0.005     | 1 <          | U  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Chlorobenzene             | 0.005 1    | <          | U  | 0.005     | 1 <         | U   | 0.005    | 1 <         | U  | 0.005     | 1 <          | U  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Chloroethane              | 0.01 1     | <          | U  | 0.01      | 1 <         | U . | 0.01     | 1 <         | Ų  | 0.01      | 1 <          | U  | 0.01      | 1 <          | U  |  |
| VOLATILES        | Chloroform                | 0.005 1    | <          | U  | 0.005     | 1 <         | U   | 0.005    | 1 <         | U  | 0.005     | 1 <          | U  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Chloromethane             | 0.01 1     | <          | U  | 0.01      | 1 <         | U   | 0.01     | 1 <         | U  | 0.01      | 1 <          | U  | 0.01      | 1 <          | U  |  |
| VOLATILES        | cls-1,3-Dichloropropene   | 0.005 1    | <          | U  | 0.005     | 1 <         | υ   | 0.005    | 1 <         | U  | 0.005     | 1 <          | ป  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Dibromochloromethane      | 0.005 1    | <          | U  | 0.005     | 1 <         | U   | 0.005    | 1 <         | U  | 0.005     | 1 <          | U  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Ethylbenzene              | 0.005 1    | <          | U  | 0.005     | 1 <         | Ð   | 0.005    | 1 <         | U  | 0.005     | 1 <          | U  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Methyl isobutyl ketone    | 0.05 1     | <          | U  | 0.05      | 1 <         | U   | 0.05     | 1 <         | U  | 0.05      | 1 <          | U  | 0.05      | 1 <          | U  |  |
| VOLATILES        | Methylene chloride        | 0.005 1    | <          | U  | 0.005     | 1 <         | U   | 0,005    | 1 <         | U  | 0,005     | 1 <          | υ  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Styrene                   | 0.005 1    | <          | U  | 0.005     | 1 <         | Ų   | 0.005    | 1 <         | U  | 0.005     | 1 <          | υ  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Tetrachloroethene         | 0.005 1    | <          | Ų  | 0.005     | 1 <         | U   | 0,005    | 1 <         | U  | 0.005     | 1 <          | U  | 0.005     | 1 <          | V  |  |
| VOLATILES        | Toluene                   | 0.005 1    | <b>ا</b> د | U  | 0.005     | 1 <         | U   | 0.005    | 1 <         | U  | 0.005     | 1 <          | U  | 0.005     | 1 <          | U  |  |
| VOLATILES        | trans-1,3-Dichloropropene | 0.005 1    | <          | U  | 0.005     | 1 <         | U   | 0.005    | 1 <         | U  | 0.005     | 1 <          | U  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Trichloroethene           | 0.005 1    | <          | U  | 0.005     | 1 <         | U   | 0.005    | 1 <         | U  | 0.005     | 1 <          | U  | 0.005     | 1 <          | U  |  |
| VOLATILES        | Vinyt acetate             | 0.05 1     | <          | ป  | 0.05      | 1 <         | U   | 0.05     | 1 <         | Ų  | 0.05      | t <          | U  | 0.05      | 1 <          | U  |  |
| VOLATILES        | Vinyi chloride            | 0.01 1     | <          | U  | 0.01      | 1 <         | U   | 0.01     | 1 <         | U  | 0.01      | 1 <          | U  | 0.01      | 1 <          | U  |  |
| VOLATILES        | Xylenes, Total            | 0.005 1    | <          | U  | 0.005     | 1 <         | U   | 0.005    | 1 <         | Ų  | 0.005     | 1 <          | U  | 0.005     | 1.<          | U  |  |

Footnotes are shown on cover page to Tables Section.



| (SUMP) = SUMP080 |                                       |                  |                  |                  |                  |                           | 111 000 04             |  |  |
|------------------|---------------------------------------|------------------|------------------|------------------|------------------|---------------------------|------------------------|--|--|
| LOCATION _CODE   |                                       | 47\$827          | 47\$B27          | 47SB27           | LH-\$80-01       | LH-880-01                 | LH-580-01              |  |  |
| SAMPLE_NO        |                                       | 47S827(0-0_5)    | 47SB27(0-0_5)QC  | 475827(1-2)      | LH-S80-01 QC     | LH-S80-01_1               | 7/24/1002              |  |  |
| SAMPLE_DATE      |                                       | 6/4/2000         | 6/4/2000         | 6/4/2000         | 7/24/1993        | 7/24/1993                 | 7/24/1990<br>9 - 10 Et |  |  |
| DEPTH            |                                       | 0 - 0.5 Ft       | 0 - 0.5 Ft       | 1 - 2 Ft         | 0.5 - 2 F1       | 0.5 - 2 -1                | 8.10 -                 |  |  |
| SAMPLE_PURPOSE   |                                       | RÉG              | FD               | REG              | FD               | HEG<br>Down Blin J.O., MO | REU<br>Result DI LO VO |  |  |
| Test Group       | Parameter (Units = mg/kg)             | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LO VO | Result DIL LQ VQ | Result OIL LO VO          | Hesuit Dic Lu Vu       |  |  |
| EXPLOSIVES       | 2.4-Dinitrotoluene                    |                  |                  |                  | 0.33 1 < ∪       | 0.33 1 < 0                | 0.33 1< 0              |  |  |
| EXPLOSIVES       | 2.5-Dinitrotaluene                    |                  |                  |                  | 0.33 1 < U       | 0.33 1 < 0                | 0.33 1< 0              |  |  |
| METALS           | Aluminum                              |                  |                  |                  | 11300 1 < U      | 12300 1 < 0               | 9250 1 < 0             |  |  |
| METALS           | Antimony                              |                  |                  |                  | 3 1 < U          | 3 1 < 0                   | 3 1< 0                 |  |  |
| METALS           | Arsenic                               |                  |                  |                  | 3.3 1            | 3.5                       | 1.2                    |  |  |
| METALS           | Barium                                |                  |                  |                  | 57 1             | 97.3                      | 130                    |  |  |
| METALS           | Cadmium                               |                  |                  |                  | 1 1 < U          | 1 1 < 0                   |                        |  |  |
| METALS           | Calcium                               |                  |                  |                  | 790 1            | 1030 1                    | 1080 1                 |  |  |
| METALS           | Chromium                              |                  |                  |                  | 14.5 1           | 18.1 1                    | 14.9                   |  |  |
| METALS           | Cobalt                                | ļ                |                  |                  | 1.9 1            | 9,4 1                     | 12.3 1                 |  |  |
| METALS           | Copper                                |                  |                  |                  | 4.1 1            | 3,7 1                     | 10.3                   |  |  |
| METALS           | Iron                                  |                  |                  |                  | 13300 1 < U      | 13400 1 < U               | 18200 1 < 0            |  |  |
| METALS           | Lead                                  |                  |                  |                  | 2.5              | 4.9 1                     | 2.1 1                  |  |  |
| METALS           | Magnesium                             |                  |                  |                  | 399 1            | 566 1                     | 1610 1                 |  |  |
| METALS           | Manganese                             | 1                |                  |                  | 182 1            | 802 1                     | 363                    |  |  |
| METALS           | Mercury                               |                  |                  |                  | 0.1 1 < U        | 0,1 1 < U                 | 0,1 1 < 0              |  |  |
| METALS           | Potassium                             |                  |                  |                  | 560 1            | 633 1                     | 695 1                  |  |  |
| METALS           | Selenium                              |                  |                  |                  | 1 1 < U          | 1 1 < U                   | 1 1< 0                 |  |  |
| METALS           | Silver                                | Ì                |                  |                  | 1 1< U           | 1 1 < U                   | 1 1 < 0                |  |  |
| METALS           | Strontium                             |                  |                  |                  | 8.6 1            | 10.5 1                    | 28.2 1                 |  |  |
| METALS           | Zinc                                  | ļ                |                  |                  | 22 1             | 22.9 1                    | 47,5 1                 |  |  |
| PERC             | Perchlorate                           | 0.00564 1 < U    | 0.00508 1 < U    | 0.00621 1 < U    |                  |                           |                        |  |  |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene                |                  |                  |                  | 0.33 1 < U       | 0.33 1 < 0                | 0.33 1 < U             |  |  |
| SEMIVOLATILES    | 1,2-Dichlorobenzene                   |                  |                  |                  | 0.33 1 < U       | 0,33 1 < 0                | 0.33 1 < 0             |  |  |
| SEMIVOLATILES    | 1,3-Dichlorobenzene                   |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < 0             |  |  |
| SEMIVOLATILES    | 1,4-Dichlorobenzene                   | 1                |                  |                  | 0.33 1< U        | 0.33 1 < U                | 0.33 1 < U             |  |  |
| SEMIVOLATILES    | 2.4.5 Trichlorophenol                 |                  |                  |                  | 1.65 1 < U       | 1.65 1 < U                | 1.65 1 < 0             |  |  |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol                 |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 i < U             |  |  |
| SEMIVOLATILES    | 2.4-Dichlorophenol                    |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < 0             |  |  |
| SEMIVOLATILES    | 2.4-Dimethylohenol                    |                  |                  |                  | 0.33 1< U        | 0.33 1 < U                | 0.33 I< U              |  |  |
| SEMIVOLATILES    | 2.4-Dinitrophenol                     |                  |                  |                  | 1.65 1 < U       | 1.65 1 < U                | 1.65 1 < U             |  |  |
| SEMIVOLATILES    | 2-Chloronaphthalene                   |                  |                  |                  | 0.33 1 < U       | 0,33 1< U                 | 0.33 1 < 0             |  |  |
| SEMIVOLATILES    | 2-Chlorophenol                        | Į                |                  |                  | 0.33 1 < U       | 0.33 f< U                 | 0.33 1 < U             |  |  |
| SEMIVOLATILES    | 2-Methvinaphthalene                   |                  |                  |                  | 0.33 1< U        | 0.33 1 < U                | 0.33 1 < U             |  |  |
| SEMIVOLATILES    | 2-Methylphenol                        | Ì                |                  |                  | 0.33 1 < U       | ∞0.33 1< U                | 0.33 1 < 0             |  |  |
| SEMIVOLATILES    | 2-Nitroaniline                        |                  |                  |                  | 1.65 1 < U       | 1.65 1 < U                | 1.65 1 < U             |  |  |
| SEMIVOLATILES    | 2-Nitrophenol                         |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U             |  |  |
| SEMIVOLATILES    | 3.3'-Dichlorobenzidine                | ļ                |                  |                  | 0.65 1< U        | 0.65 1< U                 | 0.65 1 < U             |  |  |
| SEMIVOLATILES    | 3-Nitroaniline                        |                  |                  |                  | 1.65 1 < U       | 1,65 1 < U                | 1.65 1 < U             |  |  |
| SEMIVOLATILES    | 4.6-Dinitro-2-methylphenol            |                  |                  |                  | 1.65 1 < U       | 1.65 1 < U                | 1.65 1 < U             |  |  |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether            |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1< U              |  |  |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol               |                  |                  |                  | 0.65 1 < U       | 0.65 1 < U                | 0.65 1 < U             |  |  |
| SEMIVOLATILES    | 4-Chloroaniline                       |                  |                  |                  | 0.65 1 < U       | 0.65 1 < U                | 0.65 1 < U             |  |  |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether           |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U             |  |  |
| SEMIVOLATILES    | 4-Methylphenol                        |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 ≼ U             |  |  |
| SEMIVOLATILES    | 4-Nitroaniline                        |                  |                  |                  | 1.65 1 < U       | 1.65 1 < U                | 1.65 1 < U             |  |  |
| SEMIVOLATILES    | 4-Nitrophenol                         |                  |                  |                  | 1.65 1 < U       | 1,65 1 < U                | 1.65 1 < U             |  |  |
| SEMIVOLATILES    | Acenaphthene                          |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U             |  |  |
|                  | · · · · · · · · · · · · · · · · · · · | 1                |                  |                  |                  |                           |                        |  |  |

# Table 3-80 Concentrations of Chemicals in Soil Samples Associated with Sump 080

Shaw Project No. 117591 7/11/2007

Data Evaluation Report Chemical Concentrations In Soil Associated with LHAAP-35/36 Sumps



| Table 3-80   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 080 |

| (SUMP) = SUMP080 |                             | 135207           | 475807              | i H-S80-01         | 1 H-580-01       | LH-S80-01        |                  |  |
|------------------|-----------------------------|------------------|---------------------|--------------------|------------------|------------------|------------------|--|
| LOCATION _CODE   |                             | 4/582/           | 4/302/              | 470027             | LH-580-01 OC     | LH-S80-01 1      | LH-\$80-01_2     |  |
| SAMPLE_NO        |                             | 475827(0-0_5)    | 473027(0-0_3)QC     | 6//2000            | 7/24/1993        | 7/24/1993        | 7/24/1993        |  |
| SAMPLE_DATE      |                             | 6/4/2000         | 6/4/2000<br>0.05 Ft | 0/4/2000           | 0.5 + 2 Ft       | 0.5 - 2 Ft       | 8 - 10 Ft        |  |
| DEPTH            |                             | 0 - 0.5 Pt       | 0-0.5 Ft            | DEG                | ED ED            | REG              | REG              |  |
| SAMPLE_PURPOSE   |                             | HEG              |                     | Recult Dill I O VO | Result DII 10 VO | Besult DiL LO VO | Result DIL LQ VQ |  |
| Test Group       | Parameter (Units = mg/kg)   | Hespit DIL LU VU | Hesuit Die Lo Vo    | HESUL DIL LO YO    | 033 14 11        | 0.33 1 < U       | 0.33 1 < U       |  |
| SEMIVOLATILES    | Acenaphthylene              |                  |                     |                    | 0.33 1 4 1       | 0.33 1 < U       | 0.33 1 < U       |  |
| SEMIVOLATILES    | Anthracene                  |                  |                     |                    | 0.33 1 4 1       | 0.33 1 < U       | 0.33 1 < U       |  |
| SEMIVOLATILES    | Benzo(a)anthracene          |                  |                     |                    | 0.33 1 < 1       | 0.33 1 < U       | 0.33 1 < U       |  |
| SEMIVOLATILES    | Benzo(a)pyrene              |                  |                     |                    | 0.33 1 - 11      | 0.33 1 < U       | 0.33 1 < U       |  |
| SEMIVOLATILES    | Benzo(b)fluoranthene        | 1                |                     |                    | 033 1 2 1        | 0.33 1 e U       | 0.33 1 < U       |  |
| SEMIVOLATILES    | Benzo(ghi)perylene          |                  |                     |                    | 0.33 1 2 1       | 0.33 1 < U       | 0.33 1 < U       |  |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                  |                     |                    | 165 1 4 1        | 1.65 1 < U       | 1.65 1 < U       |  |
| SEMIVOLATILES    | Benzoic Acid                |                  |                     |                    |                  | 0.65 1 < 1       | 0.65 1 < U       |  |
| SEMIVOLATILES    | Benzyi Alcohol              |                  |                     |                    |                  | 0.33 1 2 U       | 0.33 1 < U       |  |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  |                  |                     |                    | 0.33 1 4 1       | 0.33 1 < U       | 0.33 1 < U       |  |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |                  |                     |                    | 0.00 1 < U       | 0.33 1 2 11      | 0.33 1 c U       |  |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether |                  |                     |                    | 0.33 14 0        | 0.03 1 4 1       | 0.33 1 2 1       |  |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |                  |                     |                    | 0.33 1< 0        | 0.00 1 4 1       | 0.33 1 4 11      |  |
| SEMIVOLATILES    | Butyl benzyl phthalate      |                  |                     |                    | 0.33 1< 0        | 0.00 1 < 0       | 0.33 1 4 11      |  |
| SEMIVOLATILES    | Chrysene                    |                  |                     |                    | 0.33 1 < 0       | 0.00 1 4 1       |                  |  |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      |                  |                     |                    | 0.33 1 < 0       | 0.03 14 0        | 0.00 1 4 1       |  |
| SEMIVOLATILES    | Dibenzofuran                |                  |                     |                    | 0.33 1 < 0       | 0.33 1 < 0       | 0.03 1 < 0       |  |
| SEMIVOLATILES    | Diethyl phthalate           |                  |                     |                    | 0.33 1 < U       | 0.33 1 < 0       | 0.00 1 < 1       |  |
| SEMIVOLATILES    | Dimethyl phthalate          |                  |                     |                    | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |  |
| SEMIVOLATILES    | di-n-Butyl phthalate        |                  |                     |                    | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< 0        |  |
| SEMIVOLATILES    | di-n-Octyl phthalate        |                  |                     |                    | 0.33 1 < U       | 0,33 1 < U       | 0.33 1< 0        |  |
| SEMIVOLATILES    | Fluoranthene                |                  |                     |                    | 0.33 1 < U       | 0.33 1 < 0       | 0,33 1 < U       |  |
| SEMIVOLATILES    | Fluorene                    |                  |                     |                    | 0,33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |  |
| SEMIVOLATILES    | Hexachlorobenzena           |                  |                     |                    | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |  |
| SEMIVOLATILES    | Hexachlorobutadiene         |                  |                     |                    | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |  |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   | 1                |                     |                    | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       |  |
| SEMIVOLATILES    | Hexachioroethane            |                  |                     |                    | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |  |
| SEMIVOLATILES    | Indeno(1.2,3-cd)pyrene      |                  |                     |                    | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |  |
| SEMIVOLATILES    | Isophorone                  |                  |                     |                    | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |  |
| SEMIVOLATILES    | Naphthalene                 |                  |                     |                    | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |  |
| SEMIVOLATILES    | Nitrobenzene                |                  |                     |                    | 0.33 1 < U       | 0.33 1 < U       | 0,33 1< 0        |  |
| SEMIVOLATILES    | n-Nitroso-dl-n-propylamine  |                  |                     |                    | 0,33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |  |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      |                  |                     |                    | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |  |
| SEMIVOLATILES    | Penlachlorophenol           |                  |                     |                    | 1.65 1 < U       | 1,65 1 < 0       | 1.65 1 < 0       |  |
| SEMIVOLATILES    | Phenanthrene                |                  |                     |                    | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       |  |
| SEMIVOLATILES    | Phenol                      |                  |                     |                    | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |  |
| SEMIVOLATILES    | Pyrene                      |                  |                     |                    | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |  |
| VOLATILES        | 1,1,1-Trichloroethane       |                  |                     |                    | 0.005 1 < U      | 0.005 1< U       | 0.005 1 < 0      |  |
| VOLATILES        | 1,1,2,2-Tetrachloroethane   |                  |                     |                    | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      |  |
| VOLATH ES        | 1.1.2-Trichloroethane       |                  |                     |                    | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |  |
| VOLATILES        | 1.1-Dichloroethane          |                  |                     |                    | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |  |
| VOLATILES        | 1.1-Dichloroethene          |                  |                     |                    | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |  |
| VOI ATILES       | 1.2-Dichloroethane          |                  |                     |                    | 0.005 1 <  €     | 0.005 1 < U      | 0.005 1 < U      |  |
| VOLATILES        | 1.2-Dichloroethene          |                  |                     |                    | 0.005 f< U       | 0,005 1 < U      | 0.005 1 < U      |  |
| VOLATILES        | 1.2-Dichloropropane         |                  |                     |                    | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |  |
| VOLATILES        | 2-Butanone                  |                  |                     |                    | 0.05 1 < U       | 0.05 1 < U       | 0,05 1 < U       |  |
| VOLATILES        | 2-Chloroethyl vinyl ether   |                  |                     |                    | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |  |
| VOLATILES        | 2-Hexanone                  |                  |                     |                    | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |  |
| TOL THELD        |                             | 1                |                     |                    |                  |                  |                  |  |

.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-80   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 080 |

| [SUMP] = SUMP080 |                           |                  |                  | 192207           | 111 000 01           | 14 600 01            | 14-590-01   |  |  |
|------------------|---------------------------|------------------|------------------|------------------|----------------------|----------------------|-------------|--|--|
| LOCATION _CODE   |                           | 47SB27           | 475827           | 4/582/           | LH-SSU-UT            | 1 4-000-01 1         | H-S80-01_2  |  |  |
| SAMPLE_NO        |                           | 47SB27(0-0_5)    | 47SB27(0-0_5)QC  | 4/582/(1-2)      | 2010000              | 7/24/1009            | 7/24/1003   |  |  |
| SAMPLE_DATE      |                           | 6/4/2000         | 6/4/2000         | 6/4/2000         | 1/24/1990<br>0.5 0.5 | 112411990<br>AL 0 GI | 8 - 10 Ft   |  |  |
| DEPTH            |                           | 0 - 0.5 Ft       | 0 - 0.5 Ft       | 1.2.51           | 0.3 + 2 FI           | DEG                  | REG         |  |  |
| SAMPLE_PURPOSE   |                           | REG              | PU               | HEG              |                      | Result bill 10 VO    |             |  |  |
| Test Group       | Parameter (Units = mg/kg) | Result DIL LQ VQ | Hesult DIL LQ VQ | Result DIL LQ VO | Hestar DIL LO VQ     |                      |             |  |  |
| VOLATILES        | Acetone                   |                  |                  |                  | 0.1 1 4 0            |                      | 0.01 1 4 0  |  |  |
| VOLATILES        | Benzene                   |                  |                  |                  | 0.005 1 < 0          | 0.005 1< 0           | 0.005 1 < 1 |  |  |
| VOLATILES        | Bromodichloromethane      | 1                |                  |                  | 0.005 1 < 0          | 0.005 1 < 0          | 0.005 1 4 8 |  |  |
| VOLATILES        | Bromoform                 |                  |                  |                  | 0.005 1 < 0          | 0.005 1 < 0          |             |  |  |
| VOLATILES        | Bromomethane              |                  |                  |                  | 0.01 1 < 0           |                      |             |  |  |
| VOLATILES        | Carbon disulfide          |                  |                  |                  | 0.005 1 < 0          | 0.005 1 < 0          | 0.005 1 4 0 |  |  |
| VOLATILES        | Carbon tetrachloride      | 1                |                  |                  | 0.005 1 < 0          | 0.005 1 < 0          | 0.005 1 < 0 |  |  |
| VOLATILES        | Chlorobenzene             |                  |                  |                  | 0.005 1 < U          | 0.005 1 < U          | 0.005 1 < 0 |  |  |
| VOLATILES        | Chloroethane              |                  |                  |                  | 0.01 1 < U           | 0.01 1 < 0           | 0.01 1 < 0  |  |  |
| VOLATILES        | Chioroform                |                  |                  |                  | 0.005 1 < 0          | 0.005 1 < 0          | 0.005 1 < 0 |  |  |
| VOLATILES        | Chloromethane             |                  |                  |                  | 0.01 1 < 0           | 0.01 1 < 0           | 0.01 1 < 0  |  |  |
| VOLATILES        | cis-1 3-Dichloropropene   |                  |                  |                  | 0.005 1 < U          | 0.005 1 < 0          | 0.005 1 < 0 |  |  |
| VOLATILES        | Dibromochloromethane      |                  |                  |                  | 0.005 1 < U          | 0.005 1 < U          | 0.005 1 < U |  |  |
| VOLATILES        | Ethylbenzene              |                  |                  |                  | 0.005 1 < U          | 0.005 1 < U          | 0.005 1 < U |  |  |
| VOLATILES        | Methyl isobutyl ketone    |                  |                  |                  | 0.05 1 < U           | 0.05 1 < 0           | 0.05 1 < U  |  |  |
| VOLATILES        | Methylene chloride        |                  |                  |                  | 0.005 1 < U          | 0.005 1 < U          | 0.005 1 < 0 |  |  |
| VOLATILES        | Slyrene                   |                  |                  |                  | 0.005 1 < U          | 0.005 1 < U          | 0.005 1 < U |  |  |
| VOLATILES        | Tetrachioroethene         |                  |                  |                  | 0.005 1 < U          | 0.005 1 < U          | 0.005 1 < U |  |  |
| VOLATILES        | Toluene                   |                  |                  |                  | 0.005 1 < U          | 0.005 1 < U          | 0.005 1 < U |  |  |
| VOLATILES        | trans-1.3-Dichloropropene |                  |                  |                  | 0.005 1 < U          | 0.005 1 < U          | 0.005 1 < U |  |  |
| VOLATILES        | Trichloroethene           | ļ                | •                |                  | 0.005 1 < U          | 0.005 1 < U          | 0.005 1 < U |  |  |
| VOLATILES        | Vinvi acetate             |                  |                  |                  | 0.05 1 < U           | 0.05 1 < U           | 0.05 1 < U  |  |  |
| VOLATILES        | Vinvi chloride            |                  |                  |                  | 0.01 1 < 반           | 0.01 1 < U           | 0.01 1 < U  |  |  |
| VOLATILES        | Xvienes, Total            |                  |                  |                  | 0.005 1 < U          | 0.005 1 < U          | 0.005 1 < U |  |  |

Footnotes are shown on cover page to Tables Section.

.

\_\_\_

- Serae)

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-81 6.01

|                                   |  |                  |                      | Concentrati            | ons of Chemicals     | in Soil Samples  | s Associated wi  | th Sump 081      |                  |                           |                             |                           | (                          |
|-----------------------------------|--|------------------|----------------------|------------------------|----------------------|------------------|------------------|------------------|------------------|---------------------------|-----------------------------|---------------------------|----------------------------|
| [SUMP] = SUMP081<br>LOCATION_CODE |  | 35SUMP081-SB01   | 35SUMP081-SB01       | 35SUMP082-SB01         | 35SUMP082-SB01       | 47SB24           | 47SB24           | 47SB25           | 47SB25           | LH-DL81-01                | LHS-3-24                    | LH-S81-01                 | LH-S81-01                  |
| SAMPLE_NO                         |  | SUMP081-SB-01-01 | SUMP081-SB-01-02     | SUMP082-SB-01-01       | SUMP082-SB-01-02     | 47SB24(0-0_5)    | 47SB24(1-2)      | 47\$B25(0-0_5)   | 47SB25(1-2)      | LH-DL81-01                | LHS-3-24                    | LH-S81-01_1               | LH-S81-01_2                |
| SAMPLE_DATE                       |  | 9/18/2006        | 9/18/2006            | 9/18/2006              | 9/18/2006            | 6/4/2000         | 6/4/2000         | 6/4/2000         | 6/4/2000         | 7/23/1993                 | 1/10/1995<br>0 - 5 Ft       | 7/23/1993<br>5 - 2 Fl     | 7/23/1993<br>5 - 7 Ft      |
| DEPTH<br>Sample Purpose           |  | 0-0Ht<br>BFG     | 0-0Ft<br>BEG         | U-UF1<br>REG           | REG                  | REG              | REG              | REG              | REG              | REG                       | REG                         | REG                       | REG                        |
| Test Group                        | Parameter (Units = mg/kg)                | Result DIL LO VQ | Result DHL LQ VQ     | Result DilL LQ VQ      | Result DilL LQ VQ    | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO          | Result DIL LQ VQ            | Result DIL LQ VQ          | Result DIL LO VO           |
| EXPLOSIVES                        | 1,3,5-Trinitrobenzene                    |                  |                      |                        |                      |                  |                  |                  |                  |                           | 0.22 1 < U<br>0.22 1 < U    |                           |                            |
| EXPLOSIVES                        | 2,4,6-Trinitrotoluene                    |                  |                      |                        |                      |                  |                  |                  |                  |                           | 0.22 1 < ⊍                  |                           |                            |
| EXPLOSIVES                        | 2,4-Dinitrotokuene                       |                  |                      |                        |                      |                  |                  |                  |                  | 0.33 1 < U                | 0.22 1 < U                  | 0.33 t < U                | 0.33 1 < U                 |
| EXPLOSIVES                        | 2,6-Dinitrotoluene                       |                  |                      |                        |                      |                  |                  |                  |                  | 0.33 1 < 9                | 0.24 1 < U<br>0.46 1 < U    | 0.33 1 < 0                | 0.33   < 0                 |
| EXPLOSIVES                        | 4-Алило-2,6-олитоющене<br>НМХ            |                  |                      |                        |                      |                  |                  |                  |                  |                           | 21 < 0                      |                           |                            |
| EXPLOSIVES                        | m-Nitrotoluene                           |                  |                      |                        |                      |                  |                  |                  |                  |                           | 0.91 t < U                  |                           |                            |
| EXPLOSIVES                        | Nitrobenzene                             |                  |                      |                        |                      |                  |                  |                  |                  |                           | 0.24 1 < U<br>0.91 1 < U    |                           |                            |
| EXPLOSIVES                        | o-Nitrotokuene                           |                  |                      |                        |                      |                  |                  |                  |                  |                           | 2.7 1 < U                   |                           |                            |
| EXPLOSIVES                        | RDX                                      |                  |                      |                        |                      |                  |                  |                  |                  |                           | 0.99 t < U                  |                           |                            |
| EXPLOSIVES                        | Tebyl                                    |                  | EC40 1               | C400 1                 | 7750 1               |                  |                  |                  |                  | 10400 1                   | 9.68 1 < 0<br>7530 1        | 6860 1                    | 26500 \$                   |
| METALS                            | Atimoav                                  | 1 U UJL          | 0.118 1 UUL          | 0.114 1 U UJL          | 0.113 1 U UJL        |                  |                  |                  |                  | 3 1 < U                   | 10.7 1 < UJ                 | 3 1 < 1                   | 31 < U                     |
| METALS                            | Arsenic                                  | 1                | 4.21 1               | 2.31 1                 | 0.2 1 J J            |                  |                  |                  |                  | 11 < U                    | 0.97 1 J                    | 2.3 1                     | 1.7 1                      |
| METALS                            | Barium                                   |                  | 62.8 1               | 98.6 1                 | 68.1 1               |                  |                  |                  |                  | 114 1                     | 4170 1                      | 66.7                      | 129 1                      |
| METALS                            | Beryllium<br>Cadmium                     | 1 J J            | 1 1<br>10.0832 1 J J | 0.465 i<br>0.103 t J J | 0.0753 1 J J         |                  |                  |                  |                  | 11 < U                    | 1.1 1 < U                   | 1 1 < U                   | 11 < U                     |
| METALS                            | Calcium                                  | t                | 458 1                | 780 t                  | 319 1                |                  |                  |                  |                  | 1630 1                    | 2760 1                      | 783 1                     | 1660 1                     |
| METALS                            | Chromium                                 | 1 JH             | 7.81 1               | 14.7 1 JH              | 17.7 1 JH            |                  |                  |                  |                  | 16.6 1<br>9.3 1           | 144 1 J<br>-47 1            | 12.2 1                    | 31.6 I<br>9.9 t            |
| METALS                            | Copper                                   | 1 1              | 4.08 1               | 4.74 1 JC<br>5.45 1    | 5.83 1               |                  |                  |                  |                  | 5.4 1                     | 22.7 1                      | 2.6 1                     | 6.7 1                      |
| METALS                            | Iron                                     | 10               | 12200 1              | 10500 1                | 16700 1              |                  |                  |                  |                  | 13800 1                   | 12500 1                     | 15100 1                   | 26300 t                    |
| METALS                            | Lead                                     | t -              | 30.6 1               | 8.25 1                 | 3.11 1               |                  |                  |                  |                  | 3.4 1<br>1170 1           | 60.9 1<br>1660 1            | 7.1 1<br>409 1            | 10 1                       |
| METALS                            | Magnesium<br>Manoanese                   | 5 J              | 166 1 J              | 131 1 J                | 55.8 1 J             |                  |                  |                  |                  | 469 1                     | 211 1                       | 337 1                     | 179 1                      |
| METALS                            | Mercury                                  | 1 1 1            | 0.29 1 U             | 0.0137 1 J J           | 0.293 1 U            |                  |                  |                  |                  | 0.1 1 < U                 | 0.79 1                      | 0.1 1 < U                 | 0.1 1 < U                  |
| METALS                            | Nickel                                   |                  | 13.4 1               | 5.45 1                 | 19.4 1<br>374 1 II-3 |                  |                  |                  |                  | 675 1                     | 495 1                       | 359 1                     | 1270 1                     |
| METALS                            | Selenium                                 |                  | 0.15 1 J JŁ          | 0.264 1 UJL            | 0.225 1 U UJL        |                  |                  |                  |                  | 11 < 0                    | 0.36 1 J                    | 1 1 < U                   | 11 < U                     |
| METALS                            | Silver                                   | 1 U              | 1.8 1 U              | 1.72 1 U               | 1.64 1 U             |                  |                  |                  |                  | 11 < U                    | 1.1 1 < ⊍                   | 11<-U                     | 11 < V                     |
| METALS                            | Sodium                                   | 1 J J            | 270 1                | 60.3 t                 | 215 1                |                  |                  |                  |                  | 24.9 1                    | 889 t                       | 8.9 1                     | 30.3 1                     |
| METALS                            | Thallium                                 | 1                | 0.0558 1             | 0.0406 1               | 0.0399 1             |                  |                  |                  |                  | 29.0                      | 53.6 1 < U                  |                           |                            |
| METALS                            | Vanadium                                 | 1 JH             | 17.5 1 "H            | 20.1 1 JH              | 20.3 1 JH            |                  |                  |                  |                  |                           | 100 1                       |                           |                            |
| METALS                            | Zinc                                     | 1 JH             | 41.6 1 JH            | 16.1 \$ JH             | 43.7 1 JH            | 0.0056 1 < 1     | 0.00601 1 < 11   | 0.00552 \$ < 13  | 0.00644 1 < 1    | 42.4 1                    | 106 1                       | 19.5 1                    | 44.9 1                     |
| SEMIVOLATILES                     | 1,2,4-Trichlorobenzene                   |                  |                      |                        |                      |                  | 0.00001 2 0 0    |                  |                  | 0.33 1 < U                | 0.51 1 < U                  | 0.33 1 < U                | 0.33 1 < U                 |
| SEMIVOLATILES                     | 1,2-Dichlorobenzene                      |                  |                      |                        |                      |                  |                  |                  |                  | 0.33 1 < U                | 0.51 1 < U                  | 0.33 1 < U                | 0.33 1 < U                 |
| SEMIVOLATILES                     | 1,3-Dichlorobenzene                      |                  |                      |                        |                      |                  |                  |                  |                  | 0.33 1 < 0                | 0.51 1 < 0                  | 0.33 1 < 0                | 0.33 1 < 0                 |
| SEMIVOLATILES                     | 2,4,5-Trichlorophenol                    |                  |                      |                        |                      |                  |                  |                  |                  | 1.65 1 < U                | 2.6 1 < U                   | 1.65 1 < U                | 1.65 1 < U                 |
| SEMIVOLATILES                     | 2,4,6-Trichlorophenol                    |                  |                      |                        |                      |                  |                  |                  |                  | 0.33 1 < U                | 0.51 1 < U                  | 0.33 1 < U                | 0.33 1 < U                 |
| SEMIVOLATILES                     | 2,4-Dichlorophenol<br>2,4 Dimotindohanol |                  |                      |                        |                      |                  |                  |                  |                  | 0.33 1 < 0                | 0.51 1 < U                  | 0.33 1 < U                | 0.33 1 < U                 |
| SEMIVOLATILES                     | 2,4-Dinitrophenol                        |                  |                      |                        |                      |                  |                  |                  |                  | 1.65 1 < U                | 2.6 1 < U                   | 1.65 1 < U                | 1.65-1 < U                 |
| SEMIVOLATILES                     | 2,4-Dinitrotoluene                       |                  |                      |                        |                      |                  |                  |                  |                  |                           | 0.51 1 < U                  |                           |                            |
| SEMIVOLATILES                     | 2,6-Dinitrotoluene                       |                  |                      |                        |                      |                  |                  |                  |                  | 0.33 1 < U                | 0.51 1 < 0                  | 0.33 1 < Ư                | 0.33 1 < U                 |
| SEMIVOLATILES                     | 2-Chlorophenol                           |                  |                      |                        |                      |                  |                  |                  |                  | 0.33 1 < U                | 0.51 1 < U                  | 0.33 1 < U                | 0.33 1 < U                 |
| SEMIVOLATILES                     | 2-Methylnaphthalene                      |                  |                      |                        |                      |                  |                  |                  |                  | 0.33 1 < U                | 0.51 1 < U                  | 0.33 1 < U                | 0.33 1 < U                 |
| SEMIVOLATILES                     | 2-Methylphenol<br>2-Nitrocovine          |                  |                      |                        |                      |                  |                  |                  |                  | 1.65 1 < U                | 2.6 1 < U                   | 0.33 I 2 0<br>1.65 1 < U  | 1.65 1 < U                 |
| SEMIVOLATILES                     | 2-Nitrophenol                            |                  |                      | •                      |                      |                  |                  |                  |                  | 0.33 1 < U                | 0.51 1 < 0                  | €.33 1 < U                | 0.33 t < U                 |
| SEMIVOLATILES                     | 3,3'-Dichlorobénzidine                   |                  |                      |                        |                      |                  |                  | -                |                  | 0.65 t < U                | 11<                         | 0.65 t < U                | 0.65 1 < U                 |
| SEMIVOLATILES                     | 3-Nitroanifine                           |                  |                      |                        |                      |                  |                  |                  | · · · · ·        | 1.65 1 < U<br>1.65 1 < U  | ∣ 2.6 1 < U<br>  2.6 1 < II | ા,૦૦ i < U<br>1.65 i < U  | י בסגז < 10<br>1.65 t < 10 |
| SEMIVOLATILES                     | 4-Bromophenyl phenyl ether               |                  |                      |                        |                      |                  |                  |                  |                  | 0.33 t < U                | 0.51 1 < U                  | 0.33 1 < U                | 0.33 1 < U                 |
| SEMIVOLATILES                     | 4-Chloro-3-methylphenol                  |                  |                      |                        |                      |                  |                  |                  |                  | 0.65 1 < U                | 0.51 1 < U                  | 0.65 1 < U                | 0.65 1 < U                 |
| SEMIVOLATILES                     | 4-Chloroaniline                          |                  |                      |                        |                      |                  |                  |                  |                  | 0.65 1 < U<br>0.33 1 < 1  | । ∪.51ा < U<br>  0.511 < स  | 0.05 T < U<br>0.33 1 < U  | 0.0⊃ i < U<br>0.33 1 < U   |
| SEMIVOLATILES                     | 4-Methylphenol                           |                  |                      |                        |                      |                  |                  |                  |                  | 0.33 1 < U                | 0.51 1 < U                  | 0.33 1 < U                | 0.33 1 < U                 |
| SEMIVOLATILES                     | 4-Nitroaniline                           |                  |                      |                        |                      |                  |                  |                  |                  | 1.65 1 < U                | 2.6 1 < 1                   | 1.65 1 < U                | 1.65 1 < U                 |
| SEMIVOLATILES                     | 4-Nitrophenol                            |                  | -                    |                        |                      |                  |                  |                  |                  | 1.65 1 < U<br>10,33 1 < H | i 2.6 1 < U<br>0.51 1 < ∐   | 1.0c3 t < U<br>0.33 t < U | 1.05 T < U<br>0.33 1 < U   |
| JENNYVLATILEJ                     | -westaprisatione                         | E                |                      |                        |                      |                  |                  |                  |                  | · · · ·                   |                             | -                         | -                          |

Shaw Environmental, Inc.

# 00066207

Data Evaluation Report Chemical Concentrations in Soit Associated with LHAAP-35/36 Sumps

Table 3-81

| 10110400 014440004     |                                |                  |                  | Concentrati      | ons of Chemicals   | s in Soil Samples | s Associated wit | th Sump 081       |                  |                  |                  |                  |                  |
|------------------------|--------------------------------|------------------|------------------|------------------|--------------------|-------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION CODE          |                                | 3551000081-5801  | 1551 MP081_SB01  | 3551IMP082.5801  | 35511MP082-5801    | 475824            | 47SB24           | 47SB25            | 47SB25           | LH-DE81-01       | 1 HS-3-24        | LH-S81-01        | LH-S81-01        |
| CONTION_CODE           |                                | SUMPORT-SD01     | SUMPORT.SB.01.02 | SIMP082.SR-01.01 | SI IMP082-SB-01-02 | 47SR24(0-0 5)     | 475R24(1-2)      | 47SB25(0-0_5)     | 475B25(1-2)      | LH-DL 81-01      | LHS-3-24         | LH-S81-01 1      | LH-S81-01 2      |
| SAMPLE DATE            | · ·                            | 9/19/2006        | 9/18/2006        | 9/18/2006        | 9/18/2006          | 6/4/2000          | 6/4/2000         | 6/4/2000          | 6/4/2000         | 7/23/1993        | 1/10/1995        | 7/23/1993        | 7/23/1993        |
| DEDTU                  |                                | 0.00             | 0.05             | 0.051            | 0.05               | B. 5 Et           | 1-25             | 0.55              | 1.2 Ft           | 2-4Ft            | 0-5Ft            | 5-25             | 5-7.Ft           |
|                        |                                | 0-0FL<br>BEG     | REC              | REG              | REG                | BEG               | BEG              | BEG               | BEG              | REG              | REG              | REG              | REG              |
| Test Group             | Paramater (Hinits – moliko)    | Recult DIE LO VO | Result DII tO VO | Besult DH 10 VO  | Result DII LO VO   | Besuit Dit 10 VO  | Result DIL LO VO | Result Dil. LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VQ |
| SEMINON ATE ES         | Acenarhitisdene                |                  | TIGGOR DIL LO VG |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMINOLATILES          | Aphracege                      |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Renzo/alantbracene             |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 t < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Benzo(a)nvrene                 | 1                |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Benzo/b)fluoranthene           |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.18 1 J         | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES          | Benzolohilpervlene             |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES          | Benzo(k)fluoranthene           |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 t < U       | 0.082 1 J        | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES          | Benzoic Acid                   |                  |                  |                  |                    |                   |                  |                   |                  | 1.65 t < ∜       | 2.6 1 < U        | 1.65 1 < U       | 1.65 ‡ < U       |
| SEMIVOLATILES          | Senzyl Alcohol                 |                  |                  |                  |                    |                   |                  |                   |                  | 0.65 1 < U       | -0.51 1 < U      | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES          | bis(2-Chloroethoxy)methane     |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 t < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES          | bis(2-Chloroethyl)ether        |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES          | bis(2-Chloroisopropyl)ether    | 1                |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | bis(2-Ethylhexyl)phthalate     |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.22 1 J         | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Butyl benzyl phthalate         |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Chrysene                       |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Dibenzo(a,h)anthracene         |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Dibenzofuran                   |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 f < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Diethyl phthalate              |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Dimethyl phthalate             |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.13 1 J         | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES          | di-n-Butyl phthalate           | 1                |                  |                  |                    |                   |                  |                   |                  | 0.383 1          | 0.51 1 < 0       | 0.656 1          | 0.9 1            |
| SEMIVOLATILES          | di-n-Octyl phthalate           |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < 0       | 0.51 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES          | Fluoranthene                   |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < 0       | 0.065 I J        | 0.33 1 < 0       | 0.05 1 < 0       |
| SEMIVOLATILES          | Fluorene                       |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < 0       | 0.51 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES          | Hexachlorobenzene              |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < 0       | 0.51 1 < 0       | 0.33 1 < 12      |                  |
| SEMIVOLATILES          | Hexactionoputadiene            |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < 0       |                  | 0.33 1 < 11      | 0.33 1 < 1       |
| SEMINOLATILES          | Hexachorocycopeniauene         |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 051 1 < U        | 0.33 1 < 1       | 0.33 1 < 1       |
| SEMIVOLATILES          | indeno/1.2.3.od/ovrane         |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES          | Isophorane                     | <b>.</b> .       |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 t < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Nanhthalene                    |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Nitrobenzene                   | 1                |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES          | n-Nitroso-di-n-propylamine     |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | n-Nitrosodiphenylamine         |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES          | Pentachlorophenol              |                  |                  |                  |                    |                   |                  |                   |                  | 1.65 1 < U       | 2.6 1 < U        | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES          | Phenanthrene                   |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Phenol                         |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.51 1 ≺ U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Pyrene                         |                  |                  |                  |                    |                   |                  |                   |                  | 0.33 1 < U       | 0.08 1 J         | 0.33 1 < U       | 0.33 1 < U       |
| VOLATILES              | 1,1,1,2-Tetrachloroethane      |                  | 0.00489 1 U      |                  | 0.00458 1 U        |                   |                  |                   |                  |                  | 0.015 1 < U      |                  |                  |
| VOLATILES              | 1,1,1-Trichloroethane          | 1                | 0.00489 1 U      |                  | 0.00458 1 U        |                   |                  |                   |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES              | 1,1.2,2-Tetrachloroethane      |                  | 0.00489 1 U      |                  | 0.00458 1 U        |                   |                  |                   |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES              | 1,1,2-Trichloroethane          |                  | 0.00489 1 U      |                  | 0.00458 1 U        |                   |                  |                   |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < 0      |
| VOLATILES              | 1,1-Dichloroethane             |                  | 0.00489 1 U      |                  | 0.00458 1 U        |                   |                  |                   |                  | 0.005 1 < 0      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES              | 1,1-Dichloroethene             |                  | 0.00489 1 U      |                  | 0.00458 1 U        |                   |                  |                   |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < 0      |
| VOLATILES              | 1,1-Dichioropropene            |                  | 0.00489 1 U      |                  | 0.00458 1 U        |                   |                  |                   |                  |                  |                  |                  |                  |
| VOLATILES              | 1,2,3-1 nichkorobenzene        |                  | 0.00489 1 U      |                  | 0.00458 1 0        |                   |                  |                   |                  |                  | 0.016 1          |                  |                  |
| VOLATILES              | 1,2,3-Inchloropane             |                  | 0.00489 1 0      |                  | 0.00458 1 0        |                   |                  |                   |                  |                  | 0.010 1 4 0      |                  |                  |
| VOLATILES              | 1,2,4-1nchiorobenzene          |                  | 0.00489 1 0      |                  | 0.00458 1 0        |                   |                  |                   |                  |                  |                  |                  |                  |
| VOLATILES              | 1,2,4-11stretuyoenzene         |                  | 0.00489 1 U      |                  | 0.00400 1 0        |                   |                  |                   |                  |                  | 0.031 1 / 15     |                  |                  |
| VOLATILES<br>VOLATILES | 1.2 Decementary                |                  | 0.00405 1 0      |                  | 0.00450 1 0        |                   |                  |                   |                  |                  | 0.031 1 < 12     |                  |                  |
| VOLATILES              | 1.2. Dichlorohanzana           | 1                | 0.00403 1 0      |                  | 0.00458 1 11       |                   |                  |                   |                  |                  |                  |                  |                  |
| VOLATILES              | 1 2 Dichiocosthane             |                  | 0.00403 1 0      |                  | 0.00458 1 11       |                   |                  |                   |                  | 0.005 t < U      | 0.008 t < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES              | 1 2-Dichlomethene              |                  | 0.00405 1 0      |                  | 0.00100 / 0        |                   |                  |                   |                  | 0.005 1 < U      | 0.008 î < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES              | 1 2-Dichtoropropage            |                  | 0.00489 1 11     |                  | 0.00458 1 U        |                   |                  |                   |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES              | 1 2-Dimethylbenzene (o-Xvlene) | ł                | 0.00489 1 1      |                  | 0.00458 1 U        |                   |                  |                   |                  |                  |                  |                  |                  |
| VOLATILES              | 1.3 5-Trimethylbenzene         | 1                | 0.00489 1 U      |                  | 0.00458 1 U        |                   |                  |                   |                  |                  |                  |                  |                  |
| VOLATILES              | 1,3-Dichlorobenzene            |                  | 0.00489 1 U      |                  | 0.00458 1 U        |                   |                  |                   |                  |                  |                  |                  |                  |
| VOLATILES              | 1,3-Dichloropropane            |                  | 0.00489 1 U      |                  | 0.00458 1 U        |                   |                  |                   |                  |                  |                  |                  |                  |
| VOLATILES              | 1,4-Dichlorobenzene            | 1                | 0.00489 1 U      |                  | 0.00458 1 U        |                   |                  |                   |                  |                  |                  |                  |                  |
| VOLATILES              | 2,2-Bichloropropane            |                  | 0.00489 t U      |                  | 0.00458 t U        |                   |                  |                   |                  |                  |                  |                  |                  |
| VOLATILES              | 2-Butanone                     |                  | 0.00978 1 U      |                  | 0.00916 1 U        |                   |                  |                   |                  | 0.05 1 < U       | 0.015 1 < U      | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES              | 2-Chloroethyl vinyl ether      |                  | 0.00978 1 U      |                  | 0.00916 1 U        |                   |                  | · · · ·           |                  | 0.01 1 < U       | 0.015 1 < U      | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES              | 2-Chlorotoluene                |                  | 0.00489 1 U      |                  | 0.00458 1 U        |                   |                  |                   |                  |                  |                  |                  |                  |
| VOLATILES              | 2-Hexanone                     |                  | 0.00978 1 U      |                  | 0.00916 1 U        |                   |                  |                   |                  | 0.05 1 < U       | 0.015 1 < U      | 0.05 1 < U       | 0.05 t < U       |
| VOLATILES              | 2-Propenal                     | · · ·            |                  |                  |                    |                   |                  |                   |                  |                  | 0.77 1 < U       |                  | · · · · ·        |
| VOLATILES              | 4-Chlorotoluene                | Ι.               | 0.00489 1 U      |                  | 0.00458 t U        |                   |                  |                   |                  |                  |                  |                  |                  |
|                        |                                |                  |                  |                  |                    |                   |                  |                   |                  |                  |                  |                  |                  |

Shaw Environmental, Inc.

# 00066208

Table 3-81 Concentrations of Chemicals in Soil Samples Associated with Sump 081

| (SUMP) = SUMP081 |                             |                  |                  | Convondud        |                  | o in con campio  |                  |                  |                  |                  |                  |                  |                  |
|------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION_CODE    |                             | 35SUMP081-SB01   | 35SUMP081-SB01   | 35SUMP082-SB01   | 35SUMP082-SB01   | 47SB24           | 47SB24           | 47SB25           | 47SB25           | LH-DL81-01       | LHS-3-24         | LH-S81-01        | LH-S81-01        |
| SAMPLE_NO        |                             | SUMP081-SB-01-01 | SUMP081-SB-01-02 | SUMP082-SB-01-01 | SUMP082-SB-01-02 | 47SB24(0-0_5)    | 47SB24(1-2)      | 47SB25(0-0_5)    | 47SB25(1-2)      | LH-DL81-01       | LHS-3-24         | LH-S81-01_1      | LH-S81-01_2      |
| SAMPLE_DATE      |                             | 9/18/2006        | 9/18/2006        | 9/18/2006        | 9/18/2006        | 6/4/2000         | 6/4/2000         | 6/4/2000         | 6/4/2000         | 7/23/1993        | 1/10/1995        | 7/23/1993        | 7/23/1993        |
| DEPTH            |                             | 0-0Ft            | 0-0Ft            | 0 - 0 Ft         | 0 - 0 Ft         | 05 Ft            | 1-2Ft            | 05 Fl            | 1 - 2 Ft         | 2 - 4 Ft         | 05 Ft            | .5 - 2 Ft        | 5 - 7 Ft         |
| SAMPLE_PURPOSE   |                             | REG              |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LQ VQ | Result DiL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DiL LQ VQ | Result DIL LO VQ |
| VOLATILES        | Acetone                     |                  | 0.0147 1         |                  | 0.00916 1 U      |                  |                  |                  |                  | 0.1 1 < U        | 0.015 1 < U      | 0.1 1 < U        | 0.1 1 < U        |
| VOLATILES        | Acetonitrile                |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.15 1 < U       |                  |                  |
| VOLATILES        | Acrylonitrile               |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.15 1 < U       |                  |                  |
| VOLATILES        | Allyl chloride              |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.015 1 < U      |                  |                  |
| VOLATILES        | Benzene                     |                  | 0.00489 t U      |                  | 0.00458 t U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromobenzene                | 1                | 0.00489 t U      |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Bromochloromethane          |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Bromodichloromethane        |                  | 0.00489 1 U      |                  | 0.00458 f U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromoform                   |                  | 0.00489 1 U      | -                | 0.00458 t U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromomethane                |                  | 0.00978 1 U      |                  | 0.00916 1 U      |                  |                  |                  |                  | 0.01 1 < U       | 0.015 1 < U      | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Carbon disulfide            |                  | 0.00489 1 U      |                  | 0.00458 t U      |                  |                  |                  |                  | 0.005 1 < 0      | 0.008 1 < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | Carbon tetrachloride        |                  | 0.00489 t U      |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chlorobenzene               |                  | 0.00489 t U      |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 t < U      | 0.008 t < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | Chloroethane                |                  | 0.00978 1 U      |                  | 0.00916 1 U      |                  |                  |                  |                  | 0.01 1 < U       | 0.015 1 < U      | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Chloroform                  |                  | 0.00489 t U      |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloromethane               |                  | 0.00978 1 U      |                  | 0.00916 1 U      |                  |                  |                  |                  | 0.01 1 < U       | 0.015 1 < U      | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Chloroprene                 |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.15 t < U       |                  |                  |
| VOLATILES        | cis-1,2-Dichloroethene      |                  | 0.00489 1 U      |                  | 0.00458 t U      |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | cis-1,3-Dichloropropene     |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromochloromethane        | 1                | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromomethane              |                  | 0.00489 t U      |                  | 0.00458 1 U      |                  |                  |                  |                  |                  | 0.031 1 < U      |                  |                  |
| VOLATILES        | Dichlorodifluoromethane     |                  | 0.00978 1 U      |                  | 0.00916 1 U      |                  |                  |                  |                  |                  | 0.031 1 < U      |                  |                  |
| VOLATILES        | Ethyl methacrylate          |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.031 1 < U      |                  |                  |
| VOLATILES        | Ethylbenzene                |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Hexachlorobutadiene         |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | IODOMETHANE                 |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.015 1 < U      |                  |                  |
| VOLATILES        | ISOBUTYL ALCOHOL            |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3.1 1 < U        |                  |                  |
| VOLATILES        | Isopropyibenzene            |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | m,p-Xylenes                 |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Methacrylonitrile           | }                |                  |                  |                  |                  |                  |                  |                  |                  | 0.031 1 < U      |                  |                  |
| VOLATILES        | Methyl isobutyl ketone      | }                | 0.00978 1 U      |                  | 0.00916 1 U      |                  |                  |                  |                  | 0.05 t < U       | 0.015 t < U      | 0.05 t < U       | 0.05 t < U       |
| VOLATILES        | METHYL METHACRYLATE         |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.031 1 < U      |                  |                  |
| VOLATILES        | Methylene chloride          | Į                | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 i < U      | 0.008 1 < U      | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | Naphthalene                 |                  | 0.00978 1 U      |                  | 0.00916 1 U      |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | n-BUTYLBENZENE              |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | n-PROPYLBENZENE             |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Pentachloroethane           |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.031 1 < U      |                  |                  |
| VOLATILES        | p-ISOPROPYLTOLUENE          |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Propionitrile               |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.077 1 < U      |                  |                  |
| VOLATILES        | sec-BUTYLBENZENE            | ł                | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Styrene                     |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | tert-BUTYLBENZENE           |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Tetrachloroethene           |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 t < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Toluene                     |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | trans-1,2-Dichloroethene    |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | trans-1,3-Dichkoropropene   |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | trans-1,4-Dichloro-2-butene |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.031 1 < U      |                  |                  |
| VOLATILES        | Trichkroethene              |                  | 0.00489 1 U      |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < 0      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Trichlorofluoromethane      |                  | 0.00978 1 U      |                  | 0.00916 1 U      |                  |                  |                  |                  |                  | 0.015 t < U      |                  |                  |
| VOLATILES        | Vinyl acetate               |                  | 0.00978 1 U      |                  | 0.00916 1 U      |                  |                  |                  |                  | 0.05 1 < U       | 0.015 1 < U      | 0.05 1 < U       | 0.05 1 < 0       |
| VOLATILES        | Vinyl chloride              |                  | 0.00978 1 U      |                  | 0.00916 1 U      |                  |                  |                  |                  | 0.01 1 < U       | 0.015 1 < U      | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Xylenes, Total              |                  |                  |                  |                  |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U      | 0.005 1 < U      |

Shaw Environmental, Inc.

# 00066209

Table 3-81 mplas Associated with Sump 081 of Chamicals in Soil Sa

|                                |   |                  |              | Con          | centrati  | ons of Cl | hemio      | cals i  | in Soil  | Sam        | ples    | Associa         | ted wit     | th Sump  | 081     |         |          |            |                   |                |            |        |          |              |        |          |             |
|--------------------------------|---|------------------|--------------|--------------|-----------|-----------|------------|---------|----------|------------|---------|-----------------|-------------|----------|---------|---------|----------|------------|-------------------|----------------|------------|--------|----------|--------------|--------|----------|-------------|
| SUMPI = SUMPORI                |   | 144-581          | -01          | HLS          | 1-02      | LH-S      | 81-02      |         | LH-S     | 81-02      |         | 18-582          | -01         | 183      | 582-01  |         | 184-5    | 82-01      |                   | 18-582-        | 02         | -11    | 4-582-02 |              | E F    | 1-582-02 | ,           |
| SAMPLE NO                      |   | LH-S81-0         | 013          | 1H-S8        | -02 1     | LH-S8     | 1-02 2     |         | LH-S8    | 31-02 3    |         | LH-S82-0        | 01 1        | LH-S     | 82-01 2 |         | LH-SE    | 2-01 3     | 1                 | H-S82-62       | 21         | 14     | -S82-02  | 2            | บษ     | S82-02   | 3           |
| SAMPLE_DATE                    |   | 7/23/19          | 193          | 7/23/        | 1993      | 7/23      | /1993      |         | 7/23     | /1993      |         | 7/23/19         | 93          | 7/23     | 3/1993  |         | 7/23     | /1993      |                   | 7/23/199       | 93         | 7.     | 23/1993  |              | 7/     | 24/1993  |             |
| DEPTH                          |   | 9-11             | Ft           | .5-          | 2 Ft      | 5         | 7 Ft       |         | 9 -      | 11 Ft      |         | .5-21           | Ft          | 6-       | 8 Ft    |         | 14 -     | 16 Ft      |                   | 2.5 - 4.5      | ค          |        | 6 - 8 Ft |              | 1      | 0 - 0 Ft |             |
| SAMPLE_PURPOSE                 |   | REG              |              | RE           | G         | R         | EG         |         | B        | EG         |         | REG             | ł           | F        | REG     |         | Ħ        | EĠ         |                   | REG            |            |        | REG      |              |        | reg      |             |
| Test Group                     | Parameter (Units = mg/kg)               | Result Oll       | L LO VO      | Result       | DHL LQ VQ | Result    | DIL LQ     | VQ      | Result D | IL LO      | VQ      | Result DI       | L LQ VC     | ) Result | DIL LQ  | VQ F    | lesuit D | IL LO I    | /Q Resul          | DIL            | LQ VQ      | Result | DILL     | a va         | Result | DILL     | <u>) VQ</u> |
| EXPLOSIVES                     | 1,3,5- I ANBIODENZENE                   |                  |              |              |           |           |            |         |          |            |         |                 |             |          |         |         |          |            |                   |                |            |        |          |              |        |          |             |
| EXPLOSIVES                     | 2.4.6-Trinitrotoluene                   |                  |              |              |           |           |            |         |          |            |         |                 |             |          |         |         |          |            |                   |                |            |        |          |              |        |          |             |
| EXPLOSIVES                     | 2,4-Dinitrotoluene                      | 0.33 1           | < U          | 0.33         | 1 < U     | 0.33      | 1 <        | U       | 0.33     | 1 <        | U       | 0.33 1          | < U         | 0.33     | t <     | υ       | 0.33     | 1 <        | U 0.              | 33 1           | < U        | 0.33   | 1.       | c U          |        |          |             |
| EXPLOSIVES                     | 2,6-Dinitrololuene                      | 0.33 1           | < U          | 0.33         | t < U     | 0.33      | 1 <        | U       | 0.33     | 1 <        | U       | 0.33 1          | < 1J        | 0.33     | t <     | U       | 0.33     | 1 <        | U 0.              | 33 1           | < U        | 0.33   | 1 -      | : ປ          |        |          |             |
| EXPLOSIVES                     | 4-Amino-2,6-dinitrotoluene              |                  |              |              |           |           |            |         |          |            |         |                 |             |          |         |         |          |            |                   |                |            |        |          |              |        |          |             |
| EXPLOSIVES                     | HMX                                     |                  |              |              |           |           |            |         |          |            |         |                 |             |          |         |         |          |            |                   |                |            |        |          |              |        |          |             |
| EXPLOSIVES                     | m-Nitrotouene                           |                  |              |              |           |           |            |         |          |            |         |                 |             |          |         |         |          |            |                   |                |            |        |          |              |        |          |             |
| EXPLUSIVES                     | o-Nitrotokrepe                          |                  |              |              |           |           |            |         |          |            |         |                 |             |          |         |         |          |            |                   |                |            |        |          |              |        |          |             |
| EXPLOSIVES                     | p-Nitrotalvene                          |                  |              |              |           |           |            |         |          |            |         |                 |             |          |         |         |          |            |                   |                |            |        |          |              |        |          |             |
| EXPLOSIVES                     | RDX                                     |                  |              |              |           |           |            |         |          |            |         |                 |             |          |         |         |          |            |                   |                |            |        |          |              |        |          |             |
| EXPLOSIVES                     | Tetryl                                  |                  |              |              |           |           |            |         |          |            |         |                 |             |          |         |         |          |            |                   |                |            |        |          |              |        |          |             |
| METALS                         | Aluminum                                | 13000 1          | < U          | 5460         | 1 < U     | 12300     | 1 <        | U.      | 8490     | 1 <        | Û       | 8830 f          |             | 21300    | 1       |         | 6640     | 1          | 97                | 20 1           |            | 16200  | 1        |              | 142    | 1 4      | : U         |
| METALS                         | Antimony                                | . 31             | < U          | 3            | 1 < U     | 3         | 1 <        | U       | 3        | 1 <        | U       | 3 1             | < 1)        | 3        | 1 <     | U       | 3        | 1 <        | U                 | 3 1            | < U        | 3      | 1 .      | < U          | 60     | 1 4      | : -0        |
| METALS                         | Arsenic                                 | 2.8 1            |              | 2            | 1         | 2.7       | 1          |         | 1.8      | 1          |         | 2.8 1           |             | 2.2      | 1       |         | 2.2      | 1          | 2                 | 24 1           |            | 1 200  | 1        |              | 2      | 1 4      | : U         |
| METALS                         | Bandin                                  | 493 1            |              | 69.5         | 1         | 200       | '          |         | 00       |            |         | 154 1           |             | 761      | 1       |         | 104      | E          | 0/                | .5 1           |            | 300    | ,        |              | J      |          | . 0         |
| METALS                         | Cadmium                                 | 1 1              | < 11         | 1            | 1 < U     | 1         | 1 <        | U       | 1        | 1 <        | U       | 1 1             | < 1)        | 1        | 1 <     | U       | 1        | 1 <        | Ð                 | 1 1            | < 1)       | 1      | 1.       | < U          | 10     | 1.       | < U         |
| METALS                         | Calcium                                 | 1620 1           |              | 956          | 1         | 2250      | 1          | •       | 1100     | 1          |         | 2490 1          |             | 2780     | 1       | -       | 927      | 1          | 18                | 60 1           |            | 2180   | 1        |              | 200    | 1 4      | < U         |
| METALS                         | Chronxium                               | 19 1             |              | 10.2         | 1         | 18.1      | 1          |         | 11.3     | 1          |         | 19.3 1          |             | 22.8     | 1       |         | 11.4     | 1          | 15                | i.3 1          |            | 17.5   | 1        |              | 10     | 1 -      | : U         |
| METALS                         | Cobalt                                  | 12.4 1           |              | 6.6          | 1         | 11.3      | 1          |         | 13.9     | 1          |         | 13.2 1          |             | 18       | 1       |         | 36.2     | 1          | •                 | 6.6            |            | 9.2    | 1        |              | 10     | 1 4      | : U         |
| METALS                         | Copper                                  | 5.5 1            |              | 3.2          | 1         | 6         | 1          |         | 4.1      | 1          |         | 7 1             |             | 7.5      | 1       |         | 4.8      | 1          | 5                 | 5.7 1          |            | 5.5    | 1        |              | 10     | 1 .      | : U         |
| METALS                         | kon                                     | 16200 1          | < 0          | 10100        | 1 < U     | 16900     | 1 <        | U       | 11100    | 1 <        | U       | 18600 t         |             | 24300    | 1       |         | 13400    | 1          | 158               | 00 1           |            | 14900  | 1        |              | 399    | 1 4      | : 0         |
| METALS                         | Leas                                    | 10.2 1           |              | 7.9          | 1<br>1    | 9.2       | 1          |         | 1220     | 1<br>1     |         | 9.3 I<br>010 1  |             | 2410     | 1       |         | 00.8     | r<br>1     | (<br>()           | 1 0,0          |            | 14.3   | 1        |              | 200    | 1 4      | . U         |
| METALS                         | Manpanese                               | 285 1            |              | 274          | 1         | 313       | 1          |         | 119      | ,<br>†     |         | 210 1           |             | 127      | 1       |         | 1070     | 1          | 1                 | 61 1           |            | 196    | 1        |              | 10     | 1        | < U         |
| METALS                         | Mercury                                 | 0.1 1            | < U          | 0.1          | 1 < 9     | 0.1       | 1 <        | U       | 0.1      | 1 <        | U       | 0.1 1           | < U         | 0.1      | 1 <     | ប       | 0.1      | 1 <        | ប                 | .1 1           | < U        | 0.1    | 1.       | < U          | 0.2    | 1 .      | τU          |
| METALS                         | Nickel                                  |                  |              |              |           |           |            |         |          |            |         |                 |             |          |         |         |          |            |                   |                |            |        |          |              |        |          |             |
| METALS                         | Potassium                               | 795 1            |              | 317          | 1         | 768       | 1          |         | 734      | 1          |         | 526 1           |             | 1250     | 1       |         | 450      | 1          | 5                 | 71 1           |            | 690    | 1        |              | 200    | 1 .      | : U⊦        |
| METALS                         | Selenium                                | 1 1              | < U          | 1            | 1 < 1     | 1         | 1 <        | U       | 1        | 1 <        | 0       | 1 1             | < U         | 1        | 1 <     | U       | 1        | 1 <        | U                 | 11             | < 0        | 1      | 1 .      | < 1)         | 2      | 1 .      | : 0         |
| METALS                         | Silver                                  | 11               | < 0          | 1            | T < U     | 3         | 1 <        | U       | 1        | 1 <        | U       | 1 1             | < U         | 1        | 1 <     | U       | 1        | 1 <        | U                 | 3 1            | < 0        | 1      | 1.       | < 0          | 10     | 1 4      | . U         |
| METALS                         | Strentium                               | 27.7 1           |              | 8.1          | 1         | 23.8      | 1          |         | 19.3     | 1          |         | 23.8 1          |             | 61.8     | 1       |         | 21.6     | 1          | 28                | 1.6 1          |            | 42     | 1        |              | 10     | 1.       | < U         |
| METALS                         | Thallium                                |                  |              |              | -         |           |            |         |          |            |         |                 |             |          | -       |         |          | -          |                   |                |            |        |          |              |        |          |             |
| METALS                         | Vanadium                                |                  |              |              |           |           |            |         |          |            |         |                 |             |          |         |         |          |            |                   |                |            |        |          |              |        |          |             |
| METALS                         | Zinc                                    | 36.8 1           |              | 13.9         | 1         | 42.9      | 1          |         | 39.1     | 1          |         | 43.9 1          |             | 55.5     | 1       |         | 41.1     | 1          | 29                | 1.4            |            | 30.8   | 1        |              | 10     | 1 -      | : U         |
| PERC                           | Perchiorate                             |                  |              |              |           |           |            |         |          |            |         |                 |             |          |         |         |          |            |                   |                |            |        |          |              |        |          |             |
| SEMIVOLATILES                  | 1,2,4-1 nchlorobenzene                  | 0.33 1           | < U          | 0.33         | 1 < 0     | 0.33      | 1 <        | บ       | 0.33     | 1 <        | U       | 0.33 1          | < U         | 0.33     | 1 <     | U<br>V  | 0.33     | 1 <        | U 0.              | 33 1           | < 0        | 0.33   | 1        | < U<br>- 11  |        |          |             |
| SEMIVOLATILES                  | 1.3-Dichomhenzene                       | 0.33 1           | < 12         | 0.33         | 1 < 1     | 0.33      | 1 4        | 0<br>(1 | 0.33     | 1 <        | 11      | 0.33 1          | < 11        | 0.33     | 1 4     | 11      | 0.33     | 1 <        | 00.<br>11 0       | 33 t           | < 1)       | 0.33   | 1        | < 11         |        |          |             |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene                     | 0.33 1           | < Ū          | 0.33         | 1 < 0     | 0.33      | 1 <        | ย       | 0.33     | 1 <        | U       | 0.33 1          | < U         | 0.33     | t <     | Ŭ       | 0.33     | 1 <        | U 0.              | 33 1           | < 0        | 0.33   | 1.       | < U          |        |          |             |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenot                   | 1.65 1           | < U          | 1.65         | 1 < U     | 1.65      | 1 <        | U       | 1.65     | 1 <        | U       | 1.65 1          | < U         | 1.65     | 1 <     | U       | 1.65     | 1 <        | U 1.              | 65 1           | < U        | 1.65   | 1.       | < U          |        |          |             |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol                   | 0.33 1           | < U          | 0.33         | 1 < U     | 0.33      | 1 <        | ម       | 0.33     | 1 <        | U       | 0.33 1          | < U         | 0.33     | t <     | U       | 0.33     | 1 <        | U 0.              | 33 t           | < U        | 0.33   | 1.       | < 19         |        |          |             |
| SEMIVOLATILES                  | 2,4-Dichlorophenol                      | 0.33 1           | < 1)         | 0.33         | 1 < U     | 0.33      | 1 <        | U       | 0.33     | 1 <        | U       | 0.33 1          | < 10        | 0.33     | 1 <     | U       | 0.33     | 1 <        | U 0.              | 33 1           | < U        | 0.33   | 1 .      | < 11         |        |          |             |
| SEMIVOLATILES                  | 2,4-Dimethylphenol                      | 0.33 1           | < U          | 0.33         | 1 < 0     | 0.33      | 1 <        | 0       | 0.33     | 1 <        | U<br>II | 0.33 1          | < 1         | 0.33     | 1 <     | 0       | 0.33     | 1 <        | U 0.              | 33 1           | < U        | 0.33   | 1 .      | < ()<br>- 11 |        |          |             |
| SEMIVULATILES<br>SEMIVOLATILES | 2,4-Dinitrotokiana                      | 1.00 1           | < 0          | 1.65         | 1 < 0     | C0.1      | 1 <        | U       | 1.00     | : <        | U       | 1.60 \$         | < U         | 1.00     | i <     | U       | 1.00     | I <        | 0 1.              | 03 [           | < 0        | 1.00   | 1 .      | ¢ Ų          |        |          |             |
| SEMIVOLATILES                  | 2.6-Dinitrotoluene                      |                  |              |              |           |           |            |         |          |            |         |                 |             |          |         |         |          |            |                   |                |            |        |          |              |        |          |             |
| SEMIVOLATILES                  | 2-Chloronaphthalene                     | 0.33 1           | < U          | 0.33         | 1 < U     | 0.33      | 1 <        | U       | 0.33     | 1 <        | U       | 0.33 1          | < U         | 0.33     | 1 <     | U       | 0.33     | 1 <        | U <sup>1</sup> 0. | 33 1           | < U        | 0.33   | 1 .      | < U          |        |          |             |
| SEMIVOLATILES                  | 2-Chlorophenol                          | 0.33 t           | < U          | 0.33         | 1 < U     | 0.33      | 1 <        | U       | 0.33     | 1 <        | U       | 0.33 1          | < U         | 0.33     | 1 <     | U       | 0.33     | 1 <        | U 0.              | 33 t           | < U        | 0.33   | 1.       | ្រ           |        |          |             |
| SEMIVOLATILES                  | 2-Methylnaphthalene                     | 0.33 1           | < U          | 0.33         | 1 < U     | 0.33      | 1 <        | U       | 0.33     | 1 <        | ប       | 0.33 1          | < U         | 0.33     | 1 <     | U       | 0.33     | 1 <        | U 0.              | 33 1           | < U        | 0.33   | 1 -      | < U          |        |          |             |
| SEMIVOLATILES                  | 2-Methylphenol                          | 0.33 1           | < U          | 0.33         | 1 < U     | 0.33      | 1 <        | U       | 0.33     | 1 <        | U       | 0.33 1          | < U         | 0.33     | 1 <     | U       | 0.33     | 1 <        | U 0.              | 33 1           | < U        | 0.33   | 1 .      | < U          |        |          |             |
| SEMIVULATILES                  | 2-Nittoaniine                           | 1.65 1           | < U          | 1.65         | 1 < 0     | 1.60      | 1 <        | 11      | 1.65     | 1 <<br>1 - | 0       | 1.65 1          | < 0         | 1.65     | 1 <     | . fi    | 1.65     | 1 <        | υ 1.<br>11 0.     | 100 1<br>100 1 | < U        | 1.65   | • •      | (U)<br>(1)   |        |          |             |
| SEMIVOLATILES                  | 2-Milliopheno:<br>3 3-Dichlorohenzidine | 0.65 1           |              | 0.33         | 1 2 11    | 0.00      | 1 2        | 13      | 0.55     | 1 2        | Н       | 0.55 1          | 2 11        | 0.55     | 1 2     | 11      | 0.33     | 1 2        | оо.<br>Н 0        | aa r<br>65 1   | < 11       | 0.55   | 1.       | 2 U          |        |          |             |
| SEMIVOLATILES                  | 3-Nitroaniline                          | 1.65 1           | < U          | 1.65         | 1 < U     | 1.65      | 1 <        | U       | 1.65     | 1 <        | Ű       | 1.65 1          | < 10        | 1.65     | 1 <     | Ŭ       | 1.65     | 1 <        | U 1.              | 65 1           | < U        | 1.65   | t ·      | ะยั          |        |          |             |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol              | 1.65 1           | < U          | 1.65         | 1 < U     | 1.65      | 1 <        | U       | 1.65     | 1 <        | U       | 1.65 1          | < U         | 1.65     | 1 <     | υ       | 1.65     | 1 <        | U 1.              | 65 1           | < U        | 1.65   | 1        | : ប          |        |          |             |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether              | 0.33 1           | < U          | 0.33         | 1 < U     | 0.33      | 1 <        | U       | 0.33     | 1 <        | U       | 0.33 1          | < U         | 0.33     | 1 <     | ប       | 0.33     | 1 <        | U 0.              | 33 t           | < U        | 0.33   | 1 -      | < U          |        |          |             |
| SEMIVOLATILES                  | 4-Chioro-3-methylphenol                 | 0.65 1           | < U          | 0.65         | 1 < U     | 0.65      | ۲ <        | U       | 0.65     | 1 <        | U       | 0.65 1          | < U         | 0.65     | 1 <     | U       | 0.65     | 1 <        | U 0.              | 65 1           | < U        | 0.65   | 1 .      | C U          |        |          |             |
| SEMIVOLATILES                  | 4-Chioroaniine                          | 0.65 1           | < 10         | 0.65         | 1 < 13    | 0.65      | 1 <        | IJ      | 0.65     | 1 <        | U       | 0.65 1          | < U         | 0.65     | 1 <     | U       | 0.65     | 1 <        | U 0.              | 65 1           | < U        | 0.65   | 1 -      | C U          |        |          |             |
| SEMIVOLATILES                  | 4-Unioropheny) phenyl ether             | 0.33 1           | < U          | 0.33         | 1 < U     | 0.33      | 1 <        | U<br>U  | 0.33     | 1 <        | U       | 0.33 1          | < U         | 0.33     | 1 <     | U<br>11 | 0.33     | 1 <        | U 0.              | 33 1<br>22 1   | < V<br>,   | 0.33   | 1 •      | < U<br>, n   |        |          |             |
| SEMINOLATILES<br>SEMINOLATILES | 4-Nitmaniline                           | 0.33 1<br>1.85 1 | < ()<br>< 11 | 0.33<br>1.65 | 1 < U     | 0.33      | 1 4        | 0       | 1.65     | · <<br>1 · | 0       | U.33 1<br>165 1 | < U<br>2 II | 0.33     | 1 <     | 11      | 0.33     | • <<br>1 - | 0 0,<br>[] 1      | 55 I           | < U<br>< U | 1.65   | 1        | . U<br>. II  |        |          |             |
| SEMIVOLATILES                  | 4-Nitrophenol                           | 1.65 1           | < U          | 1.65         | 1 < 1     | 1.65      | . `<br>t < | Ű       | 1.65     | 1 <        | U       | 1.65 1          | < 10        | 1.65     | 1 <     | บ       | 1.65     | 1 <        | มี 1.             | 65 1           | < ป        | 1.65   | 1 -      | < U          |        |          |             |
| SEMIVOLATILES                  | Acenaphthene                            | 0.33 1           | < U          | 0.33         | 1 < U     | 0.33      | 1 <        | ป       | 0.33     | 1 <        | ប       | 0.33 1          | < U         | 0.33     | 1 <     | U       | 0.33     | 1 <        | U 0.              | 33 1           | < U        | 0.33   | 1 .      | ¢υ           |        |          |             |



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

# Table 3-81 Concentrations of Chamicals in Sail Samples Associated with Sump 081

| [SUMP] = SUMP081               |                                |                         | Concentratio           | ons of Chemicals        | in Soli Samples         | Associated with          | i Sump voi              |                           |                 |                  |                    |
|--------------------------------|--------------------------------|-------------------------|------------------------|-------------------------|-------------------------|--------------------------|-------------------------|---------------------------|-----------------|------------------|--------------------|
| LOCATION_CODE                  |                                | LH-S81-01               | LH-S81-02              | LH-S81-02               | LH-S81-02               | LH-S82-01                | LH-\$82-01              | LH-S82-01                 | LH-S82-02       | LH-S82-02        | LH-\$82-02         |
| SAMPLE_NO                      |                                | LH-\$81-01_3            | LH-S81-02_1            | LH-S81-02_2             | LH-S81-02_3             | LH-S82-01_1              | LH-S82-01_2             | LH-S82-01_3               | LH-S82-02_1     | LH-S82-02_2      | LH-\$82-02_3       |
| SAMPLE_DATE                    |                                | 7/23/1993               | 7/23/1993              | 7/23/1993               | 7/23/1993               | 7/23/1993                | 7/23/1993               | 7/23/1993                 | 7/23/1993       | 7/23/1993        | 7/24/1993          |
| DEPTH                          |                                | 9-11 Fl                 | .5-2Ft                 | 5-7Ft                   | 9 - 11 Ft               | .5-2F1                   | 6-8Ft                   | 14 - 16 Ft                | 2.5 - 4.5 Ft    | 6-8Ft            | 0-0Ft              |
| SAMPLE_PURPOSE                 | Parameter (Linia – molka)      | REG<br>Remain Dil LO MO | HEG<br>Recent DI 10 VO | HEGI<br>Recult BILLO VO | HEG<br>Bernit Dit LO VO | HEGI<br>Recult DILLO 160 | HEG<br>Result Dil LO VO | HEG<br>Basult DII I.O. VO | Recut Oll IO VO | Result DII LO VO | Result Fill 10 V/O |
| SEMIVOLATILES                  | Acenanhthulene                 | A33 1 2 1               | 0.33 1 < 1             | 0.33 1 < U              | 112301 DIE EQ VO        | 0.33 1 < {}              | 0.33 1 < U              | 0.33 1 < 1                | 0.33 1 < 1      | 0.33 1 < 11      |                    |
| SEMIVOLATILES                  | Anthracese                     | 0.33 1 < U              | 0.33 1 < U             | 0.33 t < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | Benzo(a)anthracene             | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 9.33 1 < U       |                    |
| SEMIVOLATILES                  | Benzo(a)oyrene                 | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 t < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | Benzo(b)fluoranthene           | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | Benzo(ghi)perylene             | 0.33 1 < 0              | 0.33 1 < 0             | 0.33 1 < 0              | 0.33 1 < U              | 0.33 1 < 0               | 9.33 1 < U              | 0.33 1 < 0                | 0.33 1 < 0      | 0.33 1 < U       |                    |
| SEMINOLATILES<br>SEMINOLATILES | Benzoic Acid                   | 1851 < 1                | 165 1 < 1              | 165 1 < 1               | 165 1 2 1               | 165 1 < 1                | 165 1 < 1               | 165 1 < 1                 | 165 1 < 1       | 165 1 < 1        |                    |
| SEMIVOLATILES                  | Benzyl Alcohol                 | 0.65 1 < U              | 0.65 1 < 0             | 0.65 1 < 0              | 0.65 1 < U              | 0.65 1 < U               | 0.65 t < U              | 0.65 1 < 0                | 0.65 1 < U      | 0.65 1 < U       |                    |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane     | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether        | 0.33 t < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | bis(2-Chloroisopropyf)ether    | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthalate     | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U              | 0.41 1                  | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | Butyl benzyl phthalate         | 0.33 1 < U              | 0.33 1 < 0             | 0.33 1 < 0              | 0.33 1 < 0              | 0.33 1 < 0               | 0.33 1 < 0              | 0.33 1 < 0                | 0.33 1 < 0      | 0.33 1 < 1       |                    |
| SEMIVOLATILES<br>SEMIVOLATILES | Dibenzo(a b)antbracene         |                         | 0.33 1 < 11            | 0.33 1 < 0              | 0.33 1 < 0              | 0.33 1 < U               | 0.33 1 < 1              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < 1/      |                    |
| SEMIVOLATILES                  | Dibenzofuran                   | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 t < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | Diethyl phthalate              | 0.33 t < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | Dimethyl phthalate             | 0.33 1 < U              | 0.33 1 < U             | 0.33 t < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | di-n-Butyl phthalate           | 0.33 t < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 t < U               | 0.854 1                 | 1.14 1                    | 0.33 1 < U      | 0.356 1          |                    |
| SEMIVOLATILES                  | di-n-Octyi phthalate           | 0.33 1 < 0              | 0.33 1 < 0             | 0.33 1 < 0              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < 0                | 0.33 1 < 0      | 0.33 1 < 0       |                    |
| SEMIVOLANLES<br>SEMIVOLATILES  | Fillorana                      | 0.33 1 < 0              | 0.33 1 < 0             | 0.33 1 < 0              | 0.33 1 < 1              | 0.33 1 < 0               |                         |                           | 0.33 1 < 0      | 0.33 1 < 0       |                    |
| SEMIVOLATILES                  | Hexachiorobenzene              | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < 0                | 0.33 1 < U      | 0.33 1 < 0       |                    |
| SEMIVOLATILES                  | Hexachlorobutadiene            | 0.33 t < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 t < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene      | 0.33 t < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | Hexachloroethane               | 0.33 t < U              | 0.33 1 < U             | 0.33 t < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | Indeno(1,2,3-cd)pyrene         | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 t < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < 0      | 0.33 1 < U       |                    |
| SEMIVOLATILES<br>SEMIVOLATILES | Isophorone<br>Nanhthalana      | 0.33 1 < 0              | 0.33 1 < 0             | 0.33 1 < 0              | 0.33 1 < U              | 0.33 F < U               | 0.33 1 < 0              | 0.33 1 < 0                | 0.33 1 < 0      | 0.33 1 < 0       |                    |
| SEMIVOLATILES                  | Nitrobenzene                   | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < 0               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine     | 0.33 1 < 1/             | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine         | 0.33 1 < U              | 0.33 1 < U             | 0.33 1 < U              | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < U      | 0.33 1 < U       |                    |
| SEMIVOLATILES                  | Pentachlorophenol              | 1.65 1 < U              | 1.65 1 < U             | 1.65 1 < U              | 1.65 1 < U              | 1.65 1 < U               | 1.65 1 < U              | 1.65 1 < U                | 1.65 1 < U      | 1.65 1 < U       |                    |
| SEMIVOLATILES                  | Phenanthrene                   | 0.33 1 < U              | 0.33 1 < 0             | 0.33 1 < 0              | 0.33 1 < U              | 0.33 f < U               | 0.33 1 < U              | 0.33 1 < U                | 0.33 1 < 0      | 0.33 1 < 0       |                    |
| SEMIVOLATILES                  | Purene                         | 0331 < 0                | 0.33 1 < 1             | 0.33 1 < 0              | 0.33 1 < 1              | 0.33 t < 11              |                         | 0.33 1 < 0                | 0.33 1 < U      | 0.33 1 < U       |                    |
| VOLATILES                      | 1.1.1.2-Tetrachloroethane      |                         | 0.00 1 4 0             |                         | 0.30 1 4 0              | 0.00 + < 0               |                         |                           | 0.00 / 0        |                  |                    |
| VOLATILES                      | 1,1,1-Trichloroethane          | 0.005 1 < U             | 0.005 1 < U            | 0.005 1 < U             | 0.005 1 < U             | 0.005 1 < U              | 0.005 1 < U             | 0.005 1 < U               | 0.005 1 < U     | 0.005 1 < U      |                    |
| VOLATILES                      | 1,1.2,2-Tetrachloroethane      | 0.005 1 < U             | 0.005 1 < U            | 0.005 1 < U             | 0.005 1 < U             | 0.005 t < U              | 0.005 1 < U             | 0.005 1 < U               | 0.005 1 < U     | 0.005 1 < U      |                    |
| VOLATILES                      | 1,1,2-Trichloroethane          | 0.005 1 < U             | 0.005 1 < U            | 0.005 1 < U             | 0.005 1 < U             | 0.005 t < U              | 0.005 1 < U             | 0.005 1 < U               | 0.005 1 < U     | 0.005 1 < U      |                    |
| VOLATILES                      | 1.1-Dichloroethane             | 0.005 1 < U             | 0.005 1 < U            | 0.005 1 < U             | 0.005 1 < U             | 0.005 1 < U              | 0.005 1 < U             | 0.005 1 < U               | 0.005 1 < U     | 0.005 1 < U      |                    |
| VOLATILES                      | 1,1-Dichloroethene             | 0.005 1 < 0             | 0.005 1 < 0            | 10.005 1 < 0            | 0.005 1 < 0             | 0.005 1 < 0              | 0.005 1 < 0             | 0.005 1 < 0               | 0.005 1 < 0     | 1.005 1 < 0      |                    |
| VOLATILES                      | 1,2.3-Tricblorobenzene         |                         |                        |                         |                         |                          |                         |                           |                 |                  |                    |
| VOLATILES                      | 1,2,3-Trichloropropane         |                         |                        |                         |                         |                          |                         |                           |                 |                  |                    |
| VOLATILES                      | 1,2,4-Trichlorobenzene         |                         |                        |                         |                         |                          |                         |                           |                 |                  |                    |
| VOLATILES                      | 1,2,4-Trimethybenzene          |                         |                        |                         |                         |                          |                         |                           |                 |                  |                    |
| VOLATILES                      | 1,2-Dibromo-3-chioropropane    |                         |                        |                         |                         |                          |                         |                           |                 |                  |                    |
| VOLATILES<br>WOLATHES          | 1,2-Dibromoethane              |                         |                        |                         |                         |                          |                         |                           |                 |                  |                    |
| VOLATILES                      | 1.2-Dichloroethane             | 0.005 1 2 11            | 0.005 t < 1}           | 0.005 1 < 1             | 0.005 1 < 1             | 0-005 t < 11             | 0:005 1 ∠ U             | 0.005 1 < 13              | 0:005 1 < U     | 0.005 1 < 0      |                    |
| VOLATILES                      | 1,2-Dichloroethene             | 0.005 1 < U             | 0.005 1 < U            | 0.005 1 < U             | 0.005 1 < U             | 0.005 t < U              | 0.005 1 < 0             | 0.005 1 < U               | 0.005 1 < U     | 0.005 1 < U      |                    |
| VOLATILES                      | 1,2-Dichtoropropane            | 0.005 1 < U             | 0.005 t < U            | 0.005 1 < U             | 0.005 1 < U             | 0.005 1 < U              | 0.005 1 < U             | 0.005 1 < U               | 0.005 t < U     | 0.005 1 < U      |                    |
| VOLATILES                      | 1,2-Dimethylbenzene (o-Xylene) |                         |                        |                         |                         |                          |                         |                           |                 |                  |                    |
| VOLATILES                      | 1.3,5-Trimethylbenzene         |                         |                        |                         |                         |                          |                         |                           |                 |                  |                    |
| VOLATILES                      | 1,3-Dichlorobenzene            |                         |                        |                         |                         |                          |                         |                           |                 |                  |                    |
| VOLATILES                      | 1. JDichloroporpane            |                         |                        |                         |                         |                          |                         |                           |                 |                  |                    |
| VOLATILES                      | 2.2-Dichkoropropane            |                         |                        |                         |                         |                          |                         |                           |                 |                  |                    |
| VOLATILES                      | 2-Butanone                     | 0.05 1 < U              | 0.05 1 < ∜             | 0.05 1 < U              | 0.05 1 < U              | 0.05 1 < iJ              | 0.05 1 < U              | 0.05 1 < U                | 0.05 1 < U      | 0.05 1 < U       |                    |
| VOLATILES                      | 2-Chloroethyl vinyl ether      | 0.01 1 < U              | 0.01 1 < U             | 0.01 1 < U              | 0.01 1 < U              | 0.01 1 < U               | 0.01 1 < U              | 0.01 1 < U                | 0.01 t < U      | 0.01 1 < U       |                    |
| VOLATILES                      | 2-Chloratoluene                |                         |                        |                         |                         |                          |                         |                           |                 |                  |                    |
| VOLATILES                      | 2-Hexanone                     | 0.05 i < U              | 0.05 1 < Ŭ             | 0.05 1 < U              | 0.05 1 < U              | 0.05 1 < U               | 0.05 1 < U              | 0.05 1 < U                | 0.05 1 < U      | 0.05 1 < U       |                    |
| VOLATILES                      | 2-Propenal                     |                         |                        |                         |                         |                          |                         |                           |                 |                  |                    |
| VULAHLES                       | 4-UNOROIOIBERE                 | ł                       |                        |                         |                         |                          |                         |                           |                 |                  |                    |



| LHAAP-35/36 Sumps |                             |                  |                  |                   | Table 3-81         |                  |                       |                 |                  |                  |                  |
|-------------------|-----------------------------|------------------|------------------|-------------------|--------------------|------------------|-----------------------|-----------------|------------------|------------------|------------------|
|                   |                             |                  | Concentratio     | ns of Chamical    | in Soil Sample     | Associated with  | Sumn 081              |                 |                  |                  |                  |
| [SUMP] = SUMP081  |                             |                  | ooncentrate      | 115 Of Offension. | s ni oon oumpic.   |                  |                       |                 |                  |                  |                  |
| LOCATION_CODE     |                             | LH-S81-01        | LH-581-02        | LH-S81-02         | LH-S81-02          | LH-S82-01        | LH-S82-01             | LH-\$82-01      | LH-\$82-02       | LH-S82-02        | LH-S82-02        |
| SAMPLE_NO         |                             | LH-S81-01_3      | LH-S81-02_1      | LH-S81-02_2       | LH-S81-02_3        | LH-S82-01_1      | LH-S82-01_2           | LH-S82-01_3     | LH-\$82-02_1     | LH-S82-02_2      | LH-S82-02_3      |
| SAMPLE_DATE       |                             | 7/23/1993        | 7/23/1993        | 7/23/1993         | 7/23/1993          | 7/23/1993        | 7/23/1993             | 7/23/1993       | 7/23/1993        | 7/23/1993        | 7/24/1993        |
| DEPTH             |                             | 9-11 Ft          | .5 - 2 Ft        | 5-7Ft             | 9-11 Ft            | .5-2 Ft          | 6-8Ft                 | 14 - 16 Ft      | 2.5 - 4.5 Ft     | 6-8Ft            | 0 - 0 Ft         |
| SAMPLE_PURPOSE    |                             | REG              | REG              | REG               | REG                | REG              | REG                   | REG             | REG              | REG              | REG              |
| Test Group        | Parameter (Units = mg/kg)   | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO  | Result DIL LO VO   | Result DIL LO VO | Result DIL LO VO Re   | esult DIL LO VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| VOLATILES         | Acetone                     | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U         | 0.1 1 < 1          | 0.1 1 < U        | 0.1 1 < U             | 0.1 1 < U       | 0.1 1 < U        | 0.1 1 < U        |                  |
| VOLATILES         | Acetonitrile                |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Acrylonitrile               |                  | -                |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Allyt-chloride              |                  |                  |                   |                    | D.005 6 11       |                       |                 | 0.005 A 11       | 0.005 4 14       |                  |
| VOLATILES         | Benzene                     | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0       | 0.005 1 < 0        | 0.005 1 < 0      | 0.000 I <u>&lt;</u> 0 | 0.000 i < U     | 0.005 1 < 0      | 0.005 1 < 0      |                  |
| VOLATILES         | Biomodenzene                |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Bromocnokolneviane          | 0.005 1          | 0.005 1 / 11     | 0.002 1 / 1       | 0.005 1 4 10       | "0.006 t 2 H     | 0.005 t < 11 s        | 9.005 t < H     | AAA5 1 - 11      | 0.005 1 / 11     |                  |
| VOLATILES         | Bromotorm                   | 0.005 1 < 1      | 0.005 1 < 11     | 0.005 1 2 1       | 0.005 1 < H        | 0.005 1 < 11     | 0.005 1 < 11          | 9.005 1 × U     | 0.005 1 < 1      | 0.005 1 < 0      |                  |
| VOLATILES         | Bromomethana                |                  |                  | 0.000 1 C 0       |                    | 0.000 1 < 0      | 0.01 1 < 11           | 0.000 1 < 0     | 0.000 1 < 0      |                  |                  |
| VOLATILES         | Carbon disulfide            | 0.05 1 < U       | 0.005 t < 1F     | 0.07 1 < 0        | :0,005 1 < 1F      | 0.005 1 < U      | 0.005 t < U           | 0.005 t < U     | 0.005 1 < 11     | 0.005 1 < U      |                  |
| VOLATILES         | Cathon tetrachloide         | 0.005 1 < 1      | 0.005 1 < 0      | 0.005 1 < 1       | 0.005 1 < U        | 0.005 1 < 1      | 0.005 t < U           | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                  |
| VOLATILES         | Chiombenzene                | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 1       | 0.005 1 < 0        | 0.005 t < U      | 0.005 f < U           | 0.905 1 < U     | 0.005 1 < 0      | 0.005 1 < 1      |                  |
| VOLATILES         | Chiocoethane                | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U         | 0.01 1 < U       | 0.01 1 < U            | 0.01 1 < U      | 0.01 1 < U       | 0.01 1 < U       |                  |
| VOLATILES         | Chloroform                  | 0.005 1 < ⊍      | 0.905 1 < U      | 0.005 1 < U       | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U           | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                  |
| VOLATILES         | Chloromethane               | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U         | 0.01 1 < U       | 0.01 1 < U            | 0.01 1 < U      | 0.01 1 < U       | 0.01 1 < U       |                  |
| VOLATILES         | Chloroprene                 |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | cis-1,2-Dichloroethene      |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | cis-1,3-Dichloropropene     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U           | 0.005 1 < 1)    | 0.005 1 < U      | 0.005 1 < U      |                  |
| VOLATILES         | Dipromochloromethane        | 0.005 1 < U      | 0.605 1 < U      | 0.005 1 < U       | 0.005 1 < 0        | 0.005 1 < U      | 0.005 1 < U           | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                  |
| VOLATILES         | Dibromomethane              |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Dichlorodifluoromethane     |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Ethyl methacrylate          |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Ethybenzene                 | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 <b>1</b> < U | 0.005 1 < U      | 0.005 1 < 0           | 0.005 1 < U     | 0.005 1 < 0      | 0.005 1 < U      |                  |
| VOLATILES         | Hexachiorobutadiene         |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | ODOMETHANE                  |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | ISOBUTYL ALCOHOL            |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Isopropylbenzene            |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | m,p-Xylenes                 |                  |                  |                   | •                  |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Methacrylonimie             | 0.05 1 11        |                  | 0.05 1            |                    | 0.05 1           | A05 1 11              | 0.05 1          | 0.05 1 . 11      | 0.05 1 . 11      |                  |
| VOLATILES         |                             | 0.05 1 < 0       | 0.05 1 < 0       | 10.00 F < U       | 0.05 1 < 0         | 0.03 I C O       | 0.00 1 4 0            | 0.05 1 < 0      | 0.00 1 4 0       | 0.05 1 < 0       |                  |
| VOLATILES         | METHIL METHACHICATE         | 0.006 1 - 21     | 0.005 1 - 11     | 0.005 t 2 13      | 0.605 1 2 31       | 0.005 1 - 1      | 0.005 1 - 13          | 0.005 1 - 11    | 0.005 1 < 1      | 0.005 1 < 11     |                  |
| VOLATILES         | Nanhthalenn                 | 0.005 1 < 0      | 0.000 1 4 0      | 0.005 1 < 0       | 0.000 1 4 0        | 0.000 1 2 0      | 0.000 1 1 0           | 0.000 1 C 0     | 0.003 1 2 0      | 0.000 1 2 0      |                  |
| VOLATILES         | n-BIITYI BEN7ENE            |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | n-PBOPYLBENZENE             |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Pentachiomethane            |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | p-ISOPROPYLTOLUENE          |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Propionitrile               |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | sec-BUTYLBENZENE            |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Styrene                     | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U           | 0.005 1 < U     | 0.005 1 < U      | 0.005 t < U      |                  |
| VOLATILES         | lert-BUTYLBENZENE           |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Tetrachloroethene           | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U       | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U           | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                  |
| VOLATILES         | Toluene                     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U           | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                  |
| VOLATILES         | trans-1,2-Dichkroethene     | 1                |                  |                   |                    |                  | · .                   |                 |                  |                  |                  |
| VOLATILES         | trans-1,3-Dichloropropene   | 0.005 1 < U      | 0.005 1 < U      | 0.005 ł < U       | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U           | 0.005 t < U     | 0.005 1 < U      | 0.005 1 < U      |                  |
| VOLATILES         | trans-1,4-Dichloro-2-butene | 1                |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Trichloroethene             | 0.005 t < U      | 0.005 1 < U      | 0.005 t < U       | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U           | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                  |
| VOLATILES         | Trichlorofluoromethane      |                  |                  |                   |                    |                  |                       |                 |                  |                  |                  |
| VOLATILES         | Vinyl acetate               | 0.05 t < U       | 0.05 1 < U       | 0.05 t < U        | 0.05 1 < U         | 0.05 1 < U       | 0.05 1 < U            | 0.05 1 < U      | 0.05 1 < U       | 0.05 1 < U       |                  |
| VOLATILES         | Vinyt chloride              | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U         | 0.01 1 < U       | 0.01 f < U            | 0.01 1 < U      | 0.01 1 < U       | 0.01 t < U       |                  |
| VOLATILES         | Xylenes, Total              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U        | 0.005 1 < U      | 0.005 f < U           | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                  |

Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas


Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-82

Concentrations of Chemicals in Soil Samples Associated with Sump 082

| [SUMP] = SUMPU82<br>LOCATION CODE |  | 35SUMP081-SB01     | 35SUMP081-SB01      | 35SUMP082-SB01         | 35SUMP082-SB01        | 47SB24           | 47SB24           | 47SB25                 | 47\$B25  | LH-DL81-01               | LHS-3-24                 | LH-S81-01                | LH-581-01                  |
|-----------------------------------|--|--------------------|---------------------|------------------------|-----------------------|------------------|------------------|------------------------|--|--------------------------|--------------------------|--------------------------|----------------------------|
| SAMPLE_NO                         |  | SUMP081-SB-01-01   | SUMP081-SB-01-02    | SUMP082-SB-01-01       | SUMP082-SB-01-02      | 47SB24(0-0_5)    | 47SB24(1-2)      | 47SB25(0-0_5)          | 47SB25(1-2)  | LH-DL81-01               | LHS-3-24                 | LH-S81-01_1<br>7/29/1993 | LH-581-01_2<br>7/23/1993   |
| SAMPLE_DATE<br>DEPTH              |  | 0-0Ft              | 9/18/2006<br>0-0 Ft | 9/18/2006<br>0 - 0 Ft  | 9/18/2006<br>0-0Fl    | 0 - 0.5 Ft       | 1-2 Ft           | 0 - 0.5 Ft             | 1-2 Ft   | 2-4F1                    | 0 - 0.5 Ft               | 0.5 - 2 Ft               | 5-7 Ft                     |
| SAMPLE_PURPOSE                    |  | REG                | REG                 | REG                    | REG                   | REG              | REG              | REG<br>Reput DII LO VO | REG  | REG<br>Boord Df LO VO    | REG<br>Portet DI LO VO   | REG<br>Result DIL LO VO  | REG<br>Recult Dil 10 VO    |
| Test Group<br>EXPLOSIVES          | Parameter (Units = mg/kg)<br>2.4.6-Trinitrotoluene         | Hesult DHL LQ VQ   | Hesult DIL LO VO    | Hesult Dal LQ VQ       | HESUIT DIL LO VO      | Hestar Dil LQ VQ | HESTERIUIL LU VQ | Hesur Dil LQ VQ        | HESON ON LU VU   | HESUIDIL LO VO           | 0.22 1 < U               | Result DIE LO VO         | NESOK DAL LO VO            |
| EXPLOSIVES                        | 2,4-Dinitrotoluene   | 1                  |                     |                        |                       |                  |                  | -                      |  | 0.33 1 < U               | 0.22 1 < U               | 0.33 1 < U               | 0.33 t< U                  |
| EXPLOSIVES                        | 2,6-Dinitrotoluene   |                    |                     |                        |                       |                  |                  |                        |  | 0.33 1< U                | 0.24 1 < U<br>0.46 1 < U | 0.33 f < U               | 0.33 1 < U                 |
| EXPLOSIVES                        | HMX  |                    |                     |                        |                       |                  |                  |                        |  |                          | 2 1 < U                  |                          |                            |
| EXPLOSIVES                        | m-Nitrotoluene   |                    |                     |                        |                       |                  |                  |                        |  |                          | 0.91 I< U                |                          |                            |
| EXPLOSIVES<br>EXPLOSIVES          | Nitrobenzene   | ł                  |                     |                        |                       |                  |                  |                        |  |                          | 0.91 1 < U               |                          |                            |
| EXPLOSIVES                        | p-Nitrotoluene   |                    |                     |                        |                       |                  |                  |                        |  |                          | 2.7 1 < U                |                          |                            |
| EXPLOSIVES                        | RDX  |                    |                     |                        |                       |                  |                  |                        |  |                          | 0.99 1 < U<br>0.68 1 < U |                          |                            |
| EXPLOSIVES<br>METALS              | i etryi<br>Aluminum  | 19200              | 5640 1              | 6490 1                 | 7750 1                |                  |                  |                        |  | 10400 1                  | 7530 1                   | 6860 1                   | 26500 1                    |
| METALS                            | Antimony   | 0.122 U UJL        | 0.118 1 U UJL       | 0.114 1 U UJL          | 0.113 1.U UJL         |                  |                  |                        |  | 3 1< U                   | 10.7 1 < UJ              | 3 1< U                   | 3 t< U                     |
| METALS                            | Arsenic  | 3.95               | 4.21 1              | 2.31 1                 | 0.2 1 J J             |                  |                  |                        |  | 1 1 < U                  | 0.97 1 J<br>4170 1       | 2.3 1<br>667 1           | 1:7 1<br>129 1             |
| METALS                            | Banum<br>Bervilium   | 0.521              | 1 1                 | 0.465 1                | 1.04 1                |                  |                  |                        |  |                          | 400 1                    |                          |                            |
| METALS                            | Cadmium  | 0.0881 J J         | 0.0832 1 J J        | 0.103 1 J J            | 0.0753 1 J J          |                  |                  |                        |  | 1 1< U                   | 1.1 1 ≺ U                | t 1< U                   | 1 I< U                     |
| METALS                            | Calcium  | 472                | 458 1               | 780 1                  | 319 1                 |                  |                  |                        |  | 1630 1<br>16-6 1         | 2760 1<br>144 1 .[       | 783 1                    | 1660 1<br>31.6 1           |
| METALS                            | Cobalt   | 1.97 JL            | 16.6 1 JL           | 4.74 t JL              | 11.8 1 JL             |                  |                  |                        |  | 9.3 1                    | 4.7 t                    | 7.7 1                    | 9.9 1                      |
| METALS                            | Copper   | 7.92               | 4.08 1              | 5.45 1                 | 5.83 1                |                  |                  |                        |  | 5.4 1                    | 22.7 1                   | 2.6 1                    | 6.7 1                      |
| METALS                            | iron   | 48400              | 12200 1             | 10500 1                | 16700 1               |                  |                  |                        |  | 13800 1                  | 12500 1<br>60.9 1        | 15100 1<br>7.1 t         | 26300 1<br>10 1            |
| METALS                            | Magnesium  | 1020               | 737 1               | 537 1                  | 1000 1                |                  |                  |                        |  | 1170 1                   | 1660 1                   | 409 1                    | 1900 1                     |
| METALS                            | Manganese  | 59.1 J             | 166 t J             | 131 1 J                | 55.8 t J              |                  |                  |                        |  | 469 1                    | 211 1                    | 337 1                    | 179 1                      |
| METALS<br>METALS                  | Mercury<br>Nickel  | D.0678 J J<br>7.06 | 0.29 1 U<br>13.4 1  | 0.0137 1 J J<br>5.45 1 | 0.293 1 U<br>19.4 1   |                  |                  |                        |  | 0.1 1 2 0                | 0.79 1                   | 0.1 1 4 0                |                            |
| METALS                            | Potassium  | 595 JH             | 302 1 JH            | 284 1 JH               | .374 1 JH             |                  |                  |                        |  | 675 1                    | 495 1                    | 359 1                    | 1270 1                     |
| METALS                            | Selenium   | 0.321 JL           | 0.15 1 JL           | 0.264 1 UJL            | 0.225 1 U UJL         |                  |                  |                        |  | 1 1< U                   | 0.36 1 J                 | 1 1< U                   | 1 1 < 1                    |
| METALS                            | Silver<br>Sodium   | 1.76 U<br>15.4 J J | 1.8 10<br>270 1     | 60.3 1                 | 1.64 TU<br>215 1      |                  |                  |                        |  |                          |                          |                          | 1 12 0                     |
| METALS                            | Strontium  |                    |                     |                        |                       |                  |                  |                        |  | 24.9 1                   | 889 1                    | 8.9 1                    | 30.3 1                     |
| METALS                            | Thallium   | 0.0759             | 0.0558 1            | 0.0406 1               | 0.0399 1<br>20.2 t IH |                  |                  |                        |  |                          | 53,6 1 < U               |                          |                            |
| METALS                            | Zinc   | 28.3 JH            | 41.6 1 JH           | 16.1 1 JH              | 43.7 1 JH             |                  |                  |                        |  | 42.4 1                   | 106 1                    | 19.5 1                   | 44.9 1                     |
| PERC                              | Perchlorate  |                    |                     |                        |                       | 0.0056 1 < U     | 0.00601 1 < U    | 0.00552 1 < U          | 0.00644 t <u< th=""><th></th><th>0.54 4 11</th><th></th><th>600 1. U</th></u<> |                          | 0.54 4 11                |                          | 600 1. U                   |
| SEMIVOLATILES                     | 1,2,4-Trichlorobenzene<br>1,2-Dichlorobenzene              |                    |                     |                        |                       |                  |                  |                        |  | 0.33 1< 0<br>0.33 1< 0   | 0.51 I< U<br>0.51 I< U   | 0.33 I< 0<br>0.33 I< U   | 0.33 1 < 0<br>0.33 1 < 0   |
| SEMIVOLATILES                     | 1,3-Dichiorobenzene  |                    |                     |                        |                       |                  |                  |                        |  | 0.33 1< U                | 0.51 1 < U               | 0.33 1< U                | 0.33 1 < 0                 |
| SEMIVOLATILES                     | 1,4-Dichtorobenzene  |                    |                     |                        |                       |                  |                  |                        | -  | 0.33 1 < U               | 0.51 1 < U               | 0.33 1 < U               | 0.33 t < U                 |
| SEMIVOLATILES<br>SEMIVOLATILES    | 2,4,5-1 achiorophenol<br>2,4,6-Trichlorophenol             |                    |                     |                        |                       |                  |                  |                        |  | 0.33 1 < U               | 0.51 1 < U               | 0.33 1 < U               | 0.33 1 < U                 |
| SEMIVOLATILES                     | 2,4-Dichlorophenol   |                    |                     |                        |                       |                  |                  |                        |  | 0.33 t< U                | 0.51 i < U               | 0.33 1 < U               | 0.33 1 < U                 |
| SEMIVOLATILES                     | 2,4-Dimethylphenol   | }                  |                     |                        |                       |                  |                  |                        |  | 0.33 1 < U<br>165 1 < U  | 0.51 1< U<br>26 1< U     | 0.33 1< U<br>165 1< U    | 0.33 1 < U<br>1.65 1 < U   |
| SEMIVOLATILES                     | 2,4-Dinitrotoluene   |                    |                     |                        | -                     |                  |                  |                        |  |                          | 0.51 f < U               |                          |                            |
| SEMIVOLATILES                     | 2,6-Dinitrotoluene   |                    |                     |                        |                       |                  |                  | -                      |  | 0.00 4 14                | 0.51 1 < U               | 0.00 1 1                 | 0.00 1                     |
| SEMIVOLATILES                     | 2-Chloronaphthalene  |                    |                     |                        |                       |                  |                  |                        |  | 0.33 1 < U<br>0.33 1 < U | 0.51 1< U                | 0.33 I < U<br>0.33 I < U | 0.33 I< U<br>0.33 I< U     |
| SEMIVOLATILES                     | 2-Methylnaphthalene  |                    |                     |                        |                       |                  |                  |                        |  | 0.33 1 < U               | 0.51 1 < U               | 0.33 1 < U               | 0.33 1< U                  |
| SEMIVOLATILES                     | 2-Methylphenot   |                    |                     |                        |                       |                  |                  |                        |  | 0.33 1 < U               | - 0.51 1 < U             | 0.33 1 < U               | 0.33 1 < U                 |
| SEMIVOLATILES                     | 2-Nitroanikne<br>2-Nitroahenol                             |                    |                     |                        |                       |                  | -                |                        |  | 0.33 1 < U               | 0.51 1 < U               | 0.33 1 < U               | 0.33 1 < U                 |
| SEMIVOLATILES                     | 3,3'-Dichlorobenzidine                                     |                    |                     |                        |                       |                  | -                |                        |  | 0.65 1< U                | 1 1< U                   | 0.65 1 < U               | 0.65 1 < U                 |
| SEMIVOLATILES                     | 3-Nitroaniline   | <i>i</i> .         |                     |                        |                       |                  |                  |                        |  | 1.65 1 < U               | 2.6 1 < U<br>2.6 1 < U   | 1.65 1 < U               | 1.65 1 < U<br>1.65 1 < U   |
| SEMIVOLATILES                     | 4.6-Difilito-2-ineutyipoenoi<br>4-Bromophenyl phenyl ether |                    |                     |                        |                       |                  |                  |                        |  | 0.33 1 < U               | 0.51 1 < U               | 0.33 t < U               | 0.33 1 < U                 |
| SEMIVOLATILES                     | 4-Chloro-3-methylphenol                                    |                    |                     |                        |                       |                  |                  |                        |  | 0.65 1 < U               | 0.51 1 < U               | 0.65 1 < U               | 0.65 1 < U                 |
| SEMIVOLATILES                     | 4-Chloroaniline  |                    |                     |                        |                       |                  |                  |                        |  | 0.65 1 < U<br>0.33 1 < U | 0.51 1< U<br>0.51 t< ∺   | 0.65 1 < U<br>0.33 1 < U | 43.65 1.< U<br>0.33 1.< I⊁ |
| SEMIVOLATILES                     |  |                    |                     |                        |                       |                  |                  |                        |  | 0.33 1 < U               | 0.51 1 < U               | 0.33 1 < U               | 0.33 t < U                 |
| SEMIVOLATILES                     | 4-Nitroaniline   | 1                  |                     |                        |                       |                  |                  |                        | •  | 1.65 1 < U               | 2.6 1 < V                | 1.65 1 < U               | 1.65 1 < U                 |
| SEMIVOLATILES                     | 4-Nitrophenol<br>Acenantithene                             |                    |                     |                        |                       |                  |                  |                        |  | 1.⊎s 1 < U<br>0.33 1 < U | 2.6 1 < 0                | 1∴oo i< U<br>0.33 i< U   | i.es i< U<br>0.33 î< U     |
| SEMIVOLATILES                     | Acenaphthylene   |                    |                     |                        |                       | -                | -                |                        |  | 0.33 1 < U               | 0.51 1 < U               | 0.33 1 < U               | 0.33 t< U                  |

1

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-82 Concentrations of Chemicals in Soil Samples Associated with Sump 082

| [SUMP] = SUMP082 |                               |                  |                   | ••••••           |                  |                  |                  |                  |                  |                  |                  |                    |                  |
|------------------|-------------------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|------------------|
| LOCATION_CODE    |                               | 35SUMP081-SB01   | 35SUMP081-SB01    | 35SUMP082-SB01   | 35SUMP082-SB01   | 47SB24           | 47SB24           | 47SB25           | 47SB25           | LH-DL81-01       | LHS-3-24         | LH-S81-01          | LH-S81-01        |
| SAMPLE_NO        |                               | SUMP081-S8-01-01 | SUMP081-SB-01-02  | SUMP082-SB-01-01 | SUMP082-SB-01-02 | 47SB24(0-0_5)    | 47SB24(1-2)      | 47SB25(0-0_5)    | 47SB25(1-2)      | LH-D181-01       | LHS-3-24         | LH-S81-01_1        | LH-S81-01_2      |
| SAMPLE_DATE      |                               | 9/18/2006        | 9/18/2006         | 9/18/2006        | 9/18/2006        | 6/4/2000         | 6/4/2000         | 6/4/2000         | 6/4/2000         | 7/23/1993        | 1/10/1995        | 7/23/1993          | 7/23/1993        |
| DEPTH            |                               | 0-0 Ft           | 0-0 Ft            | 0-0Ft            | 0 - 0 Ft         | 0 - 0.5 Ft       | 1-2 Ft           | 0 - 0.5 Ft       | 1-2Ft            | 2 - 4 Ft         | 0 - 0.5 Ft       | 0.5 - 2 Ft         | 5-7Ft            |
| SAMPLE_PURPOSE   |                               | REG              | REG               | REG              | REG              | REG              | REG              | REG              | REG              | REG              | REG              | REG                | REG              |
| Test Group       | Parameter (Units = mg/kg)     | Result DIL LO VQ | Result DIL. LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VC | 2 Result DIL LQ VQ | Result DIL LQ VQ |
| SEMIVOLATILES    | Anthracene                    |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < U       | 0.51 1< U        | 0.33 I< U          | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(a)anthracene            |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < Ü       | 0.51 1 < U       | 0.33 1< U          | 0.33 1< U        |
| SEMIVOLATILES    | Benzo(a)pyrene                |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U         | 0.33 1 < 1       |
| SEMIVOLATILES    | Benzo(b)#uoranthene           |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < U       | 0.18 1 J         | 0.33 I< U          | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(ghi)perylene            |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U         | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(k)fluoranthene          |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < U       | 0.082 1 J        | 0.33 1< U          | 0.33 1 < U       |
| SEMIVOLATILES    | Benzoic Acid                  |                  |                   |                  |                  |                  |                  |                  |                  | 1.65 1 < U       | 2.6 1 < U        | 1.65 1 < U         | 1.65 1< U        |
| SEMIVOLATILES    | Benzyl Alcohot                |                  |                   |                  |                  |                  |                  |                  |                  | 0.65 1 < U       | 0.51 1 < U       | 0.65 1 < U         | 0.65 1< U        |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane    |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 t< U        | 0.51 1 < U       | 0.33 1 < U         | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether       |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1< U          | 0.33 1< U        |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether   |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U         | 0.33 1< U        |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate    |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1< U        | 0.22 1 J         | 0.33 1 < U         | 0.33 t< U        |
| SEMIVOLATILES    | Butyl benzyl phthalate        |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < U       | 0.51 1< U        | 0.33 1 < U         | 0.33 1< U        |
| SEMIVOLATILES    | Chrysene                      |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1< U        | 0.51 1 < U       | 0.33 1 < U         | 0.33 I< U        |
| SEMIVOLATILES    | Dibenzo/a.hlanthracene        |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1< U        | 0.51 1 < U       | 0.33 1 < U         | 0.33 1 < 0       |
| SEMIVOLATILES    | Dibenzokvan                   |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < U         | 0.33 1< U        |
| SEMIVOLATIKES    | Diettyd obtbalate             |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1< U        | 0.51 1 < U       | 0.33 1 < U         | 0.33 1< U        |
| SEMINOLATILES    | Directly proceeds             |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < U       | 0.13 1 J         | 0.33 1 < U         | 0.33 1< U        |
| SEMIVOLATILES    | dia Putui obtagata            |                  |                   |                  |                  |                  |                  |                  |                  | 0.383 1          | 0.51 1 < U       | 0.656 1            | 0.9 1            |
| CEMMOLATILES     | di a Oatul attalata           |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < 1       | 0.51 t < U       | 0.33 t< U          | 0.33 1< U        |
| SEMIVOLATILES    |                               |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 4 1       | 0.065 1 .1       | 0.33 t< U          | 0.33 1 < U       |
| SEMIVOLATILES    | Flucianaisene                 |                  |                   |                  |                  |                  |                  |                  |                  | 0.99 1 4 1       | 0.53 1 4 1       | 0.33 1 < 11        | 033 t< U         |
| SEMIVOLATILES    | Frierene                      |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < 11      | 051 1 4 11       | 0.33 1 < 11        | 0.33 1 < 11      |
| SEMIVULATILES    | Hexachiorobenzene             |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < 11      | 0.51 1 4         |                    | 633 1 4 1        |
| SEMIVULATILES    | Hexachiofobutadiene           |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 4 1       | 0.51 1 4         | 0.33 1 < 1         | 0.33 1 4 11      |
| SEMIVOLATILES    | Hexachiorocyclopentackene     |                  |                   |                  |                  |                  |                  |                  |                  |                  | 0 >1 10.0        | 0.33 1 < 11        | 0.33 1 < 11      |
| SEMIVOLATILES    | Hexachioroethane              |                  |                   |                  |                  |                  |                  |                  |                  | 0.00 1 4 11      | 0.51 1 1         | 0.33 1 < 1         | 0.33 1 4         |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene        |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 4 0       | 0.51 1 4         | 0.00 1 4 1         | 0.33 ( 0         |
| SEMIVOLATILES    | Isophorone                    |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < 0       | 0.51 1< 0        | 0.03 1 4 0         | 0.33 1 4 11      |
| SEMIVOLATILES    | Naphthalene                   |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < 0       | 0.51 1 < 17      | 0.33 1< 0          | 0.33 1 4 1       |
| SEMIVOLATILES    | Nitrobenzene                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < 0       | 0.51 1< 0        | 0.33 1< 0          | 0.33 1 4 0       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine    |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1 < 0         | 0.33 1 < 0       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine        |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < U       | 0.51 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0       |
| SEMIVOLATILES    | Pentachlorophenol             |                  |                   |                  |                  |                  |                  |                  |                  | 1.65 1 < U       | 2.6 1 < U        | 1.65 1 < U         | 1.65 1 < 0       |
| SEMIVOLATILES    | Phenanthrene                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1< U        | 0.51 1 < U       | 0.33 1 < U         | 0.33 1 < 0       |
| SEMIVOLATILES    | Phenof                        |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 < U       | 0.51 1 < U       | 0.33 1< U          | 0.33 1 < U       |
| SEMIVOLATILES    | Pyrene                        |                  |                   |                  |                  |                  |                  |                  |                  | 0.33 1 <         | 0.08 1 J         | 0.33 1 < U         | 0.33 1 < U       |
| VOLATILES        | 1,1,1,2-Tetrachloroethane     |                  | 0.00489 ‡U        |                  | 0.00458 1 U      |                  |                  |                  |                  |                  | 0.015 1 < U      |                    |                  |
| VOLATILES        | 1, t, t-Trichloroethane       |                  | 0.00489 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U        | 0.005 1 < U      |
| VOLATILES        | 1,1,2,2-Tetrachloroethane     |                  | 0.00489 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1< U       | 0.005 1 < U        | 0.005 1 < U      |
| VOLATILES        | 1,1,2-Trichloroethane         |                  | 0.00489 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U        | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichloroethane            |                  | 0.00489 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 t< U       | 0.008 1 < U      | 0.005 1 < U        | 0.005 1 ≺ U      |
| VOLATILES        | 1,1-Dichloroethene            |                  | 0.00469 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 t< U         | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichloropropene           |                  | 0.00489 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                    |                  |
| VOLATILES        | 1,2,3-Trichlorobenzene        |                  | 0.00489 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                    |                  |
| VOLATILES        | 1,2,3-Trichloropropane        |                  | 0.00489 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  |                  | 0.015 1 < U      |                    |                  |
| VOLATILES        | 1,2,4-Trichlorobenzene        |                  | 0.00489 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                    |                  |
| VOLATILES        | 1,2,4-Trimethylbenzene        |                  | 0.00489 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                    |                  |
| VOLATILES        | 1,2-Dibromo-3-chloropropane   |                  | 0.00489 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  |                  | 0.031 t< U       |                    |                  |
| VOLATILES        | 1,2-Dibromoethane             |                  | 0.00489 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  |                  | 0.031 1 < U      |                    |                  |
| VOLATILES        | 1.2-Dichlorobenzene           |                  | 0.00489 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  |                  |                  |                    |                  |
| VOLATILES        | 1.2-Dichloroethane            |                  | 0.00489 1 U       |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1< U       | 0.005 1 < U        | 0.005 t< U       |
| VOLATILES        | 1 2-Dichloroethene            |                  |                   |                  |                  |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U        | 0.005 1 < U      |
| VOLATILES        | 1 2-Dichloropronane           |                  | 0-00489 1-U       |                  | 0.00458 1 U      |                  |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U      | 0.005 1 < U        | 0.005 1 < U      |
|                  | 1.2 Dimethylanzena (n_Yulana) |                  | 0.00489 1.11      |                  | 0.00458 1 11     |                  |                  |                  |                  |                  |                  |                    |                  |
| VOLATILES        | 1 3 5 Trimethylhonzono        |                  | 0.00489 111       |                  | 0.00458 111      |                  |                  |                  |                  |                  |                  |                    |                  |
| VOLATICES        | 1 2 Dichlorobenzena           |                  | 0.00480 111       |                  | 0.00458 1.11     |                  |                  |                  |                  |                  |                  |                    |                  |
| VOLATIES         | 1 2 Dichloropropage           |                  | 0.00489 111       |                  | 0.00458 1 11     |                  |                  |                  |                  |                  |                  |                    |                  |
|                  | t A Dichlorohonzono           |                  | 0.00400 10        |                  | 0.00458 111      |                  |                  |                  |                  |                  |                  |                    |                  |
| VULNILED         |                               |                  | 0.00403 FU        |                  | 0.00459 11       |                  |                  |                  |                  |                  |                  |                    |                  |
| VULATILES        | e,c-cucituorogropane          |                  | 0.00409 1.0       |                  | 0.00400 10       |                  |                  |                  |                  | 0.05 1 2 11      | 0.015 1 2 13     | 0.05 1 2 13        | 0.05 tz H        |
| VULATILES        |                               |                  | 0.00976 10        |                  | 0100010 111      |                  |                  |                  |                  | 0.00 1 1 1       | 0.015 1 2 12     | 0.05 1 2 1         | 0.00 / 1 2 11    |
| VULATILES        | 2-Crawtelling within earlier  |                  | 0.00970 FU        |                  | 0.00310 1.0      |                  |                  |                  |                  | 0.01 15 0        |                  | V.01 / X U         |                  |
| VOLATILES        |                               |                  | 0.00489 PU        |                  | 0.00016 11       |                  |                  |                  |                  | 0.05 1 - 11      | 0.015 1 × U      | 0.05 1 2 13        | 0.05 1 2 11      |
| VOLATILES        | 2-nexanone                    |                  | 0.00978 3.0       |                  | 0.00310 1.0      |                  |                  |                  |                  | 0.00 1 1 0       | 0.013 1< 0       | 0.05 15 0          |                  |
| VOLAHLES         | 2-Propenal                    |                  |                   |                  | A 40.00          |                  |                  |                  |                  |                  | 0.11 14 0        |                    |                  |
| VOLATILES        | 4-Chtorotoluene               | · · ·            | 0.00489 1 U       |                  | V.00458 1 U      |                  |                  |                  |                  |                  |                  |                    |                  |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-82 Concentrations of Chemicals in Soil Samples Associated with Sump 082

| [SUMP] = SUMP082 |                             |                  |            |               |               |                         |                     |                  |                  |                  |                  |   | 111.004.04       | 111 004 04       |
|------------------|-----------------------------|------------------|------------|---------------|---------------|-------------------------|---------------------|------------------|------------------|------------------|------------------|---|------------------|------------------|
| LOCATION_CODE    |                             | 35SUMP081-SB01   | 35SUMP08   | 31-SB01 35SU  | IMP082-SB01   | 35SUMP082-SB01          | 47SB24              | 47SB24           | 47SB25           | 47SB25           | LH-0L81-01       | LHS-3-24  | LH-581-01        | LH-581-01        |
| SAMPLE_NO        |                             | SUMP081-SB-01-01 | SUMP081-S  | SB-01-02 SUMP | 2082-SB-01-01 | SUMP082-SB-01-02        | 475824(0-0_5)       | 47\$B24(1-2)     | 47SB25(0-0_5)    | 47SB25(1-2)      | LH-DL81-01       | LHS-3-24  | LH-S81-01_1      | LH-S81-01_2      |
| SAMPLE_DATE      |                             | 9/18/2006        | 9/18/2     | 006 9         | 18/2006       | 9/18/2006               | 6/4/2000            | 6/4/2000         | 6/4/2000         | 6/4/2000         | 7/23/1993        | 1/10/1995   | 7/23/1993        | 7/23/1993        |
| DEPTH            |                             | 0-0Ft            | 0-0        | R             | 0-0.Ft        | 0-0 Ft                  | 0 - 0.5 Ft          | 1-2Ft            | 0 - 0.5 Ft       | 1-2Ft            | 2 - 4 Ft         | 0 - 0.5 Ft  | 0.5 - 2 Ft       | 5-7Ft            |
| SAMPLE_PURPOSE   |                             | REG              | REC        | 3             | REG           | REG                     | REG                 | REG              | REG              | REG              | REG              | REG   | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result Dil | LQ VQ Resu    | HLDIL LQ VQ   | Result DIL LO V         | Q Result Dill LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ  | Result DIL LO VQ | Result DIL LQ VQ |
| VOLATILES        | Acetone                     |                  | 0.0147     | 1             |               | 0.00916 1 U             |                     |                  |                  |                  | 0.1 1 < U        | 0.015 1 < U   | 0.1 1< U         | 0.1 1< U         |
| VOLATILES        | Acetonitrile                |                  |            |               |               |                         |                     |                  |                  |                  |                  | 0.15 1 < U  |                  |                  |
| VOLATILES        | Acrylenitrile               |                  |            |               |               |                         |                     |                  |                  |                  |                  | 0.15 1 < U  |                  |                  |
| VOLATILES        | Allyl chloride              |                  |            |               |               |                         |                     |                  |                  |                  |                  | 0.015 1 < U   |                  |                  |
| VOLATILES        | Benzene                     |                  | 0.00489    | 1 V           |               | 0.00458 1 U             |                     |                  |                  |                  | 0.005 1 < 13     | 0.008 1 < U   | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromobenzene                |                  | 0.00489    | 1 U           |               | 0.00458 1 U             |                     |                  |                  |                  |                  |   |                  |                  |
| VOLATILES        | Bromochloromethane          |                  | 0.00489    | 1 U           |               | 0.00458 t U             |                     |                  |                  |                  |                  |   |                  |                  |
| VOLATILES        | Bromodichloromethane        |                  | 0.00489    | 10            |               | 0.00458 1 U             |                     |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U   | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromotorm                   |                  | 0.00489    | 10            |               | 0.00458 1 U             |                     |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U   | 0.005 1 < U      | 0.005 1< U       |
| VOLATILES        | Bromomethane                |                  | 0.00978    | 1 U           |               | 0.00916 1 U             |                     |                  |                  |                  | 0.01 1 < U       | 0.015 t < U   | 0.01 1< U        | 0.01 1< U        |
| VOLATILES        | Carbon disulfide            |                  | 0.00489    | ſŬ            |               | 0.00458 1 U             |                     |                  |                  |                  | 0.005 t< U       | 0.008 t< U  | 0.005 t< U       | 0.005 1 < U      |
| VOLATILES        | Carbon tetrachtoride        |                  | 0.00489    | 1 U           |               | 0.00458 1 U             |                     |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U   | 0.005 1 < U      | 0.005 t< U       |
| VOLATILES        | Chlorobenzene               |                  | 0.00489    | tU            |               | 0.00458 1 U             |                     |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U   | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloroethane                |                  | 0.00978    | 1 U           |               | 0.00916 1 U             |                     |                  |                  |                  | 0.01 1.< U       | 0.015 1 < U   | 0.01 1< U        | 0.01 1< U        |
| VOLATILES        | Chloratorm                  |                  | 0.00489    | 10            |               | 0.00458 1 U             |                     |                  |                  |                  | 0.005 1 < U      | 0.008 1< U  | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloromethane               |                  | 0.00978    | 10            |               | 0.00916 1 U             |                     |                  |                  |                  | 0.01 1< U        | 0.015 1 < U   | 0.01 1 < U       | 0.01 1 < U       |
| VOLATH ES        | Chloroprene                 |                  |            |               |               |                         |                     |                  |                  |                  |                  | 0.15 1 < U  |                  |                  |
| VOLATILES        | cis-1 2-Dichloroethene      |                  | 0.00489    | ម             |               | 0.00458 1 U             |                     |                  |                  |                  |                  |   |                  |                  |
| VOLATILES        | cis-1 3-Dichloroponene      |                  | 0.00489    | 10            |               | 0.00458 1 U             |                     |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U   | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Ditromochloromethane        |                  | 0.00489    | 10            |               | 0.00458 1 U             |                     |                  |                  |                  | 0.005 1 < U      | 0.008 1 <  ₩  | 0.005 1 < 0      | 0.005 1 < U      |
| VOLATILES        | Dibromomethane              |                  | 0.00489    | 1.11          |               | 0.00458 1 1             |                     |                  |                  |                  |                  | 0.031 1 < U   |                  |                  |
| VOLATILES        | Dichlorodifluoromethane     |                  | 0.00978    | 111           |               | 0.00916 1.U             |                     |                  |                  |                  |                  | 0.031 1 < U   |                  |                  |
| VOLATILES        | Ethyl methacodate           |                  | 0.000.0    |               |               |                         |                     |                  |                  |                  |                  | 0.031 1< U  |                  |                  |
| VOLATILES        | Etivikanzana                |                  | 0.00489    | 111           |               | 0.00458 tH              |                     |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U   | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Havachlarabutadiana         |                  | 0.00489    | 1.0           |               | 0.00458 111             |                     |                  |                  |                  |                  |   |                  |                  |
|                  | IODOMETHANE                 |                  | 0.00100    | 10            |               |                         |                     |                  |                  |                  |                  | 0.015 1 < U   |                  |                  |
|                  |                             |                  |            |               |               |                         |                     |                  |                  |                  |                  | 3.1 1 < U   |                  |                  |
| VOLATILES        | transpitterazana            |                  | 0.00480    | 1.11          |               | 0.00458 1.11            |                     |                  |                  |                  |                  |   |                  |                  |
| VOLATILES        | m n-Yulenes                 |                  | 0.00489    | 1.0           |               | 0.00458 1 11            |                     |                  |                  |                  |                  |   |                  |                  |
| VOLATILES        | Methacodonitrile            |                  | 0.00 100   |               |               |                         |                     |                  |                  |                  |                  | 0.031 t< U  |                  |                  |
| VOLATILES        | Methyl isobatyl ketone      |                  | 0.00978    | 14            |               | 0.0091 <del>6</del> 1 U |                     |                  |                  |                  | 0.05 1 < U       | 0.015 1 < U   | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | METHYL METHACRY ATE         |                  | 0.000.0    |               |               |                         |                     |                  |                  |                  |                  | 0.031 1 < U   |                  |                  |
| VOLATILES        | Mathviene chloride          |                  | 0.00489    | 1.0           |               | 0.00458 tl}             |                     |                  |                  |                  | 0.005 t< U       | 0.008 t< U  | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Naohibaiene                 |                  | 0.00978    | 10            |               | 0.00916 tU              |                     |                  |                  |                  |                  |   |                  |                  |
| VOLATILES        | n-BUTYLBENZENE              |                  | 0.00489    | 10            |               | 0.00458 1 U             |                     |                  |                  |                  |                  |   |                  |                  |
| VOLATILES        | n-PROPYI BENZENE            |                  | 0.00489    | tU            |               | 0.00458 1 U             |                     |                  |                  |                  |                  |   |                  |                  |
| VOLATILES        | Pentachloroethane           |                  |            |               |               |                         |                     |                  |                  |                  |                  | 0.031 1< U  |                  |                  |
| VOLATILES        | P-ISOPROPYLTOLIJENE         |                  | 0.00489    | 1.11          |               | 0.00458 1 U             |                     |                  |                  |                  |                  |   |                  |                  |
| VOLATILES        | Propionitrile               |                  |            |               |               |                         |                     |                  |                  |                  |                  | 0.077 1 < U   |                  |                  |
| VOLATILES        | sec-BUTYLBENZENE            |                  | 0.00489    | tU            |               | 0.00458 1 U             |                     |                  |                  |                  |                  |   |                  |                  |
| VOLATILES        | Styrene                     |                  | 0.00489    | 14            |               | 0.00458 1 U             |                     |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U   | 0…005 t< U       | 0.005 1< U       |
| VOLATILES        | tect-BillTYI BENZENE        |                  | 0.00489    | 111           |               | 0.00458 1.U             |                     |                  |                  |                  |                  |   |                  |                  |
| VOLATILES        | Tetrachioroethene           |                  | 0.00489    | 10            |               | 0.00458 1 U             |                     |                  |                  |                  | 0.005 1 < U      | 0.008 1< U  | 0.005 1 < U      | 0.005 t< U       |
| VOLATILES        | Tohuene                     |                  | 0.00489    | 111           |               | 0.00458 1.U             |                     |                  |                  |                  | 0.005 1 < U      | 0.008 1 <u< td=""><td>0.005 1 &lt; U</td><td>0.005 1 &lt; ∛</td></u<> | 0.005 1 < U      | 0.005 1 < ∛      |
| VOLATILES        | trans-1 2-Dichloroethepe    |                  | 0.00489    | 111           |               | 0.00458 1 U             |                     |                  |                  |                  |                  |   |                  |                  |
| VOLATILES        | trans-1 3-Dicbloropropene   |                  | 0.00489    | 10            |               | 0.00458 1 U             |                     |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U   | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | trans-1 4-Dichloro-2-butene |                  |            |               |               |                         |                     |                  |                  |                  |                  | 0.031 1 < U   |                  |                  |
| VOLATILES        | Trichloroethene             |                  | 0.00489    | 1 U           |               | 0.00458 1 U             |                     |                  |                  |                  | 0.005 1 < U      | 0.008 1 < U   | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Trichlorofluoromethane      |                  | 0.00978    | 1 U           |               | 0.00916 1 U             |                     |                  |                  |                  |                  | 0.015 1 < U   |                  |                  |
| VOLATILES        | Vinvi acetate               |                  | 0.00978    | 10            |               | 0.00916 1 U             |                     |                  |                  |                  | 0.05 1 < U       | 0.015 1 < U   | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | Vinyl chloride              |                  | 0.00978    | 10            |               | 0.00916 1 U             |                     |                  |                  |                  | 0.01 1 < U       | 0.015 1 < U   | 0.01 1 < U       | 0.01 1< U        |
| VOLATILES        | Xytenes, Total              |                  |            |               |               | -                       |                     |                  |                  |                  | 0.005 t< U       | 0.008 1 < U   | 0.005 1 < U      | 0.005 1 < U      |
|                  | I                           |                  |            |               |               |                         |                     |                  | · · · · · · .    |                  |                  |   |                  |                  |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-82 Concentrations of Chemicals in Soil Samples Associated with Sump 082

| [SUMP] = SUMP082 |                             |            |         |     |           | посна  | auons      |              | cança | 15 11 50  | ni Saint | NC3 433          | UCIALEU      |            | 002         |            |             |            |          |            |        |           |         |    |
|------------------|-----------------------------|------------|---------|-----|-----------|--------|------------|--------------|-------|-----------|----------|------------------|--------------|------------|-------------|------------|-------------|------------|----------|------------|--------|-----------|---------|----|
| LOCATION_CODE    |                             | LH-S       | 581-01  |     | LH-S      | 81-02  |            | LH-S81-0     | 2     | LH-S      | 81-02    | LH-S             | 82-01        | LH-S8      | 2-01        | LH-S       | 582-01      | LHK        | 582-02   | LH-8       | 82-02  | LH-       | S82-02  |    |
| SAMPLE_NO        |                             | LH-S8      | 81-01_3 |     | LH-S8     | 1-02_1 | 1          | H-S81-02     | 2     | LH-S8     | 1-02_3   | LH-SE            | 32-01_1      | LH-S82     | -01_2       | LH-S       | 82-01_3     | LH-S       | 82-02_1  | LH-S8      | 2-02_2 | 1H-S      | 82-02_3 |    |
| SAMPLE_DATE      |                             | 7/23       | ¥1993   |     | 7/23      | /1993  |            | 7/23/1993    | }     | 7/23      | /1993    | 7/23             | /1993        | 7/23/1     | 993         | 7/2        | 3/1993      | 7/23       | 3/1993   | 7/23       | 1993   | 7/2       | 4/1993  |    |
| DEPTH            |                             | 9-1        | 11 Ft   |     | 0.5       | - 2 Ft |            | 5-7Ft        |       | 9-1       | 11 Ft    | 0.5              | - 2 Ft       | 6-8        | Ft          | 14 -       | 16 Ft       | 2.5        | -4.5 Ft  | 6-         | 8 Ft   | 0         | - 0 Ft  |    |
| SAMPLE_PURPOSE   |                             | R          | EG      |     | R         | EG     |            | REG          |       | RI        | EG       | R                | EG           | RE         | G           | F          | IEG         | F          | NEG      | R          | EG     | F         | ieg     |    |
| Test Group       | Parameter (Units = mg/kg)   | Result Dil | LLQ     | VQ  | Result DI | LLO    | VQ Res     | IN DIL 1     | Q VQ  | Result DI | L LQ VQ  | Result D         | L LQ VO      | Q Result D | L LQ VQ     | Result D   | IL LO VO    | Result D   | AL LQ VQ | Result D   | LLQVQ  | Result D  | LLQ     | VQ |
| EXPLOSIVES       | 2,4,6-Trinitrotolvene       |            |         |     |           |        |            | _            |       |           |          |                  |              |            |             |            |             |            |          |            |        |           |         |    |
| EXPLOSIVES       | 2,4-Dinitrotoluene          | 0.33       | 1 <     | U   | 0.33      | 1<     | U 0.:      | 3 1 <        | < U   | 9.33      | 1< 0     | 0.33             | 1< 0         | 0.33       | 1< U        | 0.33       | 1< 10       | 0.33       | 1< 0     | 0.33       | 1< 0   |           |         |    |
| EXPLOSIVES       | 2,6-Dinitrotokuene          | 0.33       | 1 <     | U   | 0.33      | 1<     | 0 0.3      | 3 14         | < 0   | 0.33      | 1 < U    | 0.33             | 1< 0         | 0.33       | 1< U        | 0.33       | 1< 0        | 0.33       | 1< 0     | 0.33       | 1< 0   |           |         |    |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene  |            |         |     |           |        |            |              |       |           |          |                  |              |            |             |            |             |            |          |            |        |           |         |    |
| EXPLOSIVES       | FMA                         |            |         |     |           |        |            |              |       |           |          |                  |              |            |             |            |             |            |          |            |        |           |         |    |
| EXPLOSIVES       | m-warolouene                |            |         |     |           |        |            |              |       |           |          |                  |              |            |             |            |             |            |          |            |        |           |         |    |
| EXPLOSIVES       | Nitrobenzene                |            |         |     |           |        |            |              |       |           |          |                  |              |            |             |            |             |            |          |            |        |           |         |    |
| EXPLOSIVES       | 0-Nitrotoluene              |            |         |     |           |        |            |              |       |           |          |                  |              |            |             |            |             |            |          |            |        |           |         |    |
| EXPLOSIVES       | b-valaoroineue              |            |         |     |           |        |            |              |       |           |          |                  |              |            |             |            |             |            |          |            |        |           |         |    |
| EXPLOSIVES       | RDX                         |            |         |     |           |        |            |              |       |           |          |                  |              |            |             |            |             |            |          |            |        |           |         |    |
| EXPLUSIVES       | i etryi                     |            |         |     | 5400      |        |            |              |       | 0400      |          | 6666             |              | 01000      |             | 0133       |             | 6700       | 1        | 10000      | 4      | 140       | ٠.      |    |
| METALS           | Additional                  | 13000      | 1<      | 10  | 0400      | 1 <    | ບ ເຊລ<br>ບ | 0 1          |       | 0490      | 1 < 0    | 5030             | 1 - 12       | 21300      | 1<br>1 - 11 | 0040       | 4<br>4 - 11 | 3120       | 1 - 11   | 10200      | 1 2 22 | 547<br>60 | 1.      | н  |
| METALS           | Ambinony                    | 3          | 1 <     | 0   | 3<br>^    | 1 < 1  | U .        | 3 14<br>7 1  | C U   | 10        | 1 1      | . 3<br>10        | 1            | 33         | 1 1         | 2          | 1 1         | 21         | 1        | J<br>1     | 1      | 2         | 12      | 5  |
| METALS           | Arsenc                      | 2.8        | 1       |     | 2         | 1      | 2          | / J          |       | 1.8       | 1        | 2.6              | 1            | 2.2        | 1           | 2.2<br>104 | 1           | 2.4        | 1        | 200        | 1      | 5         | 1.      | 1  |
| METALS           | Bardin                      | 455        | 1       |     | 09.5      | 1      | 2          | 0 1          |       | 00        | 1        | 104              | I I          | 101        | 1           | 104        | •           | 07.3       | 1        | 500        | '      | 5         |         | U  |
| METALS           | Berymont Codmium            |            | • •     |     | 1         | 1      |            |              |       | 1         | 1 - 11   | . 1              | <b>т</b> , и | 1          | t - 11      | 1          | 1 - 11      | 1          | 1 2 8    | t          | 1 - 11 | 10        | 1.      | 31 |
| METALS           | Caloim                      | 1620       | 1 <     | 0   | 1         | 1 4    | U 22       | 1 1 1<br>0 1 | L U   | 1         | 1 4      | 2400             | 1 .          | 1<br>2780  | 1           | 027        | 1 0         | 1860       | 1        | 2180       | 1 0    | 200       | 12      |    |
| METALS           | Chromium                    | 1020       |         |     | 900       | 1      | 22         | 0 i<br>1 1   |       | 11.2      | 1        | 10.2             | 1 ·          | 2100       | 1<br>1      | 11 /       | 1           | 15.2       | 1        | 17.5       | 1      | 10        | 12      | и  |
| METALS           | Caromum                     | 19         | 1       |     | 6.6       | 1      | 10         | . I<br>0 1   |       | 12.0      | 1        | 19.3             | 1            | 22.0       | 1           | 26.2       | 1           | 13.3       | 1        | 11.0       | 1      | 10        | 12      | 11 |
| METALS           | Cepart                      | 12.4       | 1       |     | 0.0       | 1      | 11         | 3 I<br>6 I   |       | 13.9      | 1        | 13.2             | ,<br>,       | 10         | 1           | 30.2       | 1           | 0.0<br>5.7 | 1        | 3.2<br>5.5 | •      | 10        | 1.      | 11 |
|                  | Copper                      | 16200      | 1.      |     | 10100     | 1.2    | 11 160     | 01.          |       | 11100     | 1        | 19600            | ;            | 24200      | •           | 12400      | 1           | 15800      | 1        | 1/000      | •      | 300       | 12      |    |
|                  |                             | 10200      | 1       | U   | 7.0       | 1      | 0 105      | 0 I.<br>2 1  |       | 7         | 1 1      | 0.000            | 1            | - 11 1     | ,<br>,      | 19.7       | 1           | 8.6        | 1        | 14.3       | 1      | 5         | 12      | ы. |
| METALS           | Magosium                    | 10.2       | 1       |     | 201       | 1      | 13         | 2 I<br>0 1   |       | 1230      | 1        | 010              | 1            | 2410       | 1           | 908        | 1           | 962        | 1        | 1390       | 1      | 200       | 1 6     | 13 |
| METALS           | Mannanasa                   | 285        | 1       |     | 274       | 1      | 3          | 3 1          |       | 119       | 1        | 210              | 1            | 127        | 1           | 1070       | 1           | 161        | 3        | 196        | 1      | 10        | 1 <     | U  |
| METALS           | Marcusy                     | £05<br>£1  | 1.      | \$1 | 01        | 12     | и<br>и г   | 1 1          | - 11  | 61        | 1.2 H    | <u>ل</u> ار<br>1 | 1 / 11       | 0.1        | 1 - 11      | 01         | 1 2 11      | 01         | 1 < 1    | 01         | 1 < 11 | 0.2       | 1.      | Н. |
| METALS           | Nickel                      | 0.1        |         | Ŭ.  | 0.1       |        |            |              |       |           |          | 0                |              |            |             |            |             |            |          |            |        |           |         | -  |
| METALS           | Potassium                   | 795        | 1       |     | 317       | 1 .    | 7          | 8 1          |       | 734       | 1        | 526              | 1            | 1250       | 1           | 450        | 1           | 571        | 1        | 690        | 1      | 200       | 1<      | υ  |
| METALS           | Selenium                    | 1          | 1 <     | ŧJ  | 1         | 1 <    | u          | 1 1          | < 11  | 1         | 1< 1/    | 1                | 1< 1/        | 1          | 1< U        | 1          | 1< U        | 1          | 1< U     | 1          | 1< U   | 2         | 1 <     | U  |
| METALS           | Silver                      | 1          | 1 <     | ม   | 1         | 1 <    | UF         | 1 14         | < 1   | 1         | 1< 1     | t                | 1< 1         | 1          | 1< U        | 1          | 1< 1        | 1          | 1< 1     | · 1        | 1< U   | 10        | 1 <     | U  |
| METALS           | Sortium                     |            |         | •   | ·         |        | •          |              |       |           |          |                  | ,            |            |             |            |             |            |          |            |        |           |         |    |
| METALS           | Stradium                    | 27.7       | 1       |     | 8.1       | 1      | 23         | t 8          |       | 19.3      | 1        | 23.8             | 1            | 61.8       | 1           | 21.6       | 1           | 28.6       | 1        | 42         | 1      | 10        | 1<      | U  |
| METALS           | Thallium                    |            |         |     | ••••      |        |            |              |       |           |          |                  |              |            |             |            |             |            |          |            |        |           |         |    |
| METALS           | Vanadium                    |            |         |     |           |        |            |              |       |           |          |                  |              |            |             |            |             |            |          |            |        |           |         |    |
| METALS           | Zinc                        | 36.8       | 1       |     | 13.9      | 1      | 42         | 91           |       | 39.1      | 1        | 43.9             | 1            | 55.5       | 1           | 41.1       | 1           | 29.4       | 1        | 30.8       | 1      | 10        | 1 <     | U  |
| PERC             | Perchiorate                 |            |         |     |           |        |            |              |       |           |          |                  |              |            |             |            |             |            |          |            |        |           |         |    |
| SEMIVOLATILES    | 1.2.4-Trichlorobenzene      | 0.33       | 1 <     | ป   | 0.33      | 1 <    | U 0.       | 3 1.         | < U   | 0.33      | 1< ⊎     | 0.33             | 1< ប         | 0.33       | 1< U        | 0.33       | 1< U        | 0.33       | 1< U     | 0.33       | t< U   |           |         |    |
| SEMIVOLATILES    | 1,2-Dichlorobenzene         | 0.33       | 1 <     | ប   | 0.33      | 1 <    | U 0.       | 3 1.         | < U   | 0.33      | 1< U     | 0.33             | 1< ∛         | 0.33       | 1< U        | 0.33       | 1< U        | 0.33       | 1< U     | 0.33       | 1< Ŭ   |           |         |    |
| SEMIVOLATILES    | 1,3-Dichlorobenzene         | 0.33       | 1 <     | ย   | 0.33      | 1 <    | U 0.       | 3 1.         | < U   | 0.33      | 1< U     | 0.33             | 1< ប         | 0.33       | 1< U        | 0.33       | t< 1/       | 0.33       | 1< U     | 0.33       | 1 < ป  |           |         |    |
| SEMIVOLATILES    | 1,4-Dichlorobenzene         | 0.33       | 1 <     | IJ  | 0.33      | 1<     | U 0.       | 3 1 4        | < U   | 0.33      | t< U     | 0.33             | 1< ⊎         | 0.33       | 1< U        | 0.33       | 1< ប        | 0.33       | 1< U     | 0.33       | 1< U   |           |         |    |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol       | 1.65       | 1<      | ប   | 1.65      | 1 <    | ປ 1,       | 5 1 4        | < U   | 1.65      | t< U     | 1.65             | 1< U         | 1.65       | 1< U        | 1.65       | 1< U        | 1.65       | 1< U     | 1.65       | 1< U   |           |         |    |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol       | 0.33       | 1 <     | U   | 8.33      | 1 <    | U 0.       | 3 1 -        | < บ   | 0.33      | 1< ⊍     | 0.33             | 1< U         | 0.33       | 1< U        | 0.33       | 1< ប        | 0.33       | 1< U     | 0.33       | t< ⊍   |           |         |    |
| SEMIVOLATILES    | 2,4-Dichlorophenol          | 0.33       | 1<      | ป   | 0.33      | 1 <    | U 0.       | 3 1.         | < ت   | 0.33      | t< U     | 0.33             | 1< U         | 0.33       | 1< U        | 0.33       | 1< U        | 0.33       | 1< U     | 0.33       | 1 < U  |           |         |    |
| SEMIVOLATILES    | 2,4-Dimethylphenol          | 0.33       | 1 <     | U   | 0.33      | 1 <    | U 0.       | 3 1 <        | c U   | 0.33      | 1< U     | 0.33             | 1< Ŭ         | 0.33       | 1 < U       | 0.33       | 1< U        | 0.33       | 1< U     | 0.33       | 1< U   |           |         |    |
| SEMIVOLATILES    | 2,4-Dinitrophenol           | 1.65       | 1 <     | U   | 1.65      | 1 <    | U 1.       | 5 1.         | < U   | 1.65      | 1< U     | 1.65             | 1< U         | 1.65       | 1< U        | 1.65       | 1< U        | 1.65       | 1< U     | 1.65       | 1< U   |           |         |    |
| SEMIVOLATILES    | 2,4-Dinitrotoluene          |            |         |     |           |        |            |              |       |           |          |                  |              |            |             |            |             |            |          |            |        |           |         |    |
| SEMIVOLATILES    | 2,6-Dinitrotoluene          |            |         |     |           |        |            |              |       |           |          |                  |              |            |             |            |             |            |          |            |        |           |         |    |
| SEMIVOLATILES    | 2-Chloronaphthalene         | 0.33       | 1 <     | ป   | 0.33      | 1 <    | U 0.       | 3 1.         | < บ   | 0.33      | 1< U     | 0.33             | 1< U         | 0.33       | 1< U        | 0.33       | 1< U        | 0.33       | 1< U     | 0.33       | t< U   |           |         |    |
| SEMIVOLATILES    | 2-Chiorophenol              | 0.33       | 1 <     | U   | 0.33      | 1 <    | U 0.3      | 3 1 4        | < U > | 0.33      | 1< 1     | 0.33             | 1< U         | 0.33       | 1< U        | 0.33       | 1< U        | 0.33       | 1< U     | 0.33       | 1< U   |           |         |    |
| SEMIVOLATILES    | 2-Methylnaphthalene         | 0.33       | 1 <     | U   | 0.33      | 1 <    | U 0.       | 3 1 4        | < U   | 0.33      | 1< U     | 0.33             | 1< U         | 0.33       | 1< U        | 0.33       | 1< U        | 0.33       | 1< U     | 0.33       | t< U∹  |           |         |    |
| SEMIVOLATILES    | 2-Methylphenol              | 0.33       | 1.<     | ម   | 0.33      | 1<     | U 9.3      | 3 1 4        | < U   | 0.33      | 1< U     | 0.33             | 1< U         | 0.33       | 1< U        | 0.33       | 1< U        | 0.33       | 1< U     | 0.33       | t< U   |           |         |    |
| SEMIVOLATILES    | 2-Nitroaniline              | 1.65       | 1 <     | U   | 1.65      | 1 <    | U 1.       | 5 1.4        | < U   | 1.65      | 1< U     | 1.65             | 1< U         | 1.65       | 1< U        | 1.65       | 1< Ü        | 1.65       | 1< U     | 1.65       | 1 < U  |           |         |    |
| SEMIVOLATILES    | 2-Nitropheno!               | 0.33       | 1<      | U   | 0.33      | 1 <    | ບ 0.:      | 3 1 -        | < U   | 0.33      | 1< U     | 0.33             | 1< U         | 0.33       | 1< U        | 0.33       | 1< U        | 0.33       | 1< U     | 0.33       | 1< 1/  |           |         |    |
| SEMIVOLATILES    | 3,3'-Dichlorobenzidine      | 0.65       | 1 <     | U   | 0.65      | 1<     | U 0.       | 5 1.∢        | < U   | 0.65      | 1< U     | 0.65             | 1< ∛         | 0.65       | 1< U        | 0.65       | 1< ប        | 0.65       | 1 < U    | 0.65       | 1< U   |           |         |    |
| SEMIVOLATILES    | 3-Nitroaniline              | 1.65       | 1<      | U   | 1.65      | 1 <    | U 1,       | 5 î.         | ឋ     | 1.65      | 1< U     | 1.65             | 1< U         | 1.65       | 1< U        | 1.65       | 1< ⊍        | 1.65       | 1< U     | 1.65       | 1 < U  |           |         |    |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol  | 1.65       | 1 <     | U   | 1.65      | 1 <    | U 1.       | 5 1.         | < U   | 1.65      | 1< U     | 1.65             | 1< U         | 1.65       | 1< U        | 1.65       | 1< U        | 1.65       | 1< U     | 1.65       | 1< ⊍   |           |         |    |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  | 0.33       | 1 <     | U   | 0.33      | 1 <    | U 0.:      | 3 1 4        | < U   | 0.33      | 1< U     | 0.33             | 1< ⊍         | 0.33       | 1< U        | 0.33       | 1< ប        | 0.33       | 1< U     | 0.33       | 1< じ   |           |         |    |
| SEMIVOLATILES    | 4-Chtoro-3-methylphenol     | 0.65       | 1 <     | U   | 0.65      | 1<     | U 0.       | 5 1 -        | < U   | 0.65      | 1< ⊍     | 0.65             | 1< ∜         | 0.65       | 1 < U       | 0.65       | 1< 1        | 0.65       | 1 < U    | 0.65       | 1 < U  |           |         |    |
| SEMIVOLATILES    | 4-Chioroaniline             | 0.65       | 1 <     | U   | 0.65      | 1 <    | U 0.       | 5 1 <        | < U   | 0.65      | 1< U     | 0.65             | 1< U         | 0.65       | 1< U        | 0.65       | 1< ប្       | 0.65       | 1 < U    | 0.65       | 1< U   |           |         |    |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether | 0.33       | 1 <     | U   | 0.33      | 1<     | U 0.:      | 3 1 4        | < U   | 0.33      | 1< U     | 0.33             | 1< U         | 0.33       | 1< U        | 0.33       | 1< IJ       | 0.33       | 1< U     | 0.33       | 1 < U  |           |         |    |
| SEMIVOLATILES    | 4-Methylphenol              | 0.33       | 1 <     | U   | 0.33      | 1<     | U 0.       | 3 14         | c U   | 0.33      | 1< U     | 0.33             | 1< ∛         | 0.33       | 1< U        | 0.33       | 1< Ü        | 0.33       | 1 < U    | 0.33       | 1< ⊍   |           |         |    |
| SEMIVOLATILES    | 4-Nitroaniline              | 1.65       | 1 <     | U   | 1.65      | 1 <    | U 1.       | 5 1 -        | τU    | 1.65      | 1< ⊍     | 1.65             | 1< U         | 1.65       | 1< U        | 1.65       | 1< U        | 1.65       | 1 < U    | 1.65       | 1< U   |           |         |    |
| SEMIVOLATILES    | 4-Nitrophenol               | 1_65       | 1 <     | U   | 1.65      | 1 <    | U 1.       | 5 1 4        | c (J  | 1.65      | 1< U     | 1.65             | 1< U         | 1.65       | 1< U        | 1.65       | 1< U        | 1.65       | 1< U     | 1.65       | 1< U   |           |         |    |
| SEMIVOLATILES    | Acenaphthene                | 0.33       | 1 <     | U   | 0.33      | 1 <    | Ų 0.:      | 3 1 4        | < U   | 0.33      | 1< U     | 0.33             | 1< Ü         | 0.33       | 1< U        | 0.33       | 1< U        | 0.33       | 1< U     | 0.33       | 1< U   |           |         |    |
| SEMIVOLATILES    | Acenaphthylene              | 0.33       | 1 <     | U   | 0.33      | 1 <    | U 0.       | 3 1 4        | < 0   | 0.33      | 1< U     | 0.33             | 1< U         | 0.33       | 1< U        | 0.33       | 1< U        | 0.33       | 1< U     | 0.33       | 1< U   |           |         |    |



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-82 Concentrations of Chemicals in Soil Samples Associated with Sump 082

| [SUMP] = SUMP082       |                                |                 | Concentra            |                  | as in Sou Sainp   | ies Associated w | ini Sump Voz  |                  |                  |                   |                  |
|------------------------|--------------------------------|-----------------|----------------------|------------------|---|------------------|---|------------------|------------------|-------------------|------------------|
| LOCATION_CODE          |                                | LH-S81-01       | LH-S81-02            | LH-S81-02        | LH-S81-02   | LH-\$82-01       | LH-S82-01   | LH-S82-01        | LH-S82-02        | LH-\$82-02        | LH-S82-02        |
| SAMPLE_NO              |                                | LH-S81-01_3     | LH-S81-02_1          | LH-\$81-02_2     | LH-\$81-02_3  | LH-S82-01_1      | LH-S82-01_2   | LH-S82-01_3      | LH-S82-02_1      | LH-S82-02_2       | LH-S82-02_3      |
| SAMPLE_DATE            |                                | 7/23/1993       | 7/23/1993            | 7/23/1993        | 7/23/1993   | 7/23/1993        | 7/23/1993   | 7/23/1993        | 7/23/1993        | 7/23/1993         | 7/24/1993        |
| DEPTH                  |                                | 9 - 11 Ft       | 0.5 - 2 Ft           | 5-7 Ft           | 9-11 Ft   | 0.5 - 2 Ft       | 6-8FI   | 14 - 16 Ft       | 2.5 - 4.5 Ft     | 6-8 Ft            | 0-0Ft            |
| SAMPLE_PURPOSE         |                                | REG             | REG                  | REG              | REG   | REG              | REG   | REG              | REG              | REG               | REG              |
| Test Group             | Parameter (Units = mg/kg)      | Result DIL LQ V | /Q Result Dil, LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ  | Result OIL LO VO | Result DIL LQ VQ | Result DIL 1.Q VQ | Result DIL LO VO |
| SEMIVOLATILES          | Anthracene                     | 0.33 1 < L      | J 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U  | 0.33 t< U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Benzo(a)anthracene             | 0.33 1 < 0      | J 0.33 t< U          | 0.33 1< U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | -0.33 1< U       | 0.33 1< U        | 0.33 1< U         |                  |
| SEMIVOLATILES          | Benzo(a)ovrene                 | 0.33 1 < 0      | ) -0.33 i< U         | 0.33 1< U        | 0.33 1< U   | 0.33 1< U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Benzo(b)fluoranthene           | 0.33 1< 1       | J 0.33 t< U          | 0.33 1 < U       | 0.33 1 < U  | 0.33 1< U        | 0.33 t< U   | 0.33 1 < U       | 0.33 1< U        | 0.333 t< U        |                  |
| SEMIVOLATILES          | Benzolahikoerdene              | 0.33 1 < 1      | 1 0.33 1 < 1         | 0.33 t< 1        | 0.33 1 < 1  | 0.33 1< U        | 0.33 1< U   | 0.33 1 < 8       | 0.33 1< U        | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Beozo(k)fluoraptene            | 0.33 1 < 1      | 1 0.33 1 < U         | 0.33 t< 1        | 0.33 1 < U  | 0.33 1< U        | 0.33 1< U   | 0.33 1< U        | 0.33 t< U        | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Renzair: Arid                  | 1.65 1 < 1      | J 1.65 t∢ U          | 1.65 1 < 1       | 1.65 1 < U  | 1.65 1 < 0       | 1.65 1 < U  | 1.65 1 < U       | 1.65 1< U        | 1.65 1 < U        |                  |
| SEMBIOLATH ES          | Report Alcohol                 | 0.65 1 c 1      |                      | 065 1 4 1        | 0.65 1 4 11   | 065 1 < 1        | 0.65 1 < U  | 0.65 1 < 1       | 0.65 1 < 1       | 0.65 1 < U        |                  |
| SEMIVOLATILES          | hie/9_Chloroethow/methane      | A33 1 C L       | 1 0.33 1 2 11        | 0.23 1 1         | 033 1 4 1   | 033 1 c il       | 0.33 1 4 11   | 0.33 1 < 1       | 0.33 1 c 11      | 033 t< U          |                  |
| CENTRON ATTLES         | his/2-Chloroathuliathar        | 0.33 1 4        | 1 033 1 / 11         | 0.33 1 4 1       | 0.33 1 4 1  | 0.33 1 4         | 033 1 c H   | 0.33 1 c 11      | 033 1 2 1        | 033 1 2 1         |                  |
| CEMINOLATILED          | bis(2-Chlorois oprom/lather    | 0.39 1< 0       |                      | 0.33 1 0         | 0.30 1 4 0  | 0.33 1 4         | 033 1 1   | 0.33 1 2 13      | 0.33 1 2 1       | 0.33 1 < 0        |                  |
|                        | bis(2 Ethulbourd) philainte    |                 |                      | 0.33 14 0        | 0.35 7 0  | 0.00 7 0         | 0.33 1 4 11   | 0.33 1 < 1       | 0.33 1 < 1       | 0.33 1 4 1        |                  |
|                        | us(2-curymexy)pharanate        |                 | 1 0.33 IC U          | 0.33 1< 0        | 1   | 0.03 1 4 0       | 0.00 1 0  | 0.33 1 < 1       | 0.00 1 0         | 0.33 1 < 0        |                  |
| SEMIVOLATILES          | Butyl benzyl privialate        |                 |                      |                  |   |                  | 0.35 1 0  |                  |                  | 0.22 1 4 1        |                  |
| SEMIVOLATILES          | Chrysene                       |                 |                      |                  | 0.33 1 < 0  | 0.33 1< 0        | 0.33 1 4 1  |                  | 0.33 1 0         | 0.33 1 0          |                  |
| SEMIVOLATILES          | Dibenzo(a,hjanthracene         | 0.33 1 < 0      | J 0.33 3 < U         | 0.33 1 < 0       | 0.33 1 < 0  | 0.33 1 < 0       | 0.33 1 < 0  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1< 0         |                  |
| SEMIVOLATILES          | Dibenzoturan                   | 0.33 1 < 0      | J 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < 0  | 0.33 1< 0        | 0.33 (< 0   | 0.33 1< 0        | 0.33 (< 0        | 0.33 1 < 0        |                  |
| SEMIVOLATILES          | Diethyl phthalate              | 0.33 1 < 1      | J 0.33 1 < U         | 0.33 1 < 0       | 0.33 1 < U  | 0.33 1 < 0       | 0.33 1 < 0  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Dimethyl phthalate             | 0.33 1 < L      | ບ.33 1< ປ            | 0.33 1 < U       | 0.33 1 < U  | 10.33 1 < U      | 0.33 1 < U  | 0.33 T< U        | 0.33 T< U        | 0.33 1 < U        |                  |
| SEMIVOLATILES          | di-n-Butyt phthalate           | 0.33 1 < 1      | J 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.854 1   | 1.14             | 0.33 1 < 0       | 0.356 1           |                  |
| SEMIVOLATILES          | di-n-Octyl phthalate           | 0.33 1 < 1      | J 0⊾33 1< U          | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< 0         |                  |
| SEMIVOLATILES          | Fluoranthene                   | 0.33 1 < U      | J 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | 0.33 t< U        | 0.33 1 < 0       | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Fluorene                       | 0.33 1< L       | J 0…33 t< U          | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U       | 9.33 t< U         |                  |
| SEMIVOLATILES          | Hexachlorobenzene              | 0.33 t< t       | J 0.33 1 < U         | 0.33 1< U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1< U   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Hexachlorobutadiene            | 0.33 t< 1.      | J 0.33 1 < U         | 0.33 1< U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Hexachlorocyclopentadiene      | 0.33 1 < 1      | J 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U  | 0.33 1< U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U       | 0.33 t< U         |                  |
| SEMIVOLATILES          | Hexachloroethane               | 0.33 1 < L      | J 0.33 1 < U         | 0.33 1< U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 <u< th=""><th>0.33 1 &lt; U</th><th>0.33 1 &lt; U</th><th>0.33 1 &lt; U</th><th></th></u<> | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Indena(1,2,3-cd)pyrene         | 0.33 1 < 1      | J 0.33 1≺ U          | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Isophorone                     | 0.33 1< L       | J 0.33 1 < U         | -0.33 1 < .U     | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Naphthalene                    | 0.33 1 < L      | J 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Nitrobenzene                   | 0.33 1 < L      | J 0.33 1 < U         | 0.33 1 < U       | 0.33 1 <u< th=""><th>0.33 1 &lt; U</th><th>0.33 1&lt; U</th><th>0.33 1 &lt; U</th><th>0.33 1 &lt; U</th><th>0.33 1&lt; U</th><th></th></u<> | 0.33 1 < U       | 0.33 1< U   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U         |                  |
| SEMIVOLATILES          | n-Nitroso-di-n-propytamine     | 0.33 1 < L      | J 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U  | 0.33 t< U        | 0.33 1 < U  | 0.33 1< U        | 0.33 1 < U       | 0.33 1 < U        |                  |
| SEMIVOLATILES          | n-Nitrosodiphenylamine         | 0.33 1 < l      | J 0.33 1 < U         | 0.33 1< U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1< U        | 0.33 1< U         |                  |
| SEMIVOLATILES          | Pentachiorophenol              | 1.65 1 < t      | J 1.65 1 < U         | 1.65 1 < Ü       | 1.65 1 < U  | 1.65 t < U       | 1.65 1 < U  | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U        |                  |
| SEMIVOLATILES          | Phenanthene                    | 0.33 1< t       | J 0.33 1≺ U          | 0.33 1 < U       | 0.33 1 < U  | 0.33 t< U        | 0.33 1< U   | 0.33 1 < U       | 0.33 t< U        | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Phenol                         | 0.33 1<         | J 0.33 1< U          | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1< U   | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < U        |                  |
| SEMIVOLATILES          | Pyrene                         | 0.33 1 < L      | J 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U         |                  |
| VOLATILES              | 1,1,1,2-Tetrachlomethane       |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
| VOLATILES              | 1,1,1-Trichloroethane          | 0.005 1< t      | J 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       |                  |
| VOLATILES              | 1,1,2,2-Tetrachloroethane      | 0.005 1 < L     | J 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < Ù      | 0.005 1 < U      | 0.005 1 < U       |                  |
| VOLATILES              | 1,1,2-Trichloroethane          | 0.005 1 < l     | J 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U      | 0.005 1 < V      | 0.005 1 < U       |                  |
| VOLATILES              | 1,1-Dichloroethane             | 0.005 1< t      | J 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U      | 0.005 1 < U   | 0.005 t< U       | 0.005 1 < U      | 0.005 1< U        |                  |
| VOLATILES              | 1,1-Dichloroethene             | 0.005 1< t      | J 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       |                  |
| VOLATILES              | 1,1-Dichloropropene            |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
| VOLATILES              | 1,2,3-Trichlorobenzene         |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
| VOLATILES              | 1,2,3-Trichloropropane         |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
| VOLATILES              | 1,2,4-Trichlorobenzene         |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
| VOLATILES              | 1,2,4-Trimethylbenzene         |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
| VOLATILES              | 1.2-Dibromo-3-chloropropane    |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
| VOLATILES              | 1.2-Dibromoethane              |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
| VOLATILES              | 1.2-Dichlorobenzene            |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
| VOLATILES              | 1.2-Dichloroethane             | 0.005 1 < L     | J 0.005 t< U         | 0.005 1 < U      | 0.005 1 < U   | 0.005 t< U       | 0.005 1 < U   | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       |                  |
| VOLATILES              | 1.2-Dichloroethene             | 0.005 1 < 0     | J 0.005 t< U         | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U      | 0.005 t< U       | 0.005 1 < ₩       |                  |
| VOLATILES              | 1 2-Dichloropopane             | 0.005 1 < 1     | 1 0.005 1 < U        | 0.005 1 < V      | 0.005 1 < U   | 0.005 1 < U      | 0.005 t < U   | 0.005 t< U       | 0.005 t < U      | 0.005 1< U        |                  |
| VOLATILES              | 1 2-Dimethylbenzene (o-Xvlene) |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
| VOLATILES              | 135 Trimethylbenzene           |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
| VOLATILES              | 1.3-Dichiomhenzene             |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
| VOLATILES              | 13-Dichlomoropane              |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
|                        | 1 4 Dichlorobanzana            |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
|                        | 2.2 Dichloroprogage            |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
|                        | 2,2-orchioropropare            | 0.05 1 - 1      | 0.05 1 - 11          | 0.05 1 2 11      | 0.05 1 2 11   | 0.05 1 - 13      | 0.05 1 - 1  | 0.05 tz D        | 805 tz H         | 0.05 1 - 11       |                  |
|                        | 2 Chickonthy view other        |                 | ) 0.00 IK U          | 0.00 1< 0        | 0.00 ICU  | 0.00 IK U        |   | 0.00 (< U        | 0.00 3 4 0       | 0.05 1 0          |                  |
| VOLATILEO<br>VOLATILEO | 2-Oncroegy view east           | . v.vi i< u     | / U.UI IK U          | 0.01 1< 0        | 0.0) IC U   | 0.01 14 0        | 0.01 I < U  | 0.01 1< 0        |                  | 0.07 14 0         |                  |
| VULANLES<br>WOLATILES  | 2-CHRODORDERE                  | 0.05 1.1        | 0.05 1 - 1           | 0.05 1.1         | 0.05 1 . 11   | 0.05 1 - 11      | 0.05 1  | A 05 ( - U       | 0.05 1 . 11      | 0.06 1 2 11       |                  |
|                        |                                | v.va r< U       | J 0.00 IC U          | 0.03 1 < 0       | 0.05 I < U  | 0.00 14 0        |   | 1 >1 COLU        | 0.03 14 0        | 0.05 14 0         |                  |
| VULATILES              | z-ropenai                      |                 |                      |                  |   |                  |   |                  |                  |                   |                  |
| VULAHLES               | 4-UNIOTOIOILIENE               | l               |                      |                  |   |                  |   |                  |                  |                   |                  |



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-82 Concentrations of Chemicals in Soil Samples Associated with Sump 082

| [SUMP] = SUMP082           |                             |           |        |    | •••       |         |    |           |         |    |          |        |    |           |            |    | •         |         |           |         |    |           |        |    |          |         |    |                  |
|----------------------------|-----------------------------|-----------|--------|----|-----------|---------|----|-----------|---------|----|----------|--------|----|-----------|------------|----|-----------|---------|-----------|---------|----|-----------|--------|----|----------|---------|----|------------------|
| LOCATION_CODE              |                             | LH-S      | 81-01  |    | LH-S      | 381-02  |    | LH-S      | 81-02   |    | LH-S     | 81-02  |    | LH-S      | 82-01      |    | LH-S8     | 2-01    | LH-       | S82-01  |    | LH-S      | 82-02  |    | LH-      | 582-02  |    | LH-582-02        |
| SAMPLE_NO                  |                             | LH-S8     | 1-01_3 |    | LH-SE     | 31-02_1 |    | LH-S8     | 81-02_2 |    | LH-SE    | 1-02_3 |    | 1H-\$8    | 2-01_1     |    | LH-S82    | 01_2    | UH-S      | 82-01_3 |    | LH-S8     | 2-02_1 |    | EH-S     | 32-02_2 |    | LH-S82-02_3      |
| SAMPLE_DATE                |                             | 7/23      | /1993  |    | 7/23      | /1993   |    | 7/23      | /1993   |    | 7/23     | /1993  |    | 7/23      | /1993      |    | 7/23/1    | 993     | 7/2       | 3/1993  |    | 7/23      | /1993  |    | 7/2      | V1993   |    | 7/24/1993        |
| DEPTH                      |                             | 9 - 1     | 11 Ft  |    | 0.5       | -2Ft    |    | 5 -       | 7 Ft    |    | 9-       | 11 Ft  |    | 0.5 -     | - 2 Ft     |    | 6-8       | Ft      | \$4       | - 16 Ft |    | 2.5-      | 4.5 Fi |    | 6        | 8 Ft    |    | 0-0 Ft           |
| SAMPLE_PURPOSE             |                             | A         | EG     |    | R         | EG      |    | R         | EG      |    | R        | EG     |    | 8         | EG         |    | REG       | 3       | 5         | REG     |    | R         | EG     |    | F        | EG      |    | REG              |
| Test Group                 | Parameter (Units = mg/kg)   | Result Di | L LQ   | VQ | Result Di | IL LQ   | VQ | Result DI | L 10    | VQ | Result D | LLQ    | VQ | Result DI | LLQ        | VQ | Result Di | L LO VO | Result D  | IL LQ   | VQ | Result DI | LLQ    | VQ | Result D | il lù   | VQ | Result DIL LQ VQ |
| VOLATILES                  | Acetone                     | 0.1       | 1 <    | U  | 0.1       | 1<      | U  | 0.1       | 1 <     | U  | 0.1      | 1<     | U  | 0.1       | 1 <        | U  | 0.1       | 1 < 1   | 0.1       | 1 <     | ប  | 0.1       | 1 <    | U  | 0.1      | 1 <     | U  |                  |
| VOLATILES                  | Acetonitrile                |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Acrylonitrile               |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Allyl chloride              |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Benzene                     | 0.005     | 1 <    | U  | 0.005     | 1 <     | U  | 0.005     | 1 <     | U  | 0.005    | 1<     | U  | 0.005     | 1 <        | บ  | 0.005     | 1< U    | 0.005     | 1 <     | U  | 0.005     | 1 <    | ¥  | 0.005    | 1 <     | U  |                  |
| VOLATILES                  | Bromobenzene                |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Bromochloromethane          |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Bromodichloromethane        | 0.005     | 1 <    | U  | 0.005     | t <     | U  | 0.005     | 1 <     | U  | 0.005    | 1<     | U  | 0.005     | 1<         | U  | 0.005     | 1 < U   | 0.005     | 1<      | U  | 0.005     | 1 <    | U  | 0.005    | 1 <     | U  |                  |
| VOLATILES                  | Bromotorm                   | 0.005     | 1 <    | U  | 0.005     | 1 <     | U  | 0.005     | 1 <     | U  | 0.005    | 1<     | U  | 0.005     | 1 <        | U  | 0.005     | 1< U    | 0.005     | 1 <     | Ų  | 0.005     | 1 <    | U  | 0.005    | 1 <     | U  |                  |
| VOLATILES                  | Bromomethane                | 0.01      | 1 <    | บ  | 0.01      | 1 <     | Û. | 0.01      | 1 <     | ß  | 0.01     | 1<     | U  | 0.01      | 1 <        | U  | 0.01      | 1< ⊍    | 0.01      | 1<      | រ  | 0.01      | 1 <    | U  | 0.01     | 1<      | U  |                  |
| VOLATILES                  | Carbon disulfide            | 0.005     | 1 <    | บ  | 0.005     | 1 <     | U  | 0.005     | 1 <     | U  | 0.005    | 1<     | U  | 0.005     | 1 <        | U  | 0.005     | 1≺ U    | 0.005     | 1 <     | U  | 0.005     | ٢<     | U  | 0.005    | 1<      | U  |                  |
| VOLATILES                  | Carbon tetrachloride        | 0.005     | 1 <    | Ð  | 0.005     | 1 <     | U  | 0.005     | 1 <     | U  | 0.005    | 1<     | U  | 0.005     | 1 <        | U  | 0.005     | 1< U    | 0.005     | 1 <     | U  | 0.005     | 1 <    | U  | 0.005    | 1 <     | U  |                  |
| VOLATILES                  | Chiorobenzene               | 0.005     | 1<     | U  | 0.005     | 1 <     | U  | 0.005     | 1<      | U  | 0.005    | 1<     | U  | 0.005     | 1 <        | U  | 0.005     | 1< 0    | 0.005     | 1 <     | U  | 0.005     | 1 <    | U  | 0.005    | 1 <     | U  |                  |
| VOLATILES                  | Chloroethane                | 0.01      | 1 <    | U  | 0.01      | 1 <     | U  | 10.0      | 1 <     | U  | 0.01     | 1<     | U  | 0.01      | 1 <        | U  | 0.01      | 1< U    | 0.01      | 1 <     | U  | 0.01      | 1<     | U  | 0.01     | 1 <     | U  |                  |
| VOLATILES                  | Chloroform                  | 0.005     | 1 <    | U  | 0.005     | 1 <     | U  | 0.005     | 1<      | U  | 0.005    | 1<     | U  | 0.005     | <b>1</b> < | U  | 0.005     | 1< Ü    | 0.005     | 1 <     | U  | 0.005     | 1 <    | U  | 0.005    | 1 <     | ប  |                  |
| VOLATILES                  | Chloromethane               | 0.01      | 1 <    | U  | 0.01      | 1 <     | U  | 0.01      | 1 <     | ម  | 0.01     | 1 <    | U  | 0.01      | 1 <        | U  | 0.01      | 1< 1    | 0.01      | 1 <     | U  | 0.01      | 1 <    | Ð  | 0.01     | 1 <     | U  |                  |
| VOLATILES                  | Chloroprene                 |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | cis-1,2-Dichloroethene      |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | cis-1,3-Dichloropropene     | 0.005     | 1 <    | U  | 0.005     | 1 <     | U  | 0.005     | 1 <     | U  | 0.005    | 1 <    | U  | 0.005     | 1 <        | U  | 0.005     | 1< ⊍    | 0.005     | 1 <     | U  | 0.005     | 1 <    | υ  | 0.005    | 1 <     | U  |                  |
| VOLATILES                  | Dibromochtoromethane        | 0.005     | 1 <    | U  | 0.005     | 1<      | U  | 0.005     | 1<      | U  | 0.005    | 1 <    | U  | 0.005     | 1 <        | U  | 0.005     | 1< U    | 0.005     | 1 <     | ป  | 0.005     | 1 <    | U  | 0.005    | 1 <     | Û  |                  |
| VOLATILES                  | Dibromomethane              |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Dichlorodifluoromethane     |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Ethyl methaciylate          |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Elhyibenzene                | 0.005     | 1<     | U  | 0.005     | 1 <     | U  | 0.005     | 1 <     | U  | 0.005    | 1 <    | บ  | 0.005     | 1 <        | U  | 0.005     | 1 < U   | 0.005     | 1 <     | ប  | 0.005     | 1 <    | U  | 0.005    | 1 <     | ย  |                  |
| VOLATILES                  | Hexachlorobutadiene         |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | IODOMETHANE                 |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | ISOBUTYL ALCOHOL            |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Isopropylbenzene            |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | m,p-Xylenes                 |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Methacrylonitrile           |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Methyl isobutyl ketone      | 0.05      | 1 <    | U  | 0.05      | t <     | U  | 0.05      | 1<      | U  | 0.05     | 1 <    | U  | 0.05      | 1 <        | U  | 0.05      | 1< U    | 0.05      | 1 <     | IJ | 0.05      | 1 <    | U  | 0.05     | 1 <     | V  |                  |
| VOLATILES                  | METHYL METHACRYLATE         |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Methylene chloride          | 0.005     | 1 <    | U  | 0.005     | 1<      | U  | 0.005     | 1 <     | υ  | 0.005    | 1 <    | U  | 0.005     | 1 <        | ឋ  | 0.005     | 1< U    | 0.005     | 1 <     | U  | 0.005     | 1 <    | U  | 0.005    | 1 <     | U  |                  |
| VOLATILES                  | Naphthalene                 |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | n-BUTYLBENZENE              |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | n-PROPYLBENZENÉ             |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Pentachloroethane           |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | p-ISOPROPYLTOLUENE          |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Propionitrile               |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | sec-BUTYLBENZENE            |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Styrene                     | 0.005     | 1 <    | U  | 0.005     | 1 <     | U  | 0.005     | 1 <     | U  | 0.005    | 1 <    | U  | 0.005     | 1 <        | U  | 0.005     | 1< U    | 0.005     | 1 <     | U  | 0.005     | 1 <    | U. | 0.005    | 1 <     | U  |                  |
| VOLATILES                  | tert-BUTYLBENZENE           |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Tetrachloroethene           | 0.005     | 1 <    | U  | 0.005     | 1 <     | U  | 0.005     | 1 <     | ប  | 0.005    | 1 <    | U  | 0.005     | 1 <        | U  | 0.005     | 1< U    | 0.005     | 1 <     | U  | 0.005     | 1 <    | U  | 0.005    | 1 <     | U  |                  |
| VOLATILES                  | Toluene                     | 0.005     | 1 <    | U  | 0.005     | 1 <     | U  | 0.005     | 1 <     | U  | 0.005    | 1 <    | U  | 0.005     | 1 <        | U  | 0.005     | 1< U    | 0.005     | 1 <     | U  | 0.005     | 1 <    | U  | 0.005    | 1 <     | U  |                  |
| VOLATILES                  | trans-1,2-Dichloroethene    |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | trans-1,3-Dichloropropene   | 0.005     | 1 <    | U  | 0.005     | 1 <     | U  | 0.005     | 1 <     | U  | 0.005    | 1 <    | U  | 0.005     | 1 <        | U  | 0.005     | 1< U    | 0.005     | 1 <     | U  | 0.005     | 1 <    | U  | 0.005    | 1 <     | U  |                  |
| VOLATILES                  | trans-1,4-Dichloro-2-butene |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Trichloroethene             | 0.005     | 1 <    | U  | 0.005     | 1 <     | U  | 0.005     | 1 <     | U  | 0.005    | 1 <    | U  | 0.005     | 1 <        | U  | 0.005     | 1< U    | 0.005     | 1 <     | U  | 0.005     | 1 <    | U  | 0.005    | 1 <     | U  |                  |
| VOLATILES                  | Trichlorofluoromethane      |           |        |    |           |         |    |           |         |    |          |        |    |           |            |    |           |         |           |         |    |           |        |    |          |         |    |                  |
| VOLATILES                  | Vinyl acetate               | 0.05      | 1 <    | U  | 0.05      | 1 <     | ย  | 0.05      | 1 <     | U  | 0.05     | 1<     | U  | 0.05      | t <        | U  | 0.05      | 1< U    | 0.05      | 1 <     | U  | 0.05      | 1 <    | U  | 0.05     | 1 <     | U  |                  |
| VOLATILES                  | Vinyl chłoride              | 0.01      | 1 <    | ប  | 0.01      | 1 <     | U  | 0.01      | 1 <     | Ð  | 0.01     | 1 <    | U  | 0.01      | 1 <        | U  | 0.01      | 1< U    | 0.01      | 1 <     | U  | 0.01      | 1 <    | U  | 0.01     | 1 <     | U  |                  |
| VOLATILES                  | Xylenes, Totai              | 0.005     | 1 <    | U  | 0.005     | 1 <     | U  | 0.005     | 1<      | U  | 0.005    | 1 <    | IJ | 0.005     | 1 <        | U  | 0.005     | 1< U    | 0.005     | 1 <     | U  | 0.005     | 1 <    | U  | 0.005    | 1 <     | U  |                  |
| Contractor and a house and | aver ence to Tables Section |           |        |    |           |         |    |           |         |    |          |        | ,  |           |            |    |           |         | ··· ·· ·· |         |    |           |        |    |          |         |    |                  |

Footnotes are shown on cover page to Tables Section



1.5 

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/35 Sumps

Table 3-83 Concentrations of Chemicals in Soil Samples Associated with Sump 083

| [SUMP] = SUMP083   |                             |                  |                  |                  |                  | •                | •                       |                  |                    |                 |                  |                        |
|--------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|-------------------------|------------------|--------------------|-----------------|------------------|------------------------|
| LOCATION _CODE     |                             | 35SUMP083-SB01   | 35SUMP083-SB01   | 47SB26           | 47SB26           | LH-DL83-01       | LHS-3-25                | LH-S83-01        | LH-S83-01          | LH-S83-02       | LH-S83-02        | LH-S83-02              |
| SAMPLE NO          |                             | SUMP083-SB-01-01 | SUMP083-SB-01-02 | 47SB26(0-0 5)    | 47SB26(1-2)      | LH-DL83-01       | LHS-3-25                | (H-S83-01_1      | LH-S83-01_2        | 1H-S83-02 QC    | LH-S83-02_1      | LH-S83-02_2            |
| CAMER E DATE       |                             | 9/18/2006        | 9/18/2006        | 6/4/2000         | 6/4/2000         | 7/23/1993        | 1/10/1995               | 7/23/1993        | 7/23/1993          | 7/23/1993       | 7/23/1993        | 7/23/1993              |
| SAMPLE_UNIC        |                             | 0.000            | 0.00             | 0.055            | 1 250            | 2.4.5            | 0-055                   | 05-25            | 8 - 10 Ft          | 05-2Ft          | 05-2Ft           | 8-10 Ft                |
| UEPIH              |                             | 0-0Ft            | 0-010            | 0.001            | 1-214            | 000              | 0-0310                  | 0.5 2 11         | 956                | 60              | pro              | REG                    |
| SAMPLE_PURPOSE     |                             | HEG              | REG              | HEG              | HEG              | neu              |                         |                  |                    |                 |                  |                        |
| Test Group         | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ        | Result DIL LO VO | Hesuli DIL LO VO   | Hesur DHL LQ VQ | Hesuit Uil LQ VU | Hesuit die lui vu      |
| EXPLOSIVES         | 1,3,5-Trinitrobenzene       |                  |                  |                  |                  |                  | 0.22 1 < U              |                  |                    |                 |                  |                        |
| EXPLOSIVES         | 1.3-Dinitrobenzene          |                  |                  |                  |                  |                  | 0…22 1 < U              |                  |                    |                 |                  |                        |
| FYPIOSIVES         | 246-Trinitratoluene         |                  |                  |                  |                  |                  | 0.22 1 < U              |                  |                    |                 |                  |                        |
|                    |                             |                  |                  |                  |                  | 029 1 < 11       | 0.22 t < 1              | 033 1 < 1        | 033 1 4 11         | 033 1 c li      | 033 1 < 11       | 033 1 < 11             |
| EXPLOSIVES         | 2,4-0644000000              |                  |                  |                  |                  |                  |                         | 0.22 1           | 0.22 1 4 1         | 0.22 1          | 0.22 1 4 1       | 0.22 1 2 13            |
| EXPLOSIVES         | 2,6-Dinitrotoluene          |                  |                  |                  |                  | 0.33 I < Q       | 0.24 1 < 0              | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0      | 0.55 1 < 0       | 0.33 1 2 0             |
| EXPLOSIVES         | 4-Amino-2,6-dinitrotoluene  |                  |                  |                  |                  |                  | 0.46 1 < U              |                  |                    |                 |                  |                        |
| EXPLOSIVES         | HMX                         |                  |                  |                  |                  |                  | 2 t < U                 |                  |                    |                 |                  |                        |
| EXPLOSIVES         | m-Nitatoluene               |                  |                  |                  |                  |                  | 0.93 1 < L <sup>3</sup> |                  |                    |                 |                  |                        |
|                    | lämbesses                   |                  |                  |                  |                  |                  | 0.24 1 - 13             |                  |                    |                 |                  |                        |
| EXPLOSIVES         | NUCCENCENE                  |                  |                  |                  |                  |                  |                         |                  |                    |                 |                  |                        |
| EXPLOSIVES         | o-Narotoxiene               |                  |                  |                  |                  |                  | 0.50 1 < 0              |                  |                    |                 |                  |                        |
| EXPLOSIVES         | p-Nitrototuene              |                  |                  |                  |                  |                  | 2.8 1 < 0               |                  |                    |                 |                  |                        |
| EXPLOSIVES         | RDX                         |                  |                  |                  |                  |                  | 11 < U                  |                  |                    |                 |                  |                        |
| EXPLOSIVES         | Tetrvi                      |                  |                  |                  |                  |                  | 0.69 1 < U              |                  |                    |                 |                  |                        |
| MCTAI C            | Aluminum                    | 17800 1          | 4460 1           |                  |                  | 5110 1           | 10600 1                 | 16700 1          | 5200 1             | 24900 1         | 12600 1          | 5880 1                 |
| METALS             |                             |                  |                  |                  |                  | 3 1 4 11         | 10 1 4 11               | 3 t 4 H          | 3 1 4 1            | 3 1 < 1         | 3 1 6 1          | 3 1 2 11               |
| METALS             | Antimony                    | 0.124 I U UJL    | 0.118 I U UJL    |                  |                  | 31 < 0           | 10 1 < 0.1              | 31 20            | 51 . 5             |                 |                  | 01 00                  |
| METALS             | Arsenic                     | 0.833 1          | 0.787 1          |                  |                  | 11 < 0           | 7 1 J                   | 3 1              | 1.1 1              | 3.2 1           | 3.7              | 2.2                    |
| METALS             | Barium                      | 34.1 1           | 47.6 1           |                  |                  | 148 1            | 79.7 1                  | 133 1            | 54.7 1             | 128 1           | 26.9 1           | 46.1 1                 |
| METALS             | Beryllium                   | 0.56 1           | 0.523 1          |                  |                  |                  |                         |                  |                    |                 |                  |                        |
| METAIS             | Cadmisum                    | 0.0681 1 .1      | 0411 1 1         |                  |                  | 11<0             | 1.6 1 < 1/              | 1 1 < U          | 11 < U             | 11<1            | 11 < U           | 11 < U                 |
|                    | Caunion .                   | 0.0001 1 0       | 0.000 1          |                  |                  | 677 1            | 2400 1                  | 1490 1           | 456 1              | 2260 1          | 800 1            | 694 1                  |
| METALS             | Calcium                     | 313 1            | 286 1            |                  |                  |                  | 5460 1                  | 1400 1           |                    | 2200            | 215 1            | 05 1                   |
| METALS             | Chromium                    | 26.5 1 JH        | 8.51 1 JH        |                  |                  | 15.7             | 53.3 1 3                | 21.9             | 9.4                | 32.0 1          | 31.0 1           | 3.0 1                  |
| METALS             | Cobalt                      | 0.265 1 J JL     | 3.72 1 jL        |                  |                  | 11.2 1           | 6.1 1                   | 6.3 t            | 4.7 1              | 9.5 1           | 1.2 1            | 6.2 1                  |
| METALS             | Copper                      | 9.47 1           | 4.36 1           |                  |                  | 2.2 1            | 13.9 1                  | 4.2 t            | 3 1                | 4.1 1           | 2.3 1            | 5.6 1                  |
| METALS             | zon                         | 60000 10         | 12500 1          |                  |                  | 9420 1           | 15600 1                 | 19300 f          | 7740 1             | 36100 1         | 22800 1          | 11800 1                |
|                    | Lond                        | 50 1             | 240 1            |                  |                  | A1 1             | 113 1                   | 63 1             | 33 1               | 95 1            | 6.4 1            | 3.7 1                  |
| WE TALS            | Ledu                        | 5.5              | 2.45             |                  |                  | 959 1            | CD1 1                   | 807 1            | C17 1              | 1190 1          | 469 1            | 704 1                  |
| METALS             | Magnesium                   | 708 1            | 641 1            |                  |                  | 202 1            | 641 1                   | 507 1            | 047 1              | 1100 1          | 400 1            | 704 1                  |
| METALS             | Manganese                   | 34.7 1 J         | 21.7 1 J         |                  |                  | 1110 1           | 239 1                   | 456 1            | 36.3               | 397 1           | 21.1             | 44.7                   |
| METALS             | Mercury .                   | Ð.083 1 J J      | 0.29 1 U         |                  |                  | 0.1 1 < U        | 0.15 1 < U              | 0.1 1 < U        | 0.1 1 < 0          | 0.1 1 < 0       | 0.1 1 < 0        | 0.1 1 < 0              |
| METALS             | Nickel                      | 4.64 1           | 5.56 1           |                  |                  |                  |                         |                  |                    |                 |                  |                        |
| METALS             | Potassium                   | 460 1 내          | 301 t JH         |                  |                  | 256 1            | 621 1                   | 738 1            | 355 1              | 1130 1          | 574 1            | 411 1                  |
| NETALO             | Palanium                    | 0.048 1 11 11    |                  |                  |                  | 1 1 4 1          | 07 1                    | 1 1 4 1          | 11 < 1             | 1121            | 11 < 13          | . 1 1 2 1              |
| METALS             | Selenum                     | 0.246 I U UJL    | 0.236 1 0 030    |                  |                  |                  | 0.5                     |                  | 1 1                | 1 1             |                  | 4 5 6 1                |
| METALS             | Silver                      | 1.92 1 U         | 1.64 1 U         |                  |                  | 11<0             | 1.6 1 < 0               | 1 1 < 0          | L I < U            | 1 1 < 0         | 1 1 < 0          | ) ( < 0                |
| METALS             | Sodium                      | 25.6 1           | 186 1            |                  |                  |                  |                         |                  |                    |                 |                  |                        |
| METALS             | Strontium                   |                  |                  |                  |                  | 7.4 1            | 23.6 1                  | 18.7 1           | 13.9 1             | 23.4 1          | 12.8 1           | 17 1                   |
| METALS             | Thallium                    | 0.0311 1         | 0.0223 1 J J     |                  |                  |                  | 80.2 1 < U              |                  |                    |                 |                  |                        |
|                    | Vasadium                    | 50.0 1 #4        | 26.3 1 14        |                  |                  |                  |                         |                  |                    |                 |                  |                        |
| METALO             |                             | 004 1 11         | 40.4 4 11        |                  |                  | 0.1 1            | 140 1                   | 25.2 1           | 22.2 1             | 32.2 1          | 128 1            | 26 1                   |
| METALS             | Zinc                        | 22.4 1 JH        | 13.4 1 JH        |                  |                  | 9.1 1            | 140 1                   | 23.3             | 23.3 1             | 32.2            | 12.0 1           | 20                     |
| PERC               | Perchlorate                 |                  |                  | 0.00637 1 < 0    | 0.00592 1 < 0    |                  |                         |                  |                    |                 |                  |                        |
| SEMIVOLATILES      | 1,2,4-Trichlorobenzene      |                  |                  |                  |                  | 0.33 1 < U       | 0.6 1 < U               | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U             |
| SEMIVOLATILES      | 1,2-Dichlorobenzene         |                  |                  |                  |                  | 0.33 1 < U       | 0.6 1 < U               | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U             |
| SEMINOLATILES      | 1 3-Dichkrobeozene          |                  |                  |                  |                  | 0.33 1 < U       | 0.6 t < U               | 0.33 1 < U       | 0.33 1 < U         | 0.33 t < U      | 0.33 1 < U       | 0.33 1 < U             |
|                    | 1 A Dishlembastana          |                  |                  |                  |                  | 0.33 1 4 11      | 06 1 < 11               | 033 1 - 11       | 6133 1 c H         | 0.33 1 < 11     | 033 1 < 11       | 033 1 < U              |
| SEMIVOLATILES      | 1,4-Dichikolobelitzeine     |                  |                  |                  |                  |                  |                         |                  |                    |                 | 165 1 4 14       | 165 1 4 1              |
| SEMIVOLATILES      | 2,4,5-Trichlorophenol       |                  |                  |                  |                  | 1.65 1 < 0       | 3 1 < 0                 | 1.00 1 < 0       | 1.00 1 < U         | 1.05 1 < 0      | 1.03 1 4 0       | 1.05 1 C U             |
| SEMIVOLATILES      | 2,4,6-Trichlorophenol       |                  |                  |                  |                  | 0.33 1 < U       | 0.6 1 < U               | 0.33 1 < 0       | 0.33 1 < 0         | 9.33 1 < 0      | 0.33 1 < 0       | 0.33 1 < 0             |
| SEMIVOLATILES      | 2,4-Dichlorophenol          |                  |                  |                  |                  | 0.33 t < U       | 0.6 1 < U               | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U             |
| SEMIVOLATILES      | 2.4-Dimethylohenot          |                  |                  |                  |                  | 0.33 1 < U       | 0.6 1 < U               | 0.33 1 < U       | 0.33 t < U         | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U             |
| SEMINOLATILES      | 2.4-Dinitrophenol           |                  |                  |                  |                  | 165 1 < ⊍        | 31 < 1                  | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U             |
|                    | 0.4 Disitualities           |                  |                  |                  |                  |                  | 06 1 2 1                |                  |                    |                 |                  |                        |
| SEMIVULATILES      | 2,4-Distatorologia          |                  |                  |                  |                  |                  |                         |                  |                    |                 |                  |                        |
| SEMIVOLATILES      | 2,6-Dinitrotoluene          |                  |                  | -                |                  |                  | 0.6 1 < 0               |                  |                    |                 |                  |                        |
| SEMIVOLATILES      | 2-Chioronaphthalene         |                  |                  |                  |                  | 0.33 1 < U       | 0.6 1 < U               | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U      | 0.33 1 < 0       | 0.33 1 < 1             |
| SEMIVOLATILES      | 2-Chlorophenol              |                  |                  |                  |                  | 0.33 1 < U       | 0.6 1 < Ŭ               | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U             |
| SEMIVOLATILES      | 2-Methylnanhtbalene         |                  |                  |                  |                  | 0.33 1 < U       | 0.6 1 < IJ              | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U             |
|                    | 2 Mathulahanal              |                  |                  |                  |                  | 0.93 1 × H       | 06 1 - 11               | 633 1 - 1        | 033 1 <b>∠ I</b> I | 0.33 1 < ∜I     | 033 1 < U        | 033 1 < U              |
| SEMIVOLATILES      |                             |                  |                  |                  |                  |                  |                         |                  | 1.00 1 1 1         | 165 1 6         | 165 1 4 18       | 165 1 4 11             |
| SEMIVOLATILES      | 2-Nitroaniline              |                  |                  |                  |                  | 1.65 1 < 0       | 3 1 < 0                 | 1.65 1 < 0       | 1.05 1 < 0         | 1.00 1 . < 0    | 1.05 1 < 0       |                        |
| SEMIVOLATILES      | 2-Nitrophenol               |                  |                  | -                |                  | 0.33 1 < U       | 0.6 1 < U               | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U             |
| SEMIVOLATILES      | 3,3'-Dichlorobenzidine      |                  |                  |                  |                  | 0.65 1 < U       | 12 1 < U                | 0.65 1 < U       | 0.65 1 < U         | 0.65 1 < U      | 0.65 1 < U       | 0.65 1 < U             |
| SEMIVOLATE ES      | - 3-Nitroaniline            |                  |                  |                  |                  | 1.65 1 < U       | 3 1 < U                 | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U             |
| ACTIVITY OF THE CO | A 6 Dinitro 2 mothedobarosi |                  |                  |                  |                  | 165 1            | 3 1 2 1                 | 165 1 1          | 165 1 2 11         | 1.65 1 < 1      | 1.65 1 < 11      | 1.65 1 <i>⊂</i> U      |
| SEIMINOLAHILES     | 4,0-Dails0-Z-meanyquites(0) |                  |                  |                  |                  | 1.00 F K U       | 0 0 1 V                 | A 99 1 1         | 1.00 1 2 0         | 0.22 1 - 1      | 0.00 1 - 11      | 0.02 1 - 11            |
| SEMIVOLATILES      | 4-Bromophenyl phenyl ether  |                  |                  |                  |                  | U.35 I < U       | 0.b i < 0               | 0.33 r < 0       | 0.33 1 < 0         | 0.55 1 < 0      | 10.00 i < U      | 0.03 i < U             |
| SEMIVOLATILES      | 4-Chioro-3-methylphenol     |                  |                  |                  |                  | 0.65 1 < U       | 0.6 1 < U               | 0.65 1 < U       | 0.65 1 ≺ U         | 0.65 1 < U      | 0.to5 1 < Ü      | ues ĭ < U              |
| SEMIVOLATILES      | 4-Chloroaniline             |                  |                  |                  |                  | 0.65 1 < U       | 0.6 1 < U               | 0.65 1 < U       | 0.65 1 < U         | 0.65 1 < U      | 0.65 1 < U       | 0.65 1 < U             |
| SEMIVOLATILES      | 4-Chiorophenyl phenyl ether |                  |                  |                  |                  | 0.33 1 < U       | 0.6 t < U               | 0.33 t < U       | 0.33 1 < U         | 0.33 1 < U      | 0.33 1 < U       | 0.33 t < U             |
| SEMIWOLATILES      | 4-Methylobenot              |                  |                  |                  |                  | 0.33 1 < 11      | 0.6 1 < 11              | 0.33 1 < 11      | 0.33 1 < U         | 0.33 1 < U      | 0.33 1 < U       | 0.33 t < 1/            |
|                    | 4 Managerian                |                  |                  |                  |                  | 165 1 - 21       | 1 1 - It                | 165 1 1          | 165 1 2 11         | 165 1 2 1       | 165 1 2 1        | 165 1 2 10             |
| SEMIVOLATILES      | 4-nusoannae                 |                  |                  |                  |                  | 1.00 I K U       |                         | 1.00 1 < U       | 100 I K U          | 100 1 1 1       | 105 1            | 105 1 - 11             |
| SEMIVOLATILES      | 4-Narophenol                |                  |                  |                  |                  | 1.65 1 < 1       | 31 < U                  | 1.65 1 < U       | 1.b5 1 < U         | 1.00 I < U      | 1.00 1 < U       | 1.05 1 < U             |
| SEMIVOLATILES      | Acenaphthene                |                  |                  |                  |                  | 0.33 1 < U       | 0.6 1 < U               | 0.33 t < U       | 0.33 1 < U         | 0.33 1 < U      | 0.33 t < U       | <del>0</del> .33 1 < U |
|                    | •                           |                  |                  |                  |                  |                  |                         |                  |                    |                 |                  |                        |



·····

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-83

## Concentrations of Chemicals in Soil Samples Associated with Sumn 083

| CLUMP) - CLIMDOG2      |                                |  | Col               | icentrations of C          | mennicals in our          | i Samples Associ | ated with Sump of     | 55              |                  |                  |                   |                  |
|------------------------|--------------------------------|--|-------------------|----------------------------|---------------------------|------------------|-----------------------|-----------------|------------------|------------------|-------------------|------------------|
| [SUMF] = SUMFUSS       |                                | 2501140002 5001  | 355LIMP082_SR01   | 475B26                     | 47SR26                    | 1 H-D( 83-01     | LHS-3-25              | LH-583-01       | LH-S83-01        | LH-S83-02        | LH-S83-02         | LH-S83-02        |
|                        |                                | SUMPROS SD01   | SIN4P082_SR_01_02 | 475B26(0-0-5)              | 475826(1-2)               | 14-0183-01       | LHS-3-25              | LH-S83-01 1     | LH-S83-01_2      | LH-S83-02 QC     | LH-S83-02_1       | LH-\$83-02_2     |
| SAMPLE_NO              |                                | SUMP003-38-01-01   | 0110/0000         | 5115020(0-0_3)<br>611/2000 | 6/4/2000                  | 7/23/1993        | 1/10/1995             | 7/23/1993       | 7/23/1993        | 7/23/1993        | 7/23/1993         | 7/23/1993        |
| SAMPLE_DATE            |                                | 9/18/2006  | 5/10/2008         | 0.050                      | 1 3 5                     | 2.45             | 0-05 Ft               | 05-2FI          | 8 - 10 FI        | 0.5 - 2 Ft       | 0.5 - 2 Fi        | 8 - 10 Ft        |
| DEPTH                  |                                | 0-0H   | 0-070             | 0-0.5 Ft                   | 1-271                     | 2-411            | REG                   | BEG             | BEG              | · FD             | REG               | FIEG             |
| SAMPLE_PURPOSE         |                                | REG  | REG NO            | HEG                        | HEG<br>Descrit DII 40 110 |                  | Port DE LO VO         | Reput Dil 10 VO | Result DIE LO VO | Regult Dil LO VO | Result Dili LO VO | Result DIL LQ VQ |
| Test Group             | Parameter (Units = mg/kg)      | Result CHL LQ VQ   | Hesuit Dil LU VQ  | HESHIT DIL LO VO           | RESUL DAL LO VO           | Hespit DAL CO VO |                       | A22 1 / 11      | A33 1 < U        | 033 1 4 11       | 0.33 1 < 1        | 0.33 1 < U       |
| SEMIVOLATILES          | Acenaphthylene                 |  |                   |                            |                           | 0.33 1 < 0       | 0.0 1 < 0             |                 | 0.23 1 < 0       |                  | 033 1 4 1         | 0.33 1 < U       |
| SEMIVOLATILES          | Anthracene                     |  |                   |                            |                           | 0.33 1 < 0       | 0.6 1 < 0             | 0.03 7 < 0      |                  | 0.35 1 < 0       | 0.33 1 4 1        |                  |
| SEMIVOLATILES          | Benzo(a)anthracene             |  |                   |                            |                           | 0.33 1 < 0       | 0.6 1 < 0             | 0.33 1 < 0      | 0.33 1 4 0       | 0.33 1 < 0       | 0.00 1 < 0        | 033 1 < 1        |
| SEMIVOLATILES          | Benzo(a)pyrene                 |  |                   |                            |                           | 0.33 1 < 0       | 0.6 1 < 0             | 0.33 1 < 0      | 0.53 1 < 0       | 0.33 1 4 1       |                   | 0.30 1 < 0       |
| SEMIVOLATILES          | Benzo(b)fluoranthene           |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < 0             | 0.33 1 < 0      | 0.33 1 < 0       | 0.33 1 < 0       |                   |                  |
| SEMIVOLATILES          | Benzo(ghi)perylene             |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < U             | 0.33 1 < 0      | 0.33 1 < 0       | 0.33 1 < 0       | 9.33 1 < 0        | 0.33 1 < 0       |
| SEMIVOLATILES          | Benzo(k)fluoranthene           |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < U             | 0.33 1 < 0      | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0        |                  |
| SEMIVOLATILES          | Benzoic Acid                   |  |                   |                            |                           | 1.65 1 < U       | 3 1 < U               | 1.65 1 < U      | 1.65 1 < 0       | 1.55 7 < 0       | 1.65 1 < 0        | 0 > 1 - 20.1     |
| SEMIVOLATILES          | Benzyl Alcohol                 |  |                   |                            |                           | 0.65 t < U       | 0.6 1 < U             | 0.65 1 < U      | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U        | 0.65 1 < 0       |
| SEMIVOLATILES          | bis(2-Chloroethoxy)methane     |  |                   |                            |                           | 0.33 t < U       | 0.6 1 < U             | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < 0       |
| SEMIVOLATILES          | bis(2-Chloroethyl)ether        |  |                   |                            |                           | 0.33 1 < U       | 0. <del>6</del> 1 < U | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < 0       |
| SEMIVOLATILES          | bis(2-Chloroisopropyi)ether    |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < U             | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1. < U       | 0.33 1 < 0       |
| SEMIVOLATILES          | bis/2-Ethylaexylionthalate     |  |                   |                            |                           | 0.33 1 < U       | 0.32 t J              | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES          | Butvi benzvi obthalate         |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < U             | 0.33 t < U      | 0⊥33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES          | Chrusene                       |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < U             | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| CONTRACTOR OF A        | Dinorzo(a bladitrzegna         |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < U             | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < 11      | 0.33 1 < U        | 0.33 1 < U       |
| SCHIVOLATILES          | Disconstructure                |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < U             | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES          | Diothid obtholoto              |  |                   |                            |                           | 0.33 f < U       | 0.6 1 < U             | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < 1/      | 0.33 t < U        | 0.33 t < U       |
| SEMMOLATILES           | Diesity philalate              |  |                   |                            |                           | 033 1 < 1        | 0.6 1 < U             | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLANLES           | Dimensi protate                |  |                   |                            |                           | 0.33 1 2 11      | 06 1 < 1              | 0.33 1 < U      | 9.722 1          | 0.33 1 < U       | 0.638 1           | 0.524 1          |
| SEMIVOLAHLES           | di-n-Butyl primalate           |  |                   |                            |                           | 0.33 1 4 11      | 06 1 < 1              | 0.33 1 < 13     | 033 1 < U        | -0.33 t < U      | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES          | di-n-Octyl primalate           |  |                   |                            |                           | 0.33 1 < 11      |                       | 0.33 1 < U      | 0.33 t < 1)      | 0.33 t < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES          |                                |  |                   |                            |                           | 0.30 1 < 0       |                       | 0.33 1 < 11     | 0.33 1 < 1       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES          | Huorene                        |  |                   |                            |                           | 0.33 1 4 0       | 0.6 1 < 1             | 033 1 4 1       | 033 1 < 1        | 0.33 1 < 1       | 0.33 1 < Ú        | 0.33 1 < U       |
| SEMIVOLATILES          | Hexachlorobenzene              |  |                   |                            |                           | 0.33 1 0.00      |                       | 0.00 1 < 0      | 0.33 1 2 1       | 033 1 2 1        | 033 t < 1         | 0.33 1 < U       |
| SEMIVOLATILES          | Hexachlorobutadiene            |  |                   |                            |                           | 0.33 1 < 0       |                       | 0.00 1 < 0      | 0.00 1 < 0       | 033 1 ~ 1        | 0.33 1 4 1        | 033 1 < U        |
| SEMIVOLATILES          | Hexachlorocyclopentadiene      |  |                   |                            |                           | 0.33 [ < 0       | 0.0 1 0.0             | 0.00 1 2 1      | 0.33 1 < 11      | 0.33 1 < 1/      | 033 1 < 1         | 0.33 1 < U       |
| SEMIVOLATILES          | Rexachloroethane               |  |                   |                            |                           | 0.33 t < 0       | 0.5 1 < 0             |                 | 0.00 1 < 0       | 0.30 1 < 0       | 033 1 4 11        | 0.33 1 < U       |
| SEMIVOLATILES          | Indeno(1,2,3-cd)pyrene         |  |                   |                            |                           | 0.33 1 < 0       | 0.6 1 < 0             | 0.33 1 < 0      | 0.00 1 < 0       | 0.00 1 < 0       | 0.00 1 < U        | 0.33 1 < 11      |
| SEMIVOLATILES          | Isophorone                     |  |                   |                            |                           | 0.33 1 < 0       | U.5 1 < U             | 0.33 1 < 0      | 0.33   < 0       | 0.03 1 < 0       | 0.30 1 < 0        | 0.33 1 < 1       |
| SEMIVOLATILES          | Naphthalene                    |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < 0             | 0.33 1 < 0      | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 4 0       |
| SEMIVOLATILES          | Nitrobenzene                   |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < U             | 0.33 1 < U      | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 < 0       |
| SEMIVOLATILES          | n-Nitroso-di-n-propylamine     |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < U             | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 < 0       |
| SEMIVOLATILES          | n-Nitrosodiphenylamine         |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < U             | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 < 0       |
| SEMIVOLATILES          | Peritachlorophenol             |  |                   |                            |                           | 1.65 1 < U       | 31 < U                | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 0        | 1.65 1 < 0       |
| SEMIVOLATILES          | Phenanthrene                   |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < U             | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES          | Phenol                         |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < U             | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < 0       |
| SEMIVOLATILES          | Pyrene                         |  |                   |                            |                           | 0.33 1 < U       | 0.6 1 < U             | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < 0       |
| VOLATILES              | 1.1.1.2-Tetrachkorgethane      |  | 0.00472 1 U       |                            |                           |                  | 0.018 1 < U           |                 |                  |                  |                   |                  |
| VOLATILES              | 1.1.1-Trichloroethane          |  | 0.00472 1 U       |                            |                           | 0.005 1 < U*     | 0.009 t < U           | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0       | 0.005 1 < U      |
| VOI ATILES             | 1 1 2 2-Tetrachkroethane       |  | 0.00472 1 U       |                            |                           | 0.005 1 < U      | 0.009 1 < U           | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 9.005 t < U      |
| VOLATE ES              | 1 1 2-Trichlomethane           |  | 0.00472 1 U       |                            |                           | 0.005 1 < U      | 0.009 1 < U           | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < 0      |
| VOLATILES              | 1 1-Dichlomethane              |  | 0.00472 1 U       |                            |                           | 0.005 1 < U      | 0.009 1 < U           | 0.005 1 < U     | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U       | 0.005 1 < U      |
| NOLATHES               | 1 1 Dictionations              |  | 0.00472 1 11      |                            |                           | 0.005 1 < U      | 0.009 1 < U           | 0.005 1 < U     | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      |
| WOLATH ES              | 1 1-Dictionaronero             |  | 0.00472 1 1       |                            |                           |                  |                       |                 |                  |                  |                   |                  |
| WOLATHES               | 1.2.2 Trichlorohonzona         |  | 0.00472 1 1       |                            |                           |                  |                       |                 |                  |                  |                   |                  |
| VOLATILES<br>VOLATILES |                                |  | 0.00472 1 11      |                            |                           |                  | 0.018 1 < U           |                 |                  |                  |                   |                  |
| VOLATILEO<br>VOLATILEO | 1.9.4 Trichlaraboarage         |  | 0.00472 1 1       |                            |                           |                  |                       |                 |                  |                  |                   |                  |
| VOLATILES              | 1,2,4-michorospenzene          |  | 0.00472 1 0       |                            |                           |                  |                       |                 |                  |                  |                   |                  |
| VOLATILES              | 1,2,4-11methybenzene           |  | 0.00472 1 0       |                            |                           |                  | 0.037 1 c 1i          |                 |                  |                  |                   |                  |
| VOLATILES              | 1,2-Dibromo-3-chioropropane    |  | 0.00472 1 0       |                            |                           |                  | 0.037 1 4 1           |                 |                  |                  |                   |                  |
| VOLATILES              | 1,2-Dibromoethane              |  |                   |                            |                           |                  | 0.001 ) < 0           |                 |                  |                  |                   |                  |
| VOLATILES              | 1,2-Dichlorobenzene            |  |                   |                            |                           | 0.005 1 4        | 0.000 1 / 1/          | 0.005 1 2 13    | 0.005 1 < 1      | 8.005 t < 11     | 0.005 1 < U       | 0.005 1 < U      |
| VOLATILES              | 1,2-Dichloroethane             |  | 0.00472 1 0       |                            |                           | 0 > 1 000.0      | 0.009 1 < 0           | 0.005 1 < 1     | 0.005 1 < 1      | 0.005 1 < 1      | 0.005 1 < 11      | 0-005 1 < U      |
| VOLATILES              | 1,2-Dichloroethene             | -  |                   |                            |                           | 0 0 0 1 0 00     | 0.009 1 < 0           | 0.005 t . 11    | 0.005 1 < 31     | 0.005 1 < 1      | 0.005 1 2 1       | 0.005 1 < U      |
| VOLATILES              | 1,2-Dichloropropane            |  | 0.00472 1 U       |                            |                           | 1.005 1 < 0      | 0.009 1 < 0           | 0.003 3 < 0     | 0.000 1 4 0      | 0.000 1 1 0      | 0.000 7 4 0       |                  |
| VOLATILES              | 1,2-Dimethylbenzene (o-Xylene) |  | 0.00472 1 U       |                            |                           |                  |                       |                 |                  |                  |                   |                  |
| VOLATILES              | 1,3,5-Trimethylbenzene         |  | 0.00472 1 U       |                            |                           |                  |                       |                 |                  |                  |                   |                  |
| VOLATILES              | 1,3-Dichlorobenzene            | I  | 0.00472 1 U       |                            |                           |                  |                       |                 | •                |                  |                   |                  |
| VOLATILES              | 1,3-Dichloropropane            | ]  | 0.00472 1 U       |                            |                           |                  |                       |                 |                  |                  |                   |                  |
| VOLATILES              | 1,4-Dichlorobenzene            |  | 0.00472 1 U       |                            |                           |                  |                       |                 |                  |                  |                   |                  |
| VOLATILES              | 2,2-Dichloropropane            |  | 0.00472 1 U       |                            |                           |                  |                       |                 |                  |                  |                   |                  |
| VOLATILES              | 2-Butanone                     |  | 0.00944 1 U       |                            |                           | 0.05 1 < U       | 0.018 1 < U           | 0.05 1 < U      | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U        | U.US 1 < U       |
| VOLATILES              | 2-Chloroethyl vinyl ether      | 1  | 0.00944 1 U       |                            |                           | 0.01 1 < U       | 0.018 1 < U           | 0.01 1 < U      | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U        | 0.01 1 < U       |
| VOLATILES              | 2-Chlorotoluene                | -  | 0.00472 1 U       |                            |                           |                  |                       |                 |                  |                  |                   |                  |
| VOLATILES              | 2-Hexanone                     |  | 0.00944 1 U       |                            |                           | 0.05 1 < U       | 0.018 1 < U           | 0.05 1 < U      | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U       |
| VOLATILES              | 2-Propenal                     |  |                   |                            |                           |                  | 0.92 1 < U            | -               |                  |                  |                   |                  |
| VOI ATILES             | 4-Chlorotaluene                | l de la constante de | 0.00472 1 U       |                            |                           |                  |                       |                 |                  |                  |                   |                  |
|                        |                                | F  | ····· · ·         |                            |                           |                  |                       |                 |                  |                  |                   |                  |



1.0

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-83 Concentrations of Chemicals in Soil Samples Associated with Sump 083

| [SUMP] = SUMP083       |                                     |                  |                  |                  |                  | •                |                  |                  |                  |                  |                           | 441 000 00           |
|------------------------|-------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------------------------|----------------------|
| LOCATION _CODE         |                                     | 35SUMP083-S801   | 35SUMP083-SB01   | 47SB26           | 47\$B26          | LH-DL83-01       | LHS-3-25         | LH-S83-01        | LH-S83-01        | LH-S83-02        | LH-S83-02                 | LH-583-02            |
| SAMPLE_NO              |                                     | SUMP083-S8-01-01 | SUMP083-SB-01-02 | 47SB26(0-0_5)    | 47SB26(1-2)      | LH-DL83-01       | LHS-3-25         | LH-S83-01_1      | LH-S83-01_2      | 2H-S83-02 QC     | 2100/1000                 | 2/00/1000            |
| SAMPLE_DATE            |                                     | 9/18/2006        | 9/18/2006        | 6/4/2000         | 6/4/2000         | 7/23/1993        | 1/10/1995        | //23/1993        | //23/1993        | //23/1993        | 1/23/1993                 | //23/1993<br>9 10 Et |
| DEPTH                  |                                     | 0 - 0 Ft         | 0 - 0 Ft         | 0 - 0.5 Ft       | 1-2Ft            | 2-4 Ft           | 0-0.5 Ht         | 0.5-2Ft          | 8-10+1           | 0.5 - 2 +1       | 9.2-2 Fl                  |                      |
| SAMPLE_PURPOSE         |                                     | REG              | REG              | REG              | REG              | REG              | HEG              | HEG              | REG NO           |                  | NEU<br>Result Official VA |                      |
| Test Group             | Parameter (Units = mg/kg)           | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LQ VQ | Hesuit DIL LO VO | Result Dil LU VU | Hesuit Dil Lu Vu | Hestia Dil Lu VU | AL 1 C 1                  |                      |
| VOLATILES              | Acetone                             |                  | 0.00944 1 U      |                  |                  | 0.1 1 < 0        | 0.018 1 < 0      | 0.1 i < U        | U.1 1 < U        |                  | 0.1 1 2 0                 |                      |
| VOLATILES              | Acetonibile                         | 1                |                  |                  |                  |                  | 0.10 3 < 0       |                  |                  |                  |                           |                      |
| VOLATILES              | Acrylonitrile                       |                  |                  |                  |                  |                  | 0.10 7 4 0       |                  |                  |                  |                           |                      |
| VOLATILES              | Allyl chionde                       |                  | 0.00470 1 13     |                  |                  | 0.005 1 2 11     | 0.008 1 .1       | 0.005 1 < 1      | 0.005 1 < If     | 0.005 1 < U      | 0.005 1 < U               | 0.005 t < U          |
| VOLATILES              | Benzene                             |                  | 0.00472 1 0      |                  |                  | 01000 1 4 0      | 0.000 1 0        | 0.000 1 0 0      | 0.000 1 1 0      |                  | 0.000                     |                      |
| VOLAHLES               | Bromobenzene                        |                  | 0.00472 1 0      |                  |                  |                  |                  |                  |                  |                  |                           |                      |
| VOLATILES              | Bromochiorometriane                 | 1                | 0.00472 1 0      |                  |                  | 0.005 1 < 11     | 0.009 1 c U      | 0.005 1 < U      | -0.005 1 < U     | 0.005 1 < U      | 0.005 t < U               | 0.005 1 < U          |
| VOLANCES               |                                     | [                | 0.00472 1 0      |                  |                  | 0.005 1 < 1      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U          |
| VOLATILES              | Sionengini<br>Sionengini            |                  | 0.00412 1 U      |                  |                  | 0.000 1 < U      | 0.018 1 < U      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U                | 0.01 1 < U           |
| VOLATILES              | Carbon dimittide                    | 1                | 0.00472 1 1      |                  |                  | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U          |
| VOLATIES               | Catego totrachlaride                | 1                | 0.00472 1 11     |                  |                  | 0.005 1 < U      | 0.009 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U          |
| VOLATILES              | Chiombenzena                        |                  | 0.00472 1 11     |                  |                  | 0.005 1 < U      | 0.009 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U          |
| VOLATIEES              | Chlomethane                         |                  | 0.00944 1 U      |                  |                  | 0.01 1 < U       | 0.018 1 < U      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U                | 0.01 1 < U           |
| VOLATILES              | Chlomform                           |                  | 0.00472 1 U      |                  |                  | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U          |
| VOLATILES              | Chloromethane                       |                  | 0.00944 1 U      |                  |                  | 0.01 1 < U       | 0.018 1 < U      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U                | 0.01 1 < U           |
| VOLATILES              | Chloroprene                         |                  |                  |                  |                  |                  | 0.18 1 < U       |                  |                  |                  |                           |                      |
| VOLATILES              | cis-1,2-Dichloroethene              | 1                | 0.00472 1 U      |                  |                  |                  |                  |                  |                  |                  |                           |                      |
| VOLATILES              | cis-1,3-Dichloropropene             |                  | 0.00472 1 U      |                  |                  | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U          |
| VOLATILES              | Dibromochloromethane                |                  | 0.00472 1 U      |                  |                  | 0.005 1 < U      | 0.009 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U               | 0.005 1 < U          |
| VOLATILES              | Dibromomethane                      |                  | 0.00472 1 U      |                  |                  |                  | 0.037 1 < U      |                  |                  |                  |                           |                      |
| VOLATILES              | Dichlorodifkuoromethane             | 1                | 0.00944 1 U      |                  |                  |                  | 0.037 1 < U      |                  |                  |                  |                           |                      |
| VOLATILES              | Ethyl methacrylate                  |                  |                  |                  |                  |                  | 0.037 1 < U      |                  |                  |                  |                           |                      |
| VOLATILES              | Ethylbenzene                        |                  | 0.00472 1 U      |                  |                  | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < 0               | $0.005 \ 1 \ < 0$    |
| VOLATILES              | Hexachlorobutadiene                 |                  | 0.00472 1 U      | 7                |                  |                  |                  |                  |                  |                  |                           |                      |
| VOLATILES              | IODOMETHANE                         |                  |                  |                  |                  |                  | 0.018 1 < U      |                  |                  |                  |                           |                      |
| VOLATILES              | ISOBUTYL ALCOHOL                    |                  |                  |                  |                  |                  | 3.7 1 < U        |                  |                  |                  |                           |                      |
| VOLATILES              | Isopropylbenzene                    |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  |                  |                           |                      |
| VOLATILES              | m,p-Xylenes                         |                  | 0.00472 1 U      |                  |                  |                  | 0.007 4          |                  |                  |                  |                           |                      |
| VOLATILES              | Methacrylonitrile                   |                  |                  |                  |                  | 0.05             | 0.03/ 1 < 0      | 0.05 1           | 0.05 1 . 1       | 0.05 1 2 11      | 0.05 t < 1i               | 0.05 1 2 1           |
| VOLATILES              | Methyl isobutyl ketone              |                  | 0.00944 1 U      |                  |                  | 0.05 1 < 0       | 0.018 1 < 0      | 0.05 1 < 0       | 0.05 T K U       | 0.00 1 4 0       | 0.05 1 1 1 0              | 0.00 1 4 0           |
| VOLATILES              | METHYL METHACHYLATE                 |                  | 0.00470 + 11     |                  |                  | 0.005 1 / 1      | 0.03/1 < 0       | 0.005 1 2 1      | 0.005 1 2 11     | 0-005 1 < H      | 0.005 1 < U               | 0.005 1 < U          |
| VOLATICES              | Methylene chlonde                   | 1                | 0.00472 7 U      |                  |                  | 0.000 1 < 0      | 0.005 1 1 0      | 0.000 1 2 0      | 0.000 1 4 0      | 0.000            |                           |                      |
| VOLATILES              | Naphthalene                         |                  | 0.00472 1 1      |                  |                  |                  |                  |                  |                  |                  |                           |                      |
| VOLATILES              |                                     |                  | 0.00472 5 0      |                  |                  |                  |                  |                  |                  |                  |                           |                      |
| VOLATILES              | Protochlorochono                    |                  | 0.00472 8 0      |                  |                  |                  | 0037 1 < U       |                  |                  |                  |                           |                      |
| VOLATILES              |                                     |                  | 0.00472 1 11     |                  |                  |                  |                  |                  |                  |                  |                           |                      |
| VOLATILES<br>VOLATILES | Provincial                          |                  | 0.00472 1 0      |                  |                  |                  | 0.092 1 < U      |                  |                  |                  |                           |                      |
| VOLATILES              | Proportiule<br>Pro-Dittyl DENI754/E | 1                | 0.00472 1 11     |                  |                  |                  |                  |                  |                  |                  |                           |                      |
| VOLATHES               | Styrene                             |                  | 0.00472 1 U      |                  |                  | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U          |
| VOLATILES              | tert-RUTYI-RENZENE                  |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  |                  |                           |                      |
| VOLATILES              | Tetrachkomethene                    |                  | 0.00472 1 U      |                  |                  | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U          |
| VOLATILES              | Toluene                             |                  | 0.00472 1 U      |                  |                  | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U          |
| VOLATILES              | trans-1.2-Dichloroethene            | ļ                | 0.00472 1 U      |                  |                  |                  |                  |                  |                  |                  |                           |                      |
| VOLATILES              | trans-1,3-Dichloropropene           |                  | 0.00472 1 U      |                  |                  | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U          |
| VOLATILES              | trans-1,4-Dichloro-2-butene         |                  |                  |                  |                  |                  | 0.037 1 < U      |                  |                  |                  |                           |                      |
| VOLATILES              | Trichloroethene                     |                  | 0.00472 1 U      |                  |                  | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U               | 0.005 1 < U          |
| VOLATILES              | Trichlorofluoromethane              |                  | 0.00944 1 U      |                  |                  |                  | 0.018 1 < U      |                  |                  |                  |                           |                      |
| VOLATILES              | Vinyl acetate                       |                  | 0.00944 1 U      |                  |                  | 0.05 1 < U       | 0.018 1 < U      | 0.05 t < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U                | 0.05 1 < U           |
| VOLATILES              | Vinyl chloride                      |                  | 0.00944 1 U      |                  |                  | 0.01 1 < U       | 0.018 1 < U      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U                | 0.01 1 < U           |
| VOLATILES              | Xvienes, Total                      | 1                |                  |                  |                  | 0.005 1 < U      | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005.1 < U               | 0.005 1 < U          |

Footnotes are shown on cover page to Tables Section.



## Data Evaluation Report Chemical Concentrations in Soit Associated with LHAAP-35/36 Sumps



| Table 3-84   |             |    |
|--|-------------|----|
| Concentrations of Chemicals in Soil Samples Associated w | rith Sump 0 | 84 |

| (SUMP) ≈ SUMP084<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PUPPOSE |                             | 35SUMP084-SB01<br>35-SMP084-SB01-01<br>9/21/2006<br>0.5 - 0.5 Fl<br>BEG | 35SUMP084-SB01<br>35-SMP084-SB01-02<br>9/21/2006<br>2.5 - 2.5 Ft<br>REG | 35SUMP084-SB02<br>35-SMP084-SB02-01<br>9/21/2006<br>0.5 - 0.5 Pt<br>BEG | 35SUMP084-S802<br>35-SMP084-SB02-02<br>9/21/2006<br>2.5 - 2.5 Ft<br>REG | LH-DL84-01<br>LH-DL84-01<br>7/21/1993<br>2 - 4 Ft<br>REG | LH-S84-01<br>LH-S84-01 QC<br>7/21/1993<br>0.5 - 1.5 Ft<br>FD | LH-S84-01<br>LH-S84-01_1<br>7/21/1993<br>0.5 - 1.5 Ft<br>REG | LH-S84-01<br>LH-S84-01_2<br>7/21/1993<br>3 • 5 FI<br>REG |
|--|-----------------------------|---|---|---|---|--|--|--|--|
| Test Group   | Parameter (Units = mg/kg)   | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO  | Result OIL LO VO  | Result DIL LO VO   | Result DIL LO VO   | Result DIL LO VO   | Result DIL LO VO   |
| EXPLOSIVES   | 2.4-Dinifrotoluene          |   |   |   |   | 0.33 1 < U   | 0.33 1 < U   | 0.33 ( < 0   | 0.33 1 < U   |
| EXPLOSIVES   | 2.6-Dinitrolotuene          | •   |   |   |   | 0.33 1 < U   | 0.33 t < U   | 0.33 1 < 0   | U.33 1 < U   |
| METALS   | Aluminum                    | 21600 1   | 22800 1   | 22800 1   | 11800 1   | 14600 1  | 8320 1   | 2 1 2 1  | 3 1 4 1  |
| METALS   | Antimony                    | 0.124 I U   | 0.126 1 U   | 0.13 1 U U  | 0,122 1 0 0   | 31 < 0   | 31 4 0   | 35.1   | 34 5   |
| METALS   | Arsenic                     | 5.27 1  | 5.15 1  | 9,28 1  | 2.52 1  | 5.7 1 × 11   | 99 1 - 1   | 92.3 1 < U   | 75.5 1 < U   |
| METALS   | Barium                      | 65.1 1  | 05.2  | 0.633 1   | 0.906 1   | 00.7 7 2 0   |  |  |  |
| METALS   | Beryinum                    | 0.022 1   |   | 0.0620 1 .1   | 0.592 1   | 11 < 9   | 11 < U   | 11 < U   | 11 < U   |
| METALS   | Caloium                     | 955 1   | 2040 1  | 277 1   | 3010 1  | 1750 1   | 1150 1   | 860 1  | 2370 \$  |
| METALS   | Chromium                    | 28 1  | 30.7 1  | 29.8 1  | 13.9 1  | 17.7 1 < U   | 14.2 1 < U   | 12.4 1 < U   | 17.3 1 < U   |
| METALS   | Cobali                      | 1.87 1  | 1.86  | 1.66 1  | 9.37 1  | 3.5 1  | 9.6 1  | 12.4 1   | 10.5 1   |
| METALS   | Copper                      | 8.33 1  | 12.3 1  | 7.62 1  | 8,3 1   | 10.4 1   | 5.1 t  | 4,3 1  | 8.3 1  |
| METALS   | Iron                        | 34700 1   | 59300 10  | 33900 t   | 14200 1   | 25600 1  | 10400 1  | 10000 1  | 19900 1  |
| METALS   | Lead                        | 12.3 1  | 11.2 1  | 10.7 1  | 14.5 1  | 7.4 1  | 10.3 1   | 11.7 1   | 11.3   |
| METALS   | Magnesium                   | t310 i  | 1380 1  | 1310 1  | 1200 1  | 823 1  | 467 1  | 340 1  | 918 1  |
| METALS   | Manganese                   | 37,8 1  | 77,4 1  | 18,4 1  | 106 1   | 52.8 1   | 706  | 881 1  | 93.1 1   |
| METALS   | Marcury                     | 0.0751 1 J J  | 0.0554 1 J J  | 0.0708 1 J J  | 0.0522 1 J J  | 0.1 1 < 0  | 2.8 1 < 0  | 4.7 1 < U  | 0,1 1 < 0  |
| METALS   | Nickel                      | 6.33 1  | 6.89 1  | 6.03 1  | 13.8 1  |  | 445 4  | 1 000  | 1030 1   |
| METALS   | Polassium                   | 638 1   | 670   | B04 1   | 493 1   | 557 1<br>( ) ( )   | 443 (  | 1 1 2 11   | 1 1 - 11   |
| METALS   | Selanium                    | 0.752 1   | 0.608 1   | 0.329   | 0.258   |  | 1120   | 1120   | 1120   |
| METALS   | Siver                       | 1.85 1 U  | 1,94 1 U  | 1.95 1 U U  | 513 1   |  |  |  |  |
| METALS   | South                       | 16.2 1 3 3  | 24.9  | 20.4 1 0 0  | 01.0  | 16.5 1   | 8.1 1  | 8 1  | 15,6 1   |
| METALS   | Thallium                    | 0.109 1   | 0.143 1   | 0.0979 1  | 0.0868 1  |  |  |  |  |
| METALS   | Vanadium                    | 55.5 1  | 63 1  | 63.9 1  | 23.7 1  |  |  |  |  |
| METALS   | Zinc                        | 26.4 1  | 34.6 1  | 21.1 1  | 50.1 1  | 43.2 1   | 25.3 1   | 13.2 1   | 28.5 1   |
| PERC   | Perchlorate                 | 0.0398 4 U  | 0.02 2 U  | 0.00998 1 U U   | 0.05 5 U U  |  |  |  |  |
| SEMIVOLATILES  | 1,2,4-Trichlorobenzene      |   |   |   |   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES  | 1,2-Dichlorobenzene         |   |   |   |   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < 0   |
| SEMIVOLATILES  | 1.3 Djchlorobenzene         |   |   |   |   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES  | 1,4-Dichlorobenzene         |   |   |   |   | 0.33 1 < U   | 0.33 1 < V   | 0.33 1 < 0   | 0,33 1 < U   |
| SEMIVOLATILES  | 2,4,5-Trichlorophenol       |   |   |   |   | 1.65 1 < U   | 1,65 1 4 1   | 1.65 1 4 0   | 0.93 t < ti  |
| SEMIVOLATILES  | 2.4.6-Trichlorophenol       |   |   |   |   | 0.00 1 4 0   | 0.33 1 < 1   | 0.33 1 < 0   | 0.33 t < U   |
| SEMIVOLATILES  | 2,4-Dichlorophenol          |   |   |   |   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES  | 2,4-Dimethylphenol          |   |   |   |   | 1.65 1 < U   | 1.65 1 < U   | 1.65 1 < U   | 1,65 1 < U   |
| SEMIVOLATILES  | 2.4-Oninteprendi            |   |   |   |   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES  | 2.Chinonhenni               |   |   |   |   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0,33 1 < U   |
| SEMIVOLATILES  | 2-Methylnaphthalans         |   |   |   |   | 0.33 1 < U   | 0.33 1 < U   | 0,33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES  | 2-Methylphenol              |   |   |   |   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES  | 2-Nitroaniline              |   |   |   |   | 1.65 1 < U   | 1.65 1 < U   | 1.65 1 < U   | 1,65 f < U   |
| SEMIVOLATILES  | 2-Nitrophenol               |   |   |   |   | 0.33 1 < U   | 0.33 î < U   | 0.33 1 < U   | 0.33 1 < 0   |
| SEMIVOLATILES  | 3,3 Dichlarobenzidine       |   |   |   |   | 0.65 t < V   | 0.65 1 < 0   | 0.65 1 < 0   | 0.65 1 < 0   |
| SEMIVOLATILES  | 3-Nitroaniline              |   |   |   |   | 1.65 1 2 U   | 1,65 1 < 0   | 165 1 4 1  | 165 1  |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol  |   |   |   |   | 1.00 ( < 0   | 033 1 < 1  | 033 1 4 1  | 0.33 1 < U   |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether  |   |   |   |   | 0.55 1 2 1   | 0.65 1 < U   | 0.65 1 < U   | 0.65 1 < U   |
| SEMIVOLATILES  | 4-Chloro-J-meinylphenol     |   |   |   |   | 0.65 1 < U   | 0.65 1 < U   | 0.65 1 < U   | 0.65 1 < U   |
| SEMIVOLATILES  | 4-Chlorophanid obenil alber |   |   |   |   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   |
| SEMINOLATILES  | d.Methylohenol              |   |   |   |   | 0.33 1 < U   | 0,33 1 < U   | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES  | 4-Nitroanlline              |   |   |   |   | 1.65 1 < U   | 1.65 1 < U   | 1.65 t < U   | 1.65 1 < U   |
| SEMIVOLATILES  | 4-Nitrophenol               |   |   |   |   | 1.65 1 < U   | 1.65 i < U   | 1.65 1 < U   | 1.65 1 < U   |
| SEMIVOLATILES  | Acenaphthene                |   |   |   |   | 0.33 1 < U   | 0.33 t < U   | 0.33 1 < U   | 0.33 t < U   |
| SEMIVOLATILES  | Acenaphthylene              |   |   |   |   | 0,33 1 < U   | 0,33 1 < U   | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES  | Anthracene                  |   |   |   |   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 2 0   |
| SEMIVOLATILES  | Benzo(a)anthracene          |   |   |   |   | 0.33 1 < U   | 0.33 1 < U   | ∪.33 1 < U   | 0,00 i < U   |
| SEMIVOLATILES  | Benzo(a)pyrene              |   |   |   |   | 0.33 1 < U   | 0.03 1 < U   | 0.00 F C U   | 0.03 1 0   |
| SEMIVOLATILES  | Benzo(b)fluoranthene        | I   |   |   |   | 0,33 1 < U   | 0.00 F K V   |  |  |

Data Evaluation Report





. .

| Table 3-84   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 084 |

| [SUMP] = SUMPOB4 |  |                   |                   |                   |                   |                  |                  |                  |                  |
|------------------|--|-------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |  | 35SUMP084-SB01    | 35SUMP084-SB01    | 35SUMP084-SB02    | 355UMP084-SB02    | LH-DL84-01       | LR-S84-01        | LH-584-01        | LH-584-01        |
| SAMPLE_NO        |  | 35-SMP084-S601-01 | 35-SMP084-SB01-02 | 35-SMP084-SB02-01 | 35-SMP084-SB02-02 | LH-DUB4-01       | LH-S84-01 QC     | LH-S84-01_1      | LH-S84-01_2      |
| SAMPLE_DATE      |  | 9/21/2006         | 9/21/2006         | 9/21/2006         | 9/21/2006         | 7/21/1993        | 7/21/1993        | 7/21/1993        | 7/21/1993        |
| DEPTH            |  | 0.5 - 0.5 FI      | 2.5 - 2.5 Ft      | 0.5 - 0.5 Ft      | 2.5 - 2.5 FI      | 2 - 4 <b>F</b> t | 0.5 - 1.5 Ft     | 0.5 - 1.5 Ft     | 3 - 5 F1         |
| SAMPLE_PURPOSE   |  | REG               | REG               | REG               | REG               | REG              | FD               | REG              | REG              |
| Test Group       | Paramater (Units = mg/kg)              | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO |
| SEMIVOLATILES    | Benzo(ghi)perviene                     |                   |                   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < 0       |
| SEMIVOLATILES    | Benzo(k)Ruoranthene                    |                   |                   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzolc Acid                           |                   |                   |                   |                   | 1,65 1 < U       | 1.65 1 < U       | 1.65 t < U       | 1.65 1 < U       |
| SEMIVOLATILES    | Benzyl Alcohol                         |                   |                   |                   |                   | 0.65 1 < U       | 0.65 1 < U       | 0.65 t < U       | 0.65 1 < U       |
| SEMIVOLATILES    | bls(2-Chloroethoxy)methane             |                   |                   |                   |                   | 0.33 1 < U       | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethvi)ether                |                   |                   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < Ü       | 0.33 î < U       |
| SEMIVOLATILES    | bis(2+Chloroisopropyl)ether            |                   |                   |                   |                   | 0.33 i < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate             |                   |                   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Butvi henzvi obihalate                 |                   |                   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < V       |
| SEMIVOLATILES    | Chrysane                               |                   |                   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < Ų       |
| SEMINOLATILES    | Dibenzo/a b)anthracene                 |                   |                   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMINOLATILES    | Dihonzofurna                           |                   |                   |                   |                   | 0.33 1 < 11      | 0.33 1 < U       | 0.33 i < U       | 0.33 1 < U       |
| CELINIQUATILES   | Distant abhairte                       |                   |                   |                   |                   | 0.33 1 2 1       | 0.33 1 - 1       | 0.33 1 2 1       | 0.33 1 < U       |
| CELINOLATILES    | Digotyl prinalate<br>Digotyl phinalate |                   |                   |                   |                   | 0.33 1 2 1       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Chroainyi Chimanais                    |                   |                   |                   |                   | 0.03 1 < 0       | 0.33 1 2 1       | 0.33 1 4 1       | 0.33 1 < U       |
| SEMIVOLATILES    | din Suly prinate                       |                   |                   |                   |                   | 0.00 1 4 1       | 0.33 1 4 1       | 0.33 1 2 13      | 0.33 1 4 1       |
| SEMIVOLATILES    | di-n-Octyl pribalate                   |                   |                   |                   |                   | 0.33 ( < 0       | 0.03 1 4 1       | 0.03 1 4 1       | 0.33 ( < 1)      |
| SEMIVOLATILES    | Fluoranthene                           |                   |                   |                   |                   | 0.33 1 < U       |                  | 0.05 1 4 1       | 0.33 1 < 0       |
| SEMIVOLATILES    | Fluorane                               |                   |                   |                   |                   | 0.33 1 < 0       | 0,03 1 < 0       | 0,33 1 4 0       | 0.00 1 4 1       |
| SEMIVOLATILES    | Hexachlorobenzene                      |                   |                   |                   |                   | 0.33 1 4 0       | 0.33 1 < 0       |                  | 0,00 1 4 0       |
| SEMIVOLATILES    | Hexachlorobutadiene                    |                   |                   |                   |                   | 0.33 1 < 0       | 0.33 1 2 0       | 0,33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorocyclopentadiene              |                   |                   |                   |                   | 0.33 1 < U       | 0,33 1 < U       | 0,33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES    | Hexachloroelhane                       |                   |                   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 10,33 1 < U      |
| SEMIVOLATILES    | Indeno(1.2.3-cd)pyrene                 |                   |                   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES    | Isophorona                             |                   |                   |                   |                   | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Naphthalene                            |                   |                   |                   |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Nirobenzene                            |                   |                   |                   |                   | 0.33 1 < U       | 0.33 î < U       | 0,33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine             |                   |                   |                   |                   | 0,33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine                 | }                 |                   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Pentachlorophanol                      | 1                 |                   |                   |                   | 1.65 í < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | Phenanibrene                           |                   |                   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Phenol                                 |                   |                   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Pyrene                                 | l '               |                   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| VOLATILES        | 1,1,1,2-Tetrachloroethane              |                   | 0,00608 1 U       |                   | 0.00529 1 U U     |                  |                  |                  |                  |
| VOLATILES        | 1,1,1-Trichloroethane                  |                   | 0.00508 1 U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | t,t,2,2-Tetrachloroethane              |                   | 0.00608 1 U       |                   | 0.00529 1 U U     | 0,005 1 < U      | 0.005 1 < U      | 0.005 i < U      | 0.005 1 < U      |
| VOLATILES        | 1,1.2-Trichloroethane                  |                   | 0.00608 1 U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 i < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichloroethane                     |                   | 0.0060B 1 U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 1 < 10     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichlorgethene                     |                   | 0.00608 1 U       |                   | 0.00529 1 U U     | 0,005 1 < U      | 0.005 f < U      | 0,005 1 < Ü      | 0.005 1 < U      |
| VOLATILES        | 1.1-Dichioroprocene                    | 1                 | 0.00608 t U       |                   | 0.00529 1 U U     |                  |                  |                  |                  |
| VOLATILES        | 1.2.3-Trichlorobenzene                 |                   | 0.00508 1 U       |                   | 0.00529 1 U U     |                  |                  |                  |                  |
| VOLATILES        | 1.2.3-Trichloropropane                 |                   | 0.00608 t U       |                   | 0.00529 1 U U     |                  |                  |                  |                  |
| VOLATH ES        | 1.2.4-Trichlorobenzene                 | 1                 | 0.00608 1 U       |                   | 0.00529 1 U U     |                  |                  |                  |                  |
| VOLATILES        | 1.2.4-Trimethylbenzene                 |                   | 0.00608 1 U       |                   | 0.00529 1 U U     |                  |                  |                  |                  |
| VOLATILES        | 1.2-Dibromo-3-chloroponane             |                   | 0.00608 1 1       |                   | 0.00529 1 U U     |                  |                  |                  |                  |
| VOI ATILES       | 1 2.Dibromoethape                      |                   | 0.00608 1 1       |                   | 0.00529 1 U U     |                  |                  |                  |                  |
| VOLATILES        | 1.2.Dichlorabenzene                    |                   | 0.00608 1 11      |                   | 0.00529 1 U U     |                  |                  |                  |                  |
| VOLATILES        | 2-Dichleringthang                      |                   | 0.00508 1 11      |                   | 0.00520 1 11 11   | 0.005 1 2 11     | 0.005 1 - 11     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATICES        | 1.2-Dichlorosthana                     |                   | 0.00000 1 0       |                   | 0.00020 1 0 0     | 0,005 1 < 0      | 0.005 1 2 1      | 0.005 1 2 0      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichlosoenene                      |                   | 0.00500 / 11      |                   |                   | 0.005 1 4 1      | 0.005 1 < 0      | 0,005 1 4 1      | 0.005 1 4 0      |
| VOLATILES        | i a Dimetholographia (a Volarit)       |                   |                   |                   | 0.0020 1 0 0      | 0.003 / K U      |                  | 0,000 / 2 0      |                  |
| VOLATILES        |  |                   | 0.00008 F U       |                   | 0.00225 1 U U     |                  |                  |                  |                  |
| VOLATILES        | 1.3.5-I AMBINIDENZENE                  |                   | U.UUDUH 1 U       |                   | 0.00520 1 U U     |                  |                  |                  |                  |
| VOLATILES        | 1,3-Disnioroberizens                   |                   | 0.00608 1 0       |                   | 0.00529 1 U U     |                  |                  |                  |                  |
| VOLATILES        | 1,3-Dichloropropane                    |                   | U 1 B0500.U       |                   | 0.00529 1 0 0     |                  |                  |                  |                  |
| VOLATILES        | 1,4-Dichlorobenzene                    | 1                 | 0.00608 1 U       |                   | 0.00529 1 U U     |                  |                  |                  |                  |
| VOLATILES        | 2.2-Dichloropropane                    |                   | 0.00608 t U       |                   | 0.00529 1 U U     |                  |                  |                  |                  |
| VOLATILES        | 2-Bulanone                             |                   | 0.0122 1 U        |                   | 0.0106 1 U U      | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | 2-Chloroethyl vinyl ether              |                   | 0.0122 I U        |                   | 0.0106 1 U U      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | 2-Chlorololuone                        |                   | 0,00608 1 U       |                   | 0.00529 i U U     |                  |                  |                  |                  |





.

| Table 3-84   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 084 |

| [SUMP] = SUMP084 |                           |                   |                   |                   |                   |                  |                    |                  |                  |
|------------------|---------------------------|-------------------|-------------------|-------------------|-------------------|------------------|--------------------|------------------|------------------|
| LOCATION _CODE   |                           | 35SUMP084-SB01    | 35SUMP084-SB01    | 35SUMP084-SB02    | 35SUMP084-SB02    | LH-DL84-01       | LH-\$84-01         | LH-S84-01        | LH-S84-01        |
| SAMPLE_NO        |                           | 35-SMP084-S801-01 | 35-SMP084-SB01-02 | 35-SMP084-SB02-01 | 35-SMP084-SB02-02 | LH-0184-01       | LH-584-01 OC       | LH-S84-01_1      | LH-584-01_2      |
| SAMPLE_DATE      |                           | 9/21/2006         | 9/21/2006         | 9/21/2006         | 9/21/2006         | 7/21/1993        | 7/21/1993          | 7/21/1993        | 7/21/1993        |
| DEPTH            |                           | 0.5 - 0.5 FI      | 2.5 - 2.5 Ft      | 0.5 - 0.5 Ft      | 2.5 - 2.5 FI      | 2 - 4 F1         | 0.5 - 1.5 Ft       | 0,5 - 1,5 Ft     | 3 - 5 F1         |
| SAMPLE_PURPOSE   |                           | REG               | REG               | REG               | REG               | REG              | FD                 | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg) | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO | Result OIL, LO, VO | Result OIL LO VO | Result DIL LO VO |
| VOLATILES        | 2-Hexanone                |                   | 0.0122 1 U        |                   | 0.0106 1 U U      | 0.05 1 < U       | 0.05 1 < U         | 0.05 1 < U       | 0.05 f < U       |
| VOLATILES        | 4-Chloratokiene           |                   | 0.00608 1 U       |                   | 0.00529 1 U U     |                  |                    |                  |                  |
| VOLATILES        | Acetone                   |                   | 0.0122 1 U        |                   | 0,0106 1 U U      | 0.1 1 < U        | 0.1 1 < U          | 0.1 1 < U        | 0.1 1 < U        |
| VOLATILES        | 8enzene                   |                   | 0.00608 I U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Sromobenzene              |                   | 0.00508 1 U       |                   | 0.00529 1 U U     |                  |                    |                  |                  |
| VOLATILES        | Stomochlotomathana        |                   | 0.00608 1 U       |                   | 0.00529 1 U U     |                  |                    |                  |                  |
| VOLATILES        | Bromodichloromethane      |                   | 0.00608 t U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 I < U        | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | Bromaform                 |                   | 0.00608 I U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 I < U        | 0.005 f < U      | 0.005 f < U      |
| VOLATILES        | Bromomethane              |                   | 0.0122 t U        |                   | 0.0106 1 U U      | 0.01 1 < U       | 0.01 t < U         | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Carbon disullide          |                   | 0.00608 1 U       |                   | 0.00529 1 U U     | 0.005 t < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Carbon leirachioride      |                   | 0.00608 1 U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0,005 1 < U        | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chlorobenzene             |                   | 0.00608 I U       |                   | 0.00529 1 U U     | 0.005 f < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloroethane              |                   | 0.0122 1 U        |                   | 0,0106 1 U U      | 0.01 1 < U       | 0.01 1 < V         | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Chiproform                |                   | 0.00608 I U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 1 < U        | 0.005 î < V      | 0.005 1 < U      |
| VOLATILES        | Chloromethane             |                   | 0.0122 1 U        |                   | 0.0106 1 U U      | 0.01 1 < U       | 0,01 1 < U         | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | cis-1,2-Dichloraethene    |                   | 0,00608 1 U       |                   | 0.00529 1 U U     |                  |                    |                  |                  |
| VOLATILES        | cis-1,3-Dichloropropene   |                   | 0.00608 1 U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 i < U        | 0,005 1 < U      | 0.005 f < U      |
| VOLATILES        | Dibromochloromethane      | 1                 | 0.00608 1 U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromomethane            |                   | 0.00608 1 U       |                   | 0.00529 t U U     |                  |                    |                  |                  |
| VOLATILES        | Dichlorodifluoromethane   |                   | 0.0122 1 U        |                   | 0.0106 1 U U      |                  |                    |                  |                  |
| VOLATILES        | Elhylbenzene              |                   | 0.00608 1 U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Hexachlorobutadiene       |                   | 0.00608 1 U       |                   | 0.00529 1 U U     |                  |                    |                  |                  |
| VOLATILES        | sopropylbenzene           |                   | 0.00508 1 U       |                   | 0,00529 1 U U     |                  |                    |                  |                  |
| VOLATILES        | m.p-Xylanas               |                   | 0.00608 ¥ U       |                   | 0.00529 1 U U     |                  |                    |                  |                  |
| VOLATILES        | Mathyl Isobutyl kelone    |                   | 0.0122 U          |                   | 0.0106 1 U U      | 0.05 1 < U       | 0.05 1 < Ų         | 0,05 1 < U       | 0.05 t < U       |
| VOLATILES        | Mathylena chloride        |                   | 0.00281 1 J B     |                   | 0.0025 t J J      | 0.005 + < U      | 0.005 1 < U        | 0.005 1 < U      | 0,005 1 < U      |
| VOLATILES        | Naphihalene               | 1                 | 0.0122 1 U        |                   | 0.0106 i U U      |                  |                    |                  |                  |
| VOLATILES        | n-BUTYLBENZENE            |                   | 0.00608 1 U       |                   | 0.00529 1 U U     |                  |                    |                  |                  |
| VOLATILES        | n-PROPYLBENZENE           |                   | 0.00608 1 U       |                   | 0.00529 1 U U     |                  |                    |                  |                  |
| VOLATILES        | p-ISOPROPYLTOLUENE        |                   | 0.00608 1 U       |                   | 0.00529 1 U U     |                  |                    |                  |                  |
| VOLATILES        | sec-BUTYLBENZENE          |                   | 0.00608 1 U       |                   | 0.00529 1 U U     |                  |                    |                  |                  |
| VOLATILES        | Styrene                   |                   | 0.00608 1 U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 1 < U        | 0.005 i < U      | 0.005 1 < U      |
| VOLATILES        | Ierl-BUTYL8ENZENE         |                   | 0.00608 1 U       |                   | 0.00529 1 U U     |                  |                    |                  |                  |
| VOLATILES        | Tetrachioroethene         | 1                 | 0.00608 1 U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 í < U        | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | Toluene                   | }                 | 0.00508 1 U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 i < U        | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | trans-1.2-Dichlorpethene  |                   | 0.00608 t U       |                   | 0.00529 1 U U     |                  |                    |                  |                  |
| VOLATILES        | trans-1.3-Dichloropropena | ł                 | 0.00508 1 U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 f < U        | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Trichioroethene           | 1                 | 0.00608 1 U       |                   | 0.00529 1 U U     | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | TrichloroBuoromethane     |                   | 0.0122 1 U        |                   | 0.0106 1 U U      |                  |                    |                  |                  |
| VOLATILES        | Vinvi acetale             |                   | 0.0122 1 U UJ     |                   | 0.0106 1 U UJ     | 0.05 t < U       | 0.05 1 < U         | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | Vinvl chloride            |                   | 0.0122 1 U        |                   | 0.0106 t U U      | 0.01 1 < U       | 0.01 1 < U         | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Xvienes, Total            |                   |                   |                   |                   | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U      |

Footnotes are shown on cover page to Tables Section.

110

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-85 . Concentrations of Chemicals in Soil Samples Associated with Sump 085

| (SUMP) = SUMP085 |                              |                         |                   |                    |                  | ·····                    |                     | •                |                  | 112 000 00           | 111000.00        | 111 202.00                | 111-596-02       |
|------------------|------------------------------|-------------------------|-------------------|--------------------|------------------|--------------------------|---------------------|------------------|------------------|----------------------|------------------|---------------------------|------------------|
| LOCATION _CODE   |                              | 35SUMP085-SB02          | 35SUMP086-SB01    | 35SUMP086-SB01     | LH-DL85-01       | LH-S85-01                | LH-S85-02           | LH-S86-01        | LH-S86-01        | 14 585-01 2          | LH-386-02        | 14-586-02 2               | 18-586-02-3      |
| SAMPLE_NO        |                              | 35-SMP085-SB01-02       | 35-SMP086-SB01-01 | 35-SMP086-SB01-02  | CH-OE65-01       | LH-585-U1_1<br>c/26/6002 | LH-363-02_1         | 7/27/1003        | 7/27/1993        | 7/27/1993            | 7/27/1993        | 7/27/1993                 | 7/27/1993        |
| SAMPLE_DATE      |                              | 9/20/2005               | 9/21/2006         | 9/21/2006          | 0/20/1993        | 6/20/1993                | 0201333             | 05 25            | 05.25            | 7 - 9 Ft             | 05-25            | 4 - 6 Ft                  | 7-9Ft            |
| DEPTH            |                              | 4.5 - 4.5 FL            | 0.5 - 0.5 Ht      | 8-81               | 2.5-3H           | 3.5-4.5 FL               | 3.3 - 4.3 FL<br>BEG | 0.3-271<br>FD    | BEG              | 8FG                  | REG              | REG                       | REG              |
| SAMPLE_PUHPOSE   | Demostor (Linite - mailer)   | REG<br>Receil Dit LO VO | Result DNI 10 VO  | Result Diff LO VO  | Result Dik IO ∀0 | n∈o<br>Besalt BIL I O VO | Result DIL LO VQ    | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ     | Result Dit LQ VQ | Result DIL LQ VQ          | Result DIL LQ VQ |
| EVELOPHUES       | 2.4 Dioitratoluona           | ACSUN DIL LU VO         |                   | Ingout Die Cog Pog | 1.22 1 < 11      | 1.22 1 < 1               | 1.299 1 < U         | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U           |                  | 0.33 1 < U                | 0.33 1 < U       |
| EXPLOSIVES       | 2 6-Dinitrotoluene           |                         |                   |                    | 1.22 1 < U       | 1.22 1 < U               | 1.299 1 < U         | 0.33 1 < U       | 0.33 i < U       | 0.33 1 < U           |                  | 0.33 1 < U                | 0.33 1 < U       |
| METALS           | Aluminum                     | 12500 1                 | 5300 1            | 4580 1             | 18200 1          | 6790 1                   | 16200 1             | 4800 1           | 6490 1           | 5150 1               | 6420 t           | 10800 1                   | 5650 1           |
| METALS           | Antimony                     | 0.118 1 U               | 0.114 1 V V       | 0.117 1 U U        | 5.12 1 < U       | 4.18 1 < U               | 4.02 1 < U          | 31 < U           | 31 < U           | 31 < U               | 31 < U           | 31 < U                    | 31 < U           |
| METALS           | Arsenic                      | 0.551 1                 | 3.42 1            | 0.9 1              | 2.59 1           | 2.34 t                   | 1.15 1              | 15.4 1           | 4 1              | 2.3 1                | 4 1              | 3.1 1                     | 2.9 1            |
| METALS           | Barium                       | 152 1                   | 43 1              | 71.7 1             | 96.5 1 < U       | 63.8 1< U                | 117 1 < U           | 76.3 1           | 109 1            | 117 1                | 117 1            | 481 1                     | 89.5 1           |
| METALS           | Beryflum                     | 0.841 1                 | 0.517 1           | 0.487 1            |                  |                          |                     |                  |                  | · · ·                |                  |                           | 1 1 4 1          |
| METALS           | Cadmium                      | 0.16 1 J J              | 0.0983 1 J J      | 0.0619 1 J J       | 5.45 1 < U       | 4.68 1 < U               | 4.64 1 < U          | 1 1 < U          | 11 < U           | 11 < 0               | 1 1 < 0          | 1 × U                     | 1 / < U<br>D/7 1 |
| METALS           | Calcium                      | 598 1                   | 901 1             | 254 1              | 701 1            | 816 1                    | 1230                | 2300 1           | 1420 1           | 700 I                | 27.5 1           | 145 1                     | 87 1             |
| METALS           | Chromium                     | 11.1 1                  | 17.7 1            | 4.86 1             | 19.3 1           | 10.7 1                   | 4.0 1<br>6.22 1     | 23.9             | 1953 I           | 14.6 1               | 76 1             | 31.7 1                    | 9.3 1            |
| METALS           | Cobatt                       | 6.3 t                   | 3.6 1             | 4.38 1             | 5./1 1           | 8.79 I                   | 97/1 2 1            | 55 1             | 43 1             | 44 1                 | 39 1             | 7.4 1                     | 3.4 1            |
| METALS           | Copper                       | 3.94 1                  | 3.09              | 2.10 1             | 19500 1 < U      | 17100 ł                  | 16709 1             | 29400 1          | 21000 1          | 11400 1              | 21300 1          | 18000 1                   | 12300 1          |
| METALS           | Iron                         | 17100 1                 | 1400 1            | 319 1              | 25.3 t           | 136 1                    | 26.8 1              | 46.1             | 27 1             | 4.3 1                | 17 1             | 13.8 1                    | 6 1              |
| METALS           | Lead                         | 9.74 1                  | 10.0 1            | 5.15 I<br>603 1    | 787 1            | 433 1                    | 1170 1              | 216 1            | 373 1            | 421 1                | 283 1            | 626 1                     | 440 1            |
| METALS           | Magnesion                    | 601 1                   | 107 1             | 21 1               | 318 1            | 206 1                    | 67.4 1              | 182 1            | 17.5 1           | 83.6 t               | 597 1            | 225 1                     | 102 1            |
| METALO           | Marganese .                  | 0.295 1 1               | 00191 1           | 11294 1 1 11       | 0.052 1 < U      | 0.06 t< U                | 0.057 t < U         | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < <del>U</del> | 0.1 1 < U        | 0.1 1 < U                 | 0.1 1 < U        |
| METALS           | Nickel                       | 11.4 1                  | 4.37 1            | 7.24 1             |                  | *                        | _                   |                  |                  |                      |                  |                           |                  |
| METALS           | Potassium                    | 364 1                   | 207 1             | 272 1              | 758 1            | 300 1                    | 652 1               | 216 1            | 390 1            | 437 1                | 295 1            | 662 t                     | 457 1            |
| METALS           | Selenium                     | 0.309 1                 | 0.233 1           | 0.235 1 U U        | 0.512 1 < U      | 0.418 1 < U              | 0.402 1 < U         | 11 < U           | 11 < U           | 1 1 < U              | t 1 < U          | 11 < U                    | 11 < U           |
| METALS           | Silver                       | 1.75 1 U                | 1.72 1 U U        | 1.83 1 U U         | 0.028 1 < U      | 0.044 1< U               | 0.024 1 < U         | 11 < U           | 11 < U           | 1 1 < U              | 11 < U           | 11 < U                    | 11 < U           |
| METALS           | Sodium                       | 358 1                   | 13.9 1 J J        | 166 t              |                  |                          |                     |                  |                  |                      |                  |                           |                  |
| METALS           | Strontium                    |                         |                   |                    | 10.1 1 < U       | 8.67 t< U                | 24.5 1 < U          | 11,1 1           | 182 1            | 18.5 1               | 12.6 1           | 45.1 1                    | 20.5 1           |
| METALS           | Thallium                     | 0.0741 1                | 0.264 1           | 0.0367 1           |                  |                          |                     |                  |                  |                      |                  |                           |                  |
| METALS           | Vanadium                     | 18.1 1                  | 22.7 1            | 7.55 1             |                  |                          |                     |                  |                  |                      |                  |                           |                  |
| METALS           | Zinc                         | 21 1                    | 16.5 1            | 20 1               | 30.9 1           | 15.7 1                   | 29.9 1              | 122 1            | 9.5 1            | 43.3 1               | 18.1 1           | 38.4 1                    | 43.6 1           |
| PERC             | Perchlorate                  | 0.098 10 U              | 0.0501 5 U U      | 0.199 20 U U       |                  |                          |                     |                  |                  |                      | 0.00 + . II      | 009 1 - 18                | ו ביו ביו א      |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene       | 0.193 1 U               |                   |                    | 1.22 1 < U       | 1.22 1 < U               | 1.299 t < U         | 0.33 1 < U       | 0.33 1 < 0       | 0.33 7 < U           | 0.33 1 < 0       | 0.33   < U                | 0.33 / < 0       |
| SEMIVOLATILES    | 1,2-Dichlorobenzene          | 0.193 1 U               |                   |                    | 1.22 1 < U       | 1.22 1 < U               | 1.299 1 < U         | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0           | 0.33 1 < 0       | 0.33 1 < 1                | 0.33 1 < 1       |
| SEMIVOLATILES    | 1,3-Dichlorobenzene          | 0.193 1 U               |                   |                    | 1.22 1 < 0       | 1.22 1 < 0               | 1.299 1 < 0         | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 1           | 0.33 1 C U       | 0.33 1 < 1                | 0.33 1 < U       |
| SEMIVOLATILES    | 1,4-Dichlorobenzene          | 0.193 1 U               |                   |                    | 1.22 1 < U       | 1.22 1 < U               | 1.239 1 < 0         | 165 1 4 1        | 1.65 1 < 11      | 165 1 < 1            | 1.65 1 < 11      | 1.65 1 < U                | 1.65 1 < U       |
| SEMIVOLATILES    | 2,4,5 Trichlorophenol        | 0.193 1 U               |                   |                    | 1.22 1 C U       | 1.22 1 < 0               | 1239 1 < 0          | 033 1 < ()       | 033 1 < 11       | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U       |
| SEMIVOLATILES    | 2,4,6-1 nchlorophenol        | 0.193 1 U               |                   |                    | 122 1 4 0        | 122 1 4 1                | 1.233 1 < 0         | 033 1 < 1        | 0.33 1 < U       | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U       |
| SEMIVOLATILES    | 2,4-Uichkorophenol           | 0.193 1 U               |                   |                    |                  | 0.61 1 4 1               | 1.£33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U       |
| SEMIVOLATILES    | 2.4-Dintentypatenti          | 0.755 1 0               |                   |                    | 12195 1 < U      | 12195 1 < U              | 12.987 1 < U        | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U           | 1.65 1 < U       | 1.65 1 < U                | 1.65 t < U       |
| SEMIVOLATILES    | 2.4-Dinisophenol             | 0.193 1 11              |                   |                    |                  |                          |                     |                  |                  |                      | 0.33 1 < U       |                           |                  |
| SEMIVOLATILES    | 2 6-Dinitroteluene           | 0.193 1 U               |                   |                    |                  |                          |                     |                  |                  |                      | 0.33 1 < U       |                           |                  |
| SEMIVOLATILES    | 2-Chlorenaphthalene          | 0.193 1 U               |                   |                    | 0.366 1 < U      | 0.366 1 < U              | 0.39 1 < U          | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < ป           | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Chlorophenol               | 0.193 1 U               |                   |                    | 0.61 1 < U       | 0.61 1 < U               | 0.649 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U                | 0.33 I < U       |
| SEMIVOLATILES    | 2-Methylnaphthatene          | 0.193 1 U               |                   |                    | 0.366 1 < U      | 0.366 1 < U              | 0.39 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Methylphenol               | 0.193 t U               |                   |                    | 0.61 1 < V       | 0.61 1 < U               | 0.649 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Nitroaniline               | 0.965 t U               |                   |                    | 3.659 1 < U      | 3.659 1 < U              | 3.896 1 < U         | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U           | 1.65 1 < U       | 1.65 1 < 0                | 1.65 1 < 0       |
| SEMIVOLATILES    | 2-Nitrophenol                | 0.193 1 U               |                   |                    | 1.22 1 < ⊍       | 1.22 1 < U               | 1,299 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 1 < 0       | 0.33 1 < 0                | 0.33 1 < 0       |
| SEMIVOLATILES    | 3,3-Dichlorobenzidine        | 0.386 1 U               |                   |                    | 0.61 1 < U       | 0.61 t< U                | 0.649 1 < U         | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U           | 0.65 1 < 0       | · 0.65 J < 0              | 1.65 1 < 1       |
| SEMIVOLATILES    | 3-Nitroaniline               | 0.965 1 U               |                   |                    | 3.659 1 < U      | 3.659 1 < U              | 3.896 1 < U         | 1.65 1 < U       | 1.00 L < U       | 1.00 1 < 0           | 165 1 - 11       | 1.00 ·i < 0<br>165 1 - 11 | 165 1 2 11       |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol   | 0.965 1 U               |                   |                    | 6.098 1 < U      | 6.098 1 < U              | 6.494 1 < 0         | 1.55 1 < 0       | . 1.00 1 < U     | 1.00 1 < 0           | 1.00 I < U       | 033 1 4 1                 | 033 1 < 8        |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether   | 0.193 1 U               |                   |                    | 1,22 1 < U       | 1.22 1 < 0               | 1.299   < U         | 0.65 1 < 1       | 0.55 1 < 1       | 0.65 1 < 1           | 0.65 1 < 1       | 0.65 1 < 0                | 0.65 1 < U       |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol      | 0.193 1 U               |                   |                    | 0.01 1 < 0       | 0.51 14 0                | 2006 1 < 1          | 0.65 1 < 17      | 0.65 1 < 11      | 0.65 1 < 1           | 0.65 1 < U       | 0.65 1 < U                | 0.65 1 < U       |
| SEMIVOLATRES     | 4-Chloroaniline              | 0.193 1 U               |                   |                    | 3.039 i < U      | 122 1 4 11               | 1299 1 < 13         | 0.33 t < 11      | 0.33 1 < 1       | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Critorophenyi phenyi ether | 0.193 1 U               |                   |                    |                  | A61 1 4 11               | 0.649 1 < 1         | 0.33 1 < 1       | 0.33 1 < U       | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U       |
| SEMIVOLATILES    | 4-Methysphenol               | 0.193 1 U               |                   |                    | 6.098 t < U      | 6098 1< U                | 6.494 1 < U         | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U           | 1.65 1 < U       | 1.65 1 < U                | 1.65 t < U       |
| SEMIVOLATILES    | 4-Mittophanal                | 0.965 1 U               |                   |                    | 6.098 1 < 1      | 6098 1< 1                | 6.494 1 < U         | 1.65 t < U       | 1.65 1 < U       | 1.65 1 < U           | 1.65 1 < U       | 1.65 1 < U                | 1.65 1 < U       |
| SEMIVOLATILES    | 4-1410000101                 | 0.303 1 0               |                   | and the start      | 0.366 1 < 1      | 0.366 1 < 1              | 0.39 1 < U          | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 t < U       | 0.33 t < U                | 0.33 1 < U       |
| SEMIVOLATILES    | Acenaphthylene               | 0.193 1 1               |                   |                    | 0.61 1 < U       | 0.61 1 < 1               | 0.649 1 < U         | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 1 < U       | 0.33 t < U                | 0.33 1 < U       |
| SEMIVOLATE ES    | Anthracene                   | 0.193 1 U               |                   |                    | 0.61 1 < U       | 0.61 1 < U               | 0.649 1 < U         | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 t < U       | 0.33 1 < U                | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(a)anthracene           | 0.193 1 1               |                   |                    | 0.366 1 < U      | 0.366 1 < U              | 0.39 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 1 < U       | 0.33 t < U                | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(a)ovrene               | 0.193 1 U               |                   |                    | 0.61 1 < U       | 0.61 1 < U               | 0.649 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(b)fluoranthene         | 0.193 1 U               |                   |                    | 1.22 1 < U       | 1.22 1 < U               | 1.299 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 t < U       | 0.33 1 < U                | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(ghi)perylene           | 0.193 1 U               |                   | •                  | 2.439 1 < U      | 2.439 1 < U              | 2.597 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 t < U       | 0.33 1 < U                | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(k)fluoranthene         | 0.193 t U               |                   |                    | 1.22 1 < U       | 1.22 1 < U               | 1.299 1 < Ü         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 1 < U       | 0.33 1 < U                | 0.33 1 < U       |
| SEMIVOLATILES    | Benzoic Acid                 | 0.965 1. U              |                   |                    |                  |                          |                     | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U           | 1.65 1 < U       | 1.65 1 < U                | 1.65 T < U       |
| SEMIVOLATILES    | Benzyi Alcohol               | 0.193 1 U               |                   |                    |                  |                          |                     | 0.65 1 < U       | 0.65 t < U       | 0.65 1 < U           | 0.65 1 < U       | 0.65 1 < U                | 0.65 1 < 0       |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane   | 0.193 1 U               |                   |                    | 0.61 1 < U       | 0.61 \$< U               | 0.649 1 < U         | 0.33 1 < U       | 0.33 t < U       | 0.33 t < U           | 0.33 t < U       | 0.33 1 < U                | 0.33 1 < 10      |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether      | 0.193 1 U               |                   |                    | 0.61 1 < U       | 0.61 1 < U               | 0.649 t < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           | 0.33 1 < U       | 0.33 T < U                | 0.33 T < U       |

 $\pm \pm j$ 

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-85 Concentrations of Chemicals in Soil Samples Associated with Sump 085

| (SUMP) = SUMP085               |                                |                   |                   |                   |                  | •                 |                         | •                |                  |                  |                  |                  |                         |
|--------------------------------|--------------------------------|-------------------|-------------------|-------------------|------------------|-------------------|-------------------------|------------------|------------------|------------------|------------------|------------------|-------------------------|
| LOCATION _CODE                 |                                | 355UMP085-SB02    | 35SUMP086-SB01    | 35SUMP086-SB01    | LH-DL85-01       | LH-S85-01         | LH-S85-02               | LH-\$86-01       | LH-S86-01        | LH-S86-01        | LH-S86-02        | LH-S86-02        | LH-\$86-02              |
| SAMPLE_NO                      |                                | 35-SMP085-SB01-02 | 35-SMP086-SB01-01 | 35-SMP086-SB01-02 | LH-DL85-01       | LH-S85-01_1       | LH-S85-02_1             | LH-S86-01 QC     | LH-S86-01_1      | LH-S86-01_2      | LH-S86-02_1      | LH-S86-02_2      | LH-S86-02_3             |
| SAMPLE_DATE                    |                                | 9/20/2006         | 9/21/2006         | 9/21/2006         | 6/26/1993        | 6/26/1993         | 6/26/1993               | 7/27/1993        | 7/27/1993        | 7/27/1993        | 7/27/1993        | 7/27/1993        | 7/27/1993               |
| DEPTH                          |                                | 4.5 - 4.5 Ft      | 0.5 - 0.5 Ft      | 8-8 Fl            | 2.5 - 3 Ft       | 3.5 - 4.5 Ft      | 3,5 - 4,5 Ft            | 0.5 - 2 Ft       | 0.5 - 2 F1       | 7 - 9 Ft         | 0.5 - 2 Ft       | 4 - 6 Ft         | 7 - 9 Ft                |
| SAMPLE_PURPOSE                 |                                | REG               | REG               | REG               | REG              | REG               | REG                     | FD               | 8EG              | REG              | REG              | REG              | REG                     |
| Test Group                     | Parameter (Units = mg/kg)      | Result DIL LQ VQ  | Result DIL LO VO  | Result DIL LQ VQ  | Result DIL LQ VQ | Result DilL LQ VQ | Result DIL LO VO        | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ        |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether    | 0.193 1 U         |                   |                   | 1.22 1 < V       | 1.22 1 < U        | 1.29 <del>9</del> 1 < U | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthalate     | 0.193 1 U         |                   |                   | 0.145 1 J        | 0.61 1< 1         | 0.649 1 < U             | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0              |
| SEMIVOLATILES                  | Butyt benzyt phthalate         | 0.193 1 U         |                   |                   | 0.61 1 < U       | 0.61 1 < U        | 0.649 1 < U             | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0              |
| SEMIVOLATILES                  | Carbazole                      | 0.400 A 11        |                   |                   | 1.22 1 < U       | 1.22 1 < U        | 1.299 1 < U             | 0 <b>00</b> 4 11 |                  | 200 d U          |                  | 0.00 ( )         | 0.22 1                  |
| SEMIVULATILES                  | Chrysene                       |                   |                   |                   | 10.098 T < U     | 6.098 I < U       | 6.434 I < U             | 10.33 I < U      | 10.33 F < U      | 0.33 1 < 0       | 0.33 } < 0       | 0.33 1 < 0       | 0.33 1 < 0              |
| SEMIVOLATILES                  | Dipenzo(a,n)antitracene        | 0.193 1 0         |                   |                   | 2.439 1 < U      | 2.439 1 < 0       | 2.39/ 1 < 0             | 0.03 1 < 0       | 0.33 1 < U       | 0.33 ( < 0       | 0.33 1 < 0       | 0.33 1 < 0       |                         |
| SEMIVOLATILES                  | Diperizorarize                 | 0.193 1 0         |                   |                   | 1.22 7 4 0       | 1.22 1 4 0        | 1.299   < 0             | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 + < 0       | 0.30 1 < 0       |                  | 0.00 1 4 14             |
| SEMIVOLATILES<br>SEMIVOLATILES | Dienyr prinaale                | 0.193 1 0         |                   |                   | 0.122 I J        | 0.51 1 4          | 0.12 1 JD               | 0.33 1 < 0       | 0.35 1 < 0       | 0.33 1 < 0       | 0.35 1 C U       | 0.33 1 < 11      | 0.33 1 < 0              |
| CEMINOLATILES                  | din Rubd abthalate             | 0.130 1 0         |                   |                   | 0.01 1 < 0       | 2744 1            | 0.049 1 < 0<br>519 1 B  | 0.33 1 2 0       | 0.00 1 < 0       | 0.33 1 < 0       | 0.35 1 < 0       | 0.33 1 < 1       | 0.33 1 < 0              |
| SCHRYOLATILES                  | di n Oobd obtoolate            | 0.150 1 0         |                   |                   | 0.000            | 0.61 1 2 31       | 10 1 012                | 0.33 1 < 0       | 0.33 1 < 13      | 0.33 1 4 1       | 0.33 1 < U       | 0.33 1 < 1       | 0.30 I < U              |
| SEMIVOLATILES                  | Eleverantheae                  | 0.193 1 11        |                   |                   | 0.61 1 4 1       | 0.01 1 C U        | 0.649 1 < 1             |                  |                  | 0.33 1 < 11      | 0.33 1 < 1       | 0.33 1 < 1       | 0.33 1 < U              |
| SEMINOUS ATH ES                | Elvarana                       | 0.193 1 1         |                   |                   | 0.61 1 2 11      | 0.61 1 2 1        | 0.649 1 < 11            | 0.33 1 < 11      | 0.33 1 < 14      | 033 1 4 1        | 0.33 1 4 1       | 0.33 1 < 1       | 0.33 1 < 11             |
| SEMIVOLATH ES                  | Hevachlomhenzene               | 0.193 1 11        |                   |                   | 122 1 4 1        | 122 1 2 1         | 1299 1 < 4              | 0.33 1 < 11      | 0.33 1 4 11      | 033 1 < 1        | 0.33 1 < 11      | 0.33 1 < 1       | 0.33 1 < U              |
| SEMIVOLATILES                  | Hexachinrobutadiene            | 0.193 1 U         |                   |                   | 3,659 1 < 1      | 3,659 1 < 0       | 3.896 1 < 1             | 0.33 1 < 1       | 1.33 1 < 12      | 0.33 T < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene      | 0.193 1 U         |                   |                   | 3,659 1 < 1      | 3,659 1 < 1       | 3.896 1 < U             | 0.33 1 < 1       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Hexachloroethane               | 0.193 1 U         |                   |                   | 1.22 1 < U       | 1.22 1 < U        | 1.299 1 < U             | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U              |
| SEMIVOLATILES                  | indeno[1.2.3-cd)pyrene         | 0.193 1 U         |                   |                   | 1.22 1 < U       | 1.22 1 < U        | 1.299 1 < U             | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U              |
| SEMIVOLATILES                  | tsophorone                     | 0.193 1 U         |                   |                   | 0.61 1 < U       | 0.61 1 < U        | 0.649 1 < U             | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 10             |
| SEMIVOLATILES                  | Nanhthalene                    | 0.193 1 U         |                   |                   | 0.366 1 < U      | 0.366 1 < U       | 0.39 1 < U              | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Nitrobenzene                   | 0.193 1 U         |                   |                   | 0.61 1 < U       | 0.61 1< U         | 0.649 1 < U             | 0.33 1 < ⊍       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < Ŭ       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine     | 0.193 1 U         |                   |                   | 1.22 1 < U       | 1.22 1 < U        | 1.299 1 < U             | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U              |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine         | 0.193 1 U         |                   |                   | 0.61 1 < U       | 0.61 1 < U        | 0.649 1 < U             | -0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 <sup>.</sup> < U |
| SEMIVOLATILES                  | Pentachiorophenol              | 0.965 1 U         |                   |                   | 6.098 1 < U      | 6.098 1 < U       | 6.494 1 < U             | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 t < U       | 1.65 1 < U              |
| SEMIVOLATILES                  | Phenanthrene                   | 0.193 1 U         |                   |                   | 0.61 1 < U       | 0.61 1 < U        | 0.649 t < U             | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U              |
| SEMIVOLATILES                  | Phenol                         | 0.193 1 U         |                   |                   | 0.61 i < U       | 0.61 1 < U        | 0.649 1 < U             | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Pyrene                         | 0.193 1 U         |                   |                   | 0.61 1 < U       | 0.61 1 < U        | 0.649 1 < U             | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U              |
| VOLATILES                      | 1,1,1,2-Tetrachloroethane      | 0.00474 1 U       |                   | 0.00489 1 U U     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | 1,1,1-Trichloroethane          | 0.00474 1 U       |                   | 0.00489 1 U U     | 0.006 1 < U      | 0.006 1 < U       | 0.007 1 < U             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U             |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane      | 0.00474 1 U       |                   | 0.00489 1 U U     | 0.006 t < U      | 0.006 1 < U       | 0.007 1 < U             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | 1,1,2-Trichloroethane          | 0.00474 1 U       |                   | 0.00489 t U U     | 0.006 1 < U      | 0.006 1 < U       | 0.007 1 < U             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | 1,1-Dichloroethane             | 0.00474 1 U       |                   | 0.00489 1 U U     | 0.006 1 < U      | 0.006 1 < U       | 0.007 1 < U             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | 1,1-Dichloroethene             | 0.00474 1 U       |                   | 0.00489 1 U U     | 0.006 1 < U      | 0.006 1 < U       | 0.007 1 < U             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0             |
| VOLAHLES                       | 1,1-Dichloropropene            | 0.00474 1 U       |                   | 0.00489 1 U U     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLANLES                       | 1,2,3-Inchlorobenzene          | 0.00474 1 U       |                   | 0.00489 1 0 0     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VULALILES                      | 1,2,3- Inchoropropane          | 0.00474 3 0       |                   | 0.00489 1 0 0     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLABLES                       | 1.2.4-Tricsbiodenzene          | 0.00474 1 0       |                   | 0.00469 1 0 0     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | 1.2.Dhrama 2 oblarapropaga     | 0.00424 1 0       |                   | 0.00469 F U U     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | 1.2-Dibromonthane              | 0.00474 1 U       |                   | 0.00469 1 0 0     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | 1 2-Dictionheazene             | 0.00474 1 11      |                   | 0.00489 1 1 11    |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | 1 2-Dichloroethane             | 0.00474 1 11      |                   | 0.00489 1 1 1     | 11 2 1 2000      | 0.006 1 c U       | 0.007 1 × 11            | 0.005 1 c H      | 0-005 t z H      | 0.005 1 < U      | 0.005 1 < 17     | 0.005 1 < 19     | 0005 1 < 1/             |
| VOLATILES                      | 1 2-Dichloroethene             |                   |                   |                   | 0.006 1 < 1      | 0.006 1 < U       | 0.007 1 < 1             | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 1      | 0.005 1 < l/     | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | 1.2-Dichloropropane            | 0.00474 1 U       |                   | 0.00489 1 U U     | 0.006 1 < U      | 0.006 1 < U       | 0.007 1 < U             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | 1.2-Dimethylbenzene (o-Xylene) | 0.00474 I U       |                   | 0.00489 1 U U     | -                |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | 1,3,5-Trimethylbenzene         | 0.00474 1 U       |                   | 0.00489 t U U     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | 1,3-Dichlorobenzene            | 0.00474 1 U       |                   | 0.00489 1 U U     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | 1,3-Dichloropropane            | 0.00474 1 U       |                   | 0.00489 1 U U     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | 1,4-Dichlorobenzene            | 0.00474 t U       |                   | 0.00489 1 U U     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | 2,2-Dichloropropane            | 0.00474 1 U       |                   | 0.00489 1 U U     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | 2-Butanone                     | 0.00948 1 U       |                   | 0.00978 1 U U     | 0.12 1 < U       | 0.12 1 < U        | 0.13 1 < U              | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U              |
| VOLATILES                      | 2-Chloroethyl vinyl ether      | 0.00948 1 U       |                   | 0.00978 1 U U     |                  |                   |                         | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U              |
| VOLATILES                      | 2-Chiorotoluene                | 0.00474 1 U       |                   | 0.00489 1 U U     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | 2-Hexanone                     | 0.00948 1 U       |                   | 0.00978 1 U U     | 0.062 1 < U      | 0.061 1 < U       | 0.065 1 < U             | 0.05 i < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U       | 0.05 1 < U       | 0.05 1 < U              |
| VOLATILES                      | 4-Chlorotoluene                | 0.00474 1 U       |                   | 0.00489 1 U U     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | Acetone                        | 0.00948 1 U       |                   | 0.00978 1 U U     | 0.12 £ < U       | 0.12 1 < U        | 0.13 1 < U              | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U               |
| VOLATILES                      | Benzene                        | 0.00474 1 U       |                   | 0.00489 t U U     | 0.006 1 < U      | 0.006 1 < U       | 0.007 1 < U             | 0.005 1 < V      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | Bromobenzene                   | 0.00474 1 U       |                   | 0.00489 t U U     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | Bromochloromethane             | 0.00474 1 U       |                   | 0.00489 1 U U     |                  |                   |                         |                  |                  |                  |                  |                  |                         |
| VOLATILES                      | Bromodichloromethane           | 0.00474 1 U       |                   | 0.00489 1 U U     | 0.006 1 < U      | 0.006 1 < U       | 0.007 1 < U             | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | Bromoform                      | 0.00474 1 U       |                   | 0.00489 1 U U     | 0.006 1 < U      | 0.006 1 < U       | 0.007 1 < U             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | Bromomethane                   | 0.00948 1 U       |                   | 0.00978 1 U U     | 0.006 1 < U      | 0.006 1 < U       | 0.007 1 < U             | 0.01 t < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U              |
| VOLATILES                      | Carbon disulfide               | 0.00474 1 U       |                   | 0,00489 1 U U     | 0.006 1 < U      | 0.006 1 < U       | 0.007 1 < U             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0             |
| VOLATILES                      | Carbon tetrachloride           | 0.00474 1 U       |                   | 0.00489 1 U U     | 0.006 1 < U      | 0.006 1 < 0       | 0.007 1 < U             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | Chiorobenzene                  | 0.00474 1 U       |                   | 0.00489 1 U U     | 0.006 1 < U      | 0.005 1 < U       | 0.007 1 < U             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 7 < 0             |
| VOLATILES                      | Chloroethane                   | 0.00948 1 U       |                   | 0.00978 1 U U     | 0.006 1 < U      | 0.006 1< U        | 0.007 1 < U             | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 I < U              |

Shaw Environmental, Inc.

 $-(1,\frac{1}{2})$ 

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-85 Concentrations of Chemicals in Soil Samples Associated with Sump 085

| [SUMP] = SUMP085       | -                             |                   |                   | •••••                                 |                  | •                |                  | •                |                  |                  |                  |                  |                  |
|------------------------|-------------------------------|-------------------|-------------------|---------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE         |                               | 35SUMP085-SB02    | 35SUMP086-SB01    | 35SUMP086-SB01                        | LH-DL85-01       | LH-\$85-01       | LH-\$85-02       | LH-S86-01        | LH-S86-01        | LH-S86-01        | LH-586-02        | LH-S86-02        | LH-S86-02        |
| SAMPLE_NO              |                               | 35-SMP085-SB01-02 | 35-SMP086-SB01-01 | 35-SMP086-SB01-02                     | LH-DL85-01       | LH-\$85-01_1     | LH-S85-02_1      | LH-S86-01 QC     | LH-S86-01_1      | LH-S86-01_2      | LH-S86-02_1      | LH-S86-02_2      | LH-S86-02_3      |
| SAMPLE_DATE            |                               | 9/20/2006         | 9/21/2006         | 9/21/2006                             | 6/26/1993        | 6/26/1993        | 6/26/1993        | 7/27/1993        | 7/27/1993        | 7/27/1993        | 7/27/1993        | 7/27/1993        | 7/27/1993        |
| DEPTH                  |                               | 4.5 - 4.5 Ft      | 0.5 - 0.5 Ft      | 8-8Ft                                 | 2.5 - 3 Ft       | 3.5 - 4.5 Ft     | 3.5 - 4.5 Ft     | 0.5 - 2 Ft       | 0.5 - 2 Ft       | 7 - 9 F1         | 0.5 - 2 Ft       | 4 - 6 Ft         | 7 - 9 Ft         |
| SAMPLE_PURPOSE         |                               | REG               | REG               | REG                                   | REG              | REG              | REG              | FD               | REG              | REG              | REG              | REG              | REG              |
| Test Group             | Parameter (Units = mg/kg)     | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ                      | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| VOLATILES              | Chiorotorm                    | 0.00474 1 U       |                   | 0.00489 1 U U                         | 10.006 1 < U     | 0.006 1 < U      | 0.007 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES              | Chloromethane                 | 0.00948 1 U       |                   | 0.00978 1 U U                         | 0.006 t < U      | 0.006 1 < U      | 0.007 1 < U      | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES              | cis-1,2-Dichloroethene        | 0.00474 1 U       |                   | 0.00489 1 U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | cis-1,3-Dichloropropene       | 0.00474 1 U       |                   | 0.00489 1 U U                         | 0.006 1 < U      | 0.006 1< U       | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < 0      |
| VOLATILES              | Dibromochloromethane          | 0.00474 1 U       |                   | 0.00489 1 U U                         | 0.006 t < U      | 0.006 1< U       | 0.007 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES              | Dibromomethane                | 0.00474 1 U       |                   | 0.00489 1 U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | Dichlorodifluoremethane       | 0.00948 1 U       |                   | 0.00978 1 U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | Ethylbenzene                  | 0.00474 1 U       |                   | 0.00489 1 U U                         | 0.006 1 < U      | 0.006 1< U       | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < 0      |
| VOLATILES              | Hexachiorobutadiene           | 0.00474 1 U       |                   | 0.00489 1 U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | isopropybenzene               | 0.00474 1 U       |                   | 0.00489 1 U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | m,p-Xylenes                   | 0.00474 1 U       |                   | 0.00489 1 U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | Methyl isobutyl ketone        | 0.00948 1 U       |                   | 0.00978 1 U U                         | 0.062 1 < U      | 0.061 1< U       | 0.065 t < U      | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < 0       |
| VOLATILES              | Methylene chloride            | 0.00474 1 U       |                   | 0.00208 1 J J                         | 0.006 1 < U      | 0.006 1 < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES              | Naphthalene                   | 0.00948 1 U       |                   | 0.00978 t U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | n-BUTYLBENZENE                | 0.00474 1 U       |                   | 0.00489 1 U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | n-PROPYLBENZENE               | 0.00474 1 U       |                   | 0.00489 1 U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | p-ISOPROPYLTOLUENE            | 0.00474 1 U       |                   | 0.00489 1 U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | sec-BUTYLBENZENE              | 0.00474 t U       |                   | 0.00489 1 U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | Styrene                       | 0.00474 1 U       |                   | 0.00489 1 U U                         | 0.006 1 < U      | 0.006 1 < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES              | tert-BUTYLBENZENE             | 0.00474 1 U       |                   | 0.00489 1 U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | Tetrachkroethene              | 0.00474 t U       |                   | 0.00489 t U U                         | 0.006 1 < U      | 0.006 1 < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 ti < U     |
| VOLATILES              | Toluene                       | 0.00474 1 U       |                   | 0.00489 1 ป ป                         | 0.006 1 < U      | 0.006 1 < U      | 0.007 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES              | trans-1,2-Dichloroethene      | 0.00474 1 U       |                   | 0.00489 1 U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | trans-1,3-Dichloropropene     | 0.00474 1 U       |                   | 0.00489 1 U U                         | 0.006 1 < U      | 0.006 1< U       | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES              | Trichloroethene               | 0.00474 t U       |                   | 0.00489 1 ปี ป                        | 0.006 t < U      | 0.006 1 < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES              | Trichloroftuoromethane        | 0.00948 1 U       |                   | 0.00978 1 U U                         |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | Vinyl acetate                 | 0.00948 1 U UJ    |                   | 0.00978 1 Ŭ UJ                        |                  |                  |                  | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES              | Vinyl chloride                | 0.00948 1 U       |                   | 0.00978 1 U U                         | 0.006 1 < U      | 0.006 1 < U      | 0.007 1 < U      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U       |
| VOLATILES              | Xylenes, Total                |                   |                   |                                       | 0.006 1 < U      | 0.006 1 < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |
| Footnotes are shown on | cover page to Tables Section. |                   |                   | · · · · · · · · · · · · · · · · · · · |                  |                  |                  |                  | · · · ·          |                  |                  |                  |                  |

Shaw Environmental, Inc.

| Data Evaluation Report   |   |
|--|---|
| Chemical Concentrations in Soil Associated with LHAAP-35/36 Sump | s |

Table 3-86 Concentrations of Chemicals in Soil Samples Associated with Sump 086

| [SUMP] = SUMPO86<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE<br>Test Group             | Parameter (Units ≈ mykg)  | 355UMP085-SB02<br>35-SMP085-SB01-02<br>9/29/2006<br>4.5 - 4.5 F1<br>REG<br>Result DIL LQ V0           | 355UMP086-5801<br>35-5MP086-5801-01<br>9/21/2006<br>0.5 - 0.5 Ft<br>REG<br>Respi DIL LQ VQ | 35SUMP086-SB01<br>35-SMP086-SB01-02<br>9/21/2006<br>8 - 6 F1<br>REG<br>Result DIL LO VQ | LH-DL85-01<br>LH-DL85-01<br>6/26/1993<br>2.5 - 3 FL<br>REG<br>Resynt DIL 10 VQ   | LH-S85-01<br>LH-S85-01_1<br>6/26/1993<br>3.5 - 4.5 Ft<br>REG<br>Result DIL LQ VQ  | LH-S85-02<br>LH-S85-02_1<br>6/25/1993<br>3.5 - 4.5 Pt<br>REG<br>Resuk Dit, LQ VQ                                   | LH-S85-01<br>LH-S85-01 OC<br>7/27/1993<br>0.5-2.Ft<br>FD<br>Result DIL LO VO   | 1.H-\$86-01<br>1.H-\$86-01_1<br>7/27/1993<br>0.5 - 2.Ft<br>REG<br>Result DIL LO VO                           | LH-S86-01<br>LH-S86-01_2<br>7/27/1993<br>7 - 9 Ft<br>REG<br>Result Dil. LQ VQ                                | LH-S86-02<br>LH-S86-02_1<br>7/27/1993<br>0.5 - 2 Ft<br>REG<br>Result Dil, LQ VO                              | LH-586-02<br>LH-586-02_2<br>7/27/1993<br>4 - 5 Ft<br>REG<br>Result DIL LO VO                                 | UH-S85-02<br>UH-S85-02_3<br>7/27/1993<br>7 - 9 Ft<br>REG<br>Result DIL LO VD  | LH-WRS17-01<br>LH-WRS17-01_1<br>7/22/1993<br>0.5 - 2 Ft<br>REG<br>Result Dil. LD VO                          | LH-WRS17-01<br>LH-WRS17-01_2<br>7/22/1993<br>4 - 6 Ft<br>REG<br>Result DIL LO VO   | WRS17-SB01<br>WRS17-SB01-01<br>9/25/2006<br>0.5 - 0.5 Ft<br>REG<br>Result DIL LQ VO | WRS17-SB01<br>WRS17-SB01-02<br>9/25/2006<br>4.5 - 4.5 Ft<br>REG<br>Result Dit, LO, VO | WRS17-SB02<br>WRS17-SB02-01<br>9/25/2006<br>0.5 - 0.5 Ft<br>REG<br>Result DIL 1.0 VO | WRS17-SB02<br>WRS17-SB02-02<br>9/25/2006<br>4.5-4.5 F1<br>REG<br>Result DIL LO VO |
|---|---|---|--|---|--|---|--|--|--|--|--|--|---|--|--|---|---|--|---|
| EXPLOSIVES<br>EXPLOSIVES<br>METALS<br>METALS<br>METALS<br>METALS  | 2,4-Dinitrotoluene<br>2,6-Dinitrotoluene<br>Alumiauxa<br>Antimony<br>Arsenic<br>Barlum<br>Doubling  | 12500 1<br>0.118 1 U<br>0.551 1<br>152 1  | 5300 1<br>0.114 1 U U<br>3.42 1<br>43 1  | 4580 1<br>0.117 1 U U<br>0.9 1<br>71.7 1  | 122 1 < U<br>122 1 < U<br>18200 1<br>5.12 1 < U<br>2.59 1<br>96.5 1 < U  | 1.22 1 < U<br>1.22 1 < U<br>6790 1<br>4.18 1 < U<br>2.34 1<br>63.8 1 < U  | 1.299 1 < U<br>1.299 1 < U<br>16200 1<br>4.02 1 < U<br>1.15 1<br>117 1 < U   | 0.33 1 < U<br>0.33 1 < U<br>4880 1<br>3 1 < U<br>15.4 1<br>76.3 1  | 0.33 1 < U<br>0.33 1 < U<br>6490 1<br>3 1 < U<br>4 1<br>109 1  | 0.33 1 < U<br>0.33 1 < U<br>5150 I<br>2.3 1 < U<br>2.3 1<br>117 1  | 6420 1<br>3 7 < U<br>4 1<br>117 1  | 0.33 t < U<br>0.33 t < U<br>t0800 t<br>3 t < U<br>3.1 t<br>481 t   | 0.33 1 < U<br>0.33 1 < U<br>5650 1<br>3 1 < U<br>2.9 1<br>89.5 1  | 0.33 1 < U<br>0.33 1 < U<br>10400 1<br>6.3 1<br>26.4 1<br>42.6 1   | 0.33 i < U<br>0.33 i < U<br>36200 i<br>3 i < U<br>2.8 i<br>171 i   | 5430 1<br>0.116 1:0 UJL<br>9.07 1 JL<br>48.3 1                                      | 24100 1<br>0.115 1 U UU<br>1.89 1 J.<br>101 1<br>0.882 1                              | 8550 1<br>0.113 1 U UL<br>1.25 1 JL<br>67.6 1<br>0.512 1                             | 17400 1<br>0.115 1 U LUL<br>0.533 1 J.<br>164 T                                   |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS  | Cadmium<br>Cadmum<br>Calcium<br>Chuumium<br>Cobalt<br>Copper<br>Iron  | 0.16 1 J J<br>598 1<br>11.1 1<br>6.3 1<br>3.94 1<br>3100 1  | 0.098 1 J 3<br>901 1<br>17.7 1<br>3.6 7<br>3.09 1<br>11400 1                               | 0.0619 1 J 3<br>254 1<br>4.86 1<br>4.38 1<br>2.16 1<br>5540 1                           | 5.45 1 < U<br>701 1<br>19.3 1<br>5.71 1<br>8.06 1 < U<br>19600 1   | 4.68 t < U<br>816 t<br>10.7 t<br>8.79 t<br>5.33 1 < U<br>17100 1  | 4.64 1 < U<br>1230 1<br>14.6 1<br>6.33 1<br>8.74 1 < U<br>16700 1  | 1 1 < U<br>2100 1<br>23.9 1<br>5 1<br>5.5 1<br>29400 1   | t 1 < U<br>1420 1<br>195 1<br>1 1 < U<br>4.3 1<br>21000 1  | 1 1 < 82<br>758 1<br>8.9 1<br>14.5 1<br>4.4 1<br>11400 1   | 1 1 < U<br>1600 1<br>27.5 1<br>7.6 1<br>3.9 1<br>21300 1   | 1 t < U<br>2040 1<br>74.5 t<br>31.7 t<br>7,4 t<br>18000 1  | 1 3 < U<br>947 1<br>8.7 1<br>9.3 1<br>3.4 3<br>12300 1  | 1 1 < U<br>785 1<br>41.5 1<br>4.5 1<br>1 t < U<br>32400 1  | 1 1 < U<br>419 5<br>30.1 1<br>11.4 1<br>7.6 1<br>30509 1   | 1.38 T<br>2270 1<br>18.5 1<br>2.55 1<br>4.61 1<br>17000 1                           | 0.0711 1 J J<br>278 1<br>23.3 1<br>6.79 1<br>5.69 1<br>25600 1                        | 0.574 1<br>1390 1<br>19.5 1<br>4.6 1<br>5.93 1<br>16500 1                            | 0.105 FJ J<br>429 T<br>16.1 1<br>8.21 1<br>5.95 T<br>17200 S                      |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS  | Lead<br>Magnesium<br>Manganese<br>Mencury<br>Nickel<br>Potassium<br>Selenium  | 9.74 1<br>1100 1<br>60.1 1<br>0.295 1 U<br>11.4 1<br>364 1<br>0.309 1                                 | 10.5 1<br>187 7<br>143 1<br>0.0191 1 J J<br>4.37 1<br>207 1<br>0.233 1                     | 3.19 1<br>603 1<br>21 1<br>0.294 1 U U<br>7.24 T<br>272 1<br>0.295 1 U U                | 25.3 1<br>787 1<br>316 1<br>0.052 T < U<br>758 t<br>0.512 1 < U  | 13.6 1<br>433 1<br>205 1<br>0.06 1 < U<br>300 1<br>0.418 1 < U  | 26.8 1<br>1170 1<br>67.4 1<br>9.057 1 < U<br>652 1<br>9.402 1 < U  | 46.1 1<br>216 f<br>162 1<br>0.1 t < U<br>216 1<br>1 t < U  | 27 t<br>373 i<br>175 t<br>0.1 1 < U<br>390 i<br>1 1 < U  | 4.3 1<br>421 1<br>83.6 1<br>0.1 1 < U<br>437 1<br>1 1 < U  | 17 9<br>283 1<br>597 1<br>0.1 1 < U<br>295 1<br>1 1 < U  | 13.8 1<br>625 3<br>225 1<br>0.1 1 < U<br>662 1<br>1 1 < U  | 6 1<br>440 1<br>102 1<br>0.1 3 < U<br>457 1<br>1 < U  | 128.1 1<br>288 1<br>234 1<br>0.7 1 < U<br>208 1<br>1 1 < U   | 13.7 1<br>2590 i<br>68.6 1<br>0.1 1 < U<br>1689 1<br>1 1 < U   | 19.9 1<br>569 1 JH<br>169 1 J<br>0.0396 1 J J<br>5.87 1<br>245 1<br>0.185 1 J JL    | 13.4 1<br>1470 1 JH<br>62.5 1 J<br>0.0694 1 J J<br>13.2 1<br>821 1<br>0.73 f J J      | 9.34 1<br>454 1 JH<br>241 1 J<br>0.0511 1J J<br>5.28 1<br>301 1<br>0.216 1J JL       | 13.2 1<br>1650 7 JH<br>53.2 7 J<br>0288 1 U U<br>14.2 1<br>581 1<br>0.263 1 JL    |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS  | Silver<br>Sodium<br>Strontium<br>Thalfium<br>Vanadium<br>Zinc   | 1.75 1 U<br>358 1<br>0.9741 1<br>18.1 1<br>21 1   | 1.72 TUU<br>13.9 JJ<br>0.264 1<br>22.7 2<br>16.5 1   | 1.83 10 0<br>166 1<br>0.0367 1<br>7.55 1<br>20 1  | 0.028. I < U .<br>10.3 I < U<br>30.9 .1  | 0.044 F < U<br>8.67 T < U<br>15.7 T   | 0.024 1 < U<br>24.5 1 < U<br>29.9 1  | 1 1 < U<br>11,1 1<br>122 1   | t t < U<br>182 t<br>95 t   | 1 1 < U<br>18.5 1<br>43.3 1  | 1 1 < U<br>12.6 1<br>18.7 1  | 1 1 ⊂ U<br>45,1 1<br>38,4 t  | 1 1 < U<br>20.5 1<br>43.6 1   | 1 I C U<br>79 1<br>52.1 1  | 1 1 < U<br>29.3 1<br>51.4 1  | 1.7 1.10 U<br>10.5 1.J J<br>0.0405 1<br>23.1 1<br>128 1                             | 1.73 1 U U<br>188 1<br>0.107 1<br>49.5 1<br>35.2 1                                    | 1.68 1 U U<br>15.5 1 J J<br>0.0506 1<br>28.1 1<br>41.4 1                             | 1.7 1 U U<br>270 1<br>0.0894 1<br>29.2 1<br>33.4 1                                |
| PERC<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES                           | Perchlorate<br>1.2.4-Trichlorobenzene<br>1.2-Dichlorobenzene<br>1.3-Dichlorobenzene<br>1.4-Dichlorobenzene<br>2.4.5-Trichlorophenol<br>2.4.5-Trichlorophenol                        | 0.098 10 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U | 0.0501 5UU   | 0.199 20 U U  | 122 I < U<br>122 I < U<br>122 I < U<br>122 I < U<br>122 I < U<br>122 I < U<br>122 I < U  | 122 3 < U<br>122 1 < U<br>122 7 < U<br>122 7 < U<br>122 7 < U<br>122 7 < U<br>122 7 < U   | 1299 1 < U<br>1299 1 < U<br>1299 1 < U<br>1299 1 < U<br>1299 1 < U<br>1299 1 < U<br>1299 1 < U                     | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U   | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U                             | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 2 < U<br>1.65 1 < U<br>0.33 1 < U                             | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U               | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 -1 < U<br>0.33 1 ≤ U              | 0.23 1 < U<br>0.23 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U  | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 t < U<br>1.65 1 < U<br>0.33 1 < U               | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U                             | 0.0501 5UU  | 0.0199 2 U U  | 0.2 20 U U   | D,0498 5 U U  |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES                  | 2,4-Dichlorophenol<br>2,4-Dinethylphenol<br>2,4-Dinitrophenol<br>2,4-Dinitrophenol<br>2,6-Dinitrophene<br>2,6-Dinitrophene<br>2,6-Dinitrophene                                      | 0.193 1 U<br>0.193 1 U<br>0.965 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U               |  |   | 122 1 < U<br>0.61 1 < U<br>12.195 1 < U<br>0.366 1 < U<br>0.56 1 < U   | 122 1 < U<br>0.61 1 < U<br>12.195 1 < U<br>0.366 1 < U  | 1.299 1 < U<br>0.649 1 < U<br>12.987 1 < U<br>0.39 1 < U   | 0.33 1 < U<br>0.33 1 < U<br>1.55 1 < U<br>0.33 1 < U   | 0.33 t < U<br>0.33 t < U<br>1.65 t < U<br>0.33 t < U   | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U   | 0.33 T < U<br>0.33 T < U<br>1.65 T < U<br>0.33 T < U  | 0.33 t < U<br>0.33 t < U<br>1.65 t < U<br>0.33 t < U   | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U   |   |   |  |   |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES                  | 2-Methylnehithalene<br>2-Methylnehithalene<br>2-Methylnehithalene<br>2-Mitrophenol<br>3,3-Dichlorobenzióne<br>3-Nétroaniäne   | 0.193 1 U<br>0.193 1 U<br>0.965 1 U<br>0.965 1 U<br>0.386 1 U<br>0.965 1 U                            |  |   | 0.366 1 < U<br>0.61 1 < U<br>3.659 1 < U<br>1.22 1 < U<br>0.61 1 < U<br>3.659 1 < U<br>3.659 1 < U   | 0.366 1 < U<br>0.61 1 < U<br>3.659 1 < U<br>1.22 1 < U<br>0.61 1 < U<br>3.659 1 < U<br>3.659 1 < U  | 0.39 1 < U<br>0.59 1 < U<br>3.896 1 < U<br>1.299 1 < U<br>0.649 1 < U<br>3.896 1 < U<br>3.896 1 < U<br>3.896 1 < U | 0.33 1 < U<br>1.65 1 < U<br>0.65 1 < U<br>0.65 1 < U<br>1.65 1 < U   | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>1.65 1 < U                             | 0.33 i < U<br>0.33 i < U<br>1.65 i < U<br>0.33 i < U<br>0.33 i < U<br>0.55 i < U<br>1.65 t < U<br>1.65 t < U | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.55 1 < U<br>1.65 1 < U<br>0.55 1 < U | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>1.65 1 < U<br>1.65 1 < U               | 0.33 T < U<br>0.33 T < U<br>1.65 T < U<br>0.33 T < U<br>0.65 T < U<br>1.65 T < U  | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>1.65 1 < U<br>1.65 1 < U | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>1.65 1 < U                             |   |   |  |   |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES | 4.6-Dhito-2-methylphenol<br>4-Bromophenyl phenyl ether<br>4-Chioro-3-methylphenol<br>4-Chiorophenyl phenyl ether<br>4-Chiorophenyl phenyl ether<br>4-Methylphenol<br>4-Nitroaniline | 0.965 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U  |  |   | 6.098         1 <         U           1.22         1 <         U           0.61         1 <         U           3.659         1 <         U           1.22         1 <         U           0.61         1          U           0.61         1          U | 6.098         i <         U           1.22         t <         U           0.51         t <         U           3.659         i <         U           1.22         t <         U           0.51         t <         U           0.52         i <         U           0.51         t <         U           0.51         t <         U           0.51         t <         U           0.538         t <         U | 6.434 % < U<br>1.299 % < U<br>0.649 % < U<br>0.849 % < U<br>0.849 % < U<br>0.649 % < U<br>6.494 % U                | 1.65 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>0.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U   | 1.65 3 < U<br>0.33 1 < U<br>0.65 1 < U.<br>0.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U              | 1.65 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>0.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U               | 1.55 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>0.55 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U               | 1.65 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>0.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U               | 1.65 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>0.65 1 < U<br>0.33 1 < U<br>0.33 f < U<br>1.65 1 < U  | 1.65 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>0.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.85 1 < U               | 1.65 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>0.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U                             |   |   |  |   |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES | 4-Nitrophenol<br>Acenaphthene<br>Antracene<br>Benzo(a)authracene<br>Benzo(a)authracene<br>Benzo(a)oynene<br>Benzo(b)fluoranthene  | 0.965 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U  |  |   | 6.098 1 < U<br>0.366 1 < U<br>0.61 1 < U<br>0.61 1 < U<br>0.61 1 < U<br>0.366 1 < U<br>0.361 1 < U<br>1.22 1 < U   | 6.098 1 < U<br>0.366 2 < U<br>0.51 1 < U<br>0.51 5 < U<br>0.366 1 < U<br>0.366 1 < U<br>0.451 1 < U<br>1.22 1 < U   | 6.484 t < U<br>0.39 t < U<br>0.649 t < U<br>0.649 t < U<br>0.39 t < U<br>0.649 t < U<br>0.649 t < U<br>0.649 t < U | 1.65       1 < U         0.33       1 < U         0.33       1 < U         0.33       1 < U         0.33       1 < U         0.33       1 < U         0.33       1 < U         0.33       1 < U         0.33       1 < U | 1.65 ? < U<br>0.33 î < U<br>0.33 î < U<br>0.33 î < U<br>0.33 î < U<br>0.33 î < U<br>0.33 î < U               | 1.65 t < U<br>0.33 t < U<br>0.33 t < U<br>0.33 t < U<br>0.33 t < U<br>0.33 t < U<br>0.33 t < U               | 1.55 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0               | 1.65 t < U<br>0.33 t < U<br>0.33 t < U<br>0.33 t < U<br>0.33 t < U<br>0.33 t < U<br>0.33 t < U               | 1,65     1 <     D       0.33     1 <     U       0.33     1 <     U       0.33     1 <     U       0.33     1 <     U       0.33     1 <     U       0.33     1 <     U       0.33     1 <     U | 1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 7 < U<br>0.33 7 < U<br>0.33 7 < U               | 1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U                             |   |   |  |   |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES                  | Benzo(ghi)perytene<br>Benzo(k)/Buoranthene<br>Benzoik Acid<br>Benzoi Kachol<br>Lis(2-Chiomethox)/methane<br>bis(2-Chiomethox)/lether<br>bis(2-Chiomethox)/lether                    | 0.193 1 U<br>0.965 1 U<br>0.965 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U  |  |   | 2.439 1 < U<br>1.22 1 < U<br>0.61 1 < U<br>0.51 1 < U<br>1.22 1 < U  | 2.439 1 < U<br>1.22 3 < U<br>0.51 1 < U<br>0.51 1 < U<br>1.22 1 < U   | 2.597 t < U<br>1.299 1 < U<br>0.649 t < U<br>0.649 t < U<br>1.299 t < U  | 0.33 f < U<br>0.33 f < U<br>1.65 f < U<br>0.65 f < U<br>0.33 f < U<br>0.33 f < U<br>0.33 f < U<br>0.33 f < U   | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U               | 0.33 i < U<br>0.33 i < U<br>1.65 i < U<br>0.33 i < U<br>0.33 i < U<br>0.33 i < U<br>0.33 i < U  | 0.33 T < U<br>0.33 T < U<br>1.65 T < U<br>0.65 T < U<br>0.33 T < U<br>0.33 T < U<br>0.33 T < U<br>0.33 T < U | 0.33 1 < 0<br>0.33 1 < 0<br>1.65 1 < 0<br>0.55 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0<br>0.33 1 < 0                             |   |   | ·  |   |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES | bs(2-Ethyñexyl)phthalaie<br>Bulyl benzyl phthalaie<br>Cartazole<br>Chrysene<br>Diberzo(a,h)anthracene<br>Diberzoturan<br>Diberzoturan   | 0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U               |  |   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | 0.61 3 < U<br>0.61 7 < U<br>1.22 3 < U<br>6.098 1 < U<br>2.439 1 < U<br>1.22 1 < U<br>0.51 1 < U  | 0.649 1 < U<br>0.649 f < U<br>1.299 t < U<br>6.494 i < U<br>2.597 f < U<br>1.299 t < U<br>0.12 i JB                | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 3 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U               | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U               | U.35 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U               | U.335 1 < U<br>U.333 1 < U<br>U.333 1 < U<br>U.333 1 < U<br>U.333 1 < U<br>U.333 1 < U<br>U.333 1 < U        | U.33 1 < U<br>0.33 7 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U  | U.35 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U               | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U   |   |   |  |   |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES                  | Dimethyl phthalate<br>di ni Butyl phthalate<br>di ni Octyl phthalate<br>Fluoranthene<br>Fluorene<br>Herachlorobenzene   | 0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U               |  |   | 0.61 1 < U<br>5.598 t<br>0.61 t < U<br>0.61 t < U<br>0.61 1 < U<br>1.22 1 < U<br>9.66 - U  | 0.51 1 < U<br>2.744 1<br>0.51 1 < U<br>0.51 1 < U<br>0.51 1 < U<br>0.51 1 < U<br>1.22 1 < U   | 0.649 t < U<br>5.18 t B<br>0.649 t < U<br>0.649 t < U<br>0.649 t < U<br>1.299 t < U<br>1.299 t < U                 | 0.33 T < U<br>0.33 T < U<br>0.33 T < U<br>0.33 T < U<br>0.33 T < U<br>0.33 T < U<br>0.33 T < U<br>0.33 T < U   | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U | 0.35 T < U<br>0.35 T < U<br>0.33 S < U<br>0.33 T < U<br>0.33 T < U<br>0.33 T < U<br>0.33 T < U<br>0.33 T < U | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U |   | ·   |  |   |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES  | nezachiorooutaolene<br>Hexachiorocyclopentadiene<br>Hexachioroethane<br>Indeno(1,2,3-cd)pyrene<br>tsophorone  | 0.183 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U   |  |   | 3.659 i < U<br>3.659 i < U<br>1.22 i < U<br>1.22 i < U<br>0.61 i < U   | 3.659 1 < U<br>3.659 1 < U<br>1.22 1 < U<br>1.22 1 < U<br>0.61 1 < U  | 3.896 t < U<br>3.896 t < U<br>1.299 t < U<br>1.299 t < U<br>0.649 t < U  | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U   | 0.33 T < U<br>0.33 T < U<br>0.33 T < U<br>0.33 T < U<br>0.33 T < U   | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U   | 0.33 i < U<br>0.33 i < U<br>0.33 i < U<br>0.33 i < U<br>0.33 i < U   | 0.33 f < U<br>0.33 f < U<br>0.33 f < U<br>0.33 f < U<br>0.33 f < U  | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 7 < U<br>0.33 7 < U   | 0.33 t < U<br>0.33 t < U<br>0.33 t < U<br>0.33 t < U   |   |   |  |   |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas Shaw Environmental, Inc.

| Data Evaluation Report  |
|---|
| Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps |

Table 3-86 Concentrations of Chemicals in Soil Samples Associated with Sump 086

| (SUMP) = SUMPOR6<br>LOCATION _CODE |  | 35SUMP085-SB02                 | 35SUMP066-S601                 | 35SUMP086-SB01                        | LH-018            | 35-01           | LH-S85              | -01          | LH-S8              | 5-02           | LH-S           | 86-01             | LHS           | \$86-01           | LH-S          | i86-01           | LH-S        | \$86-02           | 1345           | 586-02            | LHK            | 586-02            | CH-WI          | RS17-01             | LH-WR           | S17-01          | WR\$17-S801                | WRS17-SB01                 | WRS17                | SB02                                    | WR517-SB02                     |
|------------------------------------|--|--------------------------------|--------------------------------|---------------------------------------|-------------------|-----------------|---------------------|--------------|--------------------|----------------|----------------|-------------------|---------------|-------------------|---------------|------------------|-------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|---------------------|-----------------|-----------------|----------------------------|----------------------------|----------------------|---|--------------------------------|
| SAMPLE_NO<br>SAMPLE DATE           |  | 35-SMP085-SB01-02<br>9/20/2006 | 35-SMP086-SB01-01<br>9/21/2006 | 35-SMP086-SB01-02<br>9/21/2006        | LH-DL8<br>6/26/1  | 85-01<br>1993   | LH-S85-0<br>6/25/19 | 01_1<br>193  | LH-S85<br>6/26/1   | 02_1<br>993    | LH-58<br>7/27  | 6-01: QC<br>/1993 | LH-SI<br>7/27 | 86-01_1<br>7/1993 | LH-S8<br>7/27 | 86-01_2<br>/1993 | LH-S<br>7/2 | 85-02_1<br>7/1993 | 1H-SE<br>7/27  | 86-02_2<br>7/1993 | 1.H-Si<br>7/27 | 86-02_3<br>7/1993 | 1/22           | \$17-01_1<br>2/1993 | LH-WRS<br>7/22/ | 17-01_2<br>1993 | WRS17-SB01-01<br>9/25/2006 | WRS17-SB01-<br>9/25/2006   | 12 WRS17-S<br>9/25/2 | 802-01<br>)06                           | WRS17-SB02-02<br>9/25/2006     |
| DEPTH                              |  | 4.5 - 4.5 Ft                   | 0.5 - D.5 F1                   | 8-8 Fr                                | 25-3              | 3 Ft            | 3.5 - 4.5           | 5 Ft         | 3.5 - 4.           | 5 Ft           | 0.5            | - 2 Ft            | 0.5           | - 2 FI            | 7 -<br>Pi     | 9ft<br>FG        | 0.5         | - 2 Ft            | 4.<br>R        | - 6 Ft<br>IEG     | 7.<br>F        | 9 Ft<br>14 G      | 0.5<br>B       | -2 Ft               | 4-6<br>RF       | SFI<br>G        | 0.5 - 0.5 FL<br>9FG        | 4.5 - 4.5 Ft<br>REG        | 0.5-0<br>BE          | 5 F1<br>1                               | 4.5 - 4.5 Ft<br>REG            |
| Test Group                         | Parameter (Units = mg/kg)                        | Result Dit. 10 VQ              | Aesult Dil, LQ VO              | Result D11_LQ_VQ                      | Filesult DXL      | ia va           | Result DIL          | LQ VQ        | Result Dil         | 10 VO          | Result Dil     | LO VO             | Result DIL    | ιο vo             | Result Dill   | . LO VO          | Result Di   | ננס אס            | Result Oil     | ננס אס            | Result Dil     | ι ια να           | Result Ott     | r ro. vo            | Result Dit.     | LO VO           | Result DHL LO VO           | Result DiL LQ              | VO Result DIL        | 10 VO T                                 | Result DIL LO VO               |
| SEMIVOLATILES                      | Naphthalene                                      | 0.193 TU<br>8.193 tH           |                                |                                       | 0.366 1           | 1 < U<br>1 < 11 | 0.356 1             | د U<br>د 11  | 0.39               | IC U<br>IC U   | 0.33           | t< U<br>t< U      | 0.33<br>0.33  | 1< U<br>1< ป      | 0.33<br>0.33  | t< U<br>t< U     | 0.33        | t∢ U<br>t∢ U      | 0.33           | 1< 0<br>1< য      | 0.33<br>0.33   | 1< U<br>t< U      | 0.33           | 1∢ ⊑<br>1∢ U        | 0.33<br>0.33    | 1< 12<br>1< 12  |                            |                            |                      |   |                                |
| SEMPOLATILES                       | n Nitroso-di-n-propylamine                       | 0.193 tU                       |                                |                                       | 1.22 1            | 1 < U           | 122 1               | < U          | 1,299              | יג ט<br>ו< ט   | 0.33           | 1 < U             | 0.33          | 1< U              | 0.33          | 1< U             | 0.33        | 1 C U             | 0.33           | 1< U              | 0.33           | 1 < U             | 0.33           | 1 < U               | 0.33            | 1< 0            |                            |                            |                      |   |                                |
| SEMIVOLATILES                      | n-Nitrosodiphenylamine<br>Restructionerhonel     | 0.193 1U                       |                                |                                       | 8.6% 1<br>6.098 1 | 1< U<br>17 II   | 0.51 1              | < U<br>< 11  | 0.649 1<br>6.494 1 | 1< U<br>1< U   | 0.33           | 1 < 10<br>1 < 11  | 0.33          | 1< U<br>1< ∜      | 0.33          | 1< ป<br>1< มี    | 0.33        | 1 c U<br>1 c U    | 0.33           | 1< U<br>1< U      | 0.33           | t< U<br>t< U      | 0.33           | 1< U<br>1≺ U        | 0.33<br>1.65    | 1< ប<br>1< ប    |                            |                            |                      |   |                                |
| SEMIVOLATILES                      | Phenanthrene                                     | 0.193 1 U                      |                                |                                       | 0.61 1            | 1 < U           | 0.61 1              | < U          | 0.649              | I < U          | 0.33           | ⊺< 1/2            | 0.33          | 1 < U             | 0.33          | 1 < U            | 0.33        | 1 < U             | 0.33           | 1< U              | 0.33           | t< U              | 0.33           | 1< U                | 0.33            | 1 < U           |                            |                            |                      |   |                                |
| SEMIVOLATILES                      | Phenol   | 0.193 1 U                      |                                |                                       | 0.61 1            |                 | 0.61 7              | < U<br>< 13  | 0.649              | l e U          | 0.33           | t< 8<br>1∢ 8      | 0.33          | 1 < Ư<br>1 < ₿    | 0.33          | t< U<br>1< U     | 0.33        | 1∢ U<br>1∢ U      | 0.33<br>8.33   | 1< U<br>1< U      | 0.33           | 1< U<br>1< U      | 0.33<br>0.33   | 1 < ป<br>1 < ป      | 0.33<br>0.33    | 1< ∜<br>1< ∜    |                            |                            |                      |   |                                |
| VOLATILES                          | 1,1,1,2-Tetrachloroethane                        | 0.00474 1 U                    |                                | 0.00489 1U U                          | 0.07              |                 | <b>C</b> (0)        |              | 0.010              |                | •              |                   | 2.00          |                   | 2.00          |                  |             |                   |                |                   |                | -                 |                | -                   |                 |                 |                            | 0.00559 1 U                | U                    | : 0.0                                   | .00494 1UU                     |
| VOLATILES                          | 1,1,1-Trichloroethane                            | 0.00474 1 U                    |                                | 0.00489 1 U U                         | 0.006 1           | 1 < U           | 0.006 1             | < U          | 0.007              |                | 0.005          | 1 < U<br>1 < U    | 0.005         | 1 c U<br>1 c U    | 0.005         | 1∢ U<br>1∠ U     | 0.005       | 1 < U             | 0.005          | 1< U<br>1∠ U      | 0.005          | t< U<br>1< U      | 0.005          | 1∢ U<br>1∢ 11       | 0.005           | 1< U<br>1< U    |                            | 0.00559 1 U<br>0.00559 1 U | U<br>U               | . 0.0                                   | .00494 1\U U<br>.00494 1\U U   |
| VOLATILES                          | 1,1,2,2-1etachiorbethane                         | 0.00474 1 U                    |                                | 0.00489 1UU                           | 0.006             | 1 < U           | 0.006 3             | < U          | 0.007              | 1 < U          | 0.005          | 1 < U             | 0.005         | 1 < U             | 0.005         | 1< U             | 0.005       | 1< U              | 0.005          | 1< ⊍              | 0.005          | 1 < U             | 0.005          | 1< ប                | 0.005           | 1< U            |                            | 0.00559 t U                | v                    | 0.0                                     | .00494 1UU                     |
| VOLATILES                          | 1,1-Dichloroethane                               | 0.00474 1 U                    |                                | 0.00489 FU U                          | 0.006             | 1 < U           | 0.006 3             | < U          | 0.007              |                | 9.005<br>0.006 | ⊺< U<br>1         | 0.005         | 1 < U             | 0.005         | 1 < U            | 0.005       | 1< U<br>1< U      | 0,005          | 1< U              | 0.005          | 1 < 10<br>1 < 11  | 0.005          | t∢ U<br>1∢ II       | 0.005           | 1< U<br>1< Ⅱ    |                            | 0.00559 1 U<br>0.00559 1 U | U<br>U               | 0.0<br>0.0                              | .00494 1U U<br>.00494 1U U     |
| VOLATILES                          | 1,1-Dichloropropene                              | 0.00474 10                     |                                | 0.00489 10 0                          | 0.000             |                 | 0.000 (             | c v          | 0.000              |                | 0.000          | 1. 0              | 0.005         |                   | 2.000         |                  | 0.000       |                   | 0.005          |                   | 0.000          |                   | 0.000          |                     | 0.000           |                 |                            | 0.00559 1 1                | U.                   | 0,                                      | 000494 1 U U                   |
| VOLATILES                          | 1,2,3-Trichlorobenzene                           | 0.00474 1 U                    |                                | 0.00489 TUU                           |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.00559 1 U                | υ<br>II              | . 0.0                                   | 1,00494 1UU                    |
| VOLATILES                          | 1,2,3-Trichloropropane<br>1,2,4-Trichlorobenzese | 0.00474 1U<br>0.00474 1U       |                                | 0.00489 10 U<br>0.00489 10 U          |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.00559 1 U                | U U                  | 0,0                                     | 000494 1UU                     |
| VOLATILES                          | 1,2,4-Trimethy&enzene                            | 0.00474 1 U                    |                                | UUT 68400.0                           |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.00559 1 U                | ບ                    | 0.0                                     | 06494 1UU                      |
| VOLATILES<br>VOLATILES             | 1,2-Dibromo-3-chioropropane<br>1,2-Dibromoethate | 0.00474 1U<br>0.00474 1U       |                                | 0.00489 1UU<br>0.00489 1UU            |                   |                 |                     |              |                    |                | -              |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.00559 1 U                | U                    | 0.0                                     | .00494 1 U U                   |
| VOLATILES                          | 1,2-Dichiorobenzene                              | 0.00474 1 U                    |                                | 0.00489 1 U U                         |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.00559 1 U                | U                    | . 0.0                                   | 00494 1 U U                    |
| VOLATILES                          | 1,2-Dichlomethane                                | 0.00474 tU                     |                                | 0.00489 TU U                          | 0.006             | 1< U<br>1< 1    | 0.006 1             | < U<br>< 11  | 0.007              | 1 < U<br>1 < 1 | 0.005          | 1< ป<br>เ∡ ป      | 0.005         | 1 < 1)<br>1 < 1)  | 0.005         | 1< U<br>1∢ ⊞     | 0.005       | 1 < U<br>1 < U    | 0.005<br>0.005 | ર≺ 1/<br>ર≺ 1/    | 0.005          | 1< U<br>1< U      | 0.005          | 1< U<br>1< U        | 0.005           | 1< 1)<br>1< 1)  |                            | 0.00559 7 U                | U                    | 0.5                                     | 100494 100                     |
| VOLATILES                          | 1,2-Dichloropropane                              | 0.00474 1U                     |                                | 0.00489 TU U                          | 0.005             | 1 < U           | 0.006 1             | < Ŭ          | 0.007              | I < U          | 0.005          | 1∢ U              | 0.005         | 1 < U             | 0.005         | 1< U             | 0.005       | 1< ∛              | 0.005          | 1< U              | 0.005          | 1< U              | 0.005          | 1 « U               | 0.005           | 1 < U           |                            | 0.00559 1 U                | U                    | 04                                      | 100494 1 U U                   |
| VOLATILES                          | 1,2-Dimethylbenzene (o-Xylene                    | 0.00474 1 U                    |                                | 0.00489 2 U U                         |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.00559 1U<br>0.00559 1U   | U<br>U               | 0.0                                     | 1,00494 1UU                    |
| VOLATILES                          | 1,3-Dichlorobenzene                              | 0.00474 tU                     |                                | 0.00489 ?UUU                          |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.00559 1 U                | U                    | 0.1                                     | .00494 1 U U                   |
| VOLATILES                          | 1,3-Dichloropropane                              | 0.00474 1 U                    |                                | 0.00489 1UU                           |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.00559 1 U                | ម<br>ម               | 0.0                                     | 100494 1UU                     |
| VOLABLES                           | 1,4-Dichlorobenzene<br>2.2-Dichloroprograme      | 0.00474 1U<br>0.00474 1U       |                                | 0.00489 10 0<br>0.00489 10 0          |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.00559 1 U                | U U                  | 0.                                      | 1.00494 1 U U                  |
| VOLATILES                          | 2-Buitanone                                      | 0.00948 1 U                    |                                | 0.00978 1UU                           | 0.12              | 1 < U           | 0.12 T              | < U          | 0.13               | 1 < U          | 0.05           | 1 < U             | 0.05          | t< U              | 0.05          | 1< U             | 0.05        | 1< ∜              | 0.05           | 1< U              | 0.05           | t< 10             | 0.05           | 1< U                | 9.05            | t< U            |                            | 0.0112 1 U                 | ម<br>រ               | 6.                                      | 100987 1UU                     |
| VOLATILES<br>VOLATILES             | 2-Chlomethyl vinyl ether<br>2-Chlominiuene       | 0.00948 1U<br>9.00474 1U       |                                | 0.00978 1U U<br>0.00489 1U U          |                   |                 |                     |              |                    |                | 0.01           | 1 č U             | 0.01          | 1< 0              | 0.01          | 1< U             | 0.01        | I < U             | 0.01           | 1∢ ⊍              | 0.01           | 1 < 0             | 0.01           | ו גיט               | 0.01            | 1< 0            |                            | 0.00559 1 U                | U                    | 0.                                      | .00494 11U U                   |
| VOLATILES                          | 2-Hexanone                                       | 0.00948 ± U                    |                                | 0.00978 1 U U                         | 0.062             | 1< U            | 0.061 1             | < U          | 0.065              | 1< U           | 0.05           | 1∢ Մ              | 9.05          | 1< Ü              | 0.05          | 1 ¢ U            | 0.05        | 1< U              | 0.05           | t∢ U              | 0.05           | 1 < ປ             | 0.05           | 1< U                | 0.05            | 1< U            |                            | 0.0112 1 U                 | U                    | 0.0                                     | 1.00987 1UU                    |
| VOLATILES                          | 4-Chlorotokuene                                  | 0.00474 10                     |                                | 9.06489 1 U U                         | 0.12              | 1 6 11          | 6 22 1              | z 11         | 0.13               | 1 < 11         | 01             | 1 ¢ U             | 0.1           | 1द स              | 61            | 1 < 11           | 01          | 1 < 1)            | 0.1            | ្រ ប              | 0.3            | 1 < U             | 0.7            | 1< U                | 0.1             | 1 < U           |                            | 0.00559 1 U<br>0.0112 1 U  | U<br>U               | 0.                                      | 100494 10 0<br>100987 10 10    |
| VOLATILES                          | Benzene  | 0.00474 1 U                    |                                | 0.00489 1 U U                         | 0.006             | 1 < U           | 0.006 1             | < U          | 0.007              | 1 < U          | 0.005          | 1< U              | 0.005         | 1< U              | 0.005         | 1 < U            | 0.005       | 1 < 0             | 0.005          | 1 < U             | 0.005          | 1 < U             | 0.005          | 1 < U               | 0.005           | 1 < U           |                            | 0.00559 t U                | U                    | 0.0                                     | 1.00494 1 U U                  |
| VOLATILES                          | Bromobenzene                                     | 0.00474 1 U                    |                                | 0.00489 1-U U                         |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.00559 1 U<br>0.00559 1 U | U                    | 0.0<br>0.0                              | 0.00494 1UU<br>0.00494 1UU     |
| VOLATILES                          | Bromodichloromethane                             | 0.00474 1 U                    |                                | 0.00489 10 U                          | 0.006             | 1< U            | 0.006 1             | < 11         | 0.007              | 1 < ម          | 0.005          | l∢ U              | 0.005         | 1< U              | 0.005         | 1 < ប            | 0.005       | 1 < U             | 0.005          | េ ម               | 0.005          | 1 < U             | 0.005          | 1 < U               | 0.005           | 1 < U           |                            | 0.00559 1 U                | U                    | 0.0                                     | 1,00494 1 U U                  |
| VOLATILES                          | Bromolerm  | 0.00474 1 U                    |                                | 0.00489 1 U U                         | 0.006             | 1 < U           | 0.006 1             | < U          | 0.007              | 1 < 0          | 0.005          | 1< U              | 0.005         | 1< U              | 0.005         | 1 < U            | 0.005       | 1 < U             | 0.005          | 1< U              | 0.005          | 1 < U<br>1 < 11   | 0.005          |                     | 0.005           | 1< 17           |                            | 0.00559 3 U<br>0.0122 3 U  | ย<br>ม               | 0.0                                     | ),00494 1UU<br>)00987 1UU      |
| VOLATILES                          | Bromomemane<br>Carbon disulfide                  | 0.00948 1 U                    |                                | 0.00489 1UU                           | 0.006             | 1 < U<br>1 < U  | 0.006 1             | < U<br>< U   | 0.007              | 1 < U<br>1 < U | 0.005          | 1< U              | 0.005         | ; < U<br>1 < U    | 0.005         | 1 < U            | 0.005       | 1 < U             | 0.005          | 1< U              | 0.005          | 1 < U             | 0.005          | t∢ U                | 0.005           | t< U            |                            | 0.00559 1 U                | บ                    | . 0.0                                   | 1,00494 1 U U                  |
| VOLATILES                          | Carbon tetrachioride                             | 0.00474 1 U                    |                                | 0.00489 1 U U                         | 0.006             | 1 < U           | 0.006 1             | < 6          | 0.007              | i < U          | 0.005          | 1 < U             | 0.005         | 1 < U             | 0.005         | 1< U             | 0.005       | 1 < U             | 0.005          | 1 < 0             | 0.005          | 1.< U             | 0.005          | 1 < U               | 0.005           | 1< U            |                            | 0.00559 1 U                | U                    | 0.0                                     | 0,00494 1UU                    |
| VOLATILES                          | Chloroberizene<br>Chloroefhane                   | 0.00474 TU<br>0.00948 TU       |                                | 0.00978 1UU                           | 0.006             | 1 ≪ U<br>1 < U  | 0.005 3             | < U<br>< U   | 0.007              | i< ម<br>i< ម   | 10.0           | 1 < U<br>1 < U    | 0.005         | 1< U<br>1< U      | 0.005         | l< U<br>1< U     | 0.005       | 1 < U<br>1 < U    | 0.005          | 1< U              | 0.01           | 1 < U             | 0.003          | 1< U                | 0.01            | 1< U            |                            | 0.0112 1 U                 | บ                    | 0.0                                     | 1.00987 1UU                    |
| VOLATILES                          | Chieroform                                       | 0.00474 ¥ U                    |                                | 0.00489 1 U U                         | 0.006             | 1 < U           | 0.006 1             | < U          | 0.007              | 1< ប           | 0.005          | 1∢ U              | 0.005         | 1< U              | 0.005         | 1< U             | 0.005       | 1 < U             | 0.005          | 1< 1              | 0.005          | 1< U              | 0.005          | 1 < U               | 0.005           | 1 < U           |                            | 0.00559 1 U                | U                    | 0.                                      | 1,00494 1U-U                   |
| VOLATILES                          | Chioromethane                                    | 0.00948 1U                     |                                | 0.00978 1UU<br>0.00489 1UU            | 0.006             | 1 < U           | 0.005 }             | < 0          | 0.007              | 1< 0           | 0.01           | 1 < U             | 0.01          | 1∢ U              | 0.01          | 1< 0             | 0,01        | 1 < 0             | 0,01           | 1 < 1             | 0.01           | 1 < U             | 0.01           | 14 0                | 0.01            | 1< U            |                            | 0.00559 1 U                | U                    | 0.0                                     | 1,00494 1Ư Ư                   |
| VOLATILES                          | cis-1,3-Dichloropropene                          | 0.00474 1 U                    |                                | 0.00489 1 U U                         | 0.006             | 1 < ប           | 0.006 1             | < U          | 0.007              | 1 K U          | 0.005          | 1∢ U              | 0.005         | 1∢ Ü              | 0.005         | 1 < U            | 0.005       | ĭ< U              | 0.005          | 1 < U             | 0.005          | 1∢ 10             | 0.005          | t< U                | 0.005           | 1< U            |                            | 0.00559 1 U                | U                    | ÷ 0,                                    | 0,06494 1 U U                  |
| VOLATILES                          | Dibromochipromethane<br>Dibromomethane           | 0.00474 1U                     |                                | 0.00489 1.0 U<br>0.00489 1.9 U        | 0.006             | 1< 13           | 0.006 †             | < 8          | 0.007              | 1< U           | 0.005          | 1∢ U              | 0.005         | 1< U              | 0.005         | 1∠ U             | 0.005       | 1< U              | 0.005          | 1< U              | 0.005          | 1∢ U              | 0.005          | 1< 0                | 0.005           | 1< 0            |                            | 0.00559 1 U                | UUU                  | 0.9                                     | 1,00494 10 0<br>1,00494 10 U   |
| VOLATILES                          | Dictslorodifluoromethane                         | 0.00948 7 U                    |                                | 0.00976 1UU                           |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.0112 1 U                 | U                    | _ 0.0                                   | 1.00987 1UU                    |
| VOLATILES                          | Ethylbenzene                                     | 0.00474 1U                     |                                | 0.06489 1.0 0                         | 0.006             | 1< U            | 0.006 1             | < U          | 0.007              | 1 < U          | 0.005          | រ< ប              | 0.005         | 1∢ U              | 0.005         | 1 < U            | 0.005       | 1 < U             | 0.005          | 1 < U             | 0.005          | t< U              | 0.005          | 1 < U               | 0.005           | 1< U            |                            | 0.00559 10<br>0.00559 10   | UUU                  | 0.0                                     | 1.00494 10 U                   |
| VOLATILES                          | Isopropylbenzene                                 | 0.00474 1 U                    |                                | 0.06489 1 U U                         |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.00559 1 U                | U                    | 0.                                      | ),00494 1-U U                  |
| VOLATILES                          | m.p-Xylenes                                      | 0.00474 1 U                    |                                | 0.00489 1 U U                         | 0.000             |                 |                     |              | 0.065              |                | 0.05           |                   | 0.75          | 1.4               | 0.05          |                  | 0.05        | 1.4               | 0.05           | 1.4 11            | 0.05           | 1 - 11            | 0.05           | 16 11               | 6.05            | 1 11            |                            | 0_00559 )U                 | U<br>II              | 0.                                      | 1.00494 1.U U                  |
| VOLATILES                          | Methylene chloride                               | 0.00474 1 U                    |                                | 0.00208 1J J                          | 0.062             | 1 < U           | 0.006 1             | < U          | 0.007              | 1< U           | 0.005          | 1< U              | 0.005         | 1< U              | 0.005         | 1 < U            | 0.005       | 1 < U             | 0.005          | 1< ป              | 0.005          | 1 < U             | 6.005          | 1 < U               | 0.005           | 1< U            |                            | 0.00559 1 U                | Ŭ                    | 0.4                                     | 1.00494 1 U U                  |
| VOLATELES                          | Naphthalene                                      | 0.00948 1 U                    |                                | 0.00978 1 U U                         |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.0112 1 U                 | U                    | 0.1                                     | 200987 1UU                     |
| VOLATALES                          | n-BUTYLBENZENE<br>n-PROPYLBENZENE                | 0.00474 1U<br>0.00474 1U       |                                | 0.00489 10 0<br>0.00489 10 0          |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.00559 1 U                | v                    | 0.                                      | 200494 1U U                    |
| VOLATILES                          | PHSOPROPYLTOLUENE                                | 0.00474 1 U                    |                                | 0.00489 1 U U                         |                   |                 |                     |              |                    |                |                |                   |               |                   |               |                  |             |                   |                |                   |                |                   |                |                     |                 |                 |                            | 0.00559 1 U                | U<br>U               | . 0.                                    | 000494 1UU                     |
| VOLATILES<br>VOLATILES             | sec-BUTYLBENZENE<br>Storene                      | 0.00474 1U<br>0.00474 1U       |                                | 0.00489 1UU<br>0.00489 1UU            | 0.005             | 1< 1/           | 0.005 1             | < 11         | 0.007              | 1 « U          | 0.005          | 1< U              | 0.005         | 1 c U             | 0.005         | 1≺ U             | 0.005       | 1< U              | 0.005          | 1 < 10            | 0.005          | 1 < U             | 0.005          | 1 < 11              | 0.005           | 1< U            |                            | 0.00559 1U                 | U                    | 0.                                      | 0.00494 1 U U                  |
| VOLATILES                          | In AUTYLBENZENE                                  | 0.00474 tU                     |                                | 0.00489 1 U U                         |                   | •               |                     | -            |                    | -              |                | -                 |               | -                 |               | -                |             | -                 | _              |                   | _ `            |                   |                |                     | a.t             |                 |                            | 0.00559 1 U                | U<br>                | 0.                                      | 0.00494 1 U U                  |
| VOLATILES                          | Tetrachkoroethene<br>Tobucce                     | 0.00474 1U<br>0.00474 1U       |                                | 0.00489 1 U U<br>0.00489 1 U U        | 0.006<br>200.0    | 1 < U<br>1 < U  | 0.006 t             | < 0<br>< 11  | 0.007              | 1< บ<br>1√. ย  | 0.005          | 1< ⊎<br>1< ⊎      | 0.005         | ⊺∢ U<br>1< U      | 0.005         | t∢ U<br>1∢ U     | 0.005       | 1 < U<br>1 < U    | 0.005          | 1∢ ป<br>1∢ ป      | 0.005          | 1< U<br>1< U      | 0.005<br>0.005 | t< U<br>t< U        | 0.005           | 1 < U<br>1 < U  |                            | 0.00559 1U<br>0.00559 1U   | U<br>U               | LD<br>1.0                               | 1.00494 FU U<br>).00494 TU U   |
| VOLATILES                          | trans-1,2-Dichlomethene                          | 0.00474 1 U                    |                                | 0.00489 1 U U                         | 9,000             |                 | 0.000 1             | - 0          | 0.051              |                | 4.409          |                   | - 200         |                   |               | 0                | 0.000       |                   | 2.000          |                   |                |                   |                | -                   |                 | -               |                            | 0.00559 1 U                | U                    | . 0.                                    | ),00494 1 U U                  |
| VOLATILES                          | trans-1,3-Dichloropropene                        | 0,00474 1 U                    |                                | 0.06489 1 U U                         | 0.006             | 1 < U           | 0.006 1             | < 11         | 0.007              | 1 < U          | 0.005          | 1 < U             | 0.005         | 1< U<br>1∠ U      | 0.005         | 1< U             | 0.005       | 1 < U             | 0.005          | 1< U<br>1∠ U      | 0.005          | 1< U<br>1r ⊔      | 0.005          | t∢ U<br>t∢ If       | 0.005           | ⊺< U<br>1∈ II   |                            | 0.00559 1-U<br>0.00559 1-U | U<br>U               | 0.1                                     | ),00494 1 U U<br>),00494 1 U U |
| VOLATILES                          | Trichlorofluoromethane                           | 0.00948 11U                    |                                | 0.00978 1UU                           | 0.000             | , < U           | 0.000 )             |              | 0.007              |                | 2.005          | .~ u              | 0.000         |                   | 0.005         | 15 0             | 0.002       |                   | 0.005          | 1.5               | - ABG3         |                   | 0.000          |                     | 2.200           | •               |                            | 0.0112 1 U                 | υ.                   | 0.                                      | 1.00987 IU U                   |
| VOLATILES                          | Vinyl acetale                                    | 0.00948 tUUU                   |                                | 0.00978 1 U UJ                        |                   |                 |                     |              | 0.007              |                | 0.05           | t< U              | 0.05          | 1 < U             | 0.05          | t< U             | 0.05        | 1 < U             | 0.05           | 1< U              | 0.05           | 1 < U             | 0.05           | 1 < U               | 0.05            | 1< U<br>1∠ U    |                            | 0.0112 10                  | U<br>N               | 0.                                      | ).00987 11년 년<br>500987 17년 년  |
| VOLATILES<br>VOLATILES             | Vinyl chloride<br>Xylenes, Total                 | 0.00948 1U                     |                                | 0.00978 1UU                           | 0.006<br>0.006    | 1< U<br>1< U    | 0.006 1             | < 11<br>< 13 | 0.007              | i< U<br>i< U   | 0.01           | i< U<br>1< U      | 0.01          | i< U<br>1< U      | 0.005         | i< U<br>1< U     | 0.005       | 1< U<br>1< U      | 0.005          | 1< U<br>1< U      | 0.01           | i< 0<br>1< 10     | 0.005          | 1 < U<br>1 < U      | 0.005           | i< U<br>1< U    |                            | 0.0112 1.0                 | 2                    | 00                                      |                                |
| Footnotes are sh                   | own on cover page to Tables                      | Section.                       |                                | · · · · · · · · · · · · · · · · · · · |                   |                 |                     | -            |                    |                |                |                   |               | -                 |               | -                |             |                   |                |                   |                | · · · ·           |                |                     |                 | •               |                            |                            |                      | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |                                |

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concnetrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-87 Concentrations of Chemicals in Soil Samples Associated with Sump 087

| [SUMP] ≈ SUMP087<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE<br>Test Group                    | Parameter (Units = mg/kg)   | 35SUMP087-SB01<br>35-SMP087-SB01-01<br>9/21/2006<br>05 Ft<br>REG<br>Result DIL LQ VQ | 355UMP087-SB01<br>35-SMP087-SB01-02<br>9/21/2006<br>2.5 - 3.5 Ft<br>REG<br>Result DIL LQ VQ | 35SUMP087-SB02<br>35-SMP087-SB02-01<br>9/21/2006<br>05 Ft<br>REG<br>Result DilL LQ VQ | 35SUMP087-SB02<br>35-SMP087-SB02-02<br>9/21/2006<br>2.5 - 3.5 Ft<br>REG<br>Result DIL LQ VQ | 35SUMP088-SB01<br>35-SMP088-SB01-01<br>9/20/2006<br>05 Ft<br>REG<br>Result DIL LO VO | 35SUMP088-SB01<br>35-SMP088-SB01-02<br>9/20/2006<br>6 - 7 Ft<br>REG<br>Result Dit, LQ VQ | 35SUMP088-SB02<br>35-SMP088-SB01-02-QC<br>9/20/2006<br>6 - 7 Ft<br>FD<br>Result DIL LQ VQ | 355UMP088-SB02<br>35-SMP088-SB02-01<br>9/20/2006<br>05 Ft<br>REG<br>Result DIL_LQ_VQ | 35SUMP088-SB02<br>35-SMP088-SB02-02<br>9/20/2006<br>6 - 7 Ft<br>REG<br>Result DIL LQ VQ | LH-DL88-01<br>LH-DL88-01<br>7/22/1993<br>2 - 4 Ft<br>REG<br>Result DIL LQ VQ |
|--|---|--|---|---|---|--|--|---|--|---|--|
| EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES | 1,3-Dinitrobenzene<br>2,4-Dinitrobuene<br>2,4-Dinitrotoluene<br>2,6-Dinitrotoluene<br>4.Amino-2,6-dinitrotoluene<br>HMX<br>m-Nitrotoluene<br>Nitrobenzene |  |   |   |   |  |  |   |  |   | 0.33 1 < U<br>0.33 1 < U   |
| EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES   | o-Nitrotoluene<br>p-Nitrotoluene<br>RDX<br>Tetryi   | e940.000 4   | 22700.000 1   | 10300.000 1   | 9210.000 1  | 2970.000 1   | 13900.000 1  | 12500.000 1   | 3760.000 1   | 8440,000 1  | 7820 1   |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS   | Automourn<br>Antimony<br>Arsenic<br>Barium<br>Berylium  | 0.111 1 U<br>1.300 1<br>160.000 1<br>1.210 1   | 0.126 1 U<br>3.470 1<br>131.000 1<br>0.738 1  | 0.112 1 U<br>5.180 1<br>161.000 1<br>0.353 1 J J                                      | 0.108 1 U<br>2.830 1<br>92.700 1<br>0.546 1   | 0.113 1 U<br>2.400 1<br>383.000 1<br>0.227 1 J J                                     | 0.096 1 J JL<br>1.540 1<br>187.000 1<br>1.060 1  | 0.120 1 U<br>2.290 1<br>186.000 1<br>1.090 1  | 0.112 1 U<br>1.200 1<br>78.600 1<br>0.477 1  | 0.115 1 U<br>2.960 1<br>99,800 1<br>0.922 1   | 3 1 < U<br>1 1<br>106 1  |
| METALS<br>METALS<br>METALS<br>METALS   | Cadmium<br>Calcium<br>Chromium<br>Cobalt  | 0.192 1 J J<br>1050.000 1<br>12.200 1<br>10.400 1<br>3770 1                          | 0.175 1 J J<br>487.000 1<br>18.900 1<br>6.550 1<br>6.650 1                                  | 0.562 1<br>611.000 1<br>28.100 1<br>1.130 1<br>21.300 1                               | 0.367 1 J J<br>2440.000 1<br>17.400 1<br>5.580 1<br>6 170 1                                 | 1.310 1<br>777.000 1<br>9.860 1<br>1.700 1<br>51.600 1                               | 0,205 1 J J<br>578.000 1<br>12,400 1 JH<br>11,800 1 JL<br>4,860 1                        | 0.210 1 J J<br>624.000 1<br>11.700 1<br>12.600 1<br>5.100 1                               | 0.377 1 J J<br>570.000 1<br>16.600 1<br>2.160 1<br>2.780 1                           | 0.112 1 J J<br>530.000 1<br>10.700 1<br>12.700 1<br>7.160 1                             | 1 1 < U<br>875 1<br>13.8 1<br>8.5 1<br>2.7 1                                 |
| METALS<br>METALS<br>METALS<br>METALS   | Iron<br>Lead<br>Magnesium<br>Manganese  | 8540.000 1<br>10.900 1<br>281.000 1<br>572.000 1                                     | 17500.000 1<br>12.000 1<br>1460.000 1<br>42.400 1<br>0.018 1                                | 20100.000 1<br>17.200 1<br>403.000 1<br>51.300 1                                      | 13600.000 1<br>18.300 1<br>555.000 1<br>216.000 1<br>0.049 1 1 1                            | 6330.000 1<br>12.300 1 J<br>170.000 1<br>51.300 1<br>0.024 1 J                       | 17000.000 1<br>18.600 1 JL<br>1860.000 1<br>63.600 1<br>0.300 1 Li                       | 17000.000 1<br>7.860 1 J<br>1890.000 1<br>76.300 1<br>0.277 1 II                          | 15600.000 1<br>10.700 1 J<br>155.000 1<br>83,400 1<br>0.013 1 J J                    | 15900.000 1<br>7.060 1 J<br>1470.000 1<br>50.800 1<br>0.290 1 U                         | 8570 1<br>7.6 1<br>376 1<br>294 1<br>0.1 1 < U                               |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS   | Nickel<br>Potassium<br>Selenium<br>Silver   | 7.410 1<br>219.000 1<br>0.278 1<br>1.610 1 U   | 11.400 1<br>718.000 1<br>0.372 1<br>1.910 1 U   | 3.150 1<br>419.000 1<br>0.687 1<br>1.600 1 U  | 6.550 1<br>361.000 1<br>0.426 1<br>1.640 1 U  | 2.980 1<br>150.000 1<br>0.230 1<br>1.670 1 U   | 16.200 1<br>466.000 1 JH<br>0.335 1<br>1.850 1 U   | 17,200 1<br>466,000 1<br>0,380 1<br>1,820 1 U<br>392,000 1                                | 3,580 1<br>132,000 1<br>0,165 1 J J<br>1,730 1 U                                     | 18.400 1<br>429.000 1<br>0.399 1<br>1.790 1 U<br>277.000 1                              | 461 1<br>1 1 < U<br>1 1 < U  |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS   | Solum<br>Strontium<br>Thallium<br>Vanadium<br>Zinc  | 40.600 1<br>0.055 1<br>18.900 1<br>10.300 1  | 0.118 1<br>31.900 1<br>33.200 1   | 0.074 1<br>72.800 1<br>41.300 1   | 0.051 1<br>28.400 1<br>50.700 1   | 0.024 1<br>10.900 1<br>61,600 1  | 0.101 1<br>21.300 1 JH<br>33.500 1 JH  | 0.113 1<br>19.700 1<br>35.800 1   | 0.018 1 J J<br>22.600 1<br>12.700 1  | 0.070 1<br>22.800 1<br>41.700 1   | 12.7 1<br>13.8 1   |
| PERC<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES   | Perchlorate<br>1,2,4-Trichlorobenzene<br>1,2-Dichlorobenzene<br>1,3-Dichlorobenzene<br>1,4-Dichlorobenzene  | 0.040 4 U  | 0.050 5 U   | 0.040 4 U   | 0.010 1 U   | 0.010 1 U<br>0.908 5 U<br>0.908 5 U<br>0.908 5 U<br>0.908 5 U                        | 0.099 10 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U                           | 0.099 10 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U                            | 0.020 2 0<br>0.923 5 U<br>0.923 5 U<br>0.923 5 U<br>0.923 5 U<br>0.923 5 U           | 0.200 20 0<br>0.185 1 U<br>0.185 1 U<br>0.185 1 U<br>0.185 1 U                          | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U           |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES  | 2,4,5-Trichlorophenol<br>2,4,6-Trichlorophenol<br>2,4-Dichlorophenol<br>2,4-Dimethylphenol<br>2,4-Dimethylphenol  |  |   |   |   | 0.908 5 U<br>0.908 5 U<br>0.908 5 U<br>0.908 5 U<br>0.908 5 U                        | 0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.971 1 U               | 0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.977 1 H                | 0.923 5 U<br>0.923 5 U<br>0.923 5 U<br>0.923 5 U<br>0.923 5 U<br>4.610 5 U           | 0.185 1 U<br>0.185 1 U<br>0.185 1 U<br>0.185 1 U<br>0.185 1 U<br>0.926 1 U              | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$                         |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES   | 2,4-Dinitroluene<br>2,6-Dinitrololuene<br>2-Chloronaphthalene<br>2-Chlorophenol   |  |   |   |   | 0.908 5 U<br>0.908 5 U<br>0.908 5 U<br>0.908 5 U<br>0.908 5 U                        | 0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U                            | 0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U                             | 0.923 5 U<br>0.923 5 U<br>0.923 5 U<br>0.923 5 U<br>0.923 5 U                        | 0.185 1 U<br>0.185 1 U<br>0.185 1 U<br>0.185 1 U<br>0.185 1 U                           | 0.33 1 < U<br>0.33 1 < U   |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES  | 2-Methylnaphthalene<br>2-Methylphenol<br>2-Nitroaniline<br>2-Nitrophenol<br>3.3'-Dichlorobenzidine  |  |   |   |   | 0.908 5 U<br>0.908 5 U<br>4.540 5 U<br>0.908 5 U<br>1.820 5 U                        | 0.194 1 U<br>0.194 1 U<br>0.971 1 U<br>0.194 1 U<br>0.388 1 U                            | 0.195 1 U<br>0.195 1 U<br>0.977 1 U<br>0.195 1 U<br>0.391 1 U                             | 0.923 5 U<br>0.923 5 U<br>4.610 5 U<br>0.923 5 U<br>1.850 5 U                        | 0.185 1 U<br>0.926 1 U<br>0.185 1 U<br>0.185 1 U<br>0.370 1 U                           | 0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.65 1 < U           |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES  | 3-Nitroaniline<br>4,6-Dinitro-2-methylphenol<br>4-Bromophenyl phenyl ether<br>4-Chloro-3-methylphenol<br>4-Chloros-3-methylphenol                         |  |   |   |   | 4.540 5 U<br>4.540 5 U<br>0.908 5 U<br>0.908 5 U<br>0.908 5 U                        | 0.971 1 U<br>0.971 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U                            | 0.977 1 U<br>0.977 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U                             | 4.610 5 U<br>4.610 5 U<br>0.923 5 U<br>0.923 5 U<br>0.923 5 U                        | 0.926 1 U<br>0.926 1 U<br>0.185 1 U<br>0.185 1 U<br>0.185 1 U                           | 1.65 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>0.65 1 < U           |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES  | 4-Chlorophenyl phenyl ether<br>4-Methylphenol<br>4-Nitroaniline<br>4-Nitrophenol  |  |   |   |   | 0.908 5 U<br>0.908 5 U<br>4.540 5 U<br>4.540 5 U                                     | 0.194 1 U<br>0.194 1 U<br>0.971 1 U<br>0.971 1 U   | 0.195 1 U<br>0.195 1 U<br>0.977 1 U<br>0.977 1 U  | 0.923 5 U<br>0.923 5 U<br>4.610 5 U<br>4.610 5 U                                     | 0.185 1 U<br>0.185 1 U<br>0.926 1 U<br>0.926 1 U  | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>1.65 1 < U<br>1.65 1 < U           |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES   | Acenaphthene<br>Acenaphthylene<br>Anthracene<br>Benzo(a)anthracene  |  |   |   |   | 0.908 5 U<br>0.908 5 U<br>0.908 5 U<br>0.908 5 U<br>0.908 5 U                        | 0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U                            | 0,195 1 U<br>0,195 1 U<br>0,195 1 U<br>0,195 1 U<br>0,195 1 U                             | 0.923 5 U<br>0.923 5 U<br>0.923 5 U<br>0.923 5 U<br>0.923 5 U                        | 0.185 1 U<br>0.185 1 U<br>0.185 1 U<br>0.185 1 U<br>0.185 1 U                           | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U           |

MARC No. W1912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Karnack, Texas

.

2

# Table 3-87 Concentrations of Chemicals in Soil Samples Associated with Sump 087

| (SUMP) = SUMP087 |                             |   |                  |                      |                   |                     |                  |                   |                         |                   |                   |
|------------------|-----------------------------|---|------------------|----------------------|-------------------|---------------------|------------------|-------------------|-------------------------|-------------------|-------------------|
| LOCATION CODE    |                             | LH\$-3-28   | LH-S87-01        | LH-S87-01            | LH-S88-01         | LH-S88-01           | LH-\$88-01       | LH-S88-01         | LH-S88-02               | LH-\$88-02        | LH-S88-02         |
| SAMPLE_NO        |                             | LHS-3-28  | LH-S87-01_1      | LH-S87-01_2          | LH-\$88-01 QC     | LH-S88-01_1         | LH-S88-01_2      | LH-S88-01_3       | LH-S88-02_1             | LH-S88-02_2       | LH-S88-02_3       |
| SAMPLE_DATE      |                             | 1/11/1995   | 7/22/1993        | 6/26/1993            | 7/22/1993         | 7/22/1993           | 7/22/1993        | 7/22/1993         | 7/22/1993               | ////1993          | //22/1993         |
| DEPTH            |                             | 0 - ,5 Ft   | .5-2 Ft          | 2.5 - 3 Ft           | .5-2Fl            | .5-2Ft              | 4-6Ft            | 6-8FL             | .5 - 2 +1               | 4-0 Fl            | 0-8FI<br>DCC      |
| SAMPLE_PURPOSE   |                             | REG   | REG              | REG                  |                   |                     |                  |                   | REG<br>Result DIL LO VO |                   |                   |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ     | Resur DIL LO VO   | Result Dil LQ VQ    | Result DIL LO VO | Result Dil. LQ VQ | Result DIL LQ VQ        | Result DIL LQ VQ  | Result Dit. EQ VQ |
| EXPLOSIVES       | 1,3,5-Innitrobenzene        | 0.22 1 < U  |                  |                      |                   |                     |                  |                   |                         |                   |                   |
| EXPLOSIVES       | 1,3-Dinitropenzene          | 0.22 1 < 0  |                  |                      |                   |                     |                  |                   |                         |                   |                   |
| EXPLOSIVES       | 2.4.0-THINDOODENE           | 0.22 1 < 0  | 0.22 1 4 11      | 110 1 4 11           | 033 1 4 1         | <u>033 1 &lt; 1</u> | 033 1 < ∐        | 033 1 < 11        | 0.33 1 < 11             | 033 1 < 1         | 033 1 < U         |
| EXPLOSIVES       | 2.6-Dinitratoluene          | 0.24 1 < 1  | 033 1 < 1        | 119 1 < 11           | 0.33 1 < 1        | 033 1 < 0           | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U        |
| EXPLOSIVES       | 4-Amino-2 6-dinitrotokiena  | 0.46 1 < 1  | 0.55 1 4 0       |                      | 0.00 1 4 0        |                     |                  | 0.00              |                         |                   |                   |
| EXPLOSIVES       | HMX                         | 2 1 < U   |                  |                      |                   |                     |                  |                   |                         |                   |                   |
| EXPLOSIVES       | m-Nitrotoluene              | 0.93 1 < U  |                  |                      |                   |                     |                  |                   |                         |                   |                   |
| EXPLOSIVES       | Nitrobenzene                | 0.24 1 < U  |                  |                      |                   |                     |                  |                   |                         |                   |                   |
| EXPLOSIVES       | o-Nitrotoluene              | 0.93 1 < U  |                  |                      |                   |                     |                  |                   |                         |                   |                   |
| EXPLOSIVES       | p-Nitrotoluene              | 2.8 1 < U   |                  |                      |                   |                     |                  |                   |                         |                   |                   |
| EXPLOSIVES       | RDX                         | 11 <u< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></u<> |                  |                      |                   |                     |                  |                   |                         |                   |                   |
| EXPLOSIVES       | Tetryl                      | 0. <del>6</del> 9 1 < U   |                  |                      |                   |                     |                  |                   |                         |                   |                   |
| METALS           | Aluminum                    | 3830 1  | 14200 1          | 8160 1               | 13100 1           | 13500 1             | 21200 1          | 18500 1           | 12800 1                 | 40800 1           | 23600 1           |
| METALS           | Antimony                    | 9.2 1 < UJ  | 31 < U           | 4.32 1 < U           | 31 < U            | 31 < U              | 3 1 < U          | 3 1 < 0           | 31 < 0                  | 3 1 < U           | 3.6 1             |
| METALS           | Arsenic                     | 1.8 1 J   | 1.4 1            | 2.18 1               | 1.1 1             | 1.2 1               | 2 1              | 1.9 1             | 1.7 1                   | 11 < 0            | 1.3 1             |
| METALS           | Barium                      | 72.2 1  | 80.7 1           | 84.3 1 < U           | 477 1             | 394 1               | 91.8 1           | 128 1             | 104 1                   | 202 1             | 348 1             |
| METALS           | Berytlium                   |   |                  |                      |                   |                     |                  | 4 4 4 11          | 4 4 4 11                |                   | 11 - 11           |
| METALS           | Cadmium                     | 0.92 1 < 0  | 11 < 0           | 2.7 1 < 0            | 1 1 < 0           | 11 < U              | 11550            | 11 < U            | 1660 4                  | 2020 1            | 2760 1            |
| METALS           | Calcium                     | 491 1   | 1480 1           | 1810 1               | 19/0 1            | 2430 1              | 1020 1           | 12.5 1            | 1000 1                  | 286 1             | 2/60 1            |
| METALS           | Chromium                    | 6.7 1 J   | 20.8 1           | 11.9 1               | 10.4 1            | 14.1                | 106 1            | 10.1 1            | 11.2 1                  | 10.4 1            | 183 1             |
| METALS           | Copair                      | 5.2 1   | 0.1 1            | 0,19 I<br>797 1 - 11 | 81 1              | 01 1                | 49 1             | 95 1              | 51 1                    | 76 1              | 73 1              |
| METALS           | trop                        | 2660 1  | 15400 1          | 0720 1               | 12500 1           | 17900 1             | 25400 1          | 22000 1           | 17700 1                 | 22400 1           | 20900 1           |
| METALO           | Lead                        | 98 1  | 21 1             | 186 1                | 124 1             | 10.1 1              | 97 1             | 19.2 1            | 5 1                     | 6.8 1             | 13.6 1            |
| METALS           | Magnesium                   | 247 1   | 613 1            | 380 1                | 1010 1            | 1050 1              | 887 1            | 2170 1            | 666 1                   | 2400 1            | 2410 1            |
| METALS           | Manganese                   | 455 1   | 306 1            | 374 1                | 166 1             | 129 1               | 150 1            | 133 1             | 361 1                   | 43.7 1            | 69.5 1            |
| METALS           | Mercury                     | 0.091 1 < U   | 0.1 1 < U        | 0.051 1 < U          | 0.1 1 < U         | 0.1 1 < U           | 0.1 1 < U        | 0.1 1 < U         | 0.1 1 < U               | 0.1 1 < U         | 0.1 1 < U         |
| METALS           | Nickel                      |   |                  |                      |                   |                     |                  |                   |                         |                   |                   |
| METALS           | Potassium                   | 246 1   | 632 1            | 473 1                | 670 1             | 754 1               | 931 1            | 1120 1            | 622 1                   | 1870 1            | 1340 1            |
| METALS           | Selenium                    | 0.29 1 J  | 11 < U           | 0,432 1 < U          | 11 < U            | 11 < U              | 11 < U           | 11 < U            | 11 < U                  | 11 < U            | 11 < U            |
| METALS           | Silver                      | 0.92 1 < U  | 11 < U           | 0.022 1 < U          | 11<0              | 11 < U              | 11 < U           | 11 < U            | 11 < U                  | 11 < U            | 11<,U             |
| METALS           | Sodium                      |   |                  |                      |                   |                     |                  | <b></b> .         |                         |                   |                   |
| METALS           | Strontium                   | 9.2 1 < U   | 11.6 1           | 10 1 < U             | 26.7 1            | 26.4 1              | 14 1             | 31.5 1            | 14.8 1                  | 47.9 1            | 51.1 1            |
| METALS           | Thallium                    | 46.2 1 < U  |                  |                      |                   |                     |                  |                   |                         |                   |                   |
| METALS           | Vanadium                    |   |                  | <u> </u>             | 17 1              | 45 4                | 22.4 .4          | 720 4             | £9.0 4                  | EE E 1            | 622 4             |
| METALS           |                             | 21 1  | 29.6 1           | 23 1                 | 47 1              | 40 1                | 33.4 1           | 12.9              | 30.5 1                  | 33.0 1            | 02.0              |
| PERC             | Perchiorate                 | 0.42 4 4 11   | 0.23 1 - 11      | 110 1 4 11           | 033 1 4 11        | 0.33 1 2 11         | 033 1 < 1        | 033 1 4 1         | 033 1 < 11              | 033 1 < 11        | 033 1 < 11        |
|                  | 1,2,4+ShOhorobonzono        | 0.43 1 < 0  | 0.33 1 < 0       | 110 1 < 1            | 0.33 1 < 11       | 0.33 1 < 1          | 0.33 1 < 11      | 0.33 1 < 1        | 0.33 1 < 11             | 0.33 1 < 11       | 033 1 < 1         |
| SEMIVOLATILES    | 1.2-Dichlorobenzene         | 0.43 1 < 0  | 0.33 + 0.03      | 1 19 1 < 11          | $0.33 \ 1 \ < 11$ | 0.33 1 < 11         | 0.33 1 < 1       | 033 1 < 1         | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U        |
| SEMIVOLATILES    | 1 4-Dichlorobenzene         | 0.43 1 < 1  | 0.33 1 < 11      | 119 1 < 1            | 0.33 1 < 11       | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U              | 0.33 1 < 0        | 0.33 1 < U        |
| SEMIVOLATILES    | 2 4 5-Trichlorophenol       | 211 < 1   | 1.65 1 < U       | 1.19 1 < U           | 1.65 1 < U        | 1.65 1 < U          | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < U              | 1.65 1 < U        | 1.65 1 < U        |
| SEMIVOLATILES    | 2.4.6-Trichlorophenol       | 0.43 1 < 0  | 0.33 1 < U       | 1.19 1 < U           | 0.33 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U        |
| SEMIVOLATILES    | 2.4-Dichlorophenol          | 0.43 1 < U  | 0,33 1 < U       | 1.19 1 < U           | 0,33 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U        |
| SEMIVOLATILES    | 2,4-Dimethylphenol          | 0.43 1 < U  | 0.33 1 < U       | 0.595 1 < U          | 0.33 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U        |
| SEMIVOLATILES    | 2,4-Dinitrophenol           | 2.1 1 < U   | 1.65 1 < U       | 11.905 1 < U         | 1.65 1 < U        | 1.65 1 < U          | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < U              | 1.65 1 < U        | 1.65 1 < U        |
| SEMIVOLATILES    | 2,4-Dinitrotoluene          | 0.43 1 < U  |                  |                      |                   |                     |                  |                   |                         |                   |                   |
| SEMIVOLATILES    | 2,6-Dinitrololuene          | 0.43 1 < U  |                  |                      |                   |                     |                  |                   |                         |                   |                   |
| SEMIVOLATILES    | 2-Chloronaphthalene         | 0.43 1 < U  | 0.33 1 < U       | 0.357 1 < U          | 0.33 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U              | 0.33 1 < 0        | 0.33 1 < 0        |
| SEMIVOLATILES    | 2-Chlorophenol              | 0.43 1 < U  | 0.33 1 < U       | 0.595 1 < U          | 0.33 1 < 0        | 0.33 1 < U          | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 < 0              | 0.33 1 < 0        | 0.33 1 < 0        |
| SEMIVOLATILES    | 2-Methylnaphthalene         | 0.43 1 < U  | 0.33 1 < U       | 0.357 1 < U          | 0.33 1 < U        | 0.33 1 < 0          | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 < 0              | 0.33 1 < 0        | 0.33 1 < 0        |
| SEMIVOLATILES    | 2-Methylphenol              | 0.43 1 < U  | 0.33 1 < U       | 0,595 1 < U          | 0.33 1 < 0        | 0.33 1 < 0          | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 < 0              | 465 4 4 1         | 465 1 < 1         |
| SEMIVOLATILES    | 2-Nitroanitine              | 2.1 1 < 0   | 1.65 1 < 0       | 3.5/1 1 < U          | 1.05 1 < 0        | 1.00 1 < 0          | 1.00 1 < 0       | 1,00 1 < 0        |                         |                   | 033 1 < U         |
| SEMIVOLATILES    | 2-Nitrophenol               | 0.43 1 < 0  | 0.33 1 < 0       | 1.19 1 < 0           |                   |                     | 0.55 1 < 1       |                   | 0.65 1 < 0              | 0.55 1 < 0        |                   |
| SEMIVOLATILES    | 3,3-Dichloropenzigine       |   | 0.65 1 < 0       | 9571 1 < 1           |                   | 165 1 < 1           | 165 1 < 1        | 165 1 < 1         | 165 1 < 1               | 165 1 < 1         | 165 1 < 1         |
| SEMIVOLATILES    | 3-Miroansme                 | 2.1 1 4 0   | 165 1 4 11       | 5.652 1 < 1          | 1.05 1 < 0        | 165 1 < 1           | 165 1 < 1        | 1.05 1 < 1        | 165 1 < 1               | 165 1 < 1         | 165 1 < 1         |
| SEMIVOLATILES    | 4.0-Dimino-2-meinyiphenoi   |   | 0.23 1 < 1       | 149 1 4 1            | 0.33 1 < 0        | 033 1 < 1           | 033 1 < 1        | 033 1 < 1         | 033 1 < 11              | $0.33 \ 1 \ < 11$ | 0.33 1 < 11       |
| SEMINULATILES    | 4-Chloro-3-methylobeool     | 0.43 1 < 1  | 0.551 < 0        | 0.595 1 < 1          | 0.65 1 < 1        | 0.65 1 < 1          | 0.65 1 < 1       | 0.65 1 < 1        | 0.65 1 < 11             | 0.65 1 < 1        | 0.65 1 < U        |
| SEMIVOLATILES    | 4-Chlornaniline             | 043 1 < 1   | 0.65 1 < 11      | 3571 1 < 1           | 0.65 1 < 1        | 0.65 1 < 1          | 0.65 1 < 11      | 0.65 1 < 11       | 0.65 1 < 1              | 0.65 1 < 1        | 0.65 1 < 1        |
| SEMILOLATILES    | 4-Chinrophenyl phenyl ether | 043 1 < 1   | 0.33 1 < 11      | 1.19 1 < 11          | 0.33 1 < 11       | 0.33 1 < 1          | 0.33 1 < 1       | 0.33 1 < U        | 0.33 1 < LI             | 0.33 1 < U        | 0.33 t < U        |
| SEMIVOLATILES    | 4-Methviohenoi              | 0.43 1 < 11   | 0.33 1 < 11      | 0.595 1 < U          | 0.33 1 < 11       | 0.33 1 < 11         | 0.33 1 < 11      | 0.33 1 < 11       | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U        |
| SEMIVOLATILES    | 4-Nitroaniline              | 2.1 1 < 1   | 1.65 1 < 11      | 5.952 1 < U          | 1.65 1 < U        | 1.65 1 < U          | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < U              | 1.65 1 < U        | 1.65 1 < U        |
| SEMIVOLATILES    | 4-Nitrophenol               | 2.1 1 < U   | 1.65 1 < U       | 5.952 1 < U          | 1.65 1 < U        | 1.65 1 < U          | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < U              | 1.65 1 < U        | 1.65 1 < U        |
| SEMIVOLATILES    | Acenaphthene                | 0.43 1 < U  | 0.33 1 < U       | 0.357 1 < U          | 0.33 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U        |
| SEMIVOLATILES    | Acenaphthylene              | 0.43 1 < U  | 0.33 1 < U       | 0.595 1 < U          | 0.33 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U        |
| SEMIVOLATILES    | Anthracene                  | 0.43 1 < U  | 0.33 1 < U       | 0.595 1 < U          | 0.33 1 < U        | 0.33 t < U          | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U        |
| SEMIVOLATILES    | Benzo(a)anthracene          | 0.43 1 < U  | 0.33 1 < U       | 0.357 1 < U          | 0.33 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U              | 0.33 1 < U        | 0.33 1 < U        |

MARC No. W1912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas

## Data Evaluation Report Chemical Concnetrations in Soil Associated with LHAAP-35/36 Sumps

# Table 3-87 Concentrations of Chemicals in Soil Samples Associated with Sump 087

| SUMP) = SUMP087                |                                 |                  | 000 N (D007 0D04 | 0500 00003 0000  |                                     | 2001110000 0004                     | 2501110000 0004  | 2501110000 0002                        | 2501 100000 0002  | 2501 MIDA99, CD02 | HLDI 99 A1       |
|--------------------------------|---------------------------------|------------------|------------------|------------------|-------------------------------------|-------------------------------------|------------------|--|-------------------|-------------------|------------------|
|                                |                                 | 35SUMP08/-SB01   | 35SUMP087-SB01   | 35SUMP087-SB02   | 3550MP087-5802<br>35-SMP087-SB02-02 | 355UMP088-5801<br>35_SMP088_SB01_01 | 3550MP088-5801   | 3550MP000-5002<br>35-SMP088-SB01-02-0C | 35-SMP088-SB02-01 | 35-SMP088-SB02-02 | LH-DL88-01       |
| SAMPLE_NU                      |                                 | 30-5101-01-01    | 9/21/2006        | 9/21/2006        | 9/21/2006                           | 9/20/2006                           | 9/20/2006        | 9/20/2006                              | 9/20/2006         | 9/20/2006         | 7/22/1993        |
| DEPTH                          |                                 | 05 Fi            | 2.5 - 3.5 Ft     | 0 - 5 Ft         | 2.5 - 3.5 Ft                        | 05 Ft                               | 6-7 Ft           | 6 - 7 Ft                               | 05 Ft             | 6-7 Ft            | 2 - 4 Ft         |
| SAMPLE PURPOSE                 |                                 | REG              | REG              | REG              | REG                                 | REG                                 | REG              | FD                                     | REG               | REG               | REG              |
| Test Group                     | Parameter (Units = mg/kg)       | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ                    | Result DIL LQ VQ                    | Result DIL LQ VQ | Result DIL LQ VQ                       | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ |
| SEMIVOLATILES                  | Benzo(a)pyrene                  |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | Benzo(b)fluoranthene            |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | Benzo(ghi)perylene              |                  |                  |                  |                                     | 0.908 5 0                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < 0       |
| SEMIVOLATILES                  | Benzo(k)fluoranthene            |                  |                  |                  |                                     | 0.908 5 0                           | 0.194 1 0        | 0.195 1 0                              | 4610 5 14         | 0.165 1 0         | 1.33 + 0         |
| SEMIVOLATILES                  | Benzoic Acid<br>Benzut Aleobol  |                  |                  |                  |                                     | 4.540 5 U                           | 0.194 1 1        | 0.195 1 U                              | 0.923 5 1         | 0.185 1 U         | 0.65 1 < 0       |
| SEMIVOLATILES<br>SEMIVOLATILES | his/2-Chloroethoxy)methane      |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether         |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0,195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | bis(2-Chtoroisopropyl)ether     |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phlhalate      |                  |                  |                  |                                     | 0,908 5 0                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < 0       |
| SEMIVOLATILES                  | Butyl benzyl phthalate          |                  |                  |                  |                                     | 0.908 5 0                           | 0.194 1 0        | 0.195 1 0                              | 0.923 5 0         | 0.185 1 0         | 0.33 1 4 0       |
| SEMIVULATILES                  | Characole                       |                  |                  |                  |                                     | 0.908 5 11                          | 0194 1 1         | 0.195 1 14                             | 0.923 5 1/        | 0.185 1 11        | 033 1 < 1        |
| SEMBIOLATILES                  | Dibenzo/a h)apthracene          |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | Dibenzofuran                    |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | Diethyl phthalate               |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | Dimethyl phthalate              |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | di-n-Butyl phthalate            |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < 0       |
| SEMIVOLATILES                  | di-n-Octyl phthalate            |                  |                  |                  |                                     | 0.908 5 0                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 0         | 0.165 1 0         | 0.33 1 < 0       |
| SEMIVOLATILES                  | Fluorantnene                    |                  |                  |                  |                                     | 0.908 5 11                          | 0.194 1 1        | 0.195 1 11                             | 0.923 5 11        | 0.185 1 1/        | 0.33 1 < 1       |
| SEMIVOLATILES                  | Heyachlorobenzene               |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | Hexachlorobutadiene             |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene       |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | Hexachloroethane                |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | Indeno(1,2,3-cd)pyrene          |                  |                  |                  |                                     | 0.908 5 0                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 0         | 0.165 1 U         | 0.33 1 < 0       |
| SEMIVOLATILES                  | Isophorone                      |                  |                  |                  |                                     | 0,908 5 0                           | 0.194 1 0        | 0.195 1 0                              | 0.923 5 0         | 0.105 1 0         | 0.33 1 < 1       |
| SEMIVOLATILES                  | Naphinalene                     |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 11       | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine      |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0,33 1 < U       |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine          |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | Pentachlorophenol               |                  |                  |                  |                                     | 4.540 5 U                           | 0.971 1 U        | 0.977 1 U                              | 4.610 5 U         | 0.926 1 U         | 1.65 1 < U       |
| SEMIVOLATILES                  | Phenanthrene                    |                  |                  |                  |                                     | 0.908 5 U                           | 0.194 1 U        | 0.195 1 U                              | 0.923 5 U         | 0.185 1 U         | 0.33 1 < U       |
| SEMIVOLATILES                  | Phenol                          |                  |                  |                  |                                     | 0.908 5 0                           | 0.194 1 U        | 0,195 1 U                              | 0.923 5 0         | 0.185 1 0         | 0.33 1 < 0       |
| SEMIVULATILES                  | Pyrene<br>Percent Solids        | 89.3 1           | 77 5 1           | 88.2 1           | 92.3 1                              | 88,500 1                            | 83 300 1         | 82,700 1                               | 88,700 1          | 86.100 1          | 0.00 / 4 0       |
| VOLATILES                      | 1.1.1.2-Tetrachloroethane       | 03.3             | 0.00599 1 U      | 00.2             | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       |                  |
| VOLATILES                      | 1,1,1-Trichloroethane           |                  | 0.00599 1 U      |                  | 0.00527 1 U                         |                                     | 0,00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane       |                  | 0.00599 1 U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES                      | 1,1,2-Trichloroethane           |                  | 0.00599 1 U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES                      | 1,1-Dichloroethane              |                  | 0.00599 1 U      |                  | 0.00527 1 0                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 0       |                  |
|                                | 1,1-Dicaloroenene               |                  | 0.00599 1 0      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       | 0.000 1 - 0      |
| VOLATILES                      | 12.3-Trichlorobenzene           |                  | 0.00599 1 U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       |                  |
| VOLATILES                      | 1,2,3-Trichloropropane          |                  | 0.00599 1 U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       |                  |
| VOLATILES                      | 1,2,4-Trichlorobenzene          |                  | 0.00599 1 U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       |                  |
| VOLATILES                      | 1,2,4-Trimethylbenzene          |                  | 0.00599 1 U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       |                  |
| VOLATILES                      | 1,2-Dibromo-3-chloropropane     |                  | 0.00599 1 U      |                  | 0.00527 1 0                         |                                     | 0.00518 1 U      | 0.00476 1 0                            |                   | 0.00451 1 U       |                  |
|                                | 1,2-Diohomoeinane               |                  | 0.00599 1 0      |                  | 0.00527 1 0                         |                                     | 0.00518 1 U      | 0.00476 1 11                           |                   | 0.00451 1 U       |                  |
| VOLATILES                      | 1 2-Dichloroethane              |                  | 0.00599 1 1      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES                      | 1.2 Dichleroethoan <sup>#</sup> |                  |                  |                  |                                     |                                     |                  |  |                   |                   | 0.005 1 < 1      |
| VOLATIES                       | 1 2-Dichlorooropane             |                  | 0.00599 1 U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES                      | 1.2-Dimethylbenzene (o-Xviene)  |                  | 0.00599 1 U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       |                  |
| VOLATILES                      | 1,3,5-Trimethylbenzene          |                  | 0.00599 1 U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       |                  |
| VOLATILES                      | 1,3-Dichlorobenzene             |                  | 0.00599 1 U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       |                  |
| VOLATILES                      | 1,3-Dichloropropane             |                  | 0.00599 1 U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       |                  |
| VOLATILES                      | 1,4-Dichlorobenzene             |                  | 0.00599 1 U      |                  | 0.00527 1 0                         |                                     | 0.00518 1 0      | 0.00476 1 0                            |                   | 0.00451 1 0       |                  |
| VOLATILES                      | 2,2-Dichloropropane             |                  | 0.01200 1 11     |                  | 0.01050 1 1                         |                                     | 0.01040 1 U      | 0.00952 1 U                            |                   | 0.00903 1 U       | 0.05 1 < U       |
| VOLATILES                      | 2-Chloroethyl vinyt ether       |                  | 0.01200 1 U      |                  | 0.01050 1 U                         |                                     | 0.01040 1 U      | 0.00952 1 U                            |                   | 0.00903 1 U       | 0.01 1 < U       |
| VOLATILES                      | 2-Chlorotoluene                 |                  | 0.00599 1 U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       |                  |
| VOLATILES                      | 2-Hexanone                      |                  | 0.01200 1 U      |                  | 0,01050 1 U                         |                                     | 0.01040 1 U      | 0.00952 1 U                            |                   | 0.00903 1 U       | 0.05 1 < U       |
| VOLATILES                      | 2-Propenal                      |                  |                  |                  | 0.00507                             |                                     |                  | 0.00476 1 11                           |                   | 0.00464 4 11      |                  |
| VOLATILES                      | 4-Chlorotoluene                 |                  | U.00599 1 U      |                  | 0.00527 1 0                         |                                     | 0.00518 1 U      | 0.004/6 1 0                            |                   | 0.00451 1 0       | 01 1 2 11        |
| VOLATILES                      | Acetonitrile                    |                  | 0.01200 1 0      |                  |                                     |                                     | 0.01040 1 0      | 0.00302 1 0                            |                   |                   | 0.5 1 5 0        |
| VOLATILES                      | Acrylonitrile                   |                  |                  |                  |                                     |                                     |                  |  |                   |                   |                  |
| VOLATILES                      | Allyi chloride                  |                  |                  |                  |                                     |                                     |                  |  |                   |                   |                  |
| VOLATILES                      | Benzene                         |                  | 0.00599 t U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES                      | Bromobenzene                    |                  | 0,00599 1 U      |                  | 0.00527 1 U                         |                                     | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       |                  |
| VOLATILES                      | Bromochloromethane              |                  | 0.00599 1 U      |                  | 0.00527 1 U                         | -                                   | 0.00518 1 U      | 0.00476 1 U                            |                   | 0.00451 1 U       |                  |

## \$**000662**32

Data Evaluation Report Chemical Concnetrations in Soil Associated with LHAAP-36/36 Sumps

## Table 3-87 Concentrations of Chemicals in Soil Samples Associated with Sump 087

| [SUMP] = SUMP087<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |  | LHS-<br>LHS-<br>1/11/1<br>05<br>RE | 3-28<br>3-28<br>1995<br>5 Ft<br>5G |      | LH-S<br>LH-S8<br>7/22/<br>.5 -<br>RI | 87-01<br>7-01_1<br>/1993<br>2 Ft<br>EG |       | LH-S<br>LH-S8<br>6/26<br>2.5 -<br>RI | 87-01<br>7-01_1<br>/1993<br>- 3 Ft<br>EG | 2     | LH-S8<br>LH-S88-<br>7/22/1<br>.5 - 2<br>Ft | 8-01<br>01 QC<br>1993<br>2 Ft<br>) |       | LH-S88-0<br>LH-S88-0<br>7/22/199<br>.5 - 2 Fl<br>REG | 01<br>1_1<br>13<br>1 | LH-S8<br>LH-S88<br>7/22/<br>4 - 6<br>RE | 98-01<br>9-01_2<br>1993<br>9 Ft<br>9G | LH-S8<br>LH-S86<br>7/22/1<br>6 - 8<br>RE | 8-01<br>-01_3<br>1993<br>Ft<br>G | LH-S<br>LH-S8<br>7/22<br>.5 -<br>R | 888-02<br>88-02_1<br>/1993<br>• 2 Ft<br>EG | LH-S8<br>LH-S8<br>7/22/<br>4 - (<br>R8 | 38-02<br>3-02_2<br>1993<br>3 Ft<br>3 G |      | LH-S88<br>LH-S88-<br>7/22/11<br>6 - 8<br>REC | 9-02<br>02_3<br>993<br>Ft<br>\$ |         |
|---|--|------------------------------------|------------------------------------|------|--------------------------------------|--|-------|--------------------------------------|--|-------|--|------------------------------------|-------|--|----------------------|---|---------------------------------------|--|----------------------------------|------------------------------------|--|--|--|------|--|---------------------------------|---------|
| Test Group  | Parameter (Units = mg/kg)                  | Result D                           | IL LC                              | VQ   | Result                               | DIL L                                  | Q VQ  | Result (                             | DILLO                                    | Q VQ  | Result D                                   | DIL LQ                             | VQ    | Result DIL   | LQ VQ                | Result D                                | E LQ VQ                               | Result_D                                 | I LO VO                          | Result D                           | DIL LQ VQ                                  | Result D                               | DIL LQ                                 | VQ F | Result Di                                    | LQ                              | ٧Q      |
| SEMIVOLATILES   | Benzo(a)pyrene                             | 0.057                              | 1                                  | J    | 0.33                                 | 1 .                                    | < U   | 0.595                                | 1 <                                      | < U   | 0.33                                       | 1 <                                | ម     | 0.33 1   | < U                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | Benzo(b)fluoranthene                       | 0.26                               | 1                                  | J    | 0.33                                 | 1 •                                    | < U   | 1.19                                 | 1 <                                      | < U   | 0.33                                       | 1 <                                | U     | 0.33 1   | < U                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | Benzo(ghi)perylene                         | 0.43                               | 1 <                                | U    | 0.33                                 | 1 •                                    | < U   | 2.381                                | 1 <                                      | < ย   | 0.33                                       | 1 <                                | U     | 0.33 1   | < ย                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | ប    | 0.33 1                                       | < .                             | Ų.      |
| SEMIVOLATILES   | Benzo(k)fluoranthene                       | 0.069                              | 1                                  | j    | 0.33                                 | 1 .                                    | < U   | 1.19                                 | 1 <                                      | < ย   | 0.33                                       | 1 <                                | U     | 0.33 1   | < U                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | ប    | 0.33 1                                       | <                               | ប       |
| SEMIVOLATILES   | Benzoic Acid                               | 2.1                                | 1 <                                | U    | 1.65                                 | 1 -                                    | < U > |                                      |  |       | 1.65                                       | 1 <                                | U     | 1.65 1   | < U                  | 1,65 1                                  | < U                                   | 1.65 1                                   | < ()                             | 1.65                               | 1 < U                                      | 1.65                                   | 1 <                                    | U    | 1.65 1                                       | <                               | U       |
| SEMIVOLATILES   | Benzyl Alcohol                             | 0.43                               | 1 <                                | U    | 0.65                                 | 1 •                                    | < U   |                                      |  |       | 0.65                                       | 1 <                                | U     | 0,65 1   | < U                  | 0.65 1                                  | < U                                   | 0.65 1                                   | < ប                              | 0.65                               | 1 < U                                      | 0.65                                   | 1 <                                    | U    | 0.65 1                                       | <                               | U       |
| SEMIVOLATILES   | bis(2-Chloroethoxy)methane                 | 0.43                               | 1 <                                | U    | 0.33                                 | 1 -                                    | < U   | 0.595                                | 1 <                                      | < U   | 0.33                                       | 1 <                                | U     | 0.33 1   | < U                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0,33 1                                       | <                               | U       |
| SEMIVOLATILES   | bis(2-Chloroethyl)ether                    | 0.43                               | 1 <                                | U    | 0.33                                 | 1 •                                    | < U > | 0.595                                | 1 <                                      | < ป   | 0.33                                       | 1 <                                | U     | 0.33 1   | < ย                  | 0,33 1                                  | < U                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | บ       |
| SEMIVOLATILES   | bis(2-Chloroisopropyl)ether                | 0.43                               | 1 <                                | U    | 0.33                                 | 1 •                                    | < U   | 1.19                                 | 1 <                                      | < U   | 0.33                                       | 1 <                                | U     | 0.33 1   | < U                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < ป                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | bis(2-Ethylhexyl)phthalate                 | 0.43                               | 1 <                                | U    | 0.33                                 | 1 .                                    | < U   | 0.179                                | 1  | J     | 0.33                                       | 1 <                                | U     | 0.33 1   | < U                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | ឋ    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | Butyl benzyl phthalate                     | 0.43                               | 1 <                                | U    | 0.33                                 | 1.                                     | < U > | 0.595                                | 1 <                                      | < U   | 0.33                                       | 1 <                                | U     | 0.33 1   | < U                  | 0.33 1                                  | < U                                   | 0.33 1                                   | - U                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | Carbazole                                  |                                    |                                    |      |                                      |  |       | 1.19                                 | 1 <                                      | < U   |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| SEMIVOLATILES   | Chrysene                                   | 0.43                               | 1 <                                | U    | 0.33                                 | 1 -                                    | < U > | 5.952                                | 1 <                                      | < U   | 0.33                                       | 1 <                                | U     | 0.33 1   | < U                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < ป                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | Dibenzo(a,h)anthracene                     | 0.43                               | 1 <                                | U    | 0.33                                 | 1 .                                    | < U   | 2.381                                | 1 <                                      | ເປັ   | 0.33                                       | 1 <                                | U     | 0.33 1   | < ป                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < ប                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | Dibenzofuran                               | 0.43                               | 1 <                                | U    | 0.33                                 | 1 .                                    | < U > | 1.19                                 | 1 <                                      | < U > | 0.33                                       | 1 <                                | U     | 0.33 1   | < U                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < ប                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | Diethyl phthalate                          | 0.43                               | 1 <                                | U    | 0.33                                 | 1 .                                    | < U   | 0.595                                | 1 <                                      | < U   | 0.33                                       | 1 <                                | U     | 0.33 1   | < U                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | Dimethyl phthalate                         | 0.43                               | 1 <                                | U    | 0.33                                 | 1 .                                    | < ຢ   | 0.595                                | 1 <                                      | < U   | 0.33                                       | 1 <                                | U     | 0.33 1   | < U >                | 0.33 1                                  | < U                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | di-n-Butyl phthalate                       | 0.43                               | 1 <                                | U    | 0.33                                 | 1 -                                    | < U   | 4.536                                | 1  |       | 0.33                                       | 1 <                                | U     | 0.33 1   | < ย                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < 1                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | f.      |
| SEMIVOLATILES   | di-n-Octyl phthalate                       | 0.43                               | 1 <                                | U    | 0.33                                 | 1 .                                    | < U   | 0.595                                | 1 <                                      | < U   | 0.33                                       | 1 <                                | U     | 0.33 1   | < U                  | 0.33 1                                  | < ป                                   | 0.33 1                                   | < บ                              | 0.33                               | 1 < ⊎                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | Fluoranthene                               | 0.43                               | 1 <                                | U    | 0.33                                 | 1 .                                    | < U   | 0.595                                | 1 <                                      | < U   | 0.33                                       | 1 <                                | U     | 0.33 1   | < U                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < 13                             | 0.33                               | 1 < U                                      | 0,33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | Fluorene                                   | 0.43                               | 1 <                                | U    | 0.33                                 | 1 .                                    | < 17  | 0.595                                | 1 <                                      | < Ų   | 0.33                                       | 1 <                                | U     | 0.33 1   | < บ                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | Hexachlorobenzene                          | 0.43                               | 1 <                                | U    | 0.33                                 | 1 .                                    | < ប   | 1.19                                 | 1 <                                      | < U   | 0.33                                       | 1 <                                | U     | 0,33 1   | < U                  | 0.33 1                                  | < 1                                   | 0.33 1                                   | < 1)                             | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0,33 1                                       | <                               | U       |
| SEMIVOLATILES   | Hexachlorobutadiene                        | 0.43                               | 1 <                                | U    | 0,33                                 | 1 .                                    | < U   | 3.571                                | 1 <                                      | < U   | 0.33                                       | 1 <                                | U     | 0.33 1   | < U                  | 0.33 1                                  | < 0                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | Hexachlorocyclopentadiene                  | 0.43                               | 1 <                                | U    | 0.33                                 | 1 •                                    | < 11  | 3.571                                | 1 <                                      | < 0   | 0.33                                       | 1 <                                | U     | 0.33 1   | < 0                  | 0.33 1                                  | < 0                                   | 0.33 1                                   | < 0                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | 0       |
| SEMIVOLATILES   | Hexachloroethane                           | 0.43                               | 1 <                                | U    | 0.33                                 | 1 .                                    | < 0   | 1.19                                 | 1 <                                      | < 0   | 0.33                                       | 1 <                                | U.    | 0.33 1   | < 0                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < 0                                      | 0.33                                   | 1 <                                    | U II | 0,33 1                                       | ~                               |         |
| SEMIVOLATILES   | Indeno(1,2,3-cd)pyrene                     | 0.43                               | 1 <                                | U    | 0.33                                 | 1 1                                    | < 13  | 1.19                                 | 1 <                                      | < U   | 0.33                                       | 1 <                                | U.    | 0.33 1   | < 0                  | 0.33 1                                  | < 0                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < 0                                      | 0.33                                   | 1 <                                    | U II | 0.33 1                                       | ~                               |         |
| SEMIVOLATILES   | Isophorone                                 | 0.43                               |                                    | U II | 0.33                                 | 1 1                                    |       | 0.353                                | 1  |       | 0.33                                       | 1 -                                |       | 0.33   |                      | 0.33 1                                  |                                       | 0.33                                     |                                  | 0.33                               |  | 0.33                                   |  | N.   | 0,33 1                                       | 2                               | ň.      |
| SEMIVOLATILES   | Napraralete                                | 0.43                               | 1 2                                | 0    | 0.33                                 | 1 .                                    |       | 0.505                                | 1 2                                      |       | 0.33                                       | 1 2                                | ň     | 0.33 1   | 2 11                 | 0.33                                    | < 11                                  | 0.33 1                                   |                                  | 0.33                               | 1 < 11                                     | 0.33                                   | 1 2                                    | ň    | 0.33 1                                       | è                               | ŭ.      |
| SEMIVOLATILES   | nitropenzene<br>n.Nitrosn_di_n.nronvlamine | 0.43                               | 1 <                                | ü    | 0.33                                 | 1                                      | < 11  | 1 19                                 | 1 4                                      | < 11  | 0.33                                       | 1 <                                | ŭ     | 0.33 1   | < 1)                 | 0.33 1                                  | < 11                                  | 0.33 1                                   | < 13                             | 0.33                               | 1 < 1                                      | 0.33                                   | 1 <                                    | ň    | 0.33 1                                       | <                               | ŭ       |
| SEMIL/OLATILES  | n-Nitrosodinbervlamine                     | 0.43                               | 1 <                                | ň    | 0.33                                 |  | < 11  | 0.595                                | 1 4                                      | έŭ    | 0.33                                       | 1 <                                | ŭ     | 0.33 1   | < 11                 | 0.33 1                                  | < 11                                  | 0.33 1                                   | < 11                             | 0.33                               | t < Ŭ                                      | 0.33                                   | 1 <                                    | ŭ    | 0.33 1                                       | <                               | ŭ       |
| SEMIVOLATILES   | Pentachloronhenol                          | 2.1                                | 1 <                                | ŭ    | 1.65                                 | 1.                                     | < 11  | 5.952                                | i <                                      | < Ŭ   | 1.65                                       | 1 <                                | ŭ     | 1.65 1   | < Ŭ                  | 1.65 1                                  | < ยั                                  | 1.65 1                                   | < Ū                              | 1.65                               | 1 < Ū                                      | 1.65                                   | 1 <                                    | Ū    | 1.65 1                                       | <                               | Ũ.      |
| SEMIVOLATILES   | Phenanthrene                               | 0.43                               | 1 <                                | ŭ    | 0.33                                 | 1 .                                    | < Ŭ   | 0.595                                | 1 <                                      | < Ŭ   | 0.33                                       | 1 <                                | Ŭ     | 0.33 1   | < Ū                  | 0.33 1                                  | < Ū                                   | 0.33 1                                   | < Ŭ                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | Ū    | 0.33 1                                       | <                               | Ū       |
| SEMIVOLATILES   | Phenol                                     | 0.43                               | 1 <                                | Ū    | 0.33                                 | 1 .                                    | < Ū   | 0.595                                | 1 <                                      | < Ū   | 0.33                                       | 1 <                                | Ū     | 0.33 1   | < Ū                  | 0.33 1                                  | < ປ                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < U                                      | 0,33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SEMIVOLATILES   | Pyrene                                     | 0.43                               | 1 <                                | U    | 0.33                                 | 1 .                                    | < U > | 0.595                                | 1 <                                      | < U   | 0.33                                       | 1 <                                | U     | 0.33 1   | < U                  | 0.33 1                                  | < U                                   | 0.33 1                                   | < U                              | 0.33                               | 1 < U                                      | 0.33                                   | 1 <                                    | U    | 0.33 1                                       | <                               | U       |
| SOLIDS  | Percent Solids                             |                                    |                                    |      |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 1,1,1,2-Tetrachloroethane                  | 0.013                              | 1 <                                | U    |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 1,1,1-Trichloroethane                      | 0.007                              | 1 <                                | U    | 0.005                                | 1 •                                    | < U   | 0.007                                | 1 <                                      | < U   | 0.005                                      | 1 <                                | U     | 0.005 1  | < U                  | 0.005 1                                 | < U                                   | 0.005 1                                  | < ∪                              | 0.005                              | 1 < U                                      | 0.005                                  | 1 <                                    | U H  | 0.005 1                                      | <                               | U       |
| VOLATILES   | 1,1,2,2-Tetrachloroethane                  | 0.007                              | 1 <                                | U    | 0.005                                | 1 .                                    | < U > | 0.007                                | 1 <                                      | < U   | 0.005                                      | 1 <                                | U     | 0.005 1  | < U                  | 0.005 1                                 | < U                                   | 0,005 1                                  | V >                              | 0.005                              | 1 < U                                      | 0.005                                  | 1 <                                    | U    | 0.005 1                                      | <                               | U       |
| VOLATILES   | 1,1,2-Trichloroethane                      | 0.007                              | 1 <                                | U    | 0.005                                | 1 .                                    | < U   | 0.007                                | 1 <                                      | < U   | 0.005                                      | 1 <                                | U     | 0.005 1  | < U                  | 0.005 1                                 | < 0                                   | 0.005 1                                  | < U                              | 0.005                              | 1 < 0                                      | 0.005                                  | 1 <                                    | U    | 0,005 1                                      | <                               | U       |
| VOLATILES   | 1,1-Dichloroethane                         | 0.007                              | 1 <                                | U    | 0.005                                | 1 -                                    | < U:  | 0.007                                | 1 <                                      | < U   | 0.005                                      | 1 <                                | U     | 0.005 1  | < 0                  | 0.005 1                                 | < 0                                   | 0,005 1                                  | < 0                              | 0,005                              | 1 < 0                                      | 0.005                                  | 1 <                                    | U I  | 0.005 1                                      | <                               | U.      |
| VOLATILES   | 1,1-Dichloroethene                         | 0.007                              | 1 <                                | U    | 0.005                                | 1.                                     | < 0   | 0.007                                | 1 <                                      | < U   | 0.005                                      | 1 <                                | U     | 0.005 1  | < U                  | 0.005 1                                 | < 0                                   | 0.005 1                                  | < 0                              | 0.005                              | 1 < 0                                      | 0.005                                  | 1 <                                    | 0    | 0.005 1                                      | <                               | U       |
| VOLATILES   | 1,1-Dichloropropene                        |                                    |                                    |      |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 1,2,3-inchlorobenzene                      | 0.040                              |                                    |      |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 1,2,3- Inchloropropane                     | 0.015                              |                                    | U    |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 1,2,4-Inchloropenzene                      |                                    |                                    |      |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 1,2,4- Himelity/Denzene                    | 0.026                              | 1 ~                                | Ð    |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATIES  | 1.2-Dibromoethage                          | 0.020                              | 1 2                                | ŭ    |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 1 2-Dichlorobenzene                        | 0.010                              |                                    | Ŭ    |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 1.2-Dichloroethane                         | 0.007                              | 1 <                                | U    | 0.005                                | 1.                                     | u >   | 0.007                                | 1 <                                      | < U   | 0.005                                      | 1 <                                | U     | 0.005 1  | < U                  | 0.005 1                                 | < U                                   | 0.005 1                                  | < U                              | 0.005                              | 1 < U                                      | 0.005                                  | 1 <                                    | U    | 0.005 1                                      | <                               | U       |
| VOLATILES   | 1.2 Dichlossothone <sup>d</sup>            | 0.007                              |                                    |      | 300.0                                | •                                      | - 11  | 0.007                                | 4 .                                      | - 11  | 0.005                                      | 1 -                                |       | 0.005 1  | ~ 11                 | 0.005 1                                 | - 11                                  | 0.005 1                                  | - 11                             | 0.005                              | 4 - 11                                     | 0.005                                  | 1 -                                    | 11   | 0.005 4                                      | ~                               |         |
| VOLATILES   | 1,2-Dichloroethene                         | 0.007                              |                                    | 0    | 0.005                                | 1                                      |       | 0.007                                | + 2                                      |       | 0,005                                      |                                    | ii ii | 0.005 1  |                      | 0.005 1                                 |                                       | 0.005 1                                  |                                  | 0.005                              | 1 2 11                                     | 0.005                                  |  | ii i | 0.000 1                                      | 2                               | ы.<br>Н |
| VOLATILES   | 1,2-Dimethylanorona (a Yylana)             | 0.007                              |                                    | U    | 0.003                                |  | . 0   | 0.007                                |  | . 0   | 0.003                                      |                                    | U     | 0.000 1  |                      | 0.005                                   | - 0                                   | 0.000                                    | ~ 0                              | 0.000                              | 0  | 0.005                                  |  | 0    | 0.000  |                                 | 0       |
| VOLATILES   | 1 3 5-Trimethylbenzena                     |                                    |                                    |      |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 1.3-Dichlorobenzene                        |                                    |                                    |      |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 1.3-Dichloropropage                        |                                    |                                    |      |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 1.4-Dichlorobenzene                        |                                    |                                    |      |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 2.2-Dichloropropane                        |                                    |                                    |      |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 2-Butanone                                 | 0.013                              | 1 <                                | Ð    | 0.05                                 | 1 .                                    | < U > | 0.145                                | 1 <                                      | < U > | 0.05                                       | 1 <                                | U     | 0.05 1   | < U                  | 0.05 1                                  | < U                                   | 0.05 1                                   | i < U                            | 0.05                               | 1 < U                                      | 0.05                                   | 1 <                                    | U    | 0.05 1                                       | <                               | U       |
| VOLATILES   | 2-Chloroethyl vinyl ether                  | 0.013                              | 1 <                                | Ū    | 0.01                                 | 1 .                                    | < Ü   |                                      |  |       | 0.01                                       | 1 <                                | Ú     | 0.01 1   | < U                  | 0.01 1                                  | < U                                   | 0.01 1                                   | < U                              | 0.01                               | 1 < U                                      | 0.01                                   | 1 <                                    | U    | 0.01 1                                       | <                               | U       |
| VOLATILES   | 2-Chlorotoluene                            |                                    |                                    |      |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 2-Hexanone                                 | 0.013                              | 1 <                                | U    | 0.05                                 | 1 .                                    | < U > | 0.072                                | 1 <                                      | < U > | 0.05                                       | 1 <                                | U     | 0.05 1   | < U                  | 0.05 1                                  | < 10                                  | 0.05 1                                   | < U                              | 0.05                               | 1 < U                                      | 0.05                                   | 1 <                                    | U    | 0.05 1                                       | <                               | Ð       |
| VOLATILES   | 2-Propenal                                 | 0,66                               | 1 <                                | U    |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | 4-Chlorotoluene                            |                                    |                                    |      |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | Acetone                                    | 0.013                              | 1 <                                | U    | 0.1                                  | 1 .                                    | < U   | 0,145                                | 1 <                                      | < U   | 0.1  | 1 <                                | U.    | 0.1 1  | < U                  | 0.1 1                                   | < 0                                   | 0.1 1                                    | < U                              | 0.1                                | 1 < U                                      | 0.1                                    | 1 <                                    | U    | 0.1 1  | <                               | U       |
| VOLATILES   | Acetonitrile                               | 0.13                               | 1 <                                | U    |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | Acrylonitrite                              | 0.13                               | 1 <                                | U    |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VOLATILES   | Allyl chloride                             | 0.013                              | 1 <                                | Ų    |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  | · · ·                                  |  |      |  |                                 |         |
| VOLATILES   | Benzene                                    | 0.011                              | 1                                  |      | 0.005                                | 1 .                                    | < ()  | 0.007                                | 1 <                                      | < U   | 0.005                                      | 1 <                                | U     | 0.005 1  | < U                  | 0.005 1                                 | < U                                   | 0,005 1                                  | < U                              | 0.005                              | 1 < U                                      | 0.005                                  | 1 <                                    | U H  | 0.005 1                                      | <                               | U       |
| VOLATILES   | Bromobenzene                               |                                    |                                    |      |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |
| VULATILES   | Bromochlorométhane                         |                                    |                                    |      |                                      |  |       |                                      |  |       |  |                                    |       |  |                      |   |                                       |  |                                  |                                    |  |  |  |      |  |                                 |         |

## Data Evaluation Report Chemical Concnetrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-87 Concentrations of Chemicals in Soil Samples Associated with Sump 087

| [SUMP] ≠ SUMP087 |                             |                                       |                   |                   |                   |                   |                   |                      |                   |                   |                  |
|------------------|-----------------------------|---------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------|-------------------|-------------------|------------------|
| LOCATION _CODE   |                             | 35SUMP087-SB01                        | 35SUMP087-SB01    | 35SUMP087-SB02    | 35SUMP087-SB02    | 35SUMP088-SB01    | 35SUMP088-SB01    | 35SUMP088-SB02       | 35SUMP088-SB02    | 35SUMP088-SB02    | LH-DL88-01       |
| SAMPLE_NO        |                             | 35-SMP087-SB01-01                     | 35-SMP087-SB01-02 | 35-SMP087-SB02-01 | 35-SMP087-SB02-02 | 35-SMP088-SB01-01 | 35-SMP088-SB01-02 | 35-SMP088-SB01-02-QC | 35-SMP088-SB02-01 | 35-SMP088-SB02-02 | LH-DL88-01       |
| SAMPLE_DATE      |                             | 9/21/2006                             | 9/21/2006         | 9/21/2006         | 9/21/2006         | 9/20/2006         | 9/20/2006         | 9/20/2006            | 9/20/2006         | 9/20/2006         | 7/22/1993        |
| DEPTH            |                             | 0 - ,5 Ft                             | 2.5 - 3.5 Ft      | 05 Ft             | 2.5 - 3,5 Ft      | 05 Ft             | 6 - 7 Ft          | 6-7 Ft               | 05 Ft             | 6 - 7 Ft          | 2-4 Ft           |
| SAMPLE PURPOSE   |                             | REG                                   | REG               | REG               | REG               | REG               | REG               | FD                   | REG               | REG               | REG              |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ                      | Result Dit. LQ VQ | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ     | Result DIL LQ_VQ  | Result DIL LQ VQ  | Result DIL LQ VQ |
| VOLATILES        | Bromodichloromethane        |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES        | Bromoform                   |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES        | Bromomelhane                |                                       | 0.01200 1 U       |                   | 0.01050 1 U       |                   | 0.01040 1 U       | 0.00952 1 U          |                   | 0.00903 1 U       | 0.01 1 < U       |
| VOLATILES        | Carbon disulfide            |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES        | Carbon tetrachloride        |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES        | Chlorobenzene               |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES        | Chioroethane                |                                       | 0.01200 1 U       |                   | 0.01050 1 U       |                   | 0.01040 1 U       | 0.00952 1 U          |                   | 0.00903 1 U       | 0.01 1 < U       |
| VOLATILES        | Chloroform                  |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES        | Chloromethane               |                                       | 0.01200 1 U       |                   | 0.01050 1 U       |                   | 0.01040 1 U       | 0.00952 1 U          |                   | 0.00903 1 U       | 0.01 1 < U       |
| VOLATILES        | Chiorontene                 |                                       |                   |                   |                   |                   |                   |                      |                   |                   |                  |
| VOLATILES        | cis-1 2-Dichloroethene      |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  |
| VOLATILES        | cis-1.3-Dichloropropene     |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
|                  | Dibmmochlaramethane         |                                       | 0.00599 1 U       |                   | 0.00527 1 1       |                   | 0.00518 1 U       | 0.00476 1 11         |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES        | Dibromomethane              |                                       | 0.00599 1 11      |                   | 0.00527 1 1       |                   | 0.00518 1 1       | 0.00476 1 U          |                   | 0.00451 1 U       | -                |
| VOLATILES        | Dichlorodifluoromethane     |                                       | 0.01200 1 1       |                   | 0.01050 1 U       |                   | 0.01040 1 U UJ    | 0.00952 1 U          |                   | 0.00903 1 U UJ    |                  |
|                  | Ethyl methacodate           |                                       | 0.01200 1 0       |                   | 0.01000 1 0       |                   |                   |                      |                   |                   |                  |
|                  | Ethylhenzene                |                                       | 0.00599 1 14      |                   | 0.00527 1 1       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
|                  | Hovechlorobutadiene         |                                       | 0.00599 1 11      |                   | 0.00527 1 11      |                   | 0.00518 1 11      | 0.00476 1 11         |                   | 0.00451 1 11      |                  |
|                  | IODOMETHANE                 |                                       | 0.00000 1 0       |                   | 0.00027 1 0       |                   |                   | 0.00110              |                   |                   |                  |
|                  |                             |                                       |                   |                   |                   |                   |                   |                      |                   |                   |                  |
|                  | ISOBUTTE ALCOHOL            |                                       | 0.00599 1 11      |                   | 0.00527 1 11      |                   | 0.00518 1 1       | 0.00476 1 13         |                   | 0.00451 1 17      |                  |
| VOLATILES        | isopiopyidenzene            |                                       | 0.00033 1 0       |                   | 0.00327 1 0       |                   |                   | 0.00410 1 0          |                   | 0.00401 1 0       |                  |
| VOLATILES        | m,p-Xylenes *               |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  |
| VOLATILES        | Methacrylonitrile           | ·                                     |                   |                   |                   |                   |                   |                      |                   |                   |                  |
| VOLATILËS        | Methyl isobutyl ketone      |                                       | 0.01200 1 U       |                   | 0.01050 1 U       |                   | 0.01040 1 U       | 0.00952 1 U          |                   | 0.00903 1 U       | 0.05 1 < 0       |
| VOLATILES        | METHYL METHACRYLATE         | i i i i i i i i i i i i i i i i i i i |                   |                   |                   |                   |                   |                      |                   |                   |                  |
| VOLATILES        | Methylene chloride          |                                       | 0.00349 1 J B     |                   | 0.00299 1 J B     |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES        | Naphthalene                 |                                       | 0.01200 1 U       |                   | 0.01050 1 U       |                   | 0.01040 1 U       | 0.00952 1 U          |                   | 0.00903 1 U       |                  |
| VOLATILES        | n-BUTYLBENZENE              |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  |
| VOLATILES        | n-PROPYLBENZENE             |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  |
| VOLATILES        | Pentachloroethane           |                                       |                   |                   |                   |                   |                   |                      |                   |                   |                  |
| VOLATILES        | p-ISOPROPYLTOLUENE          |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  |
| VOLATILES        | Propionitrile               |                                       |                   |                   |                   |                   |                   |                      |                   |                   |                  |
| VOLATILES        | sec-BUTYLBENZENE            |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  |
| VOLATILES        | Styrene                     |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES        | tert-BUTYLBENZENE           |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  |
| VOLATILES        | Tetrachloroethene           |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES        | Toluene                     |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES        | trans-1,2-Dichloroethene    |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  |
| VOLATILES        | trans-1,3-Dichloropropene   |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES        | trans-1,4-Dichloro-2-butene |                                       |                   |                   |                   |                   |                   |                      |                   |                   |                  |
| VOLATILES        | Trichloroethene             |                                       | 0.00599 1 U       |                   | 0.00527 1 U       |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       | 0.005 1 < U      |
| VOLATILES        | Trichlorofluoromethane      | ł                                     | 0.01200 1 U       |                   | 0.01050 1 U       |                   | 0.01040 1 U       | 0.00952 1 U          |                   | 0.00903 1 U       |                  |
| VOLATILES        | Vinyl acetate               |                                       | 0.01200 1 U UJ    |                   | 0,01050 1 U UJ    |                   | 0.01040 1 U UJ    | 0.00952 1 U UJ       |                   | 0.00903 1 U UJ    | 0.05 1 < U       |
| VOLATILES        | Vinyl chloride              |                                       | 0.01200 1 U       |                   | 0.01050 t U       |                   | 0.01040 1 U       | 0.00952 1 U          |                   | 0.00903 1 U       | 0.01 1 < U       |
| VOLATILES        | Xylenes, Total              |                                       |                   |                   |                   |                   |                   |                      |                   |                   | 0.005 1 < U      |

Footnotes are shown on cover page to Tables Section.



Data Evaluation Report Chemical Concnetrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-87 Concentrations of Chemicals in Soil Samples Associated with Sump 087

| (SUMP) = SUMP087 |  |                     |                     |                     |                  |                     |                     |                    |                     |                     |                     |
|------------------|--|---------------------|---------------------|---------------------|------------------|---------------------|---------------------|--------------------|---------------------|---------------------|---------------------|
| LOCATION CODE    |  | LHS-3-28            | LH-\$87-01          | LH-S87-01           | LH-S88-01        | LH-\$88-01          | LH-S88-01           | LH-S88-01          | LH-\$88-02          | LH-S88-02           | LH-S88-02           |
| SAMPLE NO        |  | LHS-3-28            | LH-S87-01 1         | LH-S87-01 2         | LH-S88-01 QC     | LH-S88-01 1         | LH-S88-01 2         | LH-\$88-01 3       | LH-S88-02 1         | LH-S88-02_2         | LH-\$88-02_3        |
| SAMPLE DATE      |  | 1/11/1995           | 7/22/1993           | 6/26/1993           | 7/22/1993        | 7/22/1993           | 7/22/1993           | 7/22/1993          | 7/22/1993           | 7/22/1993           | 7/22/1993           |
| DEPTH            |  | 0.58                | 5.2 Ft              | 25-3Ft              | 5-2 Ft           | 5-2 Ft              | 4 - 6 Ft            | 6 - 8 FI           | .5 - 2 Ft           | 4 - 6 Ft            | 6 - 8 Ft            |
| SAMPLE PLIPPOSE  |  | REG                 | REG                 | REG                 | FD               | REG                 | REG                 | REG                | REG                 | REG                 | REG                 |
| Test Group       | Parameter (Linite = ma/ka)   | Regult OIL LO VO    | Regult DIL LO VO    | Result DIL LO VO    | Result Dil LO VO | Result DIL LO VO    | Result DILLO VO     | Result DIL LO VO   | Result Dit 10 VO    | Result DIL 10 VO    | Result DIL LO VO    |
| Test Gloup       | Parameter (Units – mg/kg)  |                     |                     |                     |                  |                     |                     |                    | 0.005 1 < 11        | $0.005 \ 1 \ < \ 1$ | $0.005 \ 1 \ < \ 1$ |
| VOLATILES        | Biomologication  | 0.007 1 < 0         |                     | 0.007 1 < 1         | 0.005 1 < 0      | 0.005 1 < 0         | 0.005 1 < 0         | 0.005 1 < 11       | 0.005 1 < 0         | 0.005 1 4 1         | 0.005 1 < 1         |
| VOLATILES        | Biomolorin   | 0.007 1 < 0         | 0.003 1 < 0         |                     | 0.005 1 < 0      |                     |                     | 0.01 1 < 1         |                     | 0.000 1 4 4 1       | 0.01 1 < 11         |
| VULATILES        | Bromomeinane   | 0.013 1 < 0         | 0.01 7 < 0          | 0.007 1 < 0         |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | Carbon disultide   | $0.007 \ 1 \ < \ 0$ | 0,005 1 < 0         | 0.007 1 < 0         | 0.005 1 < 0      | 0.005 1 < 0         | 0.005 1 < 0         | 0.005 1 < 0        | 0.005 1 < 0         | 0.005 1 < 0         | 0.003 1 < 0         |
| VOLATILES        | Carbon tetrachlonde  | 0.007 1 < 0         | 0.005 1 < 0         | 0.007 1 < 0         | 0.005 1 < 0      | 0.005 1 < 0         | 0.005 1 < 0         | 0.005 1 < 0        | 0.005 1 < 0         | 0.005 1 < 0         | 0.005 1 < 0         |
| VOLATILES        | Chlorobenzene  | 0.007 1 < U         | 0.005 1 < U         | 0.007 1 < 0         | 0.005 1 < U      | $0.005 \ 1 \ < \ U$ | $0.005 \ 1 \ < \ 0$ | 0.005 1 < 0        | 0.005 1 < 0         | 0.005 1 < 0         | 0.005 1 < 0         |
| VOLATILES        | Chloroethane   | 0.013 1 < U         | 0.01 1 < U          | 0.007 1 < U         | 0.01 1 < U       | 0.01 1 < 0          | 0.01 1 < U          | $0.01 \ 1 \ < \ U$ | 0.01 1 < 0          | $0.01 \ 1 \ < \ 0$  | 0.01 1 < 0          |
| VOLATILES        | Chloroform   | 0.007 1 < U         | 0.005 1 < U         | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < U         | 0.005 1 < U         | 0.005 1 < 0        | 0.005 1 < U         | 0.005 1 < 0         | $0.005 \ 1 \ < \ U$ |
| VOLATILES        | Chloromethane  | 0.013 1 < U         | 0.01 1 < U          | 0.007 1 < U         | 0,01 1 < U       | 0.01 1 < U          | 0.01 1 < U          | 0.01 1 < U         | 0.01 1 < U          | 0.01 1 < U          | 0.01 1 < U          |
| VOLATILES        | Chloroprene  | 0.13 1 < U          |                     |                     |                  |                     |                     |                    | •                   |                     |                     |
| VOLATILES        | cis-1,2-Dichloroethene   |                     |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | cis-1.3-Dichloropropene  | 0.007 1 < U         | 0.005 1 < U         | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < U         | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U         | 0,005 1 < U         |
| VOLATILES        | Dibromochloromethane   | 0.007 1 < U         | 0.005 1 < U         | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < 10        | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U         | 0.005 1 < U         |
| VOLATILES        | Dibromomethane   | 0.026 1 < 1         |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | Dicblorodifluoromethane  | 0.026 1 < 1         |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | Ethyl methacrylate   | 0.026 1 < 1         |                     |                     |                  |                     |                     |                    |                     |                     |                     |
|                  | Ethylhonzono   | 0.007 1 < 1         | 0.005 1 < 11        | 0.007 1 < 11        | 0.005 1 < 1      | 0.005 1 < 1         | 0.005 1 < 11        | 0.005 1 < 11       | 0.005 1 < 11        | 0.005 1 < 11        | 0.005 1 < U         |
| VOLATILES        | Lavablerabuladiena   | 0.001 1 4 0         | 0.005 / 4 0         | 0.007 1 4 0         | 0.000 1 4 0      | 0.005 1 4 0         | 0.003 1 0 0         |                    | 0.000               |                     |                     |
| VOLATILES        | Action of the second se | 0.040 4 4 11        |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        |  | 0.013 1 < 0         |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | ISOBUT YE ALCOHOL  | 2.6 1 < 0           |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | isopropylbenzene   |                     |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | m.p-Xylenes*   |                     |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | Methacrylonitrile  | 0.026 1 < U         |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | Methyl isobutyl ketone   | 0.013 1 < U         | 0.05 1 < U          | 0.007 1 < U         | 0.05 1 < U       | 0.05 1 < U          | 0.05 1 < U          | 0.05 1 < U         | 0.05 1 < U          | 0.05 1 < U          | 0.05 1 < U          |
| VOLATILES        | METHYL METHACRYLATE  | 0.026 1 < 11        |                     |                     |                  | -                   | -                   |                    |                     |                     |                     |
| VOLATILES        | Methylene chloride   | 0.007 1 < 11        | 0.005 1 < U         | 0.007 t < U         | 0.005 1 < U      | 0.005 1 < U         | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U         | 0.005 1 < U         |
| VOLATILES        | Nachthalene  |                     |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | n-BITTY BENZENE  |                     |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | D DODYI BEN7ENE  |                     |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | Bantachloroothono  | 0.026 1 < 11        |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        |  | 0.020 1 4 0         |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | p-ISOFROFTETOLOENE   | 0.000 1 - 11        |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | Propionitrite  | 0.066 1 < 0         |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | SEC-BUTTLBENZENE   |                     |                     | 0.00 <del>7</del> 4 | 0.00F 4          |                     |                     | 0.005 4 4 1        |                     | 0.005 4 4 11        | 0.005 1 < 11        |
| VOLATILES        | Styrene  | 0.007 1 < 0         | $0.005 \ 1 \ < \ 0$ | 0.007 1 < U         | 0.005 1 < 0      | 0.005 1 < 0         | 0.005 + 0           | 0.005 1 < 0        | 0.005 7 < 0         | 0.005 1 < 0         | 0.003 1 < 0         |
| VOLATILES        | TERT-BUTYLBENZENE  |                     |                     |                     |                  |                     |                     |                    |                     | 0.005 4 4 10        | 0.005 4 4 11        |
| VOLATILES        | Tetrachloroethene  | 0.007 1 < 0         | 0,005 1 < 0         | 0.007 1 < 0         | 0.005 1 < 0      | 0.005 1 < 0         | 0.005 1 < 0         | 0.005 1 < 0        | 0.005 1 < 0         |                     | 0.005 1 < 0         |
| VOLATILES        | Toluene  | $0.007 \ 1 \ < \ 0$ | 0.005 1 < U         | 0.007 1 < U         | 0.005 1 < U      | $0.005 \ 1 \ < \ U$ | 0.005 1 < 0         | $0.005 \ 1 \ < U$  | $0.005 \ 1 \ < \ U$ | $0.005 \ 1 \ < \ 0$ | 0.005 i < 0         |
| VOLATILES        | trans-1,2-Dichloroethene   |                     |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | trans-1,3-Dichloropropene  | 0.007 1 < U         | 0.005 1 < U         | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < U         | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U         | $0.005 \ 1 \ < \ U$ | 0.005 1 < 0         |
| VOLATILES        | trans-1,4-Dichloro-2-butene  | 0.026 1 < U         |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | Trichloroethene  | 0.007 1 < U         | 0.005 1 < U         | 0.007 1 < U         | 0.005 1 < U      | 0.005 1 < U         | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U         | 0.005 1 < U         |
| VOLATILES        | Trichlorofluoromethane   | 0.013 1 < U         |                     |                     |                  |                     |                     |                    |                     |                     |                     |
| VOLATILES        | Vinyl acetate  | 0.013 1 < U         | 0.05 1 < U          |                     | 0.05 1 < U       | 0.05 1 < U          | 0.05 1 < U          | 0.05 1 < U         | 0.05 1 < U          | 0.05 1 < U          | 0.05 1 < U          |
| VOLATILES        | Vinyl chloride   | 0.013 1 < U         | 0.01 1 < U          | 0.007 1 ≺ U         | 0.01 1 < U       | 0.01 1 < U          | 0.01 1 < U          | 0.01 1 < U         | 0.01 1 < U          | 0.01 1 < U          | 0.01 1 < U          |
| VOLATILES        | Xvienes, Total   | 0.007 1 < U         | 0.005 1 < U         | 0.007 1 < 0         | 0.005 1 < U      | 0.005 1 < U         | 0.005 1 < U         | 0.005 1 < U        | 0.005 1 < U         | 0.005 1 < U         | 0.005 1 < U         |
|                  | The Article  |                     | +                   |                     |                  |                     |                     |                    |                     |                     |                     |

Footnotes are shown on cover page to Tables Section.

## s00066235

Data Evaluation Report Cehmical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-88 Concentrations of Chemicals in Soil Samples Associated with Sump 088

| [SUMP] = SUMP088<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                                  | 35SUMP087-SB01<br>35-SMP087-SB01-01<br>9/21/2006<br>0.0 - 0.5 Ft<br>BEC | 35SUMP087-SB01<br>35-SMP087-SB01-02<br>9/21/2006<br>2.5 - 3.5 Ft<br>PEC | 35SUMP087-SB02<br>35-SMP087-SB02-01<br>9/21/2006<br>0.0 - 0.5 Ft | 35SUMP087-SB02<br>35-SMP087-SB02-02<br>9/21/2006<br>2.5 - 3.5 Ft<br>PEC | 35SUMP088-SB01<br>35-SMP088-SB01-01<br>9/20/2006<br>0.0 - 0.5 Ft<br>PEC | 35SUMP088-SB01<br>35-SMP088-SB01-02<br>9/20/2006<br>6 - 7 Ft<br>REG | 35SUMP088-SB02<br>35-SMP088-SB01-02-QC<br>9/20/2006<br>6 - 7 Ft<br>FD | 35SUMP088-SB02<br>35-SMP088-SB02-01<br>9/20/2006<br>0.0 - 0.5 Ft<br>BEG | 35SUMP088-SB02<br>35-SMP088-SB02-02<br>9/20/2006<br>6 - 7 Ft<br>BEG | 35SUMP089-SB01<br>SUMP089-SB-01-01<br>9/18/2006<br>0 - 0.5 Ft<br>REG |
|---|----------------------------------|---|---|--|---|---|---|---|---|---|--|
| SAMPLE_PURPOSE  | Pommeter (Units = mo@c)          | Result(SOL) Dil LO VO   | Result/SOLI DIL LO VO   | Result/SOL) DIL LO VO  | Result(SQL) DIL LO VO   | Result/SOI) DIT 10 VO   | Result(SOL) DIL LO VO   | Result(SQL) DIL LQ VQ   | Result(SQL) DIL LQ VQ   | Result(SQL) DIL LQ VQ   | Result(SQL) DIL LQ VQ  |
| EXPLOSIVES  | 1.3.5-Tripitrobenzene            | Resultable Die Ed Vo  | Nesulture Die Ed Vo   | The solid out of the   | Hestingode, Die Ed Va   | Hoodingo decy Die 2 de 1 de   |   |   |   |   |  |
| EXPLOSIVES  | 1.3-Dinitrobenzene               |   |   |  |   |   |   |   |   |   |  |
| EXPLOSIVES  | 2,4,6-Trinitrotoluene            | •   |   |  |   |   |   |   |   |   |  |
| EXPLOSIVES  | 2,4-Dinitrotoluene               |   |   |  |   |   |   |   |   |   |  |
| EXPLOSIVES  | 2,6-Dinitrotoluene               |   |   |  |   |   |   |   |   |   |  |
| EXPLOSIVES  | 4-Amino-2,6-dinitrotoillene      |   |   |  |   |   |   |   |   |   |  |
| EXPLOSIVES<br>EXPLOSIVES  | m-Nitrotoluene                   |   |   |  |   |   |   |   |   |   |  |
| EXPLOSIVES  | Nitrobenzene                     |   |   |  |   |   |   |   |   |   |  |
| EXPLOSIVES  | o-Nitrotoluene                   | 1   |   |  |   |   |   |   |   |   |  |
| EXPLOSIVES  | p-Nitrotoluene                   | 1   |   |  |   |   |   |   |   |   |  |
| EXPLOSIVES  | RUX                              |   |   |  |   |   |   |   |   |   |  |
| METALS  | Aluminum                         | 6310.000 1  | 22700.000 1   | 10300.000 1  | 9210.000 1  | 2970.000 1  | 13900.000 1   | 12500.000 1   | 3760.000 1  | 8440.000 1  | 11500 1  |
| METALS  | Antimony                         | 0.111 1 U   | 0.126 1 U   | 0.112 1 U  | 0.108 1 U   | 0.113 1 U   | 0.096 1 J JL  | . 0.120 1 U   | 0.112 1 U   | 0.115 1 U   | 0.0932 1 J JL  |
| METALS  | Arsenic                          | 1.300 1   | 3.470 1   | 5.180 1  | 2.830 1   | 2.400 1   | 1.540 1   | 2.290 1   | 1.200 1   | 2.960 1   | 0.686 1  |
| METALS  | Barium                           | 160.000 1   | 131.000 1   | 161,000 1  | 92.700 1  | 383.000 1   | 187.000 1   | 186,000 1   | 76.600 1  | 99,800 1  | 107 1  |
| METALS  | Beryllium                        |   | 0.175 1 1 1   | 0.353 1 3 3  | 0.367 1 1 1   | 1310 1  | 0.205 1 .1 .1   | 0210 1 .1 .1  | 0.377 1   | 0.112 1 J J   | 0.106 1 J J  |
| METALS  | Calcium                          | 1050 000 1  | 487.000 1   | 611.000 1  | 2440.000 1  | 777.000 1   | 578.000 1   | 624,000 1   | 570.000 1   | 530,000 1   | 1820 1   |
| METALS  | Chromium                         | 12.200 1  | 18.900 1  | 28.100 1   | 17.400 1  | 9.860 1   | 12.400 1 JH   | 11.700 1  | 16.600 1  | 10.700 1  | 17.3 1 JH  |
| METALS  | Cobalt                           | 10.400 1  | 6,550 1   | 1.130 1  | 5.580 1   | 1.700 1   | 11.800 1 JL   | . 12.800 1  | 2.160 1   | 12.700 1  | 9.02 1 JL  |
| METALS  | Copper                           | 3.770 1   | 6.660 1   | 21.300 1   | 6.170 1   | 51.600 1  | 4.860 1   | 5.100 1   | 2.760 1   | 7,160 1   | 5.13 1   |
| METALS  | iron                             | 8540.000 1  | 17500.000 1   | 20100.000 1  | 13600.000 1   | 12 300 1  | 18 600 1  | 7.860 1   | 10 700 1 .t   | 7.060 1 J   | 6.37 1   |
| METALS  | Maggesium                        | 281.000 1   | 1460 000 1  | 403.000 1  | 555.000 1   | 170.000 1   | 1860.000 1  | 1890.000 1  | 155.000 1   | 1470.000 1  | 940 1  |
| METALS  | Manganese                        | 572.000 1   | 42.400 1  | 51,300 1   | 216.000 1   | 51,300 1  | 63.600 1  | 76.300 1  | 83.400 1  | 50.800 1  | 147 1 J  |
| METALS  | Mercury                          | 0.012 1 J J   | 0.018 1 J J   | 0.084 1 J J  | 0.049 1 J J   | 0.024 1 J J   | 0.300 1 U   | 0.277 1 U   | 0.013 1 J J   | 0.290 1 U   | 0.0124 1 J J   |
| METALS  | Nickel                           | 7.410 1   | 11.400 1  | 3.150 1  | 6.550 1   | 2.980 1   | 16.200 1  | 17.200 1  | 3.580 1   | 18.400 1  | 12.3 1<br>466 1 IH   |
| METALS  | Potassium                        | 219.000 1   | /18.000 1   | 419.000 1  | 0 426 1   | 0.230 1   | 0.335 1   | 0.380 1   | 0 165 1 3 3   | 0.399 1   | 0.226 1 U UJL  |
| METALS  | Silver                           | 1.610 1 U   | 1.910 1 U   | 1.600 1 U  | 1.640 1 U   | 1.670 1 U   | 1.850 1 U   | 1.820 1 U   | 1.730 1 U   | 1.790 1 U   | 1.68 1 U   |
| METALS  | Sodium                           | 40.600 1  | 242.000 1   | 12.400 1 J J   | 31.600 1  | 12.500 1 J J  | 378.000 1   | 392.000 1   | 11.100 1 J J  | 277.000 1   | 52.1 1   |
| METALS  | Strontium                        | 1   |   |  |   | 0.00/   | o 404 - 4   | 0.442 A   | 0.049 4 1 1   | 0.070 1   | 0.0425 1   |
| METALS  | Thallium                         | 0.055 1   | 0.118 1   | 0.074 1  | 0.051 1   | 0.024 1   | 0,301 1 1   | 0.113 1   | 22 600 1  | 22 800 1  | 24.1 1 JH  |
| METALS  | Zinc                             | 10,900 1  | 33 200 1  | 41 300 1   | 50,700 1  | 61,600 1  | 33.500 1 Jł   | 1 35.800 1  | 12.700 1  | 41.700 1  | 24.8 1 JH  |
| PERC  | Perchlorate                      | 0,040 4 U   | 0.050 5 U   | 0.040 4 U  | 0.010 1 U   | 0.010 1 U   | 0.099 10 U  | 0.099 10 U  | 0.020 2 U   | 0.200 20 U  | 0.04 4 U   |
| SEMIVOLATILES   | 1,2,4-Trichtorobenzene           | ł   |   |  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | 1,2-Dichlorobenzene              |   |   |  |   | 0.908 5 0   | 0.194 1 U   | 0.195 1 U   | 0.923 5 0   | 0.185 1 0   |  |
| SEMIVOLATILES   | 1,3-Dichlorobenzene              | -   |   |  |   | 0.908 5 0   | 0.194 1 U   | 0.195 1 0   | 0.923 5 0   | 0.185 1 U   |  |
| SEMIVOLATILES   | 2.4.5-Trichlorophenol            | ļ   |   |  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | 2,4,6-Trichlorophenol            | 1   |   |  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | 2,4-Dichlorophenol               |   |   |  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | 2,4-Dimethylphenol               |   |   |  |   | 0.908 5 U   | U.194 1 U   | 0.195 1 0   | 0.923 5 0   | 0.185 1 0   |  |
| SEMIVOLATILES   | 2,4-Dinitropheno:                |   |   |  |   | 4.540 5 0<br>0.908 5 U  | 0.194 1 1   | 0.195 1 1   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | 2.6-Dinitrotoluene               |   |   |  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | 2-Chloronaphthalene              | 1   |   |  |   | 0,908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | 2-Chiorophenol                   |   |   |  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | 2-Methylnaphthalene              |   |   |  |   | 0,908 5 0   | 0.194 1 U   | 0.195 1 0   | 0.923 5 0   | 0.165 1 U   |  |
| SEMIVOLATILES<br>SEMIVOLATILES  | 2-Methylphenol<br>2-Nitroaniline |   |   |  |   | 4.540 5 U   | 0.971 1 U   | 0.977 1 U   | 4.610 5 U   | 0.926 1 U   |  |
| SEMIVOLATILES   | 2-Nitrophenol                    |   |   |  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | 3,3'-Dichlorobenzidine           | -   |   |  |   | 1.820 5 U   | 0.388 1 U   | 0.391 1 U   | 1.850 5 U   | 0.370 1 U   |  |
| SEMIVOLATILES   | 3-Nitroaniline                   |   |   |  |   | 4.540 5 U   | 0,971 1 U   | 0.977 1 U   | 4.610 5 U   | 0.926 1 0   |  |
| SEMIVOLATILES   | 4,6-Dinitro-2-methylphenol       |   |   |  |   | 4.540 5 0   | 0.9/1 1 U   | 0.977 1 0   | 0.923 5 11  | 0.185 1 11  |  |
| SEMIVOLATILES   | 4-Chloro-3-methylohenol          |   | -   |  | -   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | 4-Chloroaniline                  |   |   | -  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether      | ļ   |   |  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | 4-Methylphenol                   |   |   |  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 0   | 0.185 1 U   |  |
| SEMIVOLATILES   | 4-Nitroaniline                   | 1   |   |  |   | 4.540 5 0   | 0.971 1 0   | 0.977 1 1   | 4.610 5 0   | 0.926 1 1   |  |
| SEMIVOLATILES   | Acenaphthene                     |   |   |  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | Acenaphihylene                   |   |   |  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | Anthracene                       |   |   |  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |  |
| SEMIVOLATILES   | Benzo(a)anthracese               | l .   |   |  |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | U.185 1 U   |  |
|   |                                  |   | -   |  |   | -   |   |   |   | · .   |  |



Ц., <sup>с</sup>.,

Data Evaluation Report Cehmical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-88 Concentrations of Chemicals in Soil Samples Associated with Sump 088

| [SUMP] = SUMP088 |                             |                    |          |                   |      |             |          |          |         |            |                |            |          |          |            |         |        |        |        |         |          |                |         | 111.0   |  |          |
|------------------|-----------------------------|--------------------|----------|-------------------|------|-------------|----------|----------|---------|------------|----------------|------------|----------|----------|------------|---------|--------|--------|--------|---------|----------|----------------|---------|---------|--|----------|
| LOCATION CODE    |                             | 35SUMP089-SB       | )1 3     | 5SUMP089-S        | B02  | 35SUMP0     | 89-SB02  | LH-D     | L88-01  |            | LH-DL8         | 39-01      | LHS      | 5-3-28   | L          | HS-3-2  |        | EH     | 587-01 | 1       | LH-5     | 87-01          |         | 111 000 | 204.00   |          |
| SAMPLE_NO        |                             | SUMP089-SB-01      | 02 S     | UMP089-SB-0       | 2-01 | SUMP089     | SB-02-02 | LH-D     | L88-01  |            | LH-DL8         | 39-01      | LH       | 5-3-28   | L          | HS-3-2  | -      | LH-S   | 10-186 | 1       | LH-58    | 1002           |         | LH-500  | 4002   |          |
| SAMPLE_DATE      |                             | 9/18/2006          |          | 9/18/2006         |      | 9/18/2      | 2006     | 7/22     | /1993   |            | 7/21/1         | 993        | 1/1      | 1/1995   | 1          | 11/199  | 5      | 112    | 2/1993 | ł       | 6/26     | 1993           |         | 1122    | 1993   |          |
| DEPTH            |                             | 6 - 7 Ft           |          | 0 - 0,5 Ft        |      | 6-7         | 7 Ft     | 2-       | 4 Ft    |            | 2-4            | Ft         | 0-       | 0.5 Ft   | 0          | - 0.5 F | 1      | 0.3    | 5-2+1  |         | 2.5      | 3 Ft           |         | 0.5 -   | 2 FI   |          |
| SAMPLE PURPOSE   |                             | REG                |          | REG               |      | RE          | G        | R        | EG      |            | RE             | G.         | ٤        | REG      | -          | REG     |        |        | REG    |         | ĸ        | G              |         |         |  |          |
| Test Group       | Parameter (Units = mg/kg)   | Result(SQL) DIL LO | VQ ult(S | <u>ol) dil lq</u> | VQ   | suit(SQL) D | L LQ VQ  | h(SQL) D | IL LQ ' | VQ #(S     | QL) <u>DIL</u> | LQ VQ      | H(SQL) C | DIL LQ 1 | /Q It(SQL) | DILL    |        | n(SUL) |        | 1 VQ II | R(SQL) D | IL LQ          | VQ II(S |         |  | <u>u</u> |
| EXPLOSIVES       | 1,3,5-Trinitrobenzene       |                    |          |                   |      |             |          |          |         |            |                |            | 0.22     | 1 <      | U 0.22     | 1 .     | ្រ     |        |        |         |          |                |         |         |  |          |
| EXPLOSIVES       | 1.3-Dinitrobenzene          |                    |          |                   |      |             |          |          |         |            |                |            | 0.22     | 1 <      | U 0.22     | 1 4     | < 0    |        |        |         |          |                |         |         |  |          |
| EXPLOSIVES       | 2.4.6-Trinitrotoluene       |                    |          |                   |      |             |          |          |         |            |                |            | 0.22     | 1 <      | U 0.22     | 1 •     | ្រ     |        |        |         |          |                |         |         |  |          |
| EXPLOSIVES       | 2.4-Dinitrotoluene          |                    |          |                   |      |             |          | 0.33     | 1 <     | υ ο        | 0.33 1         | < ย        | 0.22     | 1 <      | U 0.22     | 1 •     | < U    | 0.33   | 1 <    | U       | 1.19     | <              | 0 0     | 0.33 1  | < L  | J        |
| EXPLOSIVES       | 2.6-Dinitrotoluene          | 1 .                |          |                   |      |             |          | 0.33     | 1 <     | υ 0        | ).33 1         | < ប        | 0.24     | 1 <      | U 0.24     | 1 •     | < U    | 0.33   | 1 <    | U       | 1.19     | <              | 0 0     | 0,33 1  | < ເ  | J        |
| EXPLOSIVES       | 4-Amino-2.6-dinitrotoluene  |                    |          |                   |      |             |          |          |         |            |                |            | 0.46     | 1 <      | U 0.46     | 1 •     | < U    |        |        |         |          |                | •       |         |  |          |
| EXPLOSIVES       | HMX                         |                    |          |                   |      |             |          |          |         |            |                |            | 2        | 1 <      | U 2        | 1.      | < U    |        |        |         |          |                |         |         |  |          |
| EXPLOSIVES       | m-Nitrotoluene              |                    |          |                   |      |             |          |          |         |            |                |            | 0,93     | 1 <      | U 0.91     | 1 •     | < U    |        |        |         |          |                |         |         |  |          |
| EXPLOSIVES       | Nitrobenzene                |                    |          |                   |      |             |          |          |         |            |                |            | 0.24     | 1 <      | U 0.24     | 1.      | < U    |        |        |         |          |                |         |         |  |          |
| EXPLOSIVES       | o-Nitrotoluene              | ł                  |          |                   |      |             |          |          |         |            |                |            | 0.93     | 1 <      | U 0.91     | 1 •     | < U    |        |        |         |          |                |         |         |  |          |
| EXPLOSIVES       | p-Nitrotoluene              |                    |          |                   |      |             |          |          |         |            |                |            | 2.8      | 1 <      | U 2.7      | 1 •     | < U    |        |        |         |          |                |         |         |  |          |
| EXPLOSIVES       | RDX                         |                    |          |                   |      |             |          |          |         |            |                |            | 1        | 1 <      | U 0.99     | 1 .     | < U    |        |        |         |          |                |         |         |  |          |
| EXPLOSIVES       | Tetrvi                      |                    |          |                   |      |             |          |          |         |            |                |            | 0.69     | 1 <      | U 0.68     | 1 .     | < U    |        |        |         |          |                |         |         |  |          |
| METALS           | Aluminum                    | 11200 1            | 7        | 730 1             |      | 9000 1      | 1        | 7820     | 1       | 8          | 880 1          |            | 3830     | 1        | 5740       | 1       |        | 14200  | 1      |         | 8160     | 1              | 13      | 100 1   |  |          |
| METALS           | Antimony                    | 0.114 1 U          | UJL 0.0  | 589 1 J           | JL   | 0.114 1     | U        | 3 1      | 1 <     | U          | 3 1            | < U        | 9.2      | 1 < 1    | UJ 14      | 1 •     | < UJ   | 3      | 1 <    | U       | 4.32     | 1 <            | U       | 3 1     | ં ર દ  | J.       |
| METALS           | Arsenic                     | 0.33 1 J           | J :      | 1.18 1            |      | 0,149 1     | JJ       | 1 :      | 1       |            | 2.3 1          |            | 1.8      | 1 :      | J 7.2      | 1       | J      | 1.4    | 1      |         | 2.18     | t <sup>.</sup> |         | 1.1 1   |  |          |
| METALS           | Barium                      | 137 1              | 7        | 7.5 1             |      | 96.2 1      | 1        | 106      | 1       | 2          | 146 1          | < U        | 72.2     | 1        | 67         | 1       |        | 80.7   | 1      |         | 84.3     | < ۱            | U       | 477 1   |  |          |
| METALS           | Bervllium                   | 1.13 1             | 0.       | 481 1             |      | 0.892 1     | 1        |          |         |            |                |            |          |          |            |         |        |        |        |         |          |                |         |         |  |          |
| METALS           | Cadmium                     | 0.119 1 J          | J 0.     | 113 1 J           | J    | 0.077 1     | l J      | 1        | 1 <     | Ų          | 1 1            | < U        | 0.92     | 1 <      | U 1.4      | 1 .     | < U    | 1      | 1 <    | υ       | 2.7      | 1 <            | U       | 1 1     | ં < ા  | J        |
| METALS           | Calcium                     | 452 1              | 1        | 590 1             |      | 359 1       | t -      | 875      | 1       | :          | 993 1          |            | 491      | 1        | 1380       | 1       |        | 1480   | 1      |         | 1810     | 1              | 1       | 970 1   | ,  |          |
| METALS           | Chromium                    | 14.5 1             | JH '     | 12.1 1            | JH   | 9.56 1      | I JH     | 13.8     | 1       | 1          | 4.8 1          | < U        | 6.7      | 1        | J 16.9     | 1       | 3      | 20.8   | 1      |         | 11.9     | 1              |         | 13.4 1  |  |          |
| METALS           | Cobalt                      | 14.8 1             | JL :     | 5.15 1            | JL   | 12.3 1      | I JŁ     | 8.5      | 1       |            | 8.1 1          |            | 5.2      | 1        | 5.8        | 1       |        | 8.1    | 1      |         | 8.19     | 1              |         | 10.1 1  | ,  |          |
| METALS           | Copper                      | 6,33 1             |          | 5.89 1            |      | 3.93 1      | 1        | 2.7      | 1       |            | 3.8 1          |            | 6.8      | 1        | 14.9       | 1       |        | 5.6    | 1      |         | 7.82     | 1 <            | ម       | 8.1 1   |  |          |
| METALS           | Iron                        | 20100 5            | 11       | 800 1             |      | 9880 1      | 1        | 8570     | 1       | 9          | 560 1          |            | 3560     | 1        | 17400      | 1       | -      | 15400  | 1      |         | 9730     | 1              | 12      | 2500 1  |  |          |
| METALS           | Lead                        | 6.65 1             | 1        | 3.36 1            |      | 6 1         | 1        | 7.6      | 1       |            | 6.4 1          |            | 9.8      | 1        | 17.4       | 1       |        | 21     | 1      |         | 18.6     | 1              |         | 12.4 1  |  |          |
| METALS           | Magnesium                   | 1850 1             |          | 606 1             |      | 1160 1      | 1        | 376      | 1       | :          | 504 1          |            | 247      | 1        | 522        | 1       |        | 613    | 1      |         | 380      | 1              | 1       | 010 1   |  |          |
| METALS           | Manganese                   | 61.6 1             | J        | 114 1             | J    | 47.9 1      | I J      | 294      | 1       | ;          | 801 1          |            | 455      | 1        | 309        | 1       |        | 306    | 1      |         | 374      | 1              |         | 166 1   |  |          |
| METALS           | Mercury                     | 0.294 1 U          | 0.0      | 285 1 J           | J    | 0,289 1     | IU       | 0.1      | 1 <     | U          | 0.1 1          | < U        | 0.091    | 1 <      | U 0.11     | 1 .     | < U    | 0.1    | 1 <    | U       | 0.051    | 1 <            | U       | 0.1 1   | < 1  | J        |
| METALS           | Nickel                      | 21.7 1             | -        | 7.16 1            |      | 15 1        | 1        |          |         |            |                |            |          |          |            |         |        |        |        |         |          |                |         |         |  |          |
| METALS           | Potassium                   | 521 1              | JH       | 317 1             | JH   | 461 1       | I JH     | 461      | 1       | 4          | 511 1          |            | 246      | 1        | 318        | 1       |        | 632    | 1      |         | 473      | 1 ·            |         | 670 1   | )  |          |
| METALS           | Selenium                    | 0.19 1 J           | JL 0.    | 119 1 J           | JL   | 0.227 1     | I U UJL  | 1        | 1 <     | U          | 1 1            | < U        | 0.29     | 1        | J 0.36     | 1       | J      | 1      | 1 <    | ្រា     | 0.432    | 1 <            | U       | 1 1     | I  | U        |
| METALS           | Silver                      | 1.81 1 L           |          | 1.64 1 U          |      | 1.78 1      | 1 U      | 1        | 1 <     | U          | 11             | < ປ        | 0.92     | 1 <      | U 1.4      | 1       | < บ    | 1      | 1 <    | U .     | 0.022    | 1 <            | U       | 1 1     | < (  | U        |
| METALS           | Sodium                      | 399 1              | 1        | 29.7 1            |      | 309 1       | 1        |          |         |            |                |            |          |          |            |         |        |        |        |         |          |                |         |         |  |          |
| METALS           | Strontium                   | 1                  |          |                   |      |             |          | 12.7     | 1       |            | 13 1           |            | 9.2      | 1 <      | U 14       | 1 .     | < บ    | 11.6   | 1      |         | 10       | 1 <            | 0 :     | 26.7 1  | 1  |          |
| METALS           | Thallium                    | 0.0502 1           | 0.0      | 348 1             |      | 0.0537 1    | 1        |          |         |            |                |            | 46.2     | 1 <      | U 70       | 1 ·     | < 1)   |        |        |         |          |                |         |         |  |          |
| METALS           | Vanadium                    | 21.9 1             | JH ·     | 19.7 1            | JH   | 14.1        | HL I     |          |         |            |                |            |          |          |            |         |        |        |        |         |          |                |         |         |  |          |
| METALS           | Zinc                        | 57.2 1             | JH       | 17.8 1            | JH   | . 39.2      | 1 JH     | 13.8     | 1       | 1          | 17.5 1         |            | 21       | 1        | 265        | 1       |        | 29.6   | 1      |         | 23       | 1              |         | 47 1    |  |          |
| PERC             | Perchlorate                 | 0.2 20 U           |          | 0.02 2 U          |      | 0.2 2       | 0 U      |          |         |            |                |            |          |          |            |         |        |        |        |         |          |                |         |         |  |          |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene      |                    |          |                   |      |             |          | 0.33     | 1 <     | 0 0        | 0.33 1         | < U        | 0.43     | 1 <      | บ 0.51     | 1 .     | < U    | 0.33   | 1 <    | U       | 1.19     | 1 <            | 0 0     | 0.33 1  | < (  | 0        |
| SEMIVOLATILES    | 1,2-Dichlorobenzene         |                    |          |                   |      |             |          | 0.33     | 1 <     | บ (        | 0.33 1         | < U        | 0.43     | 1 <      | U 0.51     | 1 .     | < U    | 0.33   | 1 <    | U       | 1.19     | 1 <            | U       | 0,33 1  | < (  | 0        |
| SEMIVOLATILES    | 1,3-Dichlorobenzene         |                    |          |                   |      |             | -        | 0.33     | 1 <     | U C        | 0.33 1         | < U        | 0.43     | 1 <      | U 0.51     | 1 .     | < U >  | 0.33   | 1 <    | : U     | 1.19     | 1 <            | 0 0     | 0.33 1  | < 1  | U        |
| SEMIVOLATILES    | 1,4-Dichlorobenzene         |                    |          |                   |      |             |          | 0.33     | 1 <     | U (        | 0.33 1         | < U        | 0.43     | 1 <      | U 0,51     | 1 ·     | < U    | 0.33   | 1 <    | : U     | 1.19     | 1 <            | υ (     | 0.33 1  | < (  | 0        |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol       |                    |          |                   |      |             |          | 1.65     | 1 <     | U 1        | 1.65 1         | < U        | 2.1      | 1 <      | U 2.5      | 1       | < U    | 1,65   | 1 <    | : U     | 1.19     | 1 <            | U       | 1.65 1  | . < .  | 0        |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol       |                    |          |                   |      |             |          | 0.33     | 1 <     | U (        | 0.33 1         | < U        | 0.43     | 1 <      | U 0.51     | 1 .     | < U    | 0.33   | 1 <    | U       | 1.19     | 1 <            | 0 0     | 0.33 1  | < (  | u .      |
| SEMIVOLATILES    | 2,4-Dichlorophenol          |                    |          |                   |      |             |          | 0.33     | 1 <     | υc         | 0.33 1         | < U        | 0.43     | 1 <      | U 0.51     | 1 .     | < U    | 0,33   | 1 <    | U U     | 1.19     | 1 <            | 0 0     | 0.33 1  | < (  | 0        |
| SEMIVOLATILES    | 2,4-Dimethylphenol          | l l                |          |                   |      |             | -        | 0.33     | 1 <     | Ut         | 0.33 1         | < U        | 0.43     | 1 <      | U 0.51     | 1 .     | < U    | 0.33   | 1 <    | υ       | 0.595    | 1 <            | 0 1     | 0.33 1  | < (  | 0        |
| SEMIVOLATILES    | 2,4-Dinitrophenol           | ł                  |          |                   |      |             |          | 1.65     | 1 <     | U 1        | 1.65 1         | < U        | 2.1      | 1 <      | U 2.5      | 1 .     | < U    | 1.65   | 1 <    | : U     | 11.905   | 1 <            | U       | 1,65 1  | . < (  | a        |
| SEMIVOLATILES    | 2,4-Dinitrotoluene          | 1                  |          |                   |      |             |          |          |         |            |                |            | 0.43     | 1 <      | U 0.51     | 1       | < U    |        |        |         |          |                |         |         |  |          |
| SEMIVOLATILES    | 2,6-Dinitrotoluene          |                    |          |                   |      |             |          |          |         |            |                |            | 0.43     | 1 <      | U 0,51     | 1 .     | < U    |        |        |         |          |                |         |         |  | • •      |
| SEMIVOLATILES    | 2-Chloronaphthalene         | l l                |          |                   |      |             |          | 0.33     | 1 <     | U          | 0.33 1         | < U        | 0.43     | 1 <      | U 0.51     | 1       | < U    | 0,33   | 1 <    | . 0     | 0.357    | 1 <            | U       | 0.33 1  | < (  | 0        |
| SEMIVOLATILES    | 2-Chlorophenol              |                    |          |                   |      |             |          | 0.33     | 1 <     | 0 0        | 0.33 1         | < U        | 0.43     | 1 <      | U 0.51     | 1       | < U    | 0.33   | 1 <    | . 0     | 0,595    | 1 <            | U I     | 0.33 1  | < (  | 0        |
| SEMIVOLATILES    | 2-Methylnaphthalene         |                    |          |                   |      |             |          | 0.33     | 1 <     | υ (        | 0.33 1         | < U        | 0.43     | 1 <      | 0 0.51     | 1       | < 0    | 0.33   | 1 <    | u u     | 0.357    | 1 <            | 0       | 0.33    | . < .  | 0        |
| SEMIVOLATILES    | 2-Methylphenol              |                    |          |                   |      |             |          | 0.33     | 1 <     | ยเ         | 0.33 1         | < U        | 0.43     | 1 < .    | U 0.51     | 1       | < U    | 0.33   | 1 <    | : U     | 0.595    | 1 <            | 0       | 0.33 1  | . < .  | 0        |
| SEMIVOLATILES    | 2-Nitroaniline              |                    |          |                   |      |             |          | 1.65     | 1 <     | <b>ប</b> ា | 1.65 1         | < U        | 2.1      | 1 <      | U 2.5      | 1       | < U    | 1.65   | 1 <    | : U     | 3.571    | 1 <            | U       | 1.65 1  | . < .  | 0        |
| SEMIVOLATILES    | 2-Nitrophenol               |                    |          |                   |      |             |          | 0.33     | 1 <     | U (        | 0.33 1         | < 0        | 0.43     | 1 <      | U 0.51     | 1       | < 11 > | 0.33   | 1 <    | : U     | 1.19     | 1 <            | 0       | 0.33 1  | . < .  | U .      |
| SEMIVOLATILES    | 3,3 -Dichlorobenzidine      | 1                  |          |                   |      |             | -        | 0.65     | 1 <     | 0 0        | 0.65 1         | < U        | 0.86     | 1 <      | U 1        | 1       | < 11   | 0.65   | 1 <    | ÷U      | 0.595    | 1 <            | 0 0     | 0.65 1  | < 1  | 0        |
| SEMIVOLATILES    | 3-Nitroaniline              |                    |          |                   |      |             |          | 1.65     | 1 <     | ម ។        | 1.65 1         | < (j       | 2.1      | 1 <      | U 2.5      |         | < U    | 1.65   | 1 <    | : U     | 3.571    | 1 <            | ย :     | 1.65 1  | < 1  | 0        |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol  |                    |          |                   |      |             |          | 1.65     | 1 <     | U 1        | 1.65 1         | < U        | 2.1      | 1 <      | U 2.5      | 1       | < 13   | 1.65   | 1 <    | C U     | 5.95Z    | 1 <            | U       | 1.65 1  | . < .  | 0        |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  |                    |          |                   |      |             |          | 0.33     | 1 <     | 0 0        | 0.33 1         | < U        | 0.43     | 1 <      | U 0.51     | 1       | < U    | 0.33   | 1 <    | : U     | 1.19     | 1 <            | 0       | 0.33 1  | . < !  | 0        |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     | Į                  |          |                   |      |             |          | 0.65     | 1 <     | U (        | 0.65 1         | < U        | 0.43     | 1 <      | U 0.51     | 1       | < U    | 0.65   | 1 <    | : U     | 0.595    | 1 <            | 0       | 0.65 1  | < 1  | U        |
| SEMIVOLATILES    | 4-Chloroaniline             | !                  |          |                   |      |             |          | 0.65     | 1 <     | υ          | 0.65 1         | < U        | 0.43     | 1 <      | U 0.51     | 1       | < ()   | 0.65   | 1 <    | ÷ U     | 3.571    | 1 <            | U ł     | 0.65 1  | / <b>&lt;                                   </b> | U        |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether |                    |          |                   |      |             |          | 0.33     | 1 <     | U          | 0,33 1         | < U        | 0.43     | 1 <      | U 0.51     | 1       | < U    | 0.33   | 1 <    | : U     | 1.19     | 1 <            | U I     | 0.33 1  | <  | 0        |
| SEMIVOLATILES    | 4-Methylphenol              | 1                  |          |                   |      |             |          | 0.33     | 1 <     | U (        | 0.33 1         | < U        | 0.43     | 1 <      | U 0.51     | 1       | < U    | 0.33   | 1 <    | U       | 0.595    | 1 <            | U I     | 0.33 1  | ; < I  | U        |
| SEMIVOLATILES    | 4-Nitroaniline              |                    |          |                   |      |             |          | 1.65     | 1 <     | U :        | 1.65 1         | < U        | 2.1      | 1 <      | U 2.5      | 1       | < U    | 1.65   | 1 <    | : U     | 5.952    | 1 <            | U       | 1.65 1  | ; < 1  | U        |
| SEMIVOLATILES    | 4-Nitrophenol               |                    |          |                   |      |             |          | 1.65     | 1 <     | U 1        | 1.65 1         | < U        | 2.1      | 1 <      | U 2.5      | 1       | < U    | 1.65   | 1 <    | ្រ      | 5.952    | 1 <            | U       | 1.65 1  | i < 1  | U        |
| SEMIVOLATILES    | Acenaphthene                |                    |          |                   |      |             |          | 0.33     | 1 <     | U          | 0.33 1         | < ປ        | 0.43     | 1 <      | U 0.51     | 1       | < U    | 0.33   | 1 <    | : U     | 0.357    | 1 <            | U       | 0.33 1  | . < 1  | U        |
| SEMIVOLATILES    | Acenaphthylene              |                    |          |                   |      |             | -        | 0.33     | 1 <     | U (        | 0.33 1         | < U        | 0.43     | 1 <      | U 0.51     | 1       | < U    | 0.33   | 1 <    | : U     | 0.595    | 1 <            | U       | 0.33 1  | , < 1  | U        |
| SEMIVOLATILES    | Anthracene                  |                    |          |                   |      |             | -        | 0.33     | 1 <     | U (        | 0.33 1         | < U        | 0.43     | 1 <      | U 0.51     | 1       | < U    | 0.33   | 1 <    | ម       | 0.595    | 1 <            | U       | 0.33 1  | i < 1  | U        |
| SEMIVOLATILES    | Benzo(a)anthracene          |                    |          |                   |      |             |          | 0.33     | 1 <     | 0 0        | 0.33 1         | < <u>U</u> | 0.43     | 1 <      | U 0.51     | 1       | < U    | 0.33   | 1 <    | ະ ນ.    | 0.357    | 1 <            | U       | 0.33 1  | , < 1  | U        |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas



## Data Evaluation Report Cehmical Concentrations in Soil Associated with LHAAP-35/36 Sumps

 Table 3-88

 Concentrations of Chemicals in Soil Samples Associated with Sump 088

| [SUMP] = SUMP088<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE   |   | LH-S<br>LH-S8<br>7/22/   | 88-01<br>8-01_1<br>/1993       | LH-<br>LH-S<br>7/2   | S88-01<br>88-01_2<br>2/1993             | ı   | LH-S88<br>H-S88-0<br>7/22/19  | -01<br>01_3<br>93                        | LH<br>LH-3<br>7/2   | -588-02<br>588-02_<br>22/1993                    | 2<br>_1    | LH-S<br>LH-S8<br>7/22  | 88-02<br>8-02_2<br>/1993                |                   | LH-S88<br>LH-S88-(<br>7/22/19  | 1-02<br>02_3<br>993   | LH<br>LH-1<br>7/   | -589-0<br>589-01<br>21/199 | 1<br>_1<br>3                          | LH-5<br>LH-5<br>7/2  | \$89-01<br>89-01_2<br>1/1993            | 2                                    | LH-9<br>LH-98<br>7/21  | 89-02<br>9-02_<br>/1993                 | 1  | LH-S<br>LH-S&<br>7/21  | 89-02<br>9-02_2<br>/1993                | !                                    |
|--|---|--|--------------------------------|--|---|---|---|--|---|--|------------|--|---|-------------------|--|---|--|----------------------------|---------------------------------------|--|---|--------------------------------------|--|---|--|--|---|--------------------------------------|
| DEPTH  |   | 0.5  | - 2 Ft                         | 4  | - 6 Ft                                  |   | 6-8F  | 1  | 0.  | 5-2 Ft<br>REG                                    |            | 4-<br>RI   | 6 F1                                    |                   | 6 - 8 I<br>REG   | Ft  | 0.   | 5 - 2 Fl                   | t                                     | 6<br>F   | - 8 Ft                                  |                                      | 0.5<br>R   | - 2 Fl<br>FG                            |  | 6-<br>R  | 8 Ft<br>FG                              |                                      |
| Test Group   | Parameter (Units = mg/kg)   | R(SQL) DI  | LLQ VO                         | ult(SQL)   | DIL LQ                                  | VQ :ult(SC  | L) DIL  | LQ VO                                    | Q It(SQL)   | DIL LO   | VQ.        | AL(SQL) D  | IL LQ                                   | VQ ult(S          | OL) DIL  | ίωνα  | th(SQL)  | DIL                        | Q VQ                                  | (SQL) [  | DIL LQ                                  | VQ It(S                              | IQL) D   | IL LQ                                   | VQ aul                                       | KSQL)  | <u>JIL LQ</u>                           | VQ                                   |
| EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES   | 1,3,5-Trinitrobenzene<br>1,3-Dinitrobenzene<br>2,4,6-Trinitrotoluene<br>2,4-Dinitrotoluene<br>2,6-Dinitrotoluene<br>4-Amino-2,6-dinitrotoluene<br>HMX<br>m-Nitrotoluene<br>Nitrotoluene   | 0.33 1<br>0.33 1   | < U<br>  < U                   | 0.33   | 1 <<br>1 <                              | บ 0<br>.บ 0   | 33 1<br>33 1  | < U<br>< U                               | ) 0.33<br>J 0.33  | 1 <<br>1 <                                       | ម          | 0.33<br>0.33   | 1 <<br>1 <                              | ນ (<br>ບີ         | 0.33 1<br>0.33 1   | < U<br>< U  | 0.33<br>0.33   | 1 <                        | < U<br>< ປ                            | 0.33<br>0.33   | 1 <<br>1 <                              | ម                                    | 0.33<br>0.33   | 1 <                                     | ប<br>ប                                       | 0.33<br>0.33   | 1 <<br>1 <                              | ម<br>ប                               |
| EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>METALS<br>METALS<br>METALS   | o-Nitrotoluene<br>p-Nitrotoluene<br>RDX<br>Tetryl<br>Aluminum<br>Antimony<br>Arsenic  | 13500 1<br>3 1<br>1.2 1  | < U                            | 21200<br>1 3<br>2  | 1<br>1 <<br>1                           | 189<br>U  | 500 1<br>3 1<br>1.9 1   | < ປ                                      | 12800<br>J 3<br>1.7   | 1<br>1 <<br>1                                    | U          | 40800<br>3<br>1  | 1<br>1 <<br>1 <                         | 23<br>U<br>U      | 600 1<br>3.6 1<br>1.3 1  |   | 12800<br>5.2<br>23.1   | 1                          | < (J                                  | 19000<br>3<br>3.2  | 1<br>1 <<br>1                           | ٤<br>U                               | 3950<br>3<br>2.7   | t<br>1 <                                | U  | 18500<br>3<br>3.4  | 1<br>1 <<br>1                           | U                                    |
| METALS<br>METALS<br>METALS   | Barium<br>Beryllium<br>Cadmium  | 394 1<br>1 1   | i < I                          | 91.8<br>1  | 1<br>1 <                                | 1   | 28 1  | < 1                                      | 104   | 1  | : 11       | 202  | 1                                       | н                 | 348 1  | < 11  | 111  | 1 •                        | < U                                   | 130<br>1   | 1 <<br>1 <                              | ម<br>ប                               | 108  | 1 <<br>1 <                              | U<br>U                                       | 121<br>1   | 1 <                                     | U<br>U                               |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS   | Calcium<br>Chromium<br>Cobalt<br>Copper<br>Iron   | 2430 1<br>14.1 1<br>11.7 1<br>9.1 1<br>17900 1<br>10 1 1   | U                              | 1020<br>31.5<br>10.6<br>4.9<br>25400<br>9.7  | 1 1 1 1 1 1 1                           | 220<br>1<br>220<br>1  | 892 1<br>8.1 1<br>3.6 1<br>9.5 1<br>9.0 1<br>9.2 1  | - U                                      | 1550<br>18.3<br>11.2<br>5.1<br>17700<br>5   | 1<br>1<br>1<br>1<br>1                            | J          | 3060<br>28.6<br>10.4<br>7.6<br>22400<br>6.8  | 1<br>1<br>1<br>1<br>1<br>1              | 2<br>2<br>1<br>20 | 760 1<br>20.8 1<br>18.3 1<br>7.3 1<br>900 1<br>13.6 1  |   | 1590<br>15.4<br>11.6<br>7.4<br>14400<br>25.9   | 1<br>1 4<br>1<br>1<br>1    | < U                                   | 401<br>17.4<br>11.4<br>6.9<br>16900<br>10  | 1 <<br>1 <<br>1 1                       | U<br>12                              | 1490<br>12.7<br>8.7<br>5.4<br>2300<br>6.9  | 1 <<br>1 <<br>1<br>1                    | U  | 1810<br>16.1<br>10.2<br>9.7<br>20500<br>8.1  | 1<br>1 <<br>1<br>1<br>1                 | U                                    |
| METALS<br>METALS<br>METALS<br>METALS   | Magnesium<br>Manganese<br>Mercury<br>Nickel   | 1050 1<br>129 1<br>0.1 1   | < U                            | 887<br>150<br>0.1  | 1<br>1<br>1 <                           | 2:<br>U   | 70 1<br>33 1<br>0.1 1   | < (                                      | 666<br>361<br>J 0.1   | 1<br>1<br>1 <                                    | ម          | 2400<br>43.7<br>0.1  | 1<br>1<br>1 <                           | ີ 2<br>ປ          | 410 1<br>59.5 1<br>0.1 1   | < ປ   | 816<br>544<br>0.1  | 1<br>1<br>1 -              | < U                                   | 2090<br>91<br>0.1  | 1<br>1<br>1 <                           | U                                    | 838<br>393<br>0.1  | 1<br>1<br>1 <                           | U  | 2560<br>62<br>0.1  | 1<br>1<br>1 <                           | U                                    |
| METALS<br>METALS<br>METALS   | Potassium<br>Selenium<br>Silver   | 754 1<br>1 1<br>1 1  | <br>  < 1<br>  < 1             | 931<br>1 1<br>1 1  | 1<br>1 <<br>1 <                         | 1'<br>U<br>U  | 20 1<br>1 1<br>1 1  | < L<br>< L                               | 622<br>J 1<br>J <u>1</u>  | 1<br>1 <<br>1 <                                  | ย          | 1870<br>1<br>1   | 1<br>1 <<br>1 <                         | 1<br>ប<br>ប       | 340 1<br>1 1<br>1 1  | < 1<br>< 1  | 900<br>1<br>1  | 1<br>1 •<br>1 •            | < U<br>< U                            | 1440<br>1<br>1   | 1<br>1 <<br>1 <                         | ប<br>ប                               | 623<br>1<br>1  | t<br>1 <<br>1 <                         | ប<br>ប                                       | 1350<br>1<br>1   | 1<br>1 <<br>1 <                         | บ<br>ม                               |
| METALS<br>METALS<br>METALS   | Sodium<br>Strontium<br>Thallium   | 26.4 1   | I                              | 14   | 1                                       | з   | 1.5 1   |  | 14.8  | 1  |            | 47.9   | 1                                       | 1                 | 51.1 1   |   | 12.8   | 1                          |                                       | 22.4   | 1                                       |                                      | 19.7   | 1                                       |  | 39.3   | 1                                       |                                      |
| METALS<br>METALS<br>PERC   | Vanadium<br>Zinc<br>Perchlorate   | 45 1   | ł                              | 33.4   | 1                                       | 7   | 2.9 1   |  | 58.9  | 1  |            | 55.6   | 1                                       | ŧ                 | 52.3 1   |   | 51.6   | 1                          |                                       | 55.4   | 1                                       |                                      | 23.5   | 1                                       |  | 52.6   | 1                                       |                                      |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES  | 1,2,4-Trichlorobenzene<br>1,2-Dichlorobenzene<br>1,3-Dichlorobenzene<br>1,4-Dichlorobenzene<br>2,4,5-Trichlorophenol<br>2,4-5-Trichlorophenol<br>2,4-Dichlorophenol<br>2,4-Dimethylphenol<br>2,4-Dimitrophenol<br>2,4-Dimitrophenol<br>2,4-Dimitrophenol<br>2,4-Dimitrophenol<br>2,4-Dimitrophenol  | 0.33 1<br>0.33 1<br>0.33 1<br>1.65 1<br>0.33 1<br>1.65 1<br>0.33 1<br>0.33 1<br>1.65 1   | <pre>&lt; U &lt; U &lt; </pre> | 0.33<br>0.33<br>0.33<br>0.33<br>0.33<br>0.33<br>0.33<br>0.33   | * * * * * * * * *                       | U 0<br>U 0<br>U 0<br>U 0<br>U 1<br>U 0<br>U 1<br>U 0<br>U 0<br>U 0<br>U 1   | .33 1<br>.33 1<br>.33 1<br>.33 1<br>.65 1<br>.33 1<br>.33 1<br>.33 1<br>.33 1<br>.33 1<br>.65 1   | < 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1. | J 0.33<br>J 0.33<br>J 0.33<br>J 0.33<br>J 1.65<br>J 0.33<br>J 0.33<br>J 0.33<br>J 0.33<br>J 0.33<br>J 1.65  | 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4          |            | 0.33<br>0.33<br>0.33<br>0.33<br>1.65<br>0.33<br>0.33<br>0.33<br>1.65   | 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 |                   | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>1.65 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>1.65 1 | < UUUUUU<br>< < VUUUUUUU<br>< < VUUUUUU   | 0.33<br>0.33<br>0.33<br>1.65<br>0.33<br>0.33<br>0.33<br>0.33<br>1.65   |                            | < UUUUUUUUUUUUUUUUUUUU                | 0.33<br>0.33<br>0.33<br>1.65<br>0.33<br>0.33<br>0.33<br>1.65   | 1 | U<br>U<br>U<br>U<br>U<br>U<br>U<br>U | 0.33<br>0.33<br>0.33<br>1.65<br>0.33<br>0.33<br>0.33<br>1.65   | 1 < < < < < < < < < < < < < < < < < < < |  | 0.33<br>0.33<br>0.33<br>1.65<br>0.33<br>0.33<br>0.33<br>0.33<br>1.65   | 1 < < < < < < < < < < < < < < < < < < < | ប<br>ប<br>ប<br>ប<br>ប<br>ប<br>ប<br>ប |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES | 2-Chloronaphthalene 2-Chlorophenol 2-Methylaphthalene 2-Methylaphthalene 2-Methylaphthalene 2-Nitrophenol 3-Nitroaniline 3-Nitroaniline 4,6-Dinitro-2-methylphenol 4-Bromophenyl phenyl ether 4-Chloroaniline 4-Chlorophenyl phenyl ether 4-Chlorophenyl phenyl ether 4-Methylphenol 4-Nitrophenol Acenaphthene Acenaphthylene Acenaphthylene | 0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>1.65 1<br>1.65 1<br>1.65 1<br>1.65 1<br>0.65 1<br>0.65 1<br>0.65 1<br>0.65 1<br>0.65 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.33 1<br>0.35 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 1<br>0.55 100 1000000000000000000000000000000 |                                | 0.33         0.33           0.33         0.33           0.33         0.33           1.65         0.33           1.66         0.33           1.65         1.65           1.65         0.633           0.033         0.655           1.65         0.33           0.33         0.33           1.65         0.33           1.65         0.33           1.65         0.33           1.65         0.33           1.65         0.33           1.65         0.33           0.33         0.33 | 1 | U     0       U     0       U     0       U     1       U     0       U     1       U     0       U     1       U     0       U     0       U     0       U     0       U     0       U     0       U     0       U     0       U     0       U     0       U     0       U     0       U     0 | .33       1         .33       1         .33       1         .33       1         .33       1         .65       1         .65       1         .65       1         .65       1         .65       1         .65       1         .65       1         .65       1         .65       1         .65       1         .33       1         .65       1         .33       1         .33       1         .33       1 | < < < < < < < < < < < < < < < < < < <    | J         0.33           J         0.33           J         0.33           J         0.33           J         0.33           J         1.65           J         0.33           J         1.65           J         0.33           J         1.65           J         1.65           J         0.65           J         1.65           J         0.65           J         0.65           J         0.65           J         0.65           J         0.65           J         0.65           J         0.65 | <pre>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</pre> |            | 0.33<br>0.33<br>0.33<br>1.65<br>0.33<br>0.65<br>1.65<br>0.33<br>0.65<br>0.33<br>0.65<br>0.33<br>1.65<br>0.33<br>1.65<br>0.33<br>0.33 | 11111111111111111111                    |                   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | <pre>&lt; &lt; &lt; &lt; &lt; &lt; &lt; &lt; &lt; &lt; &lt; &lt; &lt; &lt; &lt; &lt; &lt; &lt; &lt;</pre> | 0.33<br>0.33<br>0.33<br>1.65<br>0.33<br>1.65<br>1.65<br>1.65<br>0.33<br>0.65<br>0.33<br>0.33<br>1.65<br>0.33<br>0.33<br>1.65<br>0.33<br>0.33 |                            | < < < < < < < < < < < < < < < < < < < | 0.33<br>0.33<br>0.33<br>1.65<br>0.33<br>0.65<br>1.65<br>0.33<br>0.65<br>0.65<br>0.65<br>0.33<br>1.65<br>1.65<br>0.33<br>0.33<br>0.33<br>0.33 | 1 |                                      | 0.33<br>0.33<br>0.33<br>1.65<br>0.33<br>1.65<br>1.65<br>0.33<br>0.65<br>0.65<br>0.65<br>0.33<br>0.65<br>0.33<br>0.65<br>0.33<br>0.33<br>1.65<br>0.33<br>0.33<br>0.33 | 111111111111111111111111111111111111111 | <b>NNNNNNNNNNNNNNNN</b> NNNNNNNNNNNNNNNNNNNN | 0.33<br>0.33<br>0.33<br>1.65<br>0.33<br>0.65<br>1.65<br>1.65<br>0.33<br>0.65<br>0.33<br>1.65<br>0.33<br>1.65<br>0.33<br>0.33<br>1.65<br>0.33<br>0.33<br>1.65 | 1 |                                      |
| SEMIVOLATILES<br>SEMIVOLATILES   | Anthracene<br>Benzo(a)anthracene  | 0.33 1<br>0.33 1   | < U<br>  < U                   | 0.33   | 1 <<br>1 <                              | U C   | .33 1<br>.33 1  | < ເ<br>< ເ                               | ) 0.33<br>J 0.33  | 1 <<br>1 <                                       | : Ū<br>: U | 0.33<br>0.33   | 1 <<br>1 <                              | Ŭ (<br>U (        | 0.33 1<br>0.33 1   | < U<br>< U  | 0.33<br>0.33   | 1                          | < U<br>< U                            | 0.33<br>0.33   | 1 <<br>1 <                              | ប<br>ប                               | 0.33<br>0.33   | 1 <<br>1 <                              | U<br>U                                       | 0.33<br>0.33   | 1 <<br>1 <                              |                                      |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas



 Table 3-88

 Concentrations of Chemicals in Soil Samples Associated with Sump 088

| [SUMP] = SUMP088<br>LOCATION _CODE |   | 35SUMP087-SB01                 | 35SUMP087-SB01                 | 35SUMP087-SB02        | 35SUMP087-SB02                 | 35SUMP088-SB01                 | 35SUMP088-SB01                 | 35SUMP088-SB02                    | 35SUMP088-SB02                 | 35SUMP088-SB02                 | 35SUMP089-SB01                |
|------------------------------------|---|--------------------------------|--------------------------------|-----------------------|--------------------------------|--------------------------------|--------------------------------|-----------------------------------|--------------------------------|--------------------------------|-------------------------------|
| SAMPLE_NO                          |   | 35-SMP087-SB01-01<br>9/21/2006 | 35-SMP087-SB01-02<br>9/21/2006 | 35-SMP087-SB02-01     | 35-SMP087-SB02-02<br>9/21/2006 | 35-SMP088-SB01-01<br>9/20/2006 | 35-SMP088-SB01-02<br>9/20/2006 | 35-SMP088-SB01-02-QC<br>9/20/2006 | 35-SMP088-SB02-01<br>9/20/2006 | 35-SMP088-SB02-02<br>9/20/2006 | SUMP089-SB-01-01<br>9/18/2006 |
| DEPTH                              |   | 0.0 - 0.5 Ft                   | 2.5 - 3.5 Ft                   | 0.0 - 0.5 Ft          | 2.5 - 3.5 Ft                   | 0.0 - 0.5 Ft                   | 6-7 Ft                         | 6-7 Ft                            | 0.0 - 0.5 Ft                   | 6 - 7 Ft                       | 0 - 0.5 Ft                    |
| SAMPLE_PURPOSE                     |   | REG                            | REG<br>Recub/SOLV DIL LO VO    | REG                   | REG                            | REG<br>Regult(SOL) DILLO VO    | REG<br>Boowlet(SOL) Dill LO VO |                                   | REG<br>Recutt(SOL) DIL LO VO   | REG<br>Recult/SOLV DILLO VO    |                               |
| SEMIVOLATILES                      | Benzo(a)pyrene  | Resultade) DIL LO VO           | Result(SQL) DIL LQ VQ          | Resultions) Dir Lo Vo | Resultage) Die EQ VQ           | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      | Resultate Die Ed Va           |
| SEMIVOLATILES                      | Benzo(b)fluoranthene                                  |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | Benzo(ghi)perviene                                    |                                |                                |                       |                                | 0.908 5 0                      | 0.194 1 U<br>0.194 1 II        | 0.195 1 0                         | 0.923 5 U<br>0.923 5 U         | 0,185 1 U<br>0.185 1 U         |                               |
| SEMIVOLATILES                      | Benzoic Acid  |                                |                                |                       |                                | 4.540 5 U                      | 0.971 1 U                      | 0.977 1 U                         | 4.610 5 U                      | 0.926 1 U                      |                               |
| SEMIVOLATILES                      | Benzyl Alcohol  |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | bis(2-Chloroethoxy)methane<br>bis(2-Chloroethot)ether |                                |                                |                       |                                | 0,908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | bis(2-Chloroisopropyt)ether                           |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | bis(2-Ethylhexyl)phthalate                            |                                |                                |                       |                                | 0.908 5 1                      | 0.194 1 U<br>0.194 1 U         | 0.195 1 U                         | 0.923 5 0                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | Carbazole   |                                |                                |                       |                                | 0.000 0 0                      | 0.154 1 0                      | 0.100 1 0                         | 0.520 0 0                      | 0.000 1 0                      |                               |
| SEMIVOLATILES                      | Chrysene  | •                              |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | Dibenzofuran  |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | Diethyl phthalate                                     |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | Dimethyl phthalate                                    |                                |                                |                       |                                | 0.908 5 U<br>0.908 5 H         | 0.194 1 U                      | 0.195 1 U<br>0.195 1 U            | 0.923 5 U<br>0.923 5 U         | 0.185 1 U<br>0.185 1 U         |                               |
| SEMIVOLATILES                      | di-n-Octyl phthalate                                  |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | Fluoranthene  |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | Hexachlorobenzene                                     |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | Hexachlorobutadiene                                   |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES<br>SEMIVOLATILES     | Hexachiorocyclopentadiene<br>Hexachioroelhane         |                                |                                |                       |                                | 0.908 5 U<br>0.908 5 U         | 0,194 1 U<br>0,194 1 U         | 0,195 1 U<br>0,195 1 U            | 0.923 5 0                      | 0,185 1 U                      |                               |
| SEMIVOLATILES                      | Indeno(1,2,3-cd)pyrene                                |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | Isophorone  |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 10                     | 0.195 1 U<br>0.195 1 U            | 0.923 5 U<br>0.923 5 U         | 0,185 1 U                      |                               |
| SEMIVOLATILES                      | Nitrobenzene  |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | n-Nitroso-di-n-propylamine                            |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | Pentachiorophenol                                     |                                |                                |                       |                                | 4.540 5 U                      | 0.971 1 U                      | 0.977 1 U                         | 4.610 5 U                      | 0,926 1 U                      |                               |
| SEMIVOLATILES                      | Phenanthrene  |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SEMIVOLATILES                      | Prenoi  |                                |                                |                       |                                | 0.908 5 U                      | 0.194 1 U                      | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |
| SOLIDS                             | Percent Solids  | 89,300 1                       | 77.500 1                       | 88.200 1              | 92.300 1                       | 88.500 1                       | 83.300 1                       | 82.700 1                          | 88.700 1                       | 86.100 1                       | 88.4 1                        |
| VOLATILES                          | 1,1,1,2-tetrachioroethane                             |                                | 0.006 1 0                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0.005 1 0                         |                                | 0.005 1 U                      |                               |
| VOLATILES                          | 1,1,2,2-Tetrachioroethane                             |                                | 0.006 1 U                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0.005 t U                         |                                | 0.005 1 U                      |                               |
| VOLATILES                          | 1,1,2-Trichloroethane                                 |                                | 0.006 1 U                      |                       | 0.005 1 U<br>0.005 1 U         |                                | 0.005 1 0                      | 0.005 1 U<br>0.005 1 U            |                                | 0.005 1 U                      |                               |
| VOLATILES                          | 1,1-Dichloroethene                                    |                                | 0.006 1 U                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0.005 1 U                         |                                | 0.005 t U                      |                               |
| VOLATILES                          | 1,1-Dichloropropene                                   |                                | 0.006 1 U                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0.005 1 U                         |                                | 0.005 1 U                      |                               |
| VOLATILES                          | 1,2,3-Trichloropropane                                |                                | 0.006 1 U                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0.005 1 U                         |                                | 0.005 1 U                      |                               |
| VOLATILES                          | 1,2,4-Trichlorobenzene                                |                                | 0.006 1 U                      |                       | 0.005 t U                      |                                | 0.005 1 U                      | 0.005 1 U                         |                                | 0.005 1 U                      |                               |
| VOLATILES                          | 1,2,4-1 methylbenzene<br>1,2-Dibromo-3-chlaropropane  |                                | 0.006 1 0                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0.005 1 U                         |                                | 0.005 1 U                      |                               |
| VOLATILES                          | 1,2-Dibromoethane                                     |                                | 0.006 1 U                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0.005 1 U                         |                                | 0.005 1 U                      |                               |
| VOLATILES                          | 1,2-Dichlorobenzene                                   |                                | 0.006 1 U                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0.005 1 U<br>0.005 1 U            |                                | 0.005 1 U<br>0.005 1 U         |                               |
| VOLATILES                          | 1.2-Dichloroethene <sup>d</sup>                       |                                | 0.000 1 0                      |                       |                                |                                |                                |                                   |                                |                                |                               |
| VOLATILES                          | 1,2-Dichloropropane                                   |                                | 0.006 1 U                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0.005 1 U                         |                                | 0.005 1 U                      |                               |
| VOLATILES                          | 1.2-Dimethylbenzene (o-Xylene)                        |                                | 0.006 1 U                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0,005 1 U                         |                                | 0.005 1 U                      |                               |
| VOLATILES                          | 1,3-Dichlorobenzene                                   |                                | 0.006 1 U                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0.005 1 U                         |                                | 0.005 1 U                      |                               |
| VOLATILES                          | 1,3-Dichloropropane                                   |                                | 0.006 1 U                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0.005 1 U                         |                                | 0.005 1 U                      |                               |
| VOLATILES                          | 2.2-Dichloropropane                                   |                                | 0.006 1 U                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0.005 1 U                         |                                | 0.005 1 U                      |                               |
| VOLATILES                          | 2-Butanone  |                                | 0.012 1 U                      |                       | 0.011 1 U                      |                                | 0.010 1 U                      | 0.010 1 U                         | •                              | 0.009 1 U                      |                               |
| VOLATILES                          | 2-Chloroethyl vinyl ether                             |                                | 0.012 1 U                      |                       | 0.011 1 U                      |                                | 0.010 1 U                      | 0.010 1 U                         |                                | 0.009 1 U<br>0.005 1 U         |                               |
| VOLATILES                          | 2-Hexanone  |                                | 0.012 1 U                      |                       | 0.011 1 U                      |                                | 0.010 1 U                      | 0.010 1 U                         |                                | 0.009 1 U                      |                               |
| VOLATILES                          | 2-Propenal  |                                | 0.000 1 11                     |                       | 0.005 4 11                     |                                | 0.005 1 11                     | 0.005 1 11                        |                                | 0.005 1 11                     |                               |
| VOLATILES                          | Acetone   |                                | 0.006 1 U                      |                       | 0.011 1 U                      |                                | 0.010 1 U                      | 0.010 1 U                         |                                | 0.005 1 J J                    |                               |
| VOLATILES                          | Acetonitrile  |                                |                                |                       |                                |                                |                                |                                   |                                |                                |                               |
| VOLATILES                          | Acrytonitrise   |                                |                                |                       |                                |                                |                                |                                   |                                |                                |                               |
| VOLATILES                          | Benzene   |                                | 0.006 1 U                      |                       | 0.005 1 U                      |                                | 0.005 1 U                      | 0.005 1 U                         |                                | 0.00 <del>5</del> 1 U          | -                             |
| VOLATILES<br>VOLATILES             | Bromobenzene  |                                | 0.006 1 U                      |                       | 0.005 1 U<br>0.005 1 U         | · .                            | 0.005 1 U                      | 0.005 1 U<br>0.005 1 U            |                                | 0.005 1 U<br>0.005 1 U         |                               |
|                                    |   |                                | 0.000 1 0                      |                       | 0,000 1 0                      |                                |                                |                                   |                                |                                |                               |



## Data Evaluation Report Celumical Concentrations in Soil Associated with LHAAP-35/36 Sumps

# Table 3-88 Concentrations of Chemicals in Soil Samples Associated with Sump 088

| [SUMP] = SUMP088<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE |   | 35SUMP069-SB01<br>SUMP089-SB-01-02<br>9/18/2006 | 35SUMP089-SB02<br>SUMP089-SB-02-01<br>9/18/2006 | 35SUMP089-SB02<br>SUMP089-SB-02-02<br>9/18/2006 | LH-DL88-01<br>LH-DL88-01<br>7/22/1993 | LH-DL89-01<br>LH-DL89-01<br>7/21/1993 | LHS-3-28<br>LHS-3-28<br>1/11/1995 | LHS-3-29<br>LHS-3-29<br>1/11/1995 | LH-S87-01<br>LH-S87-01_1<br>7/22/1993 | LH-S87-01<br>LH-S87-01_2<br>6/26/1993 | LH-S88-01<br>LH-S88-01 QC<br>7/22/1993 |
|--|---|---|---|---|---------------------------------------|---------------------------------------|-----------------------------------|-----------------------------------|---------------------------------------|---------------------------------------|--|
| DEPTH<br>SAMPLE PURPOSE  |   | 6 - 7 Ft<br>REG                                 | 0 - 0.5 Ft<br>REG                               | 6-7 Ft<br>REG                                   | 2 - 4 Ft<br>REG                       | 2+4Ft<br>REG                          | 0-0.5 Ft<br>REG                   | REG                               | REG                                   | REG                                   | 0.5-2 Ft<br>FD                         |
| Test Group   | Parameter (Units = mg/kg)                             | Result(SQL) DIL LQ VQ                           | ult(SQL) DIL LQ VQ                              | sult(SQL) DIL LQ VQ                             | N(SQL) DIL LQ VO                      | 211(SQL) DIL LQ V                     | QII(SQL) DIL LQ                   | VQH(SQL) DIL LQ VQ                | H(SQL) DIL LQ VQ                      | ult(SQL) DIL LQ VQ                    | It(SQL) DIL LQ VQ                      |
| SEMIVOLATILES  | Benzo(a)pyrene  |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.057 1                         | J 0.51 1 < U                      | 0.33 1 < U                            | 0.595 1 < U                           | 0.33 1 < U                             |
| SEMIVOLATILES  | Benzo(ohi)pervlene                                    |   |   |   | 0.33 1 < 0                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 2.381 1 < U                           | 0.33 1 < U                             |
| SEMIVOLATILES  | Benzo(k)fluoranthene                                  |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.069 1                         | J 0.14 1 J                        | 0.33 1 < U                            | 1.19 1 < U                            | 0.33 1 < U                             |
| SEMIVOLATILES  | Benzoic Acid  |   |   |   | 1,65 1 < 0                            | 1.65 1 <                              | U 2.1 1 <                         | U 2.5 1 < U                       | 1.65 1 < U                            |                                       | 1.65 1 < 0                             |
| SEMIVOLATILES  | Benzyl Alcohol<br>bis/2 Chlomothovu/mathana           |   |   |   | 0.65 1 < 0                            | 0.65 1 <                              | U U.43 1 <                        | 0 0.51 1 < 0                      | 0.05 1 < 0                            | 0.595 t < 11                          | 0.85 1 < 0                             |
| SEMIVOLATILES  | bis(2-Chloroethyl)ether                               |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 0.595 1 < U                           | 0.33 1 < U                             |
| SEMIVOLATILES  | bis(2-Chloroisopropyl)ether                           |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 1.19 1 < U                            | 0.33 1 < U                             |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate                            |   |   |   | 0.33 1 < 0                            | 0.33 1 <                              | U 0.43 1 <                        | 0 0.51 1 < 0                      | 0.33 1 < 0                            | 0,1/9 1 J                             | 0.33 1 < 0                             |
| SEMIVOLATILES  | Carbazole   |   |   |   | 0.00 1 4 0                            |                                       | 0 0,40 1 1                        | 0 0.01 1 4 0                      | 0.00 1 4 0                            | 1.19 1 < U                            | 0.00 1 4 0                             |
| SEMIVOLATILES  | Chrysene  |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 5.952 1 < U                           | 0.33 1 < U                             |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene                                |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | 0.51 1 < 0                        | 0.33 1 < U                            | 2.381 1 < U                           | 0.33 1 < U                             |
| SEMIVOLATILES  | Diethyl phihalate                                     |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 0.595 1 < U                           | 0.33 1 < U                             |
| SEMIVOLATILES  | Dimethyl phthalate                                    |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 0.595 1 < U                           | 0.33 1 < U                             |
| SEMIVOLATILES  | di-n-Butyl phthalate                                  |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 4.536 1                               | 0.33 1 < U                             |
| SEMIVOLATILES  | Eluocanthene  |   |   |   | 0.33 1 < 0                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.087 1 J                       | 0.33 1 < U                            | 0.595 1 < U                           | 0.33 1 < U                             |
| SEMIVOLATILES  | Fluorene  | 1   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 0.595 1 < U                           | 0.33 1 < U                             |
| SEMIVOLATILES  | Hexachlorobenzene                                     |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 1.19 1 < U                            | 0.33 1 < 0                             |
| SEMIVOLATILES  | Hexachlorocyclopentadiene                             |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 3.571 1 < U                           | 0.33 1 < U                             |
| SEMIVOLATILES  | Hexachloroethane                                      |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 1.19 1 < U                            | 0.33 1 < U                             |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene                                |   |   |   | 0.33 1 < 0                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < 0                            | 1.19 1 < U                            | 0.33 1 < 0                             |
| SEMIVOLATILES  | Naphthalene   |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 0.357 1 < U                           | 0.33 1 < U                             |
| SEMIVOLATILES  | Nitrobenzene  |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 0.595 1 < U                           | 0.33 1 < U                             |
| SEMIVOLATILES<br>SEMIVOLATILES                                 | n-Nitroso-di-n-propylamine                            |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | 0 0.51 1 < 0                      | 0.33 1 < 0                            | 0.595 1 < 0                           | 0.33 1 < 0                             |
| SEMIVOLATILES  | Pentachlorophenol                                     |   |   |   | 1.65 1 < U                            | 1.65 1 <                              | U 2.1 1 <                         | U 2.5 1 < U                       | 1.65 1 < U                            | 5.952 1 < U                           | 1.65 1 < U                             |
| SEMIVOLATILES  | Phenanthrene  |   |   |   | 0.33 1 < U                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 0.595 1 < U                           | 0.33 1 < U                             |
| SEMIVOLATILES<br>SEMIVOLATILES                                 | Phenol<br>Pyrene                                      |   |   |   | 0.33 1 < 0                            | 0.33 1 <                              | U 0.43 1 <                        | U 0.51 1 < U                      | 0.33 1 < U                            | 0.595 1 < 0                           | 0.33 1 < 0                             |
| SOLIDS   | Percent Solids  | 84.3 1  | 88.5 1  | 86.4 1  |                                       |                                       |                                   | • • • • •                         |                                       |                                       |  |
| VOLATILES  | 1,1,1,2-Tetrachloroethane                             | 0.00496 1 U                                     |   | 0.00467 1 U                                     | 0.005 1 < 1                           | 0.005 1 /                             | 0.013 1 <                         | U 0.015 1 < U                     | 0.005 1 < 1                           | 0.007 1 4 11                          | 0.005 1 < 1                            |
| VOLATILES  | 1.1.2.2-Tetrachloroethane                             | 0.00496 1 U                                     |   | 0.00467 1 U                                     | 0.005 1 < U                           | 0.005 1 <                             | U 0.007 1 <                       | U 0.008 1 < U                     | 0.005 1 < U                           | 0.007 1 < U                           | 0.005 1 < U                            |
| VOLATILES  | 1,1,2-Trichloroelhane                                 | 0.00496 1 U                                     |   | 0.00467 1 U                                     | 0.005 1 < U                           | 0.005 1 <                             | U 0.007 1 <                       | U 0.008 1 < U                     | 0.005 1 < U                           | 0.007 1 < U                           | 0.005 1 < U                            |
| VOLATILES  | 1,1-Dichloroethane                                    | 0.00496 1 U                                     |   | 0.00467 1 U                                     | 0.005 1 < U                           | 0.005 1 <                             | U 0.00/1 <                        | U 0.008 1 < U                     | 0.005 1 < U                           | 0.007 1 < 0                           | 0.005 1 < 0                            |
| VOLATILES  | 1,1-Dichloropropene                                   | 0.00496 1 U                                     |   | 0.00467 1 U                                     | 0.000 1 4 0                           | 0.000 1 4                             | 0 0.001 1 4                       | 0 0.000 1 - 0                     | 0.000                                 |                                       |  |
| VOLATILES  | 1,2,3-Trichlorobenzene                                | 0.00496 1 U                                     |   | 0.00467 1 U                                     |                                       |                                       |                                   |                                   |                                       |                                       |  |
| VOLATILES  | 1,2,3-Trichloropropane                                | 0.00496 1 0                                     |   | 0.00467 1 0                                     |                                       |                                       | 0.013 1 <                         | 0 0.015 1 < 0                     |                                       |                                       |  |
| VOLATILES  | 1,2,4-Trimethylbenzene                                | 0.00496 1 U                                     |   | 0.00467 1 U                                     |                                       |                                       |                                   |                                   |                                       |                                       |  |
| VOLATILES  | 1,2-Dibromo-3-chloropropane                           | 0.00496 1 U                                     |   | 0.00467 1 U                                     |                                       |                                       | 0.026 1 <                         | U 0.031 1 < U                     |                                       |                                       |  |
| VOLATILES  | 1,2-Dichlorobenzene                                   | 0.00496 1 U                                     |   | 0.00467 1 U                                     |                                       |                                       | 0.020                             | 0 0.031 1 < 0                     |                                       |                                       |  |
| VOLATILES  | 1,2-Dichloroethane                                    | 0.00496 1 U                                     |   | 0.00467 1 U                                     | 0.005 1 < U                           | 0.005 1 <                             | U 0.007 1 <                       | U 0.008 1 < U                     | 0.005 1 < U                           | 0.007 1 < U                           | 0.005 1 < U                            |
| VOLATILES  | 1,2-Dichloroethene                                    |   |   |   | 0.005 1 < U                           | 0.005 1 <                             | U 0.007 1 <                       | U 0.008 1 < U                     | 0.005 1 < U                           | 0.007 1 < U                           | 0.005 1 < U                            |
| VOLATILES<br>VOLATILES   | 1,2-Dichloropropane<br>1,2-Dimethylbenzene (0-X)tene) | 0.00496 1 U                                     |   | 0.00467 1 U                                     | 0.005 1 < 0                           | 0.005 1 <                             | 0 0.007 1 <                       | U 0.008 1 < U                     | 0.005 1 < 0                           | 0.007 1 < 0                           | 0.005 1 < 0                            |
| VOLATILES  | 1,3,5-Trimethylbenzene                                | 0.00496 1 U                                     |   | 0.00467 1 U                                     |                                       |                                       |                                   |                                   |                                       |                                       |  |
| VOLATILES  | 1,3-Dichlorobenzene                                   | 0.00496 1 U                                     |   | 0.00467 1 U                                     |                                       |                                       |                                   |                                   |                                       |                                       |  |
| VOLATILES  | 1,3-Dichloropropane<br>1.4-Dichloropenzene            | 0.00496 1 U                                     |   | 0.00467 1 0                                     |                                       |                                       |                                   |                                   |                                       |                                       |  |
| VOLATILES  | 2,2-Dichloropropane                                   | 0.00496 1 U                                     |   | 0.00467 1 U                                     |                                       |                                       |                                   |                                   |                                       |                                       |  |
| VOLATILES  | 2-Butanone  | 0.00991 1 U                                     |   | 0.00935 1 U                                     | 0.05 1 < U                            | 0.05 1 <                              | U 0.013 1 <                       | U 0.015 1 < U                     | 0.05 1 < U                            | 0.145 1 < U                           | 0.05 1 < U                             |
| VOLATILES  | 2-Chlorotoluege                                       | 0.00991 1 0                                     |   | 0.00935 1 0                                     | 0.01 1 < 0                            | 0.01 1 <                              | 0 0.013 1 <                       | 0 0.015 1 4 0                     | 0.01 1 < 0                            | -                                     | 0.01 1 4 0                             |
| VOLATILES  | 2-Hexanone  | 0.00991 1 U                                     |   | 0.00935 1 U                                     | 0.05 1 < U                            | 0.05 1 <                              | U 0.013 1 <                       | tJ 0.015 1 < U                    | 0.05 1 < U                            | 0.072 t < U                           | 0.05 1 < U                             |
| VOLATILES  | 2-Propenal  |   |   | 0.00407 4 11                                    |                                       |                                       | 0.66 1 <                          | U 0.77 1 < U                      |                                       |                                       |  |
| VOLATILES  | Acetone   | 0.00490 1 0                                     |   | 0.00935 1 U                                     | 0.1 1 < U                             | 0.1 1 <                               | U 0.013 1 <                       | U 0.015 1 < U                     | 0.1 1 < U                             | 0.145 1 < U                           | 0.1 1 < U                              |
| VOLATILES  | Acetonitrile  |   |   |   |                                       |                                       | 0.13 1 <                          | U 0.15 1 < U                      |                                       |                                       |  |
| VOLATILES  | Acrytonitrite   |   |   |   |                                       |                                       | 0.13 1 <                          | U 0.15 1 < U                      |                                       |                                       |  |
| VOLATILES  | Benzene   | 0.00496 1 U                                     |   | 0.00467 1 U                                     | 0.005 1 < U                           | 0.005 1 <                             | U 0.011 1                         | 0.008 1 < U                       | 0.005 1 < U                           | 0.007 1 < U                           | 0.005 1 < U                            |
| VOLATILES  | Bromobenzene  | 0.00496 1 U                                     |   | 0.00467 1 U                                     |                                       |                                       |                                   |                                   |                                       |                                       | ·                                      |
| VOLATILES  | Bromochloromethane                                    | 0.00496 1 U                                     |   | 0.00467 1 0                                     |                                       |                                       |                                   |                                   |                                       |                                       |  |



## Data Evaluation Report Cehmical Concentrations in Soil Associated with LHAAP-35/36 Sumps

1.00

# Table 3-88 Concentrations of Chemicals in Soil Samples Associated with Sump 088

| [SUMP] = SUMP088 |                             |           |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        | 000 07           | <b>`</b>   |         | 00.00   |            |
|------------------|-----------------------------|-----------|---------------|--------------|---------|--------------|---------------------|-------|---------------|------------|----------|----------|--------------|----------|-------------------|---------|----------|-------|----------|-------------------|---------|--------|------------------|------------|---------|---------|------------|
| LOCATION_CODE    |                             | 111-5     | 88-01         | LH-S         | 588-01  | 11           | I-588-01            | 2     | LH-S          | 588-02     |          | 10.000   | 5-02<br>02 2 | 14.9     | 588-02<br>58.02 3 |         | 111.080  | 9-01  | LH-S     | 509-01<br>80-01 7 | ,       | 114.9  | 203-07<br>203-07 | 4          | 111-3   | 20-02 2 | 2          |
| SAMPLE_NO        |                             | 2/02      | 0-01_1        | 5-⊓-5<br>70′ | 20-01_2 | 1.R-<br>7    | 200-01              | 3     | 10-04<br>7/01 | 120-02     |          | 7/00/41  | 02_2         | 2/3/     | 00-02_3           | •       | 7/24/4   | 003   | 7/2      | 1/1007            | -       | 7/2    | 1/1007           | <u>.</u> ' | 7/21    | /1993   | •          |
|                  |                             | 1122      | -2 51         | 112          | 6 61    |              | 2211333<br>3 - 8 Ft |       | 0.5           | - 2 Ft     |          | 4.6      | Ft           | 6.       | 8 Ft              |         | 0.5-1    | 2 FI  | 6        | - 8 Ft            |         | 0.5    | - 2 Ft           | •          | 6-      | 8 Ft    |            |
| SAMPLE PURPOSE   |                             | R         | FG            | F            | FG      |              | REG                 |       | 5.0<br>F      | FG         |          | REC      | 3            | ,<br>F   | REG               |         | RE       | G     | F        | REG               |         | F      | REG              |            | R       | EG      |            |
| Test Group       | Parameter (Units = mo/ko)   | I(SQL) DI | L LO VO       | ult(SQL)     | DIL LO  | VQ sult(SQL) | DILLO               |       | (SQL) C       |            | VQ :ult( | SQL) DIL | LQ VO        | uit(SQL) | DIL LQ            | VQ tt(S | SQL) DIL | LQ VC | h(SQL) E | DIL LQ            | VQ It(  | SQL) E | DIL LO           | VQ au      | It(SQL) | DIL LQ  | VQ         |
| SEMIVOLATILES    | Benzo(a)pyrene              | 0.33 1    | < 13          | 0.33         | 1 <     | U 0.33       | 1 <                 | : U   | 0.33          | 1 <        | U        | 0.33 1   | < U          | 0.33     | 1 <               | U       | 0.33 1   | < U   | 0.33     | 1 <               | U       | 0.33   | 1 <              | U          | 0.33    | 1 <     | U          |
| SEMIVOLATILES    | Benzo(b)fluoranthene        | 0.33 1    | េ < ប         | 0.33         | 1 <     | U 0.33       | 1 <                 | < U   | 0.33          | 1 <        | ម        | 0.33 1   | < U          | 0.33     | 1 <               | U       | 0.33 1   | < U   | 0.33     | 1 <               | U       | 0.33   | 1 <              | U          | 0.33    | 1 <     | U          |
| SEMIVOLATILES    | Benzo(ghi)perylene          | 0.33 1    | < บ           | 0.33         | 1 <     | U 0.33       | ÷1 <                | : U   | 0.33          | 1 <        | U        | 0.33 1   | < U          | 0.33     | 1 <               | U       | 0.33 1   | < U   | 0.33     | 1 <               | U       | 0.33   | 1 <              | U          | 0.33    | 1 <     | U          |
| SEMIVOLATILES    | Benzo(k)fluoranthene        | 0.33 1    | < 1           | 0.33         | 1 <     | U 0.33       | 1 <                 | : U   | 0.33          | 1 <        | U        | 0.33 1   | < 11         | 0.33     | 1 <               | U       | 0.33 1   | < (r  | 0.33     | 1 <               | 0       | 0.33   | 1 <              | U          | 0.33    | 1 <     | U          |
| SEMIVOLATILES    | Benzoic Acid                | 1.65 1    | < 0           | 1.65         | 1 <     | U 1.65       | 1 <                 | e U   | 1.65          | 1 <        | U        | 1.65 1   | < U          | 1.65     | 1 <               | U       | 1.65 1   | < 0   | 1.65     | 1 <               | U       | 1.65   | 1 <              | U          | 1.65    | 1 <     | U          |
| SEMIVOLATILES    | Benzyl Alcohol              | 0.65 1    | < 0           | 0,65         | 1 <     | 0 0.65       |                     | ະ ບ   | 0.65          | 1 <        | 0        | 0.65 1   | < 0          | 0.05     | 1 <               | U       | 0.55 1   | < 0   | 0.05     | 1 4               | U<br>II | 0.65   | 1 2              |            | 0,00    | 1 2     | U II       |
| SEMIVOLATILES    | bis(2-Chioroethoxy)methane  | 0.33      |               | 0.33         |         | 0 0.33       | 4                   |       | 0.33          | 1 2        | 0        | 0.33 1   | ~ 11         | 0.33     | 12                | 11      | 0.33 1   | ~ 11  | 0.33     | 1 2               | U II    | 0,33   | 1 2              | - ñ        | 0.33    | 1 <     | ŭ          |
| SEMIVOLATILES    | bis(2-Chloroisonropy) ather | 0.33      |               | 0.33         | 1 2     | 1 0.33       |                     |       | 0.33          | 1 2        | ň        | 0.33 1   | < 11         | 0.33     | 1 <               | ii ii   | 0.33 1   | < 11  | 0.33     | 1 <               | ii ii   | 0.33   | 1 <              | ŭ          | 0.33    | 1 <     | ŭ          |
| SEMIVOLATILES    | his(2-Ethylberyl)ohthalate  | 0.33 1    | . < D         | 0.33         | 1 <     | U 033        | 1 4                 | ii i  | 0.33          | 1 <        | ŭ        | 0.33 1   | < 0          | 0.33     | 1 <               | ŭ       | 0.33 1   | < Ū   | 0.33     | 1 <               | บั      | 0.33   | 1 <              | Ū          | 0.33    | 1 <     | Ū          |
| SEMIVOLATILES    | Butvi benzvi ohthalate      | 0.33 1    | - Ŭ           | 0.33         | 1 <     | U 0.33       | 1 <                 | Ŭ     | 0.33          | 1 <        | ŭ        | 0.33 1   | < Ŭ          | 0.33     | 1 <               | Ū       | 0.33 1   | < Ŭ   | 0.33     | 1 <               | Ū       | 0.33   | 1 <              | Ŭ          | 0.33    | 1 <     | Ū          |
| SEMIVOLATILES    | Carbazole                   |           | •             |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| SEMIVOLATILES    | Chrysene                    | 0.33 1    | < U           | 0.33         | 1 <     | U 0,33       | 1 <                 | : U   | 0.33          | 1 <        | U        | 0.33 1   | < U          | 0.33     | 1 <               | υ       | 0.33 1   | < U   | 0.33     | 1 <               | U       | 0.33   | 1 <              | ម          | 0,33    | 1 <     | U          |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      | 0.33 1    | I < U         | 0.33         | 1 <     | U 0.33       | 1 <                 | ្រ    | 0.33          | 1 <        | U        | 0.33 1   | < U          | 0.33     | 1 <               | U       | 0.33 1   | < U   | 0.33     | 1 <               | U       | 0.33   | 1 <              | U          | 0.33    | 1 <     | U          |
| SEMIVOLATILES    | Dibenzofuran                | 0.33 1    | I < U         | 0.33         | 1 <     | U 0.33       | 1 <                 | : 0   | 0.33          | 1 <        | U        | 0.33 1   | < U          | 0.33     | 1 <               | U       | 0,33 1   | < U   | 0.33     | 1 <               | U       | 0.33   | 1 <              | ย          | 0.33    | 1 <     | U          |
| SEMIVOLATILES    | Diethyl phthalate           | 0.33 1    | < U           | 0.33         | 1 <     | 0 0.33       | 1 <                 | < U   | 0.33          | 1 <        | U        | 0.33 1   | < 0          | 0.33     | 1 <               | 0       | 0.33 1   | < 0   | 0.33     | 1 <               | U.      | 0.33   | 1 <              | U          | 0.33    | 1 <     | 0          |
| SEMIVOLATILES    | Dimethyl phthalate          | 0.33 1    |               | 0.33         | 1 <     | 0 0.33       |                     |       | 0.33          | 1 <        | U        | 0.33 1   | < 0          | 0.33     | 1 <               |         | 0.33 1   | < 0   | 0.33     | 1 4               | ů.      | 0.33   | 1 2              | - U<br>- H | 0.33    | 1 2     | 0          |
| SEMIVOLATILES    | di-n-butyi primalate        | 0.33 1    |               | 0.33         | 1 2     | 0 0.33       |                     |       | 0.33          | 1 2        | ň        | 0.33 1   | 2 11         | 0.33     | 1 2               |         | 033 1    | 2 II  | 0.33     | 1 <               | в       | 0.33   | 1 2              | 1          | 0.33    | 1 <     | ŭ          |
| SEMIVOLATILES    | Elucranthene                | 0.33 1    |               | 0.33         | 1 <     | 0 0.33       | 1 4                 | : 13- | 0.33          | 1 2        | й        | 0.33 1   | < 11         | 0.33     | 1 <               | ŭ       | 033 1    | < 0   | 0.33     | 1 <               | ŭ       | 0.33   | 1 <              | ŭ          | 0.33    | 1 <     | ŭ          |
| SEMIVOLATILES    | Fluorene                    | 0.33 1    | < Ŭ           | 0.33         | 1 <     | U 0.33       | 1 <                 | ÷ŭ    | 0.33          | 1 <        | ŭ        | 0.33 1   | < บั         | 0.33     | 1 <               | ŭ       | 0.33 1   | < Ŭ   | 0.33     | 1 <               | Ũ       | 0.33   | i <              | ៍បំ        | 0.33    | 1 <     | Ū          |
| SEMIVOLATILES    | Hexachlorobenzene           | 0.33 1    | i < U         | 0.33         | 1 <     | U 0.33       | 1 <                 | ÷Ŭ    | 0.33          | 1 <        | ŭ        | 0.33 1   | < บิ         | 0.33     | 1 <               | Ũ       | 0.33 1   | < Ŭ   | 0.33     | 1 <               | Ū       | 0.33   | 1 <              | ย          | 0.33    | 1 <     | Ű          |
| SEMIVOLATILES    | Hexachlorobutadiene         | 0.33 1    | i < Ū         | 0.33         | 1 <     | U 0.33       | 1 <                 | ÷Ŭ    | 0.33          | 1 <        | Ū        | 0.33 1   | < Ū          | 0.33     | 1 <               | Ŭ       | 0.33 1   | < U   | 0.33     | 1 <               | U       | 0.33   | 1 <              | : U        | 0.33    | 1 <     | U          |
| SEMIVOLATILES    | Hexachtorocyclopentadiene   | 0.33 1    | I < U         | 0.33         | 1 <     | U 0.33       | 1 <                 | ÷ U   | 0.33          | 1 <        | U        | 0.33 1   | < U          | 0.33     | 1 <               | U       | 0.33 1   | < U   | 0.33     | 1 <               | U       | 0.33   | 1 <              | ย          | 0.33    | 1 <     | U          |
| SEMIVOLATILES    | Hexachloroethane            | 0.33 1    | ( < ป         | 0.33         | 1 <     | U 0,33       | 1 <                 | ម     | 0.33          | 1 <        | U        | 0.33 1   | < U          | 0.33     | 1 <               | U       | 0.33 1   | < U   | 0.33     | 1 <               | U       | 0.33   | 1 <              | U          | 0.33    | 1 <     | U          |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene      | 0.33 1    | < U           | 0.33         | 1 <     | U 0.33       | 1 <                 | : U   | 0.33          | 1 <        | U        | 0.33 1   | < 0          | 0.33     | 1 <               | U       | 0.33 1   | < 0   | 0,33     | 1 <               | U       | 0.33   | 1 <              | U          | 0.33    | 1 <     | ប          |
| SEMIVOLATILES    | Isophorone                  | 0.33 1    | < 0           | 0.33         | 1 <     | U 0.33       | 1 <                 | < U   | 0.33          | 1 <        | Ü        | 0.33 1   | < U          | 0.33     | 1 <               | U       | 0.33 1   | < 0   | 0.33     | 1 <               | U.      | 0.33   | 1 <              | U          | 0.33    | 1 <     |            |
| SEMIVOLATILES    | Naphthalene                 | 0.33 1    | < U           | 0.33         | 1 <     | 0 0.33       |                     |       | 0.33          | 1 <        | U        | 0.33 1   | < 0          | 0.33     | 1 <               | N.      | 0.33 1   | < 0   | 0.33     | 1 <               | 0       | 0.33   | 1 5              |            | 0.33    | 1 4     |            |
| SEMIVOLATILES    | Nitropenzene                | 0.33 1    | 1 < 0         | 0.33         | 1 4     | 0 0.33       |                     |       | 0.33          | 1 4        | 0        | 0.33 1   | ~ 11         | 0.00     | 1 2               | 0       | 0.33 1   | ~ 11  | 0,33     | 1 ×               | ň       | 0.33   | 1 2              |            | 0.33    | 1 <     | й          |
| SEMIVOLATILES    | n-Nitrosodinhenvlamine      | 0.33 1    | < 1 <br>  < 1 | 0.33         | 1 <     | 0 0,33       | 1 4                 | : 11  | 0.33          | 1 2        | ŭ        | 0.33 1   | < 11         | 0.33     | 1 <               | ŭ       | 033 1    | < ŭ   | 0.33     | 1 <               | ŭ       | 0.33   | 1 <              | ŭ          | 0.33    | 1 <     | ŭ          |
| SEMIVOLATILES    | Pentachiorophenol           | 1.65 1    | ं र ग         | 1.65         | i       | U 1.65       |                     | εŭ    | 1.65          | 1 <        | ŭ        | 1.65 1   | < 0          | 1.65     | 1 <               | ยั      | 1.65 1   | < Ŭ   | 1.65     | 1 <               | ŭ       | 1.65   | 1 <              | Ŭ          | 1.65    | 1 <     | Ū          |
| SEMIVOLATILES    | Phenanthrene                | 0.33 1    | i < ŭ         | 0.33         | 1 <     | U 0.33       | 1 <                 | ÷Ŭ    | 0.33          | 1 <        | บั       | 0.33 1   | < Ū          | 0.33     | 1 <               | Ũ       | 0.33 1   | < Ŭ   | 0.33     | 1 <               | Ū       | 0.33   | 1 <              | Ū          | 0.33    | 1 <     | Ū          |
| SEMIVOLATILES    | Phenol                      | 0.33 1    | < Ú           | 0.33         | 1 <     | Ú 0.33       | 1 <                 | : U   | 0,33          | 1 <        | U        | 0.33 1   | < U          | 0.33     | 1 <               | U       | 0.33 1   | < U   | 0.33     | 1 <               | U       | 0.33   | 1 <              | U U        | 0.33    | 1 <     | U          |
| SEMIVOLATILES    | Pyrene                      | 0.33 1    | I < U         | 0.33         | 1 <     | U 0.33       | 1 <                 | < ມ   | 0.33          | 1 <        | U        | 0.33 1   | < 1          | 0.33     | 1 <               | U       | 0.33 1   | < U   | 0.33     | 1 <               | U       | 0,33   | 1 <              | U          | 0.33    | 1 <     | U          |
| SOLIDS           | Percent Solids              |           |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | 1,1,1,2-Tetrachloroethane   |           |               |              | _       |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            | 0.005   |         |            |
| VOLATILES        | 1,1,1-Trichloroethane       | 0.005 1   | < U           | 0.005        | 1 <     | U 0.005      |                     | 2 U   | 0.005         | 1 <        | U        | 0.005 1  | < 0          | 0.005    | 1 <               | 0 0     | 1005 1   | < 0   | 0.005    | 1 <               |         | 0.005  | 1 <              |            | 0.005   | 1 <     |            |
| VOLATILES        | 1,1,2,2-letrachioroethane   | 0.005 1   |               | 0.005        | 1 <     | 0 0.005      |                     |       | 0.005         | 1 <        | 0        | 0.005 1  |              | 0.005    | 1 2               | 0 0     | 005 1    | 2 11  | 0.005    | 1 2               |         | 0.005  | 1 2              |            | 0.005   | 1 2     | . <u>Б</u> |
| VOLATILES        | 1,1,2-monorbane             | 0.005 1   |               | 0.005        | 1 2     | 0 0.000      | 1 4                 | < 11  | 0.005         | , ~<br>1 < | ŭ        | 0.005 1  | < 11         | 0.005    | 1 <               | . 11 0  | 1005 1   | < 1   | 0.005    | 1 <               | ŭ       | 0.005  | 1 <              |            | 0.005   | 1 <     | ŭ          |
| VOLATILES        | 1.1-Dichloroethene          | 0.005 1   | i < 1         | 0.005        | 1 <     | U 0.005      | 1 <                 | ιŭ    | 0.005         | 1 <        | ŭ        | 0.005 1  | < U          | 0.005    | 1 <               | ŬŎ      | 0.005 1  | < Ŭ   | 0.005    | 1 <               | Ŭ       | 0.005  | 1 <              | Ũ          | 0.005   | 1 <     | Ũ          |
| VOLATILES        | 1.1-Dichloropropene         | 1         | -             |              |         |              | •                   | -     |               |            | -        |          | -            |          | -                 |         |          | -     |          |                   | -       |        |                  |            |         |         |            |
| VOLATILES        | 1,2,3-Trichlorobenzene      |           |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | 1,2,3-Trichloropropane      | [         |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | 1,2,4-Trichlorobenzene      | l         |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | 1,2,4-Trimethylbenzene      |           |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | 1,2-Dibromo-3-chloropropane |           |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | 1,2-Dibromoetnane           | 1         |               |              |         |              |                     | -     |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | 1,2-Dichloroethane          | 0.005 1   |               | 0.005        | 1 <     | 11 0.004     | . 1 .               | - 11  | 0.005         | 1 <        |          | 0.005 1  | < 11         | 0.005    | 1 <               | 11 0    | 005 1    | < 11  | 0.005    | 1 <               | 11 0    | 0.005  | 1 <              | . 11       | 0.005   | 1 <     | υ          |
| VOLATILES        |                             | 0.000     |               | 0.000        |         | 0 0.000      |                     |       | 0.000         |            | Ň        | 0.000 1  |              | 0.000    |                   |         |          |       | 0.000    |                   | ň       | 0.000  |                  | ň          | 0.005   |         |            |
| VOLATILES        | 1,2-Dichloroelhene          | 0.005 1   | ט > ו         | 0.005        | 1 <     | U 0.005      |                     | < U   | 0.005         | 1 <        | 0        | 0.005 1  | < 0          | 0.005    | 1 <               | 0 0     | 0.005 1  | < 0   | 0,005    | 1 <               | 0 0     | 0.005  | 1 <              | U          | 0.005   | 1 <     |            |
| VOLATILES        | 1,2-Dicnioropropane         | 0.005 1   | . < 0         | 0.005        | 1 <     | 0 0.00       | 114                 | . 0   | 0,005         | 1 <        | U        | 0.005 1  | < 0          | 0.005    | 1 4               | 0 0     | 1.005 1  | < U   | 0.005    |                   | U       | 0.003  |                  | . 0        | 0.000   |         | 0          |
| VOLATILES        | 1.3.5.Trimethylbenzape      | 1         |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | 1.3-Dichlorobenzene         | 1         |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | 1.3-Dichloropropane         | }         |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | 1,4-Dichlorobenzene         | ļ         |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | 2,2-Dichloropropane         | 1         |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | 2-Butanone                  | 0.05 1    | I < U         | 0.05         | 1 <     | U 0,05       | i 1 <               | < U   | 0.05          | 1 <        | U        | 0.05 1   | < U          | 0.05     | 1 <               | U       | 0.05 1   | < U   | 0.05     | 1 <               | U       | 0.05   | 1 <              | U          | 0.05    | 1 <     | U          |
| VOLATILES        | 2-Chloroethyl vinyl ether   | 0.01 1    | I < U         | 0.01         | 1 <     | U 0.01       | 1 <                 | < U   | 0.01          | 1 <        | U        | 0.01 1   | < ປ          | 0.01     | 1 <               | U       | 0.01 1   | < U   | 0.01     | 1 <               | U       | 0.01   | 1 <              | U          | 0.01    | 1 <     | U          |
| VOLATILES        | 2-Chlorotoluene             |           |               |              |         |              |                     |       | 0.55          |            |          | 0.05 ·   |              |          |                   |         |          |       | 0.05     |                   |         | 0.05   |                  |            | 0.05    |         |            |
| VOLATILES        | 2-Hexanoné                  | 0.05 1    | i < 0         | 0.05         | 1 <     | 0 0.05       | ) 1 <               | c U   | 0.05          | 1 <        | U        | 0.05 1   | < ป          | 0.05     | 1 <               | U       | 0.05 1   | < 0   | 0.05     | 1 <               | U       | 0.05   | · <              |            | 0.05    | × ۱     | U          |
| VOLATILES        | Z-Propenal                  | 1         |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        |                             | 01 4      |               | 0.4          |         |              | 1 -                 | . 11  | 6.1           | 1 -        |          | 01 1     | ~ 11         |          | 1 -               | н       | 01 1     | < 11  | 0.1      | 1 -               |         | 0.1    | 1 -              |            | 0.1     | 1 <     | 11         |
| VOLATILES        | Acetoninie                  | "''       | 0             | v.1          |         | U U.         | , •                 | · •   | 0.1           |            | 0        | 0.1 1    | - 0          | U.1      | , `               | v       | V.I 1    | - 0   | 0.1      | , ~               | v       | 0.1    | . `              |            | 0.1     |         |            |
| VOLATILES        | Acrylonitrile               | 1         |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | Allvi chloride              | i         |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |
| VOLATILES        | Benzene                     | 0.005 1   | I < U         | 0.005        | 1 <     | U 0.005      | ; 1 <               | < U   | 0.005         | 1 <        | U        | 0.005 1  | < ປ          | 0.005    | 1 <               | U O     | 0.005 1  | < ປ   | 0.005    | 1 <               | U       | 0.005  | 1 <              | U          | 0.005   | 1 <     | U          |
| VOLATILES        | Bromobenzene                | 1         |               |              |         |              | -                   | -     |               |            | -        |          | · ·          | 2        |                   |         |          | -     |          |                   |         |        |                  | -          |         |         |            |
| VOLATILES        | Bromochloromethane          |           |               |              |         |              |                     |       |               |            |          |          |              |          |                   |         |          |       |          |                   |         |        |                  |            |         |         |            |



Data Evaluation Report Cehmical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-88 Concentrations of Chemicals in Soil Samples Associated with Sump 088

| (SUMP) = SUMP088 |                             | 35SUMP087-SR01        | 35SUMP087-SB01       | 35SHMP087-S802            | 35SUMP087-SB02         | 35SUMP088-SB01        | 35SUMP088-SB01        | 35SUMP088-SB02        | 35SUMP088-SB02        | 35SUMP088-SB02        | 35SUMP089-SB01        |
|------------------|-----------------------------|-----------------------|----------------------|---------------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| SAMPLE NO        |                             | 35-SMP087-SB01-01     | 35-SMP087-SB01-02    | 35-SMP087-SB02-01         | 35-SMP087-SB02-02      | 35-SMP088-SB01-01     | 35-SMP088-SB01-02     | 35-SMP088-SB01-02-QC  | 35-SMP088-SB02-01     | 35-SMP088-SB02-02     | SUMP089-SB-01-01      |
| SAMPLE NO        |                             | 9/21/2006             | 9/21/2006            | 9/21/2006                 | 9/21/2006              | 9/20/2006             | 9/20/2006             | 9/20/2006             | 9/20/2006             | 9/20/2006             | 9/18/2006             |
| DEDTU            |                             | 00-055                | 25-35Et              | 00-0551                   | 2.5 - 3.5 Ft           | 0.0 - 0.5 Ft          | 6 - 7 Ft              | 6 - 7 Ft              | 0.0 - 0.5 Ft          | 6 - 7 Ft              | 0 - 0.5 Ft            |
| CANDLE DUDDOOF   |                             | REG                   | REG                  | REG                       | REG                    | REG                   | REG                   | FD                    | REG                   | REG                   | REG                   |
| SAMPLE_PURPUSE   | Decomptor () Inits = maf(a) |                       | Result/SOFT DILLO VO | Result(SOL) DIL LO VO     | Result/SQL) DII, LO VO | Result(SQL) DIL LQ VQ | Result(SQL) DIL LQ VQ | Result(SQL) DIL LQ VQ | Result(SQL) DIL LQ VQ | Result(SQL) DIL LQ VQ | Result(SQL) DIL LO VQ |
| 1est Group       | Parameter (Units = mg/kg)   | Result(SQL) DIE EQ VQ | 0.005 1 11           | These out out out out out | 0.005 1 U              |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 U             |                       |
| VOLATILES        | Bromodichioromethane        |                       | 0.006 1 1            |                           | 0.005 1 11             |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 U             |                       |
| VULATILES        | Bromonoliti                 |                       | 0.012 1 11           |                           | 0.011 1 1              |                       | 0.010 1 U             | 0.010 1 U             |                       | 0.009 1 U             |                       |
| VOLATILES        | Diomoneutane                |                       | 0.006 1 11           |                           | 0.005 1 11             |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 U             |                       |
| VOLATILES        | Carbon disbinde             |                       | 0.006 1 11           |                           | 0.005 1 11             |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 U             |                       |
| VOLATILES        | Carbon tetrachionoe         |                       | 0.006 1 0            |                           | 0.005 1 1              |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 U             |                       |
| VOLATILES        | Chlorobenzene               |                       | 0.012 1 11           |                           | 0.011 1 11             |                       | 0.010 1 U             | 0.010 1 U             |                       | 0.009 1 U             |                       |
| VOLATILES        | Chioroethane                |                       | 0.005 1 11           |                           | 0.005 1 11             |                       | 0.005 1 1             | 0.005 1 U             |                       | 0.005 1 U             |                       |
| VOLATILES        | Chlorotorm                  |                       | 0.012 1 11           |                           | 0.011 1 1              |                       | 0.010 1 U             | 0.010 1 U             |                       | 0.009 1 U             |                       |
| VOLATILES        | Chloromethane               |                       | 0.012 1 0            |                           | 0.011 1 0              |                       |                       |                       |                       |                       |                       |
| VOLATILES        | Chloroprene                 |                       | 0.006 4 11           |                           | 0.005 1 13             |                       | 0.005 1 11            | 0.005 1 U             |                       | 0.005 1 U             |                       |
| VOLATILES        | cis-1,2-Dichloroethene      |                       | 0.005 1 11           |                           | 0.005 1 11             |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 U             |                       |
| VOLATILES        | cis-1,3-Dichloropropene     |                       | 0.006 1 U            |                           | 0.005 1 0              |                       | 0.005 1 11            | 0.005 1 1             |                       | 0.005 1 U             |                       |
| VOLATILES        | Dibromochloromethane        |                       | 0.006 1 0            |                           | 0.005 1 1              |                       | 0.005 1 11            | 0.005 1 1             |                       | 0.005 1 U             |                       |
| VOLATILES        | Dibromomethane              |                       | 0,006 1 0            |                           | 0.003 1 0              |                       | 0.010 1 11 111        | 0.010 1 11            |                       | 0.009 1 U UJ          |                       |
| VOLATILES        | Dichlorodifluoromethane     |                       | 0.012 1 0            |                           | 0.011 1 0              |                       |                       |                       |                       |                       |                       |
| VOLATILES        | Ethyl methacrylate          |                       | 0.005 4 11           |                           | 0.005 1 11             |                       | 0.005 1 13            | 0.005 1 U             |                       | 0.005 1 U             |                       |
| VOLATILES        | Ethylbenzene                |                       | 0.000 1 0            |                           | 0.000 + 0              |                       | 0.005 1 1             | 0.005 1 1             |                       | 0.005 1 U             |                       |
| VOLATILES        | Hexachlorobutadiene         |                       | 0.006 1 0            |                           | 0.005 1 0              |                       | 0.000 1 0             | 0.000 1 0             |                       |                       |                       |
| VOLATILES        | IODOMETHANE                 |                       |                      |                           |                        |                       |                       |                       |                       |                       |                       |
| VOLATILES        | ISOBUTYL ALCOHOL            |                       |                      |                           | 0.005 4 14             |                       | 0.006 1 11            | 0.005 1 11            |                       | 0.005 1 11            |                       |
| VOLATILES        | Isopropylbenzene            |                       | 0.006 1 U            |                           | 0.005 1 0              |                       | 0.003 1 0             | 0.003 1 0             |                       |                       |                       |
| VOLATILES        | m,p-Xylenes *               |                       | 0.006 1 U            |                           | 0.005 1 U              |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 0             |                       |
| VOLATILES        | Methacrylonitrile           |                       |                      |                           |                        |                       |                       |                       |                       | 0.000 4 1/            |                       |
| VOLATILES        | Methyl isobutyl ketone      |                       | 0.012 1 U            |                           | 0.011 1 U              |                       | 0.010 1 U             | 0.010 1 0             |                       | 0.009 1 0             |                       |
| VOLATILES        | METHYL METHACRYLATE         |                       |                      |                           |                        |                       |                       |                       |                       | 0.005 4 11            |                       |
| VOLATILES        | Methylene chloride          | •                     | 0.003 1 J B          |                           | 0.003 1 J B            |                       | 0.005 1 U             | 0.005 1 0             |                       | 0.005 1 0             |                       |
| VOLATILES        | Naphthalene                 |                       | 0.012 1 U            |                           | 0.011 1 U              |                       | 0.010 1 U             | 0.010 1 0             |                       | 0.009 1 0             |                       |
| VOLATILES        | n-BUTYLBENZENÉ              |                       | 0.006 1 U            |                           | 0.005 1 U              |                       | 0.005 1 U             | 0.005 1 0             |                       | 0.005 1 0             |                       |
| VOLATILES        | n-PROPYLBENZENE             |                       | 0.006 1 U            |                           | 0.005 1 U              |                       | 0.005 1 U             | 0.005 1 0             |                       | 0.005 1 0             |                       |
| VOLATILES        | Pentachloroethane           |                       |                      |                           |                        |                       |                       |                       |                       | 0.005 4 11            |                       |
| VOLATILES        | p-ISOPROPYLTOLUENE          |                       | 0.006 1 U            |                           | 0.005 1 U              |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 0             |                       |
| VOLATILES        | Propionitrile               |                       |                      |                           |                        |                       |                       |                       |                       | 0.005 4 11            |                       |
| VOLATILES        | sec-BUTYLBENZENE            |                       | 0.006 1 U            |                           | 0.005 1 U              |                       | 0.005 1 U             | 0.005 1 0             |                       | 0.005 1 0             |                       |
| VOLATILES        | Styrene                     |                       | 0.006 1 U            |                           | 0.005 1 U              |                       | 0,005 1 U             | 0.005 1 U             |                       | 0.005 1 0             |                       |
| VOLATILES        | tert-BUTYLBENZENE           | -                     | 0.006 1 U            |                           | 0.005 1 U              |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 0             |                       |
| VOLATILES        | Tetrachloroethene           |                       | 0,006 1 U            |                           | 0.005 1 U              |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 0             |                       |
| VOLATILES        | Toluene                     |                       | 0.006 1 U            |                           | 0.005 1 U              |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 0             |                       |
| VOLATILES        | trans-1,2-Dichloroethene    |                       | 0.006 1 U            |                           | 0.005 1 U              |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 0             |                       |
| VOLATILES        | trans-1,3-Dichloropropene   |                       | 0.006 1 U            |                           | 0.005 1 U              |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 0             |                       |
| VOLATILES        | trans-1,4-Dichloro-2-butene |                       |                      |                           |                        |                       |                       |                       |                       |                       |                       |
| VOLATILES        | Trichloroethene             |                       | 0.006 1 U            |                           | 0.005 1 U              |                       | 0.005 1 U             | 0.005 1 U             |                       | 0.005 1 0             |                       |
| VOLATILES        | Trichlorofluoromethane      |                       | 0.012 1 U            |                           | 0.011 1 U              |                       | 0.010 1 U             | 0.010 1 U             |                       | 0.009 1 0             |                       |
| VOLATILES        | Vinyl acetate               |                       | 0.012 1 U UJ         |                           | 0.011 1 U UJ           |                       | 0.010 1 U UJ          | 0.010 1 U UJ          |                       | U.U. 1 C.U.U.         |                       |
| VOLATILES        | Vinvl chloride              |                       | 0.012 1 U            |                           | 0.011 1 U              |                       | 0.010 1 U             | 0.010 1 U             |                       | 0.009 1 0             |                       |
| VOLATILES        | Xylenes, Total              |                       |                      |                           |                        |                       |                       |                       |                       |                       |                       |



# Table 3-88 Concentrations of Chemicals in Soil Samples Associated with Sump 088

| [SUMP] = SUMP088 |                             |                       |                    |             |          |        |        |          |       |         |         |         |          |    |           |           |     |       |        |          |         |         |          |        |          |                  |            |
|------------------|-----------------------------|-----------------------|--------------------|-------------|----------|--------|--------|----------|-------|---------|---------|---------|----------|----|-----------|-----------|-----|-------|--------|----------|---------|---------|----------|--------|----------|------------------|------------|
| LOCATION CODE    |                             | 35SUMP089-SB01        | 35SUMP089-SB02     | 35SUMP0     | 89-SB02  | ŁH-    | DL88-0 | 1        | LH-   | DL89-0  | 01      | LH      | IS-3-28  |    | LHS       | 5-3-29    |     | LH-   | S87-01 |          | LH-S    | \$87-01 |          | LI-    | 1-S88-   | 01               |            |
| SAMPLE NO        |                             | SUMP089-SB-01-02      | SUMP089-SB-02-01   | SUMP089-    | SB-02-02 | LH-    | DL88-0 | 1        | LH-   | DL89-(  | 01      | LH      | IS-3-28  | -  | LHS       | \$-3-29   |     | LH-S  | 87-01_ | 1        | LH-SE   | 37-01_  | 2        | LH-    | S88-01   |                  |            |
| SAMPLE DATE      |                             | 9/18/2006             | 9/18/2006          | 9/18/2      | 006      | 7/2    | 2/1993 | 3        | 7/2   | 21/1993 | 3       | 1/1     | 1/1995   |    | 1/11      | /1995     |     | 7/2   | 2/1993 |          | 6/26    | v1993   |          | 7      | /22/19   | <del>3</del> 3 ' |            |
| DEPTH            |                             | 6-7 Ft                | 0 - 0.5 Ft         | 6-7         | Ft       | 2      | - 4 Ft |          | 2     | - 4 Ft  |         | 0.      | - 0.5 Ft |    | 0-1       | 0.5 Ft    |     | 0.5   | 5-2 Ft |          | 2.5     | - 3 Ft  |          | C      | 1.5 - 21 | Ft               |            |
| SAMPLE PURPOSE   |                             | REG                   | REG                | RF          | G        | _      | REG    |          | -     | REG     |         |         | REG      |    | 8         | EG        |     | 8     | REG    |          | 8       | EG      |          |        | FD       |                  |            |
| Test Group       | Peremeter (Linits = mo/ko)  | Result/SOLI DIE LO VO |                    | SULLESON DE |          | H(SOL) |        | ov c     | REON  |         |         | II(SOL) |          |    | IIISOL) D |           | VOI | HSOL) |        | VO u     | ISOL I  |         | o vo     | #(SOF) | DIL I    |                  | 5          |
| VOLATH ES        | Bromodichloromethane        | 0.00496 1 11          | dialoge, pie ca va | 0.00467 1   | 11       | 0.005  | 1 <    | 11       | 0.005 | 1 <     | <u></u> | 0.007   | 1 <      | 11 | 0.008     | 1 <       | - U | 0.005 | 1 <    | 11       | 0 007   | 1 <     | <u> </u> | 0.005  | 1        | < 11             | È          |
| VOLATILES        | Bromoform                   | 0.00496 1 14          |                    | 0.00467 1   | Ť        | 0.005  | 1 6    | - ŭ      | 0.005 | 1 4     |         | 0.007   | · <      | ŭ  | 0.008     | 1 <       | ŭ   | 0.005 | i <    | й        | 0.007   | † <     | i ii     | 0.005  | 1        | < 1              | 4          |
| VOLATILES        | Bromomothana                | 0.00001 1 14          |                    | 0.00035 1   | й        | 0.005  | 1 2    | ŭ        | 0.000 |         | Ĭ       | 0.013   | 1 2      | ň  | 0.015     | 1 2       | ň   | 0.01  | 1 4    | ň        | 0.007   | 1 4     | ň        | 0.01   | i.       | < 11             | ŧ          |
| VOLATILES        | Corbon diguisido            |                       |                    | 0.00355 1   | ŭ        | 0.01   | 1 2    | ŭ        | 0.005 |         | žň      | 0.013   | 1 2      | ŭ  | 0.010     | 1 2       | й   | 0.005 | 1 2    | й        | 0.007   | 1 2     | й        | 0.005  | 4        | 2 11             |            |
| VOLATILES        | Carbon disulte              |                       |                    | 0.00407 1   | 11       | 0.000  |        | ŭ        | 0.005 | -       |         | 0.007   | 1.2      | ň  | 0.000     | : 2       | ň   | 0.005 |        | ŭ        | 0.007   | 1 2     | Ň        | 0.005  | 1        | 2 8              | 2          |
| VOLATILES        | Calouriterachionue          |                       |                    | 0.00407 1   |          | 0.000  | 12     |          | 0.005 | -       | : ŭ     | 0.007   | 1 2      |    | 0.000     |           | ň   | 0.005 | 1 2    |          | 0.007   | 1 2     | ň        | 0.000  | 4        | 2                |            |
| VOLATILES        | Chlorobenzene               | 0.00496 1 0           |                    | 0.00467 1   |          | 0.005  | 1 2    |          | 0.005 | 1       |         | 0.007   |          | ŭ  | 0.000     | : :       |     | 0.003 | 1.2    | ň        | 0.007   | 1 2     |          | 0.000  | ÷        | 2                |            |
| VULATILES        | Chioroethane                | 0.00991 1 0           |                    | 0.00935 1   | 0        | 0.01   | 1 2    |          | 0.01  |         |         | 0,013   | 1 2      |    | 0.013     | 1 2       | N.  | 0.01  | 1 2    | U U      | 0.007   | 1 3     |          | 0.01   | 1        | 2                |            |
| VOLATILES        | Chlorotom                   | 0.00496 1 0           |                    | 0.00467 1   | 0        | 0.005  | 1 <    | U        | 0.005 | 1 1     |         | 0.007   | 1 5      |    | 0.008     | 1 5       |     | 0.005 | 1 5    |          | 0.007   |         |          | 0.005  | 1        | 2 0              |            |
| VOLATILES        | Chloromethane               | 0.00991 1 U           |                    | 0.00935 1   | U        | 0,01   | 1 <    | U        | 0.01  | 1 <     | : U     | 0.013   | 1 <      | 0  | 0.015     | 1 <       |     | 0.01  | 1 <    | U        | 0.007   | 1 <     | 0        | 0.01   | 1        | < 0              |            |
| VOLATILES        | Chloroprene                 | l                     |                    |             |          |        |        |          |       |         |         | 0.13    | 1 <      | 0  | 0.15      | 1 <       | U   |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | cis-1,2-Dichloroethene      | 0.00496 1 U           |                    | 0.00467 1   | U        |        |        |          |       |         |         |         |          |    |           |           |     |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | cis-1,3-Dichloropropene     | 0.00496 1 U           |                    | 0.00467 1   | U        | 0.005  | 1 <    | U        | 0.005 | 1 <     | : U     | 0.007   | 1 <      | U  | 0.008     | 1 <       | U   | 0.005 | 1 <    | U        | 0.007   | 1 <     | U        | 0.005  | 1        | < 0              |            |
| VOLATILES        | Dibromochloromethane        | 0.00496 1 U           |                    | 0.00467 1   | U        | 0.005  | 1 <    | U        | 0.005 | 1 -     | : U     | 0.007   | 1 <      | U  | 0.008     | 1 <       | U   | 0.005 | 1 <    | U        | 0.007   | 1 <     | . U      | 0.005  | 1        | < U              | •          |
| VOLATILES        | Dibromomethane              | 0.00496 1 U           |                    | 0.00467 1   | U        |        |        |          |       |         |         | 0.026   | 1 <      | U  | 0.031     | 1 <       | υ   |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | Dichlorodifluoromethane     | 0.00991 1 U           |                    | 0.00935 1   | U        |        |        |          |       |         |         | 0.026   | 1 <      | U  | 0.031     | 1 <       | υ   |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | Ethyl methacrylate          |                       |                    |             |          |        |        |          |       |         |         | 0.026   | 1 <      | U  | 0.031     | 1 <       | U   |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | Ethylbenzene                | 0.00496 1 U           |                    | 0.00467 1   | U        | 0.005  | 1 <    | U        | 0.005 | 1 <     | : U     | 0.007   | 1 <      | U  | 0.008     | 1 <       | U   | 0.005 | 1 <    | U        | 0.007   | 1 <     | េប       | 0.005  | 1        | < U              | /          |
| VOLATILES        | Hexachlorobutadiene         | 0.00496 1 U           |                    | 0.00467 1   | U        |        |        |          |       |         |         |         |          |    |           |           |     |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | IODOMETHANE                 | -                     |                    |             |          |        |        |          |       |         |         | 0.013   | 1 <      | U  | 0.015     | 1 <       | U   |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | ISOBUTYL ALCOHOL            |                       |                    |             |          |        |        |          |       |         |         | 2.6     | 1 <      | U  | 3.1       | 1 <       | U   |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | Isoprovibenzene             | 0.00496 1 U           |                    | 0.00467 1   | ម        |        |        |          |       |         |         |         |          |    |           |           |     |       |        |          |         |         |          |        |          |                  |            |
|                  |                             | 0.00100 4 11          |                    | 0.00400     |          |        |        |          |       |         |         |         |          |    |           |           |     |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | m,p-Xylenes                 | 0.00496 1 U           |                    | 0.00123 1   | JR       |        |        |          |       |         |         | 0.000   |          |    | 0.004     |           |     |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | Methacrylonitrile           |                       |                    |             |          |        |        |          | ~ ~ ~ |         |         | 0.026   |          |    | 0.031     |           |     | 0.05  |        |          | A       |         |          | 0.00   |          |                  |            |
| VOLATILES        | Methyl isobutyl ketone      | 0.00991 1 0           |                    | 0.00935 1   | U        | 0.05   | 1 <    | U        | 0.05  | 1 <     | ε Ο     | 0,013   | 1 <      | U  | 0.015     | 1 <       | U.  | 0.05  | 1 <    | U        | 0.007   | 1 <     | . 0      | 0.05   | 1        | < 0              |            |
| VOLATILES        | METHYL METHACRYLATE         |                       |                    |             |          |        |        |          |       |         |         | 0.026   | 1 <      | 0  | 0.031     | 1 <       |     |       |        |          | ~ ~ ~ ~ |         |          |        |          |                  |            |
| VOLATILES        | Methylene chloride          | 0.00496 1 U           |                    | 0.00467 1   | U        | 0.005  | 1 <    | U        | 0.005 | 1 <     | : U     | 0.007   | 1 <      | U  | 0.008     | 1 <       | U   | 0.005 | 1 <    | U        | 0.007   | 1 <     | U        | 0.005  | 1        | < U              |            |
| VOLATILES        | Naphthalene                 | 0.00991 1 U           |                    | 0.00935 1   | U        |        |        |          |       |         |         |         |          |    |           |           |     |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | n-BUTYLBENZENÉ              | 0.00496 1 U           |                    | 0.00467 1   | U        |        |        |          |       |         |         |         |          |    |           |           |     |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | n-PROPYLBENZENE             | 0.00496 1 U           |                    | 0.00467 1   | U        |        |        |          |       |         |         |         |          |    |           |           |     |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | Pentachloroethane           |                       |                    |             |          |        |        |          |       |         |         | 0.026   | 1 <      | U  | 0.031     | 1 <       | U   |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | p-ISOPROPYLTOLUENE          | 0.00496 1 U           |                    | 0.00467 1   | U        |        |        |          |       |         |         |         |          |    |           |           |     |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | Propionitrile               |                       |                    |             |          |        |        |          |       |         |         | 0.066   | 1 <      | U  | 0.077     | 1 <       | บ   |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | sec-BUTYLBENZENE            | 0.00496 1 U           |                    | 0.00467 1   | U        |        |        |          |       |         |         |         |          |    |           |           |     |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | Styrene                     | 0.00496 1 U           |                    | 0.00467 1   | ប        | 0.005  | 1 <    | U        | 0.005 | 1 <     | ະບ      | 0,007   | 1 <      | U  | 0.008     | 1 <       | U   | 0.005 | 1 <    | U        | 0.007   | 1 <     | ิย       | 0.005  | 1        | < U              | 2          |
| VOLATILES        | tert-BUTYLBENZENE           | 0.00496 1 U           |                    | 0.00467 1   | U        |        |        |          |       |         |         |         |          |    |           |           |     |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | Tetrachloroethene           | 0.00496 1 U           |                    | 0.00467 1   | ប        | 0.005  | 1 <    | U        | 0.005 | 1 <     | : U     | 0.007   | 1 <      | U  | 0.008     | 1 <       | U   | 0.005 | 1 <    | U        | 0.007   | 1 <     | U        | 0.005  | 1        | < U              | <i>c</i> . |
| VOLATILES        | Toluene                     | 0.00496 1 U           |                    | 0.00467 1   | U        | 0.005  | 1 <    | U        | 0.005 | 1 <     | : U     | 0,007   | 1 <      | υ  | 800.0     | 1 <       | ប   | 0.005 | 1 <    | U        | 0.007   | 1 <     | ម        | 0.005  | 1        | < U              | ,          |
| VOLATILES        | trans-1.2-Dichloroethene    | 0.00496 1 U           |                    | 0.00467 1   | U        |        |        |          |       |         |         |         |          |    |           |           |     |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | trans-1.3-Dichloroprogene   | 0.00496 1 U           |                    | 0.00467 1   | Ú        | 0,005  | 1 <    | U        | 0.005 | 1 <     | : U     | 0.007   | 1 <      | U  | 0.008     | 1 <       | Ð   | 0.005 | 1 <    | U        | 0.007   | 1 <     | Ð        | 0.005  | 1        | < U              | i          |
| VOLATILES        | trans-1.4-Dichloro-2-butene |                       |                    |             |          |        |        |          |       |         |         | 0.026   | 1 <      | U  | 0.031     | 1 <       | Ð   |       |        |          |         |         |          |        |          |                  |            |
| VOLATILES        | Trichloroethene             | 0.00496 1 ()          |                    | 0.00467 1   | U        | 0.005  | 1 <    | U        | 0.005 | 1 <     | : U     | 0.007   | 1 <      | Ū  | 0.008     | 1 <       | Ū   | 0.005 | 1 <    | υ        | 0.007   | 1 <     | U        | 0.005  | 1        | < U              | ,          |
| VOLATILES        | Trichlorofluoromethane      | 0.00991 1 U           |                    | 0.00935 1   | Ū        |        | -      | -        |       | -       | -       | 0.013   | 1 <      | Ũ  | 0.015     | 1 <       | Ű   |       | -      |          |         |         | -        |        |          | -                |            |
| VOLATILES        | Vinvt acetate               | 0.00991 1 U           |                    | 0.00935 1   | ŭ        | 0.05   | 1 <    | U        | 0.05  | 1 <     | : U     | 0.013   | 1 <      | ŭ  | 0.015     | 1 <       | Ũ   | 0.05  | 1 <    | U        |         |         |          | 0.05   | 1        | < U              | ,          |
| VOLATILES        | Vinvt chloride              | 0.00991 1 1           |                    | 0.00935 1   | й        | 0.01   | 1 <    | Ŭ        | 0.01  | 1 <     | : ŭ     | 0.013   | 1 <      | ŭ  | 0.015     | 1 <       | ũ   | 0.01  | 1 <    | ū        | 0.007   | 1 <     | 11       | 0.01   | 1        | < ú              | ,          |
| VOLATILES        | Xvlenes Total               |                       |                    |             | ~        | 0.005  | 1 <    | н        | 0.005 | 1 -     | : 11    | 0.007   | 1 <      | ŭ  | 0.008     | i <       | ŭ   | 0.005 | 1 <    | ŭ        | 0.007   | 1 <     | . ŭ      | 0.005  | 1        | < 11             |            |
| TYPE THE P       | Alicence, (Okol             |                       |                    |             |          |        |        | <u> </u> | 4.000 |         | 5       | 3,001   |          | ~  | 2.000     | · · · · · |     |       |        | <u> </u> |         |         |          |        | <u> </u> |                  | -          |



## Data Evaluation Report Cehmical Concentrations in Soil Associated with LHAAP-35/36 Sumps

# Table 3-88 Concentrations of Chemicals in Soil Samples Associated with Sump 088

| SUMP] = SUMP088 |                             |           |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
|-----------------|-----------------------------|-----------|--------|----------|----------|--------|--------|------------|--------------------|------|---------|---------|----------------|----------|---------|---------------|----------|---------|------|----------|--------|---------|----------|---------|--------|---------------|--------|---------|-------|----------------|---------|--------|---------------|--|
| LOCATION CODE   |                             | LH-       | S88-01 |          | LH-S     | 588-01 |        | LH-S       | 38-01              |      | LH      | -\$88-  | 02             | LH       | -\$88-0 | 02            |          | LH-\$88 | -02  |          | LH     | -S89-0  | 1        | LH      | -589-  | 01            |        | .H-S8   | 9-02  |                | LH-     | S69-0  | 2             |  |
| SAMPLE_NO       |                             | LH-S      | 88-01_ | 1        | LH-S8    | 88-01_ | 2      | LH-S8      | 3-01_              | 3    | LH-3    | S88-02  | 2_1            | LH-S     | \$88-02 | 2_2           | - 1      | LH-S88- | 02_3 |          | LH-    | 589-01  | _1       | LH-:    | 589-0  | 1_2           | L      | 1-\$89  | -02_1 | ł              | LH-S    | 89-02  | _2            |  |
| SAMPLE DATE     |                             | 7/2       | 2/1993 |          | 7/22     | 2/1993 |        | 7/22/      | 1993               |      | 7/      | 22/199  | <del>3</del> 3 | 7/2      | 2/199   | 3             |          | 7/22/19 | 993  |          | 7/.    | 21/1993 | 3        | 77.     | 21/199 | 3             |        | 7/21/1  | 993   |                | 7/2     | 1/1991 | 3             |  |
| DEPTH           |                             | 0.5       | 5-2 Ft |          | 4 -      | 6 Ft   |        | 6-1        | BFt                |      | 0.      | 5 - 2 F | Ft             | 4        | -6 Ft   |               |          | 6-81    | Ft   |          | 0.     | 5-2 Ft  |          | 6       | - 8 FI | 1             |        | 0.5 - 2 | 2 Ft  |                | 6       | - 8 Ft |               |  |
| SAMPLE PURPOSE  |                             | F         | REG    |          | R        | EG     |        | RE         | G                  |      |         | REG     |                |          | REG     |               |          | REG     | 5    |          |        | REG     |          |         | reg    |               |        | REC     | G     |                | F       | REG    |               |  |
| Test Group      | Parameter (Units = mg/kg)   | It(SQL) [ | DIL LO | VQL      | Itt(SQL) | DIELLO | Q VQ # | ult(SQL) D | IL LO              | 2 VQ | It(SQL) | DIL L   | Q VQ           | ult(SQL) | DILI    | LQ VO         | Q ult(SO | QL) DIL | ŁQ   | VQ       | t(SQL) | DIL LO  | ov c     | It(SQL) | DILL   | Q VC          | It(SQL | ) DIL   | LQ    | VQ iul         | it(SQL) | DILI   | Q VQ          |  |
| VOLATILES       | Bromodichloromethane        | 0.005     | 1 <    | U        | 0.005    | 1 <    | U      | 0.005      | 1 <                | U    | 0.005   | 1       | < U            | 0.005    | 1       | < (           | 0.0      | 005 1   | <    | U        | 0.005  | 1 <     | : U      | 0,005   | 1      | < U           | 0.00   | 51      | <     | U              | 0.005   | 1      | <u>v &gt;</u> |  |
| VOLATILES       | Bromoform                   | 0.005     | 1 <    | U        | 0.005    | 1 <    | U      | 0.005      | <                  | U    | 0.005   | 1       | < ป            | 0.005    | 1       | < 8           | 0.0      | 005 t   | <    | U        | 0.005  | 1 <     | : U      | 0.005   | 1      | < U           | 0.00   | 51      | <     | Ų              | 0.005   | 1      | < ប           |  |
| VOLATILES       | Bromomethane                | 0.01      | 1 <    | U        | 0.01     | 1 <    | ម      | 0.01       | <                  | U :  | 0.01    | 1       | < U            | 0.01     | 1       | < U           | J 0      | 01 1    | <    | U        | 0.01   | 1 <     | : U      | 0.01    | 1      | < U           | 0.0    | 1 1     | <     | U              | 0.01    | 1      | < U           |  |
| VOLATILES       | Carbon disulfide            | 0.005     | 1 <    | บ        | 0.005    | 1 <    | : U    | 0.005      | 1 <                | U    | 0.005   | 1       | < ป            | 0.005    | 1       | < U           | J 0.0    | 005 1   | <    | U        | 0.005  | 1 <     | េប       | 0.005   | 1      | < U           | 0.00   | 51      | <     | U              | 0.005   | 1      | < ป           |  |
| VOLATILES       | Carbon tetrachloride        | 0.005     | 1 <    | U        | 0.005    | 1 <    | U      | 0.005      | 1 <                | U :  | 0.005   | 1       | < ប            | 0.005    | 1       | < ປ           | 0.0 L    | 005 1   | <    | U        | 0.005  | 1 <     | : U      | 0.005   | 1      | < U           | 0.00   | 51      | <     | U              | 0.005   | 1      | < ป           |  |
| VOLATILES       | Chlorobenzene               | 0.005     | 1 <    | U        | 0.005    | 1 <    | U      | 0.005      | 1 <                | U    | 0.005   | 1       | < ป            | 0.005    | 1       | < U           | J 0.0    | 005 1   | <    | U        | 0.005  | 1 <     | : U      | 0.005   | 1      | < ປ           | 0.00   | 51      | <     | U              | 0.005   | 1      | < ป           |  |
| VOLATILES       | Chloroethane                | 0.01      | 1 <    | U        | 0.01     | 1 <    | U :    | 0.01       | <                  | U    | 0.01    | 1       | < 1J           | 0.01     | 1       | < U           | J O      | .01 1   | <    | ប        | 0.01   | 1 <     | : U      | 0.01    | 1      | < ប           | 0.0    | 1 1     | <     | U              | 0.01    | 1      | - U           |  |
| VOLATILES       | Chloroform                  | 0.005     | 1 <    | U        | 0.005    | 1 <    | U U    | 0.005      | <                  | U    | 0.005   | 1       | < U            | 0.005    | 1       | < t           | J 0.0    | 005 1   | <    | U        | 0.005  | 1 <     | : U      | 0.005   | 1      | < U           | 0.00   | 51      | <     | U              | 0.005   | 1      | < U           |  |
| VOLATILES       | Chloromethane               | 0.01      | 1 <    | ម        | 0.01     | 1 <    | U :    | 0.01       | <                  | U    | 0.01    | 1       | < U            | 0.01     | 1       | < U           | J O      | .01 1   | <    | U        | 0.01   | 1 <     | : U      | 0.01    | 1      | < U           | 0.0    | 1 1     | <     | U              | 0.01    | 1      | < U           |  |
| VOLATILES       | Chloroprene                 |           |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VOLATILES       | cis-1.2-Dichloroethene      | [         |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VOLATILES       | cis-1.3-Dichloropropene     | 0.005     | 1 <    | U        | 0.005    | 1 <    | : U    | 0.005      | <                  | U :  | 0.005   | 1       | < ป            | 0.005    | 1       | < t           | 0.0      | 005 1   | `<   | U        | 0.005  | 1 <     | : บ      | 0.005   | 1      | < ប           | 0.00   | 51      | <     | U              | 0.005   | 1      | < U           |  |
| VOLATILES       | Dibromochloromethane        | 0.005     | 1 <    | Ú        | 0.005    | 1 <    | ÷ Ū    | 0.005      | <                  | U :  | 0.005   | 1       | < บ            | 0.005    | 1       | < U           | 0.0      | 005 1   | <    | U        | 0.005  | 1 <     | ÷Ų       | 0.005   | 1      | < 13          | 0.00   | 51      | <     | U              | 0.005   | 1      | < U           |  |
| VOLATILES       | Dibromomethane              |           |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VOLATILES       | Dichlorodifluoromethane     | ł         |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VOLATILES       | Ethyl methacrylate          |           |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VOLATILES       | Ethylbenzene                | 0.005     | 1 <    | U        | 0.005    | 1 <    | ÷      | 0.005      | i <                | U    | 0.005   | 1       | < U            | 0.005    | 1       | < 1           | J 0.0    | 005 1   | <    | U        | 0.005  | 1 <     | េម       | 0.005   | 1      | < U           | 0.00   | 51      | <     | U              | 0.005   | 1      | < U           |  |
| VOLATILES       | Hexachlorobutadiene         |           |        | -        |          |        | -      |            |                    | -    |         |         | -              |          |         | -             |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VOLATILES       | ODOMETHANE                  | 1         |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VOLATILES       | ISOBUTYL ALCOHOL            | •         |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VOLATILES       | Isopropybenzene             | ŧ         |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
|                 |                             |           |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VOLATILES       | m,p-Aylenes                 | •         |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VULATILES       | Methacrylonithie            | 0.07      |        |          | 4.05     |        |        | 0.05       |                    |      | 0.05    |         |                | 0.05     |         |               |          |         |      |          | 0.05   |         |          | 0.00    |        |               |        |         |       |                | 0.05    |        | - n           |  |
| VOLATILES       | Methyl Isooutyl Ketone      | 0.05      | 1 <    | 0        | 0.05     | 1 <    | U      | 0.05       | • •                | U    | 0.05    | 1       | < 0            | 0.05     | 1       | < 0           | , ,      | 1.05 1  | ۲.   | U        | 0.05   | 1 4     | 0        | 0.05    | 1      | < 0           | 0.0    | 5 1     | ~     | U              | 0.05    | ł      | < U           |  |
| VOLATILES       | METHYE METHACRYLATE         |           |        |          |          |        |        | 0.005      |                    |      |         |         |                | 0.005    |         |               |          |         |      |          | 0.005  |         |          | 0.005   |        |               | 0.00   |         |       |                | 0.000   |        |               |  |
| VULATILES       | Methylene chloride          | 0.005     | 1 <    | U        | 0.005    | 1 <    | U      | 0.005      | · <                | U    | 0.005   | 1       | < 0            | 0.005    | 1       | < 1           | 0.0      | 005 1   | <    | U        | 0.005  | 1 <     | U        | 0.005   | 1      | < 0           | 0.003  | 5 1     | <     | U              | 0.005   | 1      | < 0           |  |
| VULATILES       | Naphinalene                 | }         |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VOLATILES       | R-BUTYLBENZENE              | 1         |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VOLATILES       | n-PROPYLBENZENE             | }         |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VULATILES       | Pentachioroethane           | 1         |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VULATILES       | p-ISOPROPYLIOLUENE          |           |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VOLATILES       | Propionimie                 |           |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VULATILES       | SEC-BUTYLBENZENE            | 0.005     |        |          |          |        |        |            |                    |      |         |         |                | 0.005    |         |               |          |         |      |          |        |         |          | 0.005   |        |               |        | ~ .     | _     |                | -       |        |               |  |
|                 | Styrene                     | 200.005   | 1 <    | 0        | 0.005    | 1 <    | U      | 0.005      | . <                | U    | 0.005   | 1       | < 0            | 0.005    | 1       | < 0           | .0.0     | 1 600   | ۲.   | U        | C005   | 1 4     | . 0      | 0.005   | •      | < 0           | 0.003  | 5 1     | 5     | 0              | 0.005   |        | < U           |  |
| VULATILES       | tert-BUTYLBENZENE           | 0.000     |        |          | 0.005    |        |        | 0.005      |                    |      | 0.005   |         |                | 0.005    |         |               |          |         |      |          | 0.005  |         |          | 0.005   |        |               |        |         |       |                | 0.000   |        |               |  |
| VOLATILES       | Tetrachioroethene           | 0.005     | 1 <    |          | 0.005    | 1 <    | ម      | 0.005      |                    |      | 0.005   | 1       | < 0            | 0.005    | 1       | < 0           | 0.0      | 105 1   | <    | U.       | 0.005  | 1 4     | U U      | 0.005   | 1      | < 0           | 0.003  |         | ~     |                | 0.005   |        | < 0           |  |
| VOLATILES       | toluene                     | 0.005     | 1 <    | U        | 0.005    | 1 <    | 0      | 0.005      | <                  | . 0  | 0.005   | 1       | < บ            | 0.005    | 1       | < 0           | 0.0      | 005 1   | <    | U        | 0.005  | 1 <     | Ű        | 0.005   | 1      | < 0           | 0.00   | 5 7     | <     | 0              | 0.005   | 1      | < 0           |  |
| VOLATILES       | trans-1,2-Dichloroethene    | 1         |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                |         |        |               |  |
| VULATILES       | trans-1,3-Dichloropropene   | 0.005     | 1 <    | U        | 0.005    | 1 <    | 0      | 0.005      | <                  | U    | 0.005   | 1       | < 0            | 0.005    | 1       | < U           | 0.0      | 005 1   | <    | U        | 0.005  | 1 <     | . 0      | 0.005   | 1      | < 0           | 0.00   | 5 1     | <     | 0 <sup>a</sup> | 0.005   | 1      | < 0           |  |
| VOLATILES       | trans-1,4-Dichloro-2-butene |           |        |          | 0.005    |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          | 0.005   |        |               |        |         |       |                | 0.005   |        |               |  |
| VULATILES       | Inchloroethene              | 0.005     | 1 <    | U        | 0.005    | 1 <    | U      | 0.005      | <ul><li></li></ul> | U    | 0.005   | 1       | < U            | 0.005    | 1       | < ເ           | 0.0      | 005 1   | <    | U        | 0.005  | 1 <     | υ        | 0.005   | 1      | < 0           | 0.00   | 5 1     | <     | U              | 0.005   | 1      | < U           |  |
| VOLATILES       | Inchiorofluoromethane       |           |        |          |          |        |        |            |                    |      |         |         |                |          |         |               |          |         |      |          |        |         |          |         |        |               |        |         |       |                | · · ·   |        |               |  |
| VOLATILES       | Vinyl acetale               | 0.05      | 1 <    | 0        | 0.05     | 1 <    | : U    | 0.05       | <                  | U    | 0.05    | 1       | < U            | 0.05     | 1       | < U           | 1 0      | 05 1    | <    | U        | 0.05   | 1 <     | U :      | 0.05    | 1      | < U           | 0.0    | 5 1     | <     | U              | 0.05    | 1      | < U           |  |
| VOLATILES       | Vinyl chloride              | 0.01      | 1 <    | U        | 0.01     | 1 <    | ម      | 0.01       | t <                | U    | 0.01    | 1       | < U            | 0.01     | 1       | < (           | F 0      | 0.01 1  | <    | U        | 0.01   | 1 <     | U        | 0.01    | 1      | < U           | 0.0    | 1       | <     | U              | 0.01    | 1      | < U           |  |
| VOLATILES       | Xylenes, Total              | 0.005     | 1 <    | <u> </u> | 0.005    | 1 <    | U      | 0.005      | <u> </u>           | U    | 0.005   | 1       | <u>&lt; U</u>  | 0.005    | 1       | <u>&lt; 1</u> | 0.0      | 005 1   | . <  | <u>U</u> | 0.005  | 1 <     | <u>U</u> | 0.005   | 1      | <u>&lt; U</u> | 0.00   | 5 1     | <     | U              | 0.005   | 1      | <u>&lt; U</u> |  |

Footnotes are shown on cover page to Tables Section.



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-89

Concentrations of Chemicals in Soil Samples Associated with Sump 089

| [SUMP] = SUMP089               |                            |                                |                         |                                   |                                |                                |                               |                         |                  |                  |                          |                  | 1410 5 65        | 1110 0.00        | 111 000 01                   |
|--------------------------------|----------------------------|--------------------------------|-------------------------|-----------------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------|------------------|------------------|--------------------------|------------------|------------------|------------------|------------------------------|
| LOCATION _CODE                 |                            | 35SUMP088-SB01                 | 35SUMP088-SB01          | 35SUMP088-SB02                    | 35SUMP088-SB02                 | 35SUMP088-SB02                 | 35SUMP089-SB01                | 35SUMP089-SB01          | 35SUMP089-SB02   | 35SUMP089-SB02   | LH-DL88-01               | LH-DL89-01       | 145-3-28         | LHS-3-29         | LH-\$88-01<br>1 H-\$88-01 OC |
| SAMPLE_NO                      |                            | 35-SMP088-SB01-01<br>0/30/2006 | 35-5MP088-5B01-02       | 35-SMP088-SBU1-02-QC<br>0/20/2006 | 35-5MP088-5802-01<br>9/20/2006 | 33-5MPU88-5802-02<br>9/20/2006 | SUMPU89-58-01-01<br>9/18/2005 | 0/18/2006               | 9/18/2006        | 9/18/2006        | 7/22/1993                | 7/21/1993        | 1/11/1995        | 1/11/1995        | 7/22/1993                    |
| DEPTH                          |                            | 0.5 - 0.5 Ft                   | 7 - 7 Ft                | 7-7 Ft                            | 0.5 - 0.5 Ft                   | 7 - 7 Ft                       | 0 - 0 Ft                      | 0-0Ft                   | 0-0Ft            | 0-0Ft            | 2-4 Ft                   | 2 - 4 Ft         | 0 - 0.5 Ft       | 0-0.5 Ft         | 0.5-2 Ft                     |
| SAMPLE_PURPOSE                 |                            | REG                            | REG                     | FD                                | REG                            | REG                            | REG                           | REG                     | REG              | REG              | REG                      | REG              | REG              | REG              | FD                           |
| Test Group                     | Parameter (Units = mg/kg)  | Result Dil. LO VQ              | Result DIL LQ VO        | Result DIL LQ VQ                  | Result DIL 1Q VQ               | Result DiL LQ VQ               | Result DIL LO VO              | Result DIL LQ VQ        | Result DIL LO VQ | Result DIL LQ VQ | Result Dil LQ VQ         | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ             |
| EXPLOSIVES                     | 1,3,5-Trinstrobenzene      |                                |                         |                                   |                                |                                |                               |                         |                  |                  |                          |                  | 0.22 1 < U       | 0.22 1 < U       |                              |
| EXPLOSIVES                     | 1,3-Dinitrobenzene         |                                |                         |                                   |                                |                                |                               |                         |                  |                  |                          |                  | 0.22 1 < 0       | 0.22 1 < 0       |                              |
| EXPLOSIVES                     | 2,4,6-1 runstrotoluene     |                                |                         |                                   |                                |                                |                               |                         |                  |                  | 033 1 2 11               | 033 1 < 1        | 0.22 1 < 0       |                  | 033 1 < IJ                   |
| EXPLOSIVES<br>EXPLOSIVES       | 2.6-Diatrototene           |                                |                         |                                   |                                |                                |                               |                         |                  |                  | 0.33 1 < 0               | 0.33 1 < U       | 0.24 1 < U       | 0.24 1 < U       | 0.33 1 < U                   |
| EXPLOSIVES                     | 4-Amino-2,6-dinitrotoluene |                                |                         |                                   |                                |                                |                               |                         |                  |                  |                          |                  | 0.46 1 < U       | 0.46 1 < U       |                              |
| EXPLOSIVES                     | нмх                        |                                |                         |                                   |                                |                                |                               |                         |                  |                  |                          |                  | 21 < U           | 21 < U           |                              |
| EXPLOSIVES                     | m-Nitrotofuene             |                                |                         |                                   |                                |                                |                               |                         |                  |                  |                          |                  | 0.93 1 < U       | 0.91 1 < U       |                              |
| EXPLOSIVES                     | Nitrobenzene               |                                |                         |                                   |                                |                                |                               |                         |                  |                  |                          |                  | 0.24 1 < 0       | 0.24 1 < 0       |                              |
| EXPLOSIVES                     | o-Nitrotokiene             |                                |                         |                                   |                                |                                |                               |                         |                  |                  |                          |                  | 281 < 0          | 27 1 < 1         |                              |
| EXPLOSIVES                     | P-Natoribene<br>RDX        | -                              |                         |                                   |                                |                                |                               |                         |                  |                  |                          |                  | 11 < 0           | 0.99 1 < U       |                              |
| EXPLOSIVES                     | Tetrvi                     |                                |                         |                                   |                                |                                |                               |                         |                  |                  |                          |                  | 0.69 1 < 1J      | 0.68 1 < U       |                              |
| METALS                         | Aluminum                   | 2970 t                         | 13900 1                 | 12500 1                           | 3760 1                         | 8440 1                         | 11500 1                       | 11200 1                 | 7730 1           | 9000 1           | 7820 1                   | 8880 t           | 3830 1           | 5740 1           | 13100 1                      |
| METALS                         | Antimony                   | 0.113 1 U                      | 0.0955 1 J Jl.          | 0.12 1 U                          | 0.112 1 U                      | 0.115 1 U                      | 0.0932 1 J Ji.                | 0.114 1 U U.L           | 0.0589 t J JL    | 0.114 1 U        | 31 < ⊎                   | 31 < U           | 9.2 1 < UJ       | 14 1 < UJ        | 31 < U                       |
| METALS                         | Arsenic                    | 2.4 1                          | 1.54 1                  | 2.29 1                            | 1.2 1                          | 2.96 1                         | 0.686 1                       | 0.33 1 J J              | 1.18 1           | 0.149 t J J      | 1 1                      | 2.3 1            | 1.8 1 J          | 72 1 J           | 1.1 1                        |
| METALS                         | Barium                     | 383 1                          | 187 1                   | 186 1                             | 78.6 1                         | 99.8 1                         | 107 1                         | 137 1                   | 77.5 1           | 96.2 1           | 106 1                    | 146 1 < U        | 722 1            | 6/ 7             | 4// 1                        |
| METALS                         | Beryikum                   | 0.22/ 1 J J                    | 1.06 1                  | 1.09 1                            | 0.4// 1                        | 0.922                          | 0.106 1                       | 1.13 I<br>6.119 1 .I .I | 0.461 1          | 0.092 1          | 1120                     | 1 1 4 1          | 092 1 < U        | 141 < U          | 11<0                         |
| METALS                         | Calcium                    | 777 1                          | 578 1                   | 624 1                             | 576 1                          | 530 t                          | 1820 1                        | 452 1                   | 1590 1           | 359 1            | 875 1                    | 993 1            | 491 1            | 1380 1           | 1970 1                       |
| METALS                         | Chromium                   | 9.86 1                         | 12.4 1 JH               | 11.7 1                            | 16.6 1                         | 10.7 1                         | 17.3 1 JH                     | 14.5 1 JH               | 12.1 1 JH        | 9.56 1 JH        | 13.8 1                   | 14.8 1 < U       | 6.7 1 J          | 16.9 1 J         | 13.4 1                       |
| METALS                         | Cobalt                     | 1.7 1                          | 11.8 1 JL               | 12.8 1                            | 2.16 1                         | 12.7 1                         | 9.02 1 JL                     | 14.8 1 JL               | 5.15 1 JL        | 12.3 1 JL        | 8.5 1                    | 8.1 1            | 5.2 1            | 5.8 1            | 10.1 1                       |
| METALS                         | Copper                     | 51.6 1                         | 4.86 1                  | 5.1 1                             | 2.78 1                         | 7.16 1                         | 5.13 1                        | 6.33 1                  | 6.89 1           | 3.93 1           | 2.7 1                    | 3.8 1            | 6.8 1            | 14.9 1           | 8.1 1                        |
| METALS                         | Iron                       | 6330 1                         | 17000 1                 | 17000 1                           | 15600 1                        | 15900 1                        | 14200                         | 20100 5                 | 11800 1          | 9880 1           | 8570 1                   | 9560 1           | 3560 1           | 17400 1          | 12500 1                      |
| METALS                         | Lead                       | 12.3 1 J                       | 18.6 1 JL               | 7.86 1 J                          | 10.7 1 3                       | 7.06 1 J                       | 6.37 1                        | 10.00 T                 | 8.30 i<br>606 t  | t 160 1          | 7.6 I<br>376 1           | 10.4 J<br>50.4 1 | 3.6 i<br>947 1   | 522 1            | 12.4 1                       |
| METALS                         | Magnesium                  | 513 1                          | 636 1                   | 76.3 1                            | 83.4 1                         | 50.8 1                         | 147 1 3                       | 61.6 t J                | 114 1 J          | 47.9 1 J         | 294 1                    | 801 1            | 455 1            | 309 1            | 166 1                        |
| METALS                         | Mercury                    | 0.0244 1 J J                   | 0.3 1 U                 | 0.277 1 U                         | 0.0134 1 J J                   | 0.29 1 U                       | 0.0124 1 3 3                  | 0.294 1 U               | 0.0285 1 J J     | 0.289 1 U        | 0.1 1 < V                | 011 < U          | 0.091 1 < U      | 0.11 1 < U       | 0.1 1 < U                    |
| METALS                         | Nickel                     | 2.98 1                         | 16.2 1                  | 17.2 1                            | 3.58 1                         | 18.4 1                         | 12.3 1                        | 21.7 1                  | 7.16 1           | 15 <b>1</b>      |                          |                  |                  |                  |                              |
| METALS                         | Potassium                  | 150 1                          | 465 1 JH                | 466 1                             | 132 1                          | 429 1                          | 466 1 JH                      | 521 1 JH                | 317 t JH         | 461 1 JH         | 461 1                    | 511 1            | 246 1            | 318 1            | 670 f                        |
| METALS                         | Selenium                   | 0.23 1                         | 0.335 1                 | 0.38 1                            | 0.165 1 J J                    | 0.399 1                        | 0.226 1 U UJL                 | 0.19 ¥ J JL             | 0.119 1 J JL     | 0.227 1 U UJL    | 11 < U                   | 11 < U           | 0.29 1 J         | 0.36 1 J         | 11 < U                       |
| METALS                         | Silver                     | 1.67 1 U                       | 1.85 1 U                | 1.82 1 U                          | 1.73 1 0                       | 1.79 1 U                       | 1.68 1 U                      | 1.81 1 U                | 1.64 1 U         | 1.78 1 U         | 1 1 < V                  | 11 < 0           | 0.92 1 < 0       | 1.4 i < U        | 11 < 0                       |
| METALS                         | Strantium                  | 12.5 I J J                     | 370 1                   | 392 1                             | 11,1 1 3 3                     | 211 1                          | 32,1 1                        | 333 1                   | 23.7 1           | 305 1            | 12.7 1                   | 13 1             | 9.2 1 < U        | 14 1 < U         | 26.7 1                       |
| METALS                         | Thatium                    | 0.0239 1                       | 0.101 1                 | 0.113 1                           | 0.0178 1 J J                   | 0.0697 1                       | 0.0435 1                      | 0.0502 1                | 0.0348 1         | 0.0537 1         |                          |                  | 46.2 1 < U       | 70 t < U         |                              |
| METALS                         | Vanadium                   | 10.9 1                         | 21.3 1 JH               | <b>19.7</b> 1                     | 22.6 1                         | 22.8 1                         | 24.1 1 JH                     | 21.9 1 JH               | 19.7 1 JH        | 14.1 1 JH        |                          |                  |                  |                  |                              |
| METALS                         | Zinc                       | <b>61.6</b> 1                  | 33.5 1 JH               | 35.8 1                            | 12.7 1                         | 41.7 1                         | 24.8 1 JH                     | 57.2 1 JH               | 17.8 1 JH        | 39.2 1 JH        | 13.8 1                   | 175 1            | 21 1             | 265 t            | 47 1                         |
| PERC                           | Perchlorate                | 0.01 1 U                       | 0.0993 10 U             | 0.0986 10 U                       | 0.02 2 U                       | 0.2 20 U                       | 0.04 4 U                      | 0.2 20 U                | 0.02 2 U         | 0.2 20 U         | 555 d I/                 |                  | 0.40 A           |                  | 0.00 4                       |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene     | 0.908 5 1                      | 0.194 1 U               | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |                         |                  |                  | 0.33 1 < U               | 0.33 1 < 0       | 10.43 I < U      | 0.51 1 < 0       | 0.33 1 < 0                   |
| SEMIVOLATILES                  | 1.2-Okchiologenzene        | 0.908 5 0                      | 0.194 I U<br>0.194 t Li | 0.195 1 0                         | 0.923 5 0                      | 0.163 1 0                      |                               |                         |                  |                  | 0.33 1 < U               | 033 1 < U        | 0.43 t < U       | 0.51 1 < U       | 0.33 1 < U                   |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene        | 0.908 5 U                      | 0.194 1 U               | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |                         |                  |                  | 0.33 1 < U               | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U                   |
| SEMIVOLATILES                  | 2,4,5-Trichlomphenol       | 0.908 5 U                      | 0.194 t U               | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |                         |                  |                  | 1.65-1 < U               | 1.65 t < U       | 2.1 1 < U        | 2.5 1 < U        | 1.65 1 < U                   |
| SEMIVOLATILES                  | 2,4,6-Trichtorophenol      | 0.908 5 U                      | 0.194 1 U               | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |                         |                  |                  | 0.33 1 < U               | 0.33 1 < U       | 0.43 t < U       | 0.51 1 < U       | 0.33 1 < 0                   |
| SEMIVOLATILES                  | 2,4-Dichlorophenol         | 0.908 5 U                      | 0.194 1 U               | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |                         |                  |                  | 0.33 t < U               | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < 0       | 0.33 1 < U                   |
| SEMIVOLATILES                  | 2.4-Dimethylphenol         | 0.908 5 U                      | 0.194 1 U               | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |                         |                  |                  | 165 1 < 1                | 165 1 < 1        | 21 1 - 1         | 25 1 4 13        | 1.53 1 < 0                   |
| SEMIVALATILES<br>SEMIVALATILES | 2.4-Dinicophenoi           | 11 2 8000                      | 0.971 1 0               | 0.977 1 0                         | 4.01 5 0                       | 0.320 1 0                      |                               |                         |                  |                  |                          |                  | 0.43 1 < U       | 0.51 1 < 10      |                              |
| SEMIVOLATILES                  | 2.6-Dinitrotoluene         | 0.908 5 U                      | 0.194 1 U               | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |                         |                  |                  |                          |                  | 0.43 1 < U       | 0.51 1 < U       |                              |
| SEMIVOLATILES                  | 2-Chloronaphthalene        | 0.908 5 U                      | 0.194 1 U               | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |                         |                  |                  | 0.33 1 < U               | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U                   |
| SEMIVOLATILES                  | 2-Chlorophenol             | 0.908 5 U                      | 0.194 1 U               | 0.195 ¥ U                         | 0.923 5 U                      | 0.185 1 U                      |                               |                         |                  |                  | 0.33 1 < U               | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U                   |
| SEMIVOLATILES                  | 2-Methylnaphthalene        | 0.908 5 U                      | 0.194 1 U               | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |                         |                  |                  | 0.33 1 < U               | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < 0                   |
| SEMIVOLATILES                  | 2-Methylphenol             | 0.908 5 U                      | 0.194 1 U               | 0.195 1 U                         | 0.923 5 0                      | 0.185 1 0                      |                               |                         |                  |                  | 1.55 1 < 12              | 155 1 < 1        | 21 1 - 11        | 25 1 4 1         | 165 1 < 0                    |
| SEMIVOLATILES<br>SEMIVOLATILES | 2-Nitrophenol              | 4.54 5 U<br>0.008 5 U          | 0.977 1 0               | 0.977 1 0                         | 4.61 5 0                       | 0.926 1 1                      |                               |                         |                  |                  | 0.33 1 < U               | 0.33 1 < U       | 0.43 1 < U       | 0.51 t < U       | 0.33 1 < 0                   |
| SEMIVOLATILES                  | 3.3'-Dichlorobenzidine     | 1.82 5 U                       | 0.388 1 U               | 0.391 1 U                         | 1.85 5 U                       | 0.37 1 U                       |                               |                         |                  |                  | 0.65 1 < U               | 0.65 1 < U       | 0.86 1 < U       | 11 < U           | 0.65 1 < U                   |
| SEMIVOLATILES                  | 3-Nitroaniline             | 4.54 5 U                       | 0.971 1 U               | 0.977 t U                         | 4.61 5 U                       | 0.926 1 U                      |                               |                         |                  |                  | 1.65 1 < ⊍               | 1.65 1 ≺ U       | 2.1 1 < U        | 2.5 t < 1J       | 1.65 1 < U                   |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol | 4.54 5 U                       | 0.971 1 U               | 0.977 1 U                         | 4.61 5 U                       | 0.926 1 U                      |                               |                         |                  |                  | 1.65 1 < U               | 1.65 1 < U       | 2.1 1 < U        | 2.5 1 < ∛        | 1.65 1 < 0                   |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether | 0.908 5 U                      | 0.194 t U               | 0.195 1 U                         | 0.923 5 U                      | 0.185 t U                      |                               |                         |                  |                  | 0.33 1 < U               | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < 0                   |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol    | 0.908 5 U                      | 0.194 1 U               | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |                         |                  |                  | 0.65 1 < 0               | 0.65 1 < U       | 0.43 ] < U       | 0.51 I < U       | 17.05 1 < 17<br>0.66 1 - 11  |
| SEMIVOLATILES                  | 4-UNKYO2RIINE              | 0.908 5 10                     | 0.194 1 U               | 0.195 1 U                         | 0.923 5 U<br>0.921 5 11        | U F 651.0                      |                               |                         |                  |                  | 0.00 I < U<br>8.33 I ∠ H | 0.00 1 < 0       | 0.43 1 < 0       | 0.51 1 < ⊍       | 0.00 1 < 0                   |
| SEMIVOLATILES                  | 4-Methylphenol             | 0.908 5 11                     | 0,194 1 11              | 0.195 1 11                        | 0.923 5 1                      | 0.185 1 U                      |                               |                         |                  |                  | 0.33 1 < U               | 0.33 1 < U       | 0.43 1 < 0       | 0.51 1 < U       | 0.33 1 < U                   |
| SEMIVOLATILES                  | 4-Nitroaniline             | 4.54 5 U                       | 0.971 1 U               | 0.977 t U                         | 4.61 5 U                       | 0.926 1 U                      |                               |                         |                  |                  | 1.65 1 < U               | 1.65 1 < U       | 2.1 1 < U        | 2.5 t < U        | 1.65 1 < ∜                   |
| SEMIVOLATILES                  | 4-Nitrophenol              | 4.54 5 U                       | 0.971 1 U               | 0.977 1 U                         | 4.61 5 U                       | 0.926 1 U                      |                               |                         |                  |                  | 1.65 1 < U               | 1.65 1 < U       | 2.1 1 < U        | 2.5 1 < Ü        | 1.65 1 < U                   |
| SEMIVOLATILES                  | Acenaphthene               | 0.908 5 U                      | 0.194 1 U               | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |                         |                  |                  | 0.33 1 < U               | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < 0                   |
| SEMIVOLATILES                  | Acenaphthylene             | 0.908 5 U                      | 0.194 1 U               | 0.195 1 U                         | 0.923 5 U                      | 0.185 1 U                      |                               |                         |                  |                  | 0.33 1 < U               | 0.33 1 < U       | 0.43 1 < 0       | 0.51 1 < U       | 0.33 1 < U                   |
| SEMIVOLATILES                  | Annracene                  | 0.908 5 U                      | · U.194 1 U             | 0.195 J U<br>A 105 J U            | 0.923 5 U<br>0.923 5 U         | 0.185 1 U                      |                               |                         |                  |                  | 0.33 1 2 11              | 0.33 1 2 11      | 0.43 t ∠ 11      | 0.51 t < 1       | 0.33 1 < ∛1                  |
| CONVOCALES                     | nerentalananarene          | 0.000 0 0                      | 0.124 1 0               | 0.733 1 0 .                       | V.JL0 J U                      | v                              |                               |                         | -                | -                | ···· · · · ·             |                  |                  |                  |                              |

- ( - - )

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-89 Concentrations of Chemicals in Soil Samples Associated with Sump 089

| [SUMP] = SUMP089 |                               |                   |                   |                      |                   |                   | •                |                  | •                |                  |                  |                  |                  |                  |                  |
|------------------|-------------------------------|-------------------|-------------------|----------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                               | 35SUMP088-SB01    | 35SUMP088-SB01    | 35SUMP088-SB02       | 35SUMP088-S802    | 35SUMP088-SB02    | 35SUMP089-SB01   | 35SUMP089-SB01   | 35SUMP089-SB02   | 35SUMP089-SB02   | LH-DL88-01       | LH-DL89-01       | LHS-3-28         | LHS-3-29         | LH-S88-01        |
| SAMPLE_NO        |                               | 35-SMP088-SB01-01 | 35-SMP088-SB01-02 | 35-SMP088-SB01-02-QC | 35-SMP088-SB02-01 | 35-SMP088-SB02-02 | SUMP089-SB-01-01 | SUMP089-SB-01-02 | SUMP089-SB-02-01 | SUMP089-SB-02-02 | LH-DL88-01       | LH-DL89-01       | LHS-3-28         | LHS-3-29         | LH-S88-01 QC     |
| SAMPLE_DATE      |                               | 9/20/2006         | 9/20/2006         | 9/20/2006            | 9/20/2006         | 9/20/2006         | 9/18/2006        | 9/18/2005        | 9/18/2006        | 9/18/2006        | 7/22/1993        | 7/21/1993        | 1/11/1995        | 1/11/1995        | 7/22/1993        |
| DEPTH            |                               | 0.5 - 0.5 Ft      | 7-7 Ft            | 7 - 7 Ft             | 0.5 - 0.5 Ft      | 7 - 7 Ft          | 0 - 0 Ft         | 0 - 0 Ft         | 0-0Ft            | 0 - 0 Ft         | 2 · 4 Ft         | 2 - 4 Ft         | 0 - 0.5 Ft       | 0 - 0.5 Ft       | 0.5 - 2 Ft       |
| SAMPLE_PURPOSE   |                               | REG               | REG               | FD                   | REG               | REG               | REG              | REG              | REG              | REG              | REG              | REG              | REG              | REG              | FD               |
| Test Group       | Parameter (Units = mg/kg)     | Result DIL LQ VQ  | Result DIL LO V   | Q Result DIL LQ VQ   | Result DIL LO VO  | Result DIL LO VO  | Result DIL LQ VO | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO |
| SEMIVOLATILES    | Benzo(a)pyrene                | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.057 1 J        | 0.51 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(b)fluoranthene          | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.26 1 J         | 0.24 1 J         | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(ghi)perylene            | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(k)fluoranthene          | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.069 1 J        | 0.14 1 J         | 0,33 1 < U       |
| SEMIVOLATILES    | Benzoic Acid                  | 4.54 5 U          | 0.971 1 U         | 0.977 1 U            | 4.61 5 U          | 0.926 1 U         |                  |                  |                  |                  | 1.65 1 < U       | 1.65 1 < U       | 2.1 1 < U        | 2.5 1 < U        | 1.65 1 < U       |
| SEMIVOLATILES    | Benzyl Alcohol                | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 V         | 0.185 1 U         |                  |                  |                  |                  | 0.65 1 < U       | 0.65 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane    | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 10.33 1 < U      | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether       | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether   | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate    | 0:908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Butyl benzyi phthalate        | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 t < U       |
| SEMIVOLATILES    | Chrysene                      | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.43 t < U       | 0.51 1 < Ü       | 0.33 1 < U       |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene        | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < ∜       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Dibenzofuran                  | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < 반       | 0.33 1 < 0       |
| SEMIVOLATILES    | Diethvi ohthalate             | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Dimethyl phthalate            | 0.908 5 U         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 f < U       | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | di-n-Butvl phthalate          | 0.908 5 1         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | di-n-Octvi phthalate          | 0.908 5 1         | 0.194 1 U         | 0.195 1 U            | 0.923 5 U         | 0.185 1 0         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < 0       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Fluoranthene                  | 0.908 5 1         | 0.194 1 U         | 0.195 1 U            | 0.923 5 0         | 0.185 1 U         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.43 1 < U       | 0.087 1 J        | 0.33 1 < U       |
| SEMIVOLATILES    | Fluorene                      | 0.908 5 1         | 0.194 1 1         | 0195 1 U             | 0.923 5 U         | 0.185 1 ()        |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Herachlomheozeoe              | 0.908 5 1         | 0.194 1 1         | 0.195 1 ป            | 0.923 5 U         | 0185 1 1/         |                  |                  |                  |                  | 0.33 t < U       | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < U       | 0.33 1 < 13      |
| SEMIVOLATILES    | Herachlorobutadiene           | 0.908 5 11        | 0.194 1 1         | 0.195 1 11           | 0.923 5 U         | 0.185 1 1/        |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.43 1 < U       | 0.51 1 < 1       | 0.33 1 < U       |
| SEMIVOLATILES    | Hevachlomouclonentadiene      | 0.000 0 0         | 0 194 1 11        | 0.195 1 1            | 0.923 5 11        | 0.185 1 13        |                  |                  |                  |                  | 0.33 t < 1i      | 033 1 < U        | 043 1 < U        | 051 1 < 1        | 0.33 1 < 1       |
| SEMIVOLATILES    | Herachomethane                | 0.908 5 11        | 0.194 1 U         | 0.195 1 13           | 0.923 5 11        | 0185 1 1          |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.43.1 < U       | 0.51 1 < 1       | 0.33 1 < U       |
| SEMIVOLATILES    | Indeno(1.2.3.cri)pyrene       | 0.000 0 0         | 0.194 1 1         | 0.195 1 U            | 0.023 5 11        | 0.185 1 1         |                  |                  |                  |                  | 0.33 1 < 11      | 0.33 1 < 1       | 043 1 c ll       | 0.51 1 < 1       | 0.33 1 < U       |
| SEMIVOLATILES    | Isonhomne                     | 0.908 5 11        | 0.194 1 11        | 0.105 1 81           | 0.923 5 11        | 0.105 1 0         |                  |                  |                  |                  | 033 1 < 1        | 0.33 1 < 1       | 043 1 < U        | 051 1 < 1        | 0.33 1 < 11      |
| SEMIVOLATILES    | Nanhthalene                   | 0.000 5 11        | 0.107 7 U         | 0.105 1 1/           | 0.923 5 11        | 0.107 1           |                  |                  |                  |                  | 033 1 4 1        | 0.33 1 < 11      | 043 1 < 1        | 0.51 t < U       | 0.33 1 < 1       |
| SEMIVOLATILES    | Nitrobenzene                  | 0.000 0 0         | 0.101 1 0         | 0.105 1 U            | 0.923 5 11        | 0.185 1 11        |                  |                  |                  |                  | 0.33 1 < 11      | 0.33 1 < 1       | 043 1 < U        | 051 1 < 1        | 0.33 1 < 0       |
| SEMIVOLATILES    | n-Nitroso-di-n-ormavlamine    | 0.000 5 1         | 0.194 1 11        | 0.105 1 0            | 0.923 5 11        | 0.185 1 18        |                  |                  |                  |                  | 0.33 1 < 17      | 033 1 < 1        | 043 1 < 1        | 0.51 1 < 11      | 0.33 1 < 1       |
| SEMIVOLATU ES    | n-Nitrosofinhem/smine         | 0.000 5 0         | 0.104 1 1         | 0.195 1 []           | 0.023 5 11        | 0.185 1 14        |                  |                  |                  |                  |                  | 0.33 1 4 1       | 0.43 1 < U       | 0.51 1 4 1       |                  |
| SEMIVOLATILES    | Pantacharophanol              | 454 5 11          | 0.134 1 0         | 0.135 1 0            | 461 5 11          | 0.026 1 13        |                  |                  |                  |                  | 165 1 2 11       | 165 1 < U        | 21 1 4 1         | 25 1 4 11        | 165 1 < 1        |
| SEMINOLATILES    | Phananthrene                  | 0.002 5 11        | 0.3/1 1 1         | 0.337 1 0            | -1.05 J U         | 0.320 0 0         |                  |                  |                  |                  | 033 t < 11       | A33 1 < H        | 043 1 2 1        | 051 1 4 1        | 033 1 < 1        |
| SCHIVOLATICCO    | Phone                         | 0.908 5 1         | 0.194 1 U         | 0.105 1 1            | 0.523 3 0         | 0.103 1 0         |                  |                  |                  |                  | 0.00 1 4 14      | 0.00 1 4 11      | 0.43 1 < 0       | 0.51 1 4 1       | 0.22 1 4 11      |
| CEMB/OLATILES    | Philippi                      | 0.908 5 0         | 0.194 F U         | 0.193 1 0            | 0.923 5 0         | 0.105 1 1         |                  |                  |                  |                  | 0.00 1 < 0       | 0.00 1 < 0       | 0.43 1 < 0       | 0.01 1 < 0       | 0.33 1 < 0       |
| SEMIFULATILES    | Pyrene                        | 0.908 5 0         | 0.194 1 U         | U.195 1 U            | 0.923 5 0         | U.185 I U         |                  | 0.00107 1 11     |                  | 0.00467 1 21     | 0.33 1 < 0       | 0.33 1 < 0       | 0.43 1 4 0       | 0.015 1          | 0.33 1 4 0       |
| VULATILES        | 1,1,1,2-1 ellacitorio ellarie |                   | 0.00518 F U       | 0200476 F U          |                   | 0.00451 1 0       |                  | 0.00496 1 0      |                  | 0.00407 1 0      | 0.000            | 0.005 1          | 0.013 1 < 0      | 0.010 1 < 0      | 0.005 4 - 44     |
| VOLATILES        | 1,1,1-1nchkiroethane          | 1                 | 0.00518 1 U       | 0.00476 7 0          |                   | 0.00451 1 U       |                  | 0.00496 1 0      |                  | 0.00467 1 0      | 0.005 1 < 0      | 0.005 F < 0      | 0.007 1 < 0      | 0.008 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | 1,1,2,2-1 etrachionoethane    | [                 | 0.00518 1 U       | 0.00476 1 0          |                   | 0.00451 1 U       |                  | 0.00496 1 0      |                  | 0.00407 1 0      | 0.005 i < 0      | 0.005 4 < 0      | 0.007 1 < 0      | 0.008 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | 1,1,2-1 nchioroethane         |                   | 0.00516 1 U       | 0.00476 1 0          |                   | 0.00453 1 U       |                  | 0.00496 1 0      |                  | 0.00467 1 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.007 1 < 0      | 0.008 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | 1,1-Dichloroettane            | 1                 | 0.00518 1 U       | 0.004/6 1 0          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.007 1 < 0      | 0.008 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | 1,1-Dichloroethene            | ]                 | 9.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 7 0      |                  | 0.00467 1 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.007 1 < 0      | 0.008 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | 1,1-Uxchioropropene           |                   | 0.00518 1 U       | 0.00476 T U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 0      |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2,3-Trichlorobenzene        |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2,3-Trichloropropane        |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  | 0.013 1 < 0      | 0.015 1 < U      |                  |
| VOLATILES        | 1,2,4-Trichlorobenzene        |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2,4-Trimethylbenzene        |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 0      |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2-Dibromo-3-chloropropane   |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  | 0.026 1 < 0      | 0.031 1 < U      |                  |
| VOLATILES        | 1,2-Dibromoethane             |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  | 0.026 t < U      | 0.031 1 < U      |                  |
| VOLATILES        | 1.2-Dichlorobenzene           |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 0      |                  |                  |                  |                  |                  |
| VOLATILES        | 1,2-Dichloroethane            |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < 0      | 0.008 1 < U      | 0.005 1 < 0      |
| VOLATILES        | 1,2-Dichloroethene            |                   |                   |                      |                   |                   |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      | 0.008 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichloropropane           |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00495 1 U      |                  | 0.00467 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      | 0.008 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dimethybenzene (o-Xylene) | 1                 | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 t U      |                  |                  |                  |                  |                  |
| VOLATILES        | 1,3,5-Trimethylbenzene        |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 t U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES        | 1,3-Dichlorobenzene           |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES        | 1,3-Dichloropropane           |                   | 0.00518 1 U       | 0.00476 ¥ U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES        | 1,4-Dichlorobenzene           |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES        | 2,2-Dichloropropane           |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 🔱       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES        | 2-Butanone                    | 1                 | 0.0104 I U        | 0.00952 1 U          |                   | 0.00903 1 U       |                  | 0.00991 1 U      |                  | 0.00935 1 U      | 0.05 1 < U       | 0.05 1 < U       | 0.013 1 < U      | 0.015 1 < U      | 0.05 1 < U       |
| VOLATILES        | 2-Chloroethyl vinyl ether     |                   | 0.0104 f U        | 0.00952 1 U          |                   | 0.00903 1 U       |                  | 0.00991 1 U      |                  | 0.00935 1 U      | 0.01 1 < U       | 0.01 1 < U       | 0.013 1 < U      | 0.015 1 < U      | 0.01 1 < U       |
| VOLATILES        | 2-Chlorototuene               |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES        | 2-Hexanone                    | ĺ                 | 0.0104 1 U        | 0.00952 1 U          |                   | 0.00903 1 U       |                  | 0.00991 1 U      |                  | 0.00935 1 U      | 0.05 1 < U       | 0.05 1 < U       | 0.013 1 < U      | 0.015 1 < U      | 0.05 1 < U       |
| VOLATILES        | 2-Propenai                    |                   |                   |                      |                   |                   |                  |                  |                  |                  |                  |                  | 0.66 t < U       | 0.77 1 < U       |                  |
| VOLATILES        | 4-Chlorotoluene               |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES        | Acetone                       |                   | 0.0104 1 U        | 0.00952 1 U          |                   | 0.00475 1 J J     |                  | 0.00991 1 U      |                  | 0.00935 1 U      | 0.1 1 < U        | 0.1 1 < U        | 0.013 1 < U      | 0.015 1 < U      | 0.1 1 < U        |
| VOLATILES        | Acetonitrile                  | · ·               |                   |                      |                   |                   |                  | -                |                  | -                | -                |                  | 0.13 1 < U       | 0.15 1 < U       |                  |
| VOLATILES        | Acrylonitrile                 |                   |                   |                      |                   |                   |                  |                  |                  |                  |                  |                  | 0.13 1 < U       | 0.15 1 < U       |                  |
| VOLATILES        | Allyl chloride                |                   |                   |                      |                   |                   |                  |                  |                  |                  |                  |                  | 0.013 1 < U      | 0.015 1 < 1      |                  |
| VOLATILES        | Benzene                       | 1                 | 0.00518 1 1       | 0.00476 1 U          |                   | 0.00451 1 1       |                  | 0.00496 1 U      |                  | 0.00467 1 U      | 0.005 1 < U      | 0.005 1 < 1      | 0.011 1          | 0.008 1 < 1/     | 0.005 1 < 1      |
| VOLATILES        | Bromobenzeae                  | ļ                 | 0.00518 1 1       | 0.00476 1 U          |                   | 0.00451 1 1       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  | · · · ·          | · .              |                  |                  |
|                  |                               | 1                 |                   |                      |                   |                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Oata Evaluation Report
 Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-89 Concentrations of Chemicals in Soil Samples Associated with Sump 089

| [SUMP] = SUMP089       |                             |                   |                   |                      |                   |                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|------------------------|-----------------------------|-------------------|-------------------|----------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE         |                             | 35SUMP088-SB01    | 35SUMP088-SB01    | 35SUMP088-SB02       | 35SUMP088-SB02    | 35SUMP088-SB02    | 35SUMP089-SB01   | 35SUMP089-SB01   | 35SUMP089-SB02   | 35SUMP089-SB02   | LH-DL88-01       | LH-DL89-01       | LHS-3-28         | LHS-3-29         | LH-S88-01        |
| SAMPLE_NO              |                             | 35-SMP088-SB01-01 | 35-SMP088-SB01-02 | 35-SMP088-SB01-02-QC | 35-SMP088-SB02-01 | 35-SMP088-SB02-02 | SUMP089-SB-01-01 | SUMP089-SB-01-02 | SUMP089-SB-02-01 | SUMP089-SB-02-02 | LH-DL88-01       | LH-D1.89-01      | LHS-3-28         | LHS-3-29         | LH-S88-01 QC     |
| SAMPLE_DATE            |                             | 9/20/2006         | 9/20/2006         | 9/20/2006            | 9/20/2006         | 9/20/2006         | 9/18/2005        | 9/18/2006        | 9/18/2006        | 9/18/2006        | 7/22/1993        | 7/21/1993        | 1/11/1995        | 1/11/1995        | 7/22/1993        |
| Depth                  |                             | 0.5 - 0.5 Ft      | 7 - 7 Ft          | 7 - 7 Ft             | 0.5 - 0.5 Ft      | 7-7Ft             | 0-0Ft            | 0-0Ft            | 0 ~ 0 Ft         | 0-0Ft            | 2 - 4 Ft         | 2-4 Ft           | 0-0.5 Ft         | 0 - 0.5 Ft       | 0.5 - 2 F1       |
| SAMPLE_PURPOSE         |                             | REG               | REG               | FD                   | REG               | REG               | REG              | REG              | REG              | REG              | REG              | REG              | REG              | REG              | FD               |
| Test Group             | Parameter (Units = mg/kg)   | Result DiL LQ VQ  | Result DIL LO VO  | Result Dil LQ VQ     | Result DiL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ | Result Dil LQ VQ | Result DfL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VO | Result DIL LO VO |
| VOLATILES              | Bromochloromethane          |                   | 0.00518 1 U       | 0_00476 1 U          |                   | 0.00451 1 U       |                  | 0.00495 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES              | Bromodichloromethane        |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      | 0.008 1 < U      | 0.005 1 < 0      |
| VOLATILES              | Bromoform                   |                   | 0.00518 t U       | 0.00476 1 U          |                   | 0.90451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < 1      | 0.008 1 < U      | 0.005 1 < 0      |
| VOLATILES              | Bromomethane                |                   | 0.0104 t U        | 0.00952 1 U          |                   | 0.00903 1 U       |                  | 0.00991 1 U      |                  | 0.00935 1 U      | 0.01 1 < U       | 0.01 1 < U       | 0.013 1 < U      | 0.015 1 < U      | 0.01 f < U       |
| VOLATILES              | Carbon disulfide            | -                 | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      | 0.008 1 < U      | 0.005 1 < U      |
| VOLATILES              | Carbon tetrachloride        | 2                 | 0.00518 f U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 0      |                  | 0.00467 1 0      | 9.005 1 < 0      | 0.005 1 < 0      | 0.007 1 < 0      | 0.008 1 < 0      | 0.005 1 < 0      |
| VOLATILES              | Chiorobenzene               |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.007 1 < U      | 0.008 1 < 0      | 0.005 3 < 0      |
| VOLATILES              | Chloroethane                | 2                 | 0.0104 1 U        | 0.00952 1 U          |                   | 0.00903 1 0       |                  | 0.00991 1 U      |                  | 0.00935 1 U      | 0.01 1 < 0       | 0.01 1 < 0       | 0.013 1 < U      | 0.015 1 < 0      | 0.01 3 < 0       |
| VOLATILES              | Chloroform                  |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.007 1 < U      | 0.008 1 < 0      | 9.005 1 < 0      |
| VOLATILES              | Chloromethane               |                   | 0.0104 3 U        | 0.00952 1 0          |                   | 0.00903 1 0       |                  | 0.00991 1 0      |                  | 0.00935 1 0      | 0.01 1 < 0       | 0.01 1 < 0       | 0.013 1 < 0      | 0.015 1 < 0      | 0.01 3 < 0       |
| VOLATILES              | Chloroprene                 |                   |                   |                      |                   |                   |                  |                  |                  |                  |                  |                  | 0.13 1 < 0       | 0.15 1 < 0       |                  |
| VOLATILES              | cis-1,2-Dichloroethene      |                   | 0.00518 1 U       | 0.00476 1 0          |                   | 0.00451 1 0       |                  | 0.00496 1 0      |                  | 0.00467 1 0      |                  | A 6775 ( ) )     |                  | 0.000 4          | 0.000            |
| VOLATILES              | cis-1,3-Dichloropropene     |                   | 0.00518 1 U       | 0.00476 1 0          |                   | 0.00451 1 0       |                  | 0.00496 1 0      |                  | 0.00467 1 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.007 1 < 0      | 0.008 1 < 0      | 0 > 1 200.0      |
| VOLATILES              | Dibromochloromethane        |                   | 0.00518 1 0       | 0.00476 1 0          |                   | 0.00451 1 0       |                  | 0.00495 1 0      |                  | 0.00467 1 0      | 0.005 1 < 0      | 0.005 7 < 0      | 0.007 1 < 0      | 0.008 1 < 0      | 9.005 I C U      |
| VOLAHLES               | Dibromomethane              |                   | 0.00518 1 0       | 0.00476 1 0          |                   | 0.00451 1 0       |                  | 0.00496 1 0      |                  | 0.00467 1 0      |                  |                  | 0.026 1 < 0      | 0.031 1 - 11     |                  |
| VOLATILES              | Dichlorodifluoromethane     |                   | 0.0104 1 0 0J     | 0.00952 1 0          |                   | 0.00903 1 0 03    |                  | 0.00991 1 0      |                  | 0.00935 1 0      |                  |                  | 0.026 1 < 0      |                  |                  |
| VOLATILES              | Ethyl methacrylate          |                   |                   |                      |                   | 0.00154 4 11      |                  | 0.00100 1 11     |                  | 0.00407 1 11     | 0.005 5          | 0.000 1          | 0.020 1 4 0      |                  | 0.000 1 - 11     |
| VOLATILES              | Ethylbenzene                |                   | 0.00518 1 0       | 0.00476 1 0          |                   | 0.00451 1 1       |                  | 0.00496 1 0      |                  | 0.00467 1 U      | 0.000 : < 0      | 0.005 1 2 0      |                  | 0.008 1 < 0      | 0.005 1 < 0      |
| VOLATILES              | Hexachlorobutaciene         |                   | 0.00518 1 0       | 0.00476 I U          |                   | 0.00451 1 0       |                  | 0.00496 t U      |                  | 0.00407 1 0      |                  |                  | 0.012 1 2 11     | 0.015 1 / 11     |                  |
| VULATILES              | IODOMETHANE                 |                   |                   |                      |                   |                   |                  |                  |                  |                  |                  |                  | 26 1 4           | 31 1 4 11        |                  |
| VOLATILES              | ISOBUTIL ALCOHOL            |                   | 0.00510 + 11      | 0.00476 1 11         |                   | 0.00451 5 15      |                  | 0.00406 3 11     |                  | 0.00467 1 13     |                  |                  | 2.0 1 < 0        | 3.1 1 2 0        |                  |
| VOLATILES              | sopropyidenzene             |                   | 0.00510 1 U       | 0.00476 1 U          |                   | 0.00401 1 1       |                  | 0.00490 1 0      |                  | 0.00102 1 7 8    |                  |                  |                  |                  |                  |
| VULATILES              | m,p-Aylenes                 |                   | 0.00310 1 0       | 0.00476 1 0          |                   | 0.00451 1 0       |                  | 0.00490 1 0      |                  | 0.00123 1 3 5    |                  |                  | 0.026 1 2 1      | 0.031 1 2 11     |                  |
| VOLATILES              | Mediacrykosilone            |                   | 0.010/ 1 11       | 0.00052 1 11         |                   | 0.00002 5 14      |                  | 8 00001 1 H      |                  | 6.00035 t H      | NOS 1 / H        | 0.05 t c II      | 0.020 1 C U      | 0.001 1 2 1      |                  |
| VOLATILES<br>VOLATILES |                             |                   | 0.0104 1 0        | 0.00332 1 0          |                   | 0.00505 1 0       |                  | 0.00351 1 0      |                  | 0.00503 1 0      | 0.05 1 2 0       | 0.30 1 2 0       | 0.026 1 < 1)     | 0.031 1 < 1      |                  |
| VOLATILES              | Methilles chloride          |                   | 0.00519 1 11      | 0.00476 1 H          |                   | 0.00451 1 1)      |                  | 2 00496 1 15     |                  | 0.00467 1 11     | 9005 1 < U       | 0.005 1 < U      | 6-007 1 c U      | 0.008 1 < 11     | 0-005 t < U      |
| VOLATEES               | Alanhthalene                |                   | 0.00010 1 0       | 0.00952 1 11         |                   | 0.00903 1 1       |                  | 0.00991 1 []     |                  | 0.00935 1 U      |                  |                  |                  |                  |                  |
| VOLATILES              | n-BITYI BENZENE             |                   | 0.00518 1 17      | 0.00476 1 1/         |                   | 0.00451 1 1       |                  | 0.00496 1 U      |                  | 0.09457 1 U      |                  | -                |                  |                  |                  |
| VOLATRES               | p-PROPYLBENZENE             |                   | 0.00518 1 10      | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATEES               | Pentachiomethane            |                   |                   |                      |                   |                   |                  |                  |                  |                  |                  |                  | 0.026 t < U      | 0.031 1 < U      |                  |
| VOLATILES              | p-ISOPROPYLTOLUENE          |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES              | Provionitrile               |                   |                   |                      |                   |                   |                  |                  |                  |                  |                  |                  | 0.068 1 < U      | 0.077 1 < U      |                  |
| VOLATILES              | sec-BUTYLSENZENE            |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES              | Styrene                     |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      | 0.008 1 < U      | 0.005 1 < U      |
| VOLATILES              | ten-BUTYLBENZENE            |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES              | Tetrachloroethene           |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 t < U      | 0.008 1 < U      | 0.005 1 < U      |
| VOLATILES              | Toluene                     |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      | 0.005 1 < U      | 0.005 t < U      | 0.007 t < U      | 0.008 1 < U      | 0.005 1 < U      |
| VOLATILES              | trans-1,2-Dichloroethene    |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      |                  |                  |                  |                  |                  |
| VOLATILES              | trans-1,3-Dichloropropene   |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      | 0.005 t < U      | 0.005 t < U      | 0.007 t < U      | 0.008 1 < U      | 0.005 1 < 년      |
| VOLATILES              | trans-1,4-Dichloro-2-butene |                   |                   |                      |                   |                   |                  |                  |                  |                  |                  |                  | 0.026 1 < U      | 0.031 1 < U      |                  |
| VOLATILES              | Trichloroethene             |                   | 0.00518 1 U       | 0.00476 1 U          |                   | 0.00451 1 U       |                  | 0.00496 1 U      |                  | 0.00467 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      | 0.008 1 < U      | 0.005 1 < ∜      |
| VOLATILES              | Trichlorofluoromethane      |                   | 0.0164 1 U        | 0.00952 1 U          |                   | 0.00903 1 U       |                  | 0.00991 1 12     |                  | 0.00935 t U      |                  |                  | 0.013 1 < U      | 0.015 1 < U      |                  |
| VOLATILES              | Vinyl acetate               |                   | 0.0104 1 U UJ     | 0.00952 1 U UJ       |                   | 0.00903 1 U UJ    |                  | 0.00991 1 U      |                  | 0.00935 1 U      | 0.05 1 < U       | 0.05 t < U       | 0.013 1 < U      | 0.015 1 < U      | 0.05 1 < U       |
| VOLATILES              | Vinyl chloride              |                   | 0.0104 1 U        | 0.00952 1 U          |                   | 0.00903 1 U       |                  | 0.00991 1 U      |                  | 0.00935 1 U      | 0.01 t < U       | 0.01 1 < U       | 19.013 1 < U     | 0.015 1 < U      | 0.01 1 < U       |
| VOLATILES              | Xylenes, Total              |                   |                   |                      |                   |                   |                  |                  |                  |                  | 0.005 1 < U      | 0.005 t < U      | 0.007 1 < U      | 0.008 1 < U      | 0.005 1 < U      |
|                        |                             |                   |                   |                      |                   |                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-89

of Chamicale in Soil Samples Associated with Sump 089 . . . . . . .

| ISHMPI - SHMPORG |  |                 | Concent               | rations of Chen  | incais in son sai | iipies Associateu | i wiru antiih noa |                   |                   |                  |                      |
|------------------|--|-----------------|-----------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|----------------------|
| LOCATION CODE    |  | 14.588.01       | 14-588-01             | 1 14-588-01      | 1 H-588-02        | 1 H-S88-02        | 18-588-02         | H-S89-01          | 18-589-01         | 1H-\$89-02       | H-S89-02             |
| SAMPLE NO        |  | EH-S99.01 1     | H-S88-01 2            | 14-588-01 3      | 1H-S88-02 1       | 18-588-02 2       | 14-588-02.3       | LH-S89-01 1       | 1H-S89-01_2       | 18-589-02 1      | 1H-S89-02_2          |
| CAND C DATE      |  | 7/00/1002       | 7/22/1003             | 7/22/1003        | 7/22/1003         | 7/22/1993         | 7/22/1903         | 7/21/1993         | 7/21/1993         | 7/21/1993        | 7/21/1993            |
| DCDTU            |  | 0.5 - 2 Et      | 1/2019355<br>A - 6 Ft | 6 - 8 Ft         | 05-2Ft            | 4-6Ft             | 6-85              | 05-25             | 6-8 Ft            | 05-2Ft           | 6-8 Ft               |
|                  |  | 0.3 - 2 Fi      | 9-014                 | DCC              | DEC.              | REG               | REG               | REC               | REG               | BEG              | REG                  |
| SAMPLE_FUNFUSE   | Doministry (Linite - mailtin)  |                 |                       |                  | Comult Dill 10 10 | Provit Dill LO MO |                   | Recuit Dill 10 VO | Regult DIL 10 1/0 | Recult OIL LO VO | Reput Dil (O VO      |
| Test Group       | Parameter (Units = mgrkg)  | Hesui DIL LO VO | HESUR DIL LU VU       | nesua Dil Luz Vu | MESUM DIC LO VO   | MESURI DIL LO VO  | RESUR DIL 20 YO   | Hesua DIL LOI VQ  | HESDE DIE LO VO   | ACOULD DAL LO YO | HOSUN DAL LOS VO     |
| EXPLOSIVES       | 1,3,5-Inneropenzene  | 1               |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| EXPLOSIVES       | 1,3-Dharobenzene   |                 |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| EXPLOSIVES       | 2.4.6-1 mitrolouene  |                 |                       |                  |                   |                   |                   |                   | <b>A A A A</b>    |                  | 0.00 x               |
| EXPLOSIVES       | 2.4-Unstrotoluene  | 0.33 1 < U      | 0.33 1 < 0            | 0.33 1 < 0       | 0.33 7 < 0        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0       | 0.33 1 < 0           |
| EXPLOSIVES       | 2,6-Dinitrotoluene   | 0.33 1 < U      | 0.33 1 < U            | 0.33 t < U       | 0.33 t < U        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0       | 0.33 1 < 0           |
| EXPLOSIVES       | 4-Amino-2.6-dinitrototuene   |                 |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| EXPLOSIVES       | НМХ  |                 |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| EXPLOSIVES       | m-Nitrotaluene   |                 |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| EXPLOSIVES       | Nipobenzene  | ļ               |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| EXPLOSIVES       | o-Nitrotoluene   |                 |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| EXPLOSIVES       | p-Nitrotoluene   |                 |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| EXPLOSIVES       | RDX  |                 |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| EXPLOSIVES       | Tetryl   |                 |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| METALS           | Aluminum   | 13500 1         | 21200 1               | 18500 1          | 12800 1           | 40800 1           | 23600 1           | 12800 1           | 19000 1           | 8950 1           | 18500 1              |
| METALS           | Antimony   | 31 < 11         | 31 < 1                | 3 1 < 13         | 31 < 0            | . 3 t < U         | 3.6 1             | 52 1 < U          | 3 t < U           | 31 < U           | 31 < U               |
| METALS           | Arsenic  | 12 1            | 2 1                   | 19 1             | 17 1              | 11 < 0            | 13 1              | 23.1 1            | 3.2 1             | 2.7 1            | 3.4 t                |
| METALS           | Barium   | 304 1           | 01 A 1                | 128 1            | 104 1             | 202 1             | 348 1             | 111 1 < 0         | 130 1 < 0         | 108 1 < 1/       | 121 1 < U            |
| METALS           | Bandium  |                 | 51.5                  | 120 1            |                   | 202 1             |                   |                   |                   |                  |                      |
| METALO           | Codmine  |                 |                       | 1 1 . 11         | 1 1 2 11          | 1 1 - 11          | 1 1 <i>2</i> H    | 15 1              | 1 1 2 11          | 1 1 2 11         | 1 1 2 11             |
|                  | Colorer  |                 | יו < ט<br>1000 י      | i ( < ∜<br>000 † | 1 I S U .         | 1 I < U           | 2760 1            | 1500 1            | 401 1             | 1/196 1          | 1910 1               |
| METALS           |  | 2430 7          | 1020 1                | 692 t            | 10.0              | 3000 I            | 2/00 1            | 1050 L            | 101 L             | 1 100 1          | 181 4 . 11           |
| METALS           | Chromium   | 14.1            | 31.5 1                | 18.1             | 10.3 1            | 28.0 (            | 20.8              | 10.4 I < U        | 17.4 4 < U        | 12.7 1 < 0       | 10.1 2 < U<br>10.2 1 |
| METALS           | Cobalt   | 11.7 1          | 10.6 1                | 23.6 1           | \$1.2 1           | 10.4              | 18.3 1            | 11.6 1            | 11.4              | 8./ 1            | 19,2 3               |
| METALS           | Copper   | 9.1 1           | 4.9 1                 | 9.5 1            | 5.1 1             | 7.6 1             | 7.3 1             | 7.4 1             | 6.9 1             | 5.4 1            | 9.7 1                |
| METALS           | Iron   | 17900 1         | 25400 1               | 22000 1          | 17700 1           | 22400 1           | 20900 1           | 14400 1           | 16900 1           | 12300 1          | 20500 1              |
| METALS           | Lead   | 10.1 1          | 9.7 1                 | 19.2             | 5 1               | 6.8 1             | 13.6 1            | 25.9 1            | 10 1              | 6.9 1            | 8.1 1                |
| METALS           | Magnesium  | 1050 1          | 887 1                 | 2170 1           | 666 1             | 2400 1            | 2410 1            | 816 1             | 2090 1            | 838 1            | 2560 1               |
| METALS           | Manganese  | 129 1           | 150 1                 | 133 1            | 361 1             | 43.7 1            | 69.5 1            | 544 1             | 91 1              | 393 1            | 62 1                 |
| METALS           | Mercury  | 0.1 1 < U       | 0.1 1 < U             | 0.1 t < U        | 0.1 1 < U         | 0.1 1 < U         | 0.1 1 < U         | 0.1 1 < U         | 0.1 1 < U         | 0.1 1 < U        | 0.1 1 < U            |
| METALS           | Nickel   |                 |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| METALS           | Polassium  | 754 1           | 931 1                 | 1120 1           | 622 1             | 1870 1            | 1340 1            | 900 1             | 1440 1            | 623 1            | 1350 1               |
| METALS           | Selenium   | 11 < U          | 11 < 0                | 1 î < U          | 11 < U            | 1 1 < 1           | 1 t < U           | 11 < U            | 11 < U            | 11<1             | 11 < U               |
| METALS           | Silver   | 11 < 1          | 11 < U                | 11<1             | 11 < U            | 11<1              | 11<1              | 11 < U            | 11 < U            | 1 <b>1</b> < U   | 11 < U               |
| METALS           | Sodium   |                 |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| METALS           | Strontium  | 264 1           | 14 1                  | 315 1            | 148 1             | 479 1             | 51.1 1            | 128 1             | 224 1             | 19.7 1           | 39.3 1               |
| METALS           | Thallium   |                 |                       | 0.0              |                   |                   |                   |                   | •====             |                  |                      |
|                  | Vanadium   |                 |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| METALO           | 7 at a di (/11)  | 45.1            | 20.4 *                | 70.0 1           | ED A 1            | <i></i>           | £0.0 t            | 516 1             | 55 A 1            | 23.6 1           | 526 1                |
| MEIALO           | Zek.   | 401             | 33.4 1                | 12.3             | 30.2 1            | 33.0 \$           | 02.0 1            | 31.0 1            | JJ.7 I            | 20.0             |                      |
| PERG             | Percinorale  |                 |                       | 0.02 1 . 11      | 0.22 1            | 0.00 t            | 0.00 1 . 11       | A92 1 . U         | 0.02 1 . 11       | 0.00 1           | 0.22 1 / 11          |
| SEMIVOLARILES    | 1.2.4- Inchioropenzene   | 0.33 1 < 0      | 0.33 1 < U            | 0.33 1 < 0       | 0.33 1 < 0        | 0.30 : < U        | 0.33 1 < 0        | 0.00 + < 0        | 0.00 1 < U        | 0.00 1 < 0       | 0.00 1 4 14          |
| SEMIVOLANLES     | 1,2-Dichlorobenzene  | 0.33 1 < 0      | 0.33 1 < U            | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 < 0        | 1.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0       |                      |
| SEMIVOLARLES     | 1,3-Dichlorobenzene  | 0.33 1 < 0      | 0.33 1 < 0            | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0       |                      |
| SEMIVOLATILES    | 1,4-Dichlorobenzene  | 0.33 1 < U      | 0.33 1 < U            | 0.33 1 < 0       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < 0        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < 0       | 0.33 1 < 0           |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol  | 1.65 1 < U      | 1.65 1 < 0            | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < 0        | 1.65 1 < 0        | 1.65 1 < 10       | 1.65 1 < U        | 1.65 1 < 0       | 1.05 1 < 0           |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol  | 0.33 1 < U      | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < 0       | .0.33 1 < 0          |
| SEMIVOLATILES    | 2.4-Dichlarophenol   | 0.33 1 < U      | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U           |
| SEMIVOLATILES    | 2.4-Dimethylphenol   | 0.33 1 < U      | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U           |
| SEMIVOLATILES    | 2,4-Dinitrophenol  | 1.65 1 < U      | 1.65 1 < U            | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < ⊍        | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U           |
| SEMIVOLATILES    | 2,4-Dinitrotoluene   |                 |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| SEMIVOLATILES    | 2.6-Dinitrotoluene   | 1               |                       |                  |                   |                   |                   |                   |                   |                  |                      |
| SEMIVOLATILES    | 2-Chloronaphthalene  | 0.33 1 < U      | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U           |
| SEMIVOLATILES    | 2-Chlorophenol   | 0.33 1 < U      | 0.33 1 < U            | 0.33 t < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 9.33 1 < U           |
| SEMIVOLATILES    | 2-Methylnaphthalene  | 0.33 1 < U      | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U           |
| SEMIVOLATILES    | 2 Methylobenol   | 0.33 1 ~ 11     | 033 1 < U             | 033 1 < U        | 033 1 < U         | 0.33 1 < U        | 0.33 1 < 1        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U           |
| SEMINOLATILES    | 2-Nitroaniline   | 165 1 4         | 165 1 < 11            | 165 1 < 11       | 165 1 < 1         | 1.65 i < U        | 1.65 1 < 1        | 1.65 1 < 1        | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U           |
| SEMINOL ATHES    | 2-Nitrophanal  |                 | 0.33 t < 11           | 0.33 1 2 11      | 033 1 2 1         | 033 1 4 1         | 033 1 4 1         | 0.33 1 2 11       | 033 1 < B         | 0.33 1 < 11      | 0.33 1 < 1)          |
| SEMINOLATILES    | 2.1 2 Deblerohenzidine   |                 | 41 × 1 200            | 0.65 1 4 11      | 0.65 1 < 11       | 0.65 1 4 11       | 0.55 1 4 11       | 0.65 1 < 1        | 0.65 1 4 1        | 0.65 1 4 1       | 065 1 < 0            |
| SEMINOLATILES    | 3,3 -Dictior de la companya de la compan | 0.05 1 < 0      |                       |                  | 1.05 1 4 5        | 1.00 1 4 0        | 1.65 1            | 1.55 1 . 1        | 1.65 1 4 1        | 1.65 1 . 1       | 1.65 1 4 1           |
| SEMIVOLATILES    | 3-Niroaniine   | 1.05 1 < 0      | 1.05 1 < 0            | 1.05 ( < 0       | 1.05 1 < 0        | 1.05 4 < U        | 3.00 1 < 0        | 1.03 1 < 0        |                   | 1.00 1 < 0       | 1.65 1 4 11          |
| SEMIVOLATILES    | 4.6-Dinitro-2-methylphenol   | 1.65 1 < U      | 1.65 1 < U            | 1.05 / < 0       | 1.00 1 < 0        | 1.05 } < U        | 1.00 1 < 0        | 1.03 1 < 0        | 1.65 1 < 0        | 1.00 1           | 0.02 1 1 1           |
| SEMIVOLATILES    | 4-Bromophenyi phenyi ether   | 0.33 1 < 0      | 0.33 1 < 0            | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0        | 0.33 1 < 0        |                  |                      |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol  | 0.65 1 < U      | 0.65 1 < 0            | 0.65 7 < U       | 0.65 1 < 0        | 0.65 7 < 0        | 9.65 1 < U        | 0.05 1 < 0        | 0.05 1 < U        | 0.00 1 < 0       | 0.05 1 < 0           |
| SEMIVOLATILES    | 4-Chloroaniline  | 0.65 1 < U      | 0.65 1 < U            | 0.65 t < €       | 0.65 1 < U        | 0.65 1 < U        | 0.65 1 < U        | 0.65 1 < U        | 0.65 1 < U        | 11.05 1 < U      | U.co 1 < U           |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether  | 0.33 1 < U      | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < V        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U           |
| SEMIVOLATILES    | 4-Methylphenol   | 0.33 1 < U      | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 t < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U           |
| SEMIVOLATILES    | 4-Nitroaniline   | 1.65 1 < U      | 1.65 1 < U            | 1.65 1 < U       | 1.65 1 < U        | 1.65 ¥ < U        | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U           |
| SEMIVOLATILES    | 4-Nitrophenol  | 1.65 1 < U      | 1.65 ! < U            | 1.65 î < U       | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U           |
| SEMIVOLATILES    | Acenaphthene   | 0.33 1 < U      | 0.33 t < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 t < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U           |
| SEMIVOLATILES    | Acenaphthylene   | 0.33 1 < U      | 0.33 1 < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 t < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U           |
| SEMIVOLATILES    | Anthracene   | 0.33 1 < 1      | 0.33 t < U            | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | .0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U           |
| SEMIVOLATILES    | Benzo(a)anthracene   | 0.33 1 < 11     | 0.33 1 < U            | 0.33 1 < 11      | 0.33 1 < U        | 0.33 t < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < V           |
|                  |  |                 |                       | _                |                   |                   |                   |                   |                   |                  |                      |

2


## Table 3-89 Concentrations of Chemicals in Soil Samples Associated with Sump 089

| SUMP] = SUMP089                |   |                 | 001100                         |                  |                         |                          |                          |                           |                  |                  |                         |
|--------------------------------|---|-----------------|--------------------------------|------------------|-------------------------|--------------------------|--------------------------|---------------------------|------------------|------------------|-------------------------|
| OCATION CODE                   |   | LH-588-01       | LH-\$88-01                     | LH-S88-01        | LH-S88-02               | 1H-S88-02                | LH-S88-02                | LH-S89-01                 | LH-S89-01        | LH-S89-02        | LH-S89-02               |
| SAMPLE_NU                      |   | LH-S88-01_1     | LH-588-01_2<br>7/39/1003       | 2/22/1002        | 7/22/1002               | 7/22/1003                | 213-388-02_3             | 7/21/1003                 | 7/21/1993        | 7/21/1993        | 7/21/1993               |
| TEPTH                          |   | 05-2Ft          | 4-6Ft                          | 6-8Ft            | 0.5 - 2 Ft              | 4-6 Ft                   | 6-8Ft                    | 0.5 - 2 Ft                | 6-8Ft            | 0.5 - 2 Ft       | 6-8Ft                   |
| SAMPLE_PURPOSE                 |   | REG             | REG                            | REG              | REG                     | REG                      | REG                      | REG                       | REG              | REG              | REG                     |
| fest Group                     | Parameter (Units = mg/kg)                           | Result DIL LQ V | Q Result DIL LQ VQ             | Result DIL LQ VQ | Result DIL LQ VQ        | Result DIL LQ VQ         | Result DIL LO VQ         | Result DIL LQ VQ          | Result DIL LO VQ | Result DIL LQ VQ | Result Dil. LQ VQ       |
| SEMIVOLATILES                  | Benzo(a)pyrene                                      | 0.33 1 < U      | U 0.33 t < U                   | 0.33 t < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Benzo(b)fluoranthene                                | 0.33 1 < 0      | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 8              |
|                                | Benzo(gra)perylene                                  |                 | U⊧ 0.33 I < 0<br>∖ 0.33 I < 11 | 0.33 1 < 0       | 0.33 1 < 11             | 033 1 < 0                | 0.33 1 < 13              |                           | 0.33 1 < 0       | 0.33 1 < 1       | 0.33 1 < 0              |
| SEMIVOLATILES                  | Benzoic Acid  | 1.65 1 < 1      | U 1.65 1 < U                   | 1.65 1 < U       | 1.65 1 < U              | 1.65 1 < U               | 1.65 1 < 0               | 1.65 1 < U                | 1.65 1 < U       | 1.65 1 < 1       | 1.65 1 < U              |
| SEMIVOLATILES                  | Benzyl Alcohol                                      | 0.65 1 < 1      | J 0.65 1 < U                   | 0.65 1 < U       | 0.65 1 < U              | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U                | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U              |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane                          | 0.33 t < 0      | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 t < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < V       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether                             | 0.33 1 < 1      | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < 0              | 0.33 1 < U               | 0.33 1 < 0               | 0.33 1 < U                | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether                         | 0.33 1 < 1      | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < 0                | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0              |
| SEMIVOLAULES<br>SEMIVOLATILES  | bis(2-Entylnexy)phonalale<br>But d benavi obthalate |                 | 0 0.33 i < 0<br>i 0.33 i < 1i  | 0.33 1 < 0       | 0.33 1 < 11             | 0.33 1 < 11              | 033 1 < 0                | 0.33 1 < 1                | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0              |
| SEMIVOLATILES                  | Chrysene  | 0.33 1 < 1      | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < .0             | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 0                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Dibenzo(a,h)anthracene                              | 0.33 1 < 1      | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Dibenzofuran  | 0.33 1 < 8      | U 0.33 1 < ⊍                   | 0.33 1 < U       | 0.33 1 < 10             | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U       | 0.33 1 < 1       | 0.33 1 < U              |
| SEMIVOLATILES                  | Diethyl phthalate                                   | 0.33 1 < 1      | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 t < U       | 0.33 1 < 13      | 0.33 1 < U              |
| SEMIVOLATILES                  | Dimethyl phthalate                                  | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < 0              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U<br>033 1 - 1 |
| SEMIVOLATILES<br>SEMIVOLATILES | di-n-distyl phihalate                               | 0.33 1 < 0      | ∪ 0.331 < U<br>U 0.93.1 > ∺    | 0.33 1 < 0       | 0.33 1 < 0              | 0.33 1 < U<br>0.33 1 ∠ U | ⊎.33 i < U<br>933 t ∠ 1i | u.əə i < U<br>0.33 1 < 1∔ | 0.33 1 < 11      | 0.33 1 < 13      | 0.33 1 < 11             |
| SEMIVOLATILES                  | Fluoranthene  | 0.33 1 <        | 9 0,33 1 < U                   | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Fluorene  | 0.33 1 < 1      | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Hexachlorobenzene                                   | €.33 1 < ₹      | U 0.33 1 < U                   | 0…33 1 < U       | 0.33 1 < U              | 0.33 î < U               | 0.33 1 < U               | 0.33 t < U                | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Hexachlorobutadiene                                 | 0.33 1 < K      | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 9.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene                           | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U              |
| SEMIVOLATILES                  | Hexachloroethane                                    | 0.33 1 < 1      | U 0.33 1 < U                   | 0.33 1 < 1       | 0.33 1 < U              | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 1 < 0                | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 11             |
| SEMIVOLATILES                  | Isophorone  | 0.33 1 < 1      | ม 0.33 1 < ย                   | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Naphthalene   | 0.33 1 < 1      | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Nitrobenzene  | 0.33 1 < 1      | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U       | 0.33 I < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine                          | 0.33 1 < 1      | U 0.33 1 < Ù                   | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine                              | 0.33 1 <        | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < 0              | 0.33 1 < U               | 0.33 1 < 0               | 0.33 1 < 0                | 165 1 < U        | 9.33 1 < U       | 165 1 < 1               |
|                                | Pentachilorophenol<br>Phenaethropo                  | 1.65 1 < 1      | ี่ 1,05 I < 9<br>II 033 1 ∠ 9  | 1.00 I < U       | 1.05 I < U<br>033 1 < U | 1.05 1 < 1               | 1.00 1 < U<br>1.33 1 ∠ U | 1.00 1 < 0                | 0.33 1 < 8       | 033 1 < U        | 0.33 1 < U              |
| SEMIVOLATILES                  | Phenol  | 0.33 1 <        | U 033 1 < U                    | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < ป       | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES                  | Pyrene  | 0.33 t < 1      | U 0.33 1 < U                   | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U              |
| VOLATILES                      | 1.1,1,2-Tetrachloroethane                           |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
| VOLATILES                      | 1,1,1-Trichloroethane                               | 0.005 1 < 1     | U 0.005 1 < ⊎                  | 0.005 1 < U      | 0.005 1 < U             | 0.005 1 < U              | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane                           | 0.005 1 < 1     | U 0.005 1 < U                  | 0.005 1 < U      | 0.005 1 < U             | 0.005 1 < U              | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < 0             |
| VOLANLES                       | 1,1,2-Trichloroethane                               | 0.005 1 < 1     | U 0.005 i < U<br>U 0.005 i < I | 0.005 1 < 0      | 0.005 1 < 0             | 0.005 1 < 1              | 0.005 1 < 0              | 0.005 1 < U               | 0.005 1 < 1      | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | 1.1-Dichloroethene                                  | 0.005 1 < 1     | U 0.005 1 < U                  | 0.005 1 < U      | 0.005 1 < 0             | 0.005 1 < U              | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U      | 0:005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | 1.1-Dichloropropene                                 |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
| VOLATILES                      | 1,2,3-Trichlorobenzene                              |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
| VOLATILES                      | 1,2,3-Trichloropropane                              |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
| VOLATILES                      | 1,2,4-Trichlorobenzene                              |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
|                                | 1.2.4- Inmetrybenzene                               |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
| VOLATILES                      | 1.2-Dibromoethace                                   |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
| VOLATILES                      | 1.2-Dichlorobenzene                                 |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
| VOLATILES                      | 1,2-Dichloroethane                                  | 0.005 1 <       | U 0.005 1 < U                  | 0.005 1 < U      | 0.005 1 < U             | 0.005 1 < U              | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | 1,2-Dichloroethene                                  | 0.005 1 < 1     | U 0.005 1 < U                  | 0.005 1 < U      | 0.005 1 < 0             | 0.005 1 < U              | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | 1,2-Dichloropropane                                 | 0.005 1 < 1     | U 0.005 1 < U                  | 0.005 1 < U      | 0.005 1 < 0             | 0.005 1 < U              | 0.905 1 < U              | 0.005 1 < 0               | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0             |
| VOLATILES                      | 1,2-Dimethyloenzene (0-Xylene)                      |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
| VOLATILES                      | 1.3-Dichlorohenzene                                 | l               |                                |                  |                         |                          |                          |                           |                  |                  |                         |
| VOLATILES                      | 1,3-Dichioropropane                                 |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
| VOLATILES                      | 1,4-Dichlorobenzene                                 |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
| VOLATILES                      | 2.2-Dichloropropane                                 |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
| VOLATILES                      | 2-Butanone  | 0.05 1 < 1      | U 0.05 t < U                   | 0.05 1 < U       | 0.05 1 < U              | 0.05 1 < U               | 0.05 1 < U               | 0.05 1 < U                | 0.05 1 < U       | 0.05 1 < 0       | 0.05 1 < U              |
| VOLATILES                      | 2-Chloroethyl vinyl ether                           | 0.01 1 < 1      | U 0.01 1 < U                   | 0.01 T < U       | 0.01 1 < 0              | 0.01 1 < 0               | 0.01 1 < 0               | 0.01 1 < 0                | 0.01 I < U       | 0.01 1 < 0       | 0.01 1 < 0              |
| OLATILES                       | 2-Galarocouene                                      | 0.05 1 -        | U 0,05 1 < ₽                   | 0.05 1 < 11      | 0.05 1 < U              | 0.05 1 < 13              | 0.05 t < lf              | 0.05 1 < Ư                | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < 13             |
| VOLATILES                      | 2-Propenal  |                 |                                |                  |                         |                          |                          |                           |                  |                  | -                       |
| OLATILES                       | 4-Chlorotoluene                                     |                 |                                |                  |                         |                          |                          |                           | -                |                  |                         |
| VOLATILES                      | Acetone   | 0.1 1 < 1       | U 0.1 1 < ⊍                    | 0.1 1 < U        | 0.1 1 < U               | 0.1 1 < U                | 0.1 1 < U                | 0.1 1 < U                 | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U               |
| OLATILES                       | Acetonitrile  |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
|                                | Acrylonitrile                                       |                 |                                |                  |                         |                          |                          |                           |                  |                  |                         |
| OLATILES                       | лиут спасткое<br>Велиеное                           | 0.005 1 -       | II 0+005 t ∠ <sup>31</sup>     | 0.005 1 < 11     | 0005 t < 8              | 0.005 1 < U              | 0.005 t < 1              | 0.005 f < U               | 0.005 1 < 반      | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES                      | Bromobenzene  |                 |                                | 0.000 1 1 0      |                         |                          |                          |                           |                  |                  | · · · · · ·             |
|                                | ·····   | •               |                                |                  |                         |                          |                          |                           |                  |                  |                         |



## Table 3-89 Concentrations of Chemicals in Soil Samples Associated with Sump 089

| [SUMP] = SUMP089       |                                  |               |    |            |       |              |          |            |       | •        |        |     |          | •        |          |                |            |       |          |        |              |          |       |
|------------------------|----------------------------------|---------------|----|------------|-------|--------------|----------|------------|-------|----------|--------|-----|----------|----------|----------|----------------|------------|-------|----------|--------|--------------|----------|-------|
| LOCATION _CODE         |                                  | LH-S88-01     |    | LH-S8      | B-01  | LH-S88-01    |          | LH-S88-    | -02   | LH-SE    | 8-02   |     | LH-S8    | 8-02     | LH       | S89-01         | LH-S89-6   | 91    | LH-S     | 89-02  |              | LH-S89-  | 02    |
| SAMPLE_NO              |                                  | LH-S88-01_1   |    | LH-S88     | -01_2 | LH-S88-01_   | 3        | LH-\$88-0  | 12_1  | LH-\$88  | -02_2  |     | LH-\$88  | -02_3    | (H-S     | 89-01_1        | LH-S89-01  | _2    | LH-S8    | 9-02_1 |              | LH-S89-0 | 2_2   |
| SAMPLE_DATE            |                                  | 7/22/1993     |    | 7/22/1     | 993   | 7/22/1993    |          | 7/22/19    | 93    | 7/22/    | 993    |     | 7/22/1   | 993      | 7/2      | 1/1993         | 7/21/199   | 3     | 7/21     | 1993   |              | 7/21/19  | 93    |
| Depth                  |                                  | 0.5 - 2 Ft    |    | 4-6        | Ft    | 6-8Ft        |          | 0.5 - 2    | Ft    | 4-{      | Ft     |     | 6-8      | Ft       | 0.8      | 5-2 <b>F</b> t | 5 - 8 Ft   |       | 0.5      | 2 Ft   |              | 6-8F     | t     |
| SAMPLE_PURPOSE         |                                  | REG           |    | AEC        | 3     | REG          |          | REG        |       | RE       | G      |     | RE       | G        |          | REG            | REG        |       | R        | G      |              | REG      |       |
| Test Group             | Parameter (Units = mg/kg)        | Result DIL LO | VQ | Result Dia | LO VO | Result DIL & | Q VQ     | Result D&L | LQ VQ | Result 1 | DIL LO | VQ  | Result D | IL LO VO | ) Result | DIL LO VO      | Result Dil | LQ VQ | Result D | L LQ V | Q Re         | sult DiL | LQ VQ |
| VOLATILES              | Bromochloromethane               |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLATILES              | Bromodichloromethane             | 0.005 1 <     | U  | 0.005 1    | < U   | 0.005 1      | < 1J     | 0.005 1    | < U   | 0.005    | 1 <    | U   | 0.005 1  | < U      | 0.005    | 1 < U          | 0.005 1    | < U   | 0.005    | < 1    | 1 0.         | .005 1   | < U   |
| VOLATILES              | Bromoterm                        | 0.005 1 <     | U  | 0.005 1    | < U   | 0.005 1      | < 1/     | 0.005 1    | < U   | 0.005    | 1 <    | U   | 0.005 1  | t < 1/   | 0.005    | 1 < U          | 0.005 1    | < U   | 0.005    | < (    | J 0.         | .005 1   | < U   |
| VOLATILES              | Bromomethane                     | 0.01:1 <      | U  | 0.01 1     | < U   | 0.01 1       | < U      | 0.01 1     | < U   | 0.01     | 1 <    | U   | 0.01 1   | เ < ป    | 0.01     | 1 < U          | 0.01 1     | < U   | 0.01     | < 1    | , (          | 0.01 1   | < U   |
| VOLATILES              | Carbon disulfide                 | 0.005 1 <     | U  | 0.005 1    | < U   | 0.005 1      | < U      | 0.005 1    | < U   | 0.005    | ; <    | บ   | 0.005 1  | I < U    | 0.005    | 1 < U          | 0.005 1    | < U   | 0.005    | < 1    | J 0          | .005 1   | < 0   |
| VOLATILES              | Carbon tetrachloride             | 0.005 1 <     | υ  | 0.005 1    | < U   | 0.005 1      | < U      | 0.005 1    | < 1)  | 0.005    | 1 <    | υ   | 0.005 1  | l < U    | 0.005    | 1 < U          | 0.005 1    | < 1   | 0.005    | < 1    | J 0          | 005 1    | < 0   |
| VOLATILES              | Chlorobenzene                    | 0.005 1 <     | U  | 0.005 1    | < U   | 0.005 1      | < U      | 0.005 1    | < 1J  | 0.005    | 1 <    | U   | 0.005 1  | । < ।    | 0.005    | 1 < U          | 0.005 1    | < U   | 0.005    | < 1    | J 0.         | 005 1    | < 0   |
| VOLATILES              | Chioroethane                     | 0.01 1 <      | U  | 0.01 1     | < 0   | 0.01 1       | < 1)     | 0.01 1     | < 11  | 0.01     | 1 <    | ย   | 0.01 1   | I < U    | 0.01     | 1 < U          | 0.01 1     | ςŪ    | 0.01     | < 1    |              | 0.01 1   | < 0   |
| VOLATILES              | Chloroform                       | 0.005 1 <     | U  | 0.005 1    | < 1   | 0.005 1      | < U      | 0.005 1    | < 11  | 0.005    | 1 <    | U   | 0.005 1  | ( < U    | 0.005    | 1 < U          | 0.005 1    | < 11  | 0.005    | < 1    |              | .005 1   | < 11  |
| VOLATH ES              | Chloromethane                    | 0.01 1 <      | Ū  | 0.01 1     | < 11  | 0.01 1       | ۔<br>د ۱ | 001 1      | < 11  | 8.61     | t <    | U U | 0.01 1   | 1 < 11   | 0.01     | 1 < 11         | 0.01 1     | e 11  | 8.01     | < 1    | 1 1          | 001 1    | 2 11  |
| VOLATHES               | Chiorographe                     |               | 2  |            |       |              |          |            |       |          |        | ÷   |          |          | •.••     |                |            |       | 0.01     |        |              |          |       |
| VOLATILES              | cis-1 2-Dichloroethene           |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOI ATR ES             | cis-1 3-Dichloronmone            | 0.005 1 c     | п  | 0.005 1    | - 11  | 0.005 1      | ~ !!     | 0.005 1    | < 11  | 0.005    | 1 /    | 11  | 0.005    | 1 - 11   | 0.005    | 1 - 11         | 0.005 1    | ~ 11  | 0.006    | · · )  | ı ۵          | 005 1    | z 11  |
| VOLATE ES              | Bitramochiammethane              | 0.005 1 <     | 11 | 0.005 1    | 2.0   | 0.005 1      | ~ 11     | 0.005 1    | ~ 11  | 0.005    |        |     | 0.005 1  |          | 0.005    | 1.2.11         | 0.005 1    | ~ 11  | 0.005    |        | , 0.<br>I 0. | 005 1    | ~ 11  |
| VOLATILES              | Bibromomethane                   | 0.000 1 4     | 0  | 0.000 1    |       | 0.000        | · •      | 0.000      | ` °   | 0.000    |        | v   | 0.000    |          | 0.000    |                | 0.000      |       | 0.000    |        | <b>,</b> 0.  |          |       |
| VOLATILES              | Birthardiffurromethane           |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLATILES              | Ethel motherendete               |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLATIES               | Ethulhoozopa                     | 0.005 1 -     |    | 0.000 1    | . 11  | A 005 1      | . 11     | 0.005 1    |       | 0.005    | + -    | **  | n nnc 1  |          | 0.005    | 1 - 11         | 0.005 1    | . 11  | 0.005    |        |              | 005 1    | . 0   |
| VOLATILES              | Luiywaizana                      | 0.000 1 1     | 0  | 0.000 1    |       | 0.000 1      |          | 0.000 1    |       | 0.005    |        | 0   | 0.000    |          | 0.000    | 1 ( 0          | 0.005      |       | 0.005    | ~ `    | <i>.</i> .   | .005 1   |       |
| VOLATILES              |                                  |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLATIECO              |                                  |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLATILES              | BOBUTE ACCONOL                   |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLATILES              | isophopyberizene                 |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLATILES              | hattana ing kilo                 |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLATILES              | Metracity of sub-                | 0.07 1 .      |    | 0.65 1     | . 11  | 0.05 +       |          | 0.05 1     |       | 0.05     |        |     | 0.05     |          | 0.05     | e . 11         | 0.05 1     |       | 0.05     |        |              | 0.05 4   |       |
| VOLATILES              | Merryr Isobolyl Kelolæ           | 0.000 1 <     | U  | 0.05 1     | < U   | 0.05 1       | < 0      | 0:05 1     | < 0   | 0.05     | l <    | 0   | 0.05     | I < 0    | 0.05     | 1 < 9          | 0.05 1     | < U   | 0.05     | < 1    |              | 1.05     | < 0   |
| VOLATILES              | MEINIL MEINACHILAIC              | 0.00r 1 .     |    | A 005 1    |       | 0.005 1      |          | 0.005 1    |       | 0.005    |        |     | B 007 1  |          | 0.005    | 4 . 11         | 0.005 4    |       | 0.000    |        |              | 007 1    |       |
| VOLATILES              | Metry ete critorioe              | 9.005 I K     | U  | V.UJ5 1    | < 0   | 0.000 1      | < 0      | 0.005 1    | < 0   | 0.005    | I <    | 0.  | 0.005    | i < 0    | 0.005    | 1 < 0          | 0.005 1    | < U   | 0.005    | < 1    | <i>J</i> U.  | .005 1   | < 0   |
| VOLATILES              | NAPIARIARENE<br>- DUTVI DENZEME  |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLATILES              |                                  |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
|                        | Protokiume Protokiume            |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLANLES               |                                  |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VULATILES              | p-ISOPHOPTLIOLUEIVE              |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VULAIILES              |                                  |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLATILES              | Sec-BUTTLBENZENE                 | 0.005         |    |            |       | 0.005        |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLATILES              | Styrene                          | 0.005 1 <     | 0  | 0.005 1    | < 0   | 0.005 1      | < U      | 0.005 1    | < 0   | 0.005    | 1 <    | U   | 0.005 1  | I < U    | 0.005    | 1 < 0          | 0.005 1    | < 0   | 0.005    | < (    | J Q.         | .005 1   | < 0   |
| VOLATILES              | Tert-BUTYLBENZENE                | 0.005         |    | 0.00r 4    |       | 0.000        |          |            |       |          |        |     |          |          | 0.005    |                |            |       |          |        |              |          |       |
| VOLATILES              | l etrachioroethene               | 0.005 1 <     | 0  | 0.005 1    | < 0   | 0.005 1      | < U      | 0.005 1    | < 0   | 0.005    | 1 <    | U   | 0.005 1  | I < U    | 0.005    | 1 < U          | 0.005 1    | < U   | 0.005    | . < 1  | ) ().        | .005 1   | < 0   |
| VOLATILES              | lotuene                          | 0.005 1 <     | U  | 0.905 1    | < 0   | 0.005 1      | < 0      | 0.005 1    | < 0   | 0.005    | 1 <    | U   | 0.005 1  | i < U    | 0.065    | 1 < ⊍          | 0.005 1    | < U   | 0.005    | < t    | ) 0.         | .005 1   | < 0   |
| VOLATILES              | Irans-1,2-Dichloroethene         | 0.005         |    | 0.005      |       | 0.005        |          |            |       |          |        |     |          |          |          |                | · · · ·    |       | A =      |        |              |          |       |
| VULANLES               | trans-1,3-Uichioropropene        | 0.005-1 <     | U  | 0.005 1    | < U   | 0.005 1      | < U      | 0.005 1    | < 0   | 0.005    | 1 <    | U   | 0.005 1  | i < U    | 0.005    | 1 < U          | 0.005 1    | < ປ   | 0.005    | < l    | 30.          | 1005 1   | < U   |
| VOLATILES              | trans-1,4-Dichioro-2-butene      |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLATILES              | Inchioroethene                   | 0.005 1 <     | U  | 0.005 1    | < U   | 0.005 1      | < U      | 0.005 1    | < U   | 0.005    | 1 <    | U   | 0.005 1  | i < U    | 0.005    | 1 < U          | 0.005 1    | < U   | 0.005    | < t    | 3 Q.         | .005 1   | < U   |
| VOLATILES              | Trichlorofluoromethane           |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |
| VOLAFILES              | Vinyl acetate                    | 0.05 1 <      | U  | 0.05 1     | < U   | 0.05 1       | < U      | 0.05 1     | < U   | 0.05     | 1 <    | U   | 0.05 1   | i < U    | 0.05     | 1 < U          | 0.05 1     | < U   | 0.05     | < 1    | 3 4          | 0.05 1   | < U   |
| VOLATILES              | Vinytchloride                    | 0.01 1 <      | ម  | 0.0t 1     | < U   | 0.01 1       | < U      | 0.01 1     | < ⊎   | 6.01     | 1 <    | U   | 0.01 1   | < U      | 0.01     | 1 < U          | 0.01 1     | < ម   | 0.01     | < {    | ) (          | 0.01 1   | < U   |
| VOLATILES              | Xylenes, Total                   | 0.005 1 <     | U  | 0.005 1    | .< U  | 0.005 1      | < U      | 0.005 1    | < U.  | 0.005    | 1 <    | U   | 0.005 1  | t < U    | 0.005    | 1 < U          | 0.005 1    | < U   | 0.005    | < 1    | J 0.         | 005 1    | < U   |
| Footnotes are shown of | on cover page to Tables Section. |               |    |            |       |              |          |            |       |          |        |     |          |          |          |                |            |       |          |        |              |          |       |



Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



|                      |                             | Concentra         | tions of Chemic          | als in Soil Sam  | les Associate       | d with Sump 09 | <b>ט</b>        |                  |                  |
|----------------------|-----------------------------|-------------------|--------------------------|------------------|---------------------|----------------|-----------------|------------------|------------------|
| [SUMP] = SUMP090     |                             |                   |                          |                  |                     | 111 000 01     |                 | 1 14 600.00      | 19-200-02        |
| LOCATION_CODE        |                             | 35SUMP090-SB01    | 35SUMP090-S801           | LH-DE90-01       | LH-0190-02          | LH-590-01      |                 |                  | 19-20-02 2       |
| SAMPLE_NO            |                             | SUMP090-SB-01-01  | SUMP090-SB-01-02         | LH-DL90-01       | CH-DL90-02          | LH-590-01_1    | 2/21/1002       | 7/31/1002        | 7/31/1003        |
| SAMPLE_DATE          |                             | 9/18/2006         | 9/18/2006                | 7/21/1993        | //21/1993           | 7/21/1993      | n 10 Et         | 5 - 2 5          | 8,10 Ft          |
| DEPTH                |                             | 0.0FI             | 0-0 Ft                   | 2 - 4 Ft         | 2 • 4 +1            | .5 + 1,5 FL    |                 | .0-2 M           | BEG              |
| SAMPLE_PURPOSE       |                             | REG               | REG                      | REG              |                     |                | Parel DI 10 VO  | Regult DIL LO VO | Result Oll LO VO |
| Test Group           | Parameter (Units = mg/kg)   | Result DIL LQ- VQ | Result DIL LU VU         | Result UIC LU VU | Result UIL LU VO    | All All All    |                 | 0.22 1 - 11      | 033 1 4 11       |
| EXPLOSIVES           | 2.4-Dintrotoluene           |                   |                          | 0.33 1 < U       | 0.33 1 < 0          | 0.33 1 < 0     | 0.33 1 < 0      | 0.00 1 < 0       | 0.39 1 2 11      |
| EXPLOSIVES           | 2.6-Uintrololuene           |                   | 5510 Å                   | 0.33 I < U       | 0.00 1 < 0          | 0.00 I C U     | 6650 1          | 0370 1           | 5370 1           |
| METALS               | Aluminum                    | 5450              | 6810                     | 3640 1           | 6300 (<br>2 1 4 H   | 0010           | 3 1 2 11        | 3 1 2 1          | 31211            |
| METALS               | Antimony                    | 0.106 1 0 0.3L    | 0.0658 1 J JL            | 31 < U           | 3 1 < 0             | 21 C U         | 10 1            | 26 1             | 17 1             |
| METALS               | Arsenic                     | 1.36              | 0.854 1                  | 2.0 1            | 2.0 1               | 143 1 2 1      | 109 1 2 1       | 161 1 2 11       | 78.3 1 < U       |
| METALS               | Banum                       | 44 3              | 114                      | 93.1 1 < 0       | 78.0   < U          | 14) I K U      | 103 1 2 0       |                  |                  |
| METALS               | Berymum<br>Se dari un       | 1 0,191 1 J J     | 0.693                    | (7)              | <b>1 1 4</b> H      | 1 1 2 11       | 1 1 <i>2</i> 11 | 1120             | 11 < U           |
| METALS               | Cadmium                     | 1,02 1            | 0.129 I J J              | 1,7 1            | 093 1               | 1060 1         | 984 1           | 1760             | 864 1            |
| METALS               | Calcium                     | 45400 10          | 400 I 1044               | 193 1 4 11       | 300 I<br>141 1 - II | 1300 1         | 11 1 - 11       | 119 1 < U        | 7.9 S < U        |
| METALS               | Chromium                    | 14.1 1 JH         | 6.06 1 30                | 13.3 J K U       | 26 1                | 11 1           | 01 (            | 99.1             | 5.3 f            |
| METALS               | Copali                      | 1,55 1 JL         | 12.8 1 JL                | 0.0              | 3.0                 | 1 11<br>A 1    | . 77 1          | 51 1             | 7.4 1            |
| METALS               | Copper                      | 5.54              | 5.06                     | 4.7              | 4 1                 | 1 0            | 0470 1          | 12500 1          | 7500 1           |
| METALS               | Iron                        | 10600 1           | 9300 1                   | 10800            | 8520 1              | 70 1           | 6 1             | 7 1              | 42 1             |
| METALS               | Lead                        | 16.7              | 5.06                     | 12.5             | 0.7 I<br>570 1      | 7.3            | 1450 1          | 834 1            | 1170 1           |
| METALS               | Magnesium                   | 4/6               | 1330 1                   | 572 1            | 370 1               | 510 i          | 110 1           | 775 1            | 716 1            |
| METALS               | Manganesé                   | 155 I J           | 80.7 1 J                 |                  |                     |                |                 | 01 1 < 1         | 01 t < U         |
| METALS               | Mercury                     | 0.038 1 J J       | 0.301 1 0                | 0.1 1 4 0        | 0.1 1 < 0           | 0,1 1 4 0      |                 | 0.1 1 2 0        | 0.1 1 4 0        |
| METALS               | NICKE                       | 3.05 1            | 13.9                     | F 20 1           | 122 5               | E40 1          | 627 1           | 523 1            | 543 1            |
| METALS               | Polassium                   | 250 I JH          | 446 1 JR                 | 522              | 402 1               | 040 I          | 1 1 - 11        |                  | 1101             |
| METALS               | Selenium                    | 0.212 1 U UJL     | 0,1/5 i J J⊑<br>195 i ii | 1 1 < 0          |                     | 1 1 2 1        | 1 1 2 1         | 1120             | 1120             |
| METALS               | Silver                      | 0.261 1 J J       | 1,85 1 0                 | r + < 0          |                     | 1, 20          | , , , , ,       |                  |                  |
| METALS               | Socium                      | 23.3              | 419 1                    | 10.6 1           | o 1                 | 175 1          | 25.4 1          | 15 1             | 23 1             |
| METALS               | Stronium                    | 0.0000            | 0.0449 4                 | 10.0             |                     | 17.0           | 20.4            |                  |                  |
| METALS               | . i najmum                  | 10.0280 1         | 1440                     |                  |                     |                |                 |                  |                  |
| METALS               | vanacium<br>Zies            | 19,9 I JH         | 14.1 JD                  | 50.0 1           | 16.2 1              | 27 1 1         | 40.0 1          | 189 1            | 39.8 1           |
| METALS               | Zinc                        | 39.3 F JD         | 46.4 I JN                | 50.2             | 10,0 1              | <b>4</b> 7.7   | 40.0            | 10.0             |                  |
| PERU<br>PERU ATILICO | Perchiorate                 | 0.01 0            | 0,1 10 0                 | 0.92 1 2 11      | 0.13 1 - 11         | 033 1 2 11     | 0.33 1 × 11     | 0.33 1 < 1       | 0.33 1 < U       |
| SEMIVOLATILES        | 1,2,4-Trichlardoenzene      |                   |                          | 0.00 1 4 0       | 0.03 1 < 0          | 0.33 1 < 11    | 0.33 1 < 11     | 0.33 1 < 1       | 0.33 1 < U       |
| SEMIVOLATILES        | 1,2-Dichlorobenzene         |                   |                          | 0.03 1 4 11      | 0.33 1 < 0          | 0.33 1 < 11    | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 1 A Dioblarobentana         |                   |                          | 033 1 4 11       | 0.33 1 < 1          | 0.33 1 < 1     | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 2.4.5.Trichlerenhanel       |                   |                          | 165 1 4 11       | 165 1 2 1           | 165 1 < 1      | 1.65 1 < U      | 1.65 1 < U       | 1.65 t < U       |
| SEMIVOLATILES        | 2.4.5-Trichlorophenol       |                   |                          | 0.33 1 < U       | 0.33 1 < 0          | 0.33 1 < 1     | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 3 4 Dichlorophonol          |                   |                          | 0.33 1 < 1       | 0.33 1 < U          | 0.33 1 < U     | 0.33 t < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 2.4-Dimethylopenol          |                   |                          | 0.33 1 < 1       | 0.33 1 < U          | 0.33 1 < U     | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 2 4-Dinitronhenni           |                   |                          | 165 1 < 1        | 1.65 1 < U          | 1.65 1 < U     | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES        | 2.Chloronaphthalane         |                   |                          | 0.33 1 e U       | 0.33 1 < U          | 0.33 1 < U     | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 2-Chioronhenol              |                   |                          | 0.33 1 < U       | 0.33 i < U          | 0.33 1 < U     | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 2.Maibylaanbihalana         |                   |                          | 033 1 2 0        | 0.33 1 < U          | 0.33 1 < U     | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 2-Melhylohenoi              |                   |                          | 0.33 1 < U       | 0.33 1 < U          | 0.33 1 < U     | 0.33 1 < U      | 0.33 í < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 2-Nimaniline                | 1                 |                          | 1.65 î < U       | 1.65 1 < U          | 1.65 1 < U     | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES        | 2-Nitrophenol               |                   |                          | 0.33 1 < U       | 0.33 1 < U          | 0.33 1 < U     | 0.33 1 < U      | 0.33 1 < V       | 0.33 1 < U       |
| SEMIVOLATILES        | 3.3'-Dicblorobenzidine      |                   |                          | 0.65 1 < U       | 0.65 1 < U          | 0,65 1 < Ü     | 0.65 1 < U      | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES        | 3-Nitroaniline              |                   |                          | 1.65 1 < U       | 1.65 1 < U          | 1.65 1 < U     | 1.65 1 < U      | 1.65 1 -< U      | 1.65 1 < U       |
| SEMIVOLATILES        | 4.6-Dinitro-2-melhylphanol  |                   |                          | 1.65 1 < U       | 1.65 1 < 0          | 1,65 1 < U     | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES        | 4-Bromophenyl phenyl ether  |                   |                          | 0.33 1 < U       | 0.33 1 < 0          | 0.33 1 < U     | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 4-Chioro-3-methylohenol     | ł                 |                          | 0.65 1 < U       | 0.65 1 < U          | 0.65 1 < U     | 0.65 1 < U      | 0,65 i < U       | 0.65 1 < U       |
| SEMIVOLATILES        | 4-Chloroaniline             |                   |                          | 0.65 1 < U       | 0.65 1 < U          | 0.65 1 < U     | 0.65 1 < U      | 0.65 İ < U       | 0.65 † < U       |
| SEMIVOLATILES        | 4-Chlorophenyl phenyl ether |                   |                          | 0.33 1 < U       | 0.33 1 < U          | 0.33 1 < U     | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 4-Methylphanol              |                   |                          | 0.33 1 < U       | 0.33 1 < U          | 0.33 1 < U     | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES        | 4-Nitroaniline              |                   |                          | 1.65 1 < U       | 1.65 1 < U          | 1.65 1 < U     | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U       |

Table 3-90



|                                   |                             | GUIIGEIIIIA      | dons of Grieffind | as in our oam    | Nes Associated   | a with outline out | •                |                  |                  |
|-----------------------------------|-----------------------------|------------------|-------------------|------------------|------------------|--------------------|------------------|------------------|------------------|
| [SUMP] = SUMP090<br>LOCATION CODE |                             | 35SUMP090-SB01   | 35SUMP090-SB01    | LH-DL90-01       | LH-DL90-02       | LH-S90-01          | LH-S90-01        | LH-S90-02        | LH-S90-02        |
| SAMPLE_NO                         |                             | SUMP090-SB-01-01 | SUMP090-SB-01-02  | LH-DL90-01       | LH-DL90-02       | LH-S90-01_1        | LH-S90-01_2      | LH-\$90-02_1     | LH-S90-02_2      |
| SAMPLE_DATE                       |                             | 9/18/2006        | 9/18/2006         | 7/21/1993        | 7/21/1993        | 7/21/1993          | 7/21/1993        | 7/21/1993        | 7/21/1993        |
| DEPTH                             |                             | 0 - 0 Ft         | 0 - 0 FI          | 2 - 4 Ft         | 2 - 4 FI         | .5 - 1,5 Ft        | 8 - 10 Ft        | .5 - 2 Ft        | 8 - 10 Ft        |
| SAMPLE_PURPOSE                    |                             | REG              | REG               | REG              | REG              | REG                | REG              | REG              | REG              |
| Test Group                        | Parameter (Units = mg/kg)   | Result DIL LO VO | Result DIL LO VO  | Result DIL LO VO | Result DIL LO VO | Result DIL LO VQ   | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO |
| SEMIVOLATILES                     | 4-Nitrophenol               |                  |                   | 1.65 i < U       | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U       | 1,65 1 < U       |
| SEMIVOLATILES                     | Acenaphthene                |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                     | Acenaphthylene              |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                     | Anthracene                  |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES                     | Benzo(a)anthracene          |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                     | Benzo(a)pyrene              |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                     | Benzo(b)fluoranthene        |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 f < U       | 0.33 1 < U       |
| SEMIVOLATILES                     | Benzo(ghi)perylene          |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES                     | Benzo(k)lluoranthene        |                  |                   | 0.33 i < U       | 0,33 1 < 0       | 0.33 1 < U         | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES                     | Benzoic Acid                |                  |                   | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < 0       | 1.65 1 < U       | 1.65 1 < 0       |
| SEMIVOLATILES                     | Benzyl Alcohol              |                  |                   | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U         | 0.65 1 < 0       | 0.65 1 < U       | 0.65 1 < 0       |
| SEMIVOLATILES                     | bis(2-Chloroethoxy)methane  |                  |                   | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES                     | bis(2-Chloroethyl)ether     |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES                     | bis(2-Chloraisopropyl)ether |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES                     | bis(2-Ethylhexyl)phthalate  |                  |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < 0       | 0,33 1 < 0       |
| SEMIVOLATILES                     | Bulyl benzyl phthalate      |                  |                   | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < 0       | 0,33 1 < 0       |
| SEMIVOLATILES                     | Chrysene                    |                  |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0       | 0.33   < 0       | 0.33 1 < 0       |
| SEMIVOLATILES                     | Dibenzo(a,h)anthracene      | }                |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES                     | Dibenzoturan                |                  |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES                     | Dielhyi phihalate           |                  |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES                     | Dimeinyi phihalale          |                  |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < 1       | 0.33 1 < 0       |
| SEMIVOLATILES                     | di-n-Butyi phinalate        |                  |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < 1       | 0.33 1 < 11      |
| SEMIVOLATILES                     | di-n-Ociyi phinalate        |                  |                   | 0.33 1 < 0       | 0.00 1 4 0       | 0.03 1 4 0         | 0.33 1 4 1       | 0.33 1 < 1       | 0.33 1 2 1       |
| SEMINOLATILES<br>SEMINOLATILES    | Fluorancierie               |                  |                   | 0.33 1 < 0       | 0.00 1 4 0       | 0.33 1 < 0         | 033 1 - 1        | 0.33 1 < 1       | 0.33 1 e U       |
| SEMINOLATILES                     | Hevachlarabanzana           |                  |                   | 0.33 1 4 11      | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMMOLATILES                      | Hexachlorobuladiena         |                  |                   | 0.33 1 4 1       | 0.33 1 < 11      | 0.33 1 < 0         | . 0.33 1 < U     | 0.33 1 < U       | 0.33 1 < U       |
| SEMINOLATILES                     | Hexachlorocyclopeniarliene  |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                     | Hexachioroethane            |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                     | Indeno(1.2.3-cd)ovrene      |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                     | Isopharone                  |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                     | Naphthalene                 |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                     | Nitrobenzene                |                  |                   | 0.33 f < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                     | n-Nitroso-di-n-propylamine  |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES                     | n-Nilrosodiphenylamine      |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                     | Pentachlorophenol           |                  |                   | 1,65 1 < U       | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES                     | Phenanthrene                |                  |                   | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                     | Phenol                      |                  |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES                     | Pyrene                      |                  |                   | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 í < U       |
| VOLATILES                         | 1,1,1,2-Tetrachloroethane   |                  | 0.00506 1 U       |                  |                  |                    |                  |                  |                  |
| VOLATILES                         | 1.1.1-Trichioroelhane       |                  | 0.00506 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 i < U        | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES                         | 1,1,2,2-Tetrachloroethane   |                  | 0.00506 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES                         | 1,1,2-Trichloroethane       |                  | 0.00506 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES                         | 1,1-Dichloroethane          |                  | 0.00506 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES                         | 1,1-Dichloroethene          | }                | 0.00265 1 J J     | 0.005 i < U      | 0.005 1 < Ü      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES                         | 1,1-Dichloropropene         |                  | 0.00506 1 U       |                  |                  |                    |                  |                  |                  |
| VOLATILES                         | 1,2,3-Trichlorobenzene      |                  | 0.00506 1 U       |                  |                  |                    |                  |                  |                  |
| VOLATILE5                         | 1,2,3-Trichloropropane      | 1                | 0.00506 1 U       |                  |                  |                    |                  |                  |                  |
| VOLATILES                         | 1,2.4-1 richlorobenzene     | 1                | 0.00506 1 U       |                  |                  |                    |                  |                  |                  |
| VULATILES                         | 1.2.4-1 rimelavibenzene     | 1                | 0.00506 1 U       |                  |                  |                    |                  |                  |                  |

Table 3-90

1.2-Dibromo-3-chloropropane

VOLATILES

0.00506 1 U

Data Evaluation Report Chemical Concentrations In Soil Associated with LHAAP-35/36 Sumps



|                  |                                | Concentrat       | ions of C  | hemica  | ils in S | ioil   | Sat | mpi | es As  | 50     | ciai | ea        | with a | sum    | p us     | NU . |       |        |        |    |                |        |      |          |               |        |             |           |
|------------------|--------------------------------|------------------|------------|---------|----------|--------|-----|-----|--------|--------|------|-----------|--------|--------|----------|------|-------|--------|--------|----|----------------|--------|------|----------|---------------|--------|-------------|-----------|
| [SUMP] = SUMP090 |                                |                  |            |         |          |        |     |     |        |        |      |           |        |        |          |      |       | 000    |        |    | 10             | E00.0  | a .  |          | 14.           | 500.02 | <b>.</b>    |           |
| LOCATION_CODE    |                                | 355UMP090-SB01   | 35SUMP090  | )-SB01  | LH-I     | DL90-0 | 51  |     | LH-0   | D1.90- | 02   |           | LH-    | S90-0  |          |      | LH    | -590-0 | n<br>• |    | 1,000<br>1,000 | -590-0 | 2    |          | 10.e          | 390-02 | -<br>-      |           |
| SAMPLE_NO        |                                | SUMP090-SB-01-01 | SUMP090-SI | 3-01-02 | EH-E     | DL90-0 | 01  |     | LH-C   | DL90-  | 02   |           | LH-S   | 90-01  | <u>ו</u> |      | 14-3  | 590-0  | _2     |    | 2.11-3         | 90-02  | -    |          | - LHN2<br>7/3 | 1/1002 | -£          |           |
| SAMPLE_DATE      |                                | 9/18/2006        | 9/18/20    | 06      | 7/2      | 1/1993 | 3   |     | 7/2    | 1/199  | 3    |           | 7/2    | 1/1993 |          |      | 77    | 21/199 | 3      |    | 114            | 0/199  | 3    |          | 112           | 111393 | •           |           |
| DEPTH            |                                | 0 • 0 F1         | 0 - 0 F    | ť       | 2        | - 4 Ft |     |     | 2      | - 4 Ft |      |           | .5 -   | 1.5 F  |          |      | 8     | - 10 8 | t i    |    | .5             | -2 M   |      |          | 8             | 1071   |             |           |
| SAMPLE_PURPOSE   |                                | REG              | REG        |         | 1        | AEG    |     |     | F      | RËG    |      |           | I      | REG    |          |      |       | REG    |        |    |                | HEG    |      | ~        |               | 126    | ~ .         |           |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LO VQ | Result DIL | LO VO   | Result   | DIL    | 10  | vo  | Result | DIL    | ιQ   | <u>va</u> | Result | DIL    |          | 2 Re | isult | DIL    | LQ     | VQ | Result         | DIL    | LQ V | <u>0</u> | Hesult        |        | <u>.Q v</u> | <u>/u</u> |
| VOLATILES        | 1.2-Dibromoethane              |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | 1.2-Dichlorobenzena            |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | 1,2-Dichloroethane             |                  | 0.00506 1  | U       | 0.005    | 1      | <   | U   | 0.005  | 1      | ۲    | υ         | 0.005  | 1      | < L      | 0    | .005  | 1      | <      | U  | 0.005          | 1      | < 1  | U        | 0.005         | 1      | < (         | 0         |
| VOLATILES        | 1,2-Dichlaroethane             |                  |            |         | 0.005    | 1      | <   | U   | 0.005  | 1      | <    | U         | 0.005  | 1      | < L      | 0    | .005  | 1      | <      | U  | 0.005          | }      | < 1  | U<br>    | 0.005         | 1      | < 1         |           |
| VOLATILES        | 1.2-Dichleropropane            |                  | 0.00506 1  | U       | 0.005    | f      | <   | U   | 0.005  | 1      | <    | U         | 0.005  | 1      | < (      | 0    | 005   | 1      | <      | U  | 0.005          | ٢      | < 1  | U        | 0.005         | 1      | < 1         | U         |
| VOLATILES        | 1.2-Dimethylbenzene (o-Xylene) |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | 1,3,5-Trimethylbenzene         |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | 1.3-Dichlorobenzene            |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | 1,3-Dichloropropane            |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | 1.4-Dichlorobenzene            |                  | 0.00506    | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | 2,2 Dichloropropane            |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | 2-Butanone                     |                  | 0.0101 1   | U       | 0.05     | 1      | <   | U   | 0.05   | 1      | <    | U         | 0.05   | 1      | < (      | J    | 0.05  | 1      | <      | U  | 0.05           | i      | <    | U        | 0.05          | 1      | < '         | U         |
| VOLATILES        | 2-Chloraethyl vinyl ether      |                  | 0.0101 1   | ប       | 0.01     | 1      | <   | U   | 0.01   | 1      | <    | U         | 0.01   | 1      | < l      | J    | 0.01  | 1      | <      | υ  | 0.01           | i      | <    | U        | 0.01          | 1      | <           | U         |
| VOLATILES        | 2-Chiorotoluene                |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | 2-Hexanone                     |                  | 0.0101 1   | Ų       | 0.05     | 1      | <   | Ų   | 0.05   | 1      | <    | U         | 0.05   | 1      | < ا      | J    | 0.05  | ł      | <      | U  | 0.05           | 1      | ۲    | U        | 0.05          | 1      | <           | Ų         |
| VOLATILES        | 4-Chlorololuene                |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | Acetone                        |                  | 0.0101 1   | U       | 0,1      | 1      | <   | U   | 0.1    | 1      | <    | υ         | 0.1    | 1      | < l      | J    | 0.1   | ែ      | <      | U  | 0.1            | 1      | <    | U        | 0.1           | 1      | <           | υ         |
| VOLATILES        | Benzene                        |                  | 0.00506 1  | U       | 0.005    | ſ      | <   | U   | 0.005  | 1      | ۲    | U         | 0.005  | 1      | < l      | ) (  | .005  | 1      | <      | U  | 0.005          | í      | <    | U        | 0.005         | 1      | <           | υ         |
| VOLATILES        | Bromobenzene                   |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | Bromochloromethane             |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | Bromodichloromethane           |                  | 0.00506 1  | U       | 0.005    | 1      | <   | ប   | 0.005  | 1      | <    | U         | 0.005  | 1      | < l      | JC   | .005  | 1      | <      | U  | 0.005          | 1      | <    | Ų        | 0.005         | 1      | <           | U         |
| VOLATILES        | Bromoform                      |                  | 0.00506 1  | U       | 0.005    | 1      | <   | U   | 0.005  | 1      | <    | U         | 0.005  | 1      | < 1      | j (  | .005  | i      | <      | Ų  | 0.005          | 1      | <    | U        | 0.005         | 1      | <           | Ų         |
| VOLATILES        | Bromomethane                   |                  | 0.0101 1   | U       | 0.01     | 1      | <   | U   | 0.01   | 1      | <    | U         | 0.01   | 1      | < 1      | )    | 0.01  | 1      | <      | υ  | 0.01           | 1      | <    | U        | 0.01          | 1      | ۲           | V         |
| VOLATILES        | Carbon disulfide               |                  | 0.00506 1  | U       | 0.005    | 1      | <   | U   | 0.005  | 1      | <    | U         | 0.005  | 1      | < (      | J (  | .005  | 1      | <      | U  | 0,005          | 1      | <    | U        | 0.005         | 1      | <           | Ų         |
| VOLATILES        | Carbon tetrachloride           |                  | 0.00506 1  | IJ      | 0.005    | ŧ      | <   | U   | 0.005  | 1      | <    | U         | 0.005  | 1      | < 1      | J (  | .005  | 1      | <      | u  | 0.005          | 1      | <    | U        | 0,005         | 1      | <           | U         |
| VOLATILES        | Chlorobenzane                  |                  | 0.00506 1  | U       | 0.005    | 1      | <   | U   | 0.005  | 1      | <    | U         | 0.005  | 1      | < 1      | ) (  | .005  | 1      | <      | U  | 0,005          | 1      | <    | Ų        | 0.005         | 1      | <           | U         |
| VOLATILES        | Chioroethane                   |                  | 0.0101 1   | U       | 0.01     | 1      | <   | Ų   | 0.01   | 1      | <    | U         | 0.01   | t      | < 1      | J    | 0.01  | 1      | <      | U  | 0.01           | 1      | <    | U        | 0.01          | 1      | <           | U         |
| VOLATILES        | Chloroform                     |                  | 0.00506 1  | U       | 0.005    | 1      | <   | U   | 0.005  | 1      | ۲    | U         | 0.005  | i      | < 1      | J (  | .005  | 1      | <      | IJ | 0.005          | 1      | <    | U        | 0.005         | 1      | <           | Ų         |
| VOLATILES        | Chloromethane                  |                  | 0.0101 1   | Ų       | 0.01     | 1      | <   | U   | 0.01   | 1      | <    | Ų         | 0.01   | 1      | < 1      | L    | 0.01  | 1      | <      | U  | 0.01           | 1      | <    | U        | 0.01          | 1      | <           | U         |
| VOLATILES        | cis-1.2-Dichloroethene         |                  | 0.0376 1   |         |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | cis-1.3-Dichloropropene        |                  | 0.00506 1  | U       | 0.005    | 1      | <   | U   | 0.005  | 1      | ۲    | U         | 0.005  | 1      | < 1      | J (  | .005  | 1      | <      | U  | 0.005          | i      | <    | U        | 0.005         | 1      | <           | U         |
| VOLATILES        | Dibromochloromethane           |                  | 0.00506 1  | U       | 0.005    | 1      | <   | υ   | 0.005  | 1      | <    | U         | 0.005  | 1      | < 1      | J (  | .005  | 1      | <      | U  | 0.005          | 1      | <    | U        | 0.005         | 1      | <           | U         |
| VOLATILES        | Dibromomethane                 |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | Dichlorodifluoromethane        |                  | 0.0101 1   | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | Elhvibenzene                   |                  | 0.00506 1  | U       | 0.005    | 1      | <   | U   | 0.005  | 1      | <    | U         | 0.005  | i      | < 1      | J (  | 0.005 | 1      | <      | U  | 0.005          | 1      | <    | U        | 0.005         | 1      | <           | U         |
| VOLATILES        | Hexachlorobuladiene            |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | Isopropyibenzené               |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | m.o-Xvlenes                    |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | Methyl isobutyl ketone         |                  | 0.0101 1   | U       | 0.05     | 1      | <   | U   | 0.05   | 1      | <    | U         | 0.05   | 1      | ۲        | U    | 0.05  | 1      | <      | U  | 0.05           | 1      | <    | U        | 0.05          | 1      | <           | U         |
| VOLATILES        | Methylene chloride             |                  | 0.00506 1  | U       | 0.005    | 1      | <   | IJ  | 0.005  | 1      | <    | U         | 0.005  | 1      | <        | U I  | 0.005 | 1      | <      | U  | 0.005          | 1      | <    | U        | 0.005         | 1      | <           | U         |
| VOLATILES        | Naphthalene                    |                  | 0.0101 1   | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      | 1        |               |        |             |           |
| VOLATILES        | n-BUTYLBENZENE                 |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | n-PROPYLBENZENE                |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | a-ISOPROPYLTOLUENE             |                  | 0.00506 1  | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | SEC-BUTYLBENZENF               |                  | 0.00506    | U       |          |        |     |     |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | Styrene                        |                  | 0.00506 1  | Ū       | 0.005    | 1      | <   | U   | 0.005  | 1      | <    | υ         | 0.005  | 1      | <        | U    | 0.005 | 1      | ¢      | U  | 0.005          | 1      | <    | U        | 0.005         | 1      | <           | U         |
| VOLATILES        | lert-BUTYLBENZENE              |                  | 0.00506 1  | U       |          |        |     | -   |        |        |      |           |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | Tetrachloroethene              |                  | 0.00506 1  | U       | 0.005    | 1      | <   | Ų   | 0.005  | 1      | <    | U         | 0.005  | 1      | <        | U    | 0.005 | i      | <      | U  | 0.005          | 1      | <    | Ų        | 0.005         | 1      | <           | U         |
| VOI ATILES       | Toluene                        |                  | 0.00506 1  | Ū       | 0.005    | 1      | ~   | Ŭ   | 0.005  | 1      | <    | Ú         | 0.005  | 1      | <        | υ    | 3.005 | 1      | <      | U  | 0.005          | . 1    | <    | U        | 0.005         | 1      | ۲           | U         |
| VOLATILES        | trans-1.2-Dichloroethene       |                  | 0.00506    | Ū       | 21444    |        |     | 2   |        |        |      | -         |        |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |
| VOLATILES        | trans-1.3-Dichlomoronene       |                  | 0.00506 1  | ũ       | 0.005    | 1      | <   | U   | 0.005  | í      | <    | U         | 0.005  | 1      | <        | U    | 0.005 | 1      | <      | U  | 0.005          | 1      | <    | U        | 0.005         | 1      | <           | U         |
| I YEALIYEEV      | nana, na anananah ahana        | 1                | 0.00000    | -       |          |        | -   | -   |        | -      |      | -         | *****  |        |          |      |       |        |        |    |                |        |      |          |               |        |             |           |

Table 3-90 Concentrations of Chemicals in Soil Samples Associated with Sump 090

Data Evaluation Report



Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

 Table 3-90

 Concentrations of Chemicals in Soil Samples Associated with Sump 090

| [SUMP] = SUMP090 |                           |                  |                  |                  |                  |                  |                  |                  |                  |
|------------------|---------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                           | 35SUMP090-SB01   | 35SUMP090-SB01   | LH-DL90-01       | LH-DL90-02       | LH-S90-01        | LH-S90-01        | LH-S90-02        | LH-590-02        |
| SAMPLE_NO        |                           | SUMP090-SB-01-01 | SUMP090-SB-01-02 | LH-DL90-01       | LH-DL90-02       | LH-590-01_1      | LH-S90-01_2      | LH-S90-02_1      | LH-S90-02_2      |
| SAMPLE_DATE      |                           | 9/18/2006        | 9/18/2006        | 7/21/1993        | 7/21/1993        | 7/21/1993        | 7/21/1993        | 7/21/1993        | 7/21/1993        |
| DEPTH            |                           | 0 - 0 Ft         | 0 - 0 Ft         | 2 - 4 Ft         | 2 - 4 Ft         | .5 - 1.5 Ft      | 8 - 10 Ft        | .5 - 2 Ft        | 8 - 10 Ft        |
| SAMPLE_PURPOSE   |                           | REG              | RÉG              | REG              | REG              | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg) | Result DIL LO VQ | Result DIL LO VQ | Result DIL LO VO | Result DIL LQ VQ | Aesult DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO |
| VOLATILES        | Trichloroethene           |                  | 0.0143 1         | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Trichlorofluoromethane    |                  | 0.0101 1 U       |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Vinyl acetate             |                  | 0.0101 1 U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 i < U       | 0.05 1 < U       |
| VOLATILES        | Vinyl chloride            |                  | 0,0101 1 U       | 0.01 1 < U       | .0.01 1 < U      | - 0.01 1 < U     | 0.01 1 < U       | 0.01 1 < U       | 0.01 t < U       |
| VOLATILES        | Xylenes, Total            |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
|                  |                           | ·····            |                  |                  |                  |                  |                  |                  |                  |

Footnotes are shown on cover page to Tables Section,

Table 3-91 Concentrations of Chemicals in Soil Samples Associated with Sump 091

| [SUMP] = SUMP091<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE<br>Test Group<br>EVEN COSUMES  | Parameter (Units ≃ mg/kg)<br>1.3 5 Trinitmbergane   | 35SUMP091-S801<br>35-SMP091-S801-01<br>9/21/2006<br>0.5-0.5 Ft<br>REG<br>Result DiL LQ VQ                     | 3555UMP091-5801<br>35-5MP091-5801-02<br>9/21/2006<br>6 - 6 F1<br>REG<br>Result DIL LQ VQ                     | 35SUMP092-SB01<br>35-SMP92-SB01-02<br>9/19/2006<br>7.5 - 7.5 Ft<br>REG<br>Result DIL LQ VQ            | LH-DL91<br>LH-DL91<br>7/23/1993<br>2.5-3 Ft<br>REG<br>Result DIL LQ VQ   | LH-DL92-01<br>LH-DL92-01<br>7/23/1993<br>2.5 - 3 Ft<br>REG<br>Result Dil. 1,Q VQ   | LHS-3-26<br>LHS-3-26<br>1/11/1995<br>0 - 0.5 Ft<br>REG<br>Result DIL LQ VQ   | LH-S91-01<br>LH-S91-01_1<br>7/23/1993<br>0.5 - 1 Ft<br>REG<br>Result DIL LQ VQ                               | LH-S91-01<br>LH-S91-01_2<br>7/23/1993<br>5 - 6.5 Ft<br>REG<br>Result DIL LQ VQ   | LH-S91-01<br>LH-S91-01_3<br>7/23/1993<br>10.4 - 11 Ft<br>REG<br>Result DIL LQ VQ   | LH-S91-02<br>LH-S91-02 QC<br>7/24/1993<br>5.5 - 8 F1<br>FD<br>Result D4, LQ VQ  | LH-S91-02<br>LH-S91-02_1<br>7/24/1993<br>0.5 - 1 Ft<br>REG<br>Result DIL LQ VQ          | LH-S91-02<br>LH-S91-02_2<br>7/24/1993<br>5.5 - 8 Ft<br>REG<br>Result DIL LO VO  |
|--|---|---|--|---|--|--|--|--|--|--|---|---|---|
| EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES   | 1,3-Dinitrobenzene<br>2,4,6-Trinitrotoluene<br>2,4-Dinitrotoluene<br>2,6-Dinitrotoluene<br>4-Amino-2,6-dinitrotoluene<br>HMX<br>m-Nitrotoluene<br>Nitrobenzene  |   |  | ·   | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U   | 0.22 1 < U<br>0.22 1 < U<br>0.22 1 < U<br>0.22 1 < U<br>0.24 1 < U<br>0.46 1 < U<br>2 1 < U<br>0.93 1 < U<br>0.24 1 < U  | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>0.33 1 < U  |
| EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS   | o-Nitrotoluene<br>p-Nitrotoluene<br>RDX<br>Tetryi<br>Aluminum<br>Antimony<br>Arsenic<br>Banium  | 11900 1<br>0.115 1 U UJL<br>2.09 1<br>68.9 1 JH   | 17800 1<br>0.119 % U UJL<br>1.35 1<br>99.1 1 JH  | 8320 1<br>0.0839 1 J J<br>0.202 1 J J<br>116 1  | 6890 1<br>3 1 < U<br>1 1 < U<br>113 1  | 9850 1<br>3 1 < U<br>1 t < U<br>76.8 1   | 0.93 1 < U<br>2.8 1 < U<br>1 1 < U<br>0.69 1 < U<br>19100 1<br>11.6 1 < UJ<br>4 1 J<br>90 1  | 14400 1<br>3 1 < U<br>2 1<br>83.6 1  | 21100 1<br>3 1 < U<br>1 1 < U<br>83.7 1  | 4660 1<br>3 1 < U<br>1 1 < U<br>64.2 1   | 15000 1 < U<br>3 1 < U<br>2.7 1<br>88.6 1   | 8210 1 < U<br>3 1 < U<br>2.5 1<br>76.4 1  | 13300 1 < U<br>3 1 < U<br>2.5 1<br>85.6 1   |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS   | Berymun<br>Cadrium<br>Calcium<br>Chromium<br>Cobalt<br>Copper<br>Iron<br>Lead<br>Magnesium<br>Manganese   | 0.725 1<br>0.0913 1 J J<br>1980 1<br>17.7 1 JH<br>6.03 1<br>4.15 1<br>19200 1 J<br>7.68 1<br>563 1<br>143 1 J | 0.349 1<br>0.122 1 J J<br>703 1<br>14.5 1 JH<br>13.3 1<br>4.83 1<br>16400 1 J<br>15.7 1<br>1290 1<br>244 1 J | 0.527 1<br>0.101 1 J J<br>479 1<br>7.03 1<br>7.67 1<br>3.05 1<br>7500 1<br>3.33 1<br>1050 1<br>28.9 1 | 1 1 < U<br>710 1<br>19.5 1<br>11.6 1<br>2.6 1<br>12600 1<br>7.6 1<br>386 1<br>577 1  | 1     1     <     U       475     1       14.8     1       7.7     1       3.1     1       8920     1       4.7     1       455     1       256     1  | 1.2     1     <     U       1800     1       20.7     1     J       11.9     1       9.6     1       21600     1       12.8     1       1120     1       329     1 | 1 1 < U<br>2300 1<br>16.6 1<br>7.5 1<br>7.4 1<br>16600 1<br>6.6 1<br>1350 1<br>135 1                         | 1     1     <     U       944     1       18.2     1       7.1     1       5.7     1       15400     1       3.9     1       1450     1       82.7     1 | 1     1     <     U       481     1       10     1       8.6     1       2.5     1       3650     1       2.8     1       700     1       12.4     1 | 1     1     <     U       885     1       19.3     1       10     1       7.5     1       16000     1     <       0     7.7     1       1730     1       29.9     1 | 1 1 < U<br>2330 1<br>13.9 1<br>6.5 1<br>6.3 1<br>15300 1 < U<br>8.8 1<br>947 1<br>113 1 | 1     1     <     U       1020     1       18.8     1       9.7     1       8.9     1       17400     1     <       8.7     1       1550     1       26.8     1 |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS   | Mercury<br>Nickel<br>Potassium<br>Selenium<br>Silver<br>Sodium<br>Strontium<br>Thaliium<br>Vanadium   | 0.0223 1 J J<br>6.53 1 JH<br>366 1 JH<br>0.289 1<br>1.64 1 U U<br>30 1<br>0.154 1<br>34.8 1 JH                | 0.0278 1 J J<br>7.33 1 JH<br>521 1 JH<br>0.124 1 J J<br>1.8 1 U U<br>115 1<br>0.0796 1<br>21.3 i JH          | 0.283 1 U U<br>8.37 1<br>281 1<br>0.235 1 U U<br>1.73 1 U U<br>230 1<br>0.0492 1<br>8.65 1            | 0.1 1 < U<br>439 1<br>1 1 < U<br>1 1 < U<br>1.1 < U<br>1.8 1   | 0.1 1 < U<br>489 1<br>1 1 < U<br>1 1 < U<br>7.8 1  | 0.12 1 < U<br>857 1<br>0.51 1 J<br>1.2 1 < U<br>17.7 1<br>58 1 < U   | 0.1 1 < U<br>902 1<br>1 1 < U<br>1 1 < U<br>25.2 1   | 0.1 1 < U<br>859 1<br>1 1 < U<br>1 1 < U<br>24.4 1   | 0.1 1 < U<br>306 1<br>1 1 < U<br>1 1 < U<br>15.8 1   | 0.1 1 < U<br>870 1<br>1 1 < U<br>1 1 < U<br>21.8 1  | 0.1 1 < U<br>570 1<br>1 1 < U<br>1 1 < U<br>19.4 1                                      | 0.1 1 < U<br>700 1<br>1 1 < U<br>1 1 < U<br>21.8 1  |
| METALS<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES        | Zinc<br>1,2,4-Trichlorobenzene<br>1,2-Dichlorobenzene<br>1,3-Dichlorobenzene<br>1,4-Dichlorobenzene<br>2,4,5-Trichlorophenol<br>2,4,6-Trichlorophenol<br>2,4-Dintethylphenol<br>2,4-Dintethylphenol<br>2,4-Dintethylphenol<br>2,4-Dintethylphenol | 16.9 1 JH   | 24.8 T JH  | 18.9 1  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   |  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$                                    | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$  |
| Semivolatiles<br>Semivolatiles<br>Semivolatiles<br>Semivolatiles<br>Semivolatiles<br>Semivolatiles<br>Semivolatiles<br>Semivolatiles<br>Semivolatiles<br>Semivolatiles | 2.4-Dautrotoluene<br>2.6-Dinitrotoluene<br>2.Chioronaphthalene<br>2.Chiorophenol<br>2.Methylnaphthalene<br>2.Methylphenol<br>2.Nitrophenol<br>3.3-Dichlorobenzidine<br>3Nitroaniline  |   | · .  |   | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.65 1 < U<br>1.65 1 < U | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 t < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 t < U<br>0.33 1 < U<br>0.65 1 < U<br>1.65 1 < U | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | 0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.66 1 < U<br>1.65 1 < U<br>1.65 1 < U | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | 0.33 1 < U<br>0.33 t < U<br>0.33 t < U<br>0.33 t < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.65 1 < U<br>1.65 1 < U<br>1.65 1 < U             | $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$                                    | 0.33 1 < U<br>0.33 t < U<br>0.33 t < U<br>0.33 t < U<br>1.65 t < U<br>0.65 t < U<br>1.65 t < U<br>1.65 t < U  |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES | 4.6-Dinitro-2-methylphenol<br>4-Bromophenyl phenyl ether<br>4-Chloro-3-methylphenol<br>4-Chloroanišme<br>4-Chlorophenyl phenyl ether<br>4-Methylphenol<br>4-Nitroanišme<br>4-Nitrophenol<br>Acenaphthene<br>Acenaphthylene                        |   | ۔<br>•<br>• • • •  | •<br>•<br>•<br>•  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   |  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$   | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$                                    | $\begin{array}{cccccccccccccccccccccccccccccccccccc$  |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Anny Ammunition Plant, Kamack, Texas Shaw Environmental, Inc.

Table 3-91 Concentrations of Chemicals in Soil Samples Associated with Sump 091

| [SUMP] = SUMP091               |  | 000111-0001 0001                    | OF CLIMPING CO.                     |                                    |                    |                  | 11/0 0.00        | 141 004 5-               | 111 004 01                | 151 004 07             | (1) 004 00                | 111 004 00               | 111 001 00               |
|--------------------------------|--|-------------------------------------|-------------------------------------|------------------------------------|--------------------|------------------|------------------|--------------------------|---------------------------|------------------------|---------------------------|--------------------------|--------------------------|
| LOCATION _CODE<br>SAMPLE NO    |  | 35SUMP091-SB01<br>35-SMP091-SB01-01 | 35SUMP093-SB01<br>35-SMP091-SR01-02 | 35SUMP092-S801<br>35-SMP92-S801-02 | EH-DE91<br>EH-DE91 | 18-0192-01       | LHS-3-26         | LH-591-01<br>1H-591-01 1 | LH-S91-01<br>1 H-S91-01 2 | 1H-S91-01 3            | LH-591-02<br>LH-591-02 DC | LH-S91-02<br>LH-S91-02 1 | LH-S91-02<br>1H-S91-02 2 |
| SAMPLE DATE                    |  | 9/21/2006                           | 9/21/2006                           | 9/19/2006                          | 7/23/1993          | 7/23/1993        | 1/11/1995        | 7/23/1993                | 7/23/1993                 | 7/23/1993              | 7/24/1993                 | 7/24/1993                | 7/24/1993                |
| depth -                        |  | 0.5 - 0.5 Ft                        | 6-6Ft                               | 7.5 - 7.5 Ft                       | 25-3Ft             | 2.5-3 ft         | 0-0.5 Ft         | 0.5 - 1 Ft               | 5 - 6.5 Ft                | 10.4 - 11 Ft           | 5.5 - 8 Ft                | 0.5 - 1 FL               | 5.5 - 8 Ft               |
| SAMPLE_PURPOSE                 |  | REG                                 | REG                                 | REG                                | REG                | AEG              | REG              | REG                      | REG                       | REG                    | FD                        | REG                      | REG                      |
| Test Group                     | Parameter (Units = mg/kg)                      | Result DIL LQ VQ                    | Result DIL LQ VQ                    | Result DIL LQ VQ                   | Result Dil. LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ | Result DII. LQ VQ        | Result DIL LQ VO          | Result DIL LO VO       | Result DIL LQ VQ          | Result DIL LQ VQ         | Result DIL LQ VQ         |
| SEMIVOLATILES<br>SEMIVOLATILES | Antitracene<br>Repro/plantitracene             |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < 0       | 0.47 1 < 0       | 0.33 1 < 0               | 0.33 1 < U                | 0.33 1 < 0             | 0.33 1 < 0                | 0.33 1 < 0               | 0.33 1 < 0               |
| SEMIVOLATILES                  | Benzolalovrene                                 |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < 0       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Benzo(b)Ruoranthene                            |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 I < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Benzo(ghi)perylene                             |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 t < U             | 0.33 1 < U                | 0.33 1 < U               | -0.33 t < U              |
| SEMIVOLATILES                  | Benzo(k)fluoranthene                           |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 t < U                | 0.33 t < U             | 0.33 t < U                | 0.33 1 < U               | 0.33 t < U               |
| SEMIVOLATILES                  | Benzoic Acid                                   |                                     |                                     |                                    | 1.65 1 < U         | 1.65 1 < U       | 2.4 1 < U        | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U             | 1.65 1 < 0                | 1.65 1 < U               | 1.65 1 < U               |
| SEMIVOLATILES                  | Benzyl Alconol<br>bis/2-Chloroethoor/Intethane |                                     |                                     |                                    | 0.00 1 < 0         | 0.55 1 < 0       | 0.47 t < 0       | 0.00 1 < 0               | 0.65 1 < 0                | 0.65 1 < 0             | 0.05 1 < 0                | 0.05 1 < 0               | 0.65 1 < 0               |
| SEMIVOLATILES                  | bis{2-Chloroethylether                         |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < U                | 0.33 1 < U               | 0.33 t < U               |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether                    |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 t < U       | 0.33 1 < U               | 0.33 1 < U                | <del>0</del> .33 1 < ⊍ | 0.33 1 < U                | 0.33 1 < U               | 0.33 t < U               |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthalate                     |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 t < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 t < U                | 0.33 1 < U               | 0.33 t < U               |
| SEMIVOLATILES                  | Butyl benzyl phthalate                         |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Chrysene                                       |                                     |                                     |                                    | 0.33 1 < 0         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < 0                | 0.33 1 < 0               | 0.33 1 < 0               |
| SEMINOLATILES                  | Dibenzoluza                                    |                                     |                                     |                                    | 0.33 1 < 11        | 0.33 1 < 1       | 0.47 1 < 1       |                          | 0.33 1 < U                |                        | 0.33 1 < 0                |                          | 0.33 1 < 1               |
| SEMIVOLATILES                  | Diethyl ohthalate                              |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Dimethyl phthalate                             |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | di-n-Butyl phthalate                           |                                     |                                     |                                    | 0.425 1            | 0.363 1          | 0.47 t < U       | 0.716 1                  | 0.33 1 < U                | 0.734 1                | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | di-n-Octyl phthalate                           | 1                                   |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Ruoranthene                                    |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLAHLES<br>SEMIVOLATILES  | Heverbore                                      |                                     |                                     |                                    | 0.33 1 < 0         | 0.33 1 < 0       | 0.47 1 < 1       | 0.33 1 < 1               | 0.33 1 < 1                | 0.33 1 < 1             | 0.33 1 < 1                | 0.33 1 < 0               | 0.33 1 < 11              |
| SEMIVOLATILES                  | Hexachlorobutadiene                            |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene                      |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < ⊎               |
| SEMIVOLATILES                  | Hexachloroethane                               |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 t < U       | 0.33 1 < U               | 0.33 1 < ⊍                | 0.33 1 < U             | 0.33 t < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Indeno(1,2,3-od)pyrene                         |                                     |                                     |                                    | 0.33 t < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | isophorone<br>Nachthalson                      |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < 0       | 0.33 1 < U               | 0.33 1 < 0                | 0.33 1 < U             | -0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 0               |
| SEMBVOLATILES<br>SEMIVOLATILES | Nitrobenzene                                   |                                     |                                     |                                    | 0.33 1 < 0         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < 11              | 0.33 1 < 1                | 0.33 1 < 1             | 0.33 1 < 1                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine                     |                                     |                                     |                                    | 0.33 1 < 0         | 0.33 1 < U       | 0.47 t < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine                         |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES                  | Pentachlorophenol                              |                                     |                                     |                                    | 1.65 1 < U         | 1,65 1 < U       | 2.4 1 < U        | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U             | 1.65 1 < U                | 1.65 1 < U               | 1.65 1 < U               |
| SEMIVOLATILES                  | Phenanthrene                                   |                                     |                                     |                                    | 0.33 1 < U         | 0.33 1 < U       | 0.47 1 < U       | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U             | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U               |
| SEMIVOLATILES<br>SEMIVOLATILES | Prenol   |                                     |                                     |                                    | 0.33 1 < 0         | 0.33 1 < U       | 0.47 1 < 1       | 0.33 1 < 1               | 0.33 1 < 1                | 0.33 1 < 0             | 0.33 1 < 0                | 0.33 1 < 0               | 0.33 1 < 0               |
| VOLATILES                      | 1.1.1.2-Tetrachloroethane                      |                                     | 0.00455 t U U                       | 0.00478 1 U U                      |                    |                  | 0.014 1 < U      |                          | 0.00 1 4 0                |                        |                           |                          |                          |
| VOLATILES                      | 1,1,1-Trichloroethane                          |                                     | 0.00455 1 U U                       | 0.00478 1 U U                      | 0.005 1 < U        | 0.005 1 < U      | 0.007 1 < ∜      | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U            | 0.005 1 < U               | 0.005 1 < U              | 0.005 t < U              |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane                      |                                     | 0.00455 1 U U                       | 0.00478 1 U U                      | 0.005 1 < U        | 0.005 1 < U      | 0.007 1 < U      | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U            | 0.005 1 < U               | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                      | 1,1,2-Trichloroethane                          |                                     | 0.00455 1 U U                       | 0.00478 1 U U                      | 0.005 1 < U        | 0.005 1 < U      | 0.007 1 < U      | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U            | 0.005 1 < U               | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES<br>WOLATILES         | 1,1-Dichloroethane                             |                                     | 0.00455 1 0 0                       | 0.00478 1 U U                      | 0.005 1 < 0        | 0.005 1 < U      | 0.007 1 < 0      | 0.005 1 < 0              | 0.005 1 < 0               | 0.005 1 < 0            | 0.005 1 < 0               | 0.005 1 < 0              | 0.005 1 < 0              |
| VOLATILES                      | 1.1-Dichloropropene                            |                                     | 0.00455 1 1 1                       | 0.00478 1 U U                      | 0.002 1 2 0        | 0.000 / 2 0      | 0.007 1 2 0      | 0.000 1 1 0              | 0.000 1 2 0               | 0.000 1 4 0            | 0.000 1 1 0               | 0.003 7 2 0              | 0.000 1 1 0              |
| VOLATILES                      | 1,2,3-Trichlorobenzene                         |                                     | 0.00455 1 U U                       | 0.00478 1 U U                      |                    |                  |                  |                          |                           |                        |                           |                          |                          |
| VOLATILES                      | 1,2,3-Trichkoropropane                         |                                     | 0.00455 1 U U                       | 0.00478 1 U U                      |                    |                  | 0.014 1 < U      |                          |                           |                        |                           |                          |                          |
| VOLATILES                      | 1,2,4-Trichlorobenzene                         |                                     | 0.00455 1 U U                       | 0.00478 1 U U                      |                    |                  |                  |                          |                           |                        |                           |                          |                          |
| VOLATILES                      | 1,2,4-Trimethylbenzene                         |                                     | 0.00455 1 U U                       | 0.00478 1 U U                      |                    |                  | 0.000 4          |                          |                           |                        |                           |                          |                          |
| VOLADLES<br>VOLATIEES          | 1,2-Dibromo-3-Chioropropane                    |                                     | 0.00455 1 0 0                       | 0.00478 1 U U                      |                    |                  | 0.029 1 < 0      |                          |                           |                        |                           |                          |                          |
| VOLATILES                      | 1,2-Dichlorobenzene                            |                                     | 0.00455 1 1 U                       | 0.00478 1 U U                      |                    |                  |                  |                          |                           |                        |                           |                          |                          |
| VOLATILES                      | 1,2-Dichloroethane                             |                                     | 0.00455 1 U U                       | 0.00478 1 U U                      | 0.005 t < U        | 0.005 1 < U      | 0.007 1 < U      | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U            | 0.005 1 < U               | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                      | 1,2-Dichloroethene                             |                                     |                                     |                                    | 0.005 1 < U        | 0.005 1 < U      | 0.007 1 < U      | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U            | 0.005 1 < U               | 0.005 1 < U              | 0.005 1 < U              |
| VOLATILES                      | 1,2-Dichloropropane                            |                                     | 0.00455 1 U U                       | 0.00478 1 U U                      | 0.005 t < U        | 0.005 1 < U      | 0.007 1 < U      | 0.005 1 < U              | 0.005 1 < U               | 0.005 1 < U            | 0.005 1 < U               | 0.005 1 < U              | 0.005 t < U              |
| VOLATILES                      | 1,2-Dimethylbenzene (o-Xylene)                 |                                     | 0.00455 1 U U                       | 0.00478 1 U U                      |                    |                  |                  |                          |                           |                        |                           |                          |                          |
| VOLATILES<br>VOLATILES         | 1.3.5- mmemybenzene                            |                                     | 0.00455 1 0 0                       | 0.00478 1 0 0                      |                    |                  |                  |                          |                           |                        |                           |                          |                          |
| VOLATILES                      | 1.3-Dichloropropane                            | ļ                                   | 0.00455 1 U U                       | 0.00478 1 U U                      |                    |                  |                  |                          |                           |                        |                           |                          |                          |
| VOLATILES                      | 1,4-Dichlorobenzene                            |                                     | 0.00455 1 U U                       | 0.00478 1 U U                      |                    |                  |                  |                          |                           |                        |                           |                          |                          |
| VOLATILES                      | 2,2-Dichloropropane                            |                                     | 0.00455 1 U U                       | 0.00478 i U U                      |                    |                  |                  |                          |                           |                        |                           |                          |                          |
| VOLATILES                      | 2-Butanone                                     |                                     | 0.00911 1 U U                       | 0.00956 1 U U                      | 0.05 1 < U         | 0.05 1 < U       | 0.014 1 < U      | 0.05 1 < U               | 0.05 1 < U                | 0.05 1 < U             | 0.05 1 < U                | 0.05 1 < U               | 0.05 t < U               |
| VOLATILES                      | 2-Chloroetbyl vinyl ether                      |                                     | 0.00911 1 U U                       | 0.00956 t U U                      | 0.01 1 < U         | 0.01 1 < U       | 0.014 1 < U      | 0.01 1 < U               | 0.01 1 < U                | 0.01 1 < U             | 0.01 1 < U                | 0.01 1 < U               | 0.01 L < U               |
| VOLATILES<br>VOLATILES         | 2-Uniorotoluene                                |                                     | 0.00455 3 U U                       | 0.00478 1 U U                      | 0.05 1 1           | 0.05 t < !!      | 0.014 1 2 11     | 665 1 - 1                | 0.05 1                    | 0.05 1 2 11            | 0.05 1                    | 605 t - Li               | 0.05 1 - 0               |
| VOLATILES                      | 2-Propenal                                     |                                     |                                     | 2.00200 I U U                      | V.U2 I < U         | י געע            | 0.72 1 2 11      | עעטו כ ()                | 0.00 I K U                | 0.00 ÷ < 0             | 0.00 1 < 0                | 0.00 1 4 0               | 0.00 1 < 0               |
| VOLATILES                      | 4-Chlorotoluene                                |                                     | 0.00455 1 U U                       | 0.00478 1 U U                      |                    |                  |                  |                          |                           |                        |                           |                          |                          |
| VOLATILES                      | Acetone  |                                     | 0.0208 1                            | 0.00634 1 J J                      | 0.1 1 < U          | 0.1 1 < U        | 0.014 1 < U      | 0.1 1 < U                | 0.1 1 < U                 | 0.1 1 < U              | 0.1 1 < U                 | 0.1 1 < U                | 0.1 1 ≺ U                |
|                                |  | •                                   |                                     |                                    |                    |                  |                  |                          |                           |                        |                           |                          |                          |

Shaw Environmental, Inc.

( <u>-</u>)

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

-----

Table 3-91 Concentrations of Chemicals in Soil Samples Associated with Sump 091

| [SUMP] = SUMP091 |                                |                   |                   |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  |
|------------------|--------------------------------|-------------------|-------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                                | 35SUMP091-SB01    | 35SUMP091-SB01    | 35SUMP092-SB01   | LH-DL91           | LH-DL92-01       | LHS-3-26         | LH-\$91-01       | LH-S91-01        | LH-\$91-01       | LH-S91-02        | LH-S91-02        | LH-S91-02        |
| SAMPLE_NO        |                                | 35-SMP091-SB01-01 | 35-SMP091-SB01-02 | 35-SMP92-SB01-02 | LH-DL91           | LH-DL92-01       | LHS-3-26         | LH-S91-01_1      | LH-S91-01_2      | LH-\$91-01_3     | LH-S91-02 OC     | LH-S91-02_1      | LH-S91-02_2      |
| SAMPLE_DATE      |                                | 9/21/2006         | 9/21/2006         | 9/19/2006        | 7/23/1993         | 7/23/1993        | 1/11/1995        | 7/23/1993        | 7/23/1993        | 7/23/1993        | 7/24/1993        | 7/24/1993        | 7/24/1993        |
| Depth            |                                | 0.5 ~ 0.5 Ft      | 6 - 6 Ft          | 7.5 - 7.5 Ft     | 2.5 - 3 Ft        | 2.5 - 3 Ft       | 0 - 0.5 Ft       | 0.5 - 1 Ft       | 5 - 6.5 Ft       | 10.4 - 11 Ft     | 5.5 - 8 Ft       | 0.5 - 1 Ft       | 5.5 - 8 Ft       |
| SAMPLE_PURPOSE   |                                | REG               | REG               | REG              | REG               | REG              | REG              | REG              | REG              | REG              | FD               | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LQ VQ  | Result DilL LQ VQ | Result DIL LQ VQ | Result Dil. LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DiL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO |
| VOLATILES        | Acetonitrile                   |                   |                   |                  |                   |                  | 0.14 1 < U       |                  | · · · ·          |                  |                  |                  |                  |
| VOLATILES        | Acrylonitrile                  |                   |                   |                  |                   |                  | 0.14 1 < U       |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Allyl chloride                 |                   |                   |                  |                   |                  | 0.014 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Benzene                        | 1                 | 0.00455 1 U U     | 0.00478 1 U U    | 0.005 1 < U       | 0.005 1 < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromobenzene                   |                   | 0.00455 1 U U     | 0.00478 1 U U    |                   |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Bromochloromethane             |                   | 0.00455 1 U U     | 0.00478 1 U U    |                   |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATH ES        | Bromodichioromethane           |                   | 0.00455 1 U U     | 0.00478 1 U U    | 0.005 t < U       | 0.005 1 < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Binantom                       |                   | 0.00455 1 U U     | 0.00478 1 U U    | 0.005 1 < U       | 0.005 1 < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromomethane                   |                   | 0.00911 1 U U     | 0.00956 1 U U    | 0.01 1 < U        | 0.01 1 < U       | 0.014 1 < U      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATHES         | Carbon disulfide               |                   | 0.00455 1 1 1     | 0.00478 1 U U    | 0.005 1 < U       | 0.005 1 < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Carbon tetrachinide            |                   | 0.00455 1 11 11   | 0.00478 1 U U    | 0.005 1 < 1       | 0.005 1 < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATHES         | Chlorohenzene                  |                   | 0.00455 1 11 11   | 0.00478 1 11 13  | 0.005 1 < 11      | 0.005 1 < 1      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chlorapthono                   |                   | 0.00911 1 10 10   | 0.00056 1 11 11  | 0.01 1 4 11       |                  | 0.014 1 < 11     | 661 1 < U        | 0.01 1 < 1       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Chloroform                     |                   | 0.00511 1 0 0     | 0.00000 1 0 0    |                   | 0.005 1 < 1      | 0.007 1 4 13     | 0.005 1 < 1      | 0.005 1 < 11     | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 8      | 0.005 1 < U      |
| VOLATILES        | Chicocom                       |                   | 0.00011 + 11 12   | 0.004/8 1 0 0    | 0.003 1 ( 0       | 0.000 1 < 0      | 0.00/ 1 < 0      |                  | 0.01 1 4 1       | 0.01 1 < 1       | 0.01 1 < B       | 001 1 < U        | 001 1 < U        |
| VOLATILES        | Chlorotheutane                 |                   | 0.00311 1 0 0     | 0.00300 1 0 0    | 0.01 1 C 0        | 0.01 1 1 0       | 014 1 4 11       | 0.04 5 < 0       | 0.01 1 2 0       |                  |                  |                  |                  |
| VOLATILES        | Choroprene                     |                   |                   | 0.00476 4 14 15  |                   |                  | Q.14 1 C Q       |                  |                  |                  |                  | `                |                  |
| VOLATILES        | cis-1,2-Uichioroethene         |                   | 0.00455 1 0 0     | 0.00478 1 0 0    | 0.000 t           | 0.005 1          | 0.007 1          | 0.005 1          | 0.005 1 / 11     | 0.005 1 / 11     | 0.005 1 < 11     | 0.005 1 - 11     | 0.005 1 < 11     |
| VOLATILES        | cis-1,3-Dichioropropene        |                   | 9.00455 1 0 0     | 0.00478 1 0 0    | 0.005 1 < 0       | 0.005 1 4 0      | 0.007 1 4 1      | 0.005 1 . 1      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 2 8      | 0.005 1 < 11     | 0.005 1 < 11     |
| VOLATILES        | Dibromochloromethane           |                   | 0.00455 1 U U     | 0.00478 1 0 0    | 0.005 1 < 0       | 0.005 1 < 0      | 0.007 1 < 0      | 0.000 1 < 0      |                  |                  | 0.003 1 4 5      |                  | 0.003 1 1 1 0    |
| VOLATILES        | Dibromomethane                 | 1                 | 0.00455 1 U U     | 0.00478 1 U U    |                   |                  | 0.029 1 < 0      |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Dichlorodifluoromethane        |                   | 0.00911 1 0 0     | 0.00956 1 U U    |                   |                  | 0.029 1 < 0      |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Ethyl methaciylate             |                   |                   |                  | · · · · · ·       |                  | 0.029 1 < 0      |                  | 0.005 4 11       | 0.007 1          | 0.000 1          | 0.005 1          | 0.005 1          |
| VOLATILES        | Ethylbenzene                   |                   | 0.00455 1 U U     | 0.00478 1 U U    | 0.005 1 < U       | 0.005 1 < 0      | 0.007 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.000 1 < 0      | 0.005 1 4 0      |
| VOLATILES        | Hexachlorobutadiene            |                   | 0.00455 1 U U     | 0.00478 1 U U    |                   |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | 10DOMETHANE                    | 1                 |                   |                  |                   |                  | 0.014 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES        | ISOBUTYL ALCOHOL               |                   |                   |                  |                   |                  | 2.9 1 < U        |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Isopropylbenzene               |                   | 0.00455 1 U U     | 0.00478 1 U U    |                   |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | m,p-Xylenes                    |                   | 0.00455 1 U U     | 0.00478 1 U U    |                   |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Methacrylonitrile              |                   |                   |                  |                   |                  | 0.029 1 < U      |                  |                  |                  |                  | A 97 4 41        |                  |
| VOLATILES        | Methyl isobutyl ketone         |                   | 0.00911 1 U U     | 0.00956 1 U U    | 0.05 1 < U        | 0.05 1 < U       | 0.014 1 < U      | 0.05 1 < U       | 0.05 1 < 0       | 0.05 1 < U       | 0.05 1 < 0       | 0.05 1 < 0       | 0.05 1 < 0       |
| VOLATILES        | METHYL METHACRYLATE            |                   |                   |                  |                   |                  | 0.029 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Methylene chloride             |                   | 0.00672 1         | 0.00478 1 U U    | 0.005 1 < U       | 0.005 1 < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 ! < 1      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      |
| VOLATILES        | Naphthalene                    |                   | 0.00911 1 U U     | 0.00956 1 U U    |                   |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | n-BUTYLBENZENE                 |                   | 0.00455 1 U U     | 0.00478 1 U U    |                   |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | n-PROPYLBENZENE                |                   | 0.00455 1 U U     | 0.00478 1 U U    |                   |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Pentachloroethane              |                   |                   |                  |                   |                  | 0.029 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES        | p-ISOPROPYLTOLUENE             |                   | 0.00455 1 U U     | 0.00478 1 U U    |                   |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Propionitrile                  |                   |                   |                  |                   |                  | 0.072 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES        | sec-BUTYLBENZENE               |                   | 0.00455 1 U U     | 0.00478 t U U    |                   |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Styrene                        |                   | 0.00455 1 U U     | 0.00478 1 U U    | 0.005 1 < U       | 0.005 1 < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | tert-BUTYLBENZENE              |                   | 0.00455 1 U U     | 0.00478 1 U U    |                   |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Tetrachloroethene              |                   | 0.00455 1 U U     | 0.00478 1 U U    | 0.005 1 < U       | 0.005 t < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < 10     | 0.005 t < U      |
| VOLATILES        | Toluene                        |                   | 0.00455 1 U U     | 0.00478 1 U U    | 0.005 1 < U       | 0.005 1 < U      | 0.007 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 t < U      |
| VOLATILES        | trans-1.2-Dichloroethene       |                   | 0.00455 1 U U     | 0.00478 1 U U    |                   |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES        | trans-1.3-Dichloropropene      |                   | 0.00455 1 U U     | 0.00478 1 U U    | 0.005 1 < U       | 0.005 1 < U      | 0.007 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 t < U      |
| VOLATILES        | trans-1 4-Dichloro-2-butene    |                   | ••••              |                  | ·····             |                  | 0.029 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES        | Trichbroethene                 |                   | 0.00455 1 11 11   | 0.00478 1 11     | 0.005 1 < 17      | 0.005 1 < 17     | 0.007 1 < U      | 0.005 1 < 1/     | 0.005 t < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 f < U      | 0.005 1 < U      |
| VOLATILES        | TrichlomBuommethane            |                   | 0.00911 1 11 11   | 0.00956 1 12 11  |                   |                  | 0.014 1 < []     |                  |                  |                  | -                |                  |                  |
| VOLATILES        | Vind acatata                   |                   | 0.00011 1 11 111  | 0.00956 1 13 11  | 0.05 1 < 11       | 0.05 1 < 11      | 0.014 1 < 1      | 005 1 < U        | 0.05 1 < 11      | 0.05 t < 1≀      | 0.05 1 < ย       | 0.05 t < ∪       | 0.05 1 < U       |
|                  | Vinyl ablarida                 | [                 | 0.00011 1 0 00    | 0.00056 1 11 11  |                   | 0.01 1 c 11      |                  |                  | 001 1 < 1        | 0.01 1 < 11      | 0.01 1 < U       | 0.01 1 < 11      | 0.01 1 < U       |
| VOLATILES        | vinyi Chionae<br>Volenen Tetel |                   | 0.00014 1 0 0     |                  |                   | 0.01 1 2 0       | 0.007 1 2 11     | 0.005 1 - 11     | 0.005 1 2 1      | 0.005 1 2 1      | 0.005 1 2 11     | 0.005 1 < 11     | 0.005 1 < 11     |
| VULAHLES         | Aylenes, total                 |                   |                   |                  | 0.000 1 4 0       | 0.003 1 × 0      | 0.001 1 K U      | 0.000 1 1 0      | 0.000 1 1 0      | 0.000 1 3 0      |                  |                  |                  |

Shaw Environmental, Inc.

Table 3-91 Concentrations of Chemicals in Soil Samples Associated with Sump 091

| (SUMP) = SUMP091 |                             |        |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          | _        |         |          |          |       |          |          |        |
|------------------|-----------------------------|--------|-----------|------|---------|--------|---------|------------|--------|----------|--------|-----------------|----------|-----------|----------|------------|-------------|----------|----------|---------|----------|----------|-------|----------|----------|--------|
| LOCATION_CODE    |                             | ប      | H-S91-0   | 2    |         | LH-S   | 92-01   |            | LH     | \$92-01  |        | EH              | -S92-01  |           | U        | I-S92-01   |             | LH-      | -S92-02  |         | LH-S     | .92-02   |       | UHS      | 92-02    |        |
| SAMPLE_NO        |                             | LH     | -591-02   | _3   |         | LH-S%  | 2-01 QC |            | 11-5   | 592-01_1 |        | LH-S            | 592-01_  | 2         | 114      | -\$92-01_3 | 3           | LH-S     | 92-02_1  |         | CH-St    | 2-02_2   |       | LH-S9    | 2-02_3   |        |
| SAMPLE DATE      |                             | 7      | /24/199   | 3    |         | 7/23   | /1993   |            | 7/2    | 3/1993   |        | 7/2             | 23/1993  |           | 7        | /23/1993   |             | 7/2      | 3/1993   |         | 7/23     | /1993    |       | 7/23     | /1993    |        |
| DEPTH            |                             | 1      | 10 - 11 F | t    |         | 0.5    | - 1 Ft  |            | 0.     | 5-1 Ft   |        | 6.5             | - 7.5 Ft | t         | 10.      | 5 - 11.5 F | t           | 0.5      | 5 - 1 Ft |         | 6.5      | 7.5 Ft   |       | 10.5 -   | 11.5 Ft  |        |
| SAMPLE PURPOSE   |                             |        | REG       |      |         | F      | Ð       |            |        | REG      |        |                 | reg      |           |          | REG        |             | 1        | REG      |         | F        | EG       |       | R        | EG       |        |
| Test Group       | Parameter (I Inits = mo/ko) | Result | DI        | 10 V | 0 Be    | sutt D | IL LO   | VQ         | Result | DIL LO   | VQ     | Result          | DILL     | a va      | ) Result | DIL U      | a va        | Result 1 | DIL LQ   | VQ      | Result D | IL LO    | ٧Q    | Result D | L 10     | . VQ   |
| EVELOSIVES       | 135 Tricitmboozena          | 1      |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| EXFLOSIVES       |                             |        |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| EXPLOSIVES       |                             |        |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| EXPLOSIVES       | 2,4,5-1mmrotoluene          |        |           |      |         |        |         |            | 0.00   |          |        | 0.00            |          |           | 0.99     | 1 .        |             | c é n    | 1 /      |         | 0.33     |          | 11    | 033 -    |          | н      |
| EXPLOSIVES       | 2,4-Dinitrololuene          | 0.33   | 1         | < 1  | 0 1     | 1.33   | < <     | 0          | 0.33   | I <      | 0      | 0.33            | 1        | < 0       | 0.55     |            |             | 0.35     |          |         | 0.00     |          | ň     | 0.00     |          | т<br>П |
| EXPLOSIVES       | 2,6-Dinitrotoluene          | 0.33   | 1         | < 1  | 0 (     | 0.33 1 | i <     | U          | 0.33   | 1 <      | U      | 0.33            | 1        | < 0       | 0.33     | 1 4        | : 0         | 0.33     | 1 <      | 0       | 0.55     | ; <      | U     | 0.35     | 1 1      | 0      |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene  |        |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| EXPLOSIVES       | HMX                         |        |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| EXPLOSIVES       | m-Nitrotoluene              |        |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| EXPLOSIVES       | Nitrobenzene                | 1      |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| EXPLOSIVES       | o-Nitrotoluene              |        |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| EXPLOSIVES       | n-Nitrotoluene              | ł      |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
|                  | por                         |        |           |      |         |        |         |            |        | ~        |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| EXPLUSIVES       |                             | 1      |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| EXPLOSIVES       | tenyi                       |        |           |      |         |        |         |            | 40000  |          |        | *****           |          |           | c000     |            |             | 16000    |          |         | 14400    |          |       | 4500     | 1        |        |
| METALS           | Aluminum                    | 4/00   | 1         | <    | U 13    | 300    | 1       |            | 10600  | 1        |        | 10/00           | 1        |           | 0300     |            |             | \$5000   | •        |         | 00000    | •        | r4    | 2        |          | FI.    |
| METALS           | Antimony                    | 3      | 1         | < 1  | U       | 3      | i <     | U          | 3      | 1 <      | U      | 3               | 1        | < U       | 3        |            | ς U         | 3        | · <      | U       | 3        | , <<br>1 | G     | 3        | . <<br>1 |        |
| METALS           | Arsenic                     | 2.3    | 1         |      |         | 2.1    | 1       |            | 2.6    | 1        |        | 1.2             | 1        |           | 2.3      | T          |             | 2.5      | 1        |         | 2        | 1        |       | 1        | . <      | U      |
| METALS           | Barium                      | 45     | 1         |      |         | 115    | 1       |            | 59.2   | 1        |        | 170             | 1        |           | 99.2     | 1          |             | 96.2     | 1        |         | 102      | 1        |       | 82.4     | 1        |        |
| METALS           | Beryllium                   | 1      |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| METALS           | Cadmium                     | 1 1    | 1         | <    | U       | 1 1    | 1 <     | U          | 1      | 1 <      | U      | 1               | ŧ        | < U       | 1        | 1.         | ើរ          | 1        | 1 <      | U       | 1        | 1 <      | U     | 1        | t <      | U      |
| METALS           | Calcium                     | 456    | 1         |      | 1       | 940 1  | 1       |            | 2120   | 1        |        | 626             | 1        |           | 673      | 1          |             | 5130     | 1        |         | 609      | 1        |       | 233      | t        |        |
| METALS           | Chromium                    | 01     | 1         |      |         | 171    | t       |            | 15.1   | 1        |        | 13.1            | 1        |           | 11.4     | 1          |             | 18.9     | 1        |         | 14.3     | 1        |       | 16.5     | t        |        |
|                  | Coholt                      | 70     |           |      |         | 92     | 1       |            | 66     | 1        |        | 82              | +        |           | 81       | 1          |             | 6.9      | 1        |         | 9.3      | 1        |       | 6        | 1        |        |
| NETALO           | Couas                       | 1 1.0  | :         |      |         | 5.2    |         |            | 5.0    |          |        | 4 Q             | •        |           | 75       | 1          |             | 6        | 1        |         | 57       | 1        |       | 7.1      | 1        |        |
| METALS           | Copper                      | 4      | 1         |      |         | 0.7    |         |            | 2.0    |          |        | 4.3             | 4        |           | 10000    |            |             | 1000     |          |         | 11000    |          |       | 15600    | 1        |        |
| METALS           | liou                        | 9000   | 1         | <    | U 14    | 000    | 2       |            | 13400  | 1        |        | 11700           | 1        |           | 13000    |            |             | 10200    |          |         | 1000     | •        |       | 10000    | 4        |        |
| METALS           | Lead                        | 9.6    | 1         |      |         | 6.7    | 1       |            | . 7.4  | 1        |        | 5.3             | 1        |           | 5.9      | 1          |             | 8.9      | 1        |         | 10.3     | 1        |       | . 3      |          |        |
| METALS           | Magnesium                   | 743    | 1         |      | 1       | 280    | 1       |            | 922    | 1        |        | 1420            | 1        |           | 1170     | 1          |             | 923      | 1        |         | 1610     | 1        |       | 504      | 1        |        |
| METALS           | Manganese                   | 20.3   | 1         |      |         | 104    | 1       |            | 117    | 1        |        | 33.7            | 1        |           | 52       | 1          |             | 223      | 1        |         | 58.3     | 1        |       | 51.9     | 1        |        |
| METALS           | Mercury                     | 0.1    | 1         | <    | ប       | 0.1    | 1 <     | U          | 0.1    | t <      | U      | 0.1             | 1        | < U       | 0.1      | 1 -        | < U         | 0.1      | 1 <      | U       | 0.1      | 1 <      | ប     | 0.1      | 1 <      | U      |
| METALS           | Nickel                      |        |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| METALS           | Polassium                   | 398    | 1         |      |         | 769    | t       |            | 546    | 1        |        | 556             | t        |           | 472      | 1          |             | 719      | \$       |         | 791      | 1.       |       | 282      | 1        |        |
| METALS           | Solonium                    | 1      | 1         | ٤    | 11      | 1      | 1 <     | ป          | 1      | 1 <      | υ      | 1               | 1        | < U       | 1        | 1 .        | c لا        | 1        | 1 <      | U       | 1        | 1 <      | U     | 1        | 1 <      | U      |
| METALO           | Chine                       |        |           | 2    | •<br>11 | t ·    | t 2     | 11         | •      | 1 2      | n      | 1               | ŧ        | < 11      | 1        | 1          | < 11        | 1        | 1 <      | U       | 1        | 1 <      | U     | 1        | 1 <      | U      |
| METALO           | Silver                      | 1 '    | ·         | `    | U       | •      |         | v          | '      | , ,      | Ŭ      |                 | •        |           |          | •          |             |          |          |         |          |          |       |          |          |        |
| METALS           | Sodum                       | 1      |           |      |         | oor .  |         |            | 00.0   |          |        | 00 <del>7</del> |          |           | 11.0     |            |             | 10.0     | 1        |         | 25.1     | t        |       | 91       | 1        |        |
| METALS           | Strontium                   | 12.2   | 1         |      |         | 22.5   | 1       |            | 20.3   | 1        |        | 23.1            | 1        |           | 21.0     |            |             | 19.9     | 1        |         | 20.1     |          |       | 3.1      |          |        |
| METALS           | Thallium                    | 1      |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| METALS           | Vanadium                    |        |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| METALS           | Zinc                        | 20.3   | 1         |      |         | 34.1   | 1       |            | 33.4   | 1        |        | 36.9            | 1        |           | 34.8     | 1          |             | 38.3     | 1        |         | 38.1     | 1        |       | 27.7     | 1        |        |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene      | 0.33   | 1         | <    | U       | 0.33   | 1 <     | U          | 0.33   | 1 <      | U      | 0.33            | 1        | < U       | 0.33     | 1 -        | < U         | 0.33     | 1 <      | U       | 0.33     | 1 <      | U     | 0.33     | 1 <      | U      |
| SEMIVOLATILES    | 1,2-Dichlorobenzene         | 0.33   | 1         | <    | U       | 0.33   | 1 <     | U          | 0.33   | 1 <      | U      | 0.33            | 1        | < U       | 0.33     | 1          | < U         | 0.33     | 1 <      | U       | 0.33     | 1 <      | ប     | 0.33     | 1 <      | U      |
| SEMIVOLATILES    | 1.3-Dichlorobenzene         | 0.33   | 1         | <    | U       | 0.33   | 1 <     | U          | 0.33   | 1 <      | υ      | 0.33            | 1        | < 1J      | 0.33     | 1          | < 1         | 0.33     | 1 <      | U       | 0.33     | 1 <      | ប     | 0.33     | 1 <      | U      |
| SEMIVOLATILES    | 1 4-Dicbiornbenzene         | 0.33   | 1         | ٢.   | Ð       | 0.33   | 1 <     | U          | 0.33   | 1 <      | U      | 0.33            | 1        | < U       | 0.33     | 1          | < U         | 0.33     | 1 <      | IJ      | 0.33     | 1 <      | ប     | 0.33     | 1 <      | ŧ      |
| SEMBUCH ATHES    | 245 Techlomotional          | 1.65   | 1         | 2    | -       | 1 65   | 1 c     | Ū          | 1.65   | 1 <      | U      | 1.65            | 1        | < 1       | 1.65     | 1 .        | < 1)        | 1.65     | 1 <      | U       | 1.65     | 1 <      | U     | 1.65     | 1 <      | U      |
| COMMOLATILES     |                             | 0.00   |           | )    | с<br>гі | 0.33   | 1       | u<br>U     | 0.33   | 1 2      | 11     | 0.33            | 1        | 2 11      | 0.33     | 1          | < 1)        | 0.33     | 1 <      | IJ      | 0.33     | 1 <      | U     | 0.33     | 1 <      | U      |
| SEMIVOLATRES     | 2,4,0- FIGHIGIOLITERIO      | 0.00   |           |      |         | 0.00   |         |            | 0.00   |          | 1      | 0.00            |          | 2 11      | 0.00     | 1          | , HI        | 0.33     | 1 2      |         | 0.33     | 1 6      | ų.    | 0.33     | 1 <      | U      |
| SEMIVOLATILES    | 2,4-Dichlorophenor          | 0.33   |           | <    | 0       | 0.33   | . <     |            | 0.00   | , (      |        | 0.33            |          | < U       | 0.55     |            |             | 0.00     |          | 21      | 0.00     | 1 .      | ŭ     | 0.33     | 1        |        |
| SEMIVOLATILES    | 2,4-Dimethylphenol          | 0.33   | ĩ         | <    | U       | 0.33   | 1 <     | U          | 0.33   | 1 <      | 0      | 0.33            | :        | < 0       | 0.55     |            | < U         | 0.00     |          |         | 4.00     |          | й     | 1.05     |          |        |
| SEMIVOLATILES    | 2.4-Dintrophenol            | 1.65   | 1         | <    | U       | 1.65   | 1 <     | ับ         | 1.65   | 1 <      | 0      | 1.65            | 3        | < 0       | 1.65     | 1          | < U         | 1.05     | 1 <      | U       | 1.05     | 1 4      | 0     | 1.03     |          | v      |
| SEMIVOLATILES    | 2,4-Dinitrotoluene          |        |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |
| SEMIVOLATILES    | 2,6-Dinitrotoluene          |        |           |      |         |        |         |            |        |          |        |                 |          |           |          |            |             |          |          |         |          |          | -     |          |          |        |
| SEMIVOLATILES    | 2-Chloronaphthalene         | 0.33   | 1         | <    | U       | 0.33   | 1 <     | ប          | 0.33   | 1 <      | U      | 0.33            | 1        | < U       | 0.33     | 1          | < U         | 0.33     | 1 <      | U       | 0.33     | 1 <      | 0     | 0.33     | 1 <      | U      |
| SEMIVOLATILES    | 2-Chlorophenol              | 0.33   | 1         | <    | U       | 0.33   | 1 <     | U          | 0.33   | 1 <      | U      | 0.33            | 1        | < U       | 0.33     | t          | < U         | 0.33     | t <      | U       | 0.33     | 1 <      | ป     | 0.33     | 1 <      | : U    |
| SEMIVOLATILES    | 2-Methvinaphihalene         | 0.33   | 1         | <    | U       | 0.33   | 1 <     | U          | 0.33   | 1 <      | U      | 0.33            | 1        | < U       | 0.33     | t          | < Ü         | 0.33     | 1 <      | U       | 0.33     | 1 <      | ប     | 0.33     | 1 <      | U U    |
| SEMIVOLATILES    | 2-Methylobenn!              | 0.33   | 1         | ~    | Ū.      | 0.33   | 1 <     | ប          | 0.33   | 1 <      | U      | 0.33            | 1        | < U       | 0.33     | 1          | < U         | 0.33     | 1 <      | U       | 0.33     | 1 <      | U     | 0.33     | 1 <      | U      |
| PENNOLATILES     | 2 Nitmanilina               | 1 65   |           | 2    | ы       | 1.65   | 1 2     | - 11       | 1.65   | 1 6      | 13     | 1.65            | 1        | c 11      | 1.65     | :          | < 12        | 1.65     | 1 <      | U       | 1.65     | 1 <      | U     | 1.65     | 1 <      | U      |
| OF MILEO         |                             | 1.00   |           | )    |         | 0.33   | 1       | т <b>і</b> | 0.33   | 1        | Ū.     | 0.33            | 1        | - 11      | 0.33     | 1          | < 11        | 0.33     | 1 <      | U       | 0.33     | 1 <      | U     | 0.33     | 1 <      | U      |
| SEMIVOLATILES    | 2-Naropatenoi               | 0.33   |           |      | 0       | 0.05   |         |            | 0.00   |          |        | 0.00            |          | - 11      | 0.00     | 1          |             | 0.65     | 1 2      | н       | 0.65     | 1 2      | 11    | 0.65     | 1 4      | . 1)   |
| SEMIVOLATILES    | 3,3-Dichlorobenzidine       | 0.65   | 1         | <    | 0       | 0.05   | ; <     |            | 0.00   | -1 C     |        | 0.05            |          | < U<br>,, |          |            |             | 1.05     |          | й       | 1.65     | 1        | Li I  | 1.65     | 1        | - 13   |
| SEMIVOLATILES    | 3-Nitroaniline              | 1.65   | 1         | <    | U       | 1.65   | 1 <     | U          | 1.65   | 1 <      | 0      | 1.65            | 1        | < 0       | 1.65     | 1          | < U         | 1.00     | ; <      | 0<br>12 | 1.00     | 1 .      |       | 1.00     | 1        |        |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol  | 1.65   | - 1       | <    | ป       | 1.65   | 1 <     | U          | 1.65   | 1 <      | U      | 1.65            | 1        | < U       | 1.65     | 1          | < U         | 1.65     | 1 <      | U       | 1.65     | 1 <<br>4 | 0     | 1.00     | . <      |        |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  | 0.33   | 1         | <    | U       | 0.33   | 1 <     | υ          | 0.33   | 1 <      | U      | 0.33            | 1        | < U       | 0.33     | 1          | < U         | 0.33     | 1 <      | U       | 0.33     | 1 <      | U     | 0.33     | · <      | . 0    |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     | 0.65   | 1         | <    | ย       | 0.65   | 1 <     | U          | 0.65   | 1 <      | U      | 0.65            | t        | < U       | 0.65     | 1          | < U         | 0.65     | 1 <      | ป       | 0.65     | 1 <      | U     | 0.65     | 1 <      | U      |
| SEMIVOLATILES    | 4-Chloroaniline             | 0.65   | 1         | <    | ย       | 0.65   | 1 <     | υ          | 0.65   | 1 <      | U      | 0.65            | 1        | < U       | 0.65     | 1          | < U         | 0.65     | 1 <      | ປ       | 0.65     | t <      | IJ    | 0.65     | 1 <      | : U    |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether | 0.33   | 1         | <    | ป       | 0.33   | 1 <     | U          | 0.33   | t <      | U      | 0.33            | 1        | < 10      | 0.33     | 1          | < U         | 0.33     | 1 <      | U       | 0.33     | 1 <      | U     | 0.33     | 1 <      | : U    |
| SEMIVOL ATH ES   | 4-Methylohonol              | 0.00   |           | <    | t)      | 0.33   | 1 -     | U          | 0.33   | 1 <      | U      | 0.33            | 1        | < 11      | 0.33     | 1          | < U         | 0.33     | 1 <      | U       | 0.33     | t <      | U     | 0.33     | 1 <      | . U    |
| COMMON ATU CO    | a managina an               | 1.00   | 4         | 2    | -       | 1.65   | 1 2     | ų.         | 1 65   | 1 2      | 11     | 1 65            | 1        | . u       | 741      | t          | < 11        | 1.65     | 1 <      | U       | 1.65     | 1 <      | IJ    | 1.65     | 1 <      | U :    |
| JUMINULAILES     |                             | 1.00   |           | 2    | ц       | 1.65   | . <     | 4<br>41    | 1.05   |          | 11     | 1.00            | 1        | , u       | 1.00     | 1          | 2 11        | 1 65     | 1 /      | - II    | 1.65     | 1 4      | Į     | 1.65     | t        | ิย     |
| SEMIVULATILES    | 4-Naropherol                | 1.65   | 1         | <    | U<br>U  | 1.03   | . <     |            | 1.00   | . <      |        | 60.0            | ;        |           | . 1.03   | 1          | - V<br>- 11 | 0.00     | 1        | н       | 0.33     | 1        | ii ii | 0.33     | 1        |        |
| SEMIVOLATILES    | Acenaphthene                | 0.33   | 1         | <    | U .     | 0.33   | 1 <     | U          | 0.33   | ? <      | U<br>L | 0.33            | 1        | < 0       | 0.33     | •          | < U         | 0.33     | •        |         | 0.00     | , .      |       | 0.00     |          |        |
| SEMIVOLATILES    | Acenaphthylene              | 0.33   | 1         | <    | U       | 0.33   | 1 <     | U          | 0.33   | ·i <     | U      | 0.33            | 1        | < U       | 0.33     | 3          | < U         | 9.33     | I <      | U       | 0.33     | · <      | U     | 0.33     | * <      |        |
|                  |                             |        |           |      |         |        |         | -          |        |          |        |                 |          |           |          |            |             |          |          |         |          |          |       |          |          |        |



Table 3-91 Concentrations of Chemicals in Soil Samples Associated with Sump 091

| SUMP) = SUMP091              |                                |            |         |    |         |          |             |         |          |            |          |         |            |          |                  |                |          |            |                |                |       |         |       |                |             |         |             |             |         |
|------------------------------|--------------------------------|------------|---------|----|---------|----------|-------------|---------|----------|------------|----------|---------|------------|----------|------------------|----------------|----------|------------|----------------|----------------|-------|---------|-------|----------------|-------------|---------|-------------|-------------|---------|
| OCATION _CODE                |                                | Lt         | I-S91-0 | 2  |         | 14-9     | 92-01       |         | U        | H-S92-01   | 1        |         | LH         | \$92-01  |                  | LH             | i-S92-0  | 1          |                | LH-S9          | 12-02 |         | LH-   | \$92-02        |             | LH      | -592-02     |             |         |
| AMPLE_NO                     |                                | 1.H-       | 591-02  | _3 |         | LH-S9    | 2-01 QC     |         | LH       | -S92-01    | 1        |         | 114-5      | 92-01_2  |                  | LH-            | \$92-01  | _3         |                | UH-\$92        | -02_1 |         | LH-S  | 92-02_2        |             | UH-     | 592-02_     | 3           |         |
| AMPLE_DATE                   |                                | 7/         | 24/1993 | 3  |         | 7/23     | 1993        |         | 7.       | /23/1993   | i        |         | 7/2        | 3/1993   |                  | 7/             | 23/1993  | 3          |                | 7/23/1         | 1993  |         | 7/2   | 3/1993         |             | 7/      | 23/1993     |             |         |
| EPTH                         |                                | 10         | 0-11F   | t  |         | 0.5      | - 1 Ft      |         | 0        | ).5 - 1 Ft |          |         | 6.5        | - 7.5 Ft |                  | 104            | 5 - 11.5 | Ft         |                | 0.5 -          | 111   |         | 6.5   | - 7.5 H        |             | 10.     | - 11.5 1    | -t          |         |
| AMPLE_PURPOSE                |                                |            | REG     |    |         |          | FD          |         | <b>.</b> | REG        |          | ~       |            | REG      | 110              | Dec.           | REG      |            |                | HE<br>         | 6     | 200     | 1     | itter<br>In co |             | Gassill | HEG<br>DH L | 0 10        |         |
| est Group                    | Parameter (Units = mg/kg)      | Hesun      | DIE     |    | ¥Q.     | HESUIT D |             | 10      | Hesult   | 1          | LQ V     |         | nga        |          | <u>. vu</u><br>н | nestal<br>0.32 | 1<br>1   | <u> </u>   | μ ne<br>ι τ    | 33 1           |       | 11      | 1 23  |                | - VQ<br>- H | 033     | 1           | VG VG       | <u></u> |
| EMIVOLATILES                 | Antwacene Penzo(a)anthracane   | 0.33       | 1       | ~  | 1       | 0.33     |             | 0       | 0.33     | 1          |          | 11      | 0.33       | 1 2      | 11               | 0.33           | ;        | 2 1        | , .            | 33 1           | Ì     | bi la   | 0.33  | , .<br>1 2     | เก          | 0.33    | 1           | < U         |         |
| EMIVOLATILES<br>EMIVOLATILES | Benzo(a)anutacene              | 0.33       | 1       | 2  | 11      | 0.33     |             | 0       | 0.33     | 1          | 2 1      | 11      | 0.33       | 1 2      | u                | 0.33           | 1        | < L        | , c<br>, c     | 33 1           |       | υ       | 0.33  | , .<br>1 <     | ย           | 0.33    | 1           | < U         |         |
| EMINOLATILES                 | Renzovhiltivoranthene          | 0.33       | 1       | 2  | 11      | 0.33     |             | U)      | 0.33     | 1          | 2 1      | 11      | 0.33       | 1 <      | ŭ                | 0.33           | 1        | < (        | i c            | 33 1           | ~     | Ŭ       | 0.33  | 1 <            | U           | 0.33    | 1 .         | < υ         |         |
| EMIVOLATH ES                 | Benzo(nbibendene               | 0.33       | 1       | ž  | ii<br>i | 0.33     | 2           | Ŭ       | 0.33     | 1          | < 1      | U       | 0.33       | 1 <      | Ŭ                | 0.33           | 1        | < 1        |                | 33 1           | <     | Ū.      | 0.33  | 1 <            | U           | 0.33    | 1 .         | < U         |         |
| EMIVOLATILES                 | Senzo(k)fluoranthene           | 0.33       | 1       | <  | Ũ       | 0.33     | 1 <         | Ũ       | 0.33     | 1          | < 1      | ÷<br>U  | 0.33       | 1 <      | U                | 0.33           | 1        | < (        | r (            | 33 1           | <     | U       | 0.33  | 1 <            | U           | 0.33    | 1           | < U         |         |
| EMIVOLATILES                 | Benzoic Acid                   | 1.65       | 1       | <  | U       | 1.65     | 1 <         | U       | 1.65     | 1          | < 1      | U       | 1.65       | 1 <      | U                | 1.65           | 1        | < 1        | 1              | .65 1          | <     | U       | 1.65  | 1 <            | U           | 1.65    | 1           | < ປ         |         |
| EMIVOLATILES                 | Benzyl Alcohol                 | 0.65       | 1       | <  | U       | 0.65     | 1 <         | U       | 0.65     | 1          | < 1      | U       | 0.65       | 1 <      | U                | 0.65           | 1        | < 1        | ı c            | .65 1          | <     | U       | 0.65  | 1 <            | U           | 0.65    | 1           | < U         |         |
| EMIVOLATILES                 | bis(2-Chloroethoxy)methane     | 0.33       | 1       | <  | U       | 0.33     | 1 <         | U       | 0.33     | t          | < 1      | U       | 0.33       | 1 <      | ម                | 0.33           | 1        | < 1        | I (            | .33 1          | <     | U       | 0.33  | 1 <            | ប           | 0.33    | 1           | < U         |         |
| EMIVOLATILES                 | bis(2-Chloroethyl)ether        | 0.33       | 1       | <  | υ       | 0.33     | 1 <         | U       | 0.33     | 1          | < 1      | U       | 0.33       | 1 <      | บ                | 0.33           | 1        | < 1        | r (            | .33 1          | <     | U       | 0.33  | 1 <            | U           | 0.33    | 1           | < U         |         |
| EMIVOLATILES                 | bis(2-Chloroisopropyt)ether    | 0.33       | 1       | <  | U       | 0.33     | 1 <         | U       | 0.33     | 1          | < 1      | U       | 0.33       | 1 <      | ·U               | 0.33           | 1        | < 1        | 1 0            | .33 1          | <     | U       | 0.33  | t <            | U           | 0.33    | 1           | < (J        |         |
| EMIVOLATILES                 | bis(2-Ethylhexyl)phthalate     | 0.33       | 1       | <  | U       | 0.33     | 1 <         | U       | 0.33     | 1          | < 1      | U       | 0.33       | 1 <      | U                | 0.33           | 1        | < 1        | ; (            | .33 1          | <     | ป       | 0.33  | 1 <            | U           | 0.33    | t           | < U         |         |
| EMIVOLATILES                 | Butyl benzyl phthalate         | 0.33       | 1       | <  | U       | 0.33     | 1 <         | U       | 0.33     | 1          | < 1      | U       | 0.33       | 1 <      | U ·              | 0.33           | 1        | < 1        | ) (            | .33 1          | <     | ប       | 0.33  | 1 <            | U           | 0.33    | 1           | < U         |         |
| EMIVOLATILES                 | Chrysene                       | 0.33       | 1       | <  | U       | 0.33     | 1 <         | U       | 0.33     | 1          | < 1      | U       | 0.33       | 1 <      | U                | 0.33           | 1        | < 1        | , (            | .33 1          | <     | υ       | 0.33  | t <            | U           | 0.33    | 1           | < U         |         |
| EMIVOLATILES                 | Dibenzo(a,h)anthracene         | 0.33       | 1       | <  | U       | 0.33     | 1 <         | U       | 0.33     | 1          | < 1      | U       | 0.33       | t <      | U                | 0.33           | 1        | < 1        | , (            | .33 1          | <     | U       | 0.33  | 1 <            | U           | 0.33    | \$          | < U         |         |
| EMIVOLATILES                 | Dibenzofuran                   | 0.33       | 1       | <  | U       | 0.33     | 1 <         | U       | 0.33     | 1          | < !      | U       | 0.33       | 1 <      | · U              | 0.33           | 1        | < (        | ) (            | .33 1          | <     | U       | 0.33  | 1 <            | U           | 0.33    | 1           | < 0         |         |
| EMIVOLATILES                 | Diethyl phthalate              | 0.33       | 1       | <  | U       | 0.33     | 1 <         | U       | 0.33     | 1          | <        | ប       | 0.33       | ۱ <<br>، | U                | 0.33           | 1        | < 1        |                | .33 1          | <     | 0       | 0.33  | 1 <            | U           | 0.33    | 1 .         | < U         |         |
| EMIVOLATILES                 | Dimethyl phthalate             | 0.33       | 1       | <  | 0       | 0.33     | 1 <         | U       | 0.33     | 1          | < 1      | U       | 0.33       | 1 <      | U                | 0.33           | 1        | < 1        | , (            | 33 1           | <     | U       | 0.33  | 3 .<           | U           | 0.33    | 4           | < 0         |         |
| EMIVOLATILES                 | di-n-Butyl phthalate           | 0.33       | 1       | <  | 0       | 0.537    | 1           |         | 0.549    | 1          |          |         | 0.734      | 1        |                  | 0.8            | 1        |            |                | 21 1<br>22 1   |       | 14      | 0.491 | 1              | ,,          | 0.22    | 1           | . 11        |         |
| EMIVOLATILES                 | di-n-Octyl phthalate           | 0.33       | 1       | <  | 0       | 0.33     | 1 <<br>1 .  | U<br>,, | 0.33     |            | < 1      | U<br>II | 0.33       | 1 <      |                  | 0.33           |          | < 1        |                | .30 I<br>22 I  | Ś     | и       | 0.33  | · ·            | 0           | 0.33    | •           | < 0<br>/ H  |         |
|                              | Fluoranmene                    | 0.33       | 1       | <  | 0       | 0.33     | 1 <<br>1 /  | 0<br>11 | 0.33     | 1          | < 1      | 0<br>11 | 0.22       | 1 4      | 11               | 0.00           | ;        | ~ 1        | , (            | 33 I           |       | 11      | 0.33  | 1 2            |             | 0.33    | 1           | ~ 11        | 1       |
|                              | Hevenherebenzene               | 0.33       | 1       | 2  | и       | 0.33     | 1 2         | 11      | 0.00     | 1          | 2        | 12      | 0.33       | 1 2      | u<br>U           | 6.33           | 1        | ~ 1        | , .<br>1 (     | 33 1           | 2     | н       | 0.33  | 1 4            | 11          | 0.33    | 1           | < 1         | ł       |
|                              | Havacharabutadiana             | 0.33       | 1       | 2  | 0       | 0.33     | r. `<br>t z | 11      | 0.33     | 1          | 2        | 11      | 0.33       | 1 4      | й                | 0.33           | 1        | ~ (        | , .<br>, (     | 33 1           | ż     | ŭ       | 0.33  | 1 <            | U           | 0.33    | 1           | < 13        | 1       |
|                              | Hexachloropentarliene          | 0.33       | 1       | Ì  | U U     | 0.33     | · ·         | ų.      | 0.33     | 1          | ۰ .<br>۲ | u<br>U  | 0.33       | 1 4      | ũ                | 0.33           | 1        | < 1        |                | .33 1          | <     | U       | 0.33  | 1 <            | U           | 0.33    | 1           | < U         | 1       |
| EMIVOLATILES                 | Hexachicroethane               | 0.33       | 1       | ~  | ย       | 0.33     | 1 <         | Ŭ       | 0.33     | 1          | < 1      | v       | 0.33       | 1 <      | Ū                | 0.33           | 1        | < (        | J (            | .33 1          | <     | U       | 0.33  | 1 <            | V           | 0.33    | 1           | < U         | 1       |
| EMIVOLATILES                 | Indeno(1,2,3-cd)pyrene         | 0.33       | 1       | <  | U       | 0.33     | t <         | U       | 0.33     | 1          | < 1      | U       | 0.33       | 1 <      | U                | 0.33           | 1        | < 1        | J (            | .33 1          | <     | U       | 0.33  | 1 <            | U           | 0.33    | 1           | < U         | 1       |
| EMIVOLATILES                 | Isophorone                     | 0.33       | 1       | <  | U       | 0.33     | 1 <         | Ų       | 0.33     | 1          | <        | U.      | 0.33       | 1 <      | U                | 0.33           | 1        | < 1        | J (            | .33 1          | <     | U       | 0.33  | 1 <            | U           | 0.33    | 1           | < U         | ļ       |
| EMIVOLATILES                 | Naphthalene                    | 0.33       | 1       | <  | ข       | 0.33     | 1 <         | U       | 0.33     | 1          | < !      | U       | 0.33       | 1 <      | U                | 0.33           | 1        | < 1        | ) {            | .33 1          | <     | IJ      | 0.33  | 1 <            | U           | 0.33    | 1           | < U         | )       |
| EMIVOLATILES                 | Nitrobenzene                   | 0.33       | 1       | <  | IJ      | 0.33     | 1 <         | U       | 0.33     | 1          | <        | U       | 0.33       | 1 <      | U                | 0.33           | 1        | < 1        | J              | .33 1          | · <   | U       | 0.33  | 1 <            | U           | 0.33    | 1           | < U         | )       |
| EMIVOLATILES                 | л-Nitroso-di-n-propylamine     | 0.33       | 1       | <  | ម       | 0.33     | 1 <         | U       | 0.33     | 1          | < 1      | U       | 0.33       | 1 <      | U                | 0.33           | 1        | < i        | J (            | .33 1          | <     | ប       | 0.33  | 1 <            | U           | 0.33    | 1           | < U         | 1       |
| EMIVOLATILES                 | n-Nitrosodiphenylamine         | 0.33       | ŧ       | <  | U       | 0.33     | i <         | U       | 0.33     | Į          | < 1      | Ð       | 0.33       | 1 <      | ម                | 0.33           | 1        | < 1        | J (            | .33 1          | <     | ប       | 0.33  | 1 <            | U           | 0.33    | t           | < U         |         |
| EMIVOLATILES                 | Pentachlorophenol              | 1.65       | 1       | <  | ប       | 1.65     | 1 <         | U       | 1.65     | 1          | <        | U       | 1.65       | 1 <      | U                | 1.65           | 1        | < 1        | 1              | .65 1          | <     | U       | 1.65  | 1 <            | U           | 1.65    | 1           | < U         |         |
| EMIVOLATILES                 | Phenanthrene                   | 0.33       | 1       | <  | U       | 0.33     | 1 <         | U       | 0.33     | 1          | < 1      | U       | 0.33       | 1 <      | ប                | 0.33           | 1        | < 1        | ) (            | .33 1          | <     | U       | 0.33  | 1 <            | U           | 0.33    | 1           | < U         |         |
| EMIVOLATILES                 | Phenol                         | 0.33       | 1       | <  | U       | 0.33     | 1 <         | Ų       | 0.33     | 1          | <        | U       | 0.33       | 1 <      | U                | 0.33           | 1        | < 1        | ) (            | .33 1          | <     | U       | 0.33  | 1 <            | U           | 0.33    | 1           | < ()        |         |
| EMIVOLATILES                 | Pyrene                         | 0.33       | 1       | <  | U       | 0.33     | i <         | U       | 0.33     | t          | <        | U       | 0.33       | ! <      | U                | 0.33           | 1        | < 1        | } (            | .33 1          | <     | U       | 0.33  | 1 <            | U           | 0.33    | 1           | < U         |         |
| OLATILES                     | 1,1,1,2-Tetrachioroethane      |            |         |    |         |          |             |         |          | _          |          |         |            |          |                  |                |          |            |                |                |       |         | a     |                |             | 0.005   |             |             |         |
| OLATILES                     | 1,1,1-Trichioroethane          | 0.005      | 1       | <  | 0       | 0.005    | 1 <         | U       | 0.005    | 1          | < 1      | บ       | 0.005      | 1 <      | 0                | 0.005          | 1        | < (        | .U (           | ND 1           | <     | U<br>N  | 0.005 | 1 <            | υ<br>       | 0.005   | •           | < บ<br>. ก  |         |
| OLATILES                     | 1,1,2,2-1 etrachioroethane     | 0.005      | 1       | <  | U       | 0.005    | 1 <         | 0       | 0.005    | }          | <        | 0       | 0.005      | \$ <     |                  | 0.005          | 1        | < (        | ) ().<br>) (). | 105 i          | <     | 0<br>21 | 0.005 | 1 <<br>1 .     | 0           | 0.005   | 1           | < U         |         |
| OLATILES .                   | 1.5.2-1 nonoroemane            | 0.005      | 3       | <  |         | 0.005    | 1 <<br>1 -  |         | 0.005    |            | <        | 0<br>51 | 0.005      | * <      | 11               | 0.005          |          | < 1<br>2 1 | , U.<br>1 0.   | 100 1          |       | 11      | 0,005 | • ·            |             | 0.005   | 1           | < 0         | 1       |
| VLANLES                      | 1.1 Disbarothono               | 0.005      | 1       | <  | 16      | 0.005    | , .<br>,    | 1       | 0.005    | 1          |          | บ<br>ข  | 0.005      | 1 2      | 11               | 0.005          | 1        |            | , 0.<br>1 A    | 105 1          | Ì     | 11      | 0.005 | 1              | ч           | 0.005   | 1           | ~ U         | ,       |
| VLANLES<br>VI ATILES         |                                | 0.005      | •       | ~  | U       | 0.005    |             | 0       | 0.000    | •          |          | •       | 0.000      | , ,      | U                | 0.000          | •        |            | , 0.           |                |       | •       | 0.005 | • •            | Ũ           | 0.000   | •           | • •         |         |
| OLATILES                     |                                |            |         |    |         |          |             |         |          |            |          |         |            |          |                  |                |          |            |                |                |       |         |       |                |             |         |             |             |         |
| OLATILES                     | 1.2.3-Trichloroompage          |            |         |    |         | -        |             |         |          |            |          |         |            |          |                  |                |          |            |                |                |       |         |       |                |             |         |             |             |         |
| OLATILES                     | 1.2.4-Trichlorobenzene         |            |         |    |         |          |             |         |          |            |          |         |            |          |                  |                |          |            |                |                |       |         |       |                |             |         |             |             |         |
| OLATILES                     | 1,2,4-Trimethylbenzene         |            |         |    |         |          |             |         |          |            |          |         |            |          |                  |                |          |            |                |                |       |         |       |                |             |         |             |             |         |
| OLATILES                     | 1,2-Dibromo-3-chloropropane    |            |         |    |         |          |             |         |          |            |          |         |            |          |                  |                |          |            |                |                |       |         |       |                |             |         |             |             |         |
| OLATILES                     | 1,2-Dibromoethane              |            |         |    |         |          |             |         |          |            |          |         |            |          |                  | -              |          |            |                |                |       |         |       |                |             |         |             |             |         |
| OLATILES                     | 1,2-Dichlorobenzene            |            |         |    |         |          |             |         |          |            |          |         |            |          |                  |                |          |            |                |                |       |         |       |                |             |         |             |             |         |
| OLATILES                     | 1,2-Dichloroethane             | 0.005      | 1       | <  | U       | 0.005    | 1 <         | ប       | 0.005    | 1          | <        | บ       | 0.005      | 1 <      | ប                | 0.005          | 1        | < 1        | 0.             | 105            | <     | υ       | 0.005 | 1 <            | U           | 0.005   | 1           | < U         | ł       |
| OLATILES                     | 1,2-Dichloroethene             | 0.005      | 1       | <  | U       | 0.005    | 1 <         | ប       | 0.005    | 1          | < 1      | บ       | 0.005      | 1 <      | U                | 0.005          | 1        | < t        | J 0.           | 05 1           | <     | U       | 0.005 | 1 <            | U           | 0.005   | 1           | < U         | ł       |
| OLATILES                     | 1,2-Dichloropropane            | 0.005      | 1       | <  | U       | 0.005    | 1 <         | ប       | 0.005    | 1          | <        | U       | 0.005      | 1 <      | U                | 0.005          | ŧ        | < l        | J 0.           | 05 1           | <     | U       | 0.005 | 1 <            | U           | 0.005   | 1           | < U         | ł       |
| OLATILES                     | 1,2-Dimethylbenzene (o-Xylene) |            |         |    |         |          |             |         |          |            |          |         |            |          |                  |                |          |            |                |                |       | -       |       |                |             |         |             |             |         |
| OLATILES                     | 1,3,5-Trimethylbenzene         |            |         |    |         |          |             |         |          |            |          |         |            |          |                  |                |          |            |                |                |       |         |       |                |             |         |             |             |         |
| OLATILES                     | 1,3-Dichlorobenzene            | -          |         |    |         |          |             |         |          |            |          |         |            |          |                  |                |          |            |                |                |       |         |       |                |             |         |             |             |         |
| OLATILES                     | 1,3-Dichloropropane            |            |         |    |         |          |             |         |          |            |          |         |            |          |                  |                |          |            |                |                |       |         |       |                |             |         |             |             |         |
| OLATILES                     | 1,4-Dichlorobenzene            |            |         |    |         |          |             |         |          |            |          |         |            |          |                  |                |          |            |                |                |       |         |       |                |             |         |             |             |         |
| POLATILES                    | 2,2-Uichkoropropane            | 0.05       |         |    |         | 0.05     |             |         |          |            |          |         | 0.05       |          | .,               | 0.00           |          |            | , ,            | <b>n</b> c +   |       | D       | 0.05  |                |             | 0.05    |             | ,           |         |
| IULAHLES                     | 2-Butanone                     | 0.05       | 1       | <  | U<br>Li | 0.05     | ı <<br>₁    | U<br>   | 0.05     | 1          | <        | U<br>H  | 0.05       | + <      | U                | 0.05           | 1        | < (        | , (<br>, ,     | .vo 1<br>.o. • | <<br> | U       | 0.01  | 1 4            |             | CU.V    | 1           | < U<br>2 II | ,       |
| ULAILES                      | 2-Glavatelyape                 | 0.04       | į       | <  | U       | 0.01     | · <         | U       | 0.01     | 1          | <        | U       | 0.01       | ı <      | U                | 0.01           | ł        | < (        | , <b>(</b>     | .01 )          | <     | v       | Q.U1  | ' <            | U           | 0.01    |             | 、 U         |         |
|                              |                                | 0.05       | ,       | ,  | 14      | 0.0×     | 1.          |         | 0.05     | 1          |          | 13      | 20.0       | 1.       | ы                | 0.05           |          | <i>,</i> , |                | 05 1           | ,     | ы       | 0.05  | 1 -            | ш           | 20.0    | 1           | د<br>د      |         |
|                              | 2-Prononal                     | 0.05       | 1       | `  | v       | 0.00     | . <         | U       | 0.03     | '          | •        |         | 0.00       |          | v                | 0.00           | •        |            | . (            | I              | ¢     | G       | 0.00  |                | 3           | 0.00    | •           | . 0         |         |
| OLATEES                      | 4-Chlorotoluene                |            |         |    |         |          |             |         |          |            |          |         |            |          |                  |                |          |            |                |                |       |         |       |                |             |         |             |             |         |
| OLATILES                     | Acetone                        | <b>β</b> 1 | 1       | <  | U       | 0.1      | 1 -         | ii      | f. f.    | 1          | <        | U       | <u>0.1</u> | 1 4      | ы                | 0.1            | 1        | < 1        | J              | 0.1 1          | <     | U       | 0.1   | 1 <            | U           | 0.1     | 1           | < U         | 1       |
| U.S. CREW                    |                                |            | •       | -  | -       |          | ``          | •       |          | -          | -        |         | 2          |          | -                |                |          |            |                |                |       |         |       | -              | -           |         |             | -           |         |



# Table 3-91 Concentrations of Chemicals in Soil Samples Associated with Sump 091

| (SUMP) = SUMP091 |                             |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
|------------------|-----------------------------|--------|---------|-----|-----|--------|--------|-----|----|--------|-----------|----|----|--------|---------|-----|----|--------|---------|----|-----|------------|--------|----|--------|---------|-----|----|--------|----------|------|----|
| LOCATION _CODE   |                             | U      | H-S91-  | 02  |     | Lł     | I-S92- | 01  |    | U      | 1-\$92-0  | Ħ  |    | U      | 1-592-1 | 01  |    | ίH     | -\$92-0 | 1  |     | UH-SS      | 2-02   |    | Lł     | 1-\$92- | 02  |    | L      | H-S92-0  | )2   |    |
| SAMPLE_NO        |                             | LH     | I-S91-0 | 2_3 |     | દ્યન્ડ | 592-01 | 100 |    | LH     | \$92-01   | _1 |    | LH     | S92-0   | 1_2 |    | LH-S   | S92-01  | _3 |     | LH-\$92    | 2-02_1 |    | LH     | \$92-0  | 2_2 |    | L.     | -\$92-02 | 2_3  |    |
| SAMPLE_DATE      |                             | 7      | /24/19  | 93  |     | 7.     | 23/19  | 93  |    | 7/     | 23/199    | 3  |    | 7/     | 23/199  | 3   |    | 7%     | 23/199  | 3  |     | 7/23/      | 1993   |    | 7      | 23/19   | 93  |    |        | /23/199  | 13   |    |
| DEPTH            |                             | 1      | 10-11   | Ft  |     | 0      | 5-1    | Ft  |    | 0      | 1.5 - 1 F | ł  |    | 6.     | 5 - 7.5 | Ft  |    | 10.5   | - 11.5  | Ft |     | 0.5 -      | 1Ħ     |    | 6.     | 5 - 7.5 | FI. |    | 10     | 5 - 11.5 | 5 At |    |
| SAMPLE_PURPOSE   |                             |        | REG     |     |     |        | FD     |     |    |        | REG       |    |    |        | REG     |     |    |        | reg     |    |     | RE         | G      |    |        | reg     |     |    |        | reg      |      |    |
| Test Group       | Parameter (Units = mg/kg)   | Result | DIL     | LQ  | VQ  | Result | DIL,   | ίQ  | VQ | Result | DIL       | LQ | ٧Q | Result | DIŁ     | LQ  | VQ | Result | DIL     | LQ | VQ  | Result Oll | LQ     | VQ | Result | DIL     | ιQ  | VQ | Result | DIL      | LQ   | VQ |
| VOLATILES        | Acetonitrile                |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | Acrylonitnile               |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | Allyl chloride              |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | Benzene                     | 0.005  | t       | <   | U   | 0.005  | 1      | <   | U  | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | U  | 0.005  | 1       | <  | U   | 0.005 1    | <      | U  | 0.005  | 1       | <   | ប  | 0.005  | 1        | <    | U  |
| VOLATILES        | Bromobenzene                |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | Bromochloromethane          |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | Bromodichloromethane        | 0.005  | 1       | <   | U   | 0.005  | 1      | <   | ម  | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | U  | 0.005  | 1       | <  | U   | 0.005 1    | <      | U  | 0.005  | 1       | <   | U  | 0.005  | 1.       | <    | U  |
| VOLATILES        | Bromoform                   | 0.005  | 1       | <   | υ   | 0.005  | 1      | <   | ប  | 0.005  | t         | <  | υ  | 0.005  | 1       | <   | U  | 0.005  | 1       | <  | U   | 0.005 1    | <      | U  | 0.005  | 1       | <   | U  | 0.005  | 1        | <    | ប  |
| VOLATILES        | Bromomethane                | 0.01   | 1       | <   | U   | 0.01   | 3      | <   | ບ  | 0.01   | 1         | <  | U  | 0.01   | 1       | <   | ข  | 0.01   | 1       | <  | U   | 0.01 1     | <      | ប  | 0.01   | 1       | <   | U  | 0.01   | 1        | <    | ឋ  |
| VOLATILES        | Carbon disulfide            | 0.005  | 1       | <   | U   | 0.005  | 1      | <   | บ  | 0.005  | 1         | <  | U  | 0.005  | -1      | <   | U  | 0.005  | 1       | <  | U   | 0.005 1    | <      | U  | 0.005  | 1       | <   | U  | 0.005  | 1        | <    | U  |
| VOLATILES        | Carbon tetrachloride        | 0.005  | 1       | <   | U   | 0.005  | 1      | <   | ນ  | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | U  | 0.005  | 1       | <  | U   | 0.005 1    | <      | U  | 0.005  | 1       | <   | U  | 0.005  | 1        | <    | U  |
| VOLATILES        | Chlorobenzene               | 0.005  | 1       | <   | U   | 0.005  | 1      | <   | U  | 0.005  | 1         | <  | υ  | 0.005  | 1       | <   | ប  | 0.005  | 1       | <  | U   | 0.005 1    | <      | U  | 0.005  | 1       | <   | U  | 0.005  | 1        | <    | υ  |
| VOLATILES        | Chloroethane                | 0.01   | 1       | <   | ប   | 0.01   | 1      | <   | U  | 0.01   | 1         | <  | U  | 0.01   | 1       | <   | U. | 0.01   | 1       | <  | U   | 0.01 1     | <      | U  | 0.01   | 1       | <   | U  | 0.01   | 1        | <    | ប  |
| VOLATILES        | Chloroform                  | 0.005  | 1       | <   | υ   | 0.005  | 1      | <   | U  | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | ŧ  | 0.005  | 1       | <  | U   | 0.005 1    | <      | U  | 0.005  | 1       | <   | U  | 0.005  | 1        | <    | υ  |
| VOLATILES        | Chloromethane               | 0.01   | 1       | <   | U   | 0.01   | 1      | <   | U  | 0.01   | 1         | <  | U  | 0.01   | 1       | <   | U  | 0.01   | 1       | <  | U   | 0.01 1     | <      | U  | 0.01   | 1       | <   | U  | 0.01   | 1        | <    | υ  |
| VOLATILES        | Chloroprene                 |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | cis-1.2-Dichloroethene      |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOI ATILES       | cis-1.3-Dicbloropropene     | 0.005  | 1       | <   | U.  | 0.005  | 1      | <   | บ  | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | บ  | 0.005  | 1       | <  | U   | 0.005 1    | <      | U  | 0.005  | 1       | <   | U  | 0.005  | 1        | <    | U  |
| VOLATILES        | Dibromochkommethane         | 0.005  | 1       | <   | Ū   | 0.005  | 1      | <   | U  | 0.005  | 1         | <  | Ŭ  | 0.005  | 1       | <   | U  | 0.005  | 1       | <  | U   | 0.005 1    | <      | U  | 0.005  | 1       | ۲.  | U  | 0.005  | 1        | <    | U  |
| VOI ATILES       | Dipromomethane              |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOI ATILES       | Dichlosodiducromethane      |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | Ethyl methaciviate          |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
|                  | Fibulhanzana                | 0.005  | 1       | ~   | н   | 0.005  | 1      | ,   | 11 | 0.005  | 1         | ,  | н  | 0.005  | 1       |     | 18 | 0.005  | 1       | e  | 11  | 0.005 t    |        | H  | 0.005  | 1       | <   | EI | 0.005  | 1        | <    | IJ |
|                  | Kevanhinohritadiene         | 0.000  | •       | `   | U U | 0.000  | ,      | `   | °. | 0.000  | ,         | `  | v  | 0.000  | •       | •   | •  | 0.000  | •       | •  | ·   | 0.000 1    |        | ÷  | 0,000  | •       |     |    |        | •        | -    | -  |
|                  | IODOMETHANE                 |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
|                  | ISOBILITY ALCOHOL           |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
|                  | Isoborne Accorne            |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
|                  | schuchylidenzene            |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
|                  | In providence               |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | Metradi y Martine           | 6.04   |         |     |     | 0.05   | •      |     |    | 0.05   | +         |    | 51 | 20.05  | 1       |     | 11 | 0.05   | 1       |    | ŧ١. | 0.05 1     |        | 11 | 0.05   | 1       | ,   | D  | 0.05   | 1        | ,    | 51 |
| VULATILES        |                             | 0.00   | 1       | ¢   | U   | 0.00   | '      | č   | U  | 0.05   | 1         | ·  | 0  | 0.03   | '       | `   | Ū. | 0.00   | '       | `  | U   | 0.05 1     | ~      | 0  | 0.00   | ,       |     | °. | 0.00   | •        |      | v  |
| VOLAHLEO         | MEINELMEINAGNICATE          | 0.005  |         |     |     | 0.005  |        |     |    | 0.000  | Ŧ         |    | 61 | 0.005  |         |     | 11 | 0.005  | 1       |    | 11  | 0.005 1    | ,      | 11 | 0.006  | 1       | ,   | 13 | 0.005  | 1        | ,    | 31 |
| VULATILEO        | Mentificiere                | 0.000  |         | •   | U   | 0.003  | 1      | ¢   | U  | 0.000  | •         |    | v  | 0.000  | '       | `   | v  | 0.000  | '       |    | 0   | V.005 I    | ì      | U  | 0.000  |         |     | U  | 0.000  |          |      | U  |
| VULATILES        | Naprivalene                 |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VULATILES        | POODVI BENZENE              |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VULATILES        | n-PHOPYCBENZENE             |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VULATILES        | Pentachioroethane           |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | PISOPHOPYLIOCUENE           |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | Propionitale                |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | sec-BUTYLBENZENE            |        | _       |     |     |        |        |     |    |        |           |    |    |        |         |     |    | 0.005  |         |    |     | 0.005      |        |    | 0.000  |         |     |    | 0.005  |          |      |    |
| VOLATILES        | Styrene                     | 0.005  | 1       | <   | U   | 0.005  | 1      | <   | U  | 0.005  | 1         | <  | Û  | 0.005  | 1       | <   | U  | 0.005  | F       | <  | U   | 0.005 F    | <      | U  | 0.005  |         | <   | U  | 0.005  |          | <    | U  |
| VOLATILES        | tert-BUTYLBENZENE           |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | Tetrachloroethene           | 0.005  | 1       | <   | U   | 0.005  | 1      | <   | 0  | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | U  | 0.005  | 1       | <  | U   | 0.005 1    | <      | U  | 0.005  | 1       | <   | 0  | 0.005  | 1        | <    | U  |
| VOLATILES        | Toluene                     | 0.005  | 1       | <   | U   | 0.005  | 1      | <   | U  | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | U  | 0.005  | 1       | <  | Ω.  | 0.005 1    | <      | U  | 0.005  | 1       | <   | 0  | 0.005  | 1        | <    | U  |
| VOLATILES        | trans-1,2-Dichloroethene    |        |         |     |     |        |        |     |    |        |           |    |    | _      |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | trans-1,3-Dichloropropene   | 0.005  | 1       | <   | U   | 0.005  | 1      | <   | U  | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | Ð  | 0.005  | 1       | <  | Û   | 0.005 1    | <      | U  | 0.005  | 1       | <   | Ð  | 0.005  | 1        | <    | U  |
| VOLATILES        | trans-1,4-Dichloro-2-butene |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | Trichloroethene             | 0.005  | 1       | <   | U   | 0.005  | 1      | <   | U  | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | U  | 0.005  | 1       | <  | U   | 0.005 1    | <      | U  | 0.005  | 1       | <   | U  | 0.005  | t        | <    | υ  |
| VOLATILES        | Trichlorofluoromethane      |        |         |     |     |        |        |     |    |        |           |    |    |        |         |     |    |        |         |    |     |            |        |    |        |         |     |    |        |          |      |    |
| VOLATILES        | Vinyl acetate               | 0.05   | \$      | <   | U   | 0.05   | 1      | <   | ឋ  | 0.05   | 1         | <  | U  | 0.05   | 1       | <   | U  | 0.05   | 1       | <  | U   | 0.05 1     | <      | U  | 0.05   | 1       | <   | U  | 0.05   | 1        | <    | U  |
| VOLATILES        | Vinyl chloride              | 0.01   | 1       | <   | U   | 0.01   | 1      | <   | U  | 0.01   | 1         | <  | រ  | 0.01   | 1       | <   | U  | 0.01   | t       | <  | ប   | 0.01 1     | <      | Ð  | 0.01   | 1       | <   | U  | 0.01   | 1        | <    | Ð  |
| VOLATILES        | Xylenes, Totał              | 0.005  | 1       | <   | U   | 0.005  | 1      | <   | U  | 0.005  | 1         | <  | U  | 0.005  | 1       | <   | U  | 0.005  | 1       | <  | U   | 0.005 1    | <      | U  | 0.005  | 1       | <   | IJ | 0.005  | 1        | <    | U  |

Footnotes are shown on cover page to Tables Section.



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-92

Concentrations of Chemicals in Soil Samples Associated with Sump 092

| [SUMP] = SUMP092<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE<br>Test Group   | Parameter (Units ≂ mg/kg)   | 35SUMP091-SB01<br>35-SMP091-SB01-01<br>9/21/2006<br>.5 - 5 Ft<br>REG<br>Result DLL LQ VQ         | 35SUMP091-SB01<br>35-SMP091-SB01-02<br>9/21/2006<br>6 - 6 Ft<br>REG<br>Result DiL LQ VQ | 35SUMP092-SB01<br>35-SMP92-SB01-02<br>9/19/2006<br>7.5 - 7.5 Ft<br>REG<br>Result DIL LQ VQ | LH-DL91<br>LH-DL91<br>7/23/1993<br>2.5 - 3 Ft<br>REG<br>Result DIL LO VQ  | LH-DL92-01<br>LH-DL92-01<br>7/23/1993<br>2.5 - 3 Ft<br>REG<br>Result DIL LQ VO  | LHS-3-26<br>LHS-3-26<br>1/11/1995<br>05 Ft<br>REG.<br>Result DtL LQ VQ                     | LH-S91-01<br>LH-S91-01_1<br>7/23/1993<br>.5 - 1 Ft<br>REG<br>Result Dit. LQ VO       | LH-S91-01_2<br>LH-S91-01_2<br>7/23/1993<br>5 - 6.5 Ft<br>REG<br>Result DIL LQ VQ   | LH-S91-01<br>LH-S91-01_3<br>7/23/1993<br>10.4 - 11 Ft<br>REG<br>Result DIL LQ VQ                         | LH-S91-02<br>LH-S91-02 OC<br>7/24/1993<br>5.5 - 8 Ft<br>FD<br>Result DIL LO VQ                           | LH-S91-02_1<br>LH-S91-02_1<br>7/24/1993<br>.5-1 Ft<br>REG<br>Result DIL LQ VQ  | LH-S91-02<br>LH-S91-02_2<br>7/24/1993<br>5.5 - 8 Ft<br>REG<br>Result DIL LQ VQ  | LH-S91-02<br>LH-S91-02_3<br>7/24/1993<br>10 - 11 Ft<br>REG<br>Result OLL LQ VQ   |
|--|---|--|---|--|---|---|--|--|--|--|--|--|---|--|
| EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES                 | 1,3,5-Trinitrobenzene<br>1,3-Dinitrobenzene<br>2,4,6-Trinitrotoluene<br>2,4-Dinitrotoluene<br>2,6-Dinitrotoluene<br>4-Amino-2,6-dinitrotoluene<br>HMX<br>m-Nitrotoluene<br>Nitrobenzene<br>o-Nitrotoluene<br>p-Nitrotoluene<br>p-Nitrotoluene |  |   |  | 0.33 1 < U<br>0.33 1 < U  | 0.33 i < U<br>0.33 i < U  | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$                                      | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U   | 0.33 5 < U<br>0.33 1 < U   | 0.33 t< U<br>0.33 t< U   | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>0.33 1 < U   |
| EXPLOSIVES<br>EXPLOSIVES<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS   | RDX<br>Tetyi<br>Aluminum<br>Antimony<br>Arsenic<br>Bañum<br>Beryllium   | 11900 1<br>0.115 1 U UJL<br>2.09 1<br>68.9 1 JH<br>0.725 1                                       | 17800 1<br>0.119 1 U UJL<br>1.35 1<br>99.1 1 JH<br>0.549 1                              | 8320 1<br>0.0839 1 J J<br>0.202 1 J J<br>116 1<br>0.527 1                                  | 6890 1<br>3 1 < U<br>1 1 < U<br>113 1   | 9850 1<br>3 1 < U<br>1 1 < U<br>76.8 1  | 1 1 < U<br>0.69 1 < U<br>19100 1<br>11.6 1 < UJ<br>4 1 J<br>90 1                           | 14400 1<br>3 1 < U<br>2 1<br>83.6 1  | 21100 1<br>3 1 < U<br>1 1 < U<br>83.7 1  | 4660 1<br>3 1 < 1/<br>1 1 < 1/<br>64.2 1   | 15000 1 < U<br>3 1 < U<br>2.7 1<br>88.6 1  | 8210 1 < U<br>3 1 < U<br>2.5 1<br>76.4 1   | 13300 1 < U<br>3 1 < U<br>2.5 1<br>85.6 1   | 4700 1 < U<br>3 1 < U<br>2.3 1<br>45 1   |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS   | Cadmium<br>Calcium<br>Chromium<br>Cobalt<br>Copper<br>Iron<br>Lead<br>Magnesium   | 0.0913 1 J J<br>1980 1<br>17.7 1 JH<br>6.03 1<br>4.15 1<br>19200 1 J<br>7.68 1<br>563 1<br>142 1 | 0.122 1 J J<br>703 1<br>14.5 1 JH<br>13.3 1<br>4.83 1<br>16400 1 J<br>15.7 1<br>1290 1  | 0.101 1 J J<br>479 1<br>7.03 1<br>7.87 1<br>3.05 1<br>7500 1<br>3.33 1<br>1050 1<br>280 5  | 1     1 < U       710     1       19.5     1       11.6     1       2.6     1       12600     1       7.6     1       386     1 | 1 1 < U<br>475 1<br>14.8 1<br>7.7 1<br>3.1 1<br>8920 1<br>4.7 1<br>455 1<br>256 1   | 1.2 1 < U<br>1800 1<br>20.7 1 J<br>11.9 1<br>9.6 1<br>21600 1<br>12.8 1<br>1120 1<br>220 1 | 1 1 < U<br>2300 1<br>16.6 1<br>7.5 1<br>7.4 1<br>16600 1<br>6.6 1<br>1350 1<br>125 1 | 1 1 < U<br>944 1<br>18.2 1<br>7.1 1<br>5.7 1<br>15400 1<br>3.9 1<br>1450 1<br>29.7 1   | 1 1 < U<br>481 1<br>10 1<br>8.6 1<br>2.5 1<br>3650 1<br>2.8 1<br>700 1                                   | 1 1 < U<br>885 1<br>19.3 1<br>10 1<br>7.5 1<br>16000 1 < U<br>7.7 1<br>1730 1<br>29.9 1                  | 1 1 < U<br>2330 1<br>13.9 1<br>6.5 1<br>6.3 1<br>15300 1 < U<br>8.8 1<br>947 1<br>113 1  | 1 1 < U<br>1020 1<br>18.8 1<br>9.7 1<br>8.9 1<br>17400 1 < U<br>8.7 1<br>1550 1<br>26.8 1   | 1 1 < U<br>456 1<br>9,1 1<br>7,8 1<br>4 1<br>9000 1 < U<br>9,6 1<br>743 1<br>20,3 1  |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS   | Marganese<br>Mercury<br>Nickel<br>Potassium<br>Selenium<br>Silver<br>Sodium<br>Strontium  | 143 1 3<br>0.0223 1 J J<br>6.53 1 JH<br>366 1 JH<br>0.289 1<br>1.64 1 U U<br>30 1                | 244 1 3<br>0.0278 1 J 3<br>7.33 1 JH<br>521 1 JH<br>0.124 1 J 3<br>1.8 1 U U<br>115 1   | 0.283 1 U U<br>8.37 1<br>281 1<br>0.235 1 U U<br>1.73 1 U U<br>230 1                       | 5// 1<br>0.1 1 < U<br>439 1<br>1 1 < U<br>1 1 < U<br>11.8 1   | 236 1<br>0.1 1 < U<br>489 1<br>1 1 < U<br>1 1 < U<br>7.8 1  | 329 1<br>0.12 1 < U<br>857 1<br>0.51 1 J<br>1.2 1 < U<br>17.7 1                            | 0.1 1 < U<br>902 1<br>1 1 < U<br>1 1 < U<br>25.2 1                                   | 0.1 1 < U<br>859 1<br>1 1 < U<br>1 1 < U<br>24.4 1   | 12:4 1<br>0.1 1 < U<br>306 I<br>1 1 < U<br>1 3 < U<br>15.8 1   | 23.5 1<br>0.1 1 < U<br>870 1<br>1 1 < U<br>1 1 < U<br>21.8 1   | 1.3 1 < U<br>0.1 1 < U<br>570 1<br>1 1 < U<br>1 1 < U<br>19.4 1  | 0.1 1 < U<br>700 1<br>1 1 < U<br>1 1 < U<br>21.8 1  | 0.1 1 < U<br>398 1<br>1 1 < U<br>1 3 < U<br>1 2.2 1  |
| METALS<br>METALS<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES                                | I halium<br>Vanadium<br>Zinc<br>1,2,4-Trichlorobenzene<br>1,2-Dichlorobenzene<br>1,3-Dichlorobenzene<br>1,4-Dichlorobenzene<br>2,4,5-Trichlorophenol<br>2,4,6-Trichlorophenol<br>2,4,0-Trichlorophenol  | 0.154 1<br>34.8 1 JH<br>16.9 1 JH  | 6.0796 1<br>21.3 1 JH<br>24.8 1 JH  | 0.0492 1<br>8.65 1<br>18.9 1   | 27.6 1<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U                        | 16.5       1         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U | $\begin{array}{cccccccccccccccccccccccccccccccccccc$                                       | $\begin{array}{cccccccccccccccccccccccccccccccccccc$                                 | 30.8       1         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U | 25.9 1<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U | 42.6 1<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>1.65 t < U<br>0.33 1 < U<br>0.33 1 < U | 26.6       1         0.33       1 <         0.33       1 <         0.33       1 <         0.33       1 <         0.33       1 <         0.33       1 <         0.33       1 <         0.33       1 <         0.33       1 <         0.33       1 < | 40       1         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         1.65       1 <       U         0.33       1 <       U         0.33       1 <       U | 20.3       1         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U         0.33       1 <       U |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES                                   | 2,4-Dimethylphenol<br>2,4-Dimitrophenol<br>2,4-Dimitrophenol<br>2,6-Dimitrotoluene<br>2,6-Dimitrotoluene<br>2-Chlorconiaphthalene<br>2-Chlorcophenol<br>2-Methylaphthalene<br>2-Methylphenol  |  |   |  | 0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$                                       | $\begin{array}{cccccccccccccccccccccccccccccccccccc$                                 | 0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U           | 0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U                         | 0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U  | 0.33 1 < U<br>1.65 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U<br>0.33 1 < U   |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES | 2-Nutroaniline<br>2-Nutroaniline<br>3.3'-Dichlorobenzidine<br>3-Nitroaniline<br>4.6-Dinitro-2-methylphenol<br>4-Bromophenyl phenyl ether<br>4-Chloro-3-methylphenol<br>4-Chloroaniline<br>4-Chlorophenyl phenyl ether<br>4-Methylphenol       |  | ·<br>·  |  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$                                       | $\begin{array}{cccccccccccccccccccccccccccccccccccc$                                 | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | 1.65 $1 < U$ $0.33$ $1 < U$ $0.65$ $1 < U$ $1.65$ $1 < U$ $0.65$ $1 < U$ $0.65$ $1 < U$ $0.65$ $1 < U$ $0.65$ $1 < U$ $0.65$ $1 < U$ $0.65$ $1 < U$ $0.33$ $1 < U$ $0.33$ $1 < U$ $0.33$ $1 < U$ $0.33$ $1 < U$                                    | 1.65     1 <  | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES  | 4-Nitroanitine<br>4-Nitrophenol<br>Acenaphthene   |  |   |  | 1.65 1 < U<br>1.65 1 < U<br>0.33 1 < U  | 1.65 1 < U<br>1.65 1 < U<br>0.33 1 < U  | 2.4 T < U<br>2.4 T < U<br>0.47 T < U   | 1.65 1 < U<br>1.65 1 < U<br>0.33 1 < U   | 1.65 1 < U<br>1.65 t < U<br>0.33 1 < U   | 1.65 1 < U<br>1.65 1 < U<br>0.33 1 < U   | 1.65 1< U<br>1.65 1< U<br>0.33 1< U  | 1.65 1 < U<br>1.65 1 < U<br>0.33 1 < U   | 1.65 1 < U<br>1.65 1 < U<br>0.33 1 < U  | 1.65 1 < U<br>1.65 1 < U<br>0.33 1 < U   |

Shaw Environmental, Inc.

Table 3-92

## Concentrations of Chemicals in Soil Samples Associated with Sump 092

| [SUMP] = SUMP092 |                                |                         |                              | CONCE            |                   |                  | bampico Asso      |                     | p •••=           |                  |                  |   | 111 004 00       | 111 004 00       |
|------------------|--------------------------------|-------------------------|------------------------------|------------------|-------------------|------------------|-------------------|---------------------|------------------|------------------|------------------|---|------------------|------------------|
| LOCATION_CODE    |                                | 35SUMP091-S801          | 35SUMP091-SB01               | 35SUMP092-SB01   | LH-DL91           | LH-DL92-01       | LHS-3-26          | LH-S91-01           | LH-S91-01        | LH-S91-01        | LH-S91-02        | LH-S91-02   | LH-S91-02        | LH-591-02        |
| SAMPLE_NO        |                                | 35-SMP091-SB01-01       | 35-SMP091-SB01-02            | 35-SMP92-SB01-02 | LH-OL91           | LH-D1.92-01      | LHS-3-26          | LH-S91-01_1         | LH-S91-01_2      | LM-S91-01_3      | LH-591-02 QC     | 7/24/1002   | 7/2#/1002        | 7/24/1003        |
| SAMPLE_DATE      |                                | 9/21/2006               | 9/21/2006                    | 9/19/2006        | 7/23/1993         | 7/23/1993        | 1/11/1995         | //23/1993<br>6_1 Ft | 1/23/1993        | 10.4 - 11 Et     | 55-8Ft           | 5.1F  | 55-8Ft           | 10-11 Ft         |
| DEPTH            |                                | .55Ft                   | 6-6H                         | 7.5 - 7.5 FL     | 2.5-3FL<br>PEC    | 20-31            | 956               | BEG                 | BEG              | BEG              | FD               | REG   | REG              | REG              |
| SAMPLE_PORPOSE   | Paramater (Lieita - molect)    | REG<br>Basedt DIL LO MO | HEG<br>Republic 1/0 M/0      | Result OII 10 VO | Result Dil LID VO | Result DIL 10 VD | Result Dit. LQ VQ | Result DIL LQ VQ    | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ  | Result DIL LO VO | Result DIL LQ VQ |
| SEMBADI ATILES   | Aconsolitivione                | RESULUE EQ VO           |                              |                  | 0.33 1 < U        | 0.33 1 < U       | 0.47 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Anthracene                     |                         |                              |                  | 0.33 1 < U        | 0.33 1 < U       | 0.47 1< U         | 0.33 1 < U          | 0.33 1< 1⊍       | 0.33 1< U        | 0.33 1< U        | 0.33 I< U   | 0.33 1 < U       | 0.33 1< U        |
| SEMIVOLATILES    | Benzo(a)anthracene             |                         |                              |                  | 0.33 1 < U        | 0.33 1 < U       | 0.47 1< U         | 0.33 1 < U          | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(a)pyrene                 |                         |                              |                  | 0.33 1 < U        | 0.33 1< U        | 0.47 1< U         | 0.33 1< U           | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Benzo(b)fluoranthene           |                         |                              |                  | 0.33 1 < U        | 0.33 1 < U       | 0.47 1 < ⊍        | 0.33 t< U           | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Benzo(ghi)perytene             |                         |                              |                  | 0.33 1 < U        | 0.33 1 < U       | 0.47 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 I< U        | 0.33 1 < 0  | 0.33 1 0         |                  |
| SEMIVOLATILES    | Benzo(k)fluoranthene           |                         |                              |                  | 0.33 1 < U        | 0.33 1 < 0       | 0,4/ 1< U         | 1.33 1 < 0          | 1.65 1 4 11      | 165 1 4 11       | 165 1 < 1        | 165 1 < 1   | 165 1< 1         | 1.65 1 < 1       |
| SEMIVOLATILES    | Benzoic Acid                   |                         |                              |                  | 1.05 1 < U        | 1,00 IK U        | 2.4 I C           | 1.05 1 < 0          | 1.5.5 1 < 11     | 0.65 1 < U       | 0.65 t< U        | 0.65 1 < U  | 0.65 1 < U       | 0.65 I < U       |
| SEMIVOLATILES    | benzyi Alconos                 |                         |                              |                  | 1.33 1 < 1        | 0.33 t< U        | 0.47 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 I< U        | 0.33 1 <u< th=""><th>0.33 1&lt; U</th><th>0.33 1 &lt; U</th></u<> | 0.33 1< U        | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether        |                         |                              |                  | 0.33 t< U         | 0.33 1 < U       | 0.47 1 < U        | 0.33 t< U           | 0.33 1< U        | 0.33 1< U        | 0.33 1< U        | 0.33 1 < U  | 0.33 1< U        | 0.33 1< U        |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether    |                         |                              |                  | 0.33 1 < U        | 0.33 t< U        | 0.47 1< U         | 0.33 t< U           | 0.33 1< U        | 9.33 1 < U       | 0.33 1< U        | 0.33 1< U   | 0.33 1< U        | 0.33 1< U        |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate     |                         |                              |                  | 0.33 1< U         | 9.33 1 < U       | 0.47 1 < U        | 0.33 1 < U          | 0.33 1< U        | 0.33 1< U        | 0.33 1< U        | 0.33 1 < U  | 0.33 1< U        | 0.33 1 < U       |
| SEMIVOLATILES    | Butyl benzyl phthalate         |                         |                              |                  | 0.33 t< U         | 0.33 1 < U       | 0.47 1< U         | 0.33 1< U           | 0.33 I< U        | 0.33 1< U        | 0.33 1< U        | 0.33 1< U   | 0.33 1 < U       | 0.33 1< U        |
| SEMIVOLATILES    | Chrysene                       |                         |                              |                  | 0.33 1< U         | 0.33 1 < U       | 0.47 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0  | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene         |                         |                              |                  | 0.33 1 < U        | 0.33 1 < U       | 0.47 £< U         | 0.33 1 < U          | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0,335 1< U<br>n≪n t∠ U  | 0.33 E< U        | 0.33 1 < 0       |
| SEMIVOLATILES    | Dibenzofuran                   |                         |                              |                  | 0.33 t< U         | 0.33 1 < U       | 0.47 1 < 0        | 0.33 1 < 0          | 0.33 [< 0        | 0.33 I< U        | 0.33 1< 0        | 0.33 1 < 11   | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Diethyl phthalate              |                         |                              |                  | 0.33 1 < 0        | 0.33 I< U        | 0.47 1 < 0        | 0.33 1 < 1          | 0.33 1 0         | 0.33 1 < 1       | 0.33 1 < 0       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Osmetity) phthalate            |                         |                              |                  | 0.35 1 0          | 0.35 1 0         | 0.47 1 < 1        | 0.716 1             | 0.33 1 < U       | 0.734 1          | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1< U        |
| SEMIVOLATILES    | di.n.Ocht obthalate            |                         |                              |                  | 0.33 1 < U        | 0.33 1 < U       | 0.47 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U   | 0.33 1< U        | 0.33 1< U        |
| SEMIVOLATILES    | Fluoranthene                   |                         |                              |                  | 0.33 1 < U        | 0.33 t< U        | 0.47 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U        | 0.33 1< U   | 0.33 1< U        | 0.33 t< U        |
| SEMIVOLATILES    | Fiuorene                       |                         |                              |                  | 0.33 1< U         | 0.33 t< U        | 0.47 1 < U        | 0.33 1< U           | 0.33 1 < U       | 0.33 t< U        | 0.33 1< U        | 0.33 1< U   | 0.33 1< U        | 0.33 t< U        |
| SEMIVOLATILES    | Hexachiorobenzene              |                         |                              |                  | 0.33 1 < U        | 0.33 1 < U       | 0.47 1 < U        | 0.33 1< U           | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U   | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorobutadiene            |                         |                              |                  | 0.33 1< U         | 0.33 1 < U       | 0.47 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < 0       | 0.33 1 < 0  | 0.33 1 < 0       | 10.33 1 < 0      |
| SEMIVOLATILES    | Hexachiorocyclopentadiene      |                         |                              |                  | 0.33 1 < U        | 0.33 1 < U       | 0.47 1 < U        | 0.33 1 < U          | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0  | 0.33 1< 0        | 0.33 1 < 0       |
| SEMIVOLATILES    | Hexachloroethane               |                         |                              |                  | 0.33 1 < 0        | 0.33 1 < U       | 0.47 1 < 0        | 0.33 1< 0           | 0.33 1< 0        | 0.33 1 < 1       | 0.33 1 < 1       | 0.33 1< 1   | 0.33 1 < U       | 0.33 1 < V       |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene         |                         |                              |                  | 0.33 1 4 1        | 0.33 1 4 0       | 0.47 1 < 0        | 0.33 1 < 13         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Isophorone Naphthalaga         |                         |                              |                  | 0.33 1 < 1        | 0.33 1 < 1       | 0.47 1< U         | 0.33 1 < U          | 0.33 1 < U       | 0.33 t< U        | 0.33 1 < U       | 0.33 1< U   | 0.33 1< U        | 0.33 1< Ŭ        |
| SEMINOLATILES    | Nitrobenzene                   |                         |                              |                  | 0.33 1< U         | 0.33 1 < U       | 0.47 t< Ù         | 0.33 1< U           | 0.33 1< U        | 0.33 t< U        | 0.33 1 < U       | 0.33 1< U   | 0.33 1< U        | 0.33 1< U        |
| SEMIVOLATILES    | n-Nitroso-di-n-propytamine     |                         |                              |                  | 0.33 1 < U        | 0.33 1 < U       | 0.47 1 < U        | 0.33 1< U           | 0.33 t< U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U   | 0.33 1< U        | 0.33 1 < U       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine         |                         |                              |                  | 0.33 1< U         | 0.33 1 < U       | 0.47 1< U         | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U        | 0.33 I< U   | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | Pentachlorophenol              |                         |                              |                  | 1.65 1 < U        | 1.65 1 < U       | 2.4 1 < U         | 1.65 1< ∛J          | 1.65 1 < U       | 1.65 1 < U       | 1.65 t< U        | 1.65 1 < U  | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | Phenantiarene                  |                         |                              |                  | 0.33 1 < U        | 0.33 1 < U       | 0.47 1 < U        | 0.33 1 < U          | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1< 0   | 0.33 I < U       | 0.33 1 < 0       |
| SEMIVOLATILES    | Phenol                         |                         |                              |                  | 0.33 1 < 0        | 0.33 1 < 0       | 0.47 1 4          | 10.33 1< U          | 0.33 1< 0        | 0.33 1< 0        | 0.33 1 4 1       | 033 1 2 1   | 0.33 1 < 1       | 0.33 1< U        |
| SEMIVOLATILES    | Pyrene                         |                         | 0.00455 4.11 11              | 0.00478 1.12 11  | 0.33 1< 0         | 0.33 1< 0        | 0.47 1< 0         | 0.55 1 4 0          | 0.55 1 4 0       | 0.33 1 0         | 0.00 1 0         | 0.00  | 0.00 / 4 4       |                  |
| VOLABLES         | 1,1,1,2-1 etrachloroethane     |                         | 0.00455 1.0 0                | 0.00478 10 0     | 0.005 1 < 1       | 0.005 1 < ⊎      | 0.007 1 < U       | 0.005 1 < U         | 0.005 1 < U      | 0.005 1 < U      | 0.005 1< U       | 0.005 1< U  | 0.005 1< U       | 0.005 1 < U      |
| VOLATILES        | 1 1 2 2-Tetrachloroethane      |                         | 0.00455 1 U U                | 0.00478 1 U U    | 0.005 1 < U       | 0.005 t < U      | 0.007 1 < U       | 0.005 1 < U         | 0.005 t< U       | 0.005 1< U       | 0.005 1 < U      | 0.005 1< U  | 0.005 1 < U      | 0.005 1 < Ü      |
| VOLATILES        | 1.1.2-Trichloroethane          |                         | 0.00455 1 U U                | 0.00478 1 U U    | 0.005 1 < U       | 0.005 1< U       | 0.007 1< U        | 0.005 1< U          | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1< U  | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichloroethane             |                         | 0.00455 1 U U                | 0.00478 1UU      | 0.005 1 < U       | 0.005 t < U      | 0.007 1 < U       | 0.005 1 < U         | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichloroethene             |                         | 0.00455 1UU                  | 0.00478 1 U U    | 0.005 1 < U       | 0.005 1 < U      | 0.007 1 < U       | 0.005 1 < U         | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U      | 0.005 1 < 0      |
| VOLATILES        | 1,1-Dichtoropropene            |                         | 0.00455 1 U U                | 0.00478 1 U U    |                   |                  |                   |                     |                  |                  |                  |   |                  |                  |
| VOLATILES        | 1,2,3-Trichlorobenzene         |                         | 0.00455 1 U U                | 0.00478 1 U U    |                   |                  | 0.014 1 . 13      |                     |                  |                  |                  |   |                  |                  |
| VOLATILES        | 1,2,3-Trichloropropane         |                         | 0.00455 10 0                 | 0.00478 10 0     |                   |                  | 0,014 1 < 0       |                     |                  |                  |                  |   |                  |                  |
| VOLATILES        | 1,2,4-1 nonlorobenzene         |                         | 0.00455 10 0                 | 0.00478 113 11   |                   |                  |                   |                     |                  |                  |                  |   |                  |                  |
| VOLATILES        | 1.2.Dibromo.3.chloroprocese    |                         | 0.00455 111 11               | 0.00478 1 U U    |                   |                  | 0.029 1 < U       |                     |                  |                  |                  |   |                  |                  |
| VOLATILES        | 1.2-Dibromoethane              |                         | 0.00455 1UU                  | 0.00478 1UU      |                   |                  | 0.029 1 < U       |                     |                  |                  |                  |   |                  |                  |
| VOLATILES        | 1,2-Dichlorobenzene            |                         | 0.00455 1UU                  | 0.00478 1 U U    |                   |                  |                   |                     |                  |                  |                  |   |                  |                  |
| VOLATILES        | 1,2-Dichloroethane             |                         | 0.00455 1UU                  | 0.00478 tUU      | 0.005 1 < U       | 0.005 1 < U      | 0.007 1 < U       | 0.005 1 < U         | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U   | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichloroethene             |                         |                              |                  | 0.005 1 < U       | 0.005 1 < U      | 0.007 1< U        | 0.005 1 < U         | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0   | 0.005 1 < U      | 0.005 1 < 0      |
| VOLATILES        | 1,2-Dichloropropane            |                         | 0.00455 ¥UU                  | 0.00478 1UU      | 0.005 1 < U       | 0.005 1 < U      | 0.007 1 < U       | 0.005 1 < U         | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0   | 0.005 1< 0       | 0.003 14 0       |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) |                         | 0.00455 1 U U                | 0.00478 1 U U    |                   |                  |                   |                     |                  |                  |                  |   |                  |                  |
| VOLATILES        | 1,3,5-Trimethylbenzene         |                         | 0.00455 1 U U                | 0.00478 10 0     |                   |                  |                   |                     |                  |                  |                  |   |                  |                  |
| VOLATILES        | 1,3-Dichlorobenzene            |                         | 0.00455 10 0                 | 0.00470 10 0     |                   |                  |                   |                     |                  |                  |                  |   |                  |                  |
| VOLATILES        | 1,5-DICHIOTOPTOPANE            |                         | 0.004ao EU U<br>0.00455 EU D | 0.00478 10 0     |                   |                  |                   |                     |                  |                  |                  |   |                  |                  |
| VOLATILES        | 2 2-Dichloropronane            |                         | 0.00455 1 U U                | 0.00478 11/1     |                   |                  |                   |                     |                  |                  |                  |   |                  |                  |
| VOLATILES        | 2-Butanone                     |                         | 0.00911 1UU                  | 0.00956 1UU      | 0.05 1 < U        | 0.05 1 < U       | 0.014 1 < U       | 0.05 1 < U          | 0.05 1 < U       | 0.05 t< U        | 0.05 1 < U       | 0.05 1 < U  | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | 2-Chloroethyl vinyl ether      |                         | 0.00911 1.ป.ป                | 0.00956 1 U U    | 0.01 1 < U        | 0.01 1 < U       | 0.014 1 < U       | 0.01 1 < U          | 0:01 1 < U       | 0.01 t< U        | 0.01 1 < U       | 0.01 1 < U  | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | 2-Chlorotoluene                |                         | 0.00455 1 U U                | 0.00478 TUU      |                   |                  |                   |                     |                  |                  |                  |   |                  |                  |
| VOLATILES        | 2-Hexanone                     |                         | 0.00911 1 U U                | 0.00956 1UU      | 0.05 1 < U        | 0.05 1 < U       | 0.014 1 < U       | 0.05 t< U           | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < 0  | 0.05 1< U        | 0.05 1 < U       |
| VOLATILES        | 2-Propenal                     | ļ.                      |                              |                  |                   |                  | 0.72 1 < U        |                     |                  |                  |                  |   |                  |                  |
|                  |                                |                         |                              |                  |                   |                  |                   | -                   |                  |                  |                  |   |                  |                  |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-92 Concentrations of Chemicals in Soil Samples Associated with Sump 092

| [SUMP] = SUMP092 |  |                   |                    | - Control        |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
|------------------|--|-------------------|--------------------|------------------|------------------|------------------|---------------------------------------|------------------|------------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |  | 35SUMP091-SB01    | 35SUMP091-S801     | 35SUMP092-SB01   | LH-DL91          | LH-DL92-01       | LHS-3-26                              | LH-S91-01        | LH-S91-01              | LH-S91-01        | LH-S91-02        | LH-S91-02        | LH-S91-02        | LH-S91-02        |
| SAMPLE_NO        |  | 35-SMP091-SB01-01 | 35-SMP091-SB01-02  | 35-SMP92-SB01-02 | LH-DL91          | LH-DL92-01       | 1.HS-3-26                             | LH-S91-01_1      | LH-S91-01_2            | LH-S91-01_3      | LH-S91-02 QC     | LH-S91-02_1      | LH-S91-02_2      | LH-S91-02_3      |
| SAMPLE_DATE      |  | 9/21/2006         | 9/21/2006          | 9/19/2006        | 7/23/1993        | 7/23/1993        | 1/11/1995                             | 7/23/1993        | 7/23/1993              | 7/23/1993        | 7/24/1993        | 7/24/1993        | 7/24/1993        | 7/24/1993        |
| DEPTH            |  | .55 Ft            | 6-6Ft              | 7.5-7.5 Ft       | 2.5 - 3 F1       | 2.5-3Ft          | 05 Ft                                 | .5 - 1 Ft        | 5-6.5Ft                | 10.4 - 11 Ft     | 5.5 - 8 Ft       | .5-1 Ft          | 5.5 - 8 Ft       | 10 - 11 Ft       |
| SAMPLE PURPOSE   |  | REG               | REG                | REG              | REG              | REG              | REG                                   | REG              | REG                    | REG              | FÐ               | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)  | Result DIL LO VO  | Result Dill. LQ VQ | Result DIL LQ VQ | Result DiL LQ VQ | Result DIL LO VO | Result DIL LQ VQ                      | Result DIL LO VO | Result DIL LO VO       | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LO VQ |
| VOLATILES        | 4-Chlorotoluene  |                   | 0.00455 1 U U      | 0.00478 1 U U    |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
| VOLATHES         | Acetone  |                   | 0.0208 1           | 0.00634 1 J J    | 0.1 1 < U        | 0.1 1× U         | 0.014 1 < U                           | 0.1 1< U         | 0.1 1< U               | 0.1 1 < U        | 0.1 1< U         | 0.1 1< U         | 0.1 1 < U        | 0.1 1< U         |
| VOLATILES        | Acetonitrile   |                   |                    |                  |                  |                  | 0.14 1 < U                            |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Acrotonitrile  |                   |                    |                  |                  |                  | 0.14 1 < U                            |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Allylichte   |                   |                    |                  |                  |                  | 0.014 1 < U                           |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Benzens  |                   | 0.00455 3.13 13    | 0.00478 1.11 17  | 0-005 1z U       | 0005 1 < ₩       | 0.007 1 < U                           | 0.005 1 < U      | -0.005 1 < U           | 0.005 1 < U      | 0.005. 1 < U     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATH ES        | Bromohenzano   |                   | 0.00455 111 11     | 800478 111 11    |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Bromoshloromethana   |                   | 0.00455 111 11     | 0.00478 111 11   |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Oromadiabless methods  |                   | 0.00455 111 11     | 0.00478 1.11 15  | 0.005 1 / H      | 0.005 tz 11      | 0-007 tz l1                           | 0.005 1 c 18     | 0.005 1.∠ H            | 0.005 t< U       | 0.005 1 < 1/     | 0.005 1< U       | 0.005 1.< U      | 0.005 1 < U      |
| VOLATILES        | Biomator   |                   | 0.00455 14 1       | 0.004/0 10 0     | 0.005 1 < 0      | 0.005 1 < 11     | 0.007 1 4 1                           | 0.005 tc U       | 0.005 1 < 1            | 0.005 t< U       | 0.005 t< U       | 0.005 1 < 13     | 0.005 1< U       | 0.005 1 < U      |
| VULATILES        | Bioisoioisi  |                   | 0.00433 10 0       | 0.00076 111 11   | 0.000 1 2 1      |                  | 0.001 1 2 10                          | 0.000 1 4 0      | 0.01 1 4               | 0.01 1 2 1       | 0.01 1 2 1       | 0.01 1 < 10      | 0.01 t< U        | 0.01 1 < U       |
| VULATILES        | Bromomethane   |                   | 0.00911 10 0       | 0.00930 10 0     |                  |                  | 0.014 1 0                             | 0.005 1 2 0      | 0.005 1 < 11           | 0.005 1 < 1      | 0.005 1 < 1      | 0.005 1 < 1      | 0D05 1 < U       | 0.005 1 < U      |
| VOLANLES         | Carbon disultoe  |                   | 0.00455 10 0       | 0.00476 30 0     | 0.005 1 4 0      |                  | 0.007 1 0                             | 0.005 1 4 1      | 0.005 1 0              | 0.005 1 < 11     | 0.005 1 < 0      | 0.005 1 4 0      | 0.005 1 4 1      | 0.005 tic H      |
| VOLATILES        | Carbon tetrachtonde  |                   | 0.00455 10 0       | 0.00476 10 0     |                  | 0.005 1 0        |                                       | 0.005 1 4        |                        | 0.005 1 < 0      | 0.005 1 < 1      | 0.005 1 < 0      | 0.005 1 4 11     | 0.005 1 < 1      |
| VOLATILES        | Chlorobenzene  |                   | 0.00455 10 0       | 0.00478 10 0     | 0.005 1< 0       | 0.005 1 < 0      | 0.007 1 < 0                           |                  |                        |                  |                  | 0.003 1 < 0      | 0.000 1 < 0      | 0.000 1 4 0      |
| VOLATILES        | Chloroethane   |                   | 0.00911 10 0       | U U F 60900      | 0.01 1 < 0       |                  | 0.014 1 < 0                           |                  |                        |                  |                  | 0.01 1 0         | 0.005 1 < 11     | 0.005 1 < 1      |
| VOLATILES        | Chloroform   |                   | 0.00455 1 0 0      | 0.004/8 10 0     | 0.005 1 < 0      | 0.005 1 < 0      | 0.00/ 1< 0                            | 0.005 1 < 0      | 0.005 1 < 0            |                  | 0.005 1< 0       | 0.003 1 < 0      | 0.003 1 < 0      | 0.003 1 < 0      |
| VOLATILES        | Chloromethane  |                   | 0.00911 10 0       | 0.00956 10 0     | 0.01 1 < 0       | 1.01 1< 0        | 0.014 1 < 0                           | 0.01 1 < 0       | 0.01 1 < 0             | 0.01 1< 0        | 0.01 1 < 0       | 0.01 1 < 0       | 0.01 14 0        |                  |
| VOLATILES        | Chloroprene  |                   |                    |                  |                  |                  | 0.14 1 < 0                            |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | cis-1,2-Dichloroethene   | 1                 | 0.00455 1UU        | 0.00478 1 U U    |                  |                  | · · · · · · · · · · · · · · · · · · · |                  |                        | 0.005 x th       | 0.005            | 0.005 4 . 11     | 0.005 1          | 0.005 1 . 15     |
| VOLATILES        | cis-1,3-Dichloropropene  |                   | 0.00455 1 U U      | 0.00478 1 U U    | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U                           | 0.005 1 < 0      | 0.005 1 < 0            | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1< 0       | 0.005 1 4        |
| VOLATILES        | Dibromochloromethane   | 1                 | 0.00455 1UU        | 0.00478 1 U U    | 0.605 1 < U      | 0.005 1 < U      | 0.007 1 < U                           | 0.005 t< U       | 0.005 1 < U            | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      |
| VOLATILES        | Dibromomethane   | 1                 | 0.00455 1UU        | 0.00478 1UU      |                  |                  | 0.029 1 < U                           |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Dichlorodifluoromethane  |                   | 0.00911 1UU        | 0.00956 1 U U    |                  |                  | 0.029 1 < U                           |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Ethyl methacrylate   | 1                 |                    |                  |                  |                  | 0.029 1 < U                           |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Ethylbenzene   |                   | 0.00455 1 U U      | 0.00478 1 U U    | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U                           | 0.005 1 < U      | 0.005 1 < U            | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Hexachlorobutadiene  |                   | 0.00455 1 U U      | 0.00478 1 U U    |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | IODOMETHANE  |                   |                    |                  |                  |                  | 0.014 1 < U                           |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | ISOBUTYL ALCOHOL   |                   |                    |                  |                  |                  | 2.9 1 < U                             |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Isopropylbenzene   |                   | 0.00455 1UU        | 0.00478 1UU      |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | m,p-Xylenes  |                   | 0.00455 ‡UU        | 0.00478 1UU      |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Methacrytonitrile  | 1                 |                    |                  |                  |                  | 0.029 1 < U                           |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Methył isobutył ketone   |                   | 0.00911 1UU        | 0.00956 1UU      | 0.05 1 < U       | 0.05 1 < U       | 0.014 1 < U                           | 0.05 1< U        | 0.05 1 < U             | 0.05 1 < U       | 0.05 1< U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | METHYL METHACRYLATE  |                   |                    |                  |                  |                  | 0.029 1< U                            |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Methylene chloride   |                   | 0.00672 1          | 0.00478 1 U U    | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U                           | 0.005 1 < U      | 0.005 1 < U            | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Naphthalene  |                   | 0.00911 1UU        | 0.00956 1UU      |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | n-BUTYLBENZENE   |                   | 0.00455 1UU        | 0.00478 1 U U    |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | n-PROPYL8ENZENE  |                   | 0.00455 1 U U      | 0.00478 1UU      |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Pentachloroethane  |                   |                    |                  |                  |                  | 0.029 1 < U                           |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | p-ISOPROPYLTOLUENE   |                   | 0.00455 1UU        | 0.00478 1UU      |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Propionitrile  |                   |                    |                  |                  |                  | 0.072 1 < U                           |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | SEC-BUTYLBENZENE   |                   | 0.00455 1 U U      | 0.00478 1U U     |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Styrene  |                   | 0.00455 1.11 11    | 0.00478 1 U U    | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U                           | 0.005 t< U       | 0.005 1< U             | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1< U       | 0.005 1 < U      |
| VOLATILES        | tert-BUTYLBENZENE  |                   | 0.00455 1.11 11    | 0.00478 1.0 U    |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | Tetrachioroethene  | [                 | 0.00455 11/ 31     | 0.00478 111 11   | 0.005 1 < 11     | 0.005 1 < ₩      | 0.007 t< U                            | 0.005 1< U       | 0.005 1 < <del>U</del> | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t< U       | 0.005 1 < U      |
| VOLATILES        | Toluene  |                   | 0.00455 111 11     | 0.00478 111 1    | 6.005 1 < 1      | 0.005 1 < 1      | 0.007 t< U                            | 0.005 1 < 1      | 0.005 1 < 1            | 0.005 t< U       | 0.005 t< U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | trans 1.2 Dictionaltiona   |                   | 0.00455 1 11 11    | 0.00478 111 11   |                  |                  |                                       |                  |                        |                  |                  |                  |                  |                  |
| VOLATILES        | trane-1 3-Dichloroprosess  | ł                 | 0.00455 1 11 11    | 0.00478 111 11   | 0.005 1 - 13     | 0.005 1 < 1      | 0.007 1 < 11                          | 0.005 t< D       | 0.005 1 < 1)           | -0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | trace 1 & Dichlara, 2 hutana   |                   | 0.00400 10 0       | 0.0010 10 0      | 0.003 11 0       | 0.000 1 2        | 0.029 1 2 11                          |                  |                        |                  |                  |                  |                  | · · · -          |
|                  | Raus-L-4-DR-18010-2-DR-530   | 1                 | 0.00455 1.12 11    | 0.00478 121 11   | 0.005 1 2 12     | 0.005 1 2 1      | 0.007 1 2 1                           | 0.005 1 - 11     | 0:005 fz H             | 0.005 1 < 11     | 0.005 1 < 17     | 0.005 1 < 1      | 0.005 f < U      | 0.005 1 < U      |
| VOLATILED        | Trichloroffuoromothers   |                   | 0.00403 10 0       | 0.00056 111 11   | 0.000 1 0        | 0.000 15 0       | 0.00/ 1 / 1                           | 0.000 in V       | 2.000 1 3 0            |                  |                  |                  |                  |                  |
| VUERTILES        | Charles and an and a second seco |                   | 0.00011 10 0       | 0.000056 110 0   | 0.05 1 - 11      | 0.05 1 - 11      | 0.014 1 2 1                           | 0.05 1 - 11      | 0.05 1 - 11            | 0.05 1 < 11      | 0.05 1 < ₩       | 0.05 1 < H       | 0.05 t< U        | 0.05 1 < 11      |
|                  | vnyl dutidu  | 1                 | 0.00011 10 00      | 0.0030 10 0      |                  |                  | 0.014 1 - 10                          |                  | 0.00 1 2 11            | 0.01 1 2 14      |                  | 0.01 1 < 11      | 0.01 1 < 11      | 0.01 1 < 1       |
| VULATILES        | Vitiga Children Total  |                   | 0.00911 10 0       | 0.00300 1.0 0    | 0.005 1          | 0.00 1 1 0       | 0.014 14 0                            | 0.005 1 2 1      | 0.005 12 1             | 0.005 1 2 1      | 0.005 1 < 11     | 0.005 1 < 1      | 0.005 1 < 11     | 0.005 1 < U      |
| VULATILES        | AVICINES, FUIGI  | t                 |                    |                  | 0.000 1 4 0      | 0.000 1 1 0      | 0.001 1 0                             | 0.000 11 0       | 0.000 1 0              | 4.444 I V        |                  |                  |                  |                  |



Table 3-92 Concentrations of Chemicals in Soil Samples Associated with Sump 092

| SUMP) = SUMP092 |                             | Conc | cnuau      | 0113     | 01 0  | menne    | ais     |         |          | inpic    | 3 70  | ,500.uc  | cu n     |    | oamp           |         |       |          |         |         |          |            |        |
|-----------------|-----------------------------|------|------------|----------|-------|----------|---------|---------|----------|----------|-------|----------|----------|----|----------------|---------|-------|----------|---------|---------|----------|------------|--------|
| OCATION _CODE   |                             |      | LH-S       | 92-01    |       | UH:      | S92-01  |         | LH       | 592-01   |       | LH-S     | S92-01   |    | UH-            | S92-02  |       | CH-S     | \$92-02 |         | LH-S     | 592-02     |        |
| SAMPLE_NO       |                             |      | LH-S9      | 2-01 Q   | C     | UH-S     | 92-01_1 | I       | LH-S     | 92-01_2  | 2     | LH-S     | 92-01_3  | 3  | LH-S           | 92-02_1 |       | UH-S     | 92-02_2 | 2       | LH-S     | 32-02_3    |        |
| SAMPLE_DATE     |                             |      | 7/23       | /1993    |       | 7/2      | 3/1993  |         | 7/2      | 3/1993   |       | 7/23     | 3/1993   |    | 7/2            | 3/1993  |       | 7/2      | ¥1993   |         | 7/23     | V1993      |        |
| DEPTH           |                             |      | .5-        | 1 Fl     |       | .5       | - 1 Ft  |         | 6.5      | - 7.5 Ft |       | 10.5     | 11.5 Fi  | ŧ  | .5             | - † Ft  |       | 6.5      | -7.5 Ft |         | 10.5     | 11.5 Ft    |        |
| SAMPLE_PURPOSE  |                             |      | F          | 0        |       | Ŧ        | REG     |         | F        | REG      |       | f        | REG      |    | f              | ÆG      |       | F        | 1EG     |         | F        | EG         |        |
| lest Group      | Parameter (Units = mg/kg)   |      | Result Oil | <u> </u> | VQ    | Result D | L LQ    | VQ      | Result D | IL LO    | VQ    | Result D | L LQ     | VQ | Result D       | L LQ    | VQ    | Result D | LLQ     | VQ      | Result D | L LQ       | VQ     |
| EXPLOSIVES      | 1,3,5-Trinitrobenzene       |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| EXPLOSIVES      | 1,3-Dinitrobenzene          |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| EXPLOSIVES      | 2,4,6-Trinitrotoluene       |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| -XPLOSIVES      | 2,4-Dinitrotoluene          | }    | 0.33       | 1<       | U     | 0.33     | 1<      | U       | 0.33     | 1<       | U     | 0.33     | 1 <      | U  | 0.33           | 1 <     | U     | 0.33     | 1 <     | U       | 0.33     | 1<         | U      |
| EXPLOSIVES      | 2,6-Dinitrotoluene          |      | 0.33       | 1 <      | U     | 0.33     | 1 <     | U       | 0.33     | 1 <      | บ     | 0.33     | 1 <      | U  | 0.33           | 1 <     | U     | 0.33     | 1 <     | U.      | 0.33     | 1<         | ป      |
| EXPLOSIVES      | 4-Amino-2,6-dinitrotoluene  |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| EXPLOSIVES      | RMX                         |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| EXPLOSIVES      | m-Nitrotoluene              |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| EXPLOSIVES      | Nitrobenzene                |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| EXPLOSIVES      | o-Nitrololuene              |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| EXPLOSIVES      | p-Nitrotokiene              |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| EXPLOSIVES      | BDX                         |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| EXPLOSIVES      | Tetry                       |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         | -     |          |         |         |          |            |        |
| METALS          | Aleminum                    |      | 13300      | 1        |       | 10600    | 1       |         | 10700    | 1        |       | 6380     | 1        |    | 15000          | 1       |       | 14400    | 1       |         | 4500     | t          |        |
| METALS          | Antimony                    |      | 3          | 1 <      | ប     | 3        | 1<      | · U     | 3        | 1<       | U     | 3        | 1 <      | U  | Э              | 1 <     | U     | 3        | 1<      | U       | 3        | 1 <        | U      |
| METALS          | Arsenic                     |      | 21         | 1        |       | 2.6      | 1       |         | 1.2      | 1        |       | 2.3      | 1        |    | 2.5            | 1       |       | 2        | 1       |         | 1        | 1 <        | U      |
| METALS          | Ranium                      |      | 115        | 1        |       | 59.2     | 1       |         | 170      | 1        |       | 99.2     | 1        |    | 96.2           | 1       |       | 102      | 1       |         | 82.4     | 1          |        |
|                 | Bandlinm                    |      | 115        | •        |       | 00.2     |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| HETALO          | Codmium                     |      | 1          | 1.       | 13    | ,        | 1.      | 11      | 1        | 1.       | Ħ     | 1        | 1 <      | IJ | 1              | 1 <     | Ð     | 1        | 1 <     | u       | 1        | 1<         | U      |
| WEIALO          | Calaium                     |      | 1040       | 1        |       | 2120     | ,       | 5       | 626      | 1        | Ŷ     | 673      | 1        | °. | 6130           | 1       | -     | 809      | 1       | -       | 233      | 1          | -      |
| METALS          | Charging                    |      | 171        | 1        |       | 15 1     |         |         | 12.0     | 1        |       | 11.4     | ;        |    | 18.9           | 1       |       | 14.3     | 1       |         | 16.5     | 1          |        |
| METALS          | Caromical                   |      | 17.1       | 1        |       | 1.01     | •       |         | 10,1     |          |       | 0 1      |          |    | 0.01           | ÷       |       | 93       |         |         | 6        | 1          |        |
| METALS          | Copair                      | 1    | 92         | 1        |       | 0.0      | 1       |         | 0.2      | 1        |       | 0.1      | +        |    | 6.0            | 4       |       | 5.5      | 1       |         | 71       | 1          |        |
| METALS          | Copper                      |      | 0./        | 4        |       | 3.2      | 1       |         | 4.9      |          |       | 12000    |          |    | 16900          |         |       | 11000    | 1       |         | 15500    | 1          |        |
| METALS          | Iron                        |      | 14000      | 1        |       | 13400    |         |         | 10,00    | 1        |       | 13000    |          |    | 10200          |         |       | 10.0     | *       |         | 13300    | •          |        |
| METALS          | Lead                        |      | 6./        | 1        |       | 7.4      | 1       |         | 5.3      | 3        |       | 5.9      | 1        |    | 0.9            | •       |       | 10.3     | ,       |         | 504      | •          |        |
| METALS          | Magnesium                   |      | 1280       | 1        |       | 922      | 1       |         | 1420     | 1        |       | 11/0     |          |    | 923            | н<br>4  |       | 1010     | :       |         | 504      |            |        |
| METALS          | Manganese                   |      | 104        | T        |       | 117      | 1       |         | 33.7     | 1        | • •   | 52       | 1        |    | 223            | 1       | ы     | 30.3     | 1       |         | 21.9     | 1          | н      |
| METALS          | Mercury                     |      | 0.1        | 1<       | U     | 0.1      | 1 <     | U       | 6.1      | 1 <      | Ð     | 0.1      | 1<       | U  | 0.1            | 1 <     | 0     | V.1      | 1 <     | ບ       | 0.1      | 1 <        | U      |
| METALS          | Nickel                      |      |            |          |       |          |         |         |          |          |       |          |          |    | ~~~            |         |       | 704      |         |         | 000      |            |        |
| METALS          | Potassium                   |      | 769        | 1        |       | 546      | 1       |         | 556      | 1        |       | 472      | 1        |    | 719            | 1       |       | 791      | 1       |         | 282      | 1          |        |
| METALS          | Selenium                    |      | 1          | 1 <      | U     | 1        | 1 <     | U       | 1        | 1 <      | U     | \$       | 1<       | U  | 1              | 1<      | 0     | 1        | 1<      | 0       | 1        | 1<         | U<br>U |
| METALS          | Silver                      |      | 1          | 1<       | U     | 1        | 1<      | U       | 1        | 1 <      | U     | 1        | 1 <      | Û  | 1              | 1<      | ប     | 1        | 1 <     | U       | 1        | 1 <        | U      |
| METALS          | Sodium                      |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| METALS          | Strontism                   |      | 22.5       | 1        |       | 20.3     | 1       |         | 23.7     | 1        |       | 21.8     | 1        |    | 19.9           | 1       |       | 25.1     | 1       |         | 9.1      | t          |        |
| METALS          | Thallium                    |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| METALS          | Vanadium                    |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| METALS          | Zinc                        | ]    | 34.1       | 1        |       | 33.4     | 1       |         | 36.9     | 1        |       | 34.8     | 1        |    | 38.3           | 1       |       | 38.1     | 1       |         | 27.7     | 1          |        |
| SEMIVOLATILES   | 1,2,4-Trichlorobenzene      |      | 0.33       | 1 <      | U     | 0.33     | 1 <     | · U     | 0.33     | 1 <      | U     | 0.33     | 1 <      | ឋ  | 0.33           | 1 <     | U     | 0.33     | 1 <     | IJ      | 0.33     | 1<         | 0      |
| SEMIVOLATILES   | 1,2-Dichlorobenzene         |      | 0.33       | 1 <      | U     | 0.33     | 1 <     | U       | 0.33     | 1 <      | U     | 0.33     | t <      | U  | 0.33           | 1 <     | υ     | 0.33     | 1 <     | U       | 0.33     | 1 <        | Ð      |
| SEMIVOLATILES   | 1,3-Dichlorobenzene         | 1    | 0.33       | 1 <      | ប     | 0.33     | 1 <     | U       | 0.33     | 1 <      | U     | 0.33     | 1 <      | Û  | 0.33           | 1 <     | U     | 0.33     | 1<      | U       | 0.33     | 1 <        | U      |
| SEMIVOLATILES   | 1,4-Dichlorobenzene         |      | 0.33       | 1 <      | ປ     | 0.33     | 1 <     | U       | 0.33     | 1 <      | U     | 0.33     | 1 <      | U  | 0.33           | 1 <     | U     | 0.33     | 1 <     | U       | 0.33     | 1 <        | U      |
| SEMIVOLATILES   | 2,4,5-Trichlorophenol       |      | 1.65       | 1 <      | ບ     | 1.65     | 1 <     | U       | 1.65     | 1 <      | U     | 1.65     | 1 <      | U  | 1.65           | 1 <     | U     | 1.65     | 1 <     | U       | 1.65     | 1 <        | U      |
| SEMIVOLATILES   | 2,4,6-Trichlorophenol       |      | 0.33       | 1 <      | U     | 0.33     | 1<      | U       | 0.33     | 1 <      | U     | 0.33     | 1 <      | U  | 0.33           | 1 <     | U     | 0.33     | 1 <     | U       | 0.33     | 1 <        | Ð      |
| SEMIVOLATILES   | 2.4-Dichlorophenol          |      | 0.33       | 1 <      | U     | 0.33     | 1 <     | U       | 0.33     | 1.<      | U     | 0.33     | 1<       | U  | 0.33           | 1 <     | U     | 0.33     | 1 <     | Ú       | 0.33     | 1 <        | U      |
| SEMIVOLATILES   | 2.4-Dimethylphenol          |      | 0.33       | 1<       | U     | 0.33     | 1 <     | U       | 0.33     | 1 <      | U     | 0.33     | 1 <      | U  | 0.33           | 1 <     | U     | 0.33     | 1 <     | U       | 0.33     | t <        | U      |
| SEMIVOLATILES   | 2.4-Dinitrophenol           |      | 1.65       | 1 <      | U     | 1.65     | 1 <     | ម       | 1.65     | 1 <      | U     | 1.65     | 1 <      | U  | 1.65           | 1 <     | U     | 1.65     | 1 <     | U       | 1.65     | 1 <        | U      |
| SEMIVOLATILES   | 2 4-Dinitrotoluege          |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| SEMIVOLATILES   | 2.6-Dinitrotofuene          |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |
| SEMINOLATILES   | 2.Chloronanbthatene         |      | 0.33       | 1<       | IJ    | 0.33     | 1<      | U       | 0.33     | 1 <      | ¥     | 0.33     | 1<       | ប  | 0.33           | 1 <     | U     | 0.33     | 1<      | U       | 0.33     | 1<         | U      |
|                 | 2_Chloronbenol              |      | 0.33       | 1.2      | 11    | 0.33     | 1.      | 11      | 0.33     | 14       | 11    | 0.33     | 1<       | 11 | 0.33           | 1<      | U     | 0.33     | 1<      | U       | 0.33     | 1 <        | U      |
|                 | 2 Mathunanhthalana          |      | 0.33       | 12       | 11    | 0.00     | 12      | 11      | 0.33     | 12       | Ŭ.    | 0.33     | 1 <      | ų. | 0.33           | 1 <     | U     | 0.33     | 1<      | U       | 0.33     | 1<         | ប      |
|                 | 2-metryinapinapinalene      | 1    | 0.00       | 1.       |       | 0.00     | 12      | 13      | 0.00     | 12       | n     | 0.00     | 1.0      | 11 | 0.33           | te      | H     | 0.33     | 1<      | 1       | 0.33     | 1<         | u      |
| SEMINULATILES   | 2-Meusylphentor             |      | 1.55       |          |       | 1.65     | 12      | -11     | 1.65     | 12       | 11    | 1.65     | 12       | ů. | 1.65           | 12      | ii ii | 1.65     | 1 <     | Ň       | 1.65     | 1<         | Ū      |
| SEMIVOLATILES   |                             |      | 1.00       | 1.       |       | 6.02     | 1.      | 0       | 0.00     | 1        | ы     | 6.22     | 1        | 1F | 0.33           | 12      | ŭ     | 0.33     | 12      | й<br>И  | 0.33     | 12         | 11     |
| SEMIVOLATILES   | 2-Nitroprienor              |      | 0.33       | 1 <      | П     | 0.33     | 15      |         | . 0.3J   | 1.       |       | 0.33     | 1.5      | 11 | 0.55           | 12      | П     | 0.65     | 12      | Н       | 0.65     | 12         | ι.     |
| SEMIVOLATILES   | 3,3-Dichlorodenziolne       | -    | 0.03       | 1 <      |       | 1.05     | 1 4     |         | 1.00     | 1 4      |       | 1.00     | + -      | 19 | 1.65           | 1.      |       | 1.65     | 12      | 11      | 1.65     | 12         | Ŭ.     |
| SEMIVULATILES   | J-MITORININE                |      | 1.65       | 1 <      | 0     | 1.05     | •       | U<br>II | 1.00     | 15       | 0     | 1.03     | ۲×<br>۰. | 11 | 1.00           | + -     | н     | 1.00     |         | 11      | 1.00     | 1.         | U U    |
| SEMIVOLATILES   | 4,6-Dimtro-2-methylphenol   |      | 1.65       | 1 <      | U     | 1.65     | ; <     | 0       | 1.05     | 1 <      | 0     | 1.05     | • <      | 0  | (.00)<br>(.00) | 1 <     | 0     | 60.1     | 1 4     | U<br>JE | 1.00     | 1.         | 11     |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether  |      | 0.33       | 1<       | U<br> | 0.33     | 1 <     | U<br>   | 0.33     | 1 <      | U     | 0.33     | 1<       | 0  | 0.33           | 1 <     | 0     | 0.33     | 1 <     | U<br>12 | 0.33     | ( <<br>+ - | 0      |
| SEMIVOLATILES   | 4-Chloro-3-methylphenol     |      | 0.65       | 1 <      | U     | 0.65     | 1<      | U       | 0.65     | 1<       | 0     | 0.65     | 1<       | U  | 0.65           | 1<      | 0     | 0.05     | 1 <     | U       | 0.05     | 1 <        | о<br>н |
| SEMIVOLATILES   | 4-Chloroaniline             |      | 0.65       | 1 <      | U     | 0.65     | 1 <     | ប       | 0.65     | 1 <      | ປ<br> | 0.65     | 1<       | 0  | 0.65           | 1<      | 0     | 0.65     | 1 <     | U<br>LI | 0.00     | \$ <<br>•  | 0      |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether | .    | 0.33       | 1 <      | U     | 0.33     | 1 <     | U       | 0.33     | 1 <      | IJ    | 0.33     | 1<       | U  | 0.33           | 1 <     | ປ     | 0.33     | 1 <     | 0       | 0.33     | • <        |        |
| SEMIVOLATILES   | 4-Methylphenol              |      | 0.33       | 1 <      | U     | 0.33     | 1 <     | U       | 0.33     | 1 <      | ป     | 0.33     | 1 <      | U  | 0.33           | 1 <     | U     | 0.33     | 1 <     | U       | 0.33     | 1<         | ย<br>  |
| SEMIVOLATILES   | 4-Nitroaniline              |      | 1.65       | 1 <      | υ     | 1.65     | 1 <     | U       | 1.65     | 1 <      | ប     | 1.65     | 1 <      | U  | 1.65           | 1 <     | U     | 1.65     | 1 <     | U       | 1.65     | 1 <        | U      |
| SEMIVOLATILES   | 4-Nitrophenol               |      | 1.65       | 1 <      | U     | 1.65     | 1 <     | U       | 1.65     | 1 <      | U     | 1.65     | 1 <      | U  | 1.65           | 1 <     | U     | 1.65     | 1 <     | U       | 1.65     | 1 <        | U      |
| SEMIVOLATILES   | Acenaphthene                |      | 0.33       | \$ <     | U     | 0.33     | 1 <     | U       | 0.33     | 1 <      | U     | 0.33     | 1 <      | U  | 0.33           | 1 <     | U     | 0.33     | 1 <     | U       | 0.33     | 1 <        | U      |
|                 |                             |      |            |          |       |          |         |         |          |          |       |          |          |    |                |         |       |          |         |         |          |            |        |



Table 3-92 Concentrations of Chemicals in Soil Samples Associated with Sumn 092

| (SUMP) = SUMP092 | 0                             | ncentrau   | 0115    | 010   | menac      | 315    | 11 3    | un San   | ihis    | 5 AS | Social    | eu w    | ***** | շզահ օ     | <b>3</b> 2 |       |            |        |          |           |         |         |
|------------------|-------------------------------|------------|---------|-------|------------|--------|---------|----------|---------|------|-----------|---------|-------|------------|------------|-------|------------|--------|----------|-----------|---------|---------|
| LOCATION_CODE    |                               | LH-S       | 92-01   |       | UH-S       | 92-01  |         | LH-S     | S92-01  |      | 114-5     | 592-01  |       | UH-S9      | 2-02       |       | LH-S       | 92-02  |          | LH-S      | 92-02   |         |
| SAMPLE NO        |                               | (LH-S9)    | 2-01 Q  | С     | LH-S9      | 2-01 1 |         | LH-S     | 92-01_2 | •    | LH-SS     | 92-01_3 | 3     | LH-S92     | -02_1      |       | LH-S9      | 2-02_2 | 2        | LH-S9     | 2-02_3  |         |
| SAMPLE DATE      |                               | 7/23       | /1993   |       | 7/23       | /1993  |         | 7/23     | 3/1993  |      | 7/23      | /1993   |       | 7/23/      | 993        |       | 7/23       | /1993  |          | 7/23      | /1993   |         |
| DEPTH            |                               | .5-        | 1 Ft    |       | .5-        | 1 FL   |         | 6.5      | 7.5 Ft  |      | 10.5 -    | 11.5 P  | t     | .5-1       | Ft         |       | 6.5 -      | 7.5 Ft |          | 10.5 -    | 11.5 Ft |         |
| SAMPLE PURPOSE   |                               |            | П       |       | R          | FG     |         | F        | RFG     |      | я         | EG      |       | RE         | G          |       | R          | EG     |          | 8         | EG      |         |
| Test Gram        | Parameter (Hoits - mo/kn)     | Result Oli | ۰<br>۱0 | vo    | Result Dil |        | VO      | Result D |         | vo   | Result DI | LLO     | VQ    | Result DIL | LQ         | VQ    | Result Dil | . LQ   | VQ       | Result DH | . LO    | VQ      |
| SEMIVOLATILES    | Aceoantitibulene              | 1 0 33     | 1 2     | 11    | 0.33       | 16     | 1       | 0.33     | 1 <     | 11   | 0.33      | 1<      | ť     | 0.33       | 1 <        | U     | 0.33       | 1<     | U        | 0.33      | 1<      | υ       |
| CENHVOLATILES    | antineana                     | 0.33       | 12      | й     | 0.33       | 12     | а<br>1  | 0.33     | 12      | 13   | 0.33      | 1 2     | u.    | 0.33       | 1 <        | ŧ     | 0.33       | 1<     | Ū.       | 0.33      | 1<      | Ū.      |
|                  | Penzela)anthranco             | 0.00       | 1       | ň     | 0.00       | 12     | 11      | 0.00     | 12      | ŭ    | 0.00      | 1.2     | 11    | 0.33       | 1 ~        |       | 0.33       | 1 6    | 11       | 0.33      | 1 e     | н       |
| SEMIVOLATILES    | Demo(o)mana                   | 0.33       |         | 21    | 0.00       | 1.     |         | 0.00     | 1       | 14   | 0.00      | 12      | ii ii | 0.00       | 12         | 11    | 0.33       | 12     | й        | 0.33      | 12      | ŭ       |
| SEMIVOLATILES    | Desizo(a), yiele              | 0.33       | 14      | Ч     | 0.00       | 1.     | 11      | 0.33     | 12      | 11   | 0.33      | 1.      | 12    | 0.00       | 1.2        | 11    | 0.33       | 12     | ы        | 0.33      | 1       | л<br>П  |
| CEMINOLARIES     | Deszo(opilocialiszcie         | 0.00       | 1       | 31    | 0.00       | 1.     | FL E    | 0.22     |         | ŭ    | 0.00      | 12      | 11    | 0.00       | 1.2        | )i    | 0.00       | 12     | т.       | 0.33      | 1.      | u .     |
| SEMIVOLATILES    | Benzolgin/perviewe            | 0.00       | 1.      | 0     | 0.00       |        |         | 0.00     |         | н    | 0.00      | 1 ×     | 14    | 0.00       |            | в     | 0.00       | 12     | н<br>н   | 0.00      | 12      | й       |
| SEMIVOLATILES    |                               | 0.33       | •       |       | 1.00       | 1.     |         | 1.00     | 1.      | ŭ.   | 1 65      |         | u U   | 1 65       | 1.2        | ii ii | 1 65       | 1      | ы<br>11  | 1.65      | •       | u .     |
| SEMIVOLATILES    | Benzoic Acid                  | 1.00       | 1<      |       | 0.05       | 1 <    | U<br>IR | 1.00     | 1 <     | 0    | 0.65      |         | 11    | 0.65       | 1.         | 11    | 0.65       |        | 1        | 0.65      | 1.      | ar a    |
| SEMIVOLATILES    | Benzyi Alconoi                | 0.65       | 1 <     |       | 0.05       | 1 <    |         | 0.05     |         |      | 0.00      | 1.      | 14    | 0.03       |            |       | 0.00       |        |          | 0.00      | 1.      |         |
| SEMIVOLATILES    | bis(2-Chioroethoxy)memane     | 0.33       | 1<      | 0     | 0.33       | 1 <    | 0       | 0.33     | 1<      | 0    | 0.33      |         |       | 0.33       | r <<br>• • | 0     | 0.35       | 1 <    |          | 0.00      | 14      | U<br>II |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether       | 0.33       | 1 <     | 0     | 0.33       | 1 <    |         | 0.33     | ! <     | 0    | 0.33      | 1<      | .0    | 0.33       | . <        | 0     | 0.33       | 1 <    |          | 0.33      | 1 <     | U<br>17 |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether   | 0.33       | 1 <     | 0     | 0.33       | 1 <    | U       | 0.33     | 1 <     | 0    | 0.33      | 1 <     | U     | 0.33       | 1 <        | 0     | 0.33       | 1 <    | U<br>II  | 0.33      | 1<      |         |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate    | 0.33       | 1<      | U     | 0.33       | 1 <    | U       | 0.33     | 1 <     | U    | 0.33      | 1 <     | 0     | 0.33       | 1 <        | 0     | 0.33       | 1 <    |          | 0.33      | 1<      | 0       |
| SEMIVOLATILES    | Butyl benzyl phthalate        | 0.33       | 1<      | U     | 0.33       | 1 <    | U       | 0.33     | 1 <     | U    | 0.33      | 1 <     | u     | 0.33       | 1 <        | 0     | 0.33       | 1 <    | 0        | 0.33      | 1<      | 0       |
| SEMIVOLATILES    | Chrysene                      | 0.33       | 1 <     | U     | 0.33       | 1 <    | U       | 0.33     | 1 <     | υ    | 0.33      | 1 <     | U     | 0.33       | 1 <        | U     | 0.33       | 1 <    | U        | 0.33      | 1<      | 0       |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene        | 0.33       | 1 <     | U     | 0.33       | 1 <    | U       | 0.33     | 1 <     | U    | 0.33      | 1 <     | ย     | 0.33       | 1 <        | U     | 0.33       | 1 <    | U        | 0.33      | 1 <     | U       |
| SEMIVOLATILES    | Dibenzofuran                  | 0.33       | 1 <     | U     | 0.33       | 1 <    | บ       | 0.33     | 1 <     | 0    | 0.33      | 1 <     | U     | 0.33       | 1 <        | U     | 0.33       | 1 <    | U        | 0.33      | 1 <     | U       |
| SEMIVOLATILES    | Diethyl phthalate             | 0.33       | 1 <     | ป     | 0.33       | 1 <    | U       | 0.33     | 1 <     | U    | 0.33      | 1 <     | U     | 0.33       | 1 <        | U     | 0.33       | 1 <    | U        | 0.33      | 1 <     | U       |
| SEMIVOLATILES    | Dimethyl phthalate            | 0.33       | 1 <     | U     | 0.33       | 1 <    | U       | 0.33     | 1 <     | U    | 0.33      | 1 <     | U     | 0.33       | 1 <        | U     | 0.33       | 1 <    | υ        | 0.33      | 1 <     | U       |
| SEMIVOLATILES    | di-n-Butyf phthalate          | 0.537      | 1       |       | 0.549      | 1      |         | 0.734    | 1       |      | 0.8       | 1       |       | 0.621      | 1          |       | 0.491      | 1      |          | 0.541     | 1       |         |
| SEMIVOLATILES    | di-n-Octyl phthalate          | 0.33       | 1 <     | υ     | 0.33       | 1 <    | U       | 0.33     | 1 <     | U    | 0.33      | 1 <     | U.    | 0.33       | 1 <        | ប     | 0.33       | 1<     | U        | 0.33      | 1 <     | ប       |
| SEMIVOLATILES    | Fluoranthené                  | 0.33       | 1 <     | U     | 0.33       | 1<     | U       | 0.33     | 1 <     | U    | 0.33      | 1<      | U     | 0.33       | 1 <        | U     | 0.33       | 1 <    | ป        | 0.33      | 1<      | U       |
| SEMIVOLATILES    | Fluorene                      | 0.33       | 1 <     | U     | 0.33       | 1 <    | U       | 0.33     | 1 <     | U    | 0.33      | 1 <     | U     | 0.33       | 1 <        | U     | 0.33       | 1 <    | U        | 0.33      | 1 <     | U       |
| SEMIVOLATILES    | Hexachlorobenzene             | 0.33       | 1<      | υ     | 0.33       | 1 <    | U       | 0.33     | 1 <     | U    | 0.33      | 1 <     | U     | 0.33       | ! <        | U     | 0.33       | 1 <    | U        | 0.33      | 1 <     | U       |
| SEMIVOLATILES    | Hexachlorobutackene           | 0.33       | 1 <     | U     | 0.33       | 1 <    | ย       | 0.33     | 1<      | IJ   | 0.33      | 1 <     | U     | 0.33       | 1 <        | U     | 0.33       | 1 <    | U        | 0.33      | 1 <     | U       |
| SEMIVOLATILES    | Hexachlorocyclopentadiene     | 0.33       | 1 <     | U     | 0.33       | 1 <    | U       | 0.33     | 1 <     | U    | 0.33      | 1 <     | U     | 0.33       | 1 <        | U     | 0.33       | 1 <    | ម        | 0.33      | 1 <     | U       |
| SEMIVOLATILES    | Hexachloroethane              | 0.33       | 1<      | U     | 0.33       | 1 <    | ป       | 0.33     | 1 <     | U    | 0.33      | 1 <     | IJ    | 0.33       | 1 <        | U     | 0.33       | 1 <    | U        | 0.33      | 1 <     | U       |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene        | 0.33       | 1 <     | U     | 0.33       | 1 <    | υ       | 0.33     | 1 <     | ۱.   | 0.33      | 1 <     | ប     | 0.33       | 1<         | ป     | 0.33       | 1 <    | U        | 0.33      | 1<      | U       |
| SEMIVOLATILES    | Isophorone                    | 0.33       | 1 <     | U     | 0.33       | 1 <    | U       | 0.33     | 1 <     | ป    | 0.33      | 1 <     | ប     | 0.33       | 1 <        | บ     | 0.33       | 1 <    | U        | 0.33      | 1 <     | U       |
| SEMIVOLATILES    | Naphthalene                   | 0.33       | 1 <     | រ     | 0.33       | 1 <    | U       | 0.33     | 1 <     | U    | 0.33      | 1 <     | ប     | 0.33       | 1 <        | ប     | 0.33       | 1 <    | U        | 0.33      | 1 <     | บ       |
| SEMIVOLATILES    | Nitrobenzene                  | 0.33       | 1 <     | ŧ     | 0.33       | 1 <    | U       | 0.33     | 1 <     | U    | 0.33      | 1 <     | U     | 0.33       | 1 <        | U     | 0.33       | 1 <    | U        | 0.33      | 1 <     | บ       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine    | 0.33       | 1<      | ប     | 0.33       | 1 <    | U       | 0.33     | 1 <     | U    | 0.33      | 1 <     | U     | 0.33       | 1 <        | U     | 0.33       | 1 <    | U        | 0.33      | 1 <     | ប       |
| SEMIVOLATILES    | n-Nitrosodiphenvlamine        | 0.33       | 1 <     | U     | 0.33       | 1 <    | υ       | 0.33     | 1 <     | U    | 0.33      | 1 <     | U     | 0.33       | 1 <        | U     | 0.33       | 1 <    | ປ        | 0.33      | 1<      | U       |
| SEMIVOLATILES    | Pentachtorophenol             | 1.65       | 1 <     | υ     | 1.65       | 1 <    | U       | 1.65     | 1 <     | U    | 1.65      | 1 <     | υ     | 1.65       | 1 <        | U     | 1.65       | 1 <    | U        | 1.65      | 1 <     | U       |
| SEMIVOLATILES    | Phenanthrene                  | 0.33       | 1 <     | U     | 0.33       | 1 <    | υ       | 0.33     | 1 <     | U    | 0.33      | 1 <     | υ     | 0.33       | 1 <        | U     | 0.33       | 1 <    | U        | 0.33      | 1 <     | U       |
| SEMIVOLATILES    | Phenol                        | 0.33       | 1 <     | U     | 0.33       | 1<     | U       | 0.33     | 1 <     | υ    | 0.33      | 1 <     | U     | 0.33       | 1<         | U     | 0.33       | 1 <    | ប        | 0.33      | 1 <     | U       |
| SEMIVOLATILES    | Pyrene                        | 0.33       | 1<      | υ     | 0.33       | 1 <    | U       | 0.33     | 1 <     | υ    | 0.33      | 1<      | U     | 0.33       | 1 <        | U     | 0.33       | 1 <    | U        | 0.33      | 1 <     | U       |
| VOLATILES        | 1.1.1.2-Tetrachloroethane     |            |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |
| VOLATILES        | 1.1.1-Tricbioroethane         | 8,005      | 1 <     | U     | 0.005      | 1<     | υ       | 0.005    | 1 <     | U    | 0.005     | 1 <     | U     | 0.005      | 1 <        | U     | 0.005      | 1 <    | U        | 0.005     | 1 <     | U       |
| VOLATILES        | 1.1.2.2-Tetrachloroethane     | 0.005      | 1 <     | U     | 0.005      | 1<     | U       | 0.005    | 1 <     | U    | 0.005     | 1 <     | U     | 0.005      | 1 <        | U     | 0.005      | 1 <    | υ        | 0.005     | 1 <     | U       |
| VOLATRES         | 1 1 2-Trichloroethage         | 0.005      | 1 <     | Ū     | 0.005      | 1<     | U       | 0.005    | 1<      | U    | 0.005     | 1<      | U     | 0.005      | 1 <        | U     | 0.005      | 1 <    | U        | 0.005     | 1 <     | ប       |
| VOLATRES         | 1 1-Dichoroethane             | 0.005      | 1 <     | U     | 0.005      | 1 <    | ย       | 0.005    | 1<      | ป    | 0.005     | 1<      | υ     | 0.005      | 1<         | U     | 0.005      | 1 <    | U        | 0.005     | 1<      | U       |
| VOLATILES        | 1 1-Dichloroethene            | 0.005      | 1 <     | н     | 0.005      | 1 <    | U       | 0.005    | 1 <     | ม    | 0.005     | 1 <     | U     | 0.005      | 1<         | U     | 0.005      | 1<     | Û        | 0.005     | 1<      | U       |
| VOLATILES        | 1 1-Dicklorozonene            | 1          | •••     | v     | 0.002      | • •    | •       | 0.000    |         | •    |           |         | •.    |            |            | -     |            |        | -        |           |         |         |
| VOLATILES        | 1.2.3.Trichkrohenzene         | ł          |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            | -      |          |           |         |         |
| VOLATILES        |                               | 1          |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |
| VOLATILES        | 1.2.4.Techlorohonzeno         | 1          |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |
| VOLATILES        |                               | 1          |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |
| VOLATILES        |                               |            |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |
| VOLATILES        | 1,2 Dibromashana              |            |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |
| VOLATILES        |                               |            |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |
| VOLATILES        |                               | 0.000      |         |       | 0.005      |        |         | 0.005    | 1.      | 11   | 0.005     | 1.      | *1    | 0.005      | 1.         | 41    | 0.005      | 1.     | 11       | 0.005     | 1.      | 14      |
| VOLATILES        |                               | 0.005      | 1.      |       | 0.000      | 1.     |         | 0.000    |         |      | 0.005     | 1.      |       | 0.005      | 1.         |       | 0.005      | 1.     | ir<br>ir | 0.005     | 12      | D D     |
| VOLATILES        |                               | 0.005      | 1       | บ<br> | 0.000      | •      | U<br>17 | 0.005    | 1.      |      | 0.005     | 1.      | 11    | 0.005      | 1          |       | 0.000      | 1      | 11       | 0.005     | 1.      | - H     |
| VOLATILES        |                               | 0.005      | 1 <     | U     | 0.000      | I S    | U       | 0.003    | 1 <     | U    | 0.003     | 15      | U     | 0.000      | . <        |       | 0.000      |        | u        | 0.003     |         | v       |
| VOLATILES        | 1,2-URREUSYDETZENE (0-XYRENE) |            |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |
| VULATILES        | 1, d, o-1 nmeurynbenzene      |            |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |
| VOLAHLES         | 1,3-Uichlorobenzene           |            |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |
| VOLATILES        | 1,3-Dichloropropane           |            |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |
| VOLATILES        | 1,4-Dichlorobenzene           |            |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |
| VOLATILES        | 2,2-Dichloropropane           |            |         |       |            |        |         |          |         |      | a         |         |       |            |            |       |            |        |          | 0.07      |         | •1      |
| VOLATILES        | 2-Butanone                    | 0.05       | 1 <     | U     | 0.05       | 1 <    | U       | 0.05     | 1 <     | U    | 0.05      | 1 <     | U     | 0.05       | 1<         | U     | 0.05       | 1 <    | U        | 0.05      | 1 <     | 0       |
| VOLATILES        | 2-Chloroethyl vinyl ether     | 0.01       | 1 <     | U     | 0.01       | 1 <    | U       | 0.01     | 1 <     | U    | 0.01      | 1 <     | U     | 0.01       | 1 <        | U     | 0.01       | 1 <    | U        | 0.01      | ţ <     | υ       |
| VOLATILES        | 2-Chlorotoluene               |            |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |
| VOLATILES        | 2-Hexanone                    | 0.05       | 1 <     | U     | 0.05       | 1<     | U       | 0.05     | 1 <     | υ    | 0.05      | 1<      | U     | 0.05       | 1 <        | U     | 0.05       | ¥ <    | U        | 0.05      | 1<      | U       |
| VOLATILES        | 2-Propenal                    | 1          |         |       |            |        |         |          |         |      |           |         |       |            |            |       |            |        |          |           |         |         |



|                 | Co                             | oncentrat | ions               | of ( | Chemi          | cals        | in S | oil Sa   | mple              | s As | ssocia   | ted v          | with | Sump     | 092           |     |           |              |     |           |         |       |
|-----------------|--------------------------------|-----------|--------------------|------|----------------|-------------|------|----------|-------------------|------|----------|----------------|------|----------|---------------|-----|-----------|--------------|-----|-----------|---------|-------|
| SUMPJ = SUMPUSZ |                                | 10        | C02 01             |      | 19             | 502.01      |      | 14       | -C02-01           |      | IH       | 1.502-01       |      | 1H       | 592-02        |     | ſĦ        | -592-02      |     | 18        | -592-02 | ,     |
| ECONTION_CODE   |                                | 1110      | 232-01<br>22.01 O/ | -    | 114.0          | 202-01      | 5    | 11.9     | 002.01            | 2    | LH.      | 592-01         | 3    | 18-3     | \$92.02       | 1   | 185       | 592-02       | >   | 18-9      | 592-02  | 3     |
| SAMPLE_NU       |                                | Ln-3;     | 22-01 00           |      | 1194           | 3927U L_    | •    | 75       | 002-01_<br>008000 | ~    | 76       | 22/1002        |      | 7/2      | 02/1003       | 1   | 70        | 2/1003       | -   | 7/2       | 2/1993  |       |
| SAMPLE_DATE     |                                | 112       | 3/1993             |      | 112            | 341993      |      | 114      | - 7 E EN          |      | 10.4     | 231333         |      | 172      | 1 E+          |     | 65        | - 75 Eł      |     | 10.5      | - 11 5  | Et    |
| UEPIN           |                                | c.        | - 1 - 1            |      | <del>ت</del> . | 050         |      | 0.0      | 050               |      | 10.      | 000            | 1    | ~        | REG           |     | 0.2       | REG          |     | 10.0      | REG     | •     |
| SAMPLE_PURPUSE  | Development of the last trails | D# 0      | FU 10              | 10   | Decult C       | neu<br>wiin | 1/0  | Dooule D |                   | NO   | Decuti 1 | nieu<br>nii 10 | 10   | Pocult C | າແປນ<br>ທະເບດ | 1/0 | Result (  | មាល<br>អា ហេ | vn  | Boeiff T  | NI IΩ   | NO.   |
| Test Group      | Parameter (Units = mg/kg)      | Hesuit D  | IL LQ              | VQ   | HESURI L       |             | 44   | Hester L | AL 10             | VU2  | nesual   |                |      |          |               | vu  | ILCSUIL L |              |     | TICOLAR L |         | 1 402 |
| VOLATILES       | 4-Chlorotoluene                |           |                    |      |                |             |      | ~ •      | · .               |      |          | ۰.             |      | 0.1      |               | н   |           | 1.           | п   | 0.1       | 1.      | н     |
| VOLATILES       | Acetone                        | 0.1       | 1 <                | บ    | 0.1            | 1 <         | U    | 0.1      | 1 <               | U    | 0.1      | 1 <            | U    | 0.1      | 1<            | U   | 0.1       | 1 <          | 0   | U.I       | 1.4     | v     |
| VOLATILES       | Acetonitrile                   |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Acrylonitrie                   | 1         |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Allyi chloride                 |           |                    |      |                |             |      |          |                   |      |          |                |      | 0.000    |               | 51  | 0.005     |              |     | 0.005     |         | 11    |
| VOLATILES       | Benzene                        | 0.005     | 1<                 | U    | 0.005          | 1 <         | ย    | 0.005    | 1 <               | 0    | 0.005    | · 1<           | U    | 0.005    | 1 <           | 0   | 0.005     | 1 <          | U   | 0.005     | 1 <     | U     |
| VOLATILES       | Bromobenzene                   |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Bromochloromethane             |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     | 0.005     |              |     | 0.005     |         | .,    |
| VOLATILES       | Bromodichloromethane           | 0.005     | 1 <                | U    | 0.005          | 1 <         | U    | 0.005    | 1<                | U    | 0.005    | 1<             | 0    | 0.005    | 1<            | U.  | 0.005     | 1<           | U   | 0.005     | 3 <     |       |
| VOLATILES       | Bromoform                      | 0.005     | 1<                 | U    | 0.005          | 1 <         | U    | 0.005    | 1 <               | 0    | 0.005    | 1 <            | 0    | 0.005    | 1 <           | 0   | 0.005     | 1<           | 0   | 0.005     | 1 <     | 0     |
| VOLATILES       | Bromomethane                   | 0.01      | 1 <                | U    | 0.01           | 1 <         | U    | 0.01     | 1 <               | U    | 0.01     | 1 <            | U    | 0.01     | 1 <           | U   | 0.01      | 1 <          | 0   | 0.01      | 1 <     |       |
| VOLATILES       | Carbon disulfide               | 0.005     | 1 <                | U    | 0.005          | 1 <         | U    | 0.005    | 1 <               | U    | 0.005    | 1 <            | U    | 0.005    | 1 <           | U   | 0.005     | 1 <          | 0   | 0.005     | 1 <     |       |
| VOLATILES       | Carbon letrachloride           | 0.005     | 1 <                | U    | 0.005          | 1 <         | U    | 0.005    | 1 <               | U    | 0.005    | 1 <            | U    | 0.005    | 1<            | 0   | 0.005     | 1 <          | U · | 0.005     | 1 <     | 0     |
| VOLATILES       | Chlorobenzene                  | 0.005     | 1<                 | U    | 0.005          | 1 <         | U    | 0.005    | 1 <               | U    | 0.005    | 1 <            | U    | 0.005    | 1 <           | 0   | 0.005     | . 1 <        | 0   | 0.005     | 1 <     | 0     |
| VOLATILES       | Chloroethane                   | 0.01      | 1 <                | U    | 0.01           | 1 <         | U    | 0.01     | 1 <               | U    | 0.01     | 1 <            | 0    | 0.01     | 1 <           | 0   | 0.01      | 1 <          | U   | 0.01      | 1 <     | 0     |
| VOLATILES       | Chicroform                     | 0.005     | 1 <                | U    | 0.005          | 1 <         | U    | 0.005    | 1 <               | U    | 0.005    | 1 <            | 0    | 0.005    | 1 <           | - U | 0.005     | 1<           | U   | 0.005     | 1 <     | U<br> |
| VOLATILES       | Chloromethane                  | 0.01      | 1 <                | υ    | 0.01           | 1 <         | ប    | 0.01     | 1 <               | U    | 0.01     | 1 <            | U    | 0.01     | 1 <           | U   | 0.01      | 1 <          | U   | 0.01      | 1 <     | U     |
| VOLATILES       | Chloroprene                    | 1         |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | cis-1,2-Dichloroethene         |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | cis-1,3-Dichloropropene        | 0.005     | 1 <                | U    | 0.005          | 1 <         | U    | 0.005    | 1 <               | U    | 0.005    | 1 <            | ម    | 0.005    | 1 <           | U   | 0.005     | 1 <          | U   | 0.005     | 1 <     | U     |
| VOLATILES       | Dibromochloromethane           | 0.005     | 1 <                | U    | 0.005          | 1 <         | U    | 0.005    | 1 <               | U    | 0.005    | 1 <            | U    | 0.005    | 1 <           | U   | 0.005     | 1 <          | U   | 0.005     | 1 <     | U     |
| VOLATILES       | Dibromomethane                 |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Dichtorodifluoromethane        |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Ethy! methacrylate             |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Ethylbenzene                   | 0.005     | 1 <                | IJ   | 0.005          | 1 <         | U    | 0.005    | 1. <              | U    | 0.005    | 1<             | U    | 0.005    | 1 <           | U   | 0.005     | 1 <          | U   | 0.005     | 1 <     | IJ    |
| VOLATILES       | Hexachlorobutadiene            |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | IODOMETHANE .                  | -         |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | ISOBUTYL ALCOHOL               |           |                    |      | -              |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Isopropylbenzene               |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | m,p-Xylenes                    | 1         |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Methacrylonitrile              |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Methyl isobutyl ketone         | 0.05      | 1 <                | U    | 0.05           | 1 <         | υ    | 0.05     | 1 <               | U    | 0.05     | 1 <            | υ    | 0.05     | 1 <           | U   | 0.05      | 1 <          | ប   | 0.05      | 1 <     | U     |
| VOLATILES       | METHYL METHACRYLATE            | 1         |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Methylene chloride             | 0.005     | 1 <                | U    | 0.005          | 1 <         | U    | 0.005    | 1 <               | ម    | 0.005    | 1 <            | U    | 0.005    | 1 <           | U   | 0.005     | 1 <          | U   | 0.005     | 1 <     | ŋ     |
| VOLATILES       | Naphthalene                    |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | n-BUTYLBENZENE                 |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | n-PROPYLBENZENE                |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Pentachloroethane              |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | p-ISOPROPYLTOLUENE             |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Propionitrile                  | 1         |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | sec-BUTYLBENZENE               |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Styrene                        | 0.005     | 1<                 | U    | 0.005          | 1 <         | U    | 0.005    | 1 <               | U    | 0.005    | 1 <            | U    | 0.005    | 1 <           | U   | 0.005     | 1 <          | U   | 0.005     | 1 <     | U     |
| VOLATILES       | tert-BUTYLBENZENE              |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | Tetrachloroethene              | 0.005     | 1<                 | U    | 0.005          | 1 <         | U    | 0.005    | 1 <               | U    | 0.005    | 1 <            | U    | 0.005    | 1 <           | υ   | 0.005     | 1 <          | U   | 0.005     | 1 <     | υ     |
| VOLATILES       | Toluene                        | 0.005     | 1 <                | υ    | 0.005          | 1 <         | U    | 0.005    | 1 <               | U    | 0.005    | 1 <            | U    | 0.005    | 1 <           | U   | 0.005     | 1 <          | U   | 0.005     | 1 <     | U     |
| VOLATILES       | trans-1 2-Dichloroethene       |           |                    |      |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATILES       | trans-1.3-Dichloropropene      | 0.005     | 1 <                | U    | 0.005          | 1 <         | U    | 0.005    | 1 <               | U    | 0.005    | 1 <            | U    | 0.005    | 1 <           | U   | 0.005     | 1 <          | U   | 0.005     | 1 <     | ບ     |
| VOLATILES       | trans-1.4-Dicktoro-2-butene    |           |                    | ·    |                |             |      |          |                   |      |          |                |      |          |               |     |           |              |     |           |         |       |
| VOLATIEES       | Trichtoroethene                | 0.005     | 1<                 | Ð    | 0.005          | 1 <         | U.   | 0.005    | 1 <               | ·U   | 0.005    | 1 <            | U    | 0.005    | 1 <           | U   | 0.005     | 1 <          | U   | 0.005     | 1 <     | ย     |
| VOI ATILES      | Tricburofungmethane            |           |                    | -    |                |             | -    |          |                   | -    |          |                |      | -        |               |     |           |              |     |           |         |       |
| VOLATILES       | Viavi acelate                  | 0.05      | t <                | Ð    | 0.05           | 1<          | U    | 0.05     | 1<                | U    | 0,05     | 1 <            | U    | 0.05     | 1 <           | IJ  | 0.05      | 1 <          | U   | 0.05      | 1 <     | U     |
| VOLATILES       | View chloride                  | 0.01      | 1 <                | EI.  | 0.01           | 1<          | u    | 0.01     | 1 <               | IJ   | 0.01     | t <            | ប    | 0.01     | 1 <           | U   | 0.01      | 1 <          | U   | 0.01      | 1 <     | U     |
| VOLATILES       | Xvtenes Total                  | 0.005     | 1 <                | Ū    | 0.005          | 1 <         | U    | 0.005    | 1 <               | U    | 0.005    | 1 <            | υ    | 0.005    | 1 <           | ប   | 0.005     | 1 <          | U   | 0.005     | 1 <     | υ     |

Table 3-92

Footnotes are shown on cover page to Tables Section.



Data Evaluation Report



Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

| (SUMP) = SUMP093<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE |                             | 35SUMP093-SB01<br>35-SMP093-SB01-01<br>9/21/2006 | 355UMP093-SB01<br>35-SMP093-SB01-02<br>9/21/2006 | LH-DL93-01<br>LH-DL93-01<br>7/27/1993 | LH-S93-01<br>LH-S93-01.1<br>7/24/1993 | LH-S93-01<br>LH-S93-01.2<br>7/24/1993 | LH-S93-01<br>LH-S93-01.3<br>7/24/1993 | LH-S93-02<br>LH-S93-02 .1<br>7/24/1993 | LH-593-02<br>LH-593-02.2<br>7/24/1993 |
|--|-----------------------------|--|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|---------------------------------------|
| DEPTH  |                             | .55 Ft   | 6.5 - 6.5 Ft                                     | 2.5 - 3 Ft                            | .5 - 1 Fi                             | 4.5 - 5.5 Fl                          | 12.5 - 13.5 Ft                        | .5 - 1 Ft                              | 3 - 3.5 Ft                            |
| SAMPLE_PURPOSE   |                             | REG  | REG  | REG                                   | REG                                   | REG                                   | REG                                   | REG                                    | REG                                   |
| Test Group   | Parameter (Units = mg/kg)   | Result DIL LO VO                                 | Result DIL LO VO                                 | Result DIL LO VO                      | Result DIL LO VO                      | Result DIL LO VO                      | Result DIL LO VO                      | Result DIL LO VO                       | Result DIL LQ VQ                      |
| EXPLOSIVES   | 2.4-Dinitrololuene          |  |  | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 1< U                             | 0.33 1 < U                            | 0.33 1 < U                             | 0.33 1 < U                            |
| EXPLOSIVES   | 2.6-Dinitrotoluene          |  |  | 0.33 i < U                            | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 1 < 0                             | 0.33 1 < 0                            |
| METALS   | Aluminum                    | 2420 1   | 10100 1  | 7090 1                                | 9630 1 < U                            | 9300 1 < U                            | 942 1 < U                             | 7900 1 < U                             | 10900 1 < U                           |
| METALS   | Antimony                    | 0.111 1 U UJL                                    | 0.114 (U UJL                                     | 3 1 < U                               | 3 1< U                                | 3 i < U                               | 3 1 < 0                               | 3 1 < 0                                | 3 1 < 0                               |
| METALS   | Arsenic                     | 1,38 1   | 1.85 1   | 2.5 1                                 | 2.7 1                                 | 2.3 i                                 | 1 1 < U                               | 3.2 1                                  | 2                                     |
| METALS   | Barium                      | 38.5 1 JH  | 38.4 1 JH  | 51.1 1                                | 89.8 1                                | 90 1                                  | 6.7 1                                 | 78.9 1                                 | 45,8 1                                |
| METALS   | Beryllium                   | 0.318 1 J J                                      | 1.18 1   |                                       |                                       |                                       |                                       |  | <b>4 4 1 1</b>                        |
| METALS   | Cadmium                     | 0.136 1 J J                                      | 0.0547 1 J J                                     | 1 1 < U                               | 1 1 < U                               | 1 (< U                                | 1 1 < 0                               | 1 1 4 0                                | 1 1 < 0                               |
| METALS   | Calcium                     | 458 1  | 672 1  | 1830 1                                | 1240 1                                | 1250 1                                | 155 1                                 | 2380 1                                 | 896                                   |
| METALS   | Chromium                    | 5.92 1 JH  | 19.3 I JH  | 12.7 1                                | 15.8 1                                | 17.5 1                                | 2.8                                   | 12.4 1                                 | 15.1                                  |
| METALS   | Cobalt                      | 2.72 1   | 12.2 1   | 4.2 1                                 | 10.8 1                                | 15.7 1                                | 2.4 1                                 | 11.6 1                                 | 5.5                                   |
| METALS   | Copper                      | 2,11 1   | 8.25 1   | 6.4 1                                 | 4.5 1                                 | 3.4 1                                 | 1.1 1                                 | 4.6 1                                  | 3.8 1                                 |
| METALS   | Iron                        | 4640 1 J   | 34000 1 J  | 15800                                 | 14300 1 < U                           | 13200 1 < U                           | 1670 1 < U                            | 13800 1 < U                            | 10300 1 < U                           |
| METALS   | Lead                        | 10.2 1   | 5.25 1   | 7.9 1                                 | 9.1 1                                 | 8.7 1                                 | 1.8 1                                 | 12.1 1                                 | 6.7 1                                 |
| METALS   | Magnesium                   | 130 1  | 1200 1   | 945 1                                 | 679 1                                 | 534 1                                 | 159 1                                 | 603 1                                  | 621                                   |
| METALS   | Manganese                   | 191 1 J  | 103 1 J  | 66.7 1                                | 360 1                                 | 528 1                                 | 8.7 1                                 | 348 1                                  | 136 1                                 |
| METALS   | Mercury                     | 0.0144 1 J J                                     | 0.269 IU U                                       | 0.1 1 < 분                             | 0.1 1< U                              | 0.1 1 < U                             | 0.1 1 < U                             | 0.1 1 < U                              | 0,1 1 < 0                             |
| METALS   | Nickel                      | 2.11 1 JH  | 16.7 1 JH  |                                       |                                       |                                       |                                       |  |                                       |
| METALS   | Polassium                   | 133 1 JH   | 399 1 JH   | 583 1                                 | 633 1                                 | 594 1                                 | 108 1                                 | 481 1                                  | 876 1                                 |
| METALS   | Selenium                    | 0.211 1 J  | 0.177 1 J J                                      | 1 1< ប                                | 1 1< U                                | 1 1 < U                               | 1 1 < U                               | 1 î< Ų                                 | 1 1 < U                               |
| METALS   | Silver                      | 1.69 1UU   | 1,74 IUU   | 1 1< U                                | 1 1< U                                | 1 1< U                                | 1 1 < U                               | 1 1 < U                                | 1 1 e U                               |
| METALS   | Sodium                      | 8.45 1 J J                                       | 126 1  |                                       |                                       |                                       |                                       |  |                                       |
| METALS   | Strontium                   |  |  | 19.9 1                                | 11.7 1                                | 9.3 1                                 | 2.7 1                                 | 12.2 1                                 | 7.3 1                                 |
| METALS   | Thallium                    | 0.028 1  | 0.0713 1   |                                       |                                       |                                       |                                       |  |                                       |
| METALS   | Vanadium                    | 9.27 1 JH  | 37.7 1 JH  |                                       |                                       |                                       |                                       |  |                                       |
| METALS   | Zinc                        | 7.81 1 JH  | 42 1 JH  | 26.5 1                                | 20.2 1                                | 20 1                                  | 5.4 1                                 | 22 1                                   | 20.9 1                                |
| SEMIVOLATILES  | 1.2.4-Trichlorobenzene      |  |  | 0.33 1< U                             | 0.33 1< U                             | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                             | 0.33 1 < U                            |
| SEMIVOLATILES  | 1,2-Dichlorobenzene         |  |  | 0.33 1 < U                            | 0,33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 I< U                              | 0.33 i < U                            |
| SEMIVOLATILES  | 1,3-Dichlorobenzene         |  |  | 0,33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                             | 0.33 1 < U                            |
| SEMIVOLATILES  | 1,4-Dichlorobenzene         |  |  | 0.33 1 < U                            | -0.33 1 < U                           | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                             | 0.33 1 < 0                            |
| SEMIVOLATILES  | 2,4,5-Trichlorophenol       |  |  | 1.65 i< U                             | 1.65 1 < U                            | 1.65 1 < U                            | 1.65 1 < U                            | 1.65 1 < 0                             | 1.65 1 < 0                            |
| SEMIVOLATILES  | 2,4.6-Trichlorophanol       |  |  | 0,33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                             | 0.33 1 < U                            |
| SEMIVOLATILES  | 2,4-Dichlorophenol          |  |  | 0.33 I< U                             | 0.33 1 < U                            | 0.33 i< U                             | 0.33 1 < U                            | 0.33 1 < U                             | 0.33 1 < U                            |
| SEMIVOLATILES  | 2.4-Dimethylphenol          |  |  | 0.33 1 < U                            | 0.33 t < U                             | 0.33 1 < U                            |
| SEMIVOLATILES  | 2.4-Dinitrophenol           |  |  | 1.65 1 < U                             | 1,65 1 < 0                            |
| SEMIVOLATILES  | 2-Chloronaphthalene         |  |  | 0.33 1< U                             | 0,33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 I < U                             | 0.33 1 < U                            |
| SEMIVOLATILES  | 2-Chlorophenol              |  |  | 0.33 1 < U                            | 0.33 1< U                             | 0.33 1< U                             | 0.33 I< U                             | 0.33 I< U                              | 0.33 1 < U                            |
| SEMIVOLATILES  | 2-Methylnaphthalene         |  |  | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 i< U                             | 0.33 1 < U                             | 0.33 1 < U                            |
| SEMIVOLATILES  | 2-Methylphenol              |  |  | 0.33 1 < U                            | 0.33 i< U                             | 0.33 1< U                             | 0.33 i< U                             | 0.33 1 < U                             | 0,33 1 < U                            |
| SEMIVOLATILES  | 2-Nitroaniline              |  |  | 1.65 1 < U                            | 1.65 1 < U                            | 1.65 1 < U                            | 1,65 1 < U                            | 1.65 1 < U                             | 1.65 1 < U                            |
| SEMIVOLATILES  | 2-Nitrophenol               |  |  | 0.33 1 < U                             | 0.33 1 < U                            |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine      |  |  | 0.65 1 < U                            | 0.65 I < U                            | 0.65 1 < U                            | 0.65 1 < U                            | 0.65 1 < U                             | 0.65 1 < U                            |
| SEMIVOLATILES  | 3-Nitroaniline              |  |  | 1.65 i< U                             | 1.65 1 < U                            | 1.65 f< U                             | 1,65 1 < U                            | 1.65 1 < U                             | 1.65 1 < U                            |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol  |  |  | 1.65 1 < U                            | 1.65 1 < U                            | 1.65 1 < U                            | 1,65 1 < U                            | 1.65 1 < U                             | 1.65 1 < U                            |
| SEMIVOLATILES  | 4-Bromophenyl phenyl elher  |  |  | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 1 < ⊍                            | 0.33 1 < U                             | 0.33 1 < U                            |
| SEMIVOLATILES  | 4-Chloro-3-methylphenol     | 1  |  | 0.65 1 < U                            | 0,65 1 < U                            | 0.65 1 < U                            | 0.65 1 < U                            | 0.65 I < U                             | 0.65 1 < U                            |
| SEMIVOLATILES  | 4-Chloroaniline             |  |  | 0.65 1 < U                            | 0.65 1 < U                            | 0.65 1 < U                            | 0,65 1 < U                            | 0.65 1 < .U                            | 0.65 1 < U                            |
| SEMIVOLATILES  | 4-Chiorophenyi phenyi ether |  |  | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 I< U                             | 0.33 1 < U                             | 0.33 1 < U                            |
| SEMIVOLATILES  | 4-Methylphenol              |  |  | 0.33 f < U                            | 0.33 1 < U                            | 0.33 1 < U                            | 0.33 I < U                            | 0.33 I < U                             | 0.33 1 < U                            |
| SEMIVOLATILES  | 4-Nitroaniline              |  |  | 1.65 1 < U                            | i.65 1 < U                            | 1.65 1 < U                            | 1.65 1 < U                            | 1.65 1 < U                             | 1.65 1 < U                            |

Data Evaluation Report



| State of the second sec |
|--|
| Share Environmental Inc.   |

|               |                             | Concentr            | ations of Chemic  | als in S       | oil Sam       | pies As       | sociate       | d with S  | Sump 09  | 3          | -         |               |                    |           |                     |          |
|---------------|-----------------------------|---------------------|-------------------|----------------|---------------|---------------|---------------|-----------|----------|------------|-----------|---------------|--------------------|-----------|---------------------|----------|
| LOCATION CODE |                             | SEPI WOODS CONT     | SECULIDADS CON    | LU N           | 02.01         | 110           | 09.01         | 14        | C02 01   |            | 002.04    | 1.14          | 601.03             | 14        | C03 00              |          |
|               |                             | 3550MP093-5501      | 355UMPU93-5501    | CH-0L          | .93-01        | CH-2          | 93-01         | ίπ<br>111 | -593-01  | ι          | -593-01   | ся<br>111.    | -593-02            | LA<br>(1) | -393-02<br>000 00 0 |          |
| SAMPLE_NO     |                             | 35-5MP093-5B0 (-0)  | 35-5MP093-5501-02 | LH-UL<br>7/17/ | 93-01<br>X002 | 11-50         | /3-01.1<br>// | Lri-      | 593-01.2 | LH.<br>-// | 293-01.3  | LA+<br>7/     | 553-02.1           | LH-<br>7/ | 383-02.2<br>34/1002 |          |
| DEDTU         |                             | 9/21/2006           | 9/21/2006         | 11211          | 1993          | /124          | 1993          | 114       | (4) 1993 | 112        | 4/1993    | 11.           | C 4 54<br>24/19/97 | 11.       | 29/1890             |          |
|               |                             | ,3+,3FL             | 0.3 · 0.3 FL      | 2.5 -          | 37(<br>70     | .5.           | 1 Pt          | 4.5       | - 3.3 71 | 12.5       | • 13,5 Ft |               | 9-1 FL<br>950      | 3         | - 3.3 PT            |          |
| Tasl Group    | Perimeter (Lipite – malka)  | Devil Dit LO VO     | Denvit Dill LO VO | Denuk Dit      |               | n<br>Dawit Di |               | DeauNi    |          | Doord      |           | Desult        |                    | Doudt     |                     | 1.00     |
| SEMINON ATHES | A Nitrophenol               | T Hesuit Dit, CO VO |                   | TESUR UN       |               | Hesuit Di     |               | 18501     |          |            |           | Hesun<br>K de |                    |           |                     | <u> </u> |
| SEMIVOLATILES | Acenaphthese                |                     |                   | 0.33           | 12 11         | 0.93          |               | 0.93      | 12 11    | 0.00       | 12 11     | 0.93          | 1 - 11             | 0.33      | 1.2                 | 11       |
| SEMIVOLATILES | Acenaphthylene              |                     |                   | 0.33           | 12 11         | 0.33          |               | 0.33      | 12 11    | 0.00       | 1 - 11    | 0.33          | 1 - 1              | 0.33      | 12                  | ii.      |
| SEMIVOLATE ES | Anthracene                  |                     |                   | 0.33           | 1 2 11        | 0.33          | 12 11         | 0.33      | 12 11    | 0.33       | 12 11     | 0.33          | 12 1               | 0.33      | 12                  | ŭ        |
| SEMIVOLATE ES | Benzo(a)anthracene          |                     |                   | 0.33           | 1 2 11        | 0.33          | 12 11         | 0.33      | 12 11    | 0.33       | 12 0      | 0.33          | 12 8               | 0.33      | 1 2                 | 11       |
| SEMIVOLATILES | Benzo(a)pyrene              |                     |                   | 0.33           | 1 2 11        | 0.33          | 1 2 11        | 0.33      |          | 0.33       | 1 2 1     | 0.33          | 1 < 0              | 0.33      | 12                  | ŭ        |
| SEMIVOLATILES | Benzo(b)/luoranthene        |                     |                   | 0.33           | 1 2 11        | 0.33          | 3 2 11        | 0.33      | 1 2 11   | 0.33       | 1 2 11    | 0.33          | 1 6 11             | 0.33      | 1 4                 | ŭ        |
| SEMIVOLATILES | Benzo(chi)oerviene          |                     |                   | 0.33           | 1 2 11        | 0.33          | ie U          | 0.33      | 12 1     | 0.33       | 1 2 11    | 0.33          | 1 2 1              | 0.33      | 1 4                 | ŭ        |
| SEMIVOLATILES | Benzo(k)fluoranihene        |                     |                   | 0.33           | 1 - 1         | 0.33          | te II         | 0.33      | 1 - U    | 0.33       | 12 11     | 0.33          | 1 < 0              | 0.33      | 1 4                 | ŭ        |
| SEMIVOLATILES | Benzoic Acid                |                     |                   | 1.65           | 1 < 1         | 1.65          | 1 < 0         | 1.65      | 1 < 0    | 1.65       | 1 < 1     | 1.65          | 1 < 0              | 1.65      | 14                  | Ŭ        |
| SEMIVOLATILES | Benzvi Alcohol              |                     |                   | 0.65           | 1 < 11        | 0.65          | 1 < 1         | 0.65      | 1 e U    | 0.65       | te U      | 0.65          | 1 2 0              | 0.65      | 1 <                 | ů        |
| SEMIVOLATILES | bis(2-Chloroethoxy)methane  |                     |                   | 0.33           | 1 < 1         | 0.33          | 1 2 1         | 0.33      | te U     | 0.33       | te U      | 0.33          | 1 < 0              | 0.33      | 1 <                 | ŭ        |
| SEMIVOLATILES | bis(2-Chloroethvi)ether     |                     |                   | 0.33           | 1 2 1         | 0.33          | 1 2 11        | 0.33      | 1 4 1    | 0.33       | te U      | 0.33          | 1 . 0              | 0.33      | 1 <                 | Ū        |
| SEMIVOLATILES | bis(2-Chloroisopropyi)ether |                     |                   | 0.33           | 1 - 1         | 0.33          | 1 2 11        | 0.33      | 1 6 11   | 0.33       | 12 11     | 0.33          | 1 . 1              | 0.33      | 1 <                 | Ū.       |
| SEMIVOLATILES | bis(2-Ethylberyl)ohthalate  |                     |                   | 0.33           | 1 < 1         | 0.33          | 1 2 11        | 0.33      | 1 < 11   | 04         | 1         | 0.33          | 1 - 1              | 0.33      | 1 <                 | - EF     |
| SEMIVOLATILES | Butvi benzvi obihalate      |                     |                   | 0.33           | 1 2 1         | 0.33          | 1 < 11        | 0.33      | 1 . 11   | 0.33       | 1 < 1     | 0.33          | 1 . 1              | 0.33      | 1 <                 | Ū.       |
| SEMIVOLATILES | Chrysene                    |                     |                   | 0.33           | 1 - 1         | 0.33          | 1 - 11        | 0.33      | 1 - 11   | 0.33       | 1 2 11    | 0.33          | 1 2 11             | 0.33      | í e                 | - D      |
| SEMIVOLATILES | Dibenzo(a,b)anthracens      |                     |                   | 0.33           | 1 e U         | 0.33          | 1 < 1         | 0.33      | 1 < 11   | 0.33       | 1 < ម     | 0.33          | 1 < 1              | 0.33      | 1 4                 | Ŭ        |
| SEMIVOLATILES | Dibenzofuran                |                     |                   | 0.33           | 1 < 11        | 0.33          | 1 < 8         | 0.33      | 1 . 1    | 0.33       | 1 < 11    | 0.33          | 1 < 11             | 0.33      | 1 <                 | Ű        |
| SEMIVOLATILES | Diethvi phthalate           |                     |                   | 0.33           | 1 < 11        | 0.33          | 1 - 11        | 0.33      | 1 2 0    | 0.33       | 1 e U     | 0.33          | 1 2 11             | 0.33      | 1 4                 | Ŭ        |
| SEMIVOLATILES | Dimethyl phthalate          |                     |                   | 0.33           | 1 < 1         | 0.33          | 1 < 1         | 0.33      | 1.4 1    | 0.33       | 1 < 1     | 0.33          | 1 < 1              | 0.33      | 1 <                 | Ū        |
| SEMIVOLATILES | di-n-Butvi obthalate        |                     |                   | 0.796          | 1             | 0.33          | 1 < 0         | 0.33      | 1 < 1    | 0.33       | 1 e 1     | 0.33          | 1 < 0              | 0.33      | t <                 | Ū        |
| SEMIVOLATILES | di-n-Octvi phibalate        |                     |                   | 0.33           | 1 < U         | 0.33          | 1 2 1         | 0.33      | 1 2 1    | 0.33       | 1 e 11    | 0.33          | 1 < 1              | 0.33      | 1 4                 | Ū        |
| SEMIVOLATILES | Fluoranthene                |                     |                   | 0.33           | 1 < U         | 0.33          | 1< 0          | 0.33      | 1 < 1    | 0.33       | 1 < 1     | 0.33          | 1 < 1              | 0.33      | 1 <                 | Ū        |
| SEMIVOLATILES | Fluorene                    |                     |                   | 0.33           | 1< 1          | 0.33          | 1 < 0         | 0.33      | 1 < 1    | 0.33       | t < 0     | 0.33          | 1 < 0              | 0.33      | 1 <                 | Ű        |
| SEMIVOLATILES | Hexachlorobenzene           |                     |                   | 0.33           | i e U         | 0.33          | 1 < U         | 0.33      | 1 < 1    | 0.33       | 1 < U     | 0.33          | 1 < 0              | 0.33      | 1 4                 | Ū        |
| SEMIVOLATILES | Hexachlorobutadiene         |                     |                   | 0.33           | 1 < U         | 0.33          | 1 < U         | 0.33      | 1 < U    | 0.33       | 1< U      | 0.33          | 1 e U              | 0.33      | 1 <                 | Ū        |
| SEMIVOLATILES | Hexachlorocyclopeniadiene   |                     |                   | 0.33           | 1 < U         | 0.33          | 1 < U         | 0.33      | t < U    | 0.33       | 1 < U     | 0.33          | 1 < U              | 0.33      | 1 <                 | Ū        |
| SEMIVOLATILES | Hexachloroethane            |                     |                   | 0.33           | 1 < 1         | 0.33          | 1< U          | 0.33      | 1< U     | 0.33       | 1 < U     | 0.33          | 1 < U              | 0.33      | 1 <                 | U        |
| SEMIVOLATILES | Indeno(1.2.3-cd)pyrene      |                     |                   | 0.33           | 1 < 1/        | 0.33          | 1< U          | 0.33      | 1< U     | 0.33       | 1 < U     | 0.33          | 1 < U              | 0.33      | 1 <                 | U        |
| SEMIVOLATILES | Isophorone                  |                     |                   | 0.33           | 1< U          | 0.33          | t < U         | 0.33      | 1 < U    | 0.33       | 1< U      | 0.33          | 1 < U              | 0.33      | 1 <                 | Ų        |
| SEMIVOLATILES | Naphthalene                 |                     |                   | 0.33           | 1 < 1         | 0.33          | 1 < U         | 0.33      | i < U    | 0.33       | 1< U      | 0.33          | 1< U               | 0.33      | 1 <                 | U        |
| SEMIVOLATILES | Nitrobenzene                |                     |                   | 0.33           | 1< U          | 0.33          | i < U         | 0.33      | i< U     | 0.33       | 1 < U     | 0.33          | 1 < U              | 0.33      | 1 <                 | U        |
| SEMIVOLATILES | n-Nitroso-di-n-propylamine  |                     |                   | 0.33           | 1 < 1)        | 0.33          | 1< U          | 0.33      | 1< U     | 0.33       | 1 < U     | 0.33          | 1 < U              | 0.33      | 1 <                 | U        |
| SEMIVOLATILES | n-Nitrosodiphenylamine      |                     |                   | 0.33           | 1< U          | 0.33          | 1< U          | 0.33      | 1< U     | 0.33       | 1 < U     | 0.33          | 1 < U              | 0.33      | 1 <                 | U        |
| SEMIVOLATILES | Penlachlorophenol           |                     |                   | 1.65           | 1< U          | 1.65          | 1< U          | 1.65      | 1 e U    | 1,65       | 1< 0      | 1,65          | 1 < U              | 1.65      | 1 <                 | U        |
| SEMIVOLATILES | Phenanthrene                |                     |                   | 0.33           | 1< U          | 0.33          | 1< U          | 0.33      | 1 < U    | 0.33       | 1 < 1     | 0.33          | 1 < U              | 0.33      | 1 <                 | U        |
| SEMIVOLATILES | Phenol                      |                     |                   | 0.33           | 1< U          | 0.33          | 1< U          | 0.33      | 1< U     | 0.33       | t< U      | 0.33          | t< U               | 0.33      | 1 <                 | Ų        |
| SEMIVOLATILES | Pyrene                      |                     |                   | 0.33           | 1< U          | 0.33          | 1< U          | 0.33      | ik U     | 0.33       | t č U     | 0.33          | 1 < U              | 0.33      | 1 <                 | Ų        |
| VOLATILES     | 1,1,1,2-Tetrachloroethane   |                     | 0.00452 1 U U     |                |               |               |               |           |          |            |           |               |                    |           |                     |          |
| VOLATILES     | 1,1,1-Trichloroethane       |                     | 0.00452 1 U U     | 0.005          | 1 < U         | 0.005         | 1< U          | 0.005     | 1 < U    | 0.005      | 1< U      | 0.005         | 1 < U              | 0.005     | 1 <                 | U        |
| VOLATILES     | 1,1,2,2-Tetrachloroethane   |                     | 0.00452 1 년 U     | 0.005          | 1 < U         | 0.005         | 1< Ų          | 0.005     | 1< U     | 0.005      | 1 < U     | 0.005         | 1 < U              | 0.005     | 1 <                 | U        |
| VOLATILES     | 1,1,2-Trichloroethane       |                     | 0.00452 1 U U     | 0,005          | 1< U          | 0,005         | 1< U          | 0.005     | 1< U     | 0.005      | 1< U      | 0.005         | 1 < U              | 0.005     | 1 <                 | U        |
| VOLATILES     | 1,1-Dichloroethane          |                     | 0.00452 fUU       | 0.005          | 1 < U         | 0.005         | 1 < U         | 0.005     | 1 < U    | 0.005      | 1< U      | 0.005         | 1 < U              | 0.005     | 1 <                 | U        |
| VOLATILES     | 1,1-Dichloroethene          |                     | 0.00452 1 U U     | 0.005          | 1< U          | 0.005         | 1< U          | 0.005     | 1< Ŭ     | 0.005      | 1< U      | 0.005         | 1 < U              | 0.005     | ۶ ۲                 | U        |
| VOLATILES     | 1.1-Dichloropropene         | 1                   | 0.00452 1 U U     |                |               |               |               |           |          |            |           |               |                    |           |                     |          |
| VOLATILES     | 1,2,3-Trichlorobenzene      |                     | 0.00452 1 U U     |                |               |               |               |           |          |            |           |               |                    |           |                     |          |
| VOLATILES     | 1.2,3-Trichloropropane      |                     | 0.00452 1 U U     |                |               |               |               |           |          |            |           |               |                    |           |                     |          |
| VOLATILES     | 1,2,4-Trichlorobenzene      |                     | 0.00452 1 U U     |                |               |               |               |           |          |            |           |               |                    |           |                     |          |
| VOLATILES     | 1,2,4-Trimelhylbenzene      |                     | 0.00452 1 U U     |                |               | •             |               |           |          |            |           |               |                    |           |                     |          |

Table 3-93



| Table 3-93   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 093 |

| (SUMP) = SUMP093 |                                |                   |            |              |           |        |       | 14 60      | 2.01 |      | i M-S    | 93.01        |           | LH-S       | 93-01   |        | LH-S       | 93-02  |     | LH-\$9     | 93-02      |        |
|------------------|--------------------------------|-------------------|------------|--------------|-----------|--------|-------|------------|------|------|----------|--------------|-----------|------------|---------|--------|------------|--------|-----|------------|------------|--------|
| LOCATION _CODE   |                                | 35SUMP093-SB01    | 35SUMP093  | -\$801       | LH-DI     | .93-01 |       | 111.005    | 2701 |      | 14.90    | 3.01.2       |           | LH-S       | 3-01.3  |        | LH-S9      | 3-02.1 |     | LH-S9      | 3-02.2     |        |
| SAMPLE_NO        |                                | 35-SMP093-SB01-01 | 35-SMP093- | B01-02       | LH-DU     | 93-01  |       | LH-590     | 000  |      | 7/04     | 110112       |           | 7/24       | /1993   |        | 7/24/      | 1993   |     | 7/24/      | 1993       |        |
| SAMPLE_DATE      |                                | 9/21/2006         | 9/21/20    | 06           | 7/27/     | 1993   |       | //24/1     | 993  |      | 1124     | E E E I      |           | 125.       | 13 5 Ft |        | .5 -       | 1 Ft   |     | 3-3        | ,5 FI      |        |
| DEPTH            |                                | .55 Ft            | 6.5 - 6.5  | Ft           | 2.5       | 3 F1   |       | .5 • 1     | 1 14 |      | 4.5 •    | gigint<br>Ho |           | 12,31      | 50      |        | BI         | G      |     | R          | G          |        |
| SAMPLE PURPOSE   |                                | REG               | REG        |              | R         | EG     |       | HE .       | G    |      | Browk DI | eg<br>L LA   | vo        | Decult Dil | -<br>10 | vo     | Result Dil |        | vo  | Result Dil | LO '       | VQ     |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LO VO  | Result DIL | LQ VQ        | Result Di | L LO   | VQ    | Result DIL | ιQ   | VQ   | Hesur Di |              | <u>vu</u> | Hesuit Di  | L 60    | 14     | 110001     |        |     |            |            |        |
| VOLATILES        | 1.2-Dibromo-3-chloropropane    |                   | 0.00452    | U U          |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | 1.2-Dibromoethane              |                   | 0.00452    | IU U         |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | 1.2-Dichlorobenzene            |                   | 0.00452    | U U          |           |        |       |            |      |      |          |              |           | 0.005      |         |        | 0.005      | 1.     | 11  | 0.005      | 1 <        | U      |
| VOLATILES        | 1.2-Dichloroethane             | 1                 | 0.00452    | មេ ប         | 0.005     | 1 <    | U     | 0.005      | 1 <  | U    | 0.005    | 1 <          | U<br>     | 0.005      | 1.      | ň      | 0.005      | 1      | ŭ   | 0.005      | 1 <        | Ū.     |
| VOLATILES        | 1.2-Dichloroelhene             |                   |            |              | 0.005     | 1 <    | U     | 0,005      | 1 <  | U    | 0.005    | 1 <          | 0         | 0,005      | 1 <     | U<br>U | 0.005      |        | ň   | 0.005      | 1 <        | ป      |
| VOLATILES        | 1.2-Dichloropropage            | ļ                 | 0.00452    | ιυ U         | 0,005     | 1 <    | U     | 0.005      | 1 <  | U    | 0.005    | 1 <          | U         | 0.005      | 1 <     | U      | 0.000      |        | v   | 0,000      |            | •      |
| VOLATILES        | 1 2-Dimethylbenzene (o-Xylene) | 1                 | 0.00452    | មេ ប         |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | t 3.5-Trimethylbenzepe         |                   | 0.00452    | 1 U U        |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | 1 3-Dichlorobenzene            |                   | 0.00452    | 1 U 🛛 U      |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | 1 3-Dichloropropage            |                   | 0.00452    | រប ប         |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | 1 4-Dichlorobenzene            |                   | 0.00452    | 1U U         |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | 2 2 Dichloropropage            |                   | 0.00452    | 1 U U        |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     | 0.05       |            | п      |
| VOLATILES        | 2-2-Dicholopiopane             |                   | 0.00904    | 18 0         | 0.05      | 1 <    | U     | 0.05       | 1 <  | Ų    | 0.05     | 1 <          | U         | 0.05       | 1 <     | ų<br>  | 0,05       | 1 <    |     | 0.05       | 1.2        | й<br>Н |
| VOLATILES        | 2-Dualione                     |                   | 0.00904    | 10 0         | 0.01      | 1 <    | U     | 0.01       | 1 <  | Ų    | 0.01     | 1 <          | Ų         | 0.01       | 1 <     | U      | 0.01       | 1 <    | Ų   | 0.01       | 1 <        | U      |
| VOLATILES        | 2 Chlorotelly Why enter        |                   | 0.00452    | iU Ų         |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     | 0.05       |            | 11     |
| VOLATILES        | 2-Ghiptotobene                 |                   | 0.00904    | 1U U         | 0.05      | 1 <    | U     | 0.05       | 1 <  | U    | 0.05     | 1 <          | U         | 0.05       | 1 <     | U      | 0.05       | 1 <    | U.  | 0.05       | 1 <        | Q.     |
| VOLATILES        |                                |                   | 0.00452    | 1 U U        |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            | <b>.</b> . |        |
| VULATILES        | e-Chilotonena                  |                   | 0.00904    | រប ប         | 0.1       | 1 <    | U     | 0.1        | 1 <  | U    | 0.1      | 1 <          | υ         | 0.1        | 1 <     | U      | 0.1        | 1 <    | Ų   | 0.1        |            | 0      |
| VOLATILES        | Actione                        |                   | 0.00452    | 10 0         | 0.005     | i <    | U     | 0.005      | 1 <  | U    | 0.005    | 1 <          | U         | 0.005      | 1 <     | U      | 0.005      | 1 <    | U   | 0:005      | 1 <        | 0      |
| VOLATILES        | Benzene                        |                   | 0.00452    | 111 0        |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | Bromobenzene                   |                   | 0.00452    | 10 0         |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | Bromochioromethane             |                   | 0.00452    | 10 0         | 0.005     | 1 <    | U     | 0.005      | 1 <  | U    | 0.005    | 1 <          | υ         | 0.005      | 1 <     | Ų      | 0.005      | 1 4    | U   | 0.005      | 1 <        | U      |
| VOLATILES        | Bromodichloromélhané           |                   | 0.00452    | 100          | 0.005     | 1 4    | ŭ     | 0.005      | 1 <  | U    | 0.005    | 1 <          | Ų         | 0,005      | 1 <     | Ų      | 0.005      | 1 <    | U   | 0.005      | 1 <        | Ų      |
| VOLATILES        | Bromoform                      |                   | 0.00402    | 10 0         | 0.000     | 1 -    | Ū.    | 0.01       | 1 <  | U    | 0.01     | 1 <          | U         | 0.01       | 1 <     | U      | 0.01       | 1 <    | Ų   | 0.01       | 1 <        | υ      |
| VOLATILES        | Bromomethane                   |                   | 0.00904    | 10 0         | 0.005     |        | τ.    | 0.005      | 1 <  | U    | 0.005    | 1 <          | Ų         | 0.005      | 1 <     | U      | 0.005      | < ۲    | U   | 0.005      | 1 <        | U      |
| VOLATILES        | Carbon disulfide               |                   | 0.00452    | 10 0         | 0.005     | 12     | ŭ     | 0.005      | ic   | Ū    | 0.005    | 1 <          | U         | 0.005      | 1 <     | U      | 0.005      | 1 <    | U   | 0.005      | ۲ <        | U      |
| VOLATILES        | Carbon tetrachloride           | Ì                 | 0.00452    | 10 0         | 0.005     | . 1.2  | ň     | 0.005      | 1 <  | Đ    | 0.005    | 1 <          | U         | 0.005      | 1 <     | U      | 0.005      | 1 <    | U   | 0.005      | 1 <        | U      |
| VOLATILES        | Chiorobenzene                  |                   | 0.00452    | 10 0         | 0.000     | 12     | ŭ     | 0.01       | ie   | Ů    | 0.01     | 1 <          | U         | 0.01       | 1 <     | U      | 0.01       | ۱ <    | U   | 0.01       | 1 <        | U      |
| VOLATILES        | Chloroethane                   |                   | 0.00904    | 10 0         | 0.005     | 12     | ŭ     | 0.005      | 1 4  | Ð    | 0.005    | 1 <          | U         | 0.005      | 1 <     | υ      | 0,005      | 1 <    | Ų   | 0.005      | 1 <        | U      |
| VOLATILES        | Chloroform                     |                   | 0,00452    | 10 0         | 0.000     | 1.     | й.    | 0.01       | 1 4  | EF . | 0.01     | 1 <          | U         | 0.01       | 1 <     | U      | 0.01       | 1 <.   | U   | 0.01       | 1 <        | U      |
| VOLATILES        | Chloromethane                  |                   | 0.00904    |              | 0.01      |        | Ŷ     | <b>Q</b>   |      | -    |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | cis-1.2-Dichloroelhene         |                   | 0.00452    | 10 0         | 0.005     | 1.2    | ŧ     | 0.005      | 10   | 11   | 0.005    | 1 <          | υ         | 0.005      | 1 <     | U      | 0.005      | 1 <    | U   | 0.005      | 1 <        | U      |
| VOLATILES        | cis-1.3-Dichloropropene        |                   | 0.00452    |              | 0.005     |        | ii ii | 0.005      | 12   | Ŭ    | 0.005    | 1 <          | U         | 0.005      | 1. <    | U      | 0.005      | 1 <    | U   | 0.005      | 1 <        | U      |
| VOLATILES        | Dibromochloromethane           |                   | 0.00452    | 10 0         | 0.003     | . `    | u     | 0.000      |      | č    |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | Dibromomethane                 |                   | 0.00452    | 10 0         |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | Dichlorodilluoromethane        |                   | 0.00904    | 10 0         | 0.005     |        |       | 0.005      | + -  | п    | 0.005    | 10           | U         | 0.005      | 1 <     | U      | 0.005      | 1 <    | Ų   | 0.005      | 1 <        | Ų      |
| VOLATILES        | Ethylbenzene                   |                   | 0.00452    | 10 0         | 0.005     | 1 <    | U     | 0.009      | , .  | v    | 0.005    |              | ÷         | •          |         |        |            |        |     |            |            |        |
| VOLATILES        | Hexachlorobutadiene            |                   | 0.00452    | 10 0         |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | isopropylbenzene               |                   | 0.00452    | 10 U         |           |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | m.p-Xylenas                    |                   | 0.00452    | 10 0         |           |        |       |            |      |      | 0.07     |              |           | 0.05       | 1 -     | F F    | 0.05       | 1 <    | ម   | 0.05       | 1 <        | U      |
| VOLATILES        | Methyl isobutyl ketone         |                   | 0.00904    | 10 0         | 0.05      | 1 <    | 0     | 0.05       | 1 <  |      | 0.05     |              |           | 0.00       | 1.2     | ŭ      | 0.005      | 1 <    | U   | 0.005      | 1 <        | U      |
| VOLATILES        | Melhylene chloride             |                   | 0.0327     | 1            | 0.005     | 1 <    | U     | 0.005      | ) <  | Ų    | 0.000    |              | v         | 0.000      |         | •      |            |        |     |            |            |        |
| VOLATILES        | Naphthalene                    |                   | 0.00904    | 10 1         | 1         |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | n-BUTYLBENZENE                 |                   | 0.00452    | 1 U U        | I         |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | n-PROPYLBENZENE                |                   | 0.00452    | 1U U         | )         |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | p-ISOPROPYLTOLUENE             |                   | 0.00452    | 101          | 1         |        |       |            |      |      |          |              |           |            |         |        |            |        |     |            |            |        |
| VOLATILES        | Sec-BUTYLBENZENE               | }                 | 0.00452    | 10 1         | J         |        |       |            |      |      |          |              | 11        | 0.005      | 1.4     | 11     | 0.005      | 1.4    | e U | 0.005      | { <        | U      |
| VOLATILES        | Styrene                        |                   | 0.00452    | เน เ         | J 0.005   | 1 <    | U     | 0.005      | 1 <  | U    | 0.005    | 1 <          | U         | 0.005      |         |        | 0.000      |        | •   |            |            |        |
| VOLATILES        | tert-BUTYLBENZENE              |                   | 0.00452    | 1 <b>U</b> 1 | J         |        |       |            |      |      | A A4-    | ,            |           | A 404      | ۰.      |        | 0.005      | 1.     | e u | 0.005      | 1 <        | U      |
| VOLATILES        | Tetrachloroethene              |                   | 0.00452    | 10 1         | J 0.005   | 1 <    | Ų     | 0.005      | 1 <  | 0    | 0.005    | 1 <          |           | 0.005      | 1 4     | . v.   | 0.005      | 1      | . u | 0.005      | 1 <        | U      |
| VOLATILES        | Toluene                        | 1                 | 0.00452    | 101          | J 0.005   | 1 <    | U     | 0.005      | 1 <  | Ų    | 0.005    | 1 <          | U         | 0.000      | . <     |        | 0,000      | , ,    |     | 4.544      | •••        | -      |

## Data Evaluation Report



.....



| Table 3-93   |  |
|--|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 093 |  |

| [SUMP] = SUMP093   |                           |                   |                   |                  |                  |                  |                  |                  |                  |
|--|---------------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                           | 35SUMP093-SB01    | 35SUMP093-SB01    | LH-DL93-01       | LH-S93-01        | LH-S93-01        | LH-\$93-01       | LH-S93-02        | LH-S93-02        |
| SAMPLE_NO  |                           | 35-SMP093-SB01-01 | 35-SMP093-SB01-02 | LH-DL93-01       | LH-S93-01.1      | LH-S93-01-2      | LH-S93-01.3      | LH-S93-02.1      | LH-S93-02.2      |
| SAMPLE_DATE  |                           | 9/21/2005         | 9/21/2005         | 7/27/1993        | 7/24/1993        | 7/24/1993        | 7/24/1993        | 7/24/1993        | 7/24/1993        |
| DEPTH  |                           | .55 FI            | 6.5 - 6.5 Ft      | 2.5 - 3 FI       | .5 - 1 Ft        | 4.5 - 5.5 Ft     | 12.5 - 13.5 Ft   | .5 - 1 Ft        | 3 • 3.5 Ft       |
| SAMPLE_PURPOSE   |                           | REG               | REG               | REG              | REG              | REG              | REG              | REG              | REG              |
| Test Group   | Parameter (Units = mg/kg) | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ |
| VOLATILES  | trans-1,2-Dichloroethene  |                   | 0.00452 1 U U     |                  |                  |                  |                  |                  |                  |
| VOLATILES  | trans-1,3-Dichloropropene |                   | 0,00452 1 U U     | 0.005 f < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES  | Trichloroethene           |                   | 0.00452 1 U U     | 0.005 i < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES  | Trichlorofluoromethane    |                   | 0.00904 1 U U     |                  |                  |                  |                  |                  |                  |
| VOLATILES  | Vinyl acetate             |                   | 0.00904 1 U UJ    | 0.05 1 < U       | 0.05 1 < U       | 0.05 t< U        | 0.05 1 < U       | 0.05 / < U       | 0.05 1 < U       |
| VOLATILES  | Vinyi chloride            |                   | 0.00904 1 U U     | 0.01 1 < U       | 0.01 i < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES  | Xylenes, Totai            |                   |                   | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| by a standard stand |                           |                   |                   |                  |                  |                  |                  |                  |                  |

Footnotes are shown on cover page to Tables Section.

## Table 3-94

## Concentrations of Chemicals in Soil Samples Associated with Sump 106

| [SUMP] = SUMP106 |                           |                                 | <b>DO4</b> |
|------------------|---------------------------|---------------------------------|------------|
| LOCATION _CODE   |                           | 35SUMP106-SB01 35SUMP106-S      | BUT        |
| SAMPLE_NO        |                           | 35-SMP106-SB01-01 35-SMP106-SB0 | )1-02      |
| SAMPLE_DATE      |                           | 9/20/2006 9/20/2006             |            |
| DEPTH            |                           | 0.5 - 0.5 Ft 4 - 4 Ft           |            |
| SAMPLE_PURPOSE   |                           | REG REG                         |            |
| Test Group       | Parameter (Units = mg/kg) | Result DIL LQ VQ Result DIL LQ  | VQ         |
| RANGE_ORGANICS   | Carbon Range C12-C28      | 57 1 U 47.7 1 J                 | В          |
| RANGE_ORGANICS   | CARBON RANGE C28-C35      | 57 1 U 64.5 1                   |            |
| RANGE_ORGANICS   | Carbon Range C6-C12       | <u>57 1 U 63.3 1 U</u>          |            |
|                  |                           |                                 |            |

Footnotes are shown on cover page to Tables Section.

|   |  |                                     |                                     |                                     |                                     | Concent   | rations of Chem              | icals in Soil San                       | nples Associate                         | ed with Sump 10                         | 7                                       |   |   |                                      |                                   | 00  | 066272                                    |
|---|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|------------------------------|---|---|---|---|---|---|--------------------------------------|-----------------------------------|---|---|
| ISUMP] = SUMP107<br>CATION_CODE<br>AMPLE_NO |  | 35SUMP107-SB01<br>35-SMP107-SB01-01 | 355UMP107-SB01<br>35-SMP107-SB01-02 | 35SUMP107-SB02<br>35-SMP107-SB02-01 | 35SUMP107-SB02<br>35-SMP107-SB02-02 | 35SUMP107-S802<br>35-SMP107-S802-02-QC<br>0/14/2005 | LH-S107-01<br>LH-S107-01 QC  | LH-S107-01<br>LH-S107-01_1<br>6/26/1993 | LH-S107-01<br>LH-S107-01_2<br>6/26/1993 | LH-S107-01<br>LH-S107-01_3<br>6/26/1993 | LH-S108-01<br>LH-S108-01_1<br>6/26/1993 | LH-S108-01<br>LH-S108-01_2<br>6/26/1993 | LH-S108-01<br>LH-S108-01_3<br>6/26/1993 | LH5-2-14<br>LHS-2-14 QC<br>1/11/1995 | LHS-2-14<br>LHS-2-14<br>1/11/1995 | LH-WRS16-01<br>LH-WRS16-01_1<br>6/26/1993 | LH-WRS16-01<br>LH-WRS‡6-01_2<br>6/26/1993 |
| SAMPLE_DATE                                 |  | 9/14/2006<br>0.5 - 0.5 Ft           | 3-3-Ft                              | 0.5 - 0.5 Ft                        | 3-3Ft                               | 3-3 Ft  | 0.5 - 1.5 Ft                 | 0.5 - 1.5 Ft                            | 1-1.5Ft                                 | 2 - 2.5 Ft                              | 0.5 - 1.5 Ft                            | 2-2.5 Ft                                | 4 - 4.5 Ft                              | 0 - 0.5 Ft                           | 0 - 0.5 Ft                        | 0.5 - 1.5 Ft                              | 3.5 - 4 Ft                                |
| SAMPLE_PURPOSE                              |  | REG                                 | REG                                 | REG                                 | REG                                 | FÐ  | FD                           | REG                                     | REG                                     | REG                                     | REG                                     | REG                                     | REG                                     | FD<br>Brownite TONI L. I. G. MO      | REG<br>Reput DN 10 VO             | REG<br>Result DI LO VO                    | REG<br>Result DIE TO VO                   |
| Test Group                                  | Parameter (Units = mg/kg)                              | Result DIL LQ VQ                    | Result DIL LQ VO                    | Result DIL LQ VQ                    | Result DIL LQ VQ                    | Result DIL LQ VQ                                    | Result DIL LO VO             | Result DIL LQ VQ                        | Result DIL LO VO                        | Result DIL LQ VQ                        | Result Dat. LO VO                       | Result Dal, LQ VQ                       | HESUR DIL LO VO                         | 0.23 1 < U                           | 0.24 1 < U                        |   |   |
| EXPLOSIVES<br>EXPLOSIVES                    | 1,3,5-1 notrobenzene<br>1 3-Divitrobenzene             | 0.243 1 1                           | 0.245 1 U                           | 0.239 1 0                           | 0.242 1 U                           | 0.245 1 U   |                              |   |   |   |   |   |   | 0.23 1 < U                           | 0.24 t < U                        |   |   |
| FXPLOSIVES                                  | 2.4.6-Trinitrotoluene                                  | 0.243 I U                           | 0.245 1 U                           | 0.239 1 U                           | 0.242 1 U                           | 0.245 1 U   |                              |   |   |   |   |   |   | 0.23 1 < U                           | 0.24 1 < U                        | 4 7 94 4 11                               | 1000 1                                    |
| EXPLOSIVES                                  | 2,4-Dinitrotoluene                                     | 0.243 1 U                           | 0.245 1 U                           | 0.239 1 U                           | 0.242 1 U                           | 0.245 1 U   | 1.25 1 < U                   |   | 1.266 1 < U                             | 1.149 1 < U                             | 1.099 1 < U                             | 1.149 1 < U                             | 1.205 1 < 1                             | 0.23 1 < U                           | 0.24 1 < U<br>0.25 1 < U          | 1.064 i < U<br>1064 i < U                 | 1.282 1 < U                               |
| EXPLOSIVES                                  | 2.6-Dinitrotoluene                                     | 0.252 1 U                           | 0.255 1 U                           | 0.249 1 U                           | 0.251 1 U                           | 0.255 1 U   | 1.25 1 < U                   |   | 1.266 1 < U                             | 1.149 1 < U                             | 1.099 1 < 0                             | · 1.149 1 < D                           | 1200 1 < 0                              | 025 1 4 0                            | 0.23 1 4 0                        | 1.004                                     |   |
| EXPLOSIVES                                  | 2-Arrino-4,6-dinitrotoluene                            | 0.252 1 U                           | 0.255 1 0                           | 0249 1 0                            | 0.251 1 1                           | 0.255 1 1   |                              |   |   |   |   |   |   | 0.49 1 < U                           | 0.49 1 < U                        |   |   |
| EXPLOSIVES<br>EXPLOSIVES                    | 4-Arrano-2,0-CHAUGKADERE                               | 2.14 1 1                            | 2,16 1 U                            | 2.11 1 U                            | 2.13 1 U                            | 2.16 1 U  |                              |   |   |   |   |   |   | 2.1 1 < U                            | 31                                |   |   |
| EXPLOSIVES                                  | m-Nitrotoluene   | 0.243 1 U                           | 0.245 1 U                           | 0.239 1 U                           | 0.242 1 U                           | 0.245 1 U   |                              |   |   |   |   |   |   | 0.98 1 < U                           | 0.98 1 < U                        |   |   |
| EXPLOSIVES                                  | Nitrobenzene   | 0.252 ¥ U                           | 0.255 1 U                           | 0.249 1 U                           | 0.251 1 U                           | 0.255 1 U   |                              |   |   |   |   |   |   | 0.25 I < 0<br>0.98 1 < U             | 0.98 1 < U                        |   |   |
| EXPLOSIVES                                  | o-Nitrotoluene   | 0.243 1 U                           | 0.245 1 U                           | 0.239 1 U                           | 0.242 1 0                           | 0245 1 U<br>0245 1 N                                |                              |   |   |   |   |   |   | 2.9 1 < U                            | 2.9 1 < U                         |   |   |
| EXPLOSIVES                                  | p-Maronoluene<br>RDX                                   | 0.243 1 0                           | 0.98 1 U                            | 0.957 1 U                           | 0.966 1 U                           | 0.98 1 U  |                              |   |   |   |   |   |   | 1.1 1 < U                            | 1.1 1 < U                         |   |   |
| EXPLOSIVES                                  | Tetryl   | 0.631 1 U                           | 0.637 1 U                           | 0.622 t U                           | 0.628 1 U                           | 0.637 1 U   |                              |   |   |   |   |   |   | 0.72 1 < U                           | 0.73 1 < U                        | 0000 1                                    | 1020 1                                    |
| METALS                                      | Atumenum   | 5690 1                              | 4900 1                              | 7690 1                              | 10100 1                             | 8460 1  | 17100 1                      | 15000 1                                 | 11100 1                                 | 4700 1                                  | 4030 1                                  | 5540 1                                  | 16800 1                                 | 536U T                               | 3020 I<br>125 1 c ILI             | 474 1 c U                                 | 556 1 < U                                 |
| METALS                                      | Antimony   | 0.108 1 U                           | 0.106 1 U                           | 0.0739 1 J J                        | 0.108 1 U                           | 0.112 1 U   | 4.56 1 < U                   | 32 1 < U                                | 5.56 1 < U<br>2.42 1                    | 3.62 1 < 0                              | 2.45 1                                  | 1.75 1                                  | 4.26 1                                  | 1.9 1 J                              | 2.5 1 J                           | 0.901 1 E                                 | 0.778 1 E                                 |
| METALS                                      | Arsenic  | 0.917 1<br>596 1 L                  | 0.376 E<br>37 1 J                   | 111 1 .3                            | 0.946 I<br>86.1 1 J                 | 216 1 J   | 98.9 1 < U                   | 91.6 1 < U                              | 62.5 1 < U                              | 34.2.1 < U                              | 29.7 1 < U                              | 28.9 1 < U                              | 52.2 1 < U                              | 37.1 1                               | 37.3 1                            | 6.61 1 < U                                | 8.65 1 < U                                |
| METALS                                      | Bervilium  | 0.306 1 J J                         | 0.324 1 J J                         | 0.349 1 J J                         | 0.809 1                             | 1.23 1  | -                            |   |   |   |   |   |   |                                      |                                   |   | 0.00 ( )V                                 |
| METALS                                      | Cadmium  | 0.197 1 J J                         | 0.0625 1 J J                        | 0.451 1                             | 0.0898 1 J J                        | 0.163 1 J J   | 6.06 1 < U                   | 5.06 t < U                              | 4.84 1 < U                              | 2.64 t < U                              | 3.73 1 < U                              | 2.7 1 < U                               | 6.22 1 < U                              | 0.97 1 < U                           | 1.3 1 < U                         | 2,11 1 < U                                | 2.28 1 < U<br>396 1                       |
| METALS                                      | Calcium  | 964 1                               | 425 1                               | 1890 1                              | 1080 \$                             | 1140 1  | 2360 1                       | 2250 1                                  | 1690 1                                  | 650 1<br>108 1                          | 4/6 )                                   | 522 I<br>13.8 1                         | 15.2 1                                  | 8.7 1 J                              | 8 1                               | 5.78 1                                    | 5.03 1                                    |
| METALS                                      | Chromium   | 10.5 1                              | 13.2 1                              | 14.1 1<br>3.09 1                    | 13 1                                | 6.04 1  | 5.13 1                       | 3.82 1                                  | 3.61 1                                  | 1.54 1                                  | 1.87 1                                  | 1.9 1                                   | 4,4 1                                   | 1.9 1 < U                            | 2.5 1 < U                         | 0.356 1 E                                 | 0.361 1 E                                 |
| METALS                                      | Copper   | 3.66 1                              | 1.22 1                              | 7.59 1                              | 2.13 1                              | 1.44 1  | 4.38 1 < 1)                  | 4.75 1 < U                              | 3.53 1 < U                              | 3.26 1 < U                              | 3.92 1 < U                              | 2.17 1 < U                              | 3.35 1 < U                              | 1.9 1                                | 3 1                               | 3.2 1 < U                                 | 2.75 1 < U                                |
| METALS                                      | liou   | 10500 1 J                           | 10800 1 J.                          | 11200 1                             | 11300 1 J                           | 21900 1   | 22500 1                      | 17080 1                                 | 17200 1                                 | 7670 1                                  | 11000 1                                 | 8760 1                                  | 22000 1                                 | 8180 1                               | 9610 1                            | 6400 1<br>711 1 < 1                       | 6010 1<br>834 1 < 10                      |
| METALS                                      | Lead   | 23.3 1                              | 34,3 1                              | 27.4 1 J                            | 8.22 1                              | 6.79 1 J  | 28.5 1                       | 25.6 1                                  | 21.4 1                                  | 11.6 1<br>997 1                         | 117.2 I E<br>340 1                      | 343 1                                   | 863 1                                   | 509 1                                | 449 1                             | 134 1                                     | 123 1                                     |
| METALS                                      | Magnesium  | 412 1                               | 412 1                               | 856 T<br>126 T J                    | 938 1<br>96 1 J                     | 480 1 J   | 32.2 1                       | 40 t                                    | 77.3 1                                  | 27.7 1                                  | 32.9 1                                  | 16.9 1                                  | 13 1                                    | 51.1 1                               | 60.6 1                            | 5.97 1                                    | 4.14 1                                    |
| METALS                                      | Marajanese<br>Mercurv                                  | 0.017 t J J                         | 0.0217 1 J J                        | 0.0342 1 J J                        | 0.0145 1 J J                        | 0.0144 1 J J  | 0.059 1 < U                  | 0.054 t < U                             | 0.059 1 < U                             | 0.049 1 < U                             | 0.049 1 < U                             | 0.047 1 < U                             | 0.054 1 < U                             | 0.1 1 < U                            | 0.086 1 < U                       | 0.045 1 < U                               | 0.061 1 < U                               |
| े शुम्तALS                                  | Nickel   | 3.81 1                              | 3.52 1                              | 5.9 1                               | 6.15 1                              | 5.79 1  |                              |   |   |   |   |   | rar 1                                   | 726 1                                | 969 1 × 11                        | 198 1                                     | 128 1                                     |
| ETALS                                       | Potassium  | 188 1                               | 147 1                               | 258 1                               | 251 1                               | 184 1   | 334 1                        | 318 1                                   | 326 1                                   | 224 1                                   | 251 1<br>8526 1 c 11                    | 2/6 I<br>0.38 1 < II                    | 0:456 1 < 1/                            | 230 i<br>0.51 1 J                    | 0.56 1                            | 0.474 1 < U                               | 0.556 1 < U                               |
| METALS                                      | Selenium   | 0.224 1                             | 0.213 1 U                           | 0.319 1                             | 0.342 1                             | U.198 1 J J<br>166 1 11                             | 0.456 1 < 0<br>0.023 1 < 0   | 0.021 1 < 1                             | 0.028 t < U                             | 0.02 1 < U                              | 0.026 1 < U                             | 0.027 1 < U                             | 0.023 1 < U                             | 0.97 1 < U                           | 1.3 1 < U                         | 0.024 1 < U                               | 0.028 i < U                               |
| METALS                                      | Sodium   | 51.9                                | 76.1 1                              | 35.8 1                              | 66.8 1                              | 59.5 1  |                              |   |   |   |   |   |   |                                      |                                   |   |   |
| METALS                                      | Strontium  |                                     |                                     |                                     |                                     |   | 18.1 1 < U                   | 17.8 1 < U                              | 10.6 1 < U                              | 4.83 1 < U                              | 5.73 1 < U                              | 7.33 1 < U                              | 13.7 1 < U                              | 9.7 1 < U                            | 12.6 1 < 0                        | 3.6 1 < U                                 | 2,77 1 < U                                |
| METALS                                      | Thallium   | 0.0347 1                            | 0.0273 1                            | 0.0345 1                            | 0.0406 1                            | 0.0431 1  |                              |   |   |   |   |   |   | 46.4 1 4 0                           | 001 < 0                           |   |   |
| METALS                                      | Vanadium   | 18.7 1                              | 19.9 1<br>116 1                     | 20 <u>4</u> 1<br>132 1              | 22.6 T<br>13.5 1                    | 30.3 T  | 82 1                         | 21.9 1                                  | 17.3 1                                  | 23.4 1                                  | 13.3 1                                  | 10 1                                    | 21 1                                    | 12.4 1                               | 11.6 1                            | 7.87 1                                    | 9.84 1                                    |
| SEMIVOLATILES                               | 1.2.4-Trichlorobenzene                                 | 23.0                                | 11.0                                | 132 1                               |                                     |   | 1.25 1 < ⊎                   |   | 1.266 1 < U                             | 1.149 1 < U                             | 1.099 1 < U                             | 1.149 1 < U                             | 1.205 1 < U                             | 0.41 1 < U                           | 0.43 1 < U                        | 1.064 t < U                               | 1.282 1 < U                               |
| SEMIVOLATILES                               | 1,2-Dichlorobenzene                                    |                                     |                                     |                                     |                                     |   | 1.25 1 < U                   |   | 1.266 1 < U                             | 1.149 1 < U                             | 1.099 1 < 반                             | 1.149 1 < U                             | 1.205 1 < U                             | 0.41 1 < U                           | 0.43 t < U                        | 1.064 ! < U                               | 1.282 1 < 0                               |
| SEMIVOLATILES                               | 1,3-Dichlorobenzene                                    |                                     |                                     |                                     |                                     |   | 1.25 1 < U                   |   | 1.266 1 < U                             | 1.149 1 < U                             | 1.099 1 < 0                             | 1.149 I < U<br>1149 I < U               | 1205 1 < 0                              | 0.41 1 < U                           | 0.43 1 < 1                        | 1.064 1 < U                               | 1.282 1 < U                               |
| SEMIVOLATILES                               | 1.4-Dichlorobenzene                                    |                                     |                                     |                                     |                                     |   | 125 1 < U                    |   | 1.266 1 < U                             | 1.149 1 < U                             | 1.099 1 < U                             | 1.149 1 < U                             | 1.205 1 < U                             | 2.1 1 < U                            | 2.1 1 < U                         | 1.064 1 < U                               | 1.282 1 < U                               |
| SEMIVOLATILES<br>SEMIVOLATILES              | 2,4,5-Trichlorophenol                                  |                                     |                                     |                                     |                                     |   | 1.25 1 < U                   |   | 1.266 1 < U                             | 1.149 1 < U                             | 1.099 1 < U                             | 1.149 t < U                             | 1.205 1 < U                             | 0.41 1 < U                           | 0.43 1 < U                        | 1.064 1 < U                               | 1.282 t < U                               |
| SEMIVOLATILES                               | 2,4-Dichlorophenol                                     |                                     |                                     |                                     |                                     |   | 1.25 1 < U                   |   | 1.266 1 < U                             | 1.149 1 < U                             | 1.099 1 < U                             | 1,149 1 < U                             | 1.205 1 < U                             | 0.41 1 < U                           | 0.43 1 < U                        | 3,064 1 < U<br>0,632 1 < €L               | 1.282 1 < 0                               |
| SEMIVOLATILES                               | 2,4-Dimethylphenol                                     |                                     |                                     |                                     |                                     |   | 0.625 1 < U                  |   | 0.633 1 < U                             | 0.575 1 < 0                             | 0.549 1 < U                             | 0.5/5 1 < U                             | 12.048 t < U                            | 2.1 1 < 0                            | 2.1 1 < U                         | 10.638 1 < U                              | 12.821 1 < U                              |
| SEMIVOLATILES                               | 2.4-Dinitrophenol                                      |                                     |                                     |                                     |                                     |   | 12.5 1 4 0                   |   | 12.000 1 2 0                            |   | 10.000                                  |   |   | 0.41 1 < U                           | 0.43 1 < U                        |   |   |
| SEMIVOLATILES                               | 2,4-Dimitrotoluene                                     |                                     |                                     |                                     |                                     |   |                              |   |   |   |   |   |   | 0.41 1 < U                           | 0.43 t < U                        |   | 0.005                                     |
| SEMIVOLATILES                               | 2-Chloronaphthatene                                    |                                     |                                     |                                     |                                     |   | 0.375 1 < U                  |   | 0.38 1 < U                              | 0.345 1 < U                             | 0.33 1 < U                              | 0.345 1 < U                             | 0.361 1 < U                             | 0.41 1 < U                           | 0.43 1 < U                        | 0.319 1 < U                               | 0.385 1 < 0                               |
| SEMIVOLATILES                               | 2-Chlorophenol   |                                     |                                     |                                     |                                     |   | 0.625 1 < U                  |   | 0.633 1 < 0                             | 0.575 1 < U                             | 0.549 1 < 0                             | 0.575 I < U<br>0.345 1 < II             | 0.361 1 < U                             | 0.41 / < U                           | 0.43 1 < ∜                        | 0.319 1 < U                               | 0.385 1 < U                               |
| SEMIVOLATILES                               | 2-Methylnaphthalene                                    |                                     |                                     |                                     |                                     |   | -10.375 1 < U<br>0.625 1 < U |   | 0.633 1 < 1                             | 0.575 1 < U                             | 0.549 1 < U                             | 0.575 1 < U                             | 0.602 1 < U                             | 0.41 1 < U                           | 0.43 1 < U                        | 0.532 1 < U                               | 0.641 1 < U                               |
| SEMIVULATILES<br>SEMIVOLATILES              | 2-Meanyprienon<br>2-Nitroaniane                        |                                     |                                     |                                     |                                     |   | 3.75 t < U                   |   | 3.797 t < U                             | 3.448 1 < U                             | 3.297 1 < U                             | 3.448 1 < Ư                             | 3.614 1 < U                             | 2.1 1 < U                            | 2.1 1 < Ü                         | 3.191 1 < U                               | 3.846 1 < U                               |
| SEMIVOLATILES                               | 2-Nitrophenol  |                                     |                                     |                                     |                                     |   | 1.25 1 < U                   |   | 1.266 1 < U                             | 1.149 1 < U                             | 1.099 1 < U                             | 1.149 1 < U                             | 1.205 1 < U                             | 0.41 1 < U                           | 0.43 1 < U                        | 1.064 1 < U                               | 1.282 1 < U<br>0.643 t < ⊔                |
| SEMIVOLATILES                               | 3,3'-Dichlorobenzidine                                 |                                     |                                     |                                     |                                     |   | 0.625 1 < U                  |   | 0.633 1 < U                             | 0.575 1 < U                             | 0.549 1 < U<br>3.207 1 - U              | 0.575 T < U<br>3448 1 < B               | 0.002 F < U<br>3.614 T < 11             | 2.1 1 < 1                            | 2.1 1 < U                         | 3.191 1 < U                               | 3.846 1 < U                               |
| SEMIVOLATILES                               | 3-Nitroaniline   | 1                                   |                                     |                                     |                                     |   | a./a I < 1/<br>6.25 1 < 1/   |   | 5.329 1 < U                             | 5.747 1 < U                             | 5.495 1 < U                             | 5.747 1 < U                             | 6.024 1 < U                             | 2.1 1 < U                            | 2.1 1 < U                         | 5.319 1 < U                               | 6.41 1 < ∜J                               |
| SEMIVULATILES<br>SEMIVULATILES              | 4,5-UIRR0-2-MethylpheAol<br>4-Bromonheryl shervi ether | 1 <sup>°</sup>                      |                                     |                                     |                                     |   | 1.25 1 < U                   |   | 1.266 1 < U                             | 1_149 1 < U                             | 1.099 i < U                             | 1.149 1 < U                             | 1.205 1 < U                             | 0.41 1 < U                           | 0.43 1 < U                        | 1.064 1 < U                               | 1.282 1 < U                               |
| SEMIVOLATILES                               | 4-Chloro-3-methylphenol                                | 1                                   |                                     |                                     |                                     |   | 0.625 1 < U                  |   | 0.633 1 < U                             | 0.575 1 < U                             | 0.549 1 < U                             | 0.575 1 < U                             | 0.602 1 < U                             | 0.41 1 < U                           | 0.43 t < U                        | 10.532 1 < U                              | 0.641 1 < U<br>3.846 1 - U                |
| SEMIVOLATILES                               | 4-Chloroaniline  | 1                                   |                                     | -                                   |                                     |   | 3.75 1 < U                   |   | 3.797 1 < U                             | 3.448 1 < U                             | 3.297 1 < U                             | 3.448 1 < U<br>1140 1 - 11              | 3.514 1 < U<br>1205 1 - U               | 0.41 I < U<br>0.41 I ∠ U             | v.+a i < ∀<br>8,43 1 < 5          | a.⊮an i < U<br>1.054 1 < Lt               | 1.282 1 < U                               |
| SEMIVOLATILES                               | 4-Chlorophenyl phenyl ether                            |                                     |                                     |                                     |                                     |   | 1.25 T < U<br>0.625 T < U    |   | 1.200 I < U<br>0.633 I < 11             | . เ.⊮əri< ∪<br>0,575 1 < l⊧             | 0.549 1 < U                             | 0.575 1 < U                             | 0.602 1 < U                             | 0.41 1 < U                           | 0.43 1 < U                        | 0.532 1 < U                               | 0.641 1 < U                               |
| SEMIVOLATILES                               | 4-Methylphenol<br>4-Nitrosoiline                       |                                     |                                     |                                     |                                     |   | 6.25 1 < U                   |   | 6.329 1 < U                             | 5.747 1 < U                             | 5.495 1 < U                             | 5.747 1 < U                             | 6.024 1 < U                             | 2.1 1 < U                            | 2.1 1 < U                         | 5.319 1 < U                               | 6.41 1 < U                                |
| COMINOLATILES                               | 4-Nitrophenol  |                                     |                                     |                                     |                                     | -   | 6.25 1 < U                   |   | 6.329 1 < U                             | 5.747 1 < U                             | 5.495 1 < U                             | 5.747 1 < U                             | 6.024 1 < U                             | 2.1 1 < 9                            | 2.1 1 < U                         | 5.319 1 < U                               | 6.41 1 < U                                |
| MIVOLATILES                                 | Acenaphthene   |                                     |                                     |                                     |                                     |   | 0.375 1 < U                  |   | 0.38 1 < U                              | 0.345 1 < U                             | 0.33 1 < U                              | 0.345 1 < U                             | 0.361 1 < U<br>0.602 1 - H              | 0.41 1 < 1<br>0.41 1 - 11            | 0.43 1 < U<br>⊕.43 1 -= II        | 0.519 1 < 0                               | 0.5651 1 < U                              |
| JEMIVOLATILES                               | Acenaphthylene   |                                     |                                     |                                     |                                     |   | 0.625 1 < U                  |   | 0.633 1 < U<br>0.633 1 < P              | 0.575 1 < 0<br>0.575 1 < 0              | 0.549 1 < U<br>0.549 1 < 11             | 0.575 1 < U                             | 0.602 1 < U                             | 0.41 1 < 0                           | 0.43 t < U                        | 0.532 1 < U                               | 0.641 1 < U                               |
| SEMIVOLATILES                               | Anthracene   |                                     |                                     |                                     |                                     |   | 0.020 I < U<br>0.375 1 < H   |   | 0.38 1 < 1                              | 0.345 1 < 1                             | 0.33 1 < U                              | 0.345 1 < U                             | 0.361 1 < U                             | 0.41 1 < U                           | 0.43 1 < U                        | 0.319 î < U                               | 0.385 t < U                               |
| JEMIVULA HEES                               | penzo(a)anavacene                                      | 1                                   |                                     |                                     |                                     |   |                              |   |   | _                                       |   |   |   |                                      |                                   |   |   |

Table 3-95

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

-

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-95 Concentrations of Chemicals in Soil Samples Associated with Sump 107

| [SUMP] = SUMP107       |                                  |                  |                  |                   |                  |  |                             |                  |                  | 141 5403 64      | 111 0100 01              | 111 0400 04                  | 14 6105 01         | 110.0.14           | 142.9.14                    | I ST WIDS 16-01             | 1 H.WRS16.01      |
|------------------------|----------------------------------|------------------|------------------|-------------------|------------------|--|-----------------------------|------------------|------------------|------------------|--------------------------|------------------------------|--------------------|--------------------|-----------------------------|-----------------------------|-------------------|
| CATION_CODE            |                                  | 35SUMP107-SB01   | 35SUMP107-SB01   | 355UMP107-SB02    | 35SUMP107-SB02   | 355UMP107-5B02<br>35-SMP107-SB02-02-00 | 1H-S107-01<br>(H-S107-01 OC | LH-S107-01 1     | LH-S107-01 2     | LH-5107-01 3     | LH-S108-01 1             | LH-S108-01 2                 | LH-S108-01 3       | LHS-2-14 QC        | LHS-2-14                    | LH-WRS16-01_1               | LH-WRS16-01_2     |
| AMPLE_NO               |                                  | 0/14/2006        | 9/14/2006        | 9/14/2006         | 9/14/2006        | 9/14/2006                              | 6/26/1993                   | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993                | 6/26/1993                    | 6/26/1993          | 1/11/1995          | 1/11/1995                   | 6/26/1993                   | 6/26/1993         |
| DEPTH                  |                                  | 0.5 - 0.5 Ft     | 3-3Ft            | 0.5 - 0.5 Ft      | 3-3Ft            | 3-3Ft                                  | 0.5 - 1.5 Ft                | 0.5 - 1.5 Ft     | 1 - 1.5 Ft       | 2-2.5 Ft         | 0.5 - 1.5 Ft             | 2 - 2.5 Ft                   | 4 - 4.5 Fi         | 0 - 0.5 Ft         | 0 - 0.5 Ft                  | 0.5 - 1.5 Ft                | 3.5 - 4 Ft        |
| SAMPLE PURPOSE         |                                  | REG              | REG              | REG               | REG              | FD                                     | FD                          | REG              | REG              | REG              | REG                      | REG                          | REG                | FD                 | REG                         | REG                         | REG               |
| Test Group             | Parameter (Units = mg/kg)        | Result DIL LQ VQ | Result DIL LO VO | Result DIL 1.Q VQ | Result DIL LQ VQ | Result DIL LO VO                       | Result DIL LQ VQ            | Result DIL LQ VQ | Result DiL LO VO | Result DIL LQ VQ | Result DIL LQ VQ         | Result DIL LQ VQ             | Result DIL LQ VQ   | Result DIL LO VO   | Result DIL LQ VQ            | Result DIL LO VO            | Result DIL 1.0 VO |
| SEMIVOLATILES          | Benzo(a)pyrene                   |                  |                  |                   |                  |  | 0.625 1 < U                 |                  | 0.633 1 < U      | 0.575 1 < U      | 0.549 1 < U              | 0.575 1 < U                  | 0.602 1 < U        | 0.41 1 < U         | 02 1 J                      | 0.532 1 < U                 | 0.641 1 < U       |
| SEMIVOLATILES          | Benzo(b)fluoranthene             |                  |                  |                   |                  |  | 1.25 1 < U                  |                  | 1.266 1 < U      | 1.149 1 < U      | 1.099 1 < U              | 1.149 1 < U                  | 1205 1 < 0         | 0.41 1 < U         | 0.43 1 < 0                  | 3,064 1 < 0<br>9,129 1 < 11 | 2554 1 < 11       |
| SEMIVOLATILES          | Benzo(ghi)perylene               |                  |                  |                   |                  |  | 25 1 < U                    |                  | 2.532 1 < U      | 2.299 1 < 0      | 2.198 1 < D              | 2.299 1 < 1                  | 2.41 1 < U         | 0.41 1 < 0         | 0.43 1 2 0                  | 2.126 / CU                  | 1282 1 < U        |
| SEMIVOLATILES          | Benzo(k)fluoranthene             |                  |                  |                   |                  |  | 1.25 1 < 0                  |                  | 1.200 1 K U      | 1.149 1 < 0      | 1.039 1 < 0              | 1.143 1 4 0                  | 1.203 1 1 0        | 21 1 < 1           | 0.45 1 ≤ 0<br>2.1 1 ≤ 10    |                             |                   |
| SEMIVOLATILES          | Benzok Akabal                    |                  |                  |                   |                  |  |                             |                  |                  |                  |                          |                              |                    | 0.41 1 < 1         | 0.43 1 < U                  |                             |                   |
| SEMIVOLATILES          | bis(2-Chinoethoor)methane        |                  |                  |                   |                  |  | 0.625 1 < U                 |                  | 0.633 1 < U      | 0.575 1 < U      | 0.549 1 < U              | 0.575 1 < U                  | 0.602 1 < U        | 0.41 1 < U         | 0.43 1 < U                  | 0.532 1 < U                 | 0.641 1 < U       |
| SEMIVOLATILES          | bis(2-Chloroethyl)ether          |                  |                  |                   |                  |  | 0.625 1 < U                 |                  | 0.633 1 < U      | 0.575 t < U      | 0.549 t < U              | 0.575 1 < U                  | 0.602 1 < U        | 0.41 1 < U         | 0.43 1 < U                  | 0.532 1 < U                 | 0.641 1 < U       |
| SEMIVOLATILES          | bis(2-Chloroisopropyl)ether      |                  |                  |                   |                  |  | 1.25 1 < U                  |                  | 1.266 1 < U      | 1.149 1 < U      | 1.099 t < U              | 1.149 1 < U                  | 1.205 1 < U        | 0.41 1 < U         | 0.43 1 < U                  | 1.064 1 < U                 | 1.282 1 < U       |
| SEMIVOLATILES          | bis(2-Ethylhexyl)phthalate       |                  |                  |                   |                  |  | 0.625 1 < U                 |                  | 0.127 1 J        | 0.575 1 < U      | 0.176 f J                | 0.126 1 J                    | 2.349 1            | 0.41 1 < U         | 0_43 1 < U                  | 0.809 1 3                   | 0.179 1           |
| SEMIVOLATILES          | Butyl benzyl phthalate           |                  |                  |                   |                  |  | 0.625 1 < U                 |                  | 0.633 1 < U      | 0.575 1 < U      | 0.549 t < U              | 0.575 1 < 0                  | 0.602 1 < U        | 0.41 1 < U         | 0.43 1 < U                  | 0.117 1 J                   | 0.641 I < U       |
| SEMIVOLATILES          | Carbazole                        |                  |                  |                   |                  |  | 1.25 1 < U                  |                  | 1.266 1 < U      | 1.149 1 < U      | 1.099 1 < U              | 1,149 1 < 0                  | 1205 1 < 0         | 0.44 ( . 51        | 049 S . B                   | 1.064 I < U                 | 641 1 < 1         |
| SEMIVOLATILES          | Chrysene                         |                  |                  |                   |                  |  | 625 1 < U                   |                  | 5.329 1 < U      | 5./4/ 1 < U      | 5.495 3 < U              | 5./4/ i < U                  | 0.024 I < U        | 0.41 1 < 0         | 0.43 1 < 0                  | 2128 1 4 1                  | 2564 1 < 1        |
| SEMIVOLATILES          | Dibenzo(a,h)anthracene           | 1                |                  |                   |                  |  | 25 1 < 0                    |                  | 2.5.32 I < U     | 2.299 I < U      | 2.196 I < U              | 1140 1 2 1                   | 1205 1 < 11        |                    | 0.43 1 < 1                  | 1.064 1 < U                 | 1.282 1 < U       |
| SEMIVOLATILES          | Dibenzoluran<br>Diatud abitatian |                  |                  |                   |                  |  | 1.25 I < U                  |                  | 1.200 / C U      | 0.575 1 < U      | 0.549 1 < U              | 0.575 1 < U                  | 0.602 1 < U        | 0.41 1 < U         | 0.43 1 < U                  | 0.532 t < U                 | 0.641 1 < U       |
| SEMIVOLATILES          | Dimethyl photolote               |                  |                  |                   |                  |  | 0.625 1 < 1                 |                  | 0.633 1 < 0      | 0.575 1 < U      | 0.549 1 < U              | 0.575 1 < U                  | 0.602 1 < U        | 0.41 1 < U         | 0.43 1 < U                  | 0.532 1 < U                 | 0.641 1 < U       |
| SEMIVOLATILES          | diso-Butyl abthalate             |                  |                  |                   |                  |  | 2.125 1                     |                  | 3.785 1          | 5.586 1          | 7.462 1                  | 5.402 1                      | 2.735 1            | 0.41 1 < U         | 0.43 1 < U                  | 2.362 1                     | 7.423 1           |
| SEMIVOLATILES          | di-n-Octyl phthalate             |                  |                  |                   |                  |  | 0.625 t < U                 |                  | 0.633 1 < U      | 0.575 1 < U      | 0.549 t < U              | 0.575 1 < U                  | 0.602 1 < U        | 0.41 1 < U         | 0.43 1 < U                  | 0.532 1 < U                 | 0.641 1 < U       |
| SEMIVOLATILES          | Fluoranthene                     |                  |                  |                   |                  |  | 0.625 1 < U                 |                  | 0.633 1 < U      | 0.575 1 < U      | 0.549 1 < U              | 0.575 1 < U                  | 0.602 1 < U        | 0.41 1 < U         | 0.43 1 < U                  | 0.532 1 < U                 | 0.641 t < U       |
| SEMIVOLATILES          | Fluorene                         |                  |                  |                   |                  |  | 0.625 1 < U                 |                  | 0.633 1 < U      | 0.575 1 < 1)     | 0.549 1 < U              | 0.575 1 < U                  | 0.602 1 < U        | 10.41 1 < U        | 0.43 t < U                  | 0.532 1 < U                 | 0.641 1 < U       |
| SEMIVOLATILES          | Hexachlorobenzene                |                  |                  |                   |                  |  | 11.25 1 < U                 |                  | 1.266 1 < U      | 1.149 1 < U      | 1.099 t < U              | 1,149 1 < U                  | 1.205 1 < U        | 0.41 1 < U         | 0.43 1 < U                  | 1.064 1 < U                 | 1.282 1 < 0       |
| SEMIVOLATILES          | Hexachlorobutadiene              |                  |                  |                   |                  |  | 3.75 t < U                  |                  | 3.797 1 < U      | 3.448 1 < U      | 3.297 1 < U              | 3.448 1 < 0                  | 3.514 1 < U        | 0.41 1 < 0         | 0.43 3 < U                  | 3.191 1 < U                 | 3.840 I < U       |
| SEMIVOLATILES          | Hexachlorocyclopentaciene        |                  |                  |                   |                  |  | 3.75 1 < 0                  |                  | 3.797 1 < U      | 3.448 1 < 0      | 3.29/ 1 < 0              | 3.448 I < U                  | -3.014 [ < U       | 0.41 1 < 1         | 0.43 1 < 11                 | 1064 1 2 1                  | 1282 1 < 11       |
| SEMIVOLATILES          | Hexachloroethane                 |                  |                  |                   |                  |  | 1.25 ( < 0                  |                  | 1.206 I < U      | 1.149 1 < 0      | 1.099 1 < 0              | 1.149 1 4 1                  | 1205 1 < 1         | 0.41 1 < 1         | 0.3 1 J                     | 1.064 1 < U                 | 1.282 1 < U       |
| SEMIVOLATILES          | Indeno(1,2,3-cd)pyrene           |                  |                  |                   |                  |  | 1.25 1 < 0                  |                  | 0.633 1 < U      | 0.575 1 < U      | 0.549 1 < U              | 0.575 1 < U                  | 0.602 1 < U        | 0.41 1 < U         | 0.43 1 < U                  | 0.532 1 < U                 | 0.641 1 < U       |
| SERVOLATILES           | Nanbhalene                       |                  |                  |                   |                  |  | 0.375 1 < U                 |                  | 0.38 1 < U       | 0.345 1 < U      | 0.33 1 < U               | 0.345 1 < U                  | 0.361 1 < U        | 0.41 1 < U         | 0.43 1 < U                  | 0.319 1 < U                 | 0.385 1 < U       |
| SEMIVOLATILES          | Nitrobenzene                     | 1                |                  |                   |                  |  | 0.625 t < U                 |                  | 0.633 1 < U      | 0.575 1 < U      | 0.549 1 < U              | 0.575 1 < U                  | 0.602 1 < U        | 0.41 1 < U         | 0.43 1 < U                  | 0.532 1 < U                 | 0.641 1 < U       |
| EMIVOLATILES           | n-Nitroso-di-n-propylamine       | 1                |                  |                   |                  |  | 1.25 1 < U                  |                  | 1.266 1 < U      | 1.149 1 < U      | 1.099 1 < U              | 1.149 1 < U                  | 1.205 1 < U        | 0.41 1 < U         | 0.43 1 < U                  | 1.064 1 < U                 | 1.282 1 < U       |
| MIVOLATILES            | n-Nitrosodiphenylamine           |                  |                  |                   |                  |  | 0.625 1 < U                 |                  | 0.633 1 < U      | 0.575 1 < U      | 0.549 1 < U              | 0.575 1 < U                  | 0.602 1 < U        | 0 <u>4</u> 1 1 < U | 0.43 1 < U                  | 0.532 1 < U                 | 0.641 1 < U       |
| SEMIVOLATILES          | Pentachlorophenol                |                  |                  |                   |                  |  | 6.25 1 < U                  |                  | 6.329 1 < U      | 5.747 1 < U      | 5.495 1 < ⊍              | 5.747 1 < U                  | 6.024 1 < U        | 211 < U            | 2.1 1 < 8                   | 5.319 1 < U                 | 0.41 1 < 0        |
| SEMIVOLATILES          | Phenanthrene                     |                  |                  |                   |                  |  | 0.625 1 < U                 |                  | 0.633 1 < U      | 0.575 1 < U      | 0.549 1 < 0              | 0.5/5 1 < 0                  | 0.002 1 < 0        |                    | 0.43 1 < 0                  | 0.532 1 < 0                 | 0.641 1 < U       |
| SEMIVOLATILES          | Phenoi                           | 1                |                  |                   |                  |  | 0.625 1 < 0                 |                  | 0.533 1 < U      | 0.575 1 < 0      | 0.549 1 < 0              | 0.575 1 < 13                 |                    | 0.41 1 < 1         | 0.43 1 < 1                  | 0.532 1 < U                 | 0.641 1 < 1       |
| SEMIVOLATILES          | Pyrene                           |                  |                  |                   |                  |  | 9.023 I K U                 |                  | 0.000 1 4 0      | 0.313 1 4 0      |                          |                              |                    | 0.012 1 < U        | 0.013 1 < U                 |                             |                   |
| VOLATILES<br>VOLATILES | 1.1.1.Trichlomethane             |                  |                  |                   |                  |  | 0.006 1 < U                 | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0. <del>0</del> 06 t < U | 0.006 1 < 1                  | 0.006 1 < U        | 0.006 1 < U        | 0.006 1 < U                 | 0.005 1 < U                 | 0.006 1 < U       |
| VOLATILES              | 1.1.2.2-Tetrachkoroethane        |                  |                  |                   |                  |  | 0.006 1 < U                 | 0.006 1 < U      | 0.006 t < U      | 0.006 1 < U      | 0.006 1 < U              | 0.096 1 < U                  | 0.006 1 < U        | 0.006 1 < U        | 0.006 1 < U                 | 0.005 1 < U                 | 0.006 t < U       |
| VOLATILES              | 1,1,2-Trichlosoethane            |                  |                  |                   |                  |  | 0.006 1 < U                 | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U              | 0.006 1 < U                  | 0.006 1 < U        | 0.006 1 < U        | 0.006 1 < U                 | 0.005 1 < U                 | 0.006 t < U       |
| <b>VOLATILES</b>       | 1,1-Dichloroethane               |                  |                  |                   |                  |  | 0.006 1 < U                 | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 t < U              | 0.006 1 < U                  | 0.006 1 < U        | 0.006 1 < U        | 0.006 1 < U                 | 0.005 1 < U                 | 0.006 1 < U       |
| VOLATILES              | 1,1-Dichloroethene               |                  |                  |                   |                  |  | 0.006 1 < U                 | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U              | 0.006 1 < U                  | 0.006 1 < U        | 0.006 t < U        | 0.006 1 < U                 | 0.005 1 < U                 | 0.006 1 < U       |
| VOLATILES              | 1,2,3-Tricbloropropane           |                  |                  |                   |                  | •                                      |                             |                  |                  |                  |                          |                              |                    | 0.025 1 < 0        | 0.026 1 < 1                 |                             |                   |
| VOLATILES              | 1,2-Dibromo-3-chloropropane      |                  |                  |                   |                  |  |                             |                  |                  |                  |                          |                              |                    | 0.025 1 < 0        | 0.020 1 < 0<br>0.026 1 < 11 |                             |                   |
| VOLATILES              | 1,2-Dibromoethane                |                  |                  |                   |                  |  | 0.006 1 < 11                | 0.006 1 < 11     | 0.006 t < 11     | 0.006 1 c 1      | 0.006 1 c ti             | 0.006 1 < U                  | 01006 1 < U        | 0.006 1 < U        | 0.006 1 < 0                 | 0.005 1 < U                 | 0.006 1 < U       |
| VOLATILES<br>VOLATILES | 1,2-Dichloraethane               |                  |                  |                   |                  |  | 0.000 1 < 0                 | 0.005 1 < 0      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U              | 0.006 1 < U                  | 9.006 1 < U        | 0.006 1 < U        | 0.006 1 < U                 | 0.005 1 < U                 | 0.006 1 < U       |
| VOLATILES              | 1.2-Dichlomorenape               |                  |                  |                   |                  |  | 0.006 1 < U                 | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U              | 0.006 1 < U                  | 0.006 1 < U        | 0.006 t < U        | 0.006 1 < U                 | 0.005 1 < U                 | 0.006 1 < U       |
| VOLATILES              | 2-Butanone                       |                  |                  |                   |                  |  | 0.12 1 < U                  | 0.12 1 < U       | 0.12 1 < U       | 0.12 1 < U       | 0.11 1 < ⊍               | -0.063 1 < U                 | 0.12 1 < U         | 0.012 1 < U        | 0.013 1 < U                 | 0.11 1 < U                  | 0.13 1 < U        |
| VOLATILES              | 2-Chloroethyl vinyi ether        |                  |                  |                   |                  |  |                             |                  |                  |                  |                          |                              |                    | 0.012 1 < U        | 0.013 1 < U                 |                             |                   |
| VOLATILES              | 2-Hexanone                       |                  |                  |                   |                  |  | 0.062 1 < U                 | 0.061 1 < U      | 0.061 1 < U      | 0.062 1 < U      | 0.056 1 < U              | 0.063 1 < U                  | 0.058 1 < U        | 0.012 1 < U        | 0.013 1 < U                 | 0.053 1 < U                 | 0.063 1 < U       |
| VOLATILES              | 2-Propenal                       | 1                |                  |                   |                  |  |                             |                  |                  |                  |                          |                              |                    | 0.62 1 < 0         | 0.64 1 < U                  |                             | 0.40 T . II       |
| VOLATILES              | Acetone                          |                  |                  |                   |                  |  | 0.12 1 < U                  | 0.12 1 < U       | 0.12 1 < U       | 0.12 1 < U       | 0.11 1 < 0               | 0.032 1 < U                  | $0.12 \ 1 \ < \ 0$ | 0.012 1 < 0        | 0.013 1 < 0                 | 0.13 1 < 0                  | 0.43 1 4 0        |
| VOLATILES              | Acetonitrile                     |                  |                  |                   |                  |  |                             |                  |                  |                  |                          |                              |                    | 0.12 1 < 0         | 013 1 < 11                  |                             |                   |
| VOLATILES              | Acrylonitrie                     |                  |                  |                   |                  |  |                             |                  |                  |                  |                          |                              |                    | 0.012 1 < U        | 0.013 t < U                 |                             |                   |
| VOLATILES              | Allyl chlonde                    |                  |                  |                   |                  |  | 0.006 1 < U                 | 0.006 1 < U      | 0.006 1 < 11     | 0.006 1 < U      | 0.006 1 < U              | 0.006 1 < ⊎                  | 0.006 t < U        | 0.006 1 < U        | 0.006 1 < U                 | 0.005 1 < U                 | 0.006 1 < U       |
| VOLATILES              | Bramodichloromethane             |                  |                  |                   |                  | · · ·                                  | -0.005 1 < U                | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U              | 0.006 1 < U                  | 0.006 1 < U        | 0.006 1 < U        | 0.006 1 < U                 | 0.005 1 < U                 | 0.006 1 < U       |
| VOLATILES<br>VOLATILES | Bramoform                        |                  |                  |                   |                  |  | 0.006 t < U                 | 0.006 1 < U      | 0.006 1 < U      | 0.006 t < U      | 0.006 1 < U              | 0.006 1 < U                  | 0.006 1 < U        | 0.006 1 < U        | 0.006 1 < U                 | 0.005 1 < U                 | 0.006 1 < U       |
| VOLATILES              | Bromomethane                     |                  |                  |                   |                  |  | 0.006 1 < U                 | 0.006 1 < U      | 0.006 t < U      | 0.006 1 < U      | 0.006 1 < U              | 5…032 1 < U                  | 0.006 1 < U        | 0.012 1 < U        | 0.013 1 < U                 | 0.005 1 < U                 | 0.006 1 < U       |
| VOLATILES              | Carbon disulfide                 |                  |                  |                   |                  |  | 0.006 t < U                 | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U              | 0.006 1 < U                  | 0.006 t < U        | 0.006 1 < U        | 0.006 1 < U                 | 0.006 1 < U                 | 0.006 1 < U       |
| VOLATILES              | Carbon tetrachloride             |                  |                  |                   |                  |  | 0.006 1 < U                 | 0.006 1 < V      | 0.006 \$ < U     | 0.006 1 < U      | 0.006 t < U              | 0.006 1 < U                  | 0.006 t < U        | 0.006 1 < U        | 0.006 1 < U                 | 0.005 1 < U                 | 0.006 1 < 0       |
| VOLATILES              | Chlorobenzene                    |                  |                  |                   |                  |  | 0.006 1 < U                 | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U              | 0.006 1 < U                  | 0.006 t < U        | 0.006 1 < 0        | 0.006 1 < U                 | 0.005 1 < U                 | 0.006 1 < 0       |
| VOLATILES              | Chloroethane                     | ļ                |                  |                   |                  |  | 0.006 1 < U                 | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U              | 0.032 1 < U                  | U > 7 000.0        | 0.012 1 < 0        | 10,006 1 < 11               | 0.005 1 < U<br>0.005 1 ∞ U  | 0.000 1 < 0       |
| VOLATILES              | Chloroform                       |                  |                  |                   |                  |  | 0.006 1 < U                 | 0.006 1 < U      | 0.006 1 < 0      | 0.006 1 < U      | 0.006 1 < U              | 0.000 I < 17<br>0.009 1 - 11 | U > I 4000.0       | 0.000 1 < 0        | 0.013 1 - 17                | 0.005 1 < 1                 | 0.006 1 < 1       |
| OLATILES               | Chloromethane                    |                  |                  |                   |                  |  | 0.0000 t < U                | 0.000 I < 0      | 0.000 1 < 0      | 0.000 1 < 0      | 0.000 i < 0              |                              | V.VVU I X U        | 0.12 1 < 1         | 0.13 1 < 0                  |                             |                   |
| AriLES                 | choroprene                       |                  |                  |                   |                  |  | 0.006 1 < 1                 | 0.006 1 < H      | 0.006 1 < H      | 0.006 1 < U      | 0.006 1 < U              | 0.006 1 < U                  | 0.006 1 < U        | 0.006 1 < U        | 0.006 1 < 0                 | 0.005 1 < U                 | 0.006 1 < U       |
|                        | Dihramochloromethace             | t                |                  |                   |                  |  | 0.006 1 < U                 | 0.006 t < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U              | 0.006 1 < U                  | 0.006 1 < U        | 0.006 1 < U        | 0.006 1 < U                 | 0.005 t < U                 | 0.006 t < U       |
| VOLGILLED              | Dibromomethane                   | ·                |                  |                   |                  |  |                             |                  | -                | _                |                          |                              |                    | 0.025 1 < U        | 0.026 1 < U                 |                             |                   |
|                        |                                  | 4                |                  |                   |                  |  |                             |                  |                  |                  |                          |                              |                    |                    |                             |                             |                   |

Shaw Environmental, Inc.

Table 3-95 Concentrations of Chemicals in Soil Samples Associated with Sump 107

| [SUMP] = SUMP107 |                             |                   |                   |                   |                   |                      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|------------------|-----------------------------|-------------------|-------------------|-------------------|-------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| CATION _CODE     |                             | 35SUMP107-SB01    | 35SUMP107-SB01    | 35SUMP107-SB02    | 35SUMP107-SB02    | 35SUMP107-SB02       | LH-S107-01       | LH-S107-01       | LH-St07-01       | LH-S107-01       | LH-S108-01       | LH-S108-01       | LH-S108-01       | LHS-2-14         | LHS-2-14         | 1H-WHS16-01      | LH-WHS16-01      |
| AMPLE_NO         |                             | 35-SMP107-SB01-01 | 35-SMP107-SB01-02 | 35-SMP107-S802-01 | 35-SMP107-SB02-02 | 35-SMP107-SB02-02-QC | LH-S107-01 QC    | LH-S107-01_1     | LH-\$107-01_2    | LH-S107-01_3     | LH-S108-01_1     | LH-S108-01_2     | LH-\$108-01_3    | LHS-2-14 QC      | LHS-2-14         | LH-WRS16-01_1    | UH-WHS16-01_2    |
| SAMPLE_DATE      |                             | 9/14/2006         | 9/14/2006         | 9/14/2006         | 9/14/2006         | 9/14/2005            | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        | 1/11/1995        | 1/11/1995        | 6/26/1993        | 6/26/1993        |
| DEPTH            |                             | 0.5 - 0.5 Ft      | 3 - 3 Ft          | 0.5 - 0.5 Ft      | 3-3 Ft            | 3-3Ft                | 0.5 - 1.5 Ft     | 0.5 - 1.5 Ft     | 1 - 1.5 Ft       | 2-25 Ft          | 0.5 - 1.5 Ft     | 2 - 2.5 Ft       | 4 - 4.5 Ft       | 0 - 0.5 Ft       | 0 - 0.5 Ft       | 0.5 - 1.5 Ft     | 3.5 - 4 Ft       |
| SAMPLE_PURPOSE   |                             | REG               | REG               | REG               | REG               | FD                   | FD               | REG              | REG              | REG              | REG              | REG              | REG              | FD               | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LO VQ  | Result DIL LQ VQ  | Result DIL LQ VQ     | Result DIL LO VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VO | Result DIL LQ VQ |
| VOLATILES        | Dichlorodifluoromethane     |                   |                   |                   |                   |                      |                  |                  |                  |                  |                  |                  |                  | 0.025 1 < U      | 0.026 1 < U      |                  |                  |
| VOLATILES        | Ethyl methacrylate          |                   |                   |                   |                   |                      |                  |                  |                  |                  |                  |                  |                  | 0.025 1 < U      | 0.026 1 < U      |                  |                  |
| VOLATILES        | Étbylbenzene                |                   |                   |                   |                   |                      | D.006 1 < U      | 0_006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.006 1 < 0      |
| VOLATILES        | IODOMETHANE                 |                   |                   |                   |                   |                      |                  |                  |                  |                  |                  |                  |                  | 0.012 1 < U      | 0.013 1 < 0      |                  |                  |
| VOLATILES        | ISOBUTYL ALCOHOL            |                   |                   |                   |                   |                      |                  |                  |                  |                  |                  |                  |                  | 2.5 1 < U        | 2.6 1 < U        |                  |                  |
| VOLATILES        | Methacrylonitrile           |                   |                   |                   |                   |                      |                  |                  |                  |                  |                  |                  |                  | 0.025 1 < U      | 0.026 1 < €      |                  |                  |
| VOLATILES        | Methyl isobutyl ketone      |                   |                   |                   |                   |                      | 0.062 1 < U      | 0.061 1 < U      | 0.061 1 < U      | 0.062 1 < U      | 0.056 1 < U      | 0.063 1 < U      | 0.058 1 < U      | 0.012 1 < U      | 0.013 1 < U      | 0.053 1 < U      | 0.063 1 < 0      |
| VOLATILES        | METHYL METHACRYLATE         |                   |                   |                   |                   |                      |                  |                  |                  |                  |                  |                  |                  | 0.025 1 < U      | 0.026 1 < U      |                  |                  |
| VOLATILES        | Methylene chloride          |                   |                   |                   |                   |                      | U > 1 200.0      | 0.006 t < 1/     | 0.006 1 < U      | 0.006 1 < U      | 0.0046 1 < U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.006 1 < ป      |
| VOLATILES        | Pentachloroethane           |                   |                   |                   |                   |                      |                  |                  |                  |                  |                  |                  |                  | 0.025 1 < U      | 0.026 1 < U      |                  |                  |
| VOLATILES        | Propionitrile               |                   |                   |                   |                   |                      |                  |                  |                  |                  |                  |                  |                  | 0.062 1 < U      | 0.064 1 < U      |                  |                  |
| VOLATILES        | Styrene                     |                   |                   |                   |                   |                      | 0.006 1 < U      | -0.006 1 < U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 9.005 1 < Ù      | 0.006 1 < U      | 0.005 1 < U      | 0.006 1 < U      |
| VOLATILES        | Tetrachioroethene           |                   |                   |                   |                   |                      | 0.006 1 < U      | 0.006 t < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 t < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.006 1 < U      |
| VOLATILES        | Toluene                     |                   |                   |                   |                   |                      | 9.006 t < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < Ŭ      | 0.005 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.006 1 < U      |
| VOLATILES        | trans-1,3-Dichloropropene   |                   |                   |                   |                   |                      | 0.006 1 < U      | 0.006 1 < U      | €0.006 1 < U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | trans-1,4-Dichloro-2-butene |                   |                   |                   |                   |                      |                  |                  |                  |                  |                  |                  |                  | 0.025 1 < U      | 0.026 1 < U      |                  |                  |
| VOLATILES        | Trichloroethene             |                   |                   |                   |                   |                      | 0.006 t < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | -0.005 t < U     |
| VOLATILES        | Trichlorofluoromethane      |                   |                   |                   |                   |                      |                  |                  |                  |                  |                  |                  |                  | 0.012 1 < U      | 0.013 1 < U      |                  |                  |
| VOLATILES        | Vinyl acetate               |                   |                   |                   |                   |                      |                  |                  |                  |                  |                  |                  |                  | 0.012 1 < U      | 0.013 1 < U      |                  |                  |
| VOLATILES        | Vinyl chloride              |                   |                   |                   |                   |                      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.032 1 < U      | 0.006 1 < U      | 0.012 1 < U      | 0.013 1 < U      | 0.005 t < U      | 0.005 t < U      |
| VOLATILES        | Xylenes, Total              |                   |                   |                   |                   |                      | 0.006 1 < U      | 0,006 1 < ⊍      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.006 1 < U      |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

## Table 3-96 Concentrations of Chemicals in Soil Samples Associated with Sump 108

|                  |                             |                   |                   |                   |                   | Concentra             | ations of Chemic | cais in oon oam  | ipies Associates        | u waa Sump iyo   | •                |                  |                  |                  |                    |                       |                 |
|------------------|-----------------------------|-------------------|-------------------|-------------------|-------------------|-----------------------|------------------|------------------|-------------------------|------------------|------------------|------------------|------------------|------------------|--------------------|-----------------------|-----------------|
| (SUMP) = SUMP108 |                             | 0000 ID107 CD01   | 25 CHIND 107 CDA1 | 25C11107.5802     | 35511102107-5802  | 35SHMP107-SR02        | 18-\$107-01      | 1H-S107-01       | (H-S107-01              | LH-S107-01       | LH-S108-01       | LH-S108-01       | LH-S108-01       | LHS-2-14         | LHS-2-14           | LH-WRS16-01           | LH-WRS16-01     |
| LOCATION _CODE   |                             | 35SOMP107-SB01    | 3550MP107-5891    | 355UMP107-5002    | 333UMP 101-3002   | 3330MF 107-3902       | 10 5107 01 00    | 14 6107 01 1     | 14-\$107-01 2           | H-S107-01 3      | 18-5108-01 1     | 18-5108-01 2     | 18-5108-01 3     | LHS-2-14 QC      | LHS-2-14           | LH-WRS16-01_1         | LH-WRS16-01_2   |
| SAMPLE_NO        |                             | 35-SMP107-SB01-01 | 35-SMPT07-SB01-02 | 35-SMP107-SB02-01 | 35-5MP107-5B02-02 | 13-SMP 10/-SD02-02-00 | 00740146         | LIP-010/-01_1    | EIPO107-01_2            | E/06/4003        | 6/26/1003        | 6/26/1003        | 6/26/1993        | 1/11/1995        | 1/11/1995          | 6/26/1993             | 6/26/1993       |
| SAMPLE_DATE      |                             | 9/14/2006         | 9/14/2006         | 9/14/2006         | 9/14/2006         | 9/14/2006             | 6/26/1993        | 0/20/1993        | 0/20/1993               | 0/20/1955        | 0201555          | 2 26 54          | 4.465            | 0-05 Et          | 0-05E              | 05-15Ft               | 35-4 Ft         |
| DEPTH            |                             | 0.5 - 0.5 Ft      | 3-3Ft             | 0.5 - 0.5 Ft      | 3-3Ft             | 3-3Ft                 | 0.5 - 1.5 Ft     | 0.5 - 1.5 Ft     | 1-1.5 1                 | 2-2.5 H          | 0.5-1.5 Ft       | 2-2.5 FL         | 4-4.5 FL         | 0-0.011<br>CTN   | DEC                | BEC                   | BEG             |
| SAMPLE_PURPOSE   |                             | REG               | REG               | REG               | REG               | FD                    | FD               | REG              | REG                     | REG              | REG              | REG              | HEG              | FU               |                    |                       | Result DE 10 VO |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LO VO  | Result DIL LO VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ      | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ        | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Hesuit Dil LQ VQ | Hesust DIL LO VO | HESUIG DIL LO VO   | RESULTED TO THE       | RESULTEL LO VO  |
| EXPLOSIVES       | 1.3.5-Trinitrobenzene       | 0.243 1 U         | 0.245 1 U         | 0.239 1 U         | 0.242 1 U         | 0.245 1 U             |                  |                  |                         |                  |                  |                  |                  | 0.23 1 < 0       | $0.24 \ 1 \ < \ 0$ |                       |                 |
| EXPLOSIVES       | 1.3-Dinitrohenzene          | 0.243 1 U         | 0.245 1 U         | 0.239 1 U         | 0.242 1 1         | 0.245 1 U             |                  |                  |                         |                  |                  |                  |                  | 0.23 1 < 0       | 0.24 1 < U         |                       |                 |
| EXPLOSIVES       | 2.4.6-Trinitrotokiepe       | 0.243 1 11        | 0.245 1 U         | 0.239 1 U         | 0,242 1 U         | 0.245 1 U             |                  |                  |                         |                  |                  |                  |                  | 0.23 1 < U       | 0.24 1 < U         |                       |                 |
| EXPLOSIVED       | 2.4 Disibataturan           | 0.243 1 18        | 0.245 1 1         | 0.239 1 11        | 0.242 1 11        | 0.245 1 U             | 1.25 1 < U       |                  | 1.266 1 < U             | 1.149 1 < U      | 1.099 1 < U      | 1.149 1 < U      | 1.205 1 < U      | 0.23 1 < U       | 0.24 1 < U         | 1.064 1 < U           | 1.282 1 < Ŭ     |
| EXPLUSIVES       |                             | 0240 1 0          | 0.245 1 1         | 0.240 1 11        | 0.251 1 1         | 0.255 1 11            | 125 1 < 11       |                  | 1.266 1 < U             | 1.149 1 < U      | 1.099 1 < U      | 1.149 1 < U      | 1.205 1 < U      | 0.25 1 < U       | 0.25 1 < U         | 1.064 1 < Ü           | 1.282 1 < U     |
| EXPLUSIVES       | 2,b-Dinimotoluene           | 0.252 1 0         | 0.235 1 0         | 0.249 1 0         | 0.251 1 0         | 0.255 1 1             | 125 1 4 0        |                  |                         |                  |                  |                  |                  |                  |                    |                       |                 |
| EXPLOSIVES       | 2-Amino-4,6-dimitrototuene  | 0.252 1 0         | 0.255 1 0         | 0.249 1 0         |                   | 0.200 1 0             |                  |                  |                         |                  |                  |                  |                  | 049 1 < U        | 0.49 1 < U         |                       |                 |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotokuene  | 0.252 1 U         | 0.255 1 U         | 0.249 1 U         | 0.251 1 0         | 0.255 1 0             |                  |                  |                         |                  |                  |                  |                  | 21 1 2 1         | 9 1                |                       |                 |
| EXPLOSIVES       | HMX                         | 2.14 1 U          | 2.16 1 U          | 2.11 1 U          | 2.13 1 U          | 2.16 1 U              |                  |                  |                         |                  |                  |                  |                  |                  | 009 1 2 11         |                       |                 |
| EXPLOSIVES       | m-Nitrotoluene              | 0.243 1 U         | 0.245 1 U         | 0.239 1 U         | 0.242 t U         | 0.245 1 U             |                  |                  |                         |                  |                  |                  |                  | 0.98 1 < 0       | 0.96 1 < 0         |                       |                 |
| EXPLOSIVES       | Nitrobenzene                | 0.252 1 U         | 0.255 1 U         | 0.249 1 U         | 0.251 1 U         | 0.255 1 U             |                  |                  |                         |                  |                  |                  |                  | 0.25 1 < 0       | €0.25 I < U        |                       |                 |
| EXPLOSIVES       | o-Nitrotoluene              | 0.243 1 U         | 0.245 1 U         | 0.239 1 U         | 0.242 1 U         | 0.245 1 U             |                  |                  |                         |                  |                  |                  |                  | 0.98 1 < 0       | 0.98 1 < 0         |                       |                 |
| EXDI OSIVES      | n-Mitrotoluono              | 0.243 1 11        | 0.245 1 11        | 0239 1 1          | 2.92              | 0.245 1 U             |                  |                  |                         |                  |                  |                  |                  | 2.9 1 < ∜        | 2.9 1 < U          |                       |                 |
| EXPLOSIVES       | p-Millotoliseste            | 0.276 1 14        | 0.02 1 11         | 8.057 1 H         | 1 1 330.0         | 0.98 1 11             |                  |                  |                         |                  |                  |                  |                  | 1.1 1 < U        | 1.1 1 < U          |                       |                 |
| EXPLOSIVES       | HUX                         | 0.971 1 0         | 0.90 1 0          | 0.000 1 ()        | 0.500 1 0         | 0.577 1 11            |                  |                  |                         |                  |                  |                  |                  | 0.72 1 < U       | 0.73 1 < U         |                       |                 |
| EXPLOSIVES       | letryl                      | 9.631 1 0         | 0.637 1 0         | 0.022 1 0         | 0.020 1 0         | 0.037 1 0             |                  | 10000            | 11100 1                 | 4700 1           | 4030-1           | 5540 1           | 16800 1          | 5360 1           | 3620 1             | 2200 1                | 1830 t          |
| METALS           | Atumiaum                    | 5690 1            | 4900 1            | 7690 1            | 10100 1           | 8460 1                | 1/100 1          | 15000 1          | 1100 1                  | 4700 1           | 500 1 . JI       | 1 1 0 00         | 166 1 - 1        | 97 1 411         | 126 1 2 11         | 474 t c 1             | 556 t < U       |
| METALS           | Antimony                    | 0.108 1 U         | 0.106 1 U         | 0.0739 1 J J      | 0.108 1 U         | 0.112 1 U             | 4.56 1 < 0       | 3.2  1 < 0       | 5.56 1 < 0              | 3.62 1 < 0       | 520 1 < 0        | 3.6 1 < 0        | 4.30 1 < 0       | 3.7 1 < 0.7      | 15 1 5             | 0001 1 E              | 0778 t E        |
| METALS           | Arsenic                     | 0.917 1           | 0.376 1           | 1.04 1            | 0.948 1           | 0.532 1               | 3.53 1           | 1.3 1            | 2.42 1                  | 1,43 1           | 2.45 1           | 1./5 1           | 4.20             | 1.5 1 3          | 2.2 1 7            |                       |                 |
| METALS           | Banium                      | 59.6 1 J          | 37 1 J            | 111 1 J           | 86.1 1 J          | 216 1 J               | 98.9 1 < U       | 91.6 1 < U       | 62.5 1 < U              | 34.2 1 < U       | 29.7 1 < U       | 28.9 1 < U       | 52.2 t < 0       | 37.1 1           | 37.3 1             | 10.01 F < U           | 0.05 1 < 0      |
| METALS           | Bervläum                    | 0.306 1 J J       | 0.324 1 J J       | 0.349 1 J J       | 0.809 1           | 1.23 1                |                  |                  |                         |                  |                  |                  |                  |                  |                    |                       |                 |
| METALS           | Cadmium                     | 0107 1 4          | 0.0625 1 .1 .1    | 0.451 1           | 0.0898 1 J J      | 6.163 1 J J           | 6.05 1 < U       | 5.06 1 < U       | 4.84 1 < U              | 2.64 1 < U       | 3.73 1 < U       | 2.7 1 < U        | 6.22 1 < U       | 0.97 1 < U       | 1.3 t < U          | 2.11 1 < U            | 2.28 1 < U      |
| METALO           | Calainer                    | 0.137 1 0 0       | 426 1             | 1900 1            | 1080 1            | 1140 1                | 2360 1           | 2250 1           | 1690 1                  | 650 1            | 478 1            | 522 1            | 678 1            | 365 1            | 445 1              | 483 1                 | 396 1           |
| METALS           | Calcium                     | 904 1             | 420 1             | 14.1 1            | 12 1              | 123 1                 | 23 1             | 175 1            | 167 1                   | 10.8 1           | 11.6 1           | 13.8 1           | 15.2 1           | 8.7 1 J          | 8 1                | 5.78 1                | 5.03 1          |
| METALS           | Chromium                    | 10.5              | 13.2 1            | 14.1 1            | 13 1              | 10.1 1                | 542 1            | 10.0             | 2.61 1                  | 154 1            | 187 1            | 19 1             | 44 1             | 1.9 1 < U        | 2.5 1 < U          | 0.356 1 E             | 0.361 1 E       |
| METALS           | Cobalt                      | 3.49 1            | 1.94 1            | 3.09 1            | 5.69 1            | 0.04                  | 5.10             | 3.02 1           | 2.57 1 . 11             | 200 1 4 11       | 202 1 / 1        | 217 1 2 11       | 3 95 1 2 11      | 19 1             | 3 1                | 3.2 1 < U             | 2.75 1 < U      |
| METALS           | Copper                      | 3.66 1            | 1.22 1            | 7.59 1            | 2.13 1            | 1.44 1                | 4.38   < 0       | 4./5 / < 0       | 3.53 1 4 0              | . 320 1 4 0      | 61000 1          | 0200 1           | 2000 1           | 9190 1           | 9610 1             | 6400 1                | 6010 1          |
| METALS           | tron                        | 10500 1 J         | 10800 1 J         | 11200 1           | 11300 1 J         | 21900 1               | 22500 1          | 17000 1          | 17200 1                 | /6/0 1           |                  | 5/60 1           | 22000 1          | 70 1             | 00 1               | 711 1 < 11            | 894 1 2 11      |
| METALS           | Lead                        | 23.3 1            | 34.3 1            | 27.4 1 J          | 8.22 1            | 6.79 1 J              | 28.5 1           | 25.6 1           | 21.4 1                  | 11.6 1           | 102 1 E          | 11.5 1           | 20.4             | 1.3              | 0.9 1              |                       | 300 1           |
| METALS           | Magnesium                   | 412 1             | 412 1             | 856 1             | 938 1             | 829 1                 | 1200 1           | 1200 1           | 611 1                   | 287 1            | 340 1            | 343 1            | 863 1            | 500 1            | 449 1              | 134 1                 | 12.3 1          |
| METALS           | Manganese                   | 183 1 J           | 53.2 1 J          | 126 1 J           | 96 1 J            | 480 1 J               | 32.2 1           | 40 1             | 77.3 1                  | 27.7 1           | 32.9 1           | 16.9 1           | 13 1             | 51.1 1           | 60.5 1             | 5.9/ 1                | 4.14            |
| METALS           | Marcuny                     | 0.017 1.1.1       | 0.0217 1 J J      | 0.0342 1 J J      | 0.0145 1 J J      | 0.0144 1 J J          | 0.059 t < U      | 0.054 1 < U      | 0.05 <del>9</del> 1 < U | 0.049 1 < U      | 0.049 1 < U      | 0.047 1 < U      | 0.054 1 < U      | 0.1 1 < 1        | 0.086 1 < U        | 0.045 1 < U           | 0.061 1 < 0     |
| METALO           | Microaly                    | 291 1             | 359 1             | 59 1              | 615 1             | 5.79 1                |                  |                  |                         |                  |                  |                  |                  |                  |                    |                       |                 |
| MERALO           | Recker                      | 100 1             | 147 1             | 059 t             | 251 1             | 184 1                 | 334 1            | 318 1            | 326 1                   | 224 1            | 251 1            | 276 1            | 515 1            | 236 1            | 252 1 < U          | 138 1                 | 128 1           |
| METALS           | Potassium                   | 100 1             | 147 1             | 230 1             | 1 242             | 0100 1 5 1            | 8.456 1 c II     | 612 1 1          | 0.556 1 < 1             | 0.724 1          | 0.526 1 < U      | 0.38 1 < U       | 0,456 1 < U      | 0.51 I J         | 0.56 1             | 0.474 1 < U           | 0.556 1 < U     |
| METALS           | Selenium                    | 0.224 1           | 0.213 1 0         | 0.319 1           | 0.342             | 0.198 L J J           | 0.400 1 0        | 0.02 1 1 0       | 0.000 1 < 0             | 0.02 1 < 11      | D/026 1 < U      | 0.027 1 < 1      | D(023 1 < ∐      | 0.97 1 < U       | 13 1 < U           | 0.024 1 < U           | 0.028 1 < U     |
| METALS           | Silver                      | 1.52 1 U          | 1.61 1 U          | 1.63 1 0          | 1.56 1 0          | 1.56 1 0              | 0.023 I C U      |                  | 0.020 1 1 0             | 0.02 / 1 / 0     | 0.020 1 4 0      | 0.02.            | ••••             |                  |                    |                       |                 |
| METALS           | Sodium                      | 51.9 1            | 76.1 1            | 35.8 1            | 66.8 1            | 59.5 1                |                  |                  |                         |                  | c 700 4 11       | 7.00 1 . 13      | 127 1 4 11       | 67 1 d lt        | 125 1 4 11         | 36 1 / 11             | 277 1 < 1       |
| METALS           | Strontium                   |                   |                   |                   |                   |                       | 18.1 1 < U       | 17.8 1 < U       | 10.6 1 < 0              | 4.83 3 < 0       | 5./3 1 < 0       | 1.33 I < U       | 10.7 F K U       | 3.7 1 X U        | 67 1 4 1           | 0.0 1 4 0             |                 |
| METALS           | Thallium                    | 0.0347 1          | 0.0273 1          | 0.0345 1          | 0.0406 1          | 0.0431 1              |                  |                  |                         |                  |                  |                  |                  | 48.4 I < U       | 00 I. < U          |                       |                 |
| METALS           | Vanadium                    | 18.7 1            | 19.9 1            | 20.4 1            | 22.6 1            | 30.3 1                |                  |                  |                         |                  |                  |                  |                  |                  |                    |                       |                 |
| METALS           | Zinc                        | 29.8 1            | 11.6 1            | 132 1             | 13.5 1            | 14.2 1                | 82 1             | 21.9 1           | 17.3 1                  | 23.4 1           | 13.3 1           | 10 1             | 21 1             | 12.4 1           | 11.6 1             | 7.87 1                | 9.84            |
| SEMIVOLATILES    | 1.2.4-Trichlorobenzene      |                   |                   |                   |                   |                       | 1.25 î < U       |                  | 1.266 1 < U             | 1.149 1 < U      | 1.099 1 < U      | 1.149 1 < U      | 1.205 1 < 0      | 0.41 1 < 0       | 0.43 1 < 0         | 1.064 1 < 0           | 1.282 1 < 0     |
| SEMIVOLATILES    | 1.2-Dichlombenzene          |                   |                   |                   |                   |                       | 1.25 ŧ < U       |                  | 1.266 1 < U             | 1.149 1 < U      | 1.099 1 < Ü      | 1.149 1 < U      | 1.205 1 < U      | 0.41 1 < U       | 0.43 1 < 0         | 1.064 1 < U           | 1.282 1 < 0     |
| SCHINGLATTI ES   | 1.2 Dichlorobanzana         |                   |                   |                   |                   |                       | 1.25 1 < U       |                  | 1.266 1 < U             | 1.149 1 < U      | 1.099 1 < U      | 1.149 1 < U      | 1.205 1 < U      | 0.41 1 < U       | 0.43 1 < U         | 1.064 1 < U           | 1.282 1 < U     |
| OTAINOLATILLO    |                             |                   |                   |                   |                   |                       | 125 1 2 11       |                  | 1266 1 < U              | 1,149 1 < U      | 1.099 1 < U      | 1.149 1 < U      | 1.205 1 < U      | 0.41 t < U       | 0.43 1 < U         | 1.064 1 < U           | 1…282 1 < U     |
| SEMIVOLATILES    | 1,4-Dichloroberizene        |                   |                   |                   |                   |                       | 195 1 4 1        |                  | 1266 1 c (J             | 1149 t < §       | 1.099 1 < U      | 1,149 1 < U      | 1.205 1 < U      | 2.1 1 < U        | 2.1 1 < U          | 1.064 1 < U           | 1.282 1 < U     |
| SEMIVOLABLES     | 2,4,5- Inchiorophenot       |                   |                   |                   |                   |                       | 1.2.5 1          |                  | 1256 1 4 1              | 11/0 1 - 11      | 1009 1 < 11      | 1149 1 < H       | 1205 1 < U       | 0.41 1 < U       | 0.43 1 < 0         | 1.064 1 < U           | 1.282 1 < U     |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol       |                   |                   |                   |                   |                       | 120 1 4 0        |                  | 1200 1 4 0              | 1140 1 < 1       | 1000 1 < 1       | 1149 1 2 13      | 1205 1 < 11      | 041 1 < U        | 0.43 1 < U         | 1.064 1 < 0           | 1.282 1 < U     |
| SEMIVOLATILES    | 2,4-Dichloropheno?          |                   |                   |                   |                   |                       | 1.25 1 < 0       |                  | 1200 1 < 0              |                  | 0.640 1 4 11     | 0.575 1 2 1      | 0.602 1 4 11     | 041 1 < 0        | 0.43 1 c 11        | 0532 1 < U            | 0.641 1 < U     |
| SEMIVOLATILES    | 2,4-Dimethylphenol          |                   |                   |                   |                   |                       | 0.625 1 < 0      |                  | 0.633 T < U             | 0.5/5 1 < 0      | 8.549 I < U      | 0.575 1 4 6      | 10.000 1 1 1     |                  | 21 1 4 1           | 10.639 1 - 1          | 12,821 1 / 11   |
| SEMIVOLATILES    | 2,4-Dinitrophenol           |                   |                   |                   |                   |                       | 12.5 1 < 0       |                  | 12.658 1 < U            | 11,494 1 < U     | 10.989 1 < 0     | 11.494 1 < 0     | 12.046 1 < 0     | 2.1 1 4 0        | 2.1 1 \ U          | 10.000 1 5 0          |                 |
| SEMIVOLATILES    | 2,4 Dinitrotoluene          |                   |                   |                   |                   |                       |                  |                  |                         |                  | -                |                  |                  | U.41 1 < U       | U.45 I < U         |                       |                 |
| SEMIVOLATILES    | 2.6-Dinitrotoluene          |                   |                   |                   |                   |                       |                  |                  |                         |                  |                  |                  |                  | 0.41 1 < U       | U.43 1 < U         |                       |                 |
| SEMIVOLATILES    | 2-Chloronaphthalene         |                   |                   |                   |                   | •                     | 0.375 1 < U      |                  | 0.38 1 < U              | 0.345 1 < U      | 0.33 1 < U       | 0.345 1 < U      | 0.361 1 < U      | 0.41 1 < U       | 0.43 1 < U         | 0.319 1 < U           | 0.385 1 < 0     |
| CEMBION ATHES    | 2.Chlorophand               |                   |                   |                   |                   |                       | 0.625 1 < U      |                  | 0.633 1 < U             | 0.575 1 < U      | 0.549 1 < U      | 0.575 1 < U      | 0.602 1 < U      | 0.41 1 < U       | 0.43 1 < U         | 0.532 1 < U           | 0.641 1 < U     |
| CENTROLATE CO    | 2 Methodopathiniono         |                   |                   |                   |                   |                       | 0.375 1 < 0      |                  | 0.38 1 < U              | 0.345 1 < U      | 0.33 1 < U       | 0.345 1 < U      | 0.361 1 < U      | 0.41 1 < U       | 0.43 1 < U         | 0.319 1 < U           | 0.385 1 < U     |
| SEMIVOLATILES    | 2-жевуларни алене           |                   |                   |                   |                   |                       | 1 > 1 203.6      |                  | 0633 1 6 11             | 0575 t < U       | 0.549 1 < 11     | 0.575 1 < U      | 0.602 1 < U      | 0.41 1 < U       | 0.43 1 < U         | 0.532 1 < U           | 0.641 1 < U     |
| SEMIVOLATILES    | 2-Methylphenol              |                   |                   |                   |                   |                       | 10.023 1 1 1     |                  | 2 707 1 4 1             | 3.449 1 4 13     | 3207 1 41        | 3448 1 4 11      | 3614 1 < 1       | 21 1 < 1         | 21 1 < 0           | 3.191 1 < U           | 3.846 1 < Ù     |
| SEMIVOLATILES    | 2-Nitroaniline              |                   |                   |                   |                   |                       | 3.75 1 4 0       |                  | 3.131 1 C V             | 0.440 1 . 13     | 1000 1 - 11      | 1140 1 4 12      | 1205 1 4 1       | 041 1 4 11       | 843 1 < 1          | 1064 1 < 1J           | 1.282 1 < U     |
| SEMIVOLATILES    | 2-Nitrophenol               |                   |                   |                   |                   |                       | 1.25 1 < U       |                  | 1,266 1 < 0             | 1.149 1 < U      | 1.099 1 < 0      | 0.145 1 4 0      | 0.607 1 4 1      | 0.92 1 4 11      | A95 1 - U          | 0.532 1 2 1           | 0.641 1 < U     |
| SEMIVOLATILES    | 3,3'-Dichlorobenzidine      |                   |                   |                   |                   |                       | 0.625 1 < U      |                  | U.633 7 < U             | 0.5/5 1 < 0      | U.249 I < U      | 0.273 I < U      | 0.002 I < U      | 911 - 1          | 21 1 - 1           | 3 101 1 - 1           | 3846 1 - 11     |
| SEMIVOLATILES    | 3-Nitroaniline              | ł                 |                   |                   |                   |                       | 3.75 1 < U       |                  | 3.797 1 < U             | 3.448 1 < U      | 3.297 1 < 0      | 3.448 1 < U      | 3.1319 I < U     | 2.1 1 < 0        | 2.1 1 < 0          | 0,181 I < U<br>5240 4 | 0.010 L < U     |
| SEMIVOLATILES    | 4.6-Dinitro-2-methylohenol  |                   |                   |                   |                   | · .                   | 6.25 1 < U       |                  | 6.329 1 < U             | 5.747 1 < U      | 5.495 1 < U      | 5.747 1 < U      | 6.024 1 < U      | 2.1 J < U        | Z,1 1 < U          | 2.318 1 < U           | 0.41 1 < 10     |
| SEMIVOLATE ES    | 4-Bramonhead alterval ether |                   |                   |                   |                   |                       | 1.25 1 < U       |                  | 1.266 1 < U             | 1.149 i < U      | 1.099 1 < U      | 1.149 1 < U      | 1.205 1 < U      | 0.41 1 < U       | 0.43 1 < U         | 1.064 1 < U           | 1.282 1 < U     |
| CENN/OLATH CC    | LCharn 2 matterin band      |                   |                   |                   |                   |                       | 0.625 1 < U      |                  | 0.633 1 < U             | 0.575 1 < U      | 0.549 1 < U      | 0.575 1 < U      | 0.602 1 < U      | 0.41 1 < U       | 0.43 1 < U         | 0.532 1 < U           | 0.641 1 < U     |
|                  | - Operation                 |                   |                   |                   |                   |                       | 375 1 < 1        |                  | 3,797 1 < U             | 3.448 1 ≺ U      | 3.297 1 < U      | 3.448 1 < U      | 3.614 1 < U      | 0.41 1 < U       | 0.43 1 < U         | 3.191 1 < U           | 3.846 1 < U     |
| SEMIVULATILES    | 4-GROFORMUNE                | 1                 |                   |                   |                   |                       | 105 1 - 11       |                  | 1266 1 - 11             | 1.149 1 < U      | 1.099 1 < 11     | 1.149 1 < U      | 1,205 1 < U      | 0.41 1 < 13      | 0.43 1 < U         | 1.064 1 < U           | 1.282 î < U     |
| SEMIVOLATILES    | 4-Ghlorophenyl phenyl ether |                   |                   |                   |                   |                       | 1.20 I C U       |                  | 0.520 1 - 11            | 0.675 1 - 11     | 0549 1 - 11      | 0.575 1 - 11     | 0.602 1 < 11     | 0.41 t < 1J      | 0.43 1 < U         | 0.532 1 < U           | 0.641 1 < U     |
| SEMIVOLATILES    | 4-Methylphenol              |                   |                   |                   |                   |                       | 0.625 1 < 0      |                  | 0.000 ( < 0             | 6.575 I K U      | 6.406 4 · · ·    | 5747 1 - 11      | 6024 1 - 11      | 21 1 - 11        | 21 1 2 11          | 5.319 1 < 11          | 6.41 1 < U      |
| SEMIVOLATILES    | 4-Nitroaniline              |                   |                   |                   |                   |                       | 6.25 1 < U       |                  | 0.329 1 < U             | 5.747 T < U      | 0.490 I < U      | 9.141 I < U      | 5004 1 C U       | 21 1 - 1         | 21 1 2 1           | 5310 1 - 1            | 641 1 2 0       |
| SEMIVOLATILES    | 4-Nitrophenol               | 1                 |                   |                   |                   |                       | 6.25 1 < U       |                  | 6.329 1 < U             | 5./4/ 1 < U      | 5.495 1 < U      | 5./4/ 1 < U      | 0.024 I < U      | 2.1 1 < U        | 2.1 J < U          | 0.010 + K U           | 0.11 1 1 1      |
| SEMIVOLATILES    | Acenaphthene                |                   |                   |                   |                   |                       | 0.375 1 < U      |                  | 0.38 1 < U              | 0.345 1 < 0      | 0.33 1 < U       | 0.345 1 < U      | 0.361 1 < U      | 10.41 1 < U      | 0.43 1 < U         | v,ola t < U           | V.303 I < U     |
| SEMIVOLATILES    | Acenaphthylene              |                   |                   |                   |                   |                       | 0.625 1 < U      |                  | 0.633 1 < U             | 0.575 1 < U      | 0.549 1 < U      | 0.575 1 < U      | 0.602 1 < U      | 0.41 1 < U       | 0.43 1 < U         | 0.532 T < U           | 0.641 1 < 0     |
| SEMINOLATE ES    | Anthracene                  |                   |                   |                   |                   |                       | 0.625 1 < U      |                  | 0.633 1 < U             | 0.575 1 < U      | 0.549 1 < U      | 0.575 1 < U      | 10.602 1 < U     | 0.41 1 < U       | 0.43 1 < U         | 0.532 1 < U           | 0.641 1 < U     |
| SEMINOLATE CO    |                             |                   |                   |                   |                   |                       | 0.375 1 - 13     |                  | 0.38 1 < U              | 0.345 1 < U      | 0.33 1 < U       | 0.345 t < U      | 0.361 1 < U      | 0.41 1 < U       | 0.43 1 < U         | 0.319 1 < U           | 0.385 1 < U     |
| SEMIVULARLES     | penzo(ajaniniacene          | i i               |                   |                   |                   |                       | 0.010 1 2 0      |                  |                         |                  |                  |                  |                  |                  |                    |                       |                 |

Shaw Environmental, Inc.

Table 3-96 Concentrations of Chemicals in Soil Samples Associated with Sump 108

| [SUMP] = SUMP108               |   |                   |                   |                   |                          |                      |               |                      |                |                 | _                  |                  |                            |                        |                           |                   |                 |
|--------------------------------|---|-------------------|-------------------|-------------------|--------------------------|----------------------|---------------|----------------------|----------------|-----------------|--------------------|------------------|----------------------------|------------------------|---------------------------|-------------------|-----------------|
| LOCATION _CODE                 |   | 35SUMP107-SB01    | 35SUMP107-S801    | 35SUMP107-SB02    | 35SUMP107-SB02           | 35SUMP107-SB02       | LH-S107-01    | LH-S107-01           | LH-S107-01     | LH-S107-01      | LH-S108-01         | LH-S108-01       | LH-S108-01                 | LHS-2-14               | LHS-2-14                  | LH-WHS16-01       | EH-WHS16-01     |
| SAMPLE_NO                      |   | 35-SMP107-SB01-01 | 35-SMP107-SB01-02 | 35-SMP107-SB02-01 | 35-SMP107-SB02-02        | 35-SMP107-SB02-02-QC | LH-S107-01 QC | LH-\$107-01_1        | LH-S107-01_2   | LH-S107-01_3    | LH-S108-01_1       | LH-S108-01_2     | LH-S108-01_3               | LHS-2-14 QC            | UH5-2-14                  | LH-WHS16-U1_1     | LH-WHS16-01_2   |
| SAMPLE_DATE                    |   | 9/14/2006         | 9/14/2006         | 9/14/2006         | 9/14/2006                | 9/14/2006            | 6/26/1993     | 6/26/1993            | 6/26/1993      | 6/26/1993       | 6/26/1993          | 6/26/1993        | 6/26/3993                  | 0.055                  | 0-05 51                   | 0/20/1993         | 35-AFt          |
| DEPTH                          |   | 0.5 - 0.5 Ft      | 3-3Ft             | 0.5 - 0.5 Ht      | 3-3ft                    | 3-3H                 | 0.5 - 1.5 H   | 0.5 - 1.5 FC         | 1-1.5 H        | 2-2.5 FI        | 0.5 - 1.5 FI       | 2-2.5 FL<br>9EC  | 4-4.5F1<br>BEG             | U-U-3 F4<br>FD         | REG                       | BEG               | BEG             |
| SAMPLE_PURPOSE                 |   | REG               | HEG               | REG               | KEG<br>Dest # DII I O VO |                      |               | REG<br>Room Di LO VO | Recut Di LO VO | Recult D1 10 VO | Pecult DIL I.O. VO | Result DIE 10 VO | Result BIL 10 VO           | Result DII LO VO       | Result 01 +0 VO           | Result Dill LO VO | Besut Dil LO VQ |
| Test Group                     | Parameter (Units = mg/kg)   | Hesutt DIL LO VO  | Result Dil, LQ VQ | HESUAT DAL LO VO  | Result DIE LQ VO         | HESUIT DIL LU VO     | DESCRIPTING   | RESULT DIL LO VO     | A633. 1 C II   |                 | 0549 1 < 11        | 0.575 t c ti     | 0.602 1 < 11               | 041 1 < 1              | 0.2 1 J                   | 0.532 1 < U       | 0.641 1 < U     |
| SEMINOLAHLES                   | Denzo(a)pyrene<br>Ronzo(b)@usmothson  |                   |                   |                   |                          |                      | 125 1 < 1     |                      | 1.266 1 < U    | 1.149 1 < U     | 1.099 1 < U        | 1.149 1 < U      | 1.205 1 < U                | 0.41 1 < U             | 0.43 1 < U                | 1.054 1 < U       | 1.282 1 < U     |
| SEMIYOLATALES<br>SEMA/ON ATHES | Верго(прикланинане<br>Верго(прикланинане  |                   |                   |                   |                          |                      | 25 1 < U      |                      | 2.532 1 < U    | 2.299 1 < U     | 2.198 1 < U        | 2.299 1 < U      | 2.41 1 < U                 | 0.41 1 < U             | 0.43 1 < U                | 2.128 1 < U       | 2.564 1 < U     |
| SEMIVOLATILES                  | Benzo(k)fluoranthene  |                   |                   |                   |                          |                      | 1.25 1 < U    |                      | 1.266 1 < U    | 1,149 1 < U     | 1.099 1 < U        | 1.149 1 < U      | 1.205 1 < U                | 0.41 1 < U             | 0.43 1 < U                | 1.054 1 < U       | 1.282 1 < U     |
| SEMIVOLATILES                  | Benzoic Acid  |                   |                   |                   |                          |                      |               |                      |                |                 |                    |                  |                            | 2.1 1 < U              | 2.1 1 < 1                 |                   |                 |
| SEMIVOLATILES                  | Benzyl Alcohol  |                   |                   |                   |                          |                      |               |                      |                |                 |                    |                  |                            | 0…41 1 < U             | 0.43 1 < U                |                   |                 |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane  |                   |                   |                   |                          |                      | 0.625 t < U   |                      | 0.633 1 < U    | 0.575 1 < U     | 0.549 1 < U        | 0.575 1 < U      | 0.602 1 < U                | 0.41 1 < U             | 0.43 1 < U                | 0.532 1 < U       | 0.641 1 < U     |
| SEMIVOLATILES                  | bis{2-Chloroethyl}ether   |                   |                   |                   |                          |                      | 0.625 1 < U   |                      | 0.633 t < U    | 0.575 1 < U     | 0.549 1 < U        | 0.575 1 < U      | 0.602 1 < U                | 0.41 T < U             | 0.43 1 < 1/               | 0.532 1 < U       | 0.641 1 < U     |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether   |                   |                   |                   |                          |                      | 1.25 1 < U    |                      | 1.266 1 < U    | 1.149 1 < U     | 1.099 t < U        | 1.149 1 < U      | 1_205 1 < U                | 0.41 1 < U             | 0.43 1 < U                | 1.064 1 < U       | 1.282 1 < U     |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthalate  |                   |                   |                   |                          |                      | 0.625 1 < U   |                      | 0.127 1 J      | 0.575 1 < U     | 0.176 I J          | 0.126 1 J        | 2.349 1                    | 0.41 1 < U             | 0.43 1 < U                | 0.809 1 J         | 0.179 1         |
| SEMIVOLATILES                  | Butyl benzyl phthalate  |                   |                   |                   |                          |                      | 0.625 1 < U   |                      | 0.633 t < U    | 0.575 1 < U     | 0.549 1 < U        | 0.575 1 < U      | 0.602 1 < 0                | 10.411 1 < U           | 0.43 1 < U                | U.117 1 J         | U.641 I < U     |
| SEMIVOLATILES                  | Carbazole   |                   |                   |                   |                          |                      | 1.25 1 < 1    |                      | 1.266 1 < U    | 1.149 1 < U     | 1.099 1 < U        | 1.149 1 < U      | 1205 1 < 0                 | A41 1 . B              | 0.49 t . 18               | 1.004 i < U       |                 |
| SEMIVOLATILES                  | Chrysene  |                   |                   |                   |                          |                      | 6.25 1 < 0    |                      | 6.329 1 < 0    | 5./4/ 1 < U     | 5.495 ) < U        | 5./4/ I < U      | 5.024 1 < 0                | 0.41 1 4 1             | 0.43 1 < 0                | 0.019 t < U       | 2564 3 4 11     |
| SEMIVOLATILES                  | Dibenzo(a,h)anthracene  |                   |                   |                   |                          |                      | 25 1 < 0      |                      | 2.532 1 < 0    | 2.299   < U     | 2,198 1 < U        | 2.299 1 < 0      | 2.41 I < 10<br>1995 1 2 II | 0.47 1 < 0             | 0.43 1 < 0                | 1.05/ 1 < 11      | 1282 1 2 1      |
| SEMIVOLATILES                  | Dibenzofuran  |                   |                   |                   |                          |                      | 1.25 1 < 1    |                      | 4.200 1 < 0    | 1.149 1 < U     | 1.099 1 < 0        | 1.149 F C U      | 0.602 1 < 11               | 041 1 < 0              | 043 1 < 0                 | 0.532 1 < U       | 0.641 1 < 1     |
| SEMIVOLATILES                  | Diethyl phthalate   |                   |                   |                   |                          |                      | 0.625 1 < 0   |                      | 0.000 1 4 0    | 0.575 1 < 1     | 0.549 1 < 0        | 0.575 t c U      | 0.602 1 < 0                | 041 1 < 0              | 0.43 1 < 17               | 0.532 1 < U       | 0.641 1 < U     |
| SEMIVOLATILES                  | Demethyl primalate  |                   |                   |                   |                          |                      | 2125 1 4 0    |                      | 3785 1         | 5.586 1         | 7462 1             | 5.402 1          | 2.735 1                    | 0.41 1 < U             | 0.43 1 < U                | 2.362 1           | 7.423 1         |
| SEMINOLATILES                  | din Oct d abthalate   |                   |                   |                   |                          |                      | 0.625 1 < 11  |                      | 0.633 1 < 4    | 0.575 1 < U     | 0.549 1 < U        | 0.575 1 < U      | 0.602 t < U                | 0.41 1 < U             | 0.43 1 < U                | 0.532 1 < U       | 0.641 1 < U     |
| SEMIVOLANILES                  | Electron printere   | 1                 |                   |                   |                          |                      | 0.625 1 < 1   |                      | 0.633 1 < U    | 0.575 1 < U     | 0.549 1 < U        | 0.575 1 < U      | 0.502 1 < U                | 0.41 1 < U             | 0.43 1 < U                | 0.532 1 < U       | 0.641 1 < U     |
| SEMBYCH ATHLES                 | Fluorene  |                   |                   |                   |                          |                      | 0-625 t ≺ U   |                      | 0.633 1 < U    | 0.575 1 < U     | 0.549 1 < U        | 0.575 1 < U      | 0.602 1 < U                | 0.41 1 < U             | 0.43 1 < U                | 0.532 1 < U       | 0.641 t < U     |
| SEMIVOLATILES                  | Hexachiomhenzene  |                   |                   |                   |                          |                      | 1.25 1 < U    |                      | 1.266 t < U    | 1,149 1 < U     | 1.099 1 < U        | 1.149 1 < U      | 1.205 1 < U                | 0.41 1 < U             | 0.43 t < U                | 1.064 t < U       | 1.282 1 < U     |
| SEMIVOLATILES                  | Hexachlorobutadiene   |                   |                   |                   |                          |                      | 3.75 1 < Ư    |                      | 3.797 t < U    | 3.448 1 < U     | 3.297 t < U        | 3.448 1 < U      | 3.614 1 < U                | 0.41 1 < 0             | 0.43 1⊧ < U               | 3.191 1 < U       | 3.846 1 < U     |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene   |                   |                   |                   |                          |                      | 3.75 1 ≺ U    |                      | 3.797 1 < ⊍    | 3.448 1 < U     | 3.297 1 < U        | 3.448 1 < U      | 3.614 1 < Ü                | 0.41 1 < U             | 0.43 1 < U                | 3.191 1 < U       | 3.846 1 < U     |
| SEMIVOLATILES                  | Hexachloroethane  |                   |                   |                   |                          |                      | 1.25 1 < U    | -                    | 1.266 1 < U    | 1.149 1 < U     | 1.099 1 < U        | 1.149 1 < U      | 1.205 1 < U                | 0.41 1 < U             | 0.43 I < U                | 1_064 1 < U       | 1.282 1 < U     |
| SEMIVOLATILES                  | indeno(1,2,3-cd)pyrene  | 2                 |                   |                   |                          |                      | 1.25 1 < U    |                      | 1.256 1 < U    | 1.149 1 < U     | 1.099 1 < U        | 1.149 1 < U      | 1205 1 < U                 | 0,41 1 < U             | 0.3 I J                   | 1.064 1 < U       | 1.282 1 < U     |
| SEMIVOLATILES                  | Isophorone  |                   |                   |                   |                          |                      | 0.625 1 < U   |                      | 0.633 1 < U    | 0.575 1 < U     | 0.549 1 < U        | 0.575 1 < U      | 0.602 1 < U                | 0.41 1 < U             | 0.43 1 < U                | 0.532 1 < U       | 0.641 1 < U     |
| SEMIVOLATILES                  | Naphthalene   |                   |                   |                   |                          |                      | 0.375 1 < U   |                      | 0.38 1 < U     | 0.345 1 < U     | 0.33 1 < U         | 0.345 1 < U      | 0.361 1 < U                | 0.41 1 < U             | 0.43 1 < 0                | 0.319 1 < 0       | 0.385 1 < 0     |
| SEMIVOLATILES                  | Nitrobenzene  |                   |                   |                   |                          |                      | 0.625 1 < U   |                      | 0.633 1 < U    | 0.575 1 < U     | 0.549 1 < U        | 0.575 1 < 0      | 10.602 1 < U               | U41 1 < U              | 0.43 1 < 0                | 1054 1 < 1        | 1099 1 4 1      |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine  |                   |                   |                   |                          |                      | 1.25 1 < 0    |                      | 1.266 1 < U    | 1.149 1 < U     | 1.099 1 < 0        | 1,149 1 < 0      | 1.205 1 < 0                | 0.41 1 < 1             | 0.43 I < 0<br>0.43 I < 11 | 0.532 1 < 1       | 0.641 1 4 1     |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine  |                   |                   |                   |                          |                      | 0.625 1 < 0   |                      | 0.033 I < U    |                 | 0.549 I < U        | 0.3/3 I < 0      | 6.02 1 < 0                 | 21 1 4 1               | 21 1 2 1                  | 5319 1 < II       | 641 1 < U       |
| SEMIVOLATILES                  | Pentachiorophenol   |                   |                   |                   |                          |                      | 0.20 I < U    |                      | 0.529 1 < 0    | 0.747 1 C U     | 0.450 1 < 0        | 0.575 t c 11     | 0.602 1 < 1                | 041 1 < 1              | 043 1 < U                 | 9.532 t < U       | 0.641 1 < U     |
| SEMIVOLATILES                  | Phenanthrene  |                   |                   |                   |                          |                      | 0.625 1 < 0   |                      | 0.633 1 < 1    | 0575 1 C U      | 0.549 1 < 13       | 0.575 1 < 1      | 0.602 1 < U                | 0.41 1 < U             | €.43 1 < U                | 0.532 t < U       | 0.641 1 < U     |
| SEMINULATILES                  | Parana  |                   |                   |                   |                          |                      | 0.625 1 < 0   |                      | 0.633 1 < U    | 0.575 1 < U     | 0.549 1 < U        | 0.575 1 < 1      | 0.602 1 < U                | 0.41 1 < U             | 0_43 1 < U                | 0.532 t < U       | 0.641 1 < U     |
| JOLATILES                      | 1 1 2 Tetrachlomethane  |                   |                   |                   |                          |                      |               |                      |                |                 |                    |                  |                            | 0.012 1 < U            | 0.013 1 < U               |                   |                 |
| VOLATILES                      | 1.1.1-Trichlomethane  |                   |                   |                   |                          |                      | 0.006 1 < U   | 0.006 1 < U          | 0.006 1 < U    | 0.006 1 < U     | 0.006 1 < U        | 0.006 1 < U      | 0.006 1 < U                | 0.006 1 < U            | 0.006 1 < U               | 0.005 1 < U       | 0.006 1 < U     |
| VOLATILES                      | 1.1.2.2-Tetrachkoroethane   |                   |                   |                   |                          |                      | 0.006 1 < U   | 0.006 t < U          | 0.006 1 < U    | 0.006 1 < U     | 0.006 1 < U        | 0.006 1 < U      | 0.006 1 < U                | 0.006 1 < U            | 0.006 1 < U               | 0.005 1 < U       | 0.006 1 < U     |
| VOLATILES                      | 1,1,2-Trichloroethane   | ]                 |                   |                   |                          |                      | 0.006 1 < U   | 0.006 t < U          | 0.006 1 < U    | 0.006 1 < U     | 0.006 1 < U        | 0.006 1 < U      | 0.006 1 < U                | 0.006 1 < U            | 0.006 1 < U               | 0.005 1 < U       | 0.006 t < U     |
| VOLATILES                      | t.1-Dichleroethane  | ]                 |                   |                   |                          |                      | 0.006 1 < U   | 0.006 1 < U          | 0.006 1 < U    | 0.006 1 < U     | 0.006 1 < U        | 0.006 1 < U      | 0.006 1 < U                | 0.006 t < U            | 0.006 1 < U               | 0.005 1 < U       | 0.006 1 < U     |
| VOLATILES                      | 1,1-Dichloroethene  |                   |                   |                   |                          |                      | 0.006 1 < U   | 0.006 t < ∜          | 0.006 1 < U    | 0.006 1 < U     | 0.006 1 < U        | 0.006 1 < U      | 0.006 1 < U                | 0.006 1 < U            | 0.006 1 < U               | 0.005 1 < U       | 0.006 1 < U     |
| VOLATILES                      | 1,2,3-Trichloropropane  |                   |                   |                   |                          |                      |               |                      |                |                 |                    |                  |                            | 0.012 1 < U            | 0.013 1 < U               |                   |                 |
| VOLATILES                      | 1,2-Dibromo-3-chloropropane   | 1                 |                   |                   |                          |                      |               |                      |                |                 |                    |                  |                            | 0.025 1 < U            | 0.026 1 < 0               |                   |                 |
| VOLATILES                      | 1,2-Dibromoethane   |                   |                   |                   |                          |                      |               |                      |                |                 |                    |                  | 0.000 t 11                 | 0.025 1 < 0            | 0.026 1 < 0               | 0.005 1 . 1       | 0.006 1 41      |
| VOLATILES                      | 1,2-Dichloroethane  |                   |                   |                   |                          |                      | 0.006 1 < U   | 0.006 1 < 0          | 0.006 1 < 0    | 0.006 1 < 0     | 0.005 1 < 0        | 9,006 1 < 0      | 0.006 1 < 1                |                        | 0.006 1 < 0               | 0.005 1 < 0       | 0.000 1 < 0     |
| VOLATILES                      | 1,2-Dichleroethene  |                   |                   |                   |                          |                      | 0.006 1 < 0   | 0.006 t < 0          | 0.006 1 < 0    | 0.006 1 < 15    | 0.008 1 < 0        | 0.000 1 < 0      | 0.000 1 < 0                | 0.006 1 < 11           | 0.006 1 < 1               | 0.005 1 < 1       | 0.006 1 < U     |
| VOLATILES                      | 1,2-Dichloropropane   |                   |                   |                   |                          |                      | 0.006 I < U   |                      | 0.12 1 4 8     |                 | 0.000 1 < 0        | 8063 1 < 1       | 012 1 < 1                  | 0.000 1 < 0            | 0.013 1 < U               | 0.11 1 < U        | 0.13 1 < U      |
| VOLARIES                       | 2-BUIZ0096  | •                 |                   |                   |                          |                      | 8.12 1 2 0    | 0.12 1 1 0.          | 0.12 1 5 0     | 0.12 1 4 0      |                    | 0.000 / < 0      | 0.12                       | 0.012 1 < U            | 0.013 1 < U               |                   |                 |
| VOLATILES                      | 2-Choroethyl vitsyr etiler<br>2 Marzagene   |                   |                   |                   |                          |                      | 0062 1 c ti   | 0.061 1 < 11         | £\.061 1 < ₩   | 0.062 1 < U     | 0.056 1 < U        | 0.063 1 < U      | 0.058 1 < U                | 0.012 1 < U            | 0.013 1 < U               | 0.053 1 < U       | 0.053 1 < U     |
| VOLATILES                      | 2-riexanore<br>2-Drogonal   |                   |                   |                   |                          |                      | 0.002 / 4 0   |                      |                |                 |                    |                  |                            | 0.62 1 < U             | 0.64 1 < U                |                   |                 |
| VOLATILES                      | Aceinne   |                   |                   |                   |                          |                      | 0.12 1 < U    | 0.12 1 < U           | 0.12 1 < U     | 0.12 1 < U      | 0.11 1 < U         | 0.032 1 < U      | 0.12 1 < U                 | 0.012 1 < U            | 0.013 1 < U               | 0.11 1 < U        | 0.13 1 < U      |
| VOLATILES                      | Acetonitrile  |                   |                   |                   |                          |                      |               |                      |                |                 |                    |                  |                            | 0.12 1 < U             | 0.13 1 < U                |                   |                 |
| VOLATILES                      | Acrylonitrije   |                   |                   |                   |                          |                      |               |                      |                |                 |                    |                  |                            | 0.12 1 < U             | 0.13 1 < U                |                   |                 |
| VOLATILES                      | Allyl chloride  | 1                 |                   |                   |                          |                      |               |                      |                |                 |                    |                  |                            | 0.012 1 < U            | 0.013 1 < U               |                   |                 |
| VOLATILES                      | Benzene   |                   |                   |                   |                          |                      | 0.006 1 < U   | 0.006 1 < U          | 0.006 1 < U    | 0.006 1 < U     | 0.006 1 < U        | 0.006 1 < U      | 0.006 1 < U                | 0.006 1 < U            | 0.006 1 < U               | 0.005 1 < 0       | 0.006 1 < U     |
| VOLATILES                      | Bromodichloromethane  | ľ.                |                   |                   |                          |                      | 0.006 1 < U   | 0.006 1 < U          | 0.006 1 < U    | 0.006 1 < U     | 0.006 t < U        | 0.006 1 < U      | 0.006 1 < U                | 0.006 1 < U            | 0.006 1 < U               | 0.005 1 < 0       | 0.006 1 < U     |
| VOLATILES                      | Bromoform   |                   |                   |                   |                          |                      | 0.006 1 < U   | 0.006 1 < U          | 0.006 1 < U    | 0.006 1 < U     | 0.006 1 < U        | 0.006 t < U      | 0.006 1 < U                | 0.006 1 < U            | 0.006 t < U               | 0.005 1 < 0       | 0.006 1 < 0     |
| VOLATILES                      | Bromomethane  | {                 |                   |                   |                          |                      | 0.006 1 < U   | 0.006 1 < U          | 0.006 t < U    | 0.006 1 < U     | 0.006 1 < U        | 0.032 1 < U      | 0.006 1 < U                | 0.012 1 < U            | U.013 1 < U               | 0.005 1 < U       | 0.006 1 < U     |
| VOLATILES                      | Carbon disulfide  |                   |                   |                   |                          |                      | 0.006 1 < U   | 0.006 1 < U          | 0.006 1 < U    | 0.006 1 < U     | 0.006 1 < U        | 0.006 7 < U      | 0.006 1 < U                | 0.006 1 < 0            | 0.006 1 < U               | 0.006 1 < 0       | 0.006 1 < 0     |
| VOLATILES                      | Carbon tetrachloride  | l                 |                   |                   |                          |                      | 0.006 t < U   | 0.006 1 < U          | 0.006 1 < U    | 0.006 1 < U     | 0.006 1 < U        | 0.006 3 < 0      | 0.006 1 < U                | 0.000 1 < 0            | 0.006 f < U               | 0.005 1 < 0       |                 |
| VOLATILES                      | Chlorobenzene   | 1                 |                   |                   |                          |                      | 0.006 1 < U   | 0.006 1 < U          | 0.006 1 < U    | 0.006 1 < U     | 0.000 1 < U        | 0.000 1 < 1      | 0.006 1 < U                | 0.012 1 - H            | 0.000 i < 0               | 0.005 1 < 0       | 0.000 1 < 0     |
| VOLATILES                      | Chloroethane  | t                 |                   |                   |                          |                      | 0.006 1 < U   | 0.006 1 < 0          | 0.006 1 < 0    | 0.000 I < U     | 0.000 1 < 0        | 0.002 ( < 0      | 0.000 i < U<br>0.006 i - U | 0.006 1 2 11           | 0.006 1 2 1               | 0.005 1 2 1       | 0.006 1 < 8     |
| VOLATILES                      | Chlorotorm  | 1                 |                   |                   |                          |                      | 0.000 7 < U   | 0.000 1 < .0         | 0.000 1 < 0    | 0.006 1 - 11    | 0.000 1 < 0        | 0.000 1 - 11     | 0.006 1 2 1                | 0.012 1 < 8            | 0.013 1 < U               | 0.005 1 < U       | 0.006 1 < 1     |
| VOLAHLES                       | Chloromethane   | 1                 |                   |                   |                          |                      | 0.000 t < U   | 0.000 1 < 0          | 0200 1 4 0     | 0.000 1 4 0     | 0.000 1 5 0        | 0.000 1 2 0      |                            | 0.12 1 < U             | 0.13 1 < 1                | · · · ·           |                 |
| VOLANLES<br>VOLATE ES          | circl 2 Dichlorononce   | 1                 | *                 |                   |                          |                      | 0006 1 × 11   | 0.006 1 < 9          | 0.006 t < U    | .0.006 t < L1   | 0.006 1 < LI       | 0.006 1 < U      | 0.006 1 < U                | 0.006 1 < U            | 0.006 1 < U               | 0.005 1 < U       | 0.006 1 < U     |
| VOLATILES                      | Carr, and choramethane  | 1                 |                   |                   |                          | · · · ·              | 0.006 1 < 1   | 0.006 f < U          | 0.006 1 < U    | 0.006 t < U     | 0.006 1 < 1        | 0.006 1 < U      | 0.006 t < U                | 0.006 1 < U            | 0.006 1 < U               | 0.005 t < U       | 0.006 1 < 1J    |
| VOLATIES                       | Approximate the second s |                   |                   |                   |                          |                      |               |                      |                | • • •           | ····· •            |                  | _                          | 0.025 1 < <del>U</del> | 0.026 1 < U               |                   |                 |
|                                |   | 1 .               |                   |                   |                          |                      |               |                      |                |                 |                    |                  |                            |                        |                           |                   |                 |

Shaw Environmental, Inc.

Table 3-96 Concentrations of Chemicals in Soil Samples Associated with Sump 108

| [SUMP] = SUMP108 |                             |                   |                   |                   |                   |                      |                  |                  |                   |                  |                  |                   |                  |                  |                    |                  |                         |
|------------------|-----------------------------|-------------------|-------------------|-------------------|-------------------|----------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|--------------------|------------------|-------------------------|
| LOCATION_CODE    |                             | 35SUMP107-SB01    | 35SUMP107-SB01    | 35SUMP107-SB02    | 35SUMP107-SB02    | 355UMP107-SB02       | LH-S107-01       | LH-S107-01       | LH-S107-01        | LH-\$107-01      | LH-S108-01       | LH-S108-01        | LH-\$108-01      | LHS-2-14         | LHS-2-14           | LH-WRS16-01      | LH-WRS16-01             |
| SAMPLE_NO        |                             | 35-SMP107-SB01-01 | 35-SMP107-SB01-02 | 35-SMP107-SB02-01 | 35-SMP107-SB02-02 | 35-SMP107-SB02-02-OC | LH-S107-01 QC    | LH-S107-01_1     | LH-S107-01_2      | LH-\$107-01_3    | UH-S108-01_1     | LH-S108-01_2      | LH-S108-01_3     | LHS-2-14 QC      | LHS-2-14           | LH-WRS16-01_1    | LH-WRS16-01_2           |
| SAMPLE_DATE      |                             | 9/14/2006         | 9/14/2006         | 9/14/2006         | 9/14/2006         | 9/14/2006            | 6/26/1993        | 6/26/1993        | 6/26/1993         | 6/26/1993        | 6/26/1993        | 6/26/1993         | 6/26/1993        | 1/11/1995        | 1/11/1995          | 6/26/1993        | 6/26/1993               |
| DEPTH            |                             | 0.5 - 0.5 Ft      | 3 - 3 Ft          | 0.5 - 0.5 Ft      | 3 - 3 Ft          | 3-3Ft                | 0.5 - 1.5 Ft     | 0.5 - 1.5 Ft     | 1-15A             | 2 - 2.5 Ft       | 0.5 - 1.5 Fi     | 2-25ft            | 4 - 4.5 Ft       | 0 -0.5 Ft        | 0-0.5 Ft           | 0.5 - 1.5 Ft     | 3.5 - 4 Ft              |
| SAMPLE_PURPOSE   |                             | REG               | REG               | REG               | REG               | FD                   | FÐ               | REG              | REG               | REG              | REG              | REG               | REG              | FD               | REG                | REG              | REG                     |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LO VO  | Result DIL LQ VO     | Result DIL LQ VQ | Result DIL LQ VQ | Result Dil. LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL 1.Q VQ | Result DIL LO VO | Result DIL LO VQ | Result DIL LO VO   | Result DIL LQ VQ | Result DIL LQ VQ        |
| VOLATILES        | Dichlorodifluoromethane     |                   |                   |                   |                   |                      |                  |                  |                   |                  |                  |                   |                  | 0.025 1 < U      | 0.026 1 < U        |                  |                         |
| VOLATILES        | Ethyl methacrylate          |                   |                   |                   |                   |                      |                  |                  |                   |                  |                  |                   |                  | 0.025 1 < U      | 0.026 1 < U        |                  |                         |
| VOLATILES        | Ethylbenzene                | x                 |                   |                   |                   |                      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 t < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U        | 0.005 1 < U      | 0.006 1 < 0             |
| VOLATILES        | IODOMETHANE                 |                   |                   |                   |                   |                      |                  |                  |                   |                  |                  |                   |                  | 0.012 1 < U      | 0.013 1 < U        |                  |                         |
| VOLATILES        | ISOBUTYL ALCOHOL            |                   |                   |                   |                   |                      |                  |                  |                   |                  |                  |                   |                  | 2.5 1 < U        | 2.6 1 < U          |                  |                         |
| VOLATILES        | Methacrylonitrile           |                   |                   |                   |                   |                      |                  |                  |                   |                  |                  |                   |                  | 0.025 1 < U      | 0.026 1 < U        |                  |                         |
| VOLATILES        | Methyl isobutyl ketone      |                   |                   |                   |                   |                      | 0.062 1 < U      | 0.061 1 < U      | 0.061 1 < U       | 0.062 1 < U      | 0.056 1 < U      | 0.063 t < U       | 0.058 1 < U      | 0.012 1 < U      | 0.013 <b>i</b> < U | 0.053 1 < U      | 0.063 1 < U             |
| VOLATILES        | METHYL METHACRYLATE         |                   |                   |                   |                   |                      |                  |                  |                   |                  |                  |                   |                  | 0.025 1 < 0      | 0.026 1 < U        |                  |                         |
| VOLATILES        | Methylene chloride          |                   |                   |                   |                   |                      | 0.006 1 < U      | 0.005 1 < U      | 0.006 1 < U       | 0.006 1 < 1J     | 0.006 1 < U      | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U        | 0.005 t < U      | 0.006 1 < U             |
| VOLATILES        | Pentachioroethane           |                   |                   |                   |                   |                      |                  |                  |                   |                  |                  |                   |                  | 0.025 1 < U      | 0.026 1 < U        |                  |                         |
| VOLATRES         | Propionitrile               |                   |                   |                   |                   |                      |                  |                  |                   |                  |                  |                   |                  | 0.062 t < U      | 0.064 1 < U        |                  |                         |
| VOLATILES        | Styrene                     |                   |                   |                   |                   |                      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U        | 0.005 1 < U      | 0.006 1 < U             |
| VOLATILES        | Tetrachkroethene            |                   |                   |                   |                   |                      | 10.006 1 < U     | 0.006 1 < U      | 0.006 1 < U       | 0.006 t < U      | 0.006 1 < U      | .0.006 1 < U      | 8.006 1 < U      | 0.006 1 < U      | 0.006 1 < U        | 0.005 1 < U      | 0.00 <del>6</del> 1 < U |
| VOLATILES        | Toluene                     |                   |                   |                   |                   |                      | 0.006 1 < U      | 0.006 1 < 0      | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U        | 0.065 1 < 0      | 0.006 1 < U             |
| VOLATILES        | trans-1,3-Dichloropropene   |                   |                   |                   |                   |                      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U       | û.006 1 < U      | 0.006 1 < U      | 0.006 1 < U        | 0.005 1 < U      | 0.006 1 < U             |
| VOLATILES        | trans-1,4-Dichloro-2-butene |                   |                   |                   |                   |                      |                  |                  | ÷                 |                  |                  |                   |                  | 0.025 t < U      | 0.026 1 < U        |                  |                         |
| VOLATILES        | Trichloroethene             |                   |                   |                   |                   |                      | 0.006 t < U      | 0.006 t < U      | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U        | 0.005 t < U      | 0.006 1 < U             |
| VOLATILES        | Trichlorofluoromethane      |                   |                   | -                 |                   |                      |                  |                  |                   |                  |                  |                   |                  | 0.012 1 < U      | 0.013 1 < U        |                  |                         |
| VOLATILES        | Vinyt acetate               |                   |                   |                   |                   |                      |                  |                  |                   |                  |                  |                   |                  | 0.012 1 < U      | 0.013 1 < U        |                  |                         |
| VOLATILES        | Viny! chloride              |                   |                   |                   |                   |                      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.032 1 < U       | 0.006 1 < U      | 0.012 1 < U      | 0.013 1 < U        | 0.005 t < U      | 0.006 1 < U             |
| VOLATILES        | Xylenes, Total              |                   |                   |                   |                   |                      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U        | 0.005 1 < U      | 0.006 1 < U             |

Footnotes are shown on cover page to Tables Section.

Page 3 of 3

Shaw Environmental, Inc.





| Table 3-97   |   |
|--|---|
| Concentrations of Chemicals in Soil Samples Associated with Sump 109 | 9 |

| SUMP) = SUMP109 |                            |          |         |     |          |          |    |           |         |    |          |         |    |           |      |       |
|-----------------|----------------------------|----------|---------|-----|----------|----------|----|-----------|---------|----|----------|---------|----|-----------|------|-------|
| LOCATION _CODE  |                            |          | 109-580 | 01  | 35SUMP1  | 09-SB02  |    | LH-S      | 109-01  |    | LH-S     | 109-01  |    | LHS-2     | -13  |       |
| SAMPLE_NO       |                            | 35-SMP10 | 9-SB01  | -02 | 35-SMP10 | 9-SB02-0 | 2  | LH-S1     | 09-01_1 |    | LH-\$10  | 09-01_2 |    | LHS-      | 2-13 |       |
| SAMPLE_DATE     |                            | 9/14     | 2006    |     | 9/14/    | 2006     |    | 6/26      | 1993    |    | 6/26     | 1993    |    | 1/13/1    | 995  |       |
| DEPTH           |                            | 3-       | 3 Ft    |     | 3 - 3    | Ft       |    | 0.5 -     | 1.5 Ft  |    | 2-2      | 2.5 Ft  |    | Q-Q.      | 5 Ft |       |
| SAMPLE_PURPOSE  |                            | R        | EG      |     | RE       | G        |    | A         | EG      |    | R        | EG      |    | RE        | G    |       |
| Test Group      | Parameter (Units = mg/kg)  | Result D | IL LO   | VQ  | Result D | L LQ     | VQ | Result DI | L LQ    | VQ | Result D | ιιο     | VQ | Result Di | L LO | VQ    |
| EXPLOSIVES      | 1.3,5-Trinitrobenzene      |          |         |     |          |          |    |           |         |    |          |         |    | 0.24      | 1 <  | U<br> |
| EXPLOSIVES      | 1,3-Dinitrobenzene         |          |         |     |          |          |    |           |         |    |          |         |    | 0.24      | 1 <  | 0     |
| EXPLOSIVES      | 2,4;6-Trinitroloiuene      |          |         |     |          |          |    |           |         |    |          |         |    | 0.24      | 1 <  | U     |
| EXPLOSIVES      | 2,4-Dinitrololuene         |          |         |     |          |          |    | 1.25      | 1 <     | U  | 1.235    | 1 <     | U  | 0.24      | 1 <  | U     |
| EXPLOSIVES      | 2.6-Dinitrotoluene         |          |         |     |          |          |    | 1.25      | 1 <     | U  | 1.235    | 1 <     | U  | 0.25      | 1 <  | U<br> |
| EXPLOSIVES      | 4-Amino-2,6-dinitrololuene |          |         |     |          |          |    |           |         |    |          |         |    | 0.5       | ) <  | U<br> |
| EXPLOSIVES      | HMX                        |          |         |     |          |          |    |           |         |    |          |         |    | 2.2       | 1 <  | U     |
| EXPLOSIVES      | m-Nitrololuene             |          |         |     |          |          |    |           |         |    |          |         |    | 1         | 1 <  | 0     |
| EXPLOSIVES      | Nitrobenzene               |          |         |     |          |          |    |           |         |    |          |         |    | 0.26      | 1 <  | U<br> |
| EXPLOSIVES      | o-Nitrotoluene             |          |         |     |          |          |    |           |         |    |          |         |    | 1         | 1 <  | U     |
| EXPLOSIVES      | p-Nitrololuene             | 1        |         |     |          |          |    |           |         |    |          |         |    | 3         | 1 <  | U     |
| EXPLOSIVES      | RDX                        |          |         |     |          |          |    |           |         |    |          |         |    | 1.1       | 1<   | U     |
| EXPLOSIVES      | Tetryl                     |          |         |     |          |          |    |           |         |    |          |         |    | 0.74      | 1 <  | U     |
| METALS          | Aluminum                   | 7550     | 1       |     | 6740     | 1        |    | 7180      | 1       |    | 6380     | 1       |    | 4890      | 1    |       |
| METALS          | Antimony                   | 0.117    | 10      |     | 0.119    | 10       |    | 4.64      | 1 <     | U  | 3.26     | 1 <     | U  | 15        | 1 <  | UJ    |
| METALS          | Arsenic                    | 0.35     | 1 U     |     | 0.144    | 1 J      | J  | 0.719     | 1       | ε  | 1.58     | 1       |    | 2.8       | 1    | J     |
| METALS          | Barium                     | 101      | 1       |     | 75.2     | 1        |    | 105       | 1 <     | U  | 92.5     | 1 <     | U  | 73.5      | 1    |       |
| METALS          | Beryllium                  | 0.241    | 1 J     | J   | 0.438    | 1        |    |           |         |    |          |         |    |           |      |       |
| METALS          | Cadmium                    | 0.104    | 1 J     | ł   | 0.0696   | 1 J      | J  | 2.9       | 1 <     | Ų  | 3.29     | 1 <     | Ų  | 1.5       | 1 <  | U     |
| METALS          | Calcium                    | 1080     | 1       |     | 1190     | t        |    | 2010      | 1       |    | 1510     | ŧ       |    | 2550      | 1    |       |
| METALS          | Chromium                   | 17.9     | 1       |     | 11.3     | 1        |    | 9.74      | 1       |    | 14.3     | 1       |    | 13,6      | 1    |       |
| METALS          | Cobalt                     | 4.02     | 1       |     | 3.2      | 1        |    | 3.18      | í       |    | 3.81     | 1       |    | 3.6       | 1    |       |
| METALS          | Copper                     | 1.99     | t       |     | 0.865    | 10       |    | 2.39      | 1 <     | υ  | 0.815    | 1 <     | U  | 15.9      | 1    |       |
| METALS          | iron                       | 9970     | 1       |     | 8590     | 1        |    | 9110      | 1       |    | 12300    | 1       |    | 10900     | 1    |       |
| METALS          | Lead                       | 6.61     | 1       |     | 4.19     | 1        |    | 18.5      | 1       |    | 16.9     | 1       |    | 21.6      | 1    |       |
| METALS          | Magnesium                  | 1770     | 1       |     | 1300     | 1        |    | 1750      | 1       |    | 1500     | 1       |    | 584       | 1    |       |
| METALS          | Manganésé                  | 28.8     | 1       |     | 9.62     | 1        |    | 14        | 1       |    | 21.5     | 1       |    | 107       | 1    |       |
| METALS          | Mercury                    | 0.259    | t U     |     | 0.296    | 10       |    | 0,058     | 1 <     | U  | 0.058    | 1 <     | U  | 0.18      | 1 <  | U     |
| METALS          | Nickel                     | 12.4     | 1       |     | 8.81     | 1        |    |           |         |    |          |         |    |           |      |       |
| METALS          | Potassium                  | 336      | 1       |     | 231      | 1        |    | 189       | 1       |    | 181      | 1       |    | 301       | i <  | U     |
| METALS          | Selenium                   | 0.134    | 1 J     | J   | 0.238    | 1 U      |    | 0.464     | 1 <     | υ  | 0.325    | 1 <     | U  | 0.62      | 1    |       |
| METALS          | Silver                     | 1.77     | 1 U     |     | 1.73     | 1 U      |    | 0.023     | <       | U  | 0,016    | 1 <     | U  | 1.5       | 1 <  | U     |
| METALS          | Sodium                     | 262      | 1       |     | 875      | ែ        |    |           |         |    |          |         |    |           |      |       |
| METALS          | Strontium                  |          |         |     |          |          |    | 44.3      | 1 <     | U  | 36.5     | 1 <     | υ  | 21.8      | 1    |       |
| METALS          | Thallium                   | 0.0467   | 1       |     | 0.0312   | 1        |    |           |         |    |          |         |    | 75.2      | 1 <  | U     |
| METALS          | Vanadium                   | 18       | 1       |     | 14.3     | 1        |    |           |         |    |          |         |    |           |      |       |
| METALS          | Zinc                       | 39.3     | 1       |     | 21.1     | 1        |    | 22.7      | 1       |    | 24,3     | 1       |    | 130       | 1    |       |
| PERC            | Perchlorate                | 0.0499   | 5 U     |     | 0.05     | 5 U      |    |           |         |    |          |         |    |           |      |       |
| SEMIVOLATILES   | 1.2.4-Trichlorobenzene     |          |         |     |          |          |    | 1,25      | 1 <     | U  | 1,235    | 1 <     | U  | 0.7       | 1 <  | U     |
| SEMIVOLATILES   | 1,2-Dichlorobenzene        | }        |         |     |          |          |    | 1.25      | 1 <     | U  | 1.235    | 1 <     | U  | 0.7       | ۲ ۲  | U     |
| SEMIVOLATILES   | 1,3-Dichlorobenzene        | 1        |         |     |          |          |    | 1.25      | 1 <     | U  | 1.235    | 1 <     | Ų  | 0.7       | 1 <  | Ų     |
| SEMIVOLATILES   | 1,4-Dichlorobenzene        |          |         |     |          |          |    | 1,25      | 1 <     | υ  | 1,235    | 1 <     | U  | 0.7       | 1 <  | U     |
| SEMIVOLATILES   | 2,4,5-Trichlorophenoi      | Į        |         |     |          |          |    | 1.25      | 1 <     | U  | 1.235    | 1 <     | U  | 3.5       | 1 <  | Ų     |
| SEMIVOLATILES   | 2,4,6-Trichlorophenol      |          |         |     |          |          |    | 1.25      | 1 <     | U  | 1.235    | 1 <     | Ų  | 0.7       | 1 <  | U     |
| SEMIVOLATILES   | 2.4-Dichlorophenol         | 1        |         |     |          |          |    | 1.25      | 1 <     | U  | 1.235    | 1 <     | υ  | 0.7       | 1 <  | U     |
| SEMIVOLATILES   | 2.4-Dimethylphenol         |          |         |     |          |          |    | 0.625     | 1 <     | Ų  | 0.617    | 1 <     | U  | 0.7       | 1 <  | U     |
| SEMIVOLATILES   | 2,4-Dinitrophenol          |          |         |     |          |          |    | 12.5      | 1 <     | U  | 12.346   | 1 <     | U  | 3.5       | 1 <  | U     |
| SEMIVOLATILES   | 2,4-Dinitrotoluene         |          |         |     |          |          |    |           |         |    |          |         |    | 0.7       | 1 <  | U     |
| SEMIVOLATILES   | 2,6-Dinitrololuene         |          |         |     |          |          |    |           |         |    |          |         |    | 0.7       | 1 <  | U     |
|                 |                            | •        |         |     |          |          |    |           |         |    |          |         |    |           |      |       |

Data Evaluation Report

and some in some of a

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



## Table 3-97 Concentrations of Chemicals in Soil Samples Associated with Sump 109

| [SUMP] = SUMP109               |                             |                   |                   |                  |                  |                  |
|--------------------------------|-----------------------------|-------------------|-------------------|------------------|------------------|------------------|
| LOCATION _CODE                 |                             | 35SUMP109-SB01    | 35SUMP109-SB02    | LH-\$109-01      | LH-S109-01       | LHS-2-13         |
| SAMPLE_NO                      |                             | 35-SMP109-SB01-02 | 35-SMP109-S802-02 | LH-\$109-01_1    | LH-S109-01_2     | LHS-2-13         |
| SAMPLE_DATE                    |                             | 9/14/2006         | 9/14/2006         | 6/26/1993        | 6/26/1993        | 1/11/1995        |
| DEPTH                          |                             | 3 - 3 Ft          | 3 - 3 Ft          | 0.5 - 1.5 Ft     | 2 - 2.5 F1       | 0-0.5 Ft         |
| SAMPLE_PURPOSE                 |                             | REG               | REG               | REG              | REG              | HEG              |
| Teşi Group                     | Parameter (Units = mg/kg)   | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO |
| SEMIVOLATILES                  | 2-Chloronaphthalena         |                   |                   | 0.375 1 < U      | 0.37 1 < 0       | 0.7 1 < 0        |
| SEMIVOLATILES                  | 2-Chlorophenol              |                   |                   | 0.625 1 < 0      | 0.617 1 < 0      | 0.7 1 < Ų        |
| SEMIVOLATILES                  | 2-Methylnaphthalene         |                   |                   | 0.375 1 < 0      | 0.37 1 < U       | 0.7 1 < ↓        |
| SEMIVOLATILES                  | 2-Methylphenol              |                   |                   | 0.625 1 < U      | 0.617 1 < U      | 0.7 1 < 0        |
| SEMIVOLATILES                  | 2-Nitroaniline              |                   |                   | 3,75 1 < U       | 3.704 1 < U      | 3,5 1 < U        |
| SEMIVOLATILES                  | 2-Nitrophenol               |                   |                   | 1.25 1 < U       | 1.235 1 < U      | 0.7 1 < U        |
| SEMIVOLATILES                  | 3,3'-Dichlarobenzidine      |                   |                   | 0.625 1 < U      | 0.617 1 < U      | 1,4 1 < U        |
| SEMIVOLATILES                  | 3-Nitroaniline              |                   |                   | 3,75 1 < U       | 3.704 I< U       | 3.5 1 < U        |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol  |                   |                   | 6.25 1 < U       | 6.173 1 < U      | 3.5 1 < U        |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether  |                   |                   | 1.25 1 < U       | 1.235 1 < U      | 0.7 1 < U        |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol     |                   |                   | 0.625 1 < U      | 0.617 1 < U      | 0.7 1 < U        |
| SEMIVOLATILES                  | 4-Chloroaniline             | i i               |                   | 3.75 i < U       | 3.704 1 < U      | 0.7 1 < U        |
| SEMIVOLATILES                  | 4-Chlorophenyl phenyl elher |                   |                   | 1.25 1 < U       | 1.235 1 < U      | 0.7 1 < U        |
| SEMIVOLATILES                  | 4-Melhylphenol              |                   |                   | 0.625 1 < U      | 0.617 1 < U      | 0,7 1 < U        |
| SEMIVOLATILES                  | 4-Nitroaniline              |                   |                   | 6,25 1 < U       | 6.173 1 < U      | 3.5 1 < U        |
| SEMIVOLATILES                  | 4-Nitrophenol               |                   |                   | 6.25 1< U        | 6.173 1 < U      | 3.5 1 < U        |
| SEMIVOLATILES                  | Acenaphthene                |                   |                   | 0.375 1 < U      | 0.37 1 < U       | 0.7 1 < U        |
| SEMIVOLATILES                  | Acenaphthylene              |                   |                   | 0.625 1 < U      | 0.617 1 < U      | 0,7 1 < U        |
| SEMIVOLATILES                  | Anthracene                  |                   |                   | 0.625 1 < U      | 0.617 1 < U      | 0.7 1 < U        |
| SEMIVOLATILES                  | Benzo(a)anthracene          |                   |                   | 0.375 1 < U      | 0.37 1 < U       | 0.7 I< U         |
| SEMIVOLATILES                  | Benzo(a)pyrene              |                   |                   | 0.825 1 < U      | 0.617 1 < U      | 0,28 1 J         |
| SEMIVOLATILES                  | Benzo(b)fluoranthene        |                   |                   | 1.25 1 < U       | 1.235 1 < U      | 0,14 1 J         |
| SEMIVOLATILES                  | Benzo(ahi)perviene          |                   |                   | 2.5 1 < 1        | 2.469 1 < U      | 0.27 1 J         |
| SEMIVOLATILES                  | Benzo(k)fluoranthene        |                   |                   | 1.25 1 < U       | 1.235 1 < U      | 0.083 1 J        |
| SEMIVOLATILES                  | Benzoic Acid                |                   |                   |                  |                  | 3.5 1 < U        |
| SEMIVOLATILES                  | Benzvi Alcohol              |                   |                   |                  |                  | 0.7 1 < U        |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane  |                   |                   | 0.625 1 < U      | 0.617 1 < U      | 0.7 1 < U        |
| SEMIVOLATILES                  | bis/2-Chloroethy/)ether     |                   |                   | 0.625 1 < U      | 0.617 1 < U      | 0.7 i < U        |
| SEMIVOLATILES                  | his(2-Chloroisonrony()ether |                   |                   | 1,25 I < U       | 1.235 1 < U      | 0.7 i < U        |
| SEMIVOLATILES                  | his/2-Ethylhexyl)phibaiata  |                   |                   | 0.15 1 J         | 0,185 1          | 0.7 1 < U        |
| SEMIVOLATILES                  | Butyi benzyi obthalate      |                   |                   | 0.625 i < U      | 0.617 1 < U      | 0.7 1 < U        |
| SEMIVOLATILES                  | Carbazole                   |                   |                   | 1.25 1 < U       | 1.235 i < U      |                  |
| SEMIVOLATILES                  | Chrysepe                    |                   |                   | 6.25 I < U       | 6.173 1 < U      | 0.7 1 < U        |
| SEMIVOLATILES                  | Dibenzo(a b)anthracene      |                   |                   | 2.5 1 < U        | 2,469 1 < U      | 0.7 1 < U        |
| SEMINOLATILES                  | Dibenzofuran                |                   |                   | 1.25 1 < U       | 1.235 1 < U      | 0.7 I < U        |
| CEMINOLATILES                  | Distbul oblocion            |                   |                   | 0.013 1 J        | 0.617 1 < U      | 0.7 1 < U        |
| SEMIVOLATIES                   | Directly: philliplate       |                   |                   | 0.625 1 < 11     | 0.617 1 < U      | 0.7 i < U        |
| CENTROLATILES                  | di a Rutul abitaziata       |                   |                   | 4 775 1          | 2.42 1           | 0.7 1< U         |
| SEMMOLATILES<br>SEMMOLATILES   | di e Ostul obtinziate       |                   |                   | 0.825 1 < 1      | 0.617 1 4 11     | 0.7 1 < U        |
| SEMINOLATILES<br>REMINOLATILES | Chile Octy primate          |                   |                   | 0.625 1 2 11     | 0.617 1 < 11     | 07 1< 11         |
| SENIVOLATILES                  | Fluorannene                 |                   |                   | 0.625 1 < 1      | 0.617 1 - 11     | 07 1 < 1         |
| SENIVOLATILES                  | ricolena<br>Liouadiana      |                   |                   | 125 1 < 1        | 1295 1 4 1       | 07 1 4 11        |
| SCHIVOLATILES                  | Hexachicouperzene           |                   |                   | 375 1 2 11       | 3704 1 2 1       | 0.7 1 < 11       |
| SEMIVULATILES                  | nexactiforopulations        |                   |                   | 175 1 2 11       | 3704 1 4 11      | 07 5 4 11        |
| SEMIVOLATILES                  | Hexachorocycopeniaciene     |                   |                   | 125 1 - 11       | 1.235 1 - 11     | 0.7 1 - 11       |
| SEMIVULATILES                  |                             |                   |                   | 126 1 1          | 1235 1 - 11      | 07 1 - 11        |
| SEMIVOLATILES                  | incency (, 2, 3-co)pyrene   | 1                 |                   | 1 2 1 221        | 0 A17 1 - 11     | 07 1 - 11        |
| SEMIVOLATILES                  | isophorone                  |                   |                   | 0.023 ( C U      |                  | 07 12 11         |
| SEMIVOLATILES                  |                             |                   |                   |                  |                  |                  |
| SEMIVOLATILES                  | Ntrobenzene                 | 1                 |                   | 0.020 I < U      | 0.017 1 < 0      | 0.7 TK ()        |

Shaw Environmental, Inc. 00066280

## Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

a maria

| [SUMP] = SUMP109 |                                |                   |                   |                  |                  |                  |
|------------------|--------------------------------|-------------------|-------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                                | 35SUMP109-S801    | 35SUMP109-SB02    | LH-\$109-01      | LH-S109-01       | LHS-2-13         |
| SAMPLE_NO        |                                | 35-SMP109-SB01-02 | 35-SMP109-SB02-02 | LH-S109-01_1     | LH-S109-01_2     | LHS-2-13         |
| SAMPLE_DATE      |                                | 9/14/2006         | 9/14/2006         | 6/26/1993        | 6/26/1993        | 1/11/1995        |
| DEPTH            |                                | 3 - 3 FI          | 3 - 3 Ft          | 0.5 - 1.5 Ft     | 2 - 2.5 Ft       | 0 - 0.5 Ft       |
| SAMPLE_PURPOSE   |                                | REG               | REG               | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO |
| SEMIVOLATILES    | n-Nitroso-dl-n-propylamine     |                   |                   | 1.25 1 < U       | 1.235 1 < U      | 0.7 1 < U        |
| SEMIVOLATILES    | n-Nitrosodiphenylamine         |                   |                   | 0.625 1 < U      | 0.617 1 < U      | 0.7 1 < U        |
| SEMIVOLATILES    | Pentachlorophenol              |                   |                   | 6.25 1 < U       | 6.173 1 < U      | 3.5 1 < U        |
| SEMIVOLATILES    | Phenanthrene                   |                   |                   | 0.625 1 < U      | 0.617 i < U      | 0,7 1 < U        |
| SEMIVOLATILES    | Phenol                         |                   |                   | 0.625 1 < U      | 0.617 1 < U      | 0,7 1 < U        |
| SEMIVOLATILES    | Ругеле                         |                   |                   | 0.825 1 < U      | 0.617 1 < じ      | 0.7 f < U        |
| VOLATILES        | 1,1,1,2-Tetrachioroethane      | 0.00503 1 U       | 0.00526 1 U       |                  |                  | 0.021 1 < U      |
| VOLATILES        | 1,1,1-Trichloroethane          | 0.00503 1 U       | 0.00526 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0,011 1 < U      |
| VOLATILES        | 1,1,2,2-Tetrachioroethane      | 0.00503 1 U       | 0.00526 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.011 1 < U      |
| VOLATILES        | 1,1,2-Trichloroethane          | 0.00503 1 U       | 0.00526 1 U       | 0.006 t< U       | 0.006 1 < U      | 0.011 1 < U      |
| VOLATILES        | 1,1-Dichloroethane             | 0.00503 1 U       | 0.00526 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.011 1 < U      |
| VOLATILES        | 1,1-Dichloroethens             | 0.00503 1 U       | 0.00528 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.011 1 < U      |
| VOLATILES        | 1.1-Dichloropropene            | 0.00503 1 U       | 0.00526 1 U       |                  |                  |                  |
| VOLATILES        | 1,2,3-Trichlorobenzene         | 0.00503 f U       | 0.00526 1 U       |                  |                  |                  |
| VOLATILES        | 1,2,3-Trichloropropane         | 0.00503 1 U       | 0.00526 1 U       |                  |                  | 0.021 1 < U      |
| VOLATILES        | 1,2,4-Trichlorobenzene         | 0.00503 1 U       | 0.00526 1 U       |                  |                  |                  |
| VOLATILES        | 1,2,4-Trimethylbenzene         | 0.00503 1 U       | 0.00526 1 U       |                  |                  |                  |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    | 0.00503 1 U       | 0.00526 1 U       |                  |                  | 0.042 1 < U      |
| VOLATILES        | 1.2-Dibrompethane              | 0,00503 1 U       | 0.00526 1 U       |                  |                  | 0.042 1 < U      |
| VOLATILES        | 1.2-Dichlorobenzene            | 0.00503 1 U       | 0.00526 1 U       |                  |                  |                  |
| VOLATILES        | 2-Dichloroethane               | 0.00503 tU        | 0.00526 1 U       | 0.006 1< U       | 0.006 1 < U      | 0.011 1 < U      |
| VOLATILES        | 1.2-Dichloroethene             |                   |                   | 0.006 1 < U      | 0.006 1 < U      | 0.011 1 < U      |
| VOLATILES        | 1.2-Dichlorooropane            | 0.00503 1 U       | 0.00526 1 U       | 0.006 1 < U      | 0.006 1 < U      | 0.011 1 < U      |
| VOLATILES        | 1 2-Dimethylbenzene (o-Xvlene) | 0.00503 1 U       | 0.00526 1 U       |                  |                  |                  |
| VOLATILES        | 1.3.5-Trimelbyihenzene         | 0.00503 1 U       | 0.00526 1 U       |                  |                  |                  |
| VOLATEES         | 1 3-Dichlorobenzens            | 0.00503 1 U       | 0.00526 1 U       |                  |                  |                  |
| VOLATILES        | 1 3-Dichloropropage            | 0.00503 1 U       | 0.00526 1 U       |                  |                  |                  |
|                  | 1 4-Dichlorobenzene            | 0.00503 1.11      | 0.00526 1 U       |                  |                  |                  |
| VOLATILES        | 2 2.Dichloronronane            | 0.00503 1.11      | 0.00526 1 U       |                  |                  |                  |
| VOLATILES        | 2.8 danne                      | 0.0101 1 U        | 0.0105 1 U        | 0.12 1 < U       | 0.12 1 < U       | 0.021 1 < U      |
| VOLATILES        | 2-Chiomethyl ylayl other       | 0.0101 1.11       | 0.0105 1 U        |                  |                  | 0.021 1 < U      |
| VOLATILES        | 2-Chlorololuene                | 0.00503 1.11      | 0.00526 1.U       |                  |                  |                  |
| VOLATILES        | 2-90/0000000                   | 0.0101 1 1        | 0.0105 1.1        | 0.062 1 < U      | 0.062 1 < U      | 0.021 1 < U      |
| VOLATILES        | 2.Propenal                     |                   |                   |                  |                  | 1,1 1 < U        |
| VOLATILES        | A Chloreteiuene                | 0.00503 1.11      | 0.00526 1 U       |                  |                  |                  |
| VOLATILES        | Acctone                        | 0.00000 1 0       | 0.0020 1 0        | 012 1 c U        | 0.12 1 < 1       | 0.021 1 < U      |
| VOLATILES        | Acetonicio                     | 0.0101 1.0        | 0.0100 1 0        | 0.12             |                  | 0.21 1 < 1       |
| VOLATILES        | Aceionicae .                   |                   |                   |                  |                  | 0.21 1 < U       |
| VOLATILES        | Acryonante<br>Mui oblocida     |                   |                   |                  |                  | 0.021 1 < U      |
| VOLATILES        | Any chiches                    | 0.00500 1.11      | 0.00576 1.11      | 0.006 1 4 11     | 0.006 1 - 11     | 0.011 1 < 11     |
| VOLATILES        | Benzene                        | 0.00503 1 U       | 0.00526 1 1       | 0.000 / 4 0      | 0,000 / 0        |                  |
| VULANLES         | Bromobenzene                   | 0.00303 1 0       | 0.00320 10        |                  |                  |                  |
| VOLATILES        | Bromochloromeinane             | 0.00503 1 0       | 0.00526 1 U       | 0.006 1 4 11     | 1 - 1 - 200.0    | 0.011 1 2 11     |
| VULATILES        | Bromodichioromethane           | 0.00503 1.0       | 0.00320 1 0       |                  | 0.000 1 0        | 0.011 1 2 1      |
| VOLATILES        | Bromolorm                      | 0.00503 1 0       | 0.00320 10        | 0.000 1 4 1      | 0,000 1 4 0      | 0.021 1 2 11     |
| VOLATILES        | Bromomethane                   |                   | 0.0105 + 0        |                  |                  | 0.021 1 < 1      |
| VOLATILES        | Garbon disullide               | 0.00503 1 0       | 0.00526 1 U       |                  | 0.000 1 < 0      |                  |
| VOLATILES        | Garpon letrachioride           | 0.00503 1 0       | 0.00526 1 0       | 0.000 1 < 0      |                  |                  |
| VOLATILES        | Chlorobenzene                  | 0.00503 1 U       | 0.00526 1 U       | 0.005 1 < 0      |                  |                  |
| VOLATILES        | Chloroethane                   | 0.0101 1 U        | 0.0105 1 U        | 0.005 1 < 0      | 0.006 1 < 0      | 0.021 1 < 0      |

 Table 3-97

 Concentrations of Chemicals in Soil Samples Associated with Sump 109



| Table 3-97   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 109 |

| (SUMP) = SUMP109 |                             |                  |                 |          |           |          |          |    |          |          |     |            |       |      |
|------------------|-----------------------------|------------------|-----------------|----------|-----------|----------|----------|----|----------|----------|-----|------------|-------|------|
| LOCATION _CODE   |                             | 35SUMP109-S801   | I               | 35SUMP   | 109-5802  | LH-:     | S109-01  |    | LH-S     | \$109-01 |     | LHS-       | 2-13  |      |
| SAMPLE_NO        |                             | 35-SMP109-SB01-0 | 2               | 35-SMP10 | 9-SB02-02 | LH-S     | 109-01_  | 1  | LH-S1    | 09-01_2  | ?   | LHS-       | 2-13  |      |
| SAMPLE_DATE      |                             | 9/14/2005        | 9/14/2005       |          | 2006      | 6/2      | 6/1993   |    | 6/2      | 6/1993   |     | 1/11/1995  |       |      |
| DEPTH            |                             | 3 - 3 Ft         | 3 - 3 Ft<br>REG |          | 3 FI      | 0.5      | - 1.5 Ft |    | 2 -      | 2.5 Ft   |     | 0 - 0.5 FI |       |      |
| SAMPLE_PURPOSE   |                             | REG              |                 |          | REG       |          | REG      |    | REG      |          | REG |            |       |      |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LO    | VQ              | Result D | L LQ VQ   | Result D | AL LO    | VQ | Result D | HL LO    | ٧Q  | Result D   | IL LO | i VQ |
| VOLATILES        | Chloroform                  | 0.00503 1 U      |                 | 0.00526  | 10        | 0.006    | 1 <      | U  | 0.006    | 1 <      | U   | 0.011      | 1 <   | Ü    |
| VOLATILES        | Chloromethane               | 0.0101 1 U       |                 | 0.0105   | 1 U       | 0.006    | 1 <      | U  | 0.006    | 1 <      | IJ  | 0:021      | 1 <   | U    |
| VOLATILES        | Chloroprene                 |                  |                 |          |           |          |          |    |          |          |     | 0.21       | 1 <   | U    |
| VOLATILES        | cis-1 2-Dichloroethene      | 0.00503 1 U      |                 | 0.00526  | 1 U       |          |          |    |          |          |     |            |       |      |
| VOLATILES        | cis-1 3-Dichloropropene     | 0.00503 1 U      |                 | 0.00526  | 1 U       | 0.006    | 1 <      | U  | 0.005    | 1 <      | U   | 0.011      | 1 <   | U    |
| VOLATILES        | Dibromochloromethane        | 0.00503 1 U      |                 | 0.00526  | 1 U       | 0.006    | 1 <      | U  | 0.006    | ۱ <      | U   | 0.011      | 1 <   | U    |
| VOLATILES        | Dibromomethane              | 0.00503 1 U      |                 | 0.00526  | មេ        |          |          |    |          |          |     | 0.042      | 1 <   | U    |
| VOLATILES        | Dichlorodifluoromethane     | 0.0101 1 U       |                 | 0.0105   | 10        |          |          |    |          |          |     | 0.042      | 1 <   | U    |
| VOLATILES        | Ethyl methacrylate          |                  |                 |          |           |          |          |    |          |          |     | 0.042      | 1 <   | U    |
| VOLATILES        | Ethylbenzene                | 0.00503 1 U      |                 | 0.00526  | 1 U       | 0.006    | 1 <      | U  | 0.006    | 1 <      | U   | 0.011      | 1 <   | U    |
| VOLATILES        | Hexachlorobutadiene         | 0.00503 tU       |                 | 0,00526  | 1 U       |          |          |    |          |          |     |            |       |      |
| VOLATILES        | IODOMETHANE                 |                  |                 |          |           |          |          |    |          |          |     | 0.021      | 1 <   | U    |
| VOLATILES        | ISOBUTYL ALCOHOL            |                  |                 |          |           |          |          |    |          |          |     | 4.2        | 1 <   | U    |
| VOLATILES        | Isopropylbenzene            | 0.00503 1 U      |                 | 0.00526  | 1 U       |          |          |    |          |          |     |            |       |      |
| VOLATILES        | m,p-Xylenes                 | 0.00503 1 U      |                 | 0.00526  | 1 U       |          |          |    |          |          |     |            |       |      |
| VOLATILES        | Methacrylonitrile           |                  |                 |          |           |          |          |    |          |          |     | 0.042      | 1 <   | U    |
| VOLATILES        | Methyl isobutyl ketone      | 0.0101 1 U       |                 | 0.0105   | 1 U       | 0.062    | 1 <      | U  | 0.062    | 1 <      | U   | 0.021      | 1 <   | U    |
| VOLATILES        | METHYL METHACRYLATE         |                  |                 |          |           |          |          |    |          |          |     | 0.042      | 1 <   | U    |
| VOLATILES        | Methylene chloride          | 0.00503 1 U      |                 | 0,00526  | 1 U       | 0.006    | 1 <      | U  | 0.006    | 1 <      | ប   | 0.011      | 1 <   | U    |
| VOLATILES        | Naphthalene                 | 0.0101 1 U       |                 | 0.0105   | 1 U       |          |          |    |          |          |     |            |       |      |
| VOLATILES        | n-BUTYLBENZENE              | 0.00503 t U      |                 | 0,00528  | 1.0       |          |          |    |          |          |     |            |       |      |
| VOLATILES        | n-PROPYLBENZENE             | 0.00503 1 U      |                 | 0.00526  | 1 U       |          |          |    |          |          |     |            |       |      |
| VOLATILES        | Pentachloroethane           |                  |                 |          |           |          |          |    |          |          |     | 0.042      | 1 <   | U    |
| VOLATILES        | p-ISOPROPYLTOLUENE          | 0.00503 1 U      |                 | 0.00526  | 1 U       |          |          |    |          |          |     |            |       |      |
| VOLATILES        | Propionitrile               |                  |                 |          |           |          |          |    |          |          |     | 0.11       | 1 <   | U    |
| VOLATILES        | sec-BUTYLBENZENE            | 0,00503 1 U      |                 | 0.00526  | 1 Ų       |          |          |    |          |          |     |            |       |      |
| VOLATILES        | Styrene                     | 0,00503 1 U      |                 | 0.00526  | 1 U       | 0,005    | 1 <      | U  | 0.006    | 1 <      | U   | 0.011      | 1 <   | Ų    |
| VOLATILES        | tert-BUTYLBENZENE           | 0,00503 1 U      |                 | 0.00526  | 1 U       |          |          |    |          |          |     |            |       |      |
| VOLATILES        | Teirachloroethene           | 0.00503 1 U      |                 | 0.00526  | 1 U       | 0.006    | 1 <      | Ų  | 0.006    | 1 <      | U   | 0.011      | 1 <   | U    |
| VOLATILES        | Toluene                     | 0.00503 1 U      |                 | 0.00526  | 1 U       | 0.006    | 1 <      | U  | 0.006    | 1 <      | U   | 0.011      | 1 <   | U    |
| VOLATILES        | trans-1,2-Dichloroethene    | 0.00503 1 U      | UJ              | 0.00526  | 1 U       |          |          |    |          |          |     |            |       |      |
| VOLATILES        | trans-1.3-Dichloropropene   | 0.00503 1 U      |                 | 0.00526  | 1 U       | 0.006    | 1 <      | U  | 0.006    | 1 <      | U   | 0.011      | 1 <   | U    |
| VOLATILES        | Irans-1,4-Dichloro-2-butene |                  |                 |          |           |          |          |    |          |          |     | 0.042      | 1 <   | U    |
| VOLATILES        | Trichloroethene             | 0.00503 1 U      |                 | 0.00526  | 1 U       | 0.006    | 1 <      | U  | 0.006    | 1 <      | U   | 0.011      | 1 <   | U    |
| VOLATILES        | Trichlorofluoromethane      | 0.0101 1 U       |                 | 0.0105   | 1 U       |          |          |    |          |          |     | 0.021      | 1 <   | Ų    |
| VOLATILES        | Vinyl acetate               | 0.0101 1 U       |                 | 0.0105   | 1 U       |          |          |    |          |          |     | 0,021      | 1 <   | U    |
| VOLATILES        | Vinyl chloride              | 0.0101 1 U       |                 | 0.0105   | 1 U       | 0.006    | 1 <      | U  | 0.006    | ۲ ۲      | U   | 0.021      | 1 <   | IJ   |
| VOLATH ES        | Xvienes, Total              |                  |                 |          |           | 0.006    | ۲ <      | U  | 0.006    | 1 <      | U   | 0.011      | . 1 < | υ    |

Footnotes are shown on cover page to Tables Section.

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-98   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 110 |

| [SUMP] = SUMP110 |                            |                   |                   |                  |                  |
|------------------|----------------------------|-------------------|-------------------|------------------|------------------|
| LOCATION CODE    |                            | 35SUMP110-SB01    | 35SUMP110-SB02    | LH-S110-01       | LH-S110-01       |
| SAMPLE_NO        |                            | 35-SMP110-SB01-02 | 35-SMP110-SB02-02 | LH-\$110-01_1    | LH-\$110-01_2    |
| SAMPLE_DATE      |                            | 9/14/2006         | 9/14/2006         | 8/4/1993         | 8/4/1993         |
| DEPTH            |                            | 5.5 · 5.5 Ft      | 5.5 - 5.5 Ft      | 0.5 - 2 Ft       | 3 - 5 Ft         |
| SAMPLE_PURPOSE   |                            | REG               | REG               | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)  | Result DIL LO VQ  | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ |
| EXPLOSIVES       | 1,3,5-Trinitrobenzene      | 0.244 1 U         | 0.248 1 U         |                  |                  |
| EXPLOSIVES       | 1,3-Dinitrobenzene         | 0.244 1 U         | 0.248 1 U         |                  |                  |
| EXPLOSIVES       | 2,4,6-Trinitrotoluene      | 0.244 1 U         | 0.248 1 U         |                  |                  |
| EXPLOSIVES       | 2,4-Dinitrotoluene         | 0.244 1 U         | 0.248 1 U         |                  |                  |
| EXPLOSIVES       | 2,6-Dinitrotoluene         | 0.254 1 U         | 0.257 1 U         |                  |                  |
| EXPLOSIVES       | 2-Amino-4,6-dinitrotoluene | 0.254 1 U         | 0.257 1 U         |                  |                  |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene | 0.254 1 U         | 0.257 1 U         |                  |                  |
| EXPLOSIVES       | НМХ                        | 2.15 1 U          | 2.18 1 U          |                  |                  |
| EXPLOSIVES       | m-Nitrotoluene             | 0.244 1 U         | 0.248 1 U         |                  |                  |
| EXPLOSIVES       | Nitrobenzene               | 0.254 1 U         | 0.257 1 U         |                  |                  |
| EXPLOSIVES       | o-Nitrotoluene             | 0.244 1 U         | 0.248 1 U         |                  |                  |
| EXPLOSIVES       | p-Nitrotoluene             | 0.244 1 U         | 1.35 1            |                  |                  |
| EXPLOSIVES       | RDX                        | 0.976 1 U         | 0.99 1 U          |                  |                  |
| EXPLOSIVES       | Tetry!                     | 0.634 1 U         | 0.644 1 U         |                  |                  |
| METALS           | Aluminum                   | 8960 1            | 14100 1           | 11200 1          | 9060 1           |
| METALS           | Antimony                   | 0.115 1 U         | 0.116 1 U         | 3 1 < U          | 31 < U           |
| METALS           | Arsenic                    | 0.128 1 J J       | 0.119 1 J J       | 3.7 1            | 2.9 1            |
| METALS           | Barium                     | 76.1 1            | 144 1             | 44 1             | 29 1             |
| METALS           | Beryllium                  | 0.482 1           | 0.85 1            |                  |                  |
| METALS           | Cadmium                    | 0.0785 1 J J      | 0.119 1 J J       | 1 1 < U          | 11 < U           |
| METALS           | Calcium                    | 343 1             | 512 1             | 484 1            | 667 1            |
| METALS           | Chromlum                   | 9.69 1            | 11,3 1            | 16 1             | 10 1             |
| METALS           | Cobalt                     | 6.24 1            | 9.43 1            | 2 1              | 11 < U           |
| METALS           | Copper                     | 3.26 t            | 5.51 1            | 2 1              | 3 1              |
| METALS           | iron                       | 12600 1           | 16200 1           | 13500 1          | 9200 1           |
| METALS           | Lead                       | 6.35 1            | 4.66 1            | 3.1 1            | 49.9 1           |
| METALS           | Magnesium                  | 848 1             | 1280 1            | 435 1            | 304 1            |
| METALS           | Manganese                  | 9.76 1            | 16.8 1            | 27 1             | 15 1             |
| METALS           | Mercury                    | 0.0158 1 J J      | 0.287 1 U         | 0.1 1 < U        | 0.1 1 < U        |
| METALS           | Nickel                     | 8.28 1            | 10.8 1            |                  |                  |
| METALS           | Potassium                  | 271 1             | 317 1             | 483 1            | 456 1            |
| METALS           | Selenium                   | 0.276 1           | 0.185 1 J J       | 11< U            | 11 < 0           |
| METALS           | Silver                     | 1.57 1 U          | 1.7 1 U           | 1 1 < U          | 11 < U           |
| METALS           | Sodium                     | · 441 1           | 473 1             |                  |                  |
| METALS           | Strontium                  |                   |                   | 8 1              | 10 1             |
| METALS           | Thalitum                   | 0.0594 1          | 0.0507 1          |                  |                  |
| METALS           | Vanadium                   | 19.6 1            | 15,7 1            |                  |                  |
| METALS           | Zinc                       | 14,6 1            | 20.2 1            | 13 1             | 9 1              |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene     |                   |                   | 0,33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 1,2-Dichlorobenzene        |                   |                   | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 1,3-Dichlorobenzene        |                   |                   | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 1,4-Dichlorobenzene        |                   |                   | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol      |                   |                   | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | 2.4.6 Trichlorophenol      |                   |                   | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2.4-Dichlorophenol         |                   |                   | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2.4-Dimethylphenol         |                   |                   | 0.33 1 < U       | 0.33 t < U       |
| SEMIVOLATILES    | 2,4-Dinitrophenol          | l                 |                   | 1.65 1 < U       | 1.65 1 < U       |



|                  | Concentrations of Chem      | nicals in Soil Sample | es Associated wi  | th Sump    | 110     |              |        |       |
|------------------|-----------------------------|-----------------------|-------------------|------------|---------|--------------|--------|-------|
| (SUMP) = SUMP110 |                             |                       |                   |            |         |              |        |       |
| LOCATION _CODE   |                             | 35SUMP110-SB01        | 35SUMP110-S802    | LH-S11     | 0-01    | LH-S110-01   |        |       |
| SAMPLE_NO        |                             | 35-SMP110-SB01-02     | 35-SMP110-SB02-02 | LH-S110    | -01_1   | LH-S110-01_2 |        |       |
| SAMPLE_DATE      |                             | 9/14/2005             | 9/14/2006         | B/4/19     | 193     | 8/4          | 4/1993 |       |
| DEPTH            |                             | 5.5 - 5.5 Ft          | 5.5 - 5.5 Ft      | 0.5 - 2 Ft |         | 3 • 5 Ft     |        |       |
| SAMPLE_PURPOSE   |                             | REG                   | REG               | REC        | 3       | I            | REG    |       |
| SEMIVOLATILES    | 2.4-Dinitrotoluene          |                       |                   | 0.33 1     | < 13    | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | 2.6-Dinitrotoluene          |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | 2-Chioronaphthalene         |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | 2-Chlorophenol              |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | 2-Methylnaphthalene         |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | 2-Methylphenol              |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | 2-Nitroaniline              |                       |                   | 1.65 1     | < U     | 1.65         | 1 <    | U     |
| SEMIVOLATILES    | 2-Nitrophenoi               |                       |                   | 0.33 1     | < U     | 0,33         | 1 <    | U     |
| SEMIVOLATILES    | 3,3 Dichlorobenzidine       |                       |                   | 0.65 1     | < U     | 0.65         | 1 <    | U     |
| SEMIVOLATILES    | 3-Nitroaniline              |                       |                   | 1,65 1     | < U     | 1.65         | 1 <    | U     |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol  |                       |                   | 1,65 1     | < U     | 1.65         | 1 <    | U     |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  |                       |                   | 0,33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     |                       |                   | 0.65 1     | < Ų     | 0.65         | 1 <    | U     |
| SEMIVOLATILES    | 4-Chloroaniline             |                       |                   | 0.65 1     | < U     | 0.65         | 1 <    | U     |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether | 1                     |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | 4-Methylphenol              |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | 4-Nitroaniline              |                       |                   | 1.65 1     | < U     | 1.65         | 1 <    | U     |
| SEMIVOLATILES    | 4-Nitrophenol               |                       |                   | 1.65 1     | < U     | 1.65         | 1 <    | U     |
| SEMIVOLATILES    | Acenaphthene                |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Acenaphihylene              |                       |                   | 0,33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Anthracene                  |                       |                   | 0,33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Benzo(a)anthracene          |                       |                   | 0,33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Benzo(a)pyrene              |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Benzo(b)fluoranthene        |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Benzo(ghi)perylene          |                       |                   | 0,33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Benzoic Acld                |                       |                   | 1.65 1     | < U     | 1.65         | 1 <    | U     |
| SEMIVOLATILES    | Benzyl Alcohol              |                       |                   | 0.65 1     | < U     | 0.65         | 1 <    | Ų     |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |                       |                   | 0.519 1    |         | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Butyl benzyl phthalate      |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Chrysene                    |                       |                   | 0.33       | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      |                       |                   | 0.33       | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Dibenzofuran                |                       |                   | 0,33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Diethyl phthalate           |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Dimethyl phthalate          |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | di-n-Butyi phthalate        |                       |                   | 0.33 1     | < 0     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | di-n-Octyl phthalate        |                       |                   | 0.33 1     | < 0     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Fluoranthene                |                       |                   | 0.33 1     | < U<br> | 0.33         | 1 <    | U<br> |
| SEMIVOLATILES    | Fluorene                    | 1                     |                   | 0.33 1     | < U<br> | 0.33         | 1 <    | U<br> |
| SEMIVOLATILES    | Hexachlorobenzene           |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | 0     |
| SEMIVOLATILES    | Hexachlorobutadiene         |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | Hexachiorocyclopentadiene   |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | 0     |
| SEMIVOLATILES    |                             |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | indeno(1,2,3-ca)pyrene      |                       |                   | 0.33 1     | < U     | 0.33         | 1 <    | U     |
| SEMIVOLATILES    | isophorone                  | I                     |                   | 0.33 1     | < U     | 0.33         | I <    | Ų     |

## Table 3-98

~

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-98   |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 110 |

| (SUMP) = SUMP110 |                                |                   |                               |              |               |  |  |  |
|------------------|--------------------------------|-------------------|-------------------------------|--------------|---------------|--|--|--|
| LOCATION_CODE    |                                | 35SUMP110-SB01    | 35SUMP110-SB01 35SUMP110-SB02 |              | LH-S110-01    |  |  |  |
| SAMPLE_NO        |                                | 35-SMP110-SB01-02 | 35-SMP110-SB02-02             | LH-S110-01_1 | LH-\$110-01_2 |  |  |  |
| SAMPLE DATE      |                                | 9/14/2006         | 9/14/2006                     | 8/4/1993     | 8/4/1993      |  |  |  |
| DEPTH            |                                | 5.5 - 5.5 Ft      | 5.5 - 5.5 Ft                  | 0.5 - 2 Ft   | 3 - 5 Ft      |  |  |  |
| SAMPLE PURPOSE   |                                | REG               | REG                           | REG          | REG           |  |  |  |
| SEMIVOLATILES    | Naphthalene                    |                   |                               | 0.33 1 < U   | 0.33 1 < U    |  |  |  |
| SEMIVOLATILES    | Nitrobenzene                   |                   |                               | 0.33 1 < U   | 0.33 1 < U    |  |  |  |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine     |                   |                               | 0.33 1 < U   | 0.33 1 < U    |  |  |  |
| SEMIVOLATILES    | n-Nitrosodiphenvlamine         |                   |                               | 0.33 1 < U   | 0,33 1 < U    |  |  |  |
| SEMIVOLATILES    | Pentachlorophenol              |                   |                               | 1.65 1 < U   | 1.65 1 < U    |  |  |  |
| SEMIVOLATILES    | Phenanthrene                   |                   |                               | 0.33 1 < U   | 0,33 1 < U    |  |  |  |
| SEMIVOLATILES    | Phenol                         |                   |                               | 0.33 1 < U   | 0.33 1 < U    |  |  |  |
| SEMIVOLATILES    | Pyrene                         |                   |                               | 0.33 1 < U   | 0.33 1 < U    |  |  |  |
| VOLATILES        | 1.1.1.2-Tetrachloroethane      | 0.00519 1 U       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | 1 1 1-Trichloroethane          | 0.00519 1 1       | 0.00497 1 U                   | 0.005 1 < U  | 0.005 1 < U   |  |  |  |
| VOLATILES        | 1 1 2 2-Tetrachloroetbane      | 0.00519 1 U       | 0.00497 1 U                   | 0.005 1 < 1  | 0.005 1 < U   |  |  |  |
| VOLATILES        | 1 1 2-Trichbroethane           | 0.00519 1 11      | 0.00497 1 1                   | 0.005 1 < U  | 0.005 1 < U   |  |  |  |
| VOLATILES        | 1 1-Dichlomethane              | 0.00510 1 11      | 0.00497 1 11                  | 0.005 1 < 1  | 0.005 1 < U   |  |  |  |
|                  | 1.1 Disbloreethers             | 0.00319 1 0       | 0.00487 1 0                   | 0.000 1 < 0  |               |  |  |  |
|                  |                                | 0.00319 F 0       | 0.00497 7 0                   | 0.003 1 2 0  | 0,000 1 4 0   |  |  |  |
| VOLATILES        | 1, POICHORDPROPERE             | 0.00519 1 0       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | 1,2,3+1 noniorobenzene         |                   | 0.00497 1 0                   |              |               |  |  |  |
| VOLATILES        | 1,2,3- (richloropropane        | 0.00519 1 0       | 0.00497 1 0                   |              |               |  |  |  |
| VOLAHLES         | 1.2,4-Trichlorobenzene         | 0.00519 1 0       | 0,00497 1 0                   |              |               |  |  |  |
| VOLATILES        | 1,2,4-1 rimelhyibenzene        | 0.00519 1 0       | 0.00497 1 0                   |              |               |  |  |  |
| VOLAHLES         | 1,2-Olbromo-3-chloropropane    | 0.00519 1 0       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | 1,2-Dibromoethane              | 0.00519 1 U       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | 1,2-Dichlorobenzene            | 0.00519 1 0       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | 1,2-Dichloroethane             | 0.00519 1 U       | 0.00497 1 U                   | 0.005 1 < U  | 0.005 1 < U   |  |  |  |
| VOLATILES        | 1.2-Dichloroethene             |                   |                               | 0.005 1 < U  | 0.005 1 < U   |  |  |  |
| VOLATILES        | 1,2-Dichloropropane            | 0.00519 1 U       | 0.00497 1 U                   | 0.005 1 < U  | 0.005 1 < U   |  |  |  |
| VOLATILES        | 1.2-Dimethylbenzene (o-Xylene) | 0.00519 1 U       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | 1.3.5-Trimethylbenzene         | 0.00519 1 U       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | 1,3-Dichlorobenzena            | 0.00519 1 U       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | 1.3-Dichloropropane            | 0.00519 1 U       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | 1,4-Dichlorobenzene            | 0.00519 1 U       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | 2.2-Dichloropropane            | 0.00519 1 U       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | 2-Butanone                     | 0.0104 1 U        | 0.00993 1 U                   | 0.05 1 < U   | 0.05 1 < U    |  |  |  |
| VOLATILES        | 2-Chloroethyl vinyl ether      | 0.0104 1 U        | 0.00993 1 U                   | 0.01 1 < U   | 0.01 1 < U    |  |  |  |
| VOLATILES        | 2-Chlorotoluene                | 0.00519 1 U       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | 2-Hexanone                     | 0.0104 1 U        | 0.00993 1 U                   | 0.05 1 < U   | 0.05 1 < U    |  |  |  |
| VOLATILES        | 4-Chlorotoluene                | 0.00519 1 U       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | Acetone                        | 0.0104 1 U        | 0.00993 1 U                   | 0.1 1 < U    | 0.1 1 < U     |  |  |  |
| VOLATILES        | Benzene                        | 0.00519 1 U       | 0.00497 1 U                   | 0.005 1 < U  | 0.005 1 < U   |  |  |  |
| VOLATILES        | Bramabenzene                   | 0.00519 1 U       | 0.00497 1 U                   |              |               |  |  |  |
| VOLATILES        | Bromochloromethane             | 0.00519 1 U       | 0,00497 1 U                   |              |               |  |  |  |
| VOLATILES        | Bromodichloromethane           | 0.00519 1 U       | 0.00497 1 U                   | 0.005 1 < U  | 0.005 1 < U   |  |  |  |
| VOLATILES        | Bromotorm                      | 0.00519 1 U       | 0,00497 1 U                   | 0.005 1 < U  | 0.005 1 < U   |  |  |  |
| VOLATILES        | Bromomethane                   | 0.0104 1 U        | 0.00993 1 U                   | 0.01 1 < U   | 0.01 i < U    |  |  |  |
| VOLATILES        | Carbon disulfide               | 0.00519 1 U       | 0.00497 1 U                   | 0.005 1 < U  | 0.005 1 < U   |  |  |  |
| VOLATILES        | Carbon tetrachloride           | 0.00519 1 U       | 0.00497 1 U                   | 0.005 1 < U  | 0,005 1 < U   |  |  |  |
| VOLATILES        | Chlorobenzene                  | 0.00519 1 U       | 0.00497 1 U                   | 0.005 1 < U  | 0.005 1 < U   |  |  |  |
| VOLATILES        | Chloroethane                   | 0.0104 1 U        | 0.00993 1 U                   | 0.01 1 < U   | 0.01 1 < U    |  |  |  |
| VOLATILES        | Chloroform                     | 0.00519 1 U       | 0.00497 1 U                   | 0.005 1 < U  | 0.005 1 < U   |  |  |  |




| Table 3-98   |   |
|--|---|
| Concentrations of Chemicals in Soil Samples Associated with Sump 110 | ) |

| (SUMP) = SUMP110 |                           | 4501110140 0D04   | ACCUMPTIO CROS | 11 6110.01  | 18-5110-01      |  |  |
|------------------|---------------------------|-------------------|----------------|-------------|-----------------|--|--|
| LOCATION_CODE    |                           | 355UMP110-5601    | 355UMP110-3002 |             | 18-5110-01 0    |  |  |
| SAMPLE_NO        |                           | 35-5MP110-5801-02 | 00-010-0002-02 | 0///1002    | 9/6/1002        |  |  |
| SAMPLE_DATE      |                           | 9/14/2006         | 9/14/2000      | 05-25       | 0/4/1990        |  |  |
| DEPTH            |                           | 5.5 - 5.5 -       | 5,5 • 5,5 71   | 0.5 • 2 FL  | 0.01            |  |  |
| SAMPLE_PURPOSE   |                           | REG               | REG            | REG         |                 |  |  |
| VOLATILES        | Chloromethane             | 0.0104 1 U        | 0.00993 1 0    | 0.01 + < 0  | 0.011 < 0       |  |  |
| VOLATILES        | cis-1,2-Dichloroethene    | 0.00519 1 U       | 0.00497 1 U    |             | 0.007 ( 1)      |  |  |
| VOLATILES        | cis-1,3-Dichloropropene   | 0.00519 1 U       | 0,00497 1 U    | 0,005 1 < 0 | 0.005 1 < 0     |  |  |
| VOLATILES        | Dibromochloromethane      | 0.00519 1 U       | 0.00497 1 U    | 0.005 1 < 0 | $0.005 \ 1 < 0$ |  |  |
| VOLATILES        | Dibromomethane            | 0.00519 1 U       | 0.00497 1 U    |             |                 |  |  |
| VOLATILES        | Dichlorodifiuoromethane   | 0.0104 1 U        | 0.00993 1 U    |             |                 |  |  |
| VOLATILES        | Ethylbenzene              | 0.00519 1 U       | 0.00497 1 U    | 0,005 1 < U | 0.005 1 < U     |  |  |
| VOLATILES        | Hexachlorobutadiene       | 0.00519 1 U       | 0.00497 1 U    |             |                 |  |  |
| VOLATILES        | Isopropylbenzene          | 0.00519 1 U       | 0.00497 1 U    |             |                 |  |  |
| VOLATILES        | m.p-Xylenes               | 0.00519 1 U       | 0.00497 1 U    |             |                 |  |  |
| VOLATILES        | Mernyl isobutyl ketone    | 0.0104 1 U        | 0.00993 1 U    | 0.05 1 < U  | 0.05 1 < U      |  |  |
| VOLATILES        | Methylena chlorida        | 0.00519 1 U       | 0.00497 1 U    | 0,005 1 < U | 0.005 1 < U     |  |  |
| VOLATILES        | Naphthalene               | 0.0104 1 U        | 0.00993 1 U    |             |                 |  |  |
| VOLATILES        | n-BUTYLBENZENE            | 0.00519 1 U       | 0.00497 1 U    |             |                 |  |  |
| VOLATILES        | n-PROPYLBENZENE           | 0.00519 1 U       | 0.00497 1 U    |             |                 |  |  |
| VOLATILES        | D-ISOPROPYLTOLUENE        | 0.00519 1 U       | 0.00497 1 U    |             |                 |  |  |
| VOLATILES        | sec-BUTYLBENZENE          | 0.00519 1 U       | 0.00497 1 U    |             |                 |  |  |
| VOLATILES        | Styrene                   | 0.00519 1 U       | 0.00497 1 U    | 0.005 1 < U | 0.005 1 < U     |  |  |
| VOLATILES        | tert-BUTYLBENZENE         | 0.00519 1 U       | 0.00497 1 U    |             |                 |  |  |
| VOLATILES        | Tetrachioroethene         | 0.00519 1 U       | 0.00497 1 U    | 0.005 1 < U | 0.005 1 < U     |  |  |
| VOLATILES        | Toluene                   | 0.00519 1 U       | 0.00497 1 U    | 0.005 1 < U | 0.005 1 < U     |  |  |
| VOLATILES        | trans-1.2-Dichloroelhene  | 0.00519 1 U UJ    | 0,00497 1 U    |             |                 |  |  |
| VOLATILES        | trans-1.3-Dichloropropene | 0.00519 1 U       | 0.00497 1 U UJ | 0.005 1 < U | 0.005 1 < U     |  |  |
| VOLATILES        | Trichloroethene           | 0.00519 1 U       | 0.00497 1 U    | 0.005 1 < U | 0.005 f < U     |  |  |
| VOLATILES        | Trichlorofluoromethane    | 0.0104 1 U        | 0.00993 1 U    |             |                 |  |  |
| VOI ATILES       | Vinul acetate             | 0.0104 1 U        | 0.00993 1 U    | 0.05 1 < U  | 0.05 1 < U      |  |  |
| VOLATILES        | Vievi chloride            | 0.0104 1 U        | 0.00993 1 U    | 0.01 1 < U  | 0.01 1 < U      |  |  |
| VOLATILES        | Xvienes, Total            |                   |                | 0.005 1 < U | 0.005 1 < U     |  |  |
|                  |                           |                   |                |             |                 |  |  |

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| Table 3-99   |    |
|--|----|
| Concentrations of Chemicals in Soil Samples Associated with Sump 1 | 11 |

| (SUMP) ⊭ SUMP111 |                            |                   |                   |                   |                    |                  |                  |  |  |
|------------------|----------------------------|-------------------|-------------------|-------------------|--------------------|------------------|------------------|--|--|
| LOCATION CODE    |                            | 35SUMP111-SB01    | 35SUMP111-SB01    | LH-S111-01        | LH-S111-01         | LH-S112-01       | LH-S112-01       |  |  |
| SAMPLE NO        |                            | 35-SMP111-S801-01 | 35-SMP111-SB01-02 | LH-S111-01 1      | LH-S111-01_2       | LH-S112-01 1     | LH-\$112-01_2    |  |  |
| SAMPLE DATE      |                            | 9/20/2006         | 9/20/2006         | 7/8/1993          | 7/8/1993           | 7/8/1993         | 7/8/1993         |  |  |
| DEPTH            |                            | 0.5 - 0.5 El      | 35-358            | 0 - 2 Ft          | 2 - 4 Ft           | 0-2 Ft           | 3 • 5 Ft         |  |  |
| SAMPLE PURPOSE   |                            | BEG               | REG               | BEG               | REG                | REG              | REG              |  |  |
| Test Group       | Parameter (Units = mo/kg)  | Result DIL LO VO  | Result DIL LO VO  | Result Dill LO VO | Result DIL LO VO   | Result DIL LQ VQ | Result DIL LQ VQ |  |  |
| EXPLOSIVES       | 2.4-Dinitrotoluene         |                   |                   | 0.33 t < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       |  |  |
| EXPLOSIVES       | 2.6-Dinitrotoluene         |                   |                   | 0.33 i < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       |  |  |
| METALS           | Aluminum                   | 4400 1            | 9500 1            | 3430 1            | 18100 1            | 4850 1           | 6040 1           |  |  |
| METALS           | Antimony                   | 0.0582 1.1        | 0112 111          | 34 1              | 41 1               | 85 1             | 3 1 < 11         |  |  |
| METALS           | Arsenic                    | 1.21 1            | 3.64 1            | 2.3 1             | 2 1                | 1.8 1            | 2.2 1            |  |  |
| METALS           | Barium                     | 108 1             | 20.1 1            | 108 1             | 52.4 1             | 55.9 1           | 105 1            |  |  |
| METALS           | Bervilium                  | 0.688 1           | 0.421 1           |                   |                    |                  |                  |  |  |
| METALS           | Cadmium                    | 0.166 1.4         | 0.398 1 U         | 1 1e U            | 1 1 c li           | 1 t< U           | 1 1< 1           |  |  |
| METALS           | Calcium                    | 783 1             | 136 1             | 651 1             | 360 1              | 608 1            | 1050 1           |  |  |
| METALS           | Chromium                   | 18.2 1            | 101 1             | R 1               | 12.8 1             | 17.7 1           | 72 1             |  |  |
| METALS           | Cobalt                     | 792 1             | 242 1             | 42 1              | 39 1               | 44 1             | 49 1             |  |  |
| METALS           | Copper                     | 161 1             | 2.83 1            | 40 1              | 8.4 1              | 38 1             | 41 1             |  |  |
| METALS           | lrop                       | 5030 1            | 26500 1           | 9720 1            | 27700 1            | 42900 1          | 12300 1          |  |  |
| METALS           | Lead                       | 10.6 1            | 711 1             | 77 1              | 145 1              | 23.8 1           | 8 1              |  |  |
| METALS           | Magnesium                  | 608 1             | 370 1             | 252 1             | 018 1              | 120 1            | 286 1            |  |  |
| METALS           | Manganese                  | 479 1             | 160 1             | 157 1             | 04 1               | 157 1            | 500 1            |  |  |
| METALS           | Marcuni                    | 0.0123 1 1        | 0.0416 1 1        |                   | 8,4 I<br>01 1 - II |                  |                  |  |  |
| METALS           | Nickol                     | 724 1             | 201 1             |                   | 0.1 1 4 0          |                  |                  |  |  |
| METALS           | Pataceium                  | 405 1             | 226 1             | 155 1             | E06 1              | 140 1            | 005 4            |  |  |
| METALS           | Selection                  | 925 1             | 200 i             | 200 F             | 1 1 1              | 140 1            | 200 1            |  |  |
| METALO           | Cilvor                     | 1 63 1            | 180 111           | 1 14 0            |                    | 1 12 0           | 1 1 4 0          |  |  |
| METALO           | Codlum                     | 1.62 1.0          | 100 1             | r i< U            | 1 1 2 0            | 1 1 4 4 4        | ! I < U          |  |  |
| NETALS           | Stratium                   | 53.9              | 100 1             | A7 /              | 17 I               | *** 4            | ** *             |  |  |
|                  | Suomum<br>Thelling         | 0.0400 1          | 0.000 1           | 9.7 T             | 10 1               | 17.7             | 11, <b>4</b> I   |  |  |
| METALO           | Venedium                   | 0,0406            | 0.039 1           |                   |                    |                  |                  |  |  |
| METALO           | Zine                       | 10.0 1            | 40 1              | 107 1             | 107 1              |                  | 170 1            |  |  |
| REINLO ATU DO    |                            |                   | 0.00 1            | 10.5 1            | 19.0 1             | 41 1             | 17.97 i          |  |  |
| SEMINOLATILES    | 1.2.4-Thendropenzene       |                   |                   | 0.00 1 4 11       | 0.33 1 < 0         | 0.33 1 < 0       | 0.00 1 4 11      |  |  |
| SCHIVOLATILES    |                            |                   |                   | 0.00 (            | 0.00 1 0           | 0.33 1 4 1       | 0.00 1 0         |  |  |
| SEMIVOLATILES    | 1,3-Dichlorebenzene        |                   |                   | 0.33 1 < U        | 0.33 1< 0          | 0.33 I < U       | 0.33 1 < U       |  |  |
| SEMIVOLATILES    | 2.4.5. Trichlestehesel     |                   |                   | 0.33 1 < 0        | 0.33 1 < 0         | 0.33 1< 0        | 0.33 1< 0        |  |  |
| SENIVOLATILES    | 2.4,5* Trichlorephenol     |                   |                   | 1.05 1 < U        | 1.00 1 < U         | 1,65 I < U       | 1.03 1 < U       |  |  |
| SENNOLATILES     | 2,4,6-Frichereneren        |                   |                   | 0.33 1 < 0        | 0.33 1 < 0         | 0.33 1< 0        | 0.33 1 < 0       |  |  |
| SEMIVOLATILES    | 2.4-Dichlorophenol         |                   |                   | 0.33 1 < 0        | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < 0       |  |  |
| SEMIVOLATILES    | 2.4-Dimetriyiphenol        |                   |                   | 0,33 1 < 0        | 0,33 1 < 0         | 0.33 1 < U       | 0.33 1 < 0       |  |  |
| SEMIVOLATILES    | 2.4-Unitrophenol           |                   |                   | 1.65 1 < U        | 1.65 1 < 0         | 1,65 1 < 0       | 1.65 1 < U       |  |  |
| SEMIVOLATILES    | 2-Unioronaphrnaiene        | ŀ                 |                   | × 0.33 1 < 0      | 0.33 1 < U         | 0.33 1 < 0       | 0.33 1 < 0       |  |  |
| SEMIVOLATILES    |                            |                   |                   | 0.33 1 < 0        | 0.33 1 < U         | 0.33 1 < 0       | 0,33 1 < 0       |  |  |
| SEMIVOLATILES    | 2-Methymaphtoziene         |                   |                   | 0,33 1 < 0        | 0.33 1 < 0         | 0.33 1 < 0       | 0.33 1 < 0       |  |  |
| SEMIVOLATILES    | 2-Methylphenol             |                   |                   | 0.33 1 < 0        | 0.33 1 < U         | 0,33 1 < 0       | 0.33 1 < U       |  |  |
| SEMIVOLATILES    | 2-Nitroaniine              |                   |                   | 1.65 1 < U        | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U       |  |  |
| SEMIVOLATILES    | 2-Nilrophenol              |                   |                   | 0,33 1 < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       |  |  |
| SEMIVOLATILES    | 3,3"-Dichlorobenzidine     |                   |                   | 0.65 1 < 0        | 0.65 1 < U         | 0.65 1 < U       | 0.65 I < U       |  |  |
| SEMIVOLATILES    | 3-Nitroaniline             |                   |                   | 1.65 1 < U        | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U       |  |  |
| SEMIVOLATILES    | 4.6-Uinitro-2-methylphenol |                   |                   | 1.65 1 < U        | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U       |  |  |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether |                   |                   | 0.33 t < U        | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U       |  |  |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol    |                   |                   | 0.85 1 < U        | 0,65 1 < U         | 0.65 1 < U       | 0.65 1 < U       |  |  |
| SEMIVOLATILES    | 4-Ghloroaniline            | 1                 |                   | 0.65 1 < U        | 0.65 1 < U         | 0.65 1 < U       | 0.65 1 < U       |  |  |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| (SUMP) = SUMP111 |                             |                   |                   |                  |                  |                  | ()( 0)(0.0)              |
|------------------|-----------------------------|-------------------|-------------------|------------------|------------------|------------------|--------------------------|
| LOCATION _CODE   |                             | 35SUMP111-SB01    | 35SUMP111-SB01    | LH-S111-01       | LH-S111-01       | LH-S112-01       | LH-S112-01               |
| SAMPLE_NO        |                             | 35-SMP111-SB01-01 | 35-SMP111-SB01-02 | LH-\$111-01_1    | LH-8111-01_2     | LH-S112-01_1     | LH-S112-U1_2             |
| SAMPLE_DATE      |                             | 9/20/2006         | 9/20/2006         | 7/8/1993         | 7/8/1993         | 7/8/1993         | //8/1993                 |
| DEPTH            |                             | 0.5 - 0.5 Ft      | 3.5 • 3.5 Ft      | 0 - 2 Ft         | 2 • 4 Ft         | 0.211            | 3-5F1                    |
| SAMPLE_PURPOSE   |                             | REG               | REG               | REG              | REG              | REG              | REG<br>Desuit Dill LO VO |
| Test Group       | Parameter (Units ≃ mg/kg)   | Result DIL LQ VQ  | Result DIL LO VO  | Result DIL LQ VO | Hesult DIL LQ VQ | Hesuit DiL LU VO |                          |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 I < U       | 0.00 1< 0                |
| SEMIVOLATILES    | 4-Methylphenol              | 1                 |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 I < U       | 1.65 1 < 11              |
| SEMIVOLATILES    | 4-Nitroaniline              |                   |                   | 1,65 1 < U       | 1.05 1 4 0       | 1.05 1 4 0       | 165 1 < 1                |
| SEMIVOLATILES    | 4-Nitrophenol               |                   |                   | 1.65 1 < U       | 1.55 1 < U       | 1.00 I < U       | 0.00 1 - 1               |
| SEMIVOLATILES    | Acenaphihene                |                   |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1< 0        | 0.33 1 4 1               |
| SEMIVOLATILES    | Acenaphthylene              |                   |                   | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 4 0       | 0.00 1 < 11              |
| SEMIVOLATILES    | Anthracene                  |                   |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       |                          |
| SEMIVOLATILES    | Benzo(a)anthracene          |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.00 1 4 1               |
| SEMIVOLATILES    | 8enzo(a)pyrene              |                   |                   | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.03 1 < 0               |
| SEMIVOLATILES    | Benzo(b)fluoranthene        |                   |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0,33 14 0                |
| SEMIVOLATILES    | Benzo(ghi)perylene          |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0               |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1< 0                |
| SEMIVOLATILES    | Benzoic Acid                |                   |                   | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 0               |
| SEMIVOLATILES    | Benzyl Alcohol              |                   |                   | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < 0               |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0               |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     | 1                 |                   | 0.33 t< U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0               |
| SEMIVOLATILES    | bis(2-Ghloroisopropyl)ether |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0               |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |                   |                   | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < 0       | 0.33 1 < 0               |
| SEMIVOLATILES    | Butyl benzyl phthalate      | Į                 |                   | 0.33 1< U        | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < U               |
| SEMIVOLATILES    | Chrysene                    | 1                 |                   | 0.33 1 < U       | 0.33 1 < U       | 0.39 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      | 1                 |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | Dibenzofuran                |                   |                   | 0.33 1 < U       | 0.33 t< U        | 0.33 1 < U       | 0.33 1 < 0               |
| SEMIVOLATILES    | Diethyl phthalate           |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < 0               |
| SEMIVOLATILES    | Dimethyl phthalate          |                   |                   | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | di-n-Butyl phthalate        |                   |                   | 0.33 1 < Ü       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | di-n-Octyl phthalate        | 1                 |                   | 0.33 1 < U       | 0.33 t< U        | 0.33 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | Fluoranthene                |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0               |
| SEMIVOLATILES    | Fluorene                    |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 t< U        | 0.33 1 < U               |
| SEMIVOLATILES    | Hexachlorobenzene           |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 i < U       | 0,33 1 < U               |
| SEMIVOLATILES    | Hexachlorobutadiene         |                   |                   | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | Hexachloroethane            |                   |                   | 0:33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0               |
| SEMIVOLATILES    | Indeno(1,2.3-cd)pyrene      |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | Isophorone                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | Naphthalene                 |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | Nitrobenzene                |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < U               |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |                   |                   | 0.33 i< U        | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | n-Nitrosodlphanylamine      |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | Pentachlorophenol           |                   |                   | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 <                 |
| SEMIVOLATILES    | Phenanthrene                |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | Phenol                      | 1                 |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U               |
| SEMIVOLATILES    | Pyrene                      |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U        | 0,33 1< U                |
| VOLATILES        | 1,1,1,2-Tetrachloroethane   |                   | 0.00557 1 U       |                  |                  |                  |                          |
| VOLATILES        | 1.1.1-Trichloroethane       |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U              |
| VOLATILES        | 1,1,2,2-Tetrachloroethane   |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U              |
| VOLATILES        | 1,1,2-Trichloroethane       |                   | 0.00557 1 U       | 0,005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U              |
| VOLATILES        | 1.1-Dichloroethane          | l                 | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 t< U       | 0.005 1 < U              |
|                  |                             | <i>c</i>          |                   |                  |                  |                  |                          |



| Table 3-99  |   |
|---|---|
| Concentrations of Chemicals in Soil Samples Associated with Sump 11 | 1 |

| [SUMP] = SUMP111 |                                |                   |                   |                  |                  |                  |                  |
|------------------|--------------------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                                | 35SUMP111-SB01    | 35SUMP111-SB01    | LH-\$111-01      | LH-S111-01       | LH-S112-01       | LH-\$112-01      |
| SAMPLE_NO        |                                | 35-SMP111-SB01-01 | 35-SMP111-S801-02 | LH-S111-01_1     | LH-S111-01_2     | LH-S112-01_1     | LH-\$112-01_2    |
| SAMPLE_DATE      |                                | 9/20/2006         | 9/20/2006         | 7/8/1993         | 7/8/1993         | 7/8/1993         | 7/8/1993         |
| DEPTH            |                                | 0.5 - 0.5 Ft      | 3.5 - 3.5 Ft      | 0 - 2 Ft         | 2 - 4 Ft         | 0 - 2 Ft         | 3 - 5 Ft         |
| SAMPLE_PURPOSE   |                                | REG               | REG               | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LQ VO  | Result DIL LO VO  | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO |
| VOLATILES        | 1,1-Dichloroethene             |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,1-Dichloropropene            |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2,3-Trichlorobenzene         |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2.3-Trichloropropane         |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2.4-Trichlorobenzene         |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2.4-Trimethylbenzene         |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2-Dibromo-3-chloropropane    |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2-Dibromoethane              |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2-Dichlorobenzene            | ļ                 | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1,2-Dichloroethane             |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichloroethene             |                   |                   | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dichloropropane            |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.3.5-Trimethylbenzene         |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.3-Dichlorobenzene            |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.3-Dichloropropane            |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.4-Dichlorobenzene            |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 2.2-Dichioropropane            | ļ                 | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 2-Butanone                     |                   | 0.0111 1 U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 i< U        |
| VOLATILES        | 2-Chloroethyl vinyl ether      |                   | 0.0111 1 U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0,01 1 < U       |
| VOLATILES        | 2-Chlorotoluene                |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILĘS        | 2-Hexanone                     |                   | 0.0111 1 U UJ     | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | 4 Chlorotoluene                |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | Acetone                        |                   | 0.0278 1          | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1< ⊍         |
| VOLATILES        | Benzene                        |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromobenzene                   |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | Bromochloromethane             |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | Bromodichloromethane           |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromoform                      |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromomethane                   |                   | 0.0111 1 U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Carbon disulfide               | 1                 | 0.00557 1 U       | 0.005 i < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Carbon tetrachloride           |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      |
| VOLATILES        | Chlorobenzene                  |                   | 0.00557 1 U       | 0.005 i< U       | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloroethane                   |                   | 0.0111 1 U        | 0,01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Chloroform                     |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloromethane                  |                   | 0.0111 1 U        | 0,01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | cis-1,2-Dichloroethene         |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | cis-1,3-Dichloropropane        |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromochloromethane           |                   | 0.00557 IU        | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 i< U       |
| VOLATILES        | Dibromomethane                 |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | Dichlorodifluoromethane        |                   | 0.0111 1 U        |                  |                  |                  |                  |
| VOLATILES        | Ethylbenzene                   |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Hexachlorobutadiene            | 1                 | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | Isopropyibenzene               |                   | 0.00557 U         |                  |                  |                  |                  |
| VOLATILES        | m,p-Xylenes                    |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | Methyl isobutyl ketone         |                   | 0.0111 1 U        | 0.05 1 < U       | 0.05 1 < U       | 0,05 1 < U       | 0.05 1 < U       |
| VOLATILES        | Methylene chloride             |                   | 0.0066 1 B        | 0.005 1 < 반      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |

Data Evaluation Report



Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps

Table 3-99 Concentrations of Chemicals in Soil Samples Associated with Sump 111

| (SUMP) = SUMP111<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | Darameter (  Inite = meßet) | 355UMP111-S801<br>35-SMP111-S801-01<br>9/20/2005<br>0.5 - 0.5 F1<br>REG<br>Besuit Dil LO VO | 35SUMP111-S<br>35-SMP111-SB<br>9/20/2006<br>3.5 - 3.5 F<br>REG<br>Besuit Dit. | 801<br>01-02<br>1 | LH-S1<br>LH-S11<br>7/8/1<br>0 - ;<br>RE<br>Result D1 | 11-01<br>1-01_1<br>993<br>2 Ft<br>3G<br>L LQ | VQ | LH-S1<br>LH-S11<br>7/8/<br>2 -<br>RI<br>Result DI | 11-01<br>1-01_2<br>1993<br>4 Ft<br>EG<br>L LQ | vo | LH-S1<br>LH-S11<br>7/8/1<br>0 - 2<br>RE<br>Result DI | 12-01<br>2-01_1<br>993<br>2 Ft<br>G<br>L LQ | VQ | LH-S112<br>LH-S112<br>7/8/19<br>3 - 5 1<br>REC<br>Result Dil | 2-01<br>-01_2<br>93<br>Ft<br>3<br>L LQ | ł Vo     |
|---|-----------------------------|---|---|-------------------|--|--|----|---|---|----|--|---|----|--|--|----------|
| VOLATILES   | Naphthalene                 |   | 0.0111 1  | U                 |  |  |    |   |   |    |  |   |    |  |  |          |
| VOLATILES   | n-BUTYLBENZENE              |   | 0.00557 1   | U                 |  |  |    |   |   |    |  |   |    |  |  |          |
| VOLATILES   | n-PROPYLBENZENE             |   | 0.00557 1   | U                 |  |  |    |   |   |    |  |   |    |  |  |          |
| VOLATILES   | p-ISOPROPYLTOLUENE          |   | 0.00557 1   | U                 |  |  |    |   |   |    |  |   |    |  |  |          |
| VOLATILES   | sec-BUTYLBENZENE            |   | 0.00557 1   | U                 |  |  |    |   |   |    |  |   |    |  |  |          |
| VOLATILES   | Styrene                     |   | 0.00557 1   | U                 | 0.005  | 1 <  | U  | 0.005   | 1 <   | U  | 0.005  | 1 <   | U  | 0.005  | 1 <                                    | U        |
| VOLATILES   | tert-BUTYLBENZENE           |   | 0.00557 1   | U                 |  |  |    |   |   |    |  |   |    |  |  |          |
| VOLATILES   | Tetrachloroethene           |   | 0.00557 1   | U                 | 0.005  | 1 <  | U  | 0.005   | 1 <   | U  | 0.005  | 1 <   | Ų  | 0.005  | 1 <                                    | U        |
| VOLATILES   | Toluene                     |   | 0.00557 1   | IJ                | 0.005  | 1 <  | U  | 0.005   | 1 <   | U  | 0.005  | 1 <   | Ų  | 0.005  | 1 <                                    | U        |
| VOLATILES   | trans-1,2-Dichloroethene    |   | 0.00557 1   | U                 |  |  |    |   |   |    |  |   |    |  |  |          |
| VOLATILES   | trans-1,3-Dichloropropene   | 1   | 0.00557 1   | U                 | 0.005  | 1 <  | U  | 0.005   | 1 <   | U  | 0.005  | 1 <   | Ų  | 0.005  | 1 <                                    | U        |
| VOLATILES   | Trichloroethene             |   | 0.00557 1   | U                 | 0.005  | 1 <  | U  | 0.005   | 1 <   | U  | 0.005  | 1 <   | U  | 0.005  | 1 <                                    | U        |
| VOLATILES   | Trichlorofluoromethane      |   | 0.0111 1  | บ                 |  |  |    |   |   |    |  |   |    |  |  |          |
| VOLATILES   | Vinyl acetate               |   | 0.0111 1  | U UJ              | 0.05   | 1 <  | Ų  | 0.05  | 1 <   | U  | 0.05   | 1 <   | U  | 0.05   | 1 <                                    | U        |
| VOLATILES   | Vinyl chloride              |   | 0.0111 i  | U                 | 0.01   | 1 <  | ป  | 0.01  | 1 <   | Ų  | 0.01   | 1 <   | U  | 0.01   | 1 <                                    | U        |
| VOLATILES   | Xylenes. Total              |   |   |                   | 0.005  | 1 <  | U  | 0.005   | 1 <   | U  | 0.005  | 1 <   | U  | 0.005  | 1 <                                    | <u> </u> |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



|       | Table 3-100  |
|-------|--|
| Conce | entrations of Chemicals in Soil Samples Associated with Sump 112 |

| {SUMP] ≥ SUMP112<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                            | 35SUMP111-SB01<br>35-SMP111-SB01-01<br>9/20/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP111-SB01<br>35-SMP111-SB01-02<br>9/20/2006<br>3.5 - 3.5 Ft<br>REG | LH-S111-01<br>LH-S111-01_1<br>7/8/1993<br>0 - 2 Ft<br>REG                 | LH-S111-01<br>LH-S111-01_2<br>7/8/1993<br>2 - 4 Ft<br>REG | LH-S112-01<br>LH-S112-01_1<br>7/8/1993<br>0 - 2 Fl<br>REG | LH-S112-01<br>LH-S112-01_2<br>7/8/1993<br>3 • 5 Fl<br>REG |
|--|----------------------------|---|---|---|---|---|---|
| Test Group   | Parameter (Units = mg/kg)  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| EXPLOSIVES   | 2,4-Dinitratoluene         |   |   | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < 0  |
| EXPLOSIVES   | 2.6-Dinitrotoluene         |   |   | 0.33 1 < U  | 0,33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| METALS   | Aluminum                   | 4400 1  | 9500 1  | 3430 1  | 18100 1   | 4850 1  | 6040 1  |
| METALS   | Antimony                   | 0.0582 1 J J  | 0.112 1 U   | 3.4 1   | 4.1 1   | 8.5 1   | 31 < U  |
| METALS   | Arsenic                    | 1.21 1  | 3.64 1  | 2.3 1   | 2 1   | 1.B 1   | 2.2 1   |
| METALS   | Barlum                     | 108 1   | 20.1 1  | 108 1   | 52.4 1  | 55.9 1  | 105 1   |
| METALS   | Beryllium                  | 0.888 1   | 0.421 1   |   |   |   |   |
| METALS   | Cadmium                    | 0.166 1 J J   | 0.398 1 U   | 1 1 < U   | 11 < U  | 11 < U  | 11< U   |
| METALS   | Calcium                    | 783 1   | 135 1   | 651 1   | 360 1   | 608 1   | 1050 1  |
| METALS   | Chromium                   | 18.2 1  | 19.1 1  | 6 1   | 12.8 1  | 17.7 1  | 7.2 1   |
| METALS   | Cobalt                     | 7.92 1  | 2,42 1  | 4.2 1   | 3.9 1   | 4.4 1   | 4,9 1   |
| METALS   | Copper                     | 1.61 1  | 2.83 1  | 4.9 1   | 8.4 1   | 3.8 1   | 4.1 1   |
| METALS   | Iron                       | 5030 1  | 26500 1   | 9720 1  | 27700 1   | 42900 1   | 12300 1   |
| METALS   | Lead                       | 10.6 1  | 7.11 1  | 7,7 1   | 14.5 1  | 23.8 1  | 8 1   |
| METALS   | Magnesium                  | 608 1   | 370 1   | 252 1   | 918 1   | 129 1   | 286 1   |
| METALS   | Manganese                  | 478 1   | 16.2 1  | 157 1   | 9.4 1   | 157 1   | 629 1   |
| METALS   | Mercury                    | 0.0123 1 J J  | 0.0416 1 J J  | 0.1 t < U   | 0.1 1 < U   | 0.1 1 < U   | 0.1 1 < U   |
| METALS   | Nickel                     | 7.24 1  | 3.21 1  |   |   |   |   |
| METALS   | Potassium                  | 425 1   | 236 1   | 255 1   | 526 1   | 140 1   | 235 1   |
| METALS   | Selenium                   | 0.228 1   | 0.816 1   | 11 < U  | 11 < 1  | 1 1 < U   | 11 < U  |
| METALS   | Silver                     | 1.62 1 U  | 1.59 1 U  | 11 <u< td=""><td>11 &lt; U</td><td>1 1 &lt; U</td><td>11 &lt; U</td></u<> | 11 < U  | 1 1 < U   | 11 < U  |
| METALS   | Sodium                     | 55.9 1  | 183 1   |   |   |   |   |
| METALS   | Strontium                  |   |   | 9.7 1   | 15 1  | 17.7 1  | 11.4 1  |
| METALS   | Thailium                   | 0.0466 1  | 0.039 1   |   |   |   |   |
| METALS   | Vanadium                   | 11.8 1  | 45 1  |   |   |   |   |
| METALS   | Zinc                       | 10 1  | 8.35 1  | 10.5 1  | 19.5 1  | 41 1  | 17.9 1  |
| SEMIVOLATILES  | 1,2,4-Trichlorobenzene     |   |   | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES  | 1.2-Dichlorobenzene        |   |   | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES  | 1.3-Dichlorobenzene        |   |   | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES  | 1.4-Dichlorobenzene        |   |   | 0,33 1 < U  | 0.33 1 < U  | 0,33 1 < Ü  | 0.33 1 < U  |
| SEMIVOLATILES  | 2,4.5-Trichlorophenol      |   |   | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  |
| SEMIVOLATILES  | 2.4.6 Trichlorophenol      |   |   | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES  | 2,4-Dichlorophenol         |   |   | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 t < U  |
| SEMIVOLATILES  | 2.4-Dimethylphenol         |   |   | 0,33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES  | 2.4-Dinitrophenol          |   |   | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  |
| SEMIVOLATILES  | 2-Chloronaphthalene        |   |   | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES  | 2-Chlorophenol             |   |   | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES  | 2-Methylnaphthalene        |   |   | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES  | 2-Methylohenol             |   |   | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES  | 2-Nitroaniline             |   |   | 1.65 1 < U  | 1,65 1 < U  | 1.65 1 < Ü  | 1.65 1 < U  |
| SEMIVOLATILES  | 2-Nitrophenol              |   |   | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES  | 3.3 Dichlorobenzidine      |   |   | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < Li   | 0.65 1 < U  |
| SEMIVOLATILES  | 3-Nitroaniline             |   |   | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  |
| SEMIVOLATILES  | 4.6-Dinitro-2-methylohenol |   |   | 1,65 1 < U  | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U  |
| SEMIVOLATILES  | 4-Bromonhenvl ohenvl ether |   |   | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U  |
| SEMIVOLATILES  | 4-Chiom-3-methylphenol     |   |   | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < U  | 0.65 i < U  |
| SEMIVOLATILES  | 4-Chloroaniline            |   |   | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < U  |
|  |                            | 1   |   |   |   |   |   |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

. . . . .



# Table 3-100 Concentrations of Chemicals in Soil Samples Associated with Sump 112

| (SUMP] = SUMP112 |                             |                   |                   |                   | 111 0171 01 | 14 6112 01       | 14.8112.01        |
|------------------|-----------------------------|-------------------|-------------------|-------------------|-------------|------------------|-------------------|
| LOCATION _CODE   |                             | 35SUMP111-SB01    | 35SUMP111-S801    | LH-S111-01        | LH-STIT-UI  |                  | LH-S112-01 2      |
| SAMPLE_NO        |                             | 35-SMP111-SB01-01 | 35-SMP111-SB01-02 | LH-5)11-01_1      | 7/0/1002    | 7/9/1003         | 7/9/1003          |
| SAMPLE_DATE      |                             | 9/20/2006         | 9/20/2006         | //8/1993          | 70/1993     | //o/(855         | 3 - 5 Ft          |
| DEPTH            |                             | 0.5 + 0.5 Pt      | 3.5 - 3.5 FT      | 0.210             | 2-4F1       | 950              | 856               |
| SAMPLE_PURPOSE   |                             | REG               | HEG NO. NO.       |                   |             | Result DIE LO VO | Result Dill LO VO |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LO VO  | Hesun Dil LQ VQ   | Result Dit, LO VG |             | 033 1 < 11       | 0.33 1 4 1        |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether |                   |                   | 0.03 1 < 0        |             | 0.33 1 < 1       | 0.33 1 4 11       |
| SEMIVOLATILES    | 4-Methylphenol              |                   |                   | 1.00 1 4 0        |             | 1.55 1 < 1       | 165 1 2 1         |
| SEMIVOLATILES    | 4-Nitroaniline              |                   |                   | 1.55 1 < U        | 1.00 1 < 0  | 165 1 < 1        | 1.65 1 < 1        |
| SEMIVOLATILES    | 4-Nitrophenol               |                   |                   | 1.55 1 < U        |             |                  | 0.33 1 < 0        |
| SEMIVOLATILES    | Acenaphthene                |                   |                   | 0.00 1 < 0        | 0.00 1 < 0  | 0.33 1 < U       | 0.33 1 < 1        |
| SEMIVOLATILES    | Acenaphthylene              |                   |                   | 0.33 1 < 0        | 0.33 1 < 0  |                  | 0.39 1 < 11       |
| SEMIVOLATILES    | Anthracene                  |                   |                   | 0.33 1 < 0        | 0.33 1 < U  | 0.03 1 < 0       |                   |
| SEMIVOLATILES    | Benzo(a)anthracene          |                   |                   | 0.33 1 < 0        | 0.33 1 < 0  | 0.03 1 < 0       |                   |
| SEMIVOLATILES    | Benzo(a)pyrene              |                   |                   | 0,33 1 < 0        | 0.33 1 < 0  | 0.00 1 < 1       | 0.00 1 < 0        |
| SEMIVOLATILES    | Benzo(b)fluoranthene        |                   |                   | 0.33 1 < 0        | 0.33 1 < 0  | 0.33 1 < 0       | 0.00 1 4 0        |
| SEMIVOLATILES    | 8enzo(ghi)perylene          |                   |                   | 0.33 1 < 0        | 0.33 1 < 0  |                  |                   |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                   |                   | 0.33 1 < 0        | 0.33 1 < 0  | 0.33 1 < 0       |                   |
| SEMIVOLATILES    | Benzoic Acid                |                   |                   | 1.65 1 < U        | 1.65 1 < 0  | 1.65 1 < 0       | 1.00 1 < 0        |
| SEMIVOLATILES    | Benzyl Alcohol              |                   |                   | 0.65 1 < U        | 0.65 1 < 0  | 0.65 1 < 0       | 0.65 1 < 0        |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  |                   |                   | 0,33 1 < U        | 0.33 1 < U  | 0.33 1 < 0       | 0.33 1 < 0        |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |                   |                   | 0.33 1 < U        | 0.33 1 < 0  | 0.33 1 < U       | 0.33 1 < 0        |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < 0       | 0.33 1 < 0        |
| SEMIVOLATILES    | bis(2-Ethythexyl)phthalate  |                   |                   | 0.33 t < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Butyl benzyl phthalate      |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Chrysene                    |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Dibenzo(a.h)anthracene      |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Dibenzofuran                |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Diethyl phthalate           |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < 0        |
| SEMIVOLATILES    | Dimethyl phthalate          |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | di-n-Butyl phthalate        |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | di-n-Octyl phthalate        |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Fluoranthene                |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < 0        |
| SEMIVOLATILES    | Fluorene                    |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < 0        |
| SEMIVOLATILES    | Hexachlorobenzene           |                   |                   | 0.33 t < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Hexachlorobutadiene         |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < 0        |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < 0        |
| SEMIVOLATILES    | Hexachloroethane            |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 t < U        |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene      |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < 0        |
| SEMIVOLATILES    | Isophorone                  |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Nachthalene                 |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Nitrobenzene                |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | n-Nitrosodiphenvlamine      |                   |                   | 0.33 t < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Pentachlorophenoi           |                   |                   | 1.65 1 < U        | 1.65 1 < U  | 1,65 1 < U       | 1.65 1 < U        |
| SEMIVOLATILES    | Phenapthrene                |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Phenoi                      |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES    | Pyrepe                      |                   |                   | 0.33 1 < U        | 0.33 1 < U  | 0.33 1 < U       | 0.33 1 < U        |
| VOLATILES        | 1 1 2 Tetrachiomethane      |                   | 0.00557 1 U       | -                 |             |                  |                   |
| VOI ATILES       | 1.1.1.Trichlorgethane       |                   | 0.00557 1 U       | 0.005 1 < U       | 0.005 1 < U | 0.005 1 < U      | 0.005 1 < U       |
| VOLATILES        | 1.1.2.2-Tetrachlomethane    |                   | 0.00557 1 U       | 0.005 i < U       | 0.005 1 < U | 0.005 1 < U      | 0.005 i < U       |
| VOLATILES        | 1.1.2-Trichlomethane        |                   | 0.00557 1 U       | 0.005 1 < U       | 0.005 1 < U | 0.005 1 < U      | 0.005 1 < U       |
| VOLATILES        | 1.1-Dichloroethane          |                   | 0.00557 1 U       | 0.005 1 < U       | 0,005 1 < U | 0.005 1 < U      | 0.005 1 < U       |
|                  |                             |                   |                   |                   |             |                  |                   |

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



## Table 3-100 Concentrations of Chemicals in Soli Samples Associated with Sump 112

| [SUMP] = SUMP112 |                                |                   |                   |                  |                  | ,                |                  |
|------------------|--------------------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE   |                                | 35SUMP111-SB01    | 35SUMP111-S801    | LH-S111-01       | LH-S111-01       | LH-S112-01       | LH-S112-01       |
| SAMPLE NO        |                                | 35-SMP111-SB01-01 | 35-SMP111-SB01-02 | LH-S111-01_1     | LH-S111-01_2     | LH-5112-01_1     | LH-S112-01_2     |
| SAMPLE DATE      |                                | 9/20/2006         | 9/20/2006         | 7/8/1993         | 7/8/1993         | 7/8/1993         | 7/8/1993         |
| DEPTH            |                                | 0.5 • 0.5 Ft      | 3.5 - 3.5 Ft      | 0 - 2 Ft         | 2 - 4 Ft         | 0 - 2 Ft         | 3 • 5 Ft         |
| SAMPLE PURPOSE   |                                | REG               | REG               | REG              | REG              | REG              | REG              |
| Test Group       | Parameter (Units ≄ mo/kg)      | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LO VO |
| VOLATILES        | 1.1-Dichloroethene             | 1                 | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1.1-Dichloropropene            |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2.3 Trichlorobenzene         |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2.3-Trichloropropane         |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2.4-Trichlorobenzene         |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2.4-Trimethylbenzene         |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2-Dibromo-3-chloropropane    |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2-Dibromoethane              |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2-Dichlorobenzene            |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2-Dichloroethane             |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1.2-Dichloraethene             |                   |                   | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | 1.2-Dichloropropane            |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      |
| VOLATILES        | 1.2-Dimethylbenzene (o-Xylene) |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.3.5-Trimethylbenzene         |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.3-Dichlorobenzene            |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.3-Dichloropropane            |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.4-Dichlorobenzene            |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | 2.2-Dichloropropage            |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATE ES        | 2-Butanone                     |                   | 0.0111 1 U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U       |
| VOLATILES        | 2-Chloroethyl vinyl ether      |                   | 0.0111 1 U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | 2-Chlorotoluene                |                   | 0.00557 1 1       |                  |                  |                  |                  |
| VOLATILES        | 2-Heyanone                     |                   | 0.0111 1 U UJ     | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | 4-Chlorotoluene                |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | Acetone                        |                   | 0.0278 1          | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        |
| VOLATILES        | Benzene                        |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bromobenzene                   |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | Bromochloromelhane             |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | Bromodichloromethana           |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Bramoform                      |                   | 0.00557 1 U       | 0,005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < Ü      |
| VOLATILES        | Bromomethane                   |                   | 0,0111 1 U        | 0,01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES        | Carbon disulfide               |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Carbon tetrachloride           |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chlorobenzene                  |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloroethane                   |                   | 0.0111 1 U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U       |
| VOLATILES        | Chloroform                     |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Chloromethane                  |                   | 0.0111 1 U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0,01 1 < U       |
| VOLATILES        | cis-1.2-Dichloroethene         |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | cis-1,3-Dichloropropene        |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromochloromethane           |                   | 0.00557 i U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Dibromomethane                 |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | Dichlorodifluoromethane        |                   | 0.0111 1 U        |                  |                  |                  |                  |
| VOLATILES        | Ethvibenzene                   |                   | 0.00557 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES        | Hexachlorobutadiene            |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | isopropylbenzene               |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | m.p.Xvlenes                    |                   | 0.00557 1 U       |                  |                  |                  |                  |
| VOLATILES        | Methyl isobutyl kelone         | 1                 | 0.0111 1 U        | 0.05 1 < U       | 0,05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES        | Methylene chloride             |                   | 0.0066 1 B        | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
|                  |                                | ,                 |                   |                  |                  |                  |                  |

shaw Environmental, Inc. 00066293

|  |                           |   |   |   | •   |  |   |
|--|---------------------------|---|---|---|---|--|---|
| [SUMP] = SUMP112<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | 35SUMP111-SB01<br>35-SMP111-SB01-01<br>9/20/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP111-S801<br>35-SMP111-S801-02<br>9/20/2006<br>3.5 - 3.5 Ft<br>REG<br>Bowth Dill - 10 - VO | LH-S111-01<br>LH-S111-01_1<br>7/8/1993<br>0 - 2 Ft<br>REG<br>Becuit LO VO | LH-S111-01<br>LH-S111-01_2<br>7/8/1993<br>2 - 4 F1<br>REG<br>Result DIL LO VO | LH-S112-01<br>LH-S112-01_1<br>7/8/1993<br>0 - 2 Ft<br>REG<br>Result DH 10 VQ | LH-S112-01<br>LH-S112-01_2<br>7/8/1993<br>3 - 5 Ft<br>REG<br>Result DIL LO VQ |
| Test Group   | Parameter (Units = mg/xg) | Result Die LO VO  |   | HEADIN CHL. COL. YOL  |   |  | ·····   |
| VOLATILES  | Naphinalene               |   |   |   |   |  |   |
| VOLATILES  | n-BUTYLBENZENE            |   | 0.00557 1 0   |   |   |  |   |
| VOLATILES  | n-PROPYLBENZENE           |   | 0.00557 1 U   |   |   |  |   |
| VOLATILES  | p-ISOPROPYLTOLUENE        | 1   | 0.00557 1 U   |   |   |  |   |
| VOLATILES  | sec-BUTYLBENZENE          |   | 0.00557 1 U   |   |   |  |   |
| VOLATILES  | Styrene                   |   | 0.00557 1 U   | 0.005 1 < U   | 0.005 1 < U   | 0.005 1 < U  | 0.005 1 < U   |
| VOLATILES  | tert-BUTYLBENZENE         |   | 0.00557 1 U   |   |   |  |   |
| VOLATILES  | Tetrachloroethene         |   | 0.00557 1 U   | 0.005 1 < U   | 0.005 1 < U   | 0.005 1 < U  | 0.005 1 < U   |
| VOLATILES  | Toluene                   |   | 0.00557 1 U   | 0.005 1 < U   | 0.005 1 < U   | 0.005 1 < U  | 0.005 1 < U   |
| VOLATILES  | trans-1.2-Dichloroethene  |   | 0.00557 1 U   |   |   |  |   |
| VOLATILES  | trans-1.3-Dichloropropaga |   | 0.00557 1 U   | 0.005 1 < U   | 0.005 1 < U   | 0.005 1 < U  | 0.005 1 < U   |
| VOLATILES  | Trichloroethene           | 1   | 0.00557 1 U   | 0.005 1 < U   | 0.005 1 < U   | 0.005 1 < U  | 0.005 1 < U   |
| VOLATILES  | Trichlorofluoromethane    |   | 0.0111 1 U  |   |   |  |   |
| VOLATILES  | View apointe              |   | 0.0111 1 U U  | 005 1 < U   | 0.05 1 < U  | 0.05 1 < U   | 0.05 1 < U.   |
| VOLATILES  | Vingi acciaic             |   | 0.0111 1 1  |   | 0.01 1 2 11   | 0.01 1 < U   | 0.01 1 < U  |
| VULANLES   | vinyi chioride            |   | 0.0111 1 0  | 0.01 1 × U  | 0.005 1 - 11  | 0.005 1 × H  | 0.005 1 < U   |
| VOLATILES  | Xylenes, Iotal            |   |   | 0.000 1 < 0   | 0.000 1 4 0   | V.000 1 K O  |   |

## Table 3-100 Concentrations of Chemicals in Soil Samples Associated with Sump 112

Shaw Environmental, Inc.

## 00066294

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

| [SUMP] = SUMP113<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                             | 35SUMP113-SB01<br>35-SMP113-SB01-02<br>9/20/2006<br>4 - 4 Ft | 35SUMP113-SB02<br>35-SMP113-SB02-02<br>9/20/2006<br>4 - 4 Ft | LH-S113-01<br>LH-S113-01_1<br>8/4/1993<br>0.5 - 2 Ft | LH-S113-01<br>LH-S113-01_2<br>8/4/1993<br>4 - 6 Ft<br>BEC |
|---|-----------------------------|--|--|--|---|
| SAMPLE_PURPOSE  |                             | REG  | REG  | REG  |   |
| Test Group  | Parameter (Units = mg/kg)   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LU VU                                     |   |
| EXPLOSIVES  | 2,4-Dinitrotoluene          |  |  | 0.33 1 < U   | 0,33 1 4 0  |
| EXPLOSIVES  | 2,6-Dinitrotoluene          |  |  | 0.33 1 < 0   | 0.33 1 1 0  |
| METALS  | Aluminum                    |  |  | 14600 1  | 18900 1   |
| METALS  | Antimony                    |  |  | 31 < 0   | 3150  |
| METALS  | Arsenic                     |  |  | 2 1  | 3.8 1   |
| METALS  | Barium                      |  |  | 69.4 1   | 73.2 1  |
| METALS  | Cadmium                     |  |  | 11 < 0   | 11 < 0  |
| METALS  | Caicium                     |  |  | 2100 1   | 1240 1  |
| METALS  | Chromium                    |  |  | 14.8 1   | 16.7 1  |
| METALS  | Cobalt                      |  |  | 2.9 1  | 3.3 1   |
| NETALS  | Conner                      |  |  | 3.8 1  | 4.2 1   |
| NETALO  | kon                         | 1  |  | 13900 1  | 17600 1   |
| METALO  | Land                        |  |  | 11.4 1   | 9.7 1   |
| METALS  | Manachum                    |  |  | 767 1  | 1190 1  |
| METALS  | Magnesium                   |  |  | 160 1  | 126 1   |
| METALS  | Manganese                   |  |  | 0.1 1 < U  | 0.1 1 < U   |
| METALS  | Mercury                     |  |  | 592 1  | 631 1   |
| METALS  | Potassium                   |  |  | 11 < 0   | 11 < U  |
| METALS  | Selenium                    |  |  | 11< 1  | 11< 8   |
| METALS  | Silver                      |  |  | 16.8 1   | 31 1  |
| METALS  | Strontum                    |  |  | 19.9 1   | 22.3 1  |
| METALS  | Zinc                        | 67.0 1 11  | 551 1 15   |  |   |
| RANGE_ORGANICS  | Carbon Range C12-C28        | 57,9 I U   | 551 1 11   |  |   |
| RANGE_ORGANICS  | CARBON RANGE C28-C35        | 57.9 ( U   | 551 1 1  |  |   |
| RANGE_ORGANICS  | Carbon Range C6-C12         | 57.9 1 0   | 30/1 T O   | 033 1 < Ư  | 0.33 1 < U  |
| SEMIVOLATILES   | 1,2,4-Trichlorobenzene      |  |  | 0.33 1 < U   | 0.33 1 < U  |
| SEMIVOLATILES   | 1,2-Dichlorobenzene         |  |  | 0.33 1 < U   | 0.33 1 < U  |
| SEMIVOLATILES   | 1,3-Dichlorobenzene         |  |  | 0.33 1 < U   | 0.33 1 < U  |
| SEMIVOLATILES   | 1.4-Dichlorobenzene         |  | 1  | 165 1 < U  | 1.65 1 < U  |
| SEMIVOLATILES   | 2,4,5-Trichlorophenol       |  |  | 033 1 4 1  | 0.33 1 < U  |
| SEMIVOLATILES   | 2,4,6-Trichlorophenol       |  |  | 0.33 1 < 13  | 0.33 1 < U  |
| SEMIVOLATILES   | 2,4-Dichlorephenol          |  |  | 0.32 1 < 1   | 0.33 1 < U  |
| SEMIVOLATILES   | 2.4-Dimethylphenol          |  |  | 1.00 1 4 0   | 165 1 c II  |
| SEMIVOLATILES   | 2,4-Dinitrophenol           |  |  |  | A33 5 4 8   |
| SEMIVOLATILES   | 2-Chloronaphthalene         |  |  |  | 0.33 1 4 15   |
| SEMIVOLATILES   | 2-Chlorophenol              | l  |  | 0.33 1 4 0   |   |
| SEMIVOLATILES   | 2-Methyinaphthalene         |  |  | 0.33 1 4 0   |   |
| SEMIVOLATILES   | 2-Methylphenol              |  |  | 0.33 1 < U   | 165 1 4 11  |
| SEMIVOLATILES   | 2-Nitoaniilne               |  |  | 1,65 1 < U   |   |
| SEMIVOLATILES   | 2-Nitrophenol               |  |  | 0.33 1 < 0   |   |
| SEMIVOLATILES   | 3,3'-Dichlorobenzidine      | 1  |  | 0.65 1 < 0   | U.05 1 4 U  |
| SEMIVOLATILES   | 3-Nitroaniline              |  |  | 1.65 1 < U   | 1.05 1 4 0  |
| SEMIVOLATILES   | 4,6-Dinitro-2-methylphenol  |  |  | 1.65 1 < U   | 1.65 1 < U  |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether  |  |  | 0.33 1 < U   | 0.33 1 < U  |
| SEMIVOLATILES   | 4-Chioro-3-methylphenol     |  |  | 0.65 1 < U   | 0.65 1 < U  |
| SEMIVOLATILES   | 4-Chloroaniline             |  |  | 0.65 1 < U   | 0.65 1 < U  |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether |  |  | 0.33 1 < U   | 0.33 1 < U  |
| SEMIVOLATILES   | 4-Methylphenoi              |  |  | 0.33 1 < U   | 0.33 1 < U  |

Table 3-101 Concentrations of Chemicals in Soil Samples Associated with Sump 113

# Shaw Environmental, Inc. 00066295

| [SUMP] = SUMP113<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                               | 35SUMP113-SB01<br>35-SMP113-SB01-02<br>9/20/2006<br>4 - 4 Ft | 35SUMP113-SB02<br>35-SMP113-SB02-02<br>9/20/2006<br>4 - 4 Ft | LH-S113-01<br>LH-S113-01_1<br>8/4/1993<br>0.5 - 2 F1 | LH-S113-01<br>LH-S113-01_2<br>8/4/1993<br>4 - 6 Ft |
|---|-------------------------------|--|--|--|--|
| SAMPLE_PURPOSE  |                               | REG  | REG  | REG  |  |
| Test Group  | Parameter (Units = mg/kg)     | Result DIL LQ VQ   | Result DIL LO VQ   | Result DIL LQ VQ                                     | Result DIL LOL VO                                  |
| SEMIVOLATILES   | 4-Nitroaniline                |  |  | 1,65 1 < 0   | 1.05 1 4 0   |
| SEMIVOLATILES   | 4-Nitrophenol                 |  |  | 1.65 1 < U   | 1.65   < U   |
| SEMIVOLATILES   | Acenaphthene                  |  |  | 0.33 1 < 0   | 0.33 1 4 0   |
| SEMIVOLATILES   | Acenaphthyiene                |  |  | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES   | Anthracene                    |  |  | 0.33 1 < U   | 0.33 1 < 0   |
| SEMIVOLATILES   | Benzo(a)anthracene            |  |  | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES   | Benzo(a)pyrene                |  |  | 0,33 1 < U   | 0.33 1 < 0   |
| SEMIVOLATILES   | Benzo(b)fluoranthene          |  |  | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES   | Benzo(ghl)perylene            |  |  | 0.33 1 < U   | 0.33 1 < 0   |
| SEMIVOLATILES   | Benzo(k)fluoranthene          |  |  | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES   | Benzoic Acid                  |  |  | 1.65 1 < U   | 1.65 1 < U   |
| SEMIVOLATILES   | Benzvi Alcohol                |  |  | 0.65 1 < U   | 0.65 1 < U   |
| SEMINOLATILES   | bis(2-Chloroethoxy)methane    |  |  | 0.33 1 < U   | 0.33 1 < U   |
| SEMINOLATILES   | bis(2-Chloroethyl)ether       |  |  | 0.33 1 < U   | 0.33 1 < U   |
| CENING ATKES  | bis/2-Chioroisopropyliether   |  |  | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES   | his (2. Ethylheryl) obthalate |  |  | 0.33 t < U   | 0.33 1 < U   |
| OEMBYOLATILES   | Butd boosul abthalate         |  |  | 0.33 1 < U   | 0.33 1 < U   |
| SCHIVOLATILES   | Chorana<br>Chorana            |  |  | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVULATILES   | Cillysone                     |  |  | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATICES   | Dibertzo(a,ri)ariunacene      |  |  | 0.33 1 < 1   | 0.33 1 < U   |
| SEMIVOLATILES   | Dipenzoiuran                  |  |  | 0.33 1 < U   | 0.33 1 < U   |
| SEMIVOLATILES   | Diethyl phthalate             |  |  | 0.33 1 < U   | 6.33 i < U   |
| SEMIVOLATILES   | Umenyi prinalate              |  |  | 0.33 1 < 1   | 0.33 1 < U   |
| SEMIVOLATILES   | di-n-Butya phinakate          |  |  | 0.33 1 < 1   | 0.33 1 < U   |
| SEMIVOLATILES   | di-n-Octyl phthalate          |  |  | 0.33 1 < 1   | 0.33 1 < 1   |
| SEMIVOLATILES   | Fluoranthene                  |  |  | 0.33 1 4 11  | 0.33 5 < 1   |
| SEMIVOLATILES   | Fluorene                      |  |  | 0.32 1 4 11  | 0.33 i < U   |
| SEMIVOLATILES   | Hexachlorobenzene             |  |  |  | 0.33 1 < 11  |
| SEMIVOLATILES   | Hexachlorobutadiene           |  |  | 0.00 1 4 1   | 0.93 1 4 1   |
| SEMIVOLATILES   | Hexachlorocyclopentadiene     |  |  |  | 0.00 1 4 0   |
| SEMIVOLATILES   | Hexachloroethane              |  |  | 0.33 1 4 11  | 0.00 1 4 1   |
| SEMIVOLATILES   | Indeno(1,2,3-cd)pyrene        |  |  | 0.33 1 5 0   |  |
| SEMIVOLATILES   | Isophorone                    |  |  |  | 0.00 1 4 0   |
| SEMIVOLATILES   | Naphthalene                   |  |  | 0.33 1 1 0   | 0.00 1 4 1   |
| SEMIVOLATILES   | Nitrobenzene                  |  |  | 0.33   < 0   | 0.00 1 4 0   |
| SEMIVOLATILES   | n-Nitroso-di-n-propylamine    |  |  | 0.33 1 < 0   | 0.33 1 < 0   |
| SEMIVOLATILES   | n-Nitrosodiphenylamine        |  |  | 0.33 1 < 0   | 0.33 1 4 0   |
| SEMIVOLATILES   | Pentachlorophenol             |  |  | 1.65 1 < 0   | 1.65 1 < U   |
| <b>\$EMIVOLATILES</b>   | Phenanthrene                  |  |  | 0.33 1 < 0   | 0.33 1 < 0   |
| SEMIVOLATILES   | Phenol                        |  |  | 0.33 1 < 0   | (0.33 3 < U  |
| SEMIVOLATILES   | Pyrene                        |  |  | 0.33 1 < U   | 0.33 1 < U   |
| TPH   | TOTAL HYDROCARBONS            | 1  |  | 110 1  | 430 1  |
| VOLATILES   | 1,1,1,2-Tetrachloroethane     | 0.00552 1 U  | 0.00517 1 U  |  |  |
| VOLATILES   | 1,1,1-Trichloroethane         | 0.00552 1 U  | 0.00418 1 J J  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES   | 1,1,2,2-Tetrachloroethane     | 0.00552 1 U  | 0.00517 1 U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES   | 1,1,2-Trichloroethane         | 0.00552 1 U  | 0.00517 1 U  | 0.005 1 < U  | 0.005 1 < U  |
| VOLATILES   | 1,1-Dichloroethane            | 0.00395 1 J J  | 0.00191 1 J J  | 0.005 1 < U  | 0.005 1 < U  |

# Table 3-101 Concentrations of Chemicals In Soil Samples Associated with Sump 113

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas

VOLATILES

1,1-Dichloroethene

0.005 1 < U

0.005 1 < U

0.0027 1 J J

0.00517 1 U

| [SUMP] = SUMP113<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PUPPOSE |                                | 35SUMP113-SB01<br>35-SMP113-SB01-02<br>9/20/2006<br>4 - 4 Ft<br>REG | 355UMP113-S602<br>35-SMP113-S602-02<br>9/20/2006<br>4 - 4 Ft<br>REG | LH-S113-01<br>LH-S113-01_1<br>8/4/1993<br>0.5 - 2 Ft<br>REG | LH-S113-01<br>LH-S113-01_2<br>8/4/1993<br>4 - 6 Ft<br>REG |  |  |
|--|--------------------------------|---|---|---|---|--|--|
| GAMPLE_FORFOGE   | Becomptor () Inits = make)     | Result DII. LO VQ   | Result OIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  |  |  |
| Lest Group   | Parameter (Utals = mg/kg)      | 0.00552 1 11  | 0.00517 1 U   |   |   |  |  |
| VOLATILES  | 1,1-Dichloropropene            | 0.00552 1 11  | 0.00517 1 1   |   |   |  |  |
| VOLABLES   | 1,2,3-Theatorobenzene          | 0.00552 1 11  | 0.00517 1 U   |   |   |  |  |
| VOLATILES  | 1,2,3+1 Renioropropane         | 0.00552 1 1   | 0.00517 1 U   |   |   |  |  |
| VOLATILES  | 1,2,4-1 nchlorodenzene         | 0.00532 1 0   | 0.00517 1 1   |   |   |  |  |
| VOLATILES  | 1,2,4- I methylbenzene         | 0,00002 1 0   | 0.00517 1 1   |   |   |  |  |
| VOLATILES  | 1,2-Dibromo-3-chloropropane    | 0.00552 1 0   | 0.00011 1 0   |   |   |  |  |
| VOLATILES  | 1,2-Dibromoeihane              | 0.00552 1 0   | 0.00517 1 1   |   |   |  |  |
| VOLATILES  | 1,2-Dichlorobenzene            | 0.00552 + 0   | 0.00317 1 0   | 0.005 1 < 11  | 0.005 1 ≤ B   |  |  |
| VOLATILES  | 1,2-Dichloroethane             | 0.00552 1 0   | 0,00017 1 0   | 0.005 1 < 1   | 0.005 1 < U   |  |  |
| VOLATILES  | 1,2-Dichloroethene             |   | 0.00747 4 11  | 0.005 1 4 11  | 0.005 1 < 1   |  |  |
| VOLATILES  | 1,2-Dichloropropane            | 0.00552 1 0   |   | 0.000 1 4 0   |   |  |  |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylene) | 0.00552 1 U   | 0.00517 1 0   |   |   |  |  |
| VOLATILES  | 1,3,5-Trimethylbenzene         | 0.00552 1 U   | 0.00517 1 0   |   |   |  |  |
| VOLATILES  | 1,3-Dichiorobenzene            | 0.00552 1 U   | 0.00517 1 U   |   |   |  |  |
| VOLATILES  | 1,3-Dichloropropane            | 0.00552 1 U   | 0.00517 1 U   |   |   |  |  |
| VOLATILES  | 1,4-Dichlorobenzene            | 0.00552 1 U   | 0.00517 1 U   |   |   |  |  |
| VOLATILES  | 2,2-Dichloropropane            | 0.00552 1 U   | 0.00517 1 U   |   |   |  |  |
| VOLATILES  | 2-Butanone                     | 0.011 1 U   | 0.0103 1 U  | 0.05 1 < U  | 0.05 3 4 0  |  |  |
| VOLATILES  | 2-Chloroethyl vinyl ether      | 0.011 1 U   | 0.0103 1 U  | 0.01 1 < U  | 0.01 1 < 0  |  |  |
| VOLATILES  | 2-Chlorotoluene                | 0.00552 1 U   | 0.00517 1 U   |   |   |  |  |
| VOLATILES  | 2-Hexanone                     | 0.011 1 U UJ  | 0.0103 1 U  | 0.85 1 < U  | 0.05 t < U  |  |  |
| VOLATRES   | 4-Chlorotoluene                | 0.00552 1 U   | 0.00517 1 U   |   |   |  |  |
| VOLATILES  | Acetone                        | 0.011 1 U   | 0.0103 1 U  | 0.1 1 < U   | 0.1 1 < U   |  |  |
| VOLATILES  | Вергерв                        | 0.00552 1 U   | 0.00517 1 U   | 0,005 1 < じ   | 0.005 1 < U   |  |  |
| VOLATILES  | Bromohenzene                   | 0.00552 1 U   | 0.00517 1 U   |   |   |  |  |
| VOLATILES  | Bromochloromethane             | 0,00552 1 U   | 0.00517 1 U   |   |   |  |  |
| VOLATILES  | Stomodichloromethane           | 0.00552 1 U   | 0.00517 1 U   | 0.005 1 < じ   | 0.005 1 < U   |  |  |
| VOLATILES  | Bromoform                      | 0.00552 1 U   | 0.00517 1 U   | 0.005 1 < U   | 0.005 1 < U   |  |  |
| VOLATILES  | Bromomethane                   | 0.011 1 U   | 0.0103 1 U  | 0.01 1 < U  | 0.01 1 < U  |  |  |
| VOLATILES  | Carbon disulfide               | 0.00552 1 U   | 0.00517 1 U   | 0,005 1 < U   | 0.005 1 < U   |  |  |
| VOLATILES  | Carbon tetrachloride           | 0.00552 1 U   | 0.00517 1 U   | 0,005 1 < U   | 0.005 1 < 인   |  |  |
| VOLATILES  | Chlorobenzene                  | 0.00552 1 U   | 0.00517 1 U   | 0.005 1 < U   | 0.005 1 < U   |  |  |
| VOLATILES  | Chicrosthane                   | 0.011 1 1   | 0.0103 1 U  | 0.01 1 < U  | 0.01 1 < U  |  |  |
| VOLATILES  | Chloroform                     | 0.00552 1 U   | 0.00517 1 U   | 0.005 1 < U   | 0.005 1 < U   |  |  |
| VOLATILES  | Chloromothane                  | 8011 1 U  | 0.0103 1 U  | 0.01 1 < U  | 0.01 1 < U  |  |  |
| VOLATILES  | cin 1.2 Dichlomethere          | 0.008 1   | 0.00517 1 U   |   |   |  |  |
| VOLATILES  |                                | 0.00552 \$ 13   | 0.00517 1 U   | 0.005 1 < U   | 0.005 1 < U   |  |  |
| VOLATICES  | Diber machieremethere          | 0.00552 1 1   | 0.00517 1 1   | 0.005 1 < U   | 0.005 1 < U   |  |  |
| VOLATILES  | Dibromocnioronieurane          | 0.00552 1 1   | 0.00517 1 U   |   |   |  |  |
| VOLATILES  | Distance                       | 0.0032 1 0  | 0.0103 1 U  |   |   |  |  |
| VOLATILES  |                                | 0.00552 1 11  | 0.00517 1 1   | 0.005 1 < U   | 0.005 1 < U   |  |  |
| VOLATILES  | Ethyloenzene                   | 0.00552 1 0   | 0.00517 1 1   |   |   |  |  |
| VOLATILES  | Mexachioroputadiene            | 0.00552 1 1   | 0.00517 1 U   |   |   |  |  |
| VOLATILES  | Isopropyidenzene               | 0.00002 ( 0   | 0.00517 1 11  |   |   |  |  |
| VOLATILES  | m,p-Xylenes                    | 0.00002 1 0   | 0.0103 1 11   | 0.05 1 < 11   | 0.05 1 < U  |  |  |
| VOLATILES  | Metnyi ISODUtyi Ketone         | 0.001 1 0   | 0.00126 1 J B   | 0.005 1 < U   | 0.005 1 < U   |  |  |
| VOLATILES  | Methylene chipfide             | 0.00002 1 0   | 0.0103 1 11   |   |   |  |  |
| VOLATILES  | Naphthalene                    | 0.011 4 0   | 0,0100 1 0  |   |   |  |  |

## Table 3-101 Concentrations of Chemicals in Soil Samples Associated with Sump 113

Shaw Environmental, Inc.

00066296

| SUMP] = SUMP113 |                           |                   |                   |                  |                  |  |  |
|-----------------|---------------------------|-------------------|-------------------|------------------|------------------|--|--|
| OCATION_CODE    |                           | 35SUMP113-SB01    | 35SUMP113-SB02    | LH-S113-01       | LH-S113-01       |  |  |
| SAMPLE NO       |                           | 35-SMP113-SB01-02 | 35-SMP113-SB02-02 | LH-\$113-01_1    | LH-S113-01_2     |  |  |
| SAMPLE DATE     |                           | 9/20/2006         | 9/20/2006         | 8/4/1993         | 8/4/1993         |  |  |
| DEPTH           |                           | 4 - 4 Ft          | 4 - 4 Ft          | 0.5 - 2 Ft       | 4 - 6 Ft         |  |  |
| SAMPLE PURPOSE  |                           | REG               | REG               | REG              | REG              |  |  |
| Test Group      | Parameter (Units = mg/kg) | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ |  |  |
| VOLATILES       | n-BUTYLBENZENE            | 0.00552 1 U       | 0.00517 1 U       |                  |                  |  |  |
| /OLATILE\$      | n-PROPYLBENZENE           | 0.00552 1 U       | 0.00517 1 U       |                  |                  |  |  |
| VOLATILES       | p-ISOPROPYLTOLUENE        | 0.00552 1 U       | 0,00517 1 U       |                  |                  |  |  |
| VOLATILES       | sec-BUTYLBENZENE          | 0.00552 1 U       | 0.00517 1 U       |                  |                  |  |  |
| VOLATILES       | Styrene                   | 0.00552 1 U       | 0.00517 1 U       | 0.005 1 < U      | 0.005 1 < U      |  |  |
| VOLATILES       | tert-BUTYLBENZENE         | 0.00552 1 U       | 0.00517 1 U       |                  |                  |  |  |
| VOLATILES       | Tetrachloroethene         | 0.00552 1 U       | 0.00248 1 J J     | 0.005 1 < U      | 0.005 1 < U      |  |  |
| VOLATILES       | Toluene                   | 0.00552 1 U       | 0.00517 1 U       | 0.005 1 < U      | 0.005 1 < U      |  |  |
| VOLATILES       | trans-1,2-Dichloroethene  | 0.00552 1 U       | 0.00517 1 U       |                  |                  |  |  |
| VOLATILES       | trans-1,3-Dichloropropene | 0.00552 1 U       | 0.00517 1 U       | 0,005 1 < U      | 0.005 1 < U      |  |  |
| VOLATILES       | Trichloroethene           | 0.008 1           | 0.00203 🕴 J J     | 0.005 1 < U      | 0.005 1 < U      |  |  |
| VOLATILES       | Trichlorofluoromethane    | 0.011 1 U         | 0.0103 1 U        |                  |                  |  |  |
| VOLATILES       | Vinyl acetate             | 0.011 1 U UJ      | 0.0103 1 U UJ     | 0.05 1 < U       | 0.05 1 < U       |  |  |
| VOLATILES       | Vinyl chloride            | 0.011 1 U         | 0.0103 1 U        | 0.01 1 < U       | 0.01 1 < U       |  |  |
| VOLATILES       | Xvienes, Total            | 1                 |                   | 0.005 1 < U      | 0.005 1 < U      |  |  |

Table 3-101 Concentrations of Chemicals in Soil Samples Associated with Sump 113

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

00066297



Table 3-102 Concentrations of Chemicals in Soil Samples Associated with Sump 114

| (SUMP] = SUMP114 |                            |                  |                   |                   |                  | 111 5444 64      | LU PRU M              | H-2111-02       | H-S114-02        | 18-5114-02       |
|------------------|----------------------------|------------------|-------------------|-------------------|------------------|------------------|-----------------------|-----------------|------------------|------------------|
| LOCATION _CODE   |                            | 18SS20           | 35SUMP1 [4-SB01   | 35SUMP114-S801    | LH-S114-01       | LR-5114-01       | 10 0114-01 0          | 10.5114.02 1    | 18-5114-02 2     | LH-S114-02 3     |
| SAMPLE_NO        |                            | 185520(000_0)    | 35-SMP114-SB01-01 | 35-SMP114-SB01-02 | LH-5114-01_1     | LH-5114-01_2     | 1/12/102              | 7/10/1002       | 7/13/1993        | 7/13/1993        |
| SAMPLE_DATE      |                            | 3/19/1995        | 9/15/2006         | 9/15/2006         | 7/13/1993        | 7/13/1993        | 1/10/1990             | 0.5.155         | 34.453           | 12 - 12 8 FI     |
| DEPTH            |                            | 0 - 0 Ft         | 0.5 - 0.5 Ft      | 0.5 - 0.5 Ft      | 0.5 - 1.5 Ht     | 3 · 4,2 FL       | 11.0 - 12.7 (1        | 020             | REG              | REG              |
| SAMPLE_PURPOSE   |                            | REG              | REG               | REG               | HEG              |                  | ncu<br>Davis Di LO VO |                 | Result OIL 10 VO | Result DII FO VO |
| Test Group       | Parameter (Units = mg/kg)  | Result DIL LO VO | Result DIL LQ VQ  | Result DIL LQ VO  | Result DIL LO VQ | Result DIL LO VO | Hesur Dic Lo Vo       | HESUK DIL LO VO | MESUK DIL LO YO  |                  |
| EXPLOSIVES       | 1,3.5-Trinitrobenzene      |                  | 0.249 1 U U       | 0.243 1 U U       |                  |                  |                       |                 |                  |                  |
| EXPLOSIVES       | 1,3-Dinitrobenzene         |                  | 0.249 1 U U       | 0.243 1 U U       |                  |                  |                       |                 |                  |                  |
| EXPLOSIVES       | 2,4.6-Trinitrotoluene      |                  | 0.249 1 U U       | 0.243 1 U U       |                  |                  |                       |                 | 0.00 1           | 0.12 1 2 11      |
| EXPLOSIVES       | 2,4-Dinitratoluene         |                  | 0.249 1 U U       | 0.243 1 U U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0            | 0.33 1 2 0      |                  | 0.00 1 4 11      |
| EXPLOSIVES       | 2,6-Dinitrotoluene         |                  | 0.259 1 U U       | 0.252 1 U U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0            | 0.33 1 < 0      | 0,33 1 4 0       | 0.00 1 4 0       |
| EXPLOSIVES       | 2-Amino-4.6-dinitrotoluene |                  | 0.259 i U U       | 0.252 1 U U       |                  |                  |                       |                 |                  |                  |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene |                  | 0.259 1 U U       | 0.252 I U U       |                  |                  |                       |                 |                  |                  |
| EXPLOSIVES       | нмх                        |                  | 2.19 1 U U        | 2.14 1 U U        |                  |                  |                       |                 |                  |                  |
| EXPLOSIVES       | m-Nitrotoluene             |                  | 0.249 1 U U       | 0.243 1 U U       |                  |                  |                       |                 |                  |                  |
| EXPLOSIVES       | Nitrobenzene               |                  | 0.259 1 U U       | 0.252 1 U U       |                  |                  |                       |                 |                  |                  |
| EXPLOSIVES       | o-Nitrololuene             |                  | 0.249 1 U U       | 0.243 1 U U       |                  |                  |                       |                 |                  |                  |
| EXPLOSIVES       | o-Nitrotoluene             |                  | 0.249 1 U U       | 0.243 1 U U       |                  |                  |                       |                 |                  |                  |
| EXPLOSIVES       | RDX                        |                  | 0.995 1 U U       | 0.971 1 U U       |                  |                  |                       |                 |                  |                  |
| EXPLOSIVES       | Tetrvi                     |                  | 0.647 1 U U       | 0.631 1 U U       |                  |                  |                       |                 |                  |                  |
| METALS           | Aluminum                   |                  |                   |                   | 9150 1           | 11700 1          | 4260 1                | 11100 1         | 23500 1          | 12500 1          |
| METALS           | Antimony                   | 1.28 1 < R       |                   |                   | 31 < U           | 31 < U           | 31 < Ü                | 31 < U          | 31 < U           | 31 < U           |
| METALS           | Arsenic                    | 0.64 1 < UJ      |                   |                   | 2.7 1            | 2 1              | 1,3 1                 | 2.6 1           | 11 < U           | 4.9 1            |
| METALC           | Bariam                     | 259.5 1          |                   |                   | 75 1             | 71,4 1           | 79.5 1                | 60.5 1          | 79.8 1           | 166 1            |
|                  | Cadmium                    | 064 1 4 111      |                   |                   | 1140             | 11 < U           | 11 < U                | 11 < U          | 11 < U           | 11 < U           |
| METALO           | Calcium                    | 0.04 1 2 00      |                   |                   | 283 1            | 815 1            | 384 1                 | 999 1           | 879 1            | 1780 1           |
| METALO           | Chremium                   | 14.4 1           |                   |                   | 15.3 1           | 12.6 1           | 5.7 1                 | 13.9 1          | 20.4 1           | 16.1 1           |
| METALS           | Calcolium                  |                  |                   |                   | 3.8 1            | 2.8 1            | 5.3 1                 | 5.1 1           | 4.2 1            | 10.1 1           |
| METALS           | Copan                      |                  |                   |                   | 2.9 1            | 6.1 1            | 3.6 1                 | 5.9 1           | 6.7 1            | 8.6 1            |
| METALS           | Copper                     |                  |                   |                   | 16500 1          | 19200 1          | 10600 1               | 17400 1         | 15900 1          | 26100 1          |
| METALS           | iron<br>Lond               | 67 1             |                   |                   | 12.4 1           | 9.8 1            | 4.7 1                 | 11.3 1          | 7.2 1            | 6.8 1            |
| METALS           | Lead                       | 07 1 0           |                   |                   | 1160 1           | 1130 1           | 1270 1                | 786 1           | 1710 1           | 2600 1           |
| METALS           | Magnesium                  |                  |                   |                   | 150 1            | 32.2 1           | 53.3 1                | 183 1           | 36.5 1           | 198 1            |
| METALS           | Manganese                  | A12 1 1          |                   |                   | 01 1 2 11        | 011 < 1          | .0.1 1 < U            | 0.1 1 < U       | 0,1 1 < U        | 0.1 1 < U        |
| METALS           | Mercury                    |                  |                   |                   | Q.1 1 4 Q        | 0.,              |                       |                 |                  |                  |
| METALS           | Nickel                     | 7.46             |                   |                   | 444 \$           | 670 1            | 354 1                 | 669 1           | 1260 1           | 994 1            |
| METALS           | Polassium                  |                  |                   |                   |                  | 1 1 4 11         | 1121                  | 1140            | 11 < 0           | 11 < U           |
| METALS           | Selenium                   | 0.64 1 < 0       |                   |                   | 1 1 2 0          | 1 1 4 1          | 1 1 - 11              | 1120            | 1140             | 11 < 1           |
| METALS           | Silver                     | 1,28 1 < U       |                   |                   | 11 4 0           | 100 1            | 75 1                  | 174 1           | 212 1            | 36.6 1           |
| METALS           | Strontium                  |                  |                   |                   | 4,9 1            | 13.3 1           | 1.2                   | 10.4            |                  |                  |
| METALS           | Thallium                   | 0.54 1 < 0       |                   |                   | ··· ·            | 00 1             | 54.1 F                | 455 t           | 424 1            | 55.5 1           |
| METALS           | Zinc                       |                  |                   |                   | 15,1 1           | 29 1             | 49.1 F                | 40.0 7          | 0.33 1 4 11      | 0.33 1 4 11      |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene     |                  |                   |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0            | 0.00 1 4 11     | 0.11 1 - 11      | 033 1 4 11       |
| SEMIVOLATILES    | 1.2-Dichlorobenzene        |                  |                   |                   | 0.33 1 < 0       | 0.33 I < U       | 0.33 1 < U            | 0,33 1 4 11     | 0.33 1 4 1       | 0.33 1 < 11      |
| SEMIVOLATILES    | 1.3-Dichlorobenzene        |                  |                   |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 I < U            |                 | 0.00 1 4 0       | 0.33 1 < 11      |
| SEMIVOLATILES    | 1.4-Dichlorobenzene        |                  |                   |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 I < U            |                 | 1.05 1 4 0       | 145 1 4 11       |
| SEMIVOLATILES    | 2.4.5-Trichlorophenol      |                  |                   |                   | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 0            | 1.00 1 < U      | 1.00 1 4 1       |                  |
| SEMIVOLATILES    | 2,4.6-Trichlorophenal      |                  |                   |                   | 0.33 1 < U       | 0,33 1 < U       | 0.33 1 < 0            | 0.33 1 2 0      | 0.33 1 < 0       | 0.33 1 4 0       |
| SEMIVOLATILES    | 2.4-Dichtorophenol         |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            | 0.33 1 < 0      | 0.33 1 < 0       | 0.03 F < 0       |
| SEMIVOLATILES    | 2.4-Dimethylphenöl         |                  |                   |                   | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U            | 0.33 1 < ∪      | 0.33 1 < 0       |                  |
| SEMIVOLATILES    | 2.4-Dinitrophenol          |                  |                   |                   | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 0            | 1.65 1 < 0      | 1.65 1 < 0       | 1.65 1 < 0       |
| SEMIVOLATILES    | 2-Chloronaphthalane        |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < V            | 0.33 1 < U      | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Chlorophenol             | 1                |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Mathylnaphthalene        |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            | 0.33 1 < U      | 0,33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Methylphenol             |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Nitroaniline             |                  |                   |                   | 1.65 1 < U       | 1,65 1 < U       | 1.65 1 < U            | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES    | 2-Nitrophenol              |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U            | 0.33 t < U      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES    | 3.3' Dichlorobenzidine     |                  |                   |                   | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U            | 0.65 1 < U      | 0.65 1 < U       | 0.65 t < U       |
|                  |                            | •                |                   |                   |                  |                  |                       |                 |                  |                  |





> Table 3-102 Concentrations of Chemicals in Soll Samples Associated with Sump 114

| [SUMP] = SUMP114 |                             |                  |                   |                   |                  |                  |                  |                          |                  | 111 0444 00         |
|------------------|-----------------------------|------------------|-------------------|-------------------|------------------|------------------|------------------|--------------------------|------------------|---------------------|
| LOCATION _CODE   |                             | 18SS20           | 35SUMP114-S801    | 35SUMP114-SB01    | LH-S114-01       | LH-S114-01       | LH-S114-01       | LH-S114-02               | LH-S114-02       | LH-S114-02          |
| SAMPLE_NO        |                             | 18\$\$20(000_0)  | 35-SMP114-S801-01 | 35-SMP114-S801-02 | LH-S114-01_1     | LH-S114-01_2     | LH-S114-01_3     | LH-S114-02_1             | LH-5114-02_2     | 7/10/1002           |
| SAMPLE_DATE      |                             | 3/19/1995        | 9/15/2006         | 9/15/2006         | 7/13/1993        | 7/13/1993        | 7/13/1993        | 7/13/1993                | ///1993          | 7/13/1983           |
| DEPTH            |                             | 0 - 0 Ft         | 0.5 - 0.5 Fi      | 0,5 - 0.5 Ft      | 0.5 - 1.5 Ft     | 3 - 4,2 Fl       | 11.5 - 12.7 Ft   | 0.5 - 1,5 Ft             | 3.4 - 4 -1       | 12-12.84            |
| SAMPLE_PURPOSE   |                             | REG              | REG               | REG               | REG              | REG              | REG              | REG                      | HEG VO           | REG David Dil 10 VO |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LO VO | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ         | Result DIL UG VG | Hesuli DiL LO VO    |
| SEMIVOLATILES    | 3-Nilroaniline              |                  |                   |                   | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1,65 1 < U               | 1.65 1 < U       | 1.00 1 4 0          |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol  |                  |                   |                   | 1,65 1 < U       | 1,65 1 < U       | 1.65 1 < U       | 1,65 1 < U               | 1.65   < U       |                     |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0               | 0.03 / 4 0       |                     |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     |                  |                   |                   | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < 0       | 0.55 1 < 0               | 0.05 1 4 0       | 0.65 1 - 11         |
| SEMIVOLATILES    | 4-Chloroaniline             |                  |                   |                   | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < 0       | 0.65 1 < 0               | 0.03 1 4 0       | 0.03 3 4 0          |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl eihar |                  |                   |                   | 0,33 1 < U       | 0.33 1 < 0       | 0.33 1 < ∪       | 0.33 1 < 0               | 0.33 1 < 0       | 0.33 1 4 0          |
| SEMIVOLATILES    | 4-Methylphenol              |                  |                   |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0,33 1 < U               | 1.66 1 . 1       | 1.55 1 - 1          |
| SEMIVOLATILES    | 4-Nitroaniline              |                  |                   |                   | 1.65 1 < 0       | 1.65 1 < 0       | 1.65 1 < U       | 1.65 1 < 0               | 1.05 1 4 0       | 165 1 < 1           |
| SEMIVOLATILES    | 4-Nitrophenol               |                  |                   |                   | 1.65 1 < U       | 1.65 1 < 0       | 1,55 1 < 0       |                          |                  | 0.12 1 4 11         |
| SEMIVOLATILES    | Acenaphthene                |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < 0               | 0.00 1 - 11      | 0.00 1 < 0          |
| SEMIVOLATILES    | Acenaphthylene              |                  |                   |                   | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       | 0.33 I < U               |                  | 0.33 1 < 0          |
| SEMIVOLATILES    | Anthracene                  |                  |                   | •                 | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U               | 0.00 1 4 0       | 0.00 1 2 11         |
| SEMIVOLATILES    | Benzo(a)anthracene          |                  |                   |                   | 0,33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.03 1 < 0               | 0.33 1 4 0       | 0.00 1 4 11         |
| SEMIVOLATILES    | Benzo(a)pyrene              |                  |                   |                   | 0.33 1 < U       | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 < 0.              | 0.03 1 < 0       |                     |
| SEMIVOLATILES    | Benzo(b)fluoranthene        |                  |                   |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 2 0               | 0.00 1 < 0       | 0.03 1 4 0          |
| SEMIVOLATILES    | Benzo(ghi)perylene          |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 ≪ U       | 0.33 1 < 0               | 0.33 1 < 0       | 0.33 1 4 1          |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                  |                   |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0               | 165 1 4 1        | 165 1 - 11          |
| SEMIVOLATILES    | Benzolc Acid                |                  |                   |                   | 1.65 1 < 0       | 1.65 1 < 0       | 1,65 1 < 0       | 1.65 1 < 0               |                  |                     |
| SEMIVOLATILES    | Benzyi Alcohol              |                  |                   |                   | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < 0       | 0.05 1 4 0               | 0.05 1 < 0       |                     |
| SEMIVOLATILES    | bis(2-Chloroelhoxy)methane  |                  |                   |                   | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 < 0       | 0.33   < U               | 0.03 1 < 0       | 0.00 1 4 11         |
| SEMIVOLATILES    | bls(2-Chioroethyl)ether     |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < 0       | 0.33 1 < 0               | 0.00 1 4 0       | 0.33 1 4 0          |
| SEMIVOLATILES    | bls(2-Chloroisopropyl)ether |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0               | 0.33 1 < 0       | 0,33 1 < 0          |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0               | 0.33 1 < 0       | 0.35 7 4 0          |
| SEMIVOLATILES    | Bulyi benzyi phihalate      |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 2 0       | 0.33 1 2 0               | 0.33 1 < 0       | 0.00 1 4 0          |
| SEMIVOLATILES    | Chrysene                    |                  |                   |                   | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 4 0               | 0.33 1 4 1       | 0.00 / 4 //         |
| SEMIVOLATILES    | Dibenzo(a,h)an/hracene      |                  |                   |                   | 0.33 i < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0               | 0.33 1 < 0       | 0.00 1 4 0          |
| SEMIVOLATILES    | Dibenzoluran                |                  |                   |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.03 1 < 0               | 0.00 1 4 11      |                     |
| SEMIVOLATILES    | Diethyl phthalate           |                  |                   |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 < U               | 0.33 1 4 0       | 0.00 1 < 0          |
| SEMIVOLATILES    | Dimelhyl phthalale          |                  |                   |                   | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0               | 0.33 / 2 0       | 0.33 1 4 11         |
| SEMIVOLATILES    | di-n-Butyl phthatate        | 1                |                   |                   | 0.33 1 < U       | 0.33 1 < 0       | 0,33 1 < 0       | 0.33 1 < 0               | 0.35 1 4 11      | 0.33 1 2 11         |
| SEMIVOLATILES    | di-n-Octyl phihalate        |                  |                   |                   | 0,33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 4 0               | 0.33 1 4 0       | 0.33 1 2 11         |
| SEMIVOLATILES    | Fluoranthene                |                  |                   |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 + < 0       | 0.33 1 < 0               | 0.33 1 2 1       |                     |
| SEMIVOLATILES    | Fluorene                    |                  |                   |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 4 0               | 0,33 1 4 1       | 0.03 1 < 0          |
| SEMIVOLATILES    | Hexachlorobenzene           |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0               | 0.03 1 < 0       | 0.33 1 2 1          |
| SEMIVOLATILES    | Hexachlorobutadiene         |                  |                   |                   | 0.33 1 < 0       | 0.33   < 0       | 0.33 1 < 0       | 0.33 ( < 0               | 0.00 1 4 0       | 0.00 1 4 0          |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   |                  |                   |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0               | 0.33 1 < U       | 0.33 1 - 1          |
| SEMIVOLATILES    | Hexachloroethane            |                  |                   |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0               | 0.00 1 4 1       | 0.30 1 4 0          |
| SEMIVOLATILES    | Indeno(1.2.3-cd)pyrena      |                  |                   |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 F < U               | 0.00 1 < 0       | 0.33 1 4 1          |
| SEMIVOLATILES    | Isophorone                  |                  |                   |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 ! < 0       | 0.33 1 4 0               | 0.00 1 4 11      | 0.30 1 - 0          |
| SEMIVOLATILES    | Naphthalene                 |                  |                   |                   | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 ≪ U       | 0.33 1 < 0               | 0.03 1 < 0       | 0.33 1 4 0          |
| SEMIVOLATILES    | Nitrobenzene                |                  |                   |                   | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0               | 0.00 1 4 0       |                     |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |                  |                   |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U               | 0.33 1 < 0       |                     |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      |                  |                   |                   | 0.33 1 < U       | 0.33 1 4 0       | 0.33 1 2 0       | 0.33 1 4 0               | 1.05 1 - 1       | 165 1 4 11          |
| SEMIVOLATILES    | Penlachlorophenol           |                  |                   |                   | 1.65 1 < U       | 1.65 1 < U       | 1.05 1 < U       | U > 1 (0.)               | 1,00 ( K U       | 1.00 1 2 0          |
| SEMIVOLATILES    | Phenanihrene                |                  |                   |                   | 0.33 1 < U       | 0.33 1 < 0       | 0.33 I < U       | 0.33 i < U<br>0.33 i < U | 0.00 i ≪ U       | 0.00 7 4 0          |
| SEMIVOLATILES    | Phenol                      |                  |                   |                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 1       | v.da i ≪ U<br>∆aa i - U  |                  | 0.00 1 - 0          |
| SEMIVOLATILES    | Pyrene                      |                  |                   |                   | 0.33 1 ≼ 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 ⊨ ≪ 0               | uaa i ≼ Q        | 0.00 1 2 0          |
| VOLATILES        | 1.1.1.2. Tetrachloroethane  |                  |                   | 0.0058 1 U U      |                  |                  | A ADE 4          | 0.00E 1 - 11             | 0.005 1 - 11     | 0.005 1 - 11        |
| VOLATILES        | 1,1,1-Trichloroethane       |                  |                   | 0.0058 1 U U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0              | 0,003 ( C U      | 0.005 1 < 1         |
| VOLATILES        | 1.1.2.2-Tetrachloroethane   |                  |                   | 0.0058 1 U U      | 0.005 1 < U      | 0.005 1 < 0      | 0,000 I < U      | 0.005 1 - 33             |                  | 0.005 1 4 1         |
| VOLATILES        | 1,1,2-Trichloroelhane       |                  |                   | 0.0058 1 U U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 i < 0              | 0,000 I < U      | 0.003 ( 🗧 🖉         |



## Table 3-102 Concentrations of Chemicals in Soil Samples Associated with Sump 114

| (SUMP) = SUMP 114 |                                |                  |                   | 2001 B (0144 CE01 | LU DI MAN                             | 18-5114-01       | 18-5114-01       | LH-S114-02       | LH-5114-02       | LH-S114-02       |
|-------------------|--------------------------------|------------------|-------------------|-------------------|---------------------------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION CODE     |                                | 18SS20           | 35SUMP114-S801    | 355UMP114-5801    | LH-3174-01                            |                  | 19.5114.01 3     | 18-5114-02 1     | LH-S114-02 2     | LH-S114-02_3     |
| SAMPLE_NO         |                                | 185520(000_0)    | 35-SMP114-SB01-01 | 35-SMP114-SB01-02 | UH-S114-01_1                          | LU-0114-01_2     | 7/12/1002        | 7/13/1093        | 7/13/1993        | 7/13/1993        |
| SAMPLE_DATE       |                                | 3/19/1995        | 9/15/2006         | 9/15/2006         | 7/13/1993                             | 7/13/1993        | 11011200         | 05.155           | 34.45            | 12 - 12.8 Ft     |
| DEPTH             |                                | 0 - 0 Fi         | 0.5 - 0.5 Ft      | 0.5 · 0.5 Ft      | 0.5 - 1.5 FI                          | 3 - 4,2 Ft       | 11.5 · 12.7 Ft   | 0.0 1.0 1        | PEG              | REG              |
| SAMPLE PURPOSE    |                                | REG              | REG               | REG               | REG                                   | REG              | HEG              |                  |                  | Besult DII 10 VO |
| Test Group        | Parameter (Units = mg/kg)      | Result DIL LO VQ | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO                      | Result DIL LQ VQ | Result DIL LQ VQ | Hespit DIL LU VU | Aesuli Dic Lo Vo | 0.005 1 - 11     |
| VOLATE ES         | 1.1-Dichloroethane             |                  |                   | 0.0058 1 U U      | 0.005 1 < U                           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      |                  |
| VOLATILES         | 1 1.Dichloroelhene             |                  |                   | 0.0058 1 U U      | 0.005 1 < U                           | 0,005 1 < U      | 0,005 1 < 빈      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      |
| VOLATILES         | 1 1-Dishioropropose            |                  |                   | 0.005B 1 U U      |                                       |                  |                  |                  |                  |                  |
| VULATIÇES         | 1,1-2 Trisblerebonzona         |                  |                   | 0.0058 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 1.2.3 The solution of the      |                  |                   | 0.0058 1 11 U     |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 1.2.3- Michioropropane         |                  |                   | 0.0058 1 1 11     |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 1,2,4-Trichlorobenzene         |                  |                   | 0.0058 1 11 11    |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 1,2,4-Trimethylbenzene         |                  |                   | 0.0008 1 1 1      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 1,2-Dibromo-3-chloropropane    |                  |                   | 0.0056 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 1,2-Dibromoethane              |                  |                   | 0.0058 1 0 0      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 1,2-Dichlorobenzene            |                  |                   | 0.0058 1 0 0      | e e e e e e e e e e e e e e e e e e e | 0.005 1 - 11     | 0.005 1 < 11     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES         | 1,2-Dichloroethane             |                  |                   | 0.0058 1 0 0      | 0,005-1 < 0                           |                  | 0.005 1 4 11     | 0.005 1 < 1      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES         | 1,2-Dichloraethene             |                  |                   |                   | 0.005 1 < 0                           |                  | 0.005 1 4 1      | 0.005 1 4 1      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES         | 1,2-Dichloropropane            |                  |                   | 0,0058 1 U U      | 0,005 1 < 0                           | 0.005 1 < 0      | 0.003 1 4 0      | 0.000 1 4 0      |                  |                  |
| VOLATILES         | 1,2 Dimethylbenzene (o Xylene) |                  |                   | 0.0058 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 1,3,5-Trimethylbenzene         |                  |                   | 0.0058 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 1.3 Dichlorobenzene            |                  |                   | 0.0058 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 1.3 Dichloropropane            |                  |                   | 0.0058 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 1 4 Dichlorobenzene            |                  |                   | 0.0058 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 2 2-Dichlorooronaus            |                  |                   | 0.0058 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 2-Bidanong                     |                  |                   | 0.0116 1 U U      | 0.05 1 < U                            | 0.05 1 < U       | 0.05 1 < U       | 0,05 1 < U       | 0.05 1 < U       | 0.05 1 < 0       |
| VOLATILES         | 2 Chieseth duind other         |                  |                   | 0.0116 1 U U      | 0.01 1 < U                            | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 0       |
| VOLAHLES          | 2-Criteroeinyi vinyi auses     |                  |                   | 0.0058 1 11 11    |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 2-Uniorotoluene                |                  |                   | 0.0008 1 11 11    | 0.05 1 < U                            | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES         | 2-Hexanone                     |                  |                   | 0.0058 1 11 11    |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | 4-Chlorotoluena                |                  |                   | 0.0036 1 0 0      | 01 1 2 11                             | 744 1            | 0.1 1 < U        | 0.1 t < U        | 0.1 1 < U        | 0.1 1 < U        |
| VOLATILES         | Acelone                        | i                |                   |                   | 0.005 1 4 11                          | 0.005 i < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES         | Benzené                        |                  |                   | 0.0058 1 0 0      | 0.005 1 4 9                           | 0.000 ( 0 0      |                  |                  |                  |                  |
| VOLATILES         | Bromobenzene                   |                  |                   | 0.0058 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | Bromochloromethane             |                  |                   | 0.0058 1 0 0      |                                       | 0.007 I . II     | 0.005 t < 11     | 0.005 1 < U      | 0.005 1 < U      | 0.005 f < U      |
| VOLATILES         | Bromodichloromethane           |                  |                   | 0,0058 1 U U      | 0.005 1 < 0                           | 0.005 1 < 0      | 0.005 1 2 1      | 0.005 1 4 11     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES         | Bromolorm                      |                  |                   | 0.0058 1 U U      | 0.005 1 < 0                           | 0.005 1 < 0      |                  | 0.01 1 < 11      | 0.01 1 < U       | 0.01 1 < U       |
| VOLATILES         | Bromomethane                   |                  |                   | 0.0116 1 U U      | 0.01 1 < 0                            | 0,01 1 < 0       |                  | 0.005 3 2 11     | 0.005 1 e U      | 0.005 1 < U      |
| VOLATILES         | Carbon disulfide               |                  |                   | 0.0058 1 U U      | 0.005 1 < U                           | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 11     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES         | Carbon tetrachloride           |                  |                   | 0.0058 1 U U      | 0.005 1 < 0                           | 0.005 1 < 0      | 0.005 1 < 0      |                  | 0.005 1 < 0      | 0.005 1 c U      |
| VOLATILES         | Chlorobenzene                  |                  |                   | 0.0058 1 U U      | 0.005 1 < U                           | 0.005 1 < 0      | 0.005 1 < U      |                  |                  | 0.01 1 - 1       |
| VOLATILES         | Chloroelhans                   |                  |                   | 0.0116 1 U U      | 0.01 1 < U                            | 0.01 1 < 0       | 0.01 1 < 0       |                  |                  | 0.005 1 4 11     |
| VOLATILES         | Chloroform                     |                  |                   | 0.0056 1 U U      | 0.005 1 < U                           | 0.005 i < U      | 0.005 1 < 0      | 0.005 1 < 0      |                  | 0.000 1 4 0      |
| VOLATILES         | Chloromelhaue                  |                  |                   | 0.0116 1 U U      | 0.01 1 < U                            | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 0       | 0,01 1 < U       | 0.01 1 4 0       |
| VOLATILES         | ris-1 2-Dichlorositiene        |                  |                   | 0.0058 f U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | cic 12 Dichleropropage         |                  |                   | 0.0058 1 U U      | 0.005 1 < U                           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      |
| VOLATILES         | Dipremochloromethana           |                  |                   | 0.0058 1 U U      | 0.005 1 < U                           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      |
| VOLANCES          | Dibromentation                 |                  |                   | 0.0056 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | Distance in and                |                  |                   | 0.0116 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | Dichioroquiuporomeinane        | 1                |                   | 0.0058 1 11 11    | 0.005 1 < U                           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 i < U      | 0.005 1 < 나      |
| VOLATILES         | EINVIDENZENE                   |                  |                   | 0.0058 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | Hexachlorobutadiene            |                  |                   | 0.0058 1 1 1      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | Isopropylbenzene               |                  |                   |                   |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | m.p-Xylenes                    |                  |                   | 0.0058 0 0        | A 65 1 - 11                           | 0.05 1 - 11      | 0-05 t - U       | 0.05 1 < 11      | 0.05 1 < U       | 0.05 1 < U       |
| VOLATILES         | Methyl isobutyl kelone         |                  |                   | 0.0116 1 0 0      | 0.00 1 < 0                            | 0,00 1 4 0       |                  | 0.005 1 < 11     | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES         | Methylene chloride             |                  |                   | 0.0058 1 U U      | 0.005 1 < U                           | 0.005 1 2 0      | 0.000 I K U      | 0.000            |                  |                  |
| VOLATILES         | Naphthalene                    |                  |                   | 0.0116 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | n-BUTYLBENZENE                 |                  |                   | 0.0058 1 U U      |                                       |                  |                  |                  |                  |                  |
| VOLATILES         | n-PROPYLBENZENE                |                  |                   | 0.0058 I U U      |                                       |                  |                  |                  |                  |                  |
|                   |                                |                  |                   |                   |                                       |                  |                  |                  |                  |                  |

Data Evaluation Report Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps



- 5-1 - 2

| Table 3-102   |        |
|---|--------|
| Concentrations of Chemicals in Soil Samples Associated with Sun | 1p 114 |

| 185520<br>185520(000_0)<br>3/19/1995<br>0 - 0 Ft<br>REG | 35SUMP114-SB01<br>35-SMP114-SB01-01<br>9/15/2006<br>0.5 - 0.5 Ft<br>REG     | 35SUMP114-SB01<br>35-SMP114-S801-02<br>9/15/2006<br>0.5 - 0.5 Ft<br>REG  | LH-S114-01<br>LH-S114-01_1<br>7/13/1993<br>0.5 - 1.5 Ft<br>REG   | LH-S114-01<br>LH-S114-01_2<br>7/13/1993<br>3 - 4,2 Fl<br>REG  | LH-S114-01<br>LH-S114-01_3<br>7/13/1993<br>11.5 - 12.7 Fl<br>REG   | LH-S114-02<br>LH-S114-02_1<br>7/13/1993<br>0.5 - 1.5 Fl<br>REG   | LH-S114-02<br>LH-S114-02_2<br>7/13/1993<br>3.4 - 4 Fl<br>REG   | LH-S114-02<br>LH-S114-02_3<br>7/13/1993<br>12 - 12,8 Fi<br>BEG   |
|---|---|--|--|---|--|--|--|--|
| Result DIL LO VO  | Result DIL LO VO  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LO VQ  | Result DIL LO VO   | Besult Dill. EO VO   | Result DIL ED VO   | Reput Dil LO VO  |
|   |   | 0.0058 1 U U   |  |   |  |  |  | Headin the Co Yo   |
|   |   | 0.0058 1 11 11   |  |   |  |  |  |  |
|   |   | 0.0058 1 11 11   | 0.005 t < 11   | 0.005 1 - 11  | 0.005 1 - 11   | 0.005 (  | 0.005 1 12   | 5 00T 4  |
|   |   | 0.0058 1 11 11   | 0.000 / 1 0  |   | 0.000 I K U  |  | 0.005 1 < U  | 0.005 1 4 0  |
|   |   | 0.0058 1 11 11   | 0.005 1 4 11   | 0.005 1   | 0.005  |  | • • • • · · · · · · · · · · · · · · · ·  |  |
|   |   | 0.0058 1 11 11   | 0.005 1 4 1  | 0.005 1 < 0   | 0.005 1 < 0  | 0.005 1 < 0  | 0.005 1 < U  | 0.005 1 < U  |
|   |   | 0.0000 1 U U   | 0.003 1 4 0  |   | 0,005 1 < U  | 0.005 1 < 0  | 0.005 1 < U  | 0.005 1 < U  |
|   |   | 0.0038 1 0 0   | 0.005 1  |   |  |  |  |  |
|   |   | 0.0056 1 0 0   | 0.005 1 < U  | 0.005 t < 0   | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
|   |   |  | 0.005 I < 0  | 0.005 1 < 0   | 0.005 1 < U  | 0,005 1 < 0  | 0.005 1 < U  | 0.005 1 < U  |
|   |   |  |  |   |  |  |  |  |
|   |   | U,U116 1 U U   | 0.05 1 < U   | 0.05 1 < U  | 0.05 1 < U   | 0.05 1 < U   | 0.05 1 < U   | 0.05 1 < U   |
|   |   | 0.0116 1 U U   | 0.01 1 < U   | 0.01 I < U  | 0.01 1 < U   | 0.01 1 < 빈   | 0.01 1 < U   | 0.01 1 < U   |
|   |   |  | 0.005 1 < U  | 0.001 1 < U   | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  | 0.005 1 < U  |
|   | 185520<br>185520(000_0)<br>3/19/1995<br>0 - 0 FI<br>REG<br>Result DIL LO VO | 185520 355UMP114-SB01<br>185520(000_0) 35-SMP114-SB01-01<br>3/19/1995 9/15/2006<br>0 - 0 Fi 0,5 - 0,5 Fi<br>REG REG<br>Result DIL LO VO Result DIL LO VO | 18SS20         35SUMP114-S801         35SUMP114-S801           18SS20(000_0)         35-SMP114-S801-01         35-SMP114-S801-02           3/19/1995         9/15/2006         9/15/2006           0-0-Ft         0.5-0.5 Ft         0.5-0.5 Ft           REG         REG         REG           Result         DIL         LQ         VQ           0.0058         1         U           0.0058         1 | 18S520         35SUMP114-SB01         35SUMP114-SB01         LH-S114-01           18S520(000_0)         35-SMP114-SB01-01         35-SMP114-SB01-02         LH-S114-01_1           3/19/1995         9/15/2006         9/15/2006         7/13/1993           0-0-0F1         0,5-0,5 F1         0,5-0,5 F1         0,5-1,5 F1           REG         REG         REG         REG           Result         DIL         LQ         VQ         Result         DIL         LQ         VQ           0.0058         1         U         0.0055         1         U         0.0055         1         U           0.0058         1         U         0.0055         1         U         0.0055         1         U           0.0058         1         U         U         0.0055         1         U         0.0055         1         U           0.0058         1         U         U         0.0055         1< | 18SS20         35SUMP114-S801         35SUMP114-S801         LH-S114-01         LH-S114-01           18SS20(000_0)         35-SMP114-S801-01         35-SMP114-S801-02         LH-S114-01_1         LH-S114-01_2           3/19/1995         9/15/2006         9/15/2006         7/13/1993         7/13/1993           0-0F1         0.5-0.5F1         0.5-0.5F1         0.5-0.5F1         3-4.2 FI           REG         REG         REG         REG         REG         REG           0.0501         LO VQ         Result DIL         LO VQ         Result DIL         LQ VQ         Result DIL </td <td>18SS20         35SUMP114-SB01         35SUMP114-SB01-01         LH-S114-01         LH-S114-01         LH-S114-01           18SS20(000_0)         35-SMP114-SB01-01         35-SMP114-SB01-02         LH-S114-01_1         LH-S114-01_2         LH-S114-01_3           3/19/1995         9/15/2006         9/15/2006         7/13/1993         7/13/1993         7/13/1993           0-0-Ft         0.5-0.5 Ft         0.5-0.5 Ft         0.5-0.5 Ft         3-4.2 Ft         11.5-12.7 Ft           REG         REG         REG         REG         REG         REG         REG         REG           0.0058         1         U         0.0058         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1&lt;</td> U         0.0055         1< | 18SS20         35SUMP114-SB01         35SUMP114-SB01-01         LH-S114-01         LH-S114-01         LH-S114-01           18SS20(000_0)         35-SMP114-SB01-01         35-SMP114-SB01-02         LH-S114-01_1         LH-S114-01_2         LH-S114-01_3           3/19/1995         9/15/2006         9/15/2006         7/13/1993         7/13/1993         7/13/1993           0-0-Ft         0.5-0.5 Ft         0.5-0.5 Ft         0.5-0.5 Ft         3-4.2 Ft         11.5-12.7 Ft           REG         REG         REG         REG         REG         REG         REG         REG           0.0058         1         U         0.0058         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1< | 18SS20         35SUMP114-S801         35SUMP114-S801-01         35-SMP114-S801-01         35-SMP114-S801-02         LH-S114-01         LH-S114-01         LH-S114-01_3         LH-S114-02_1           3/19/1995         9/15/2006         9/15/2006         9/15/2006         7/13/1993         15.1         15.1         15.1         15.1         15.1         15.1         15.1         15.1         15.1         15.1         15.1 | 18SS20         35SUMP114-SB01         35SUMP114-SB01         LH-S114-01         LH-S114-01         LH-S114-01         LH-S114-02         LH-S114-02           78SS20(000_0)         35-SMP114-SB01-01         35-SMP114-SB01-02         LH-S114-01_1         LH-S114-01_2         LH-S114-01_3         LH-S114-02_1         LH-S114-02_2           3/19/1995         9/15/2006         9/15/2006         9/15/2006         7/13/1993 |

Chemical Concentrations In Soil Associated with LHAAP-35/36 Sumps



 Table 3-103

 Concentrations of Chemicals in Soil Samples Associated with Sump 115

| [SUMP] = \$UMP115 |                            |                  |                   |                   |                  | 111 5445 64            | IN CHIERT       | 19.5115.02        | LH-S115-02       | LH-S115-02       | LH-S115-02       |
|-------------------|----------------------------|------------------|-------------------|-------------------|------------------|------------------------|-----------------|-------------------|------------------|------------------|------------------|
| LOCATION _CODE    |                            | 185507           | 355UMP115-SB01    | 35SUMP115-SB01    | LH-S115-01       | LH-5115-01             | LUCHEN 2        | EH-S115-02 OC     | LH-S115-02 1     | LH-\$115-02_2    | LH-\$115-02_3    |
| SAMPLE_NO         |                            | 18SS07(000_0)    | 35-SMP115-SB01-01 | 35-SMP115-SB01-02 | LH-S115-01_1     | LN-5115-01_2           | DIA(1003        | R/A/1997          | 8/4/1993         | B/4/1993         | 8/4/1993         |
| SAMPLE_DATE       |                            | 3/19/1995        | 9/19/2006         | 9/19/2006         | 8/4/1993         | 8/4/1993               | 5 FH 1320       | 6 - 2 6 Ft        | 6 - 2.6 FI       | 7 • 7,5 FI       | 15 • 17 Ft       |
| DEPTH             |                            | 0 - 0 F1         | .55 Ft            | 8 - 8 Ft          | .5 . 1 Pl        | 7 - 7.5 M              | 0.0 - 9 - 1     | - 2.011<br>FD     | REG              | REG              | REG              |
| SAMPLE_PURPOSE    |                            | REG              | REG               | REG               | HEG              |                        | Peruli Di LO VO | Regid Di LO VO    | Besuli OIL LO VO | Result DIL LQ VQ | Result DIL LQ VO |
| Tesi Group        | Parameter (Units = mg/kg)  | Resull DIL LO VO | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO | HESHI DIL LO VO        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | 1,3,5-Trinitrobanzene      |                  | 0.244 1 U         | 0.25 1 U          |                  |                        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | 1,3-Dinitrobenzene         |                  | 0.244 1 U         | 0.25 10           |                  |                        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | 2.4.6 Trinitrotoluene      |                  | 0.244 1 U         | 0.25 1 0          |                  |                        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | 2.4-Dinkrotoluene          |                  | 0.244 I U         | 0.25 10           |                  |                        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | 2.6-Dinitrotoluene         |                  | 0.254 TU          | 0.26 10           |                  |                        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | 2-Amino-4,6-dinitrolojuane |                  | 0.254 1 U         | 0.25 10           |                  |                        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | 4-Amina-2.6-dinitrataluene |                  | 0.254 1 0         | 0.20 10           |                  |                        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | HMX                        |                  | 2,15 1 U          | 2.2 10            |                  |                        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | m-Nitrolo/uene             |                  | 0.244 1 0         | 0.25 10           |                  |                        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | Nihobenzene                |                  | 0.254 10          | 0.20 10           |                  |                        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | o-Nitrotoluene             |                  | 0,244 1 0         | 0.25 0            |                  |                        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | p-Nitrotoluene             | 1                | 0.244 1 0         | 0.28 10           |                  |                        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | ADX                        |                  | 0,976 10          | 066 116           |                  |                        |                 |                   |                  |                  |                  |
| EXPLOSIVES        | Teiryi                     |                  | 9.634 1.0         | 0.00 10           | 4950 1           | 7960 1                 | 5970 1          | 5870 <sup>1</sup> | 9470 1           | 6560             | 12300            |
| METALS            | Alyminum                   |                  |                   |                   | 3 1 4 1          | 3 te U                 | 3 1 < U         | 3 1< U            | 3 1< U           | 3 1≺ U           | 3 I< U           |
| METALS            | Antimony                   | 1.15 I < H       |                   |                   | 19 5             | 25 1                   | 21 1            | 1.9 1             | 2.1 1            | 1,9 1            | 1,4 1            |
| METALS            | Arsenic                    | 1,39             |                   |                   | 70 1             | 14 1                   | 27 1            | 28 1              | 29 1             | 18 1             | 86 1             |
| METALS            | Barium                     | 459.7            |                   |                   | 1 1 4 1          | 1 1 1                  | 1 1 d U         | 1 1 e U           | 5 5 4 U          | 1 1 < U          | 1 1 < U          |
| METALS            | Cadmium                    | 0.58 1 < 0       |                   |                   | E25 1            | 560 1                  | 445 1           | 1070 1            | 1070 1           | 262 1            | 389 1            |
| METALS            | Calcium                    |                  |                   |                   | 7 1              | 10 1                   | 9 1             | 12 1              | 12 1             | 15 1             | 11 1             |
| METALS            | Chromium                   | 9.43 '           |                   |                   | 1 1 4 11         | 1 1 2 11               | 1 1 < 1         | 1 1< U            | 1 1              | 1 1 < U          | 4 1              |
| METALS            | Cobali                     |                  |                   |                   | 1 1              | 2 1                    | 4 1             | 2 1               | 3 1              | 3 1 < U          | 3 1              |
| METALS            | Copper                     |                  |                   |                   | 8190 1           | 10800 1                | 11000 1         | 21800 1           | 14000 1          | 11800 1          | 10200 1          |
| METALS            | Irón                       | 1000 1           |                   |                   | 16 1             | 1.7 1                  | 6.5 1           | 4.9 1             | 5.2 1            | 4.7 1            | 6.4 1            |
| METALS            | Lead                       | 1250             |                   |                   | 311 1            | 341 5                  | 574 1           | 289 1             | 391 1            | 247 1            | 768 1            |
| METALS            | Magnesium                  |                  |                   |                   | 28 1             | 14 1                   | 24 1            | 35 1              | 35 1             | 14 1             | 117 1            |
| METALS            | Manganese                  | 0.12 1 4 11      |                   |                   | 0,1 1 < U        | 0,1 1 < U              | 0.1 1 < U       | 0.1 1 < U         | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < 0        |
| NETALO            | Nickol                     | 282 1            |                   |                   |                  |                        |                 |                   |                  |                  |                  |
| METALS            | Polaccium                  | L.01             |                   |                   | 313 1            | 380 1                  | 398 1           | 388 1             | 540 1            | 344 1            | 849 1            |
| METALS            | Selanium                   | 0.58 1 < U       |                   |                   | 1 1 < U          | 1 1 <b>≮</b> U         | 1 1< U          | 1 1 < V           | 1 1∢ U           | 1 1 < 0          | 1 I C U          |
| METALS            | Silver                     | 1.15 1 < 0       |                   |                   | 1 1< U           | 1 1< U                 | 1 1 < U         | 1 i < U           | 1 1< U           | 1 1< 0           |                  |
| METALS            | Stronlium                  |                  |                   |                   | 15 1             | 8 1                    | 17 1            | 15 1              | 17 1             | 9 1              | <b>I</b> I I     |
| METALS            | Thallium                   | 0.58 1 < U       |                   |                   |                  |                        |                 |                   |                  | <b>.</b> .       | 10 1             |
| METALS            | Zinc                       | 1                |                   |                   | 8 1              | 7 1                    | 10 1            | 12 1              | 10 1             | 0.22 1           | 0 1 1 1          |
| SEMIVOLATILES     | 1.2,4 Trichlarobenzene     |                  | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 1 < U             | 0,33 1 < 0      | 0.33 1 < 0        | 0.33 1 < 0       | 0.00 1 4 1       | 0.03 1 < 1       |
| SEMIVOLATILES     | 1.2-Dichlorobenzene        |                  | 0,178 1 U         | 0.191 1 U         | 0.33 1 < 1J      | 0.33 1 < 0             | 0.33 1 < 0      | 0.33 1 < 0        | 0.00 14 0        | 0.33 1 4 1       | 0.33 1 < U       |
| SEMIVOLATILES     | 1,3-Dichlorobenzene        |                  | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0,33 1 < U             | 0.33 1 < U      | 0.33 1 < U        | 0.33 14 0        | 0.33 14 0        | 033 1 < 1        |
| SEMIVOLATILES     | 1,4-Dichlorobenzene        |                  | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 I < U             | 0.33 1 < 0      | 0.33 I C U        | 11 1 2 2 2 2 2   | 165 1 4 1        | 1.65 1 < U       |
| SEMIVOLATILES     | 2,4,5 Trichlorophenol      |                  | 0.178 f U         | 0.191 1 U         | 1.65 i < U       | 1.65 1 < U             | 1.65 1 < U      | 0.00 1< 0         | 0.33 1 4 1       | 0.33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES     | 2,4,6-Trichlorophenol      |                  | 0.178 IU          | 0.191 1 U         | 0.33 i < U       | 0.33 1 < U             | 0.33 1 2 0      | 0.00 1 4 0        | 0.33 1 4 1       | 0.33 1 4 1       | 0.33 1 < U       |
| SEMIVOLATILES     | 2.4-Dichlorophenol         |                  | 0,178 1 U         | 0.191 1 U         | 0.33 1 < 0       | 9.33 1 < U             | 0.33 14 0       | 0.03 1 4 1        | 0.33 1 e U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES     | 2,4-Dimethylphenol         |                  | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 1 < 0             | 0.33 TK U       | 165 1 2 11        | 0.00 1 4 U       | 1.65 t < U       | 1.65 1 < U       |
| SEMIVOLATILES     | 2,4-Dinifrophenol          |                  | 0.89 1 U          | 0.957 1 U         | 1.65 1 < 0       | 1,55   < 0             | U >⊺ ¢¢,⊺       | 0.00 1 4 11       | 0.33 S < U       | 0.33 1 < U       | 0.33 1< U        |
| SEMIVOLATILES     | 2,4-Dinitratatuene         |                  | 0.178 1 U         | 0.191 1 U         | 0.33 1 < 0       | 0.33 1 4 0             | 0.00 1 4 1      | 0.33 1 4 1        | 0.33 1 d U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES     | 2,6 Dinitrotoluene         |                  | 0.178 1 U         | 0.191 1 U         | 0,33 1 < U       | 0.33 14 11             | 0.33 1 4 1      | 0.03 1 4 1        | 0.33 1 < U       | 0.33 1 < U       | 0.33 i< U        |
| SEMIVOLATILES     | 2-Chloronaphihaiene        | 1                | 0.178 I U         | 0,191 10          | 0,33 1 < U       | 0,20 i< U<br>013 i∠ ii | 0.33 12 11      | 0.33 1 2 11       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES     | 2-Chlaraphenol             |                  | 0.176 1 U         | 0.191 1.0         | 0.33 1 < U       | 0.30 1 4 1             | 0.33 1 × 11     | 0.33 1 < 11       | 0.33 I < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES     | 2-Methylnaphthalene        |                  | 0,178 1 U         | 0.191 1.0         | 0.33 1 < 0       | 0.00 14 0              | 0.33 1 c II     | 0.33 1 < L        | 0.33 1 < U       | 0.33 1 < U       | 0.33 f < U       |
| SEMIVOLATILES     | 2-Methylphanol             | ł                | 0,178 1 U         | 0.191 1 U         | 0.33 I < U       | 166 (J )               | 1.65 1 2 11     | 1.65 1 e U        | 1,65 1 < U       | 1.65 i < U       | 1.65 î< U        |
| SEMIVOLATILES     | 2-Nikoaniline              |                  | 0.89 1 U          | 0.057 10 .        | 1.00 1 < 0       | 033 1 2 U              | 0.33 i < U      | 0,33 1< U         | 0.33 I < U       | 0.33 1 < U       | 0,33 1 < U       |
| SEMIVOLATILES     | 2-Nilrophenal              |                  | 0.178 1 U         | 0.191 FU          | 0.35 1 2 1       | 0.65 1 2 1             | 0.65 1 < U      | 0.65 i< U         | 0.65 1 e U       | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES     | 3,3 Dichlorobenzidine      |                  | 0,355 10          | 0.057 1.0         | 165 1 2 (        | 165 12 11              | 1.65 1 < U      | 1,65 1 < U        | 1.65 1 < U       | 1.65 1 < U       | 1,65 i < U       |
| SEMIVOLATILES     | 3-Nitroaniime              | 1                | 0.89 / 0          | 0.351 IU          | 1.00 1 4 0       |                        |                 |                   |                  |                  |                  |



 Table 3-103

 Concentrations of Chemicals in Soil Samples Associated with Sump 115

| (SUMP) = SUMP115       |   |                                       |                   |                   |                  |                  |                  |                  |                  |                  |                  |
|------------------------|---|---------------------------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE         |   | 185507                                | 35SUMP115-SB01    | 35SUMP115-SB01    | LH-5115-01       | LH-S115-01       | LH-S115-01       | LH-S115-02       | LH-S115-02       | LH-S115-02       | LH-S115-02       |
| SAMPLE_NO              |   | 185507(000_0)                         | 35-SMP115-SB01-01 | 35-SMP115-SB01-02 | LH-S115-01 1     | LH-S115-01_2     | LH-S115-01 3     | LH-S115-02 OC    | LH-S115-02 1     | LH-S115-02 2     | LH-S115-02 3     |
| SAMPLE_DATE            |   | 3/19/1995                             | 9/19/2006         | 9/19/2006         | B/4/1993         | 8/4/1993         | 8/4/1993         | 8/4/1993         | 8/4/1993         | 8/4/1993         | 8/4/1993         |
| DEPTH                  |   | 0 - 0 FI                              | .55 FI            | 8 - 8 Ft          | .5 - 1 Fi        | 7 - 7.5 Ft       | 8.5 - 9 Ft       | .6 - 2.6 Fi      | .6 - 2.6 FI      | 7 - 7.5 Ft       | 15 - 17 Ft       |
| SAMPLE_PURPOSE         |   | REG                                   | REG               | REG               | REG              | REG              | REG              | FD               | REG              | REG              | REG              |
| Test Group             | Parameter (Units = mg/kg)               | Result DIL LO VO                      | Result DIL LO VO  | Result DIL LO VO  | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO |
| SEMIVOLATILES          | 4.6-Dinitro-2-methylphenol              |                                       | 0.89 1 U          | 0.957 EU          | 1,65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.55 1 < U       | 1.85 1 < U       |
| SEMIVOLATILES          | 4-Bromophenyl phenyl ether              |                                       | 0.178 IU          | 0.191 t U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 i < U       | 0.33 1< U        | 0.33 1 < U       | 0.33; 1 < U      |
| SEMIVOLATILES          | 4-Chloro-3-methylphenol                 |                                       | 0.178 1 U         | 0.191 tU          | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 i< U        | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES          | 4-Chloroanlline                         |                                       | 0.178 1 U         | 0.191 1 U         | 0.65 1 < U       | 0,65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 i < U       | 0.65 1 < U       | 0.65 1 < U       |
| SEMIVOLATILES          | 4-Chforophenyl phenyl ether             |                                       | 0.178 1 U         | 0.191 IU          | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 i< U        | 0.33 1< U        | 0.33 1 < U       |
| SEMIVOLATILES          | 4-Mathylphenol                          |                                       | 0.178 1 U         | 0.191 i U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 i< U        | 0.33 i< Ü        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | 4-Nitroaniline                          |                                       | 0.89 1 U          | 0.957 tU          | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 i< U        | 1.85 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES          | A-Nitrophenol                           |                                       | 0.89 1 U          | 0.957 1 U         | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 t< U        | 1.85 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES          | Acenaphihene                            |                                       | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 î< U        | 0.33 E< U        | 0,33 1 < U       | 0.33 1 < U       | 0.33 1 ⊲ U       |
| SEMIVOLATILES          | Acenaphihylene                          |                                       | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U        | 0.33 i < U       | 0.33 1< U        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Anthracene                              |                                       | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | ō.33 1< U        |
| SEMIVOLATILES          | Benzo(a)anthracene                      |                                       | 0.17B 1 U         | 0.191 IU          | 0.33 1< U        | 0.33 1 < U       | 0.33 í< U        | 0.33 1.< U       | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < U       |
| SEMIVOLATILES          | Banzo(a)pyrene                          |                                       | 0.17B 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 ì< U        | 0.33 I< U        |
| SEMIVOLATILES          | Benzo(b)fluoranihene                    |                                       | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0,33 1 ⊂ U       | 0.33 1 < U       | 0.33 i< U        | 0.001 1< U       | 0.33 1< U        | 0.33 1< U        |
| SEMIVOLATILES          | Benzo(ghi)perylene                      |                                       | 0.17B 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33. 1 < U      | 0.33 I< U        | 0.33 t< U        | 0.33 1< U        | 0.33 1< U        | 0,33 1 < 0       |
| SEMIVOLATILES          | 8enzo(k)Ruoranthene                     |                                       | 0.17B 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.001 1 < U      | 0.33 1 c U       | 0.33 I< U        |
| SEMIVOLATILES          | Benzoic Acid                            |                                       | 0.89 IU           | 0,957 1 U         | 1.65 i < U       | 1.65 î< U        | 1,65 i< U        | 1.65 1 < U       | 0.001 1 < U      | 1.65 1 < U       | t.65 1 ≺ U       |
| SEMIVOLATILES          | Benzył Alcohol                          |                                       | 0.17B 1 U         | 0,191 1 U         | 0.65 I < U       | 0.65 1 < U       | 0.65 1 < U       | 0.85 1 < U       | 0.65 1 < U       | 0.65 I < U       | 0.65 1< U        |
| SEMIVOLATILES          | bis(2-Chioroethoxy)melhane              |                                       | 0.178 I U         | 0.191 I U         | 0.33 F < U       | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U        |
| SEMIVOLATILES          | bis(2-Chlorolethyi)ether                |                                       | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 i < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Disiz-Chioroisopropylietter             |                                       | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       |
| CEMILOLATILES          | ors(2-cinynexy)primalate                |                                       | 0.178 1 0         | 0.285 1           | 0.395            | 0.775 1          | 1,1 1            | 0.822 1          | 1,34 1           | 0.427            | 0.829            |
| SEMMOLATILES           | Character Character Character Character |                                       | 0.178 10          | 0.191 1.0         | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 <           |
| SEMMOCATILES           | Dibog zg(z b) ag thracoso               |                                       | 0.178 1.0         | 0.191 1.0         | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 < 0         |
| SEMINOLATILES          | Dibeazeturae                            |                                       | 0.178 FU          | 0,191 10          |                  | 0.33 1 < U       | 0,33 1 < 0       | 0.33 1< 0        | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       |
| SEMIVOLATILES          | Diethul nhthalate                       |                                       | 0.178 1.1         | 0.191 10          | 0.03 E< U        | 0.33 1< 0        | 0.33 1 < 0       | 0.33 1< 0        | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1< 0        |
| SEMIVOLATH ES          | Dimethyl phihalate                      |                                       | 0.178 1.1         | 0.191 10          | 0.00 1 4 1       | 0.00 1 4 11      | 0.03 1 < 0       | 0.33 1< 0        | 0.33 1< 0        | 0.33 1< 0        | 0.33 14 0        |
| SEMIVOLATILES          | di-n-Build policialate                  |                                       | 0.178 11          | 0.101 1.1         | 0.00 14 0        | 0.03 1 4 11      | 0.00 1 4 11      | 0.33 1 < 0       | 0.33 FC U        | 0.00 1 4 11      | 0.33 1 4 0       |
| SEMIVOLATILES          | di-n-Octvt phthatate                    |                                       | 0.178 1 U         | 0.191 1.1         | 0.33 5 11        | 033 1 4 1        | 0.33 1 ~ 8       | 0.33 1 4 1       | 0.33 1 < 1       | 0.33 1 < 11      | 0.33 1 < 1       |
| SEMIVOLATILES          | Fluoranthene                            |                                       | 0.178 1.1         | 0.191 1.U         | 0.33 1 4 1       | 0.35 1 4 11      | 0.33 1 4 1       | 0.33 1 < 11      | 0.33 1 - 11      |                  | 0.33 1 < 1       |
| SEMIVOLATILES          | Fluorene                                |                                       | 0.178 t U         | 0.191 1.U         | 0.33 1 - U       | 0.33 1 4 1       | 0.33 1 × 0       | 0.33 1 < 1/      | 0.33 1 2 11      | 0.33 1< 11       | 0.33 te U        |
| SEMIVOLATILES          | Hexachtorobenzene                       |                                       | 0.178 IU          | 0.191 1 U         | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 11      | 0.33 1 < U       |
| SEMIVOLATILES          | Hexachiorobuladiane                     |                                       | 0.178 1 U         | 0,191 1 U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 11      | 0.33 1 < 11      |
| SEMIVOLATILES          | Hexachlorocyclopentadiene               |                                       | 0.178 IU          | 0.191 1 U         | 0.33 1 × U       | 0.33 I< U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES          | Hexachloroethane                        |                                       | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0,33 t< U        | 0.33 1 < U       |
| SEMIVOLATILES          | Indeno(1.2,3-cd)pyrene                  |                                       | 0.178 fU          | 0.191 1 U         | 0.33 1 < U       | 0.33 i< U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 i< U        | 0.33 t< U        |
| SEMIVOLATILES          | Isophorone                              |                                       | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 i < U       | 0,33 1 < U       | 0,33 1 < U       | 0.33 1 < U       | 0.33 t< U        | 0.33 1< U        |
| SEMIVOLATILES          | Naphthalene                             |                                       | 0.178 IU          | 0.191 1 U         | 0.33 1 < U       | 0.33 f< U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U        | 0.33 t< U        | 0.33 1< U        |
| SEMIVOLATILES          | Nitrobenzene                            |                                       | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 I< U        | 0.33 1 < U       | 0.33 1< U        | 0.33 1 < U       | 0.33 t< U        | 0.33 1< U        |
| SEMIVOLATILES          | n-Nitroso di n-oropytamine              |                                       | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 1 < U       | 0,33 1 < U       | 0.33, 1 < U      | 0.001 1 < U      | 0.33 i< U        | 0.33 1< U        |
| SEMIVOLATILES          | n-Nitrosodiphenylamina                  |                                       | 0.178 1 U         | 0.191 1 U         | 0,33 1< U        | 0.33 i< U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U        | 0.33 1.< U       | 0.33 1< U        |
| SEMIVOLATILES          | Pentachlorophenol                       |                                       | 0.89 IU           | 0.957 1 U         | 1.65 1 < U       | 1.55 i< U        | 1.65 1 < U       | 1.65 1 < U       | 1.65 1< U        | 1.55 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES          | Phenanthrene                            |                                       | 0.178 1 U         | 0,191 1 U         | 0.33 1 < U       | 0.33 î< U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1.< U       | 0.33 i< U        | 0.33 1< U        |
| SEMIVOLATILES          | Phenol                                  |                                       | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 i× U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1< U        | 0.33 i< U        | 0.33 1< U        |
| SEMIVOLATILES          | Pyréné                                  |                                       | 0.178 1 U         | 0.191 1 U         | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | . 0.33 1 < U     | 0.33 1< U        | 0.33 t< U        | 0.33 1< U        |
| VOLATILES              | 1.1.1.2-Teirachloroethane               | · · · · · · · · · · · · · · · · · · · |                   | 0.00507 1 U       |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES              | 1,1,1-1 nchioroethane                   | 0,005 1 < U                           |                   | 0.00507 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < U      | 0.005 i < U      | 0.005 1 < U      |
| VOLANLES               | 1.1.2.2-Teirachioroethane               | 0.005 1 < U                           |                   | 0.00507 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      |
| VOLATILES<br>VOLATILES | 1, 1, 2* (RCRIORDEINARE                 | 0.006 1 < U                           |                   | 0.00507 \$ U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 I < U      | 0.005 1 < U      |
| VOLATILES              | 1, Puturiorosmane                       | 0,006 1 < U                           |                   | 0.00507 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |
| VOLATILES              | 1. Dichloropropage                      | 0.000 i < U                           |                   | 0.00507 1.0       | 0.005 1 < 0      | 0,005 1 < U      | 0.005 I < U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 I< U       | 0.005 f< U       |
| VOLATILES              | 1.2.2.Trichlorobozono                   |                                       |                   | 0.00007 1.0       |                  |                  |                  |                  |                  |                  |                  |
|                        |   |                                       |                   | 0.00007 1.0       |                  |                  |                  |                  |                  |                  |                  |

Page 2 of 4

Chemical Concentrations in Soil Associated with LHAAP-35/38 Sumps



 Table 3-103

 Concentrations of Chemicals in Soil Samples Associated with Sump 115

| (SUMP) = SUMP115 |  |          |          |          |                   |           |           |           |                  |        | 112.5          |                  |     | 10.0       | 112.01  |    | 18-5       | 115-02  |    | LH-S      | 115-02  |    | LH-S*      | 115-02  |    | LH-S       | 115-02     |    |
|------------------|--|----------|----------|----------|-------------------|-----------|-----------|-----------|------------------|--------|----------------|------------------|-----|------------|---------|----|------------|---------|----|-----------|---------|----|------------|---------|----|------------|------------|----|
| LOCATION _CODE   |  | 18       | 85507    |          | 35SUMP115-SB01    | 35SUMP    | 115-5801  | LH-S      | 5115-01          |        | 5-112<br>1-112 | 11201.0          |     | 10.01      | 15.01.3 |    | LH-S12     | 5-02 00 | ÷  | LH-S1     | 15-02 1 |    | LH-S1      | 15-02_2 |    | LH-S1      | t5-02_3    |    |
| SAMPLE_NO        |  | 1855/    | 07(000_0 | 9        | 35-SMP115-SB01-01 | 35-SMP11  | 5-SB01-02 | LH-5      | 115-01_1         |        | 5/A            | 119101_2<br>M665 |     | ala<br>ala | 1003    |    | R/4        | 1993    |    | 8/4       | 1993    |    | 8/4/       | 1993    |    | 8/4        | /1993      |    |
| SAMPLE_DATE      |  | 3/1      | 9/1995   |          | 9/19/2006         | 9/19/     | 2006      | 6/4       | 4 E1<br>11 (227) |        | 0.4            | 7521             |     | 85         | - 9 Fł  |    | .6 -       | 2.6 Ft  |    | .5 -      | 2,6 Ft  |    | 7 . 7      | 7.5 FI  |    | 15 -       | 17 FI      |    |
| DEPTH            |  | 0        | - 0 Ft   |          | ,5 - ,5 Ft        | 8<br>-    | 8 F(      |           |                  |        | , ·            | FG               |     | 0.0<br>F   | FG      |    |            | FD      |    | F         | EG      |    | R          | EG      |    | F          | EG         |    |
| SAMPLE_PURPOSE   |  |          | REG      |          |                   | Deauti Di |           | Recuit Di |                  | vo     | Result Di      | 10               | vo  | Result Di  | ີ່ເດ    | VQ | Result Dil | ίω      | VQ | Result Di | . LQ    | VQ | Result DIL | LQ.     | VQ | Result Dil | <u> to</u> | VQ |
| Test Group       | Parameter (Units = mg/kg)                          | Result D | L LO     | Va       | Result DIL LQ VQ  | Hesua Da  |           | nesul pr  |                  | VQ     | 10301 0/       |                  |     | FIGDER DA  |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | 1,2,3-Trichloropropane                             | 0.005    | 1 <      | U        |                   | 0.00507   | 10        |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | 1,2,4-Trichlorobenzene                             |          |          |          |                   | 0.00007   | 10        |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | 1.2.4- I rimethylbenzene                           |          |          |          |                   | 0.00307   | 10        |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | 1.2-Dibromo-3-chloropropane                        |          |          |          |                   | 0.00007   | 5 13      |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | 1,2-Diptomoethane                                  |          |          |          |                   | 0.00507   | 10        |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VULATILES        | 1.2 Dichlorodinges                                 | 0.006    | 1.4      | н        |                   | 0.00507   | 1 Ü       | 0.005     | 1 <              | U      | 0.005          | 1 <              | υ   | 0.005      | 1 <     | υ  | 0.005      | 1 <     | U  | 0.005     | 1 <     | U  | 0.005      | 1 <     | U  | 0.005      | 1 <        | U  |
| VOLATILES        | 1,2-Dichloraothana                                 | 0.000    | 1.2      | ы.<br>Н  |                   |           |           | 0.005     | 1 <              | Ų      | 0.005          | 1 <              | U   | 0.005      | 1 <     | U  | 0.005      | ۱ <     | υ  | 0.005     | 1 <     | IJ | 0.005      | 1 <     | υ  | 0.005      | 1 <        | 0  |
| VOLATILES        | 1.2-Dichloropropage                                | 0.000    | 1 -      | ŭ        |                   | 0.00507   | េប        | 0.005     | 1 <              | U      | 0.005          | 1 <              | U   | 0.005      | 1 <     | U  | 0,005      | 1 <     | U  | 0.005     | í <     | U  | 0.005      | 1 <     | U  | 0.005      | 1 <        | U  |
| VOLATILES        | 1 2-Dimethylbenzene (n-Xylene)                     |          |          | -        |                   | 0.00507   | 10        |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | 1.3.5.Trimethybenzene                              |          |          |          |                   | 0.00507   | 1.0       |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | 1.3-Dichlorobeozene                                |          |          |          |                   | 0.00507   | 1.0       |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | 1.3-Dichloropropane                                |          |          |          |                   | 0.00507   | ۱U        |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | 1.4-Dichloro-2-butene                              | 0.012    | 1 <      | υ        |                   |           |           |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | 1.4-Dichlorobenzene                                |          |          |          |                   | 0.00507   | 1 U       |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | 2.2-Dichloropropane                                |          |          |          |                   | 0.00507   | 1.10      |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    | n nr       |            |    |
| VOLATILES        | 2-Butanone   | 0.012    | 1 <      | u        |                   | 0.0101    | ۱U        | 0.05      | 1 <              | U      | 0.05           | 1 <              | U   | 0.05       | 1 <     | Ų  | 0,05       | 1 <     | 0  | 0.05      | 1 <     | 0  | 0.05       | 14      |    | 0.00       | 1.5        | 11 |
| VOLATILES        | 2-Chloroethyl vinyl ether                          | 0.012    | ۱ <      | υ        |                   | 0.0101    | 1 U       | 0.01      | 1 <              | U      | 0.01           | 1 <              | U   | 0.01       | 1 <     | U  | 0.01       | 1 <     | U  | 0.01      | 1 <     | U  | Ų.Ų 1      | 1 <     | v  | 0.01       |            | 0  |
| VOLATILES        | 2-Chlorotoluene                                    | {        |          |          |                   | 0.00507   | 1.0       |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    | 0.05       |         | n  | 0.05       | 12         | 11 |
| VOLATILES        | 2-Hexanone   | 0.012    | 1 <      | U        |                   | 0.0101    | 1 U       | 0.05      | 1 <              | U      | 0.05           | 1 <              | U   | 0.05       | ۱ <     | U  | 0.05       | 1 <     | 0  | 0.05      | } <     | U  | 0.05       | 1 <     | U  | 0.00       |            | v  |
| VOLATILES        | 2 Propenal   | 0.058    | 1 <      | U        |                   |           |           |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | 4-Chlorotoluene                                    |          |          |          |                   | 0.00507   | 1 U       |           |                  |        |                |                  |     |            |         |    | • •        |         |    |           |         | п  | 0.1        | د ،     | n  | 0.1        | 1 c        | u  |
| VOLATILES        | Acetone  | 0.012    | t e      | U        |                   | 0.0101    | 1 U       | 0.1       | ۱ <              | U      | 0.1            | 1 <              | U   | 0.1        | 1 <     | U  | 0,1        | 1 <     | 0  | 0.1       | 1 <     | U  | ų, i       |         | 0  | 0,1        |            | ¥  |
| VOLATILES        | Acrylonitrile                                      | 0.058    | 1 <      | U        |                   |           |           |           |                  |        |                |                  |     |            |         | н  | A 565      |         |    | 0.005     |         | 14 | 0.005      | 10      | н  | 0.005      | 1 <        | U  |
| VOLATILES        | Benzane  | 0.006    | 1 <      | U        |                   | 0.00507   | ۱Ų        | 0.005     | 1 <              | U      | 0.005          | 1 <              | U   | 0.005      | 1 <     | U  | 0.005      | 15      | U  | 0.000     |         | 0  | 0.000      |         |    |            |            | -  |
| VOLATILES        | Bromobenzene                                       |          |          |          |                   | 0.00507   | 1.0       |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | Bromochloromethane                                 |          |          |          |                   | 0.00507   | 10        |           |                  |        |                |                  |     |            |         |    | 0.005      | ۰.      |    | 0.005     | • •     | ш  | 0.005      | 10      | н  | 0.005      | <          | U  |
| VOLATILES        | Bromodichloromethane                               | 0.006    | 13       | Ų        |                   | 0.00507   | 1 ម       | 0.005     | 1 <              | U      | 0.005          | 1 <              | 0   | 0.005      | 1 <     |    | 0.005      | 1.4     | 11 | 0.000     | 12      | ŭ  | 0.005      | 1 <     | ŭ  | 0.005      | 1 <        | Ū  |
| VOLATILES        | Bromoform  | 0.006    | 1 <      | U        |                   | 0.00507   | 10        | 0.005     | 1 <              | U      | 0.005          | 1 <              | ů   | 0.005      | 14      | ů. | 0.000      | 12      | Ŭ. | 0,000     | 12      | ŭ  | 0.01       | 1.4     | ů  | 0.01       | 1 <        | υ  |
| VOLATILES        | Bromomethane                                       | 0.012    | 1 <      | υ        |                   | 0.0101    | 10        | Q.D1      | 1 <              | U<br>U | 0.01           | ) <              | 1   | 0.01       | 1 4     |    | 0.01       | 1       | ŭ  | 0.005     | 1 4     | ū  | 0.005      | 1 <     | Ŭ  | 0.005      | ۱ د        | U  |
| VOLATILES        | Carbon disulfice                                   | 0.006    | 1 <      | U        |                   | 0.00507   | 10        | 0.005     | 1.4              | 0      | 0.005          | 4.2              | U U | 0.005      | 1       | 1  | 0.005      | 1 <     | Ű  | 0.005     | 1 <     | Ū  | 0.005      | ٤ <     | U  | 0.005      | 1 <        | U  |
| VOLATILES        | Carbon latrachloride                               | 0.006    | 1 <      | U        |                   | 0.00507   | 10        | 0.005     | 1 <              | U<br>L | 0.005          |                  |     | 0.005      |         | ŭ  | 0.000      | 1 4     | ŭ  | 0.005     | 1 <     | Ŭ  | 0.005      | 1 <     | U  | 0.005      | 1 <        | U  |
| VOLATILES        | Chlorobenzene                                      | 0.006    | 1 <      | U        |                   | 0.00507   | 1.0       | 0.005     |                  | 0      | 0,000          | 1.               | н   | 0.000      | 1 -     | ŭ  | 0.01       | 1 <     | Ū  | 0.01      | ۲ <     | U  | 0.01       | 1 <     | U  | 0.01       | 1 <        | Ų  |
| VOLATILES        | Chloroethane                                       | 0.012    | 1 <      | U        |                   | 0.0101    | 1.0       | 0.005     | 1 4              | 1      | 0.01           | 1.               | Ű.  | 0.005      | 1 4     | ŭ  | 0,005      | 1 <     | ŭ  | 0.005     | 1 <     | υ  | 0.005      | 1 <     | U  | 0.005      | 1 <        | U  |
| VOLATILES        | Chloroform   | 0.005    | 1 <      | 0        |                   | 100007    | 10        | 0.003     | 1.               | i i    | 0.000          | 1.0              | ŭ   | 0.01       | 1 4     | Ū  | 0.01       | 1 <     | Ŭ  | 0.01      | 1 <     | υ  | 0.01       | 1 <     | Ų  | 0.01       | 1 <        | U  |
| VOLATILES        | Chloromethane                                      | 0.012    | 1 <      | U        |                   | 0.0101    | 1 11      | 0.01      |                  | 0      | 0.01           |                  | Ŷ   |            |         | •  |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | cis-1.2-Dichloroethene                             |          |          |          |                   | 0.00507   | 1.0       | 0.005     | 1.0              | 11     | 0.005          | 1 4              | U   | 0.005      | 1 <     | U  | 0.005      | 1 <     | U  | 0.005     | 1 <     | U  | 0.005      | ۱ <     | U  | 0.005      | 1 <        | Ų  |
| VOLATILES        | cis-1.3-Dichloropropene                            | 0,006    | 1 <      | 0        |                   | 0.00307   | 10        | 0.000     | 1.0              | ň      | 0.005          | 1 6              | Ŭ   | 0.005      | 1 <     | บ  | 0.005      | 1 <     | U  | 0.005     | 1 <     | υ  | 0.005      | 1 <     | U  | 0.005      | 1 <        | U  |
| VOLATILES        | Dipromochioromethane                               | 0.006    | 14       | 0        |                   | 0.00007   | 11        | 0.000     |                  | ·      | 0.040          |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        |  | 0.000    | 1 4      | - 0<br>Н |                   | 0.00001   | 111       |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | Oloniprophillorpmentane<br>Oloniprophillorpmentane | 0.000    | 1.       |          |                   | 0,0101    | 1.5       |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | Elevitoracio                                       | 0.000    | 1.2      | ŭ        |                   | 0.00507   | t D       | 0.005     | 1 <              | U      | 0.005          | 1 <              | U   | 0.005      | 1 <     | U  | 0.005      | 1 <     | U  | 0.005     | 1 <     | U  | 0.005      | 1 <     | U  | 0.005      | 1 <        | Ų  |
| VOLATILES        | Elliyideazene<br>Movochiorobutadione               | 0.000    |          | v        |                   | 0.00507   | 10        |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
|                  |  | 0.012    | 1.4      | н        |                   |           |           |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | Isopromibenzene                                    | 1 0.012  |          | Ū        |                   | 0.00507   | 1.0       |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | m n-Xulenes  |          |          |          |                   | 0.00507   | 1 U       |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | Methyl isobutyl ketone                             | 0.012    | 1 <      | U        |                   | 0.0101    | 1 U       | 0.05      | 1 <              | U      | 0.05           | 1 <              | U   | 0.05       | 1 <     | U  | 0.05       | 1 <     | U  | 0.05      | 1 <     | บ  | 0.05       | 1 <     | U  | 0.05       | 1 <        | Ų. |
| VOLATILES        | Melhviene chloride                                 | 0.012    | 1 -      | Ū        |                   | 0.00507   | 1 U       | 0.005     | 1 <              | U      | 0.005          | ۲ <              | U   | 0,005      | 1 <     | U  | 0.005      | 1 <     | U  | 0.005     | 1 <     | U  | 0.005      | 1 <     | U  | 0.005      | 1 <        | U  |
| VOLATILES        | Naphthalene  |          |          |          |                   | 0.0101    | 1 U       |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | n-BUTYLBENZENE                                     | 1        |          |          |                   | 0.00507   | 1 ម       |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | n-PROPYLBENZENE                                    | 1        |          |          |                   | 0.00507   | ŧU        |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | DISOPROPYLTOLUENE                                  |          |          |          |                   | 0.00507   | 10        |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
| VOLATILES        | sec-BUTYLBENZENE                                   |          |          |          |                   | 0.00507   | 10        |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |
|                  |  |          |          |          |                   |           |           |           |                  |        |                |                  |     |            |         |    |            |         |    |           |         |    |            |         |    |            |            |    |

Data Evaluation Report Chemical Concentrations in Soit Associated with LHAAP-35/36 Sumps



 Table 3-103

 Concentrations of Chemicals in Soil Samples Associated with Sump 115

| (SUMP) = SUMP115 |                           |                  |                   |                   |                |                  |                        | 111 01 17 00     | LH CLIF OD       | 114-0116-00      | 11.8115-02                            |
|------------------|---------------------------|------------------|-------------------|-------------------|----------------|------------------|------------------------|------------------|------------------|------------------|---------------------------------------|
| LOCATION _CODE   |                           | 18\$\$07         | 35SUMP115-SB01    | 35SUMP115-SB01    | LH-S115-01     | LH-S115-01       | LH-S115-01             | LH-8115-02       | LE-5115-02       |                  | 18-5116-02-3                          |
| SAMPLE_NO        |                           | 185507(000_0)    | 35-SMP115-SB01-01 | 35-SMP115-S801-02 | LH-S115-01_1   | LH-S115-01_2     | LH-S115-01_3           | LH-S115-02 QL    | LE-5115-02_1     |                  | g///10/02_0                           |
| SAMPLE_DATE      |                           | 3/19/1995        | 9/19/2006         | 9/19/2006         | 8/4/1993       | B/4/1993         | 8/4/1993               | 8/4/1993         | 8/4/1993         | 8/4/ (993        | 12 17 23                              |
| DEPTH            |                           | 0-0 FI           | .55 Ft            | 8 - 8 Ft          | .5 - 1 Ft      | 7 • 7.5 FI       | 8.5 - 9 Ft             | .6 • 2.6 Ft      | .6 - 2.8 FI      | 7-7,3 Ft         | 000                                   |
| SAMPLE PURPOSE   |                           | REG              | REG               | REG               | REG            | REG              | REG                    | FD               | REG              | REG NO           |                                       |
| Test Group       | Parameter (Units = mg/kg) | Result DIL LO VO | Result DIL LO VQ  | Result DIL LO VO  | Result_DILLOVO | Result DIL LQ VO | Result DIL LO VO       | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Hesuit DIL LO VO                      |
| VOLATILES        | Styrene                   | 0,005 1 < U      |                   | 0.00507 1 U       | 0.005 1 < U    | 0,005 1 < U      | 0.005 1 < U            | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0                           |
| VOLATILES        | tert-BUTYLBENZENE         |                  |                   | 0.00507 iU        |                |                  |                        |                  |                  |                  | • • • • • • • • • • • • • • • • • • • |
| VOLATILES        | Tetrachloroethene         | 0.005 t< U       |                   | 0.00507 1 U       | 0.005 1 < U    | 0.005 1 < U      | 0.005 1 < U            | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0                           |
| VOLATILES        | Toluena                   | 0.006 i< U       |                   | 0.00507 1 U       | 0.005 i < U    | .0.005 1 < U     | 0.005 t < U            | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 ) < 0      | 0,005 1 < U                           |
| VOLATILES        | trans-1,2-Dichtoroethene  |                  |                   | 0.00507 1 U       |                |                  |                        |                  |                  |                  |                                       |
| VOLATILES        | Irans-1.3-Dichloropropene | 0.006 1 < U      |                   | 0.00507 1 U       | 0.005 1 < U    | 0.005 1 < U      | 0.005 1 < U            | 0.005 t < U      | 0.005 t< U       | 0.005 1 < 0      | 0,005 1 < 0                           |
| VOLATILES        | Trichloroathene           | 0.006 1 < U      |                   | 0.00507 1 U       | 0.005 1 < U    | 0.005 1 < U      | 0.005 1 <del>«</del> U | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < 0      | 0.005 1 < U                           |
| VOLATILES        | Trichlorofluoromethane    | 0.006 1 < U      |                   | 0.0101 1 U        |                |                  |                        |                  |                  |                  |                                       |
| VOLATILES        | Vinvil acetete            | 0.012 i < U      |                   | 0.0101 1 U        | 0.05 1 < U     | 0.05 1 < U       | 0.05 1 < U             | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < 0       | 0.05 1 < 0                            |
| VOLATILES        | Vinvi chlaride            | 0.012 1 < U      |                   | 0.0101 1 U        | 0.01 1 < U     | 0.01 1 < U       | 0.01 1 < U             | 0.01 1 < U       | 0.01 I < U       | 0.01 1 < U       | 0.01 1 < U                            |
| VOLATILES        | Xylenes, Total            | 0.006 1 < U      |                   |                   | 0.005 1 < U    | 0.005 1 < U      | 0.005 1 < U            | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0,005 1 < U                           |



| Table 3-104   |
|---|
| Concentrations of Chemicals in Soil Samples Associated with Sump 11 |

أحمله والمسا

| [SUMP] = SUMP116 |                             |                   |                         |                   |                   |                |                  |                   | 14 6516 00       |
|------------------|-----------------------------|-------------------|-------------------------|-------------------|-------------------|----------------|------------------|-------------------|------------------|
| LOCATION _CODE   |                             | 35SUMP116-SB01    | 35SUMP116-SB01          | 35SUMP116-SB02    | 35SUMP116-SB02    | LH-S116-01     | LH-S116-01       | LH-SHO-UZ         | 18-5116-02 2     |
| SAMPLE_NO        |                             | 35-SMP116-SB01-01 | 35-SMP116-SB01-02       | 35-SMP116-SB02-01 | 35-SMP116-SB02-02 | 201000         | 2/1/1002         | 7/7/1003          | 7/8/1993         |
| SAMPLE_DATE      |                             | 9/19/2006         | 9/19/2006               | 9/19/2006         | 9/19/2006         | 0.05           | A . 6 El         | 0.2 Fi            | 4 6 Fi           |
| DEPTH            |                             | .5 • .5 Ft        | 5.5 + 6.5 +1            | .5 + .5 FT        | 0.0 · 0.0 m       | DEC            | REG              | BEG               | REG              |
| SAMPLE_PURPOSE   |                             | HEG               | REG<br>Bauth Dil (A. VA |                   |                   | Real DIL IO VO | Result Dil LO VQ | Result DiL LO VQ  | Result DIL LO VO |
| Test Group       | Parameter (Units = mg/kg)   | Hesait UIL LO VO  | Result DIL LO VO        | Result Die en vo  |                   | 033 1 4 11     | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| EXPLOSIVES       | 2,4-Dinitrotoluene          |                   |                         |                   |                   | 0.33 1 < 11    | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| EXPLOSIVES       | S'P-Dipitionene             | 1 0170            | E060 1                  | 0770 1            | 8390 t            | 10300 1        | 8170 1           | 2100 1            | 9780 1           |
| METALS           | Aluminum                    | 0/40              | 0.117 1 11              | 0.0793 1 .1 .1    | 0.122 1 11        | 3 1 < U        | 31 < 0           | 4.2 1             | 3 1 × U          |
| METALS           | Antimony                    |                   | 165 1                   | 56 1              | 2 22 1            | 1.3 1          | 1.1 1            | i 1 < U           | 1.3 1            |
| METALS           | Arsenic                     | 646 1             | 55 1                    | 252 1             | 111 1             | 221 1          | 36.3 1           | 38.4 1            | 651 1            |
| METALQ           | Bandhirm                    | 0.422 1           | 0.214 1 .1 .1           | 0.525 1           | 0.277 1 J J       |                |                  |                   |                  |
| NETALS           | Gadmium                     | 0.101 1 .1 .1     | 0.0637 1 .1 .1          | 0.519 1           | 0.154 1 J J       | 11 < U         | 11 < 0           | 1 <b>1 &lt;</b> U | 11 < U           |
| NETALS           | Caloimo                     | 3370 1            | 632 1                   | 1920 1            | 719 1             | 1690 1         | 11300 1          | 691 1             | 878 1            |
| METALG           | Chromium                    | 318 1             | 11.9 1                  | 19.4 1            | 12.8 1            | 23.7 1         | 14.2 1           | 27.9 1            | 7.2 1            |
|                  | Coball                      | 26 1              | 1.4 1                   | <b>5.8</b> 1      | 2.3 1             | 4.1 1          | 3 1              | 2.9 1             | 4.4 t            |
| METALS           | Conner                      | 4.04 1            | 8.55 1                  | 17.5 1            | 10.1 1            | 25.3 1         | 10.1 1           | 8 1               | 5.4 1            |
| METALS           | Irop                        | 63800 5           | 16300 1                 | 24800 1           | 15000 1           | 14800 1        | 14400 1          | 8290 t            | 13400 1          |
| METALS           | laari                       | 6.94 1            | 5.81 1                  | 17.6 1            | 9.72 1            | 9.7 1          | 84.3 1           | 4.2 1             | 5.7 1            |
| METALS           | Magneskim                   | 563 1             | 549 1                   | 1450 1            | 851 1             | 802 1          | 739 1            | 238 1             | 834 1            |
| METALS           | Mannanese                   | 53.4 1 J          | 71.8 1                  | 135 1             | 55.6 1            | 187 1          | 33.3 1           | 147 1             | 188 1            |
| METALS           | Margandae                   | 0.0263 1 J J      | 0.0506 1 J J            | 0.0367 1 J J      | 0.0749 1 J J      | 0,1 1 < U      | 0.1 1 < U        | 0.1 1 < U         | 0.1 1 < U        |
| METALS           | Nickel                      | 5.93 t            | 2.24 1                  | 14.3 i            | 3.5 1             |                |                  |                   |                  |
| METALS           | Polassium                   | 268 1             | 450 1                   | 488 1             | 501 1             | 936 1          | 273 1            | 260 1             | 492 1            |
| METALS           | Setenium                    | 0.447 1           | 0.385 1                 | 0.437 1           | 0.427 1           | 11 < U         | 1 1 < U          | 11 < U            | 11 e U           |
| METALS           | Silver                      | 0.242 1 J J       | 1,85 1 U                | 1.59 1 U          | 1,77 1 U          | 11 < U         | 11 < U           | 11 < U            | 11 < U           |
| METALS           | Sodium                      | 32.5 1            | 366 1                   | 27.2 1            | 395 1             |                |                  |                   |                  |
| METALS           | Strontium                   |                   |                         |                   |                   | 34,4 1         | 17.8 1           | 11.6 1            | 13.3 1           |
| METALS           | Thallium                    | 0.0782 1          | 0.0449 1                | 0.0741 1          | 0.0561 1          |                |                  |                   |                  |
| METALS           | Vanadium                    | 82.3 1            | 18.4 1                  | 26.9 1            | 20 1              |                |                  |                   |                  |
| METALS           | Zinc                        | 33.9 1            | 9.89 1                  | 69.6 1            | 18.4 1            | <b>59.2</b> 1  | 37.2 1           | 26.7 1            | 22.6 1           |
| SEMIVOLATILES    | 1.2.4-Trichlorobenzene      | 0.178 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0,33 î < U     | 0.33 1 < U       | 0.33 i < U        | 0,33 1 < U       |
| SEMIVOLATILES    | 1.2 Dichlorobenzene         | 0.178 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U     | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES    | 1.3-Dichlorobenzene         | 0.178 I U         | 0.195 1 U               | 0.377 2 U         | 0.194 t U         | 0,33 1 < U     | 0,33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES    | 1,4-Dichlorobenzene         | 0,178 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U     | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES    | 2,4.5-Trichlorophenol       | 0.178 1 U         | 0.195 T U               | 0.377 2 U         | 0.194 1 U         | 1.65 1 < U     | 1.65 1 < U       | 1.65 i < U        | 1.65 1 < U       |
| SEMIVOLATILES    | 2.4.6-Trichlorophenol       | 0.178 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U     | 0.33 1 < U       | 0.33 i < U        | 0.33 1 < U       |
| SEMIVOLATILES    | 2,4-Dichlorophenol          | 0.176 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U     | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < 0       |
| SEMIVOLATILES    | 2,4-Dimethylphenol          | 0.178 I U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U     | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES    | 2,4-Dinitrophenol           | 0.888 1 U         | 0.977 1 U               | 1.89 2 U          | 0.972 t U         | 1.65 1 < U     | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < 0       |
| SEMIVOLATILES    | 2,4-Dinitrotoluene          | 0.178 1 U         | 0.195 1 U               | 0.377 2 U         | 0,194 1 U         |                |                  |                   |                  |
| SEMIVOLATILES    | 2,6-Dinitrotoluene          | 0.178 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         |                |                  |                   |                  |
| SEMIVOLATILES    | 2-Chloronaphihalene         | 0.17B 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U     | 0.33 1 × U       | 0,33 1 < U        | 0.33 1 < U       |
| SEMIVOLATILES    | 2-Chlorophenol              | 0.178 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U     | 0.33 1 < L       | 0,33 1 < U        | 0,33 1 < ∪       |
| SEMIVOLATILES    | 2-Methylnaphthalene         | 0.178 I U         | 0.195 1 U               | 0.377 2 U         | 0.194 t U         | 0.33 1 < U     | 0.33 1 < U       | 0.33 1 < 0        | 0.33 1 < 0       |
| SEMIVOLATILES    | 2-Methylphenol              | 0.178 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0.33 t < U     | 0.33 1 < 0       | 0.33 1 < 0        | 0.33 1 < 0       |
| SEMIVOLATILES    | 2-Nitroaniline              | 0.888 1 U         | 0.977 1 U               | 1.89 2 U          | 0.972 1 U         | 1.65 1 < U     | 1.65 1 < 0       | 1.65 1 < 0        | 1,65 1 < U       |
| SEMIVOLATILES    | 2-Nitrophenol               | 0.178 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U     | 0.33 1 < L       | 0.33 1 < 0        | 0,33 1 < U       |
| SEMIVOLATILES    | 3.3 Dichlorobenzidine       | 0.355 1 U         | 0,391 1 U               | 0.754 2 U         | 0.389 1 U         | 0.65 1 < U     | 0.65 1 < L       | 0,65 1 < U        | 0.55 1 < 0       |
| SEMIVOLATILES    | 3-Nitroaniline              | 0.888 î U         | 0.977 1 U               | 1.89 2 U          | 0.972 t U         | 1.65 1 < U     | 1.65 1 < L       | 1,65 1 < 0        | 1.65 F < U       |
| SEMIVOLATILES    | 4,5.Dinitro.2-methylphenol  | 0.888 1 U         | 0.977 1 U               | 1.89 2 U          | 0.972 1 U         | 1.65 1 < U     | 1.65 1 < L       | 1.65 1 < U        | 1,65 1 < U       |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  | 0.178 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U     | 0.33 1 < L       | 0.33 1 < U        | 0.33 1 < 0       |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     | 0.178 1 U         | 0.195 1 U               | 0,377 2 U         | 0.194 1 U         | 0.65 1 < U     | 0.65 1 < L       | 0.65 1 < U        | 0,65 1 < U       |
| SEMIVOLATILES    | 4-Chloroaniline             | 0.178 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0.65 1 < U     | 0.65 1 < L       | ) 0.65 1 < U      | 0.65 i < U       |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether | 0.178 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U     | 0.33 1 < U       | 0.33 1 < 0        | 10.333 1 < U     |
| SEMIVOLATILES    | 4-Methylphenol              | 0,178 1 U         | 0.195 1 U               | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U     | 0.33 1 < L       | ) 0.33 1 < U      | 0.33 T < U       |





| Table 3-104  |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 116 |

| [SUMP] = SUMP116 |                             | 35511MP116-SR01   | 35SUMP115-SB01    | 35SUMP116-SB02    | 35SUMP116-SB02    | LH-S116-01       | LH-S116-01       | LH-S116-02       | LH-\$116-02      |
|------------------|-----------------------------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|
| CONTION_CODE     |                             | 35-SMP116-SB01-01 | 35-SMP116-SB01-02 | 35-SMP116-SB02-01 | 35-SMP118-SB02-02 | LH-S116-01_1     | LH-S116-01_2     | LH-S116-02_1     | LH-S116-02_2     |
| SAMPLE NO        |                             | 9/19/2006         | 9/19/2006         | 9/19/2006         | 9/19/2006         | 7/7/1993         | 7/7/1993         | 7/7/1993         | 7/8/1993         |
| DEPTH            |                             | .55 F1            | 5.5 · 6.5 F1      | .5 - ,5 FI        | 6,5 - 6.5 FI      | 0 - 2 Ft         | 4 - 6 Ft         | 0 - 2 Ft         | 4 - 6 Ft         |
| SAMPLE PURPOSE   |                             | REG               | REG               | REG               | REG               | REG              | REG              | REG              | REG              |
| Tast Group       | Parameter (Units = mo/ko)   | Result OIL LO VO  | Result DIL LO VO  | Result DIL LO VQ  | Result DIL LO VO  | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO |
| SEMIVOLATILES    | 4-Nitroaniline              | 0.888 1 U         | 0.977 1 U         | 1.89 2 U          | 0.972 1 U         | 1.65 1 < U       | 1,85 î < U       | 1.65 1 < 0       | 1,65 1 < 0       |
| SEMIVOLATILES    | 4-Nitrophenol               | 0.888 1 U         | 0.977 i U         | 1.89 2 U          | 0.972 1 U         | 1.65 1 < U       | 1.65 1 < 0       | 1.65 1 < V       | 1.65 ) < 0       |
| SEMIVOLATILES    | Acenaphibene                | 0,178 1 U         | 0.195 1 U         | 0.377 2 U         | 0,194 1 U         | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Acenaphihylene              | 0.178 1 U         | 0.195 1 U         | 0.377 2 U         | 0.194 1 U         | 0,33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Anthracene                  | 0.178 I U         | 0,195 1 U         | 0.377 2 U         | 0.194 1 U         | 0,33 1 < U       | 0.33 1 < 0       | 0,33 1 < U       | 0.33 1 < 0       |
| SEMIVOLATILES    | Benzo(a)anthracene          | 0.178 1 U         | 0.195 i U         | 0.377 2 U         | 0.194 1 U         | 0.33 i < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 4 0       |
| SEMIVOLATILES    | Benzo(a)pyrene              | 0,178 1 U         | 0.195 1 U         | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |
| SEMIVOLATILES    | Banzo(b)fluoranthene        | 0.178 1 U         | 0.195 1 U         | 0.377 2 U         | 0.194 1 U         | 0.33 1 < 0       | 0.33 1 < 0       |                  | 0.00 1 4 1       |
| SEMIVOLATILES    | Benzo(ghi)perylene          | 0.178 1 U         | 0.195 1 U         | 0.377 2 U         | 0.194 1 U         | 0.33 1 < 0       | 0,33 1 < 0       | . 0,33 1 < U     | 0.33 1 < 11      |
| SEMIVOLATILES    | Benzo(k)fluoranthene        | 0.178 1 U         | 0.195 î U         | 0.377 2 U         | 0.194 1 U         | 0.33 1 < 0       | 105 1 < 0        | 165 1 < U        | 165 1 < 11       |
| SEMIVOLATILES    | Benzoić Acld                | 0.868 1 U         | 0.977 1 U         | 1.89 2 U          | 0.972 1 U         | 1,65 1 < U       | 1.03 1 < 0       |                  | 065 1 < U        |
| SEMIVOLATILES    | Benzyl Alcohol              | 0.178 1 U         | 0.195 1 U         | 0.377 2 U         | 0.194 1 U         | 0.65 1 < U       | 0.00 1 4 0       |                  | 0.33 t ∉ U       |
| SEMIVOLATILES    | bis(2-Chloroelhoxy)methane  | 0.178 1 U         | 0.195 I U         | 0.377 2 U         | 0.194 1 U         | 0.33 1 < 0       | 0.33 1 < 0       | 5 0.00 1 × U     | 0.33 1 4 U       |
| SEMIVOLATILES    | bis(2-Chloroethyi)ether     | 0.178 1 U         | 0.195 1 U         | 0.377 2 U         | 0.194 1 U         | Q.33 1 < U       | 0.33 1 < 0       |                  | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Chloroisopropyi)eiher | 0.178 1 U         | 0.195 1 U         | 0.377 2 U         | 0.194 1 U         | 0.33 1 < 0       | 0.33 1 4 1       | 1 033 1 × 0      | 0.33 1 < U       |
| SEMIVOLATILES    | bis(2-Elhylhexyl)phihalate  | 0.176 1 U         | 0.195 1 U         | 0.377 2 U         | 0.194 1 U         | 0.33 1 < 0       |                  | 1 0.33 1 - U     | 0.33 1 < U       |
| SEMIVOLATILES    | Butyi benzyi phihalale      | 0.178 1 U         | 0,195 i U         | 0.377 2 U         | 0.194 1 U         | 0.33 1 < 0       | 0.00 1 4 1       | 1 033 1 4 1      | 0.33 1 < U       |
| SEMIVOLATILES    | Chrysene                    | 0.178 1 U         | 0.195 1 U         | 0.377 2 U         | 0,194 1 U         | 0.33 1 < 0       |                  |                  | 033 1 × U        |
| SEMIVOLATILES    | Dibenzo(a,h)anihracene      | 0.178 1 U         | 0,195 1 U         | 0.377 2 U         | 0,194 1 U         | 0.33 1 < U       | 0.00 t < 1       | 1 033 1 × U      | 0.33 1 < U       |
| SEMIVOLATILES    | Dibenzoluran                | 0.178 i U         | 0.195 1 U         | 0.377 2 U         | 0.194 1 U         | 0.33 1 < 0       | 0.00 1 4 4       | ) 0.33 1 ≪ U     | 0.33 1 < U       |
| SEMIVOLATILES    | Diethyl phthalate           | 0.178 1 U         | 0.195 1 U         | 0.377 2 U         | 0.194 1 U         | 0.33 1 < 0       | 0.33 1 < 0       | 1 033 1 < U      | 0.33 1 < U       |
| SEMIVOLATILES    | Dimethyl phthalate          | 0.178 1 U         | 0.195 1 U         | 0.377 2 U         | 0,194 1 U         |                  | 0.33 1 4 4       | ) 0.00 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES    | di-n-Butyl phthalate        | 0,178 1 U         | 0.195 1 U         | 0.377 2 U         | 0.194 1 U         | 0.33 1 < 0       | 0.00 1 < 0       | ) 0.33 1 × U     | 0.33 1 < 0       |
| SEMIVOLATILES    | di-n-Octyl phthalate        | 0.178 1 U         | 0.195 1 U         | 0.377 2 U         | 0,194 1 0         | 0.33 F < 0       |                  | 1 033 1 < U      | 0.33 1 < U       |
| SEMIVOLATILES    | Fluoranihene                | 0.178 1 U         | 0.195 1 U         | 0.377 2 U         | 0.194 1 U         | 0.03 1 4 0       | 0.33 1 4 1       | j 0.33 1 e U     | 0.33 1 < U       |
| SEMIVOLATILES    | Fluorene                    | 0.178 1 U         | 0.195 1 U         | 0.377 2 0         | 0.194 1 U         | 0.00 1 4 4       | 0.00 1 4 1       | J 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorobenzene           | 0.178 1 U         | 0.195 1 U         | 0,377 2 0         | 0,194 1 0         | 0.33 1 < 1       | 0.33 1 < 1       | J 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorobutadiene         | 0.178 1 U         | 0.195 1 U         | 0.377 2 U         | 0,194 1 0         | 033 1 4 11       | 0.33 1 < 1       | J 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   | 0.178 1 U         | 0.195 1 U         | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U       | 0.33 1 < 1       | U 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES    | Hexachloroethane            | 0.178 1 U         | 0.195 1 U         | 0.377 2 11        | 0.194 1 U         | 0.33 1 < U       | 0.33 1 < 1       | U 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene      | 0,178 1 0         | 0.195 1 U         | 0.377 2 11        | 0,194 1 11        | 0.33 1 < U       | 0.33 1 <         | U 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES    | Isophorone                  | 0.176 1 U         | 0.195 1 U         | 0.377 2 11        | 0194 1 1          | 0.33 1 < U       | 0.33 1 <         | U 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES    | Naphhalene                  | 0.178 1 0         | 0.193 I U         | 0.377 2 11        | 0.194 1 U         | 0.33 t ∢ U       | 0.33 1 <         | U 0.33 1 ∢ U     | 0.33 1 < U       |
| SEMIVOLATILES    | Nifrodenzene                | 0.178 1 0         | 0.195 1 0         | 0.377 2 1         | 0.194 1 U         | 0.33 1 < U       | 0.33 1 <         | U 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  | 0.178 1 0         | 0.195 1 0         | 0.377 2 10        | 0.194 1 U         | 0.33 1 < U       | 0.33 1 <         | U 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES    | n-muosoopnenyiamine         |                   | 0.007 1 11        | 189 2 11          | 0.972 1 U         | 1.65 1 < U       | 1,65 1 c         | U 1.65 1 < U     | 1:65 1 < U       |
| SEMIVOLATILES    | Pemachioropheno:            | 0.008 1 0         | 0.195 1 11        | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U       | 0.33 1 <         | U 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES    | Phenal                      | 0.178 1 11        | 0.195 1 11        | 0.377 2 U         | 0.194 1 U         | 0.33 ( < U       | 0.33 1 <         | U 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES    | Prieno                      | 0.178 1 11        | 0.195 1 1         | 0.377 2 U         | 0.194 1 U         | 0.33 1 < U       | 0.33 1 <         | U 0.33 1 < U     | 0.33 1 < U       |
| SEMIVULANLES     | 1 1 1 3 Totrachiorophana    | 0.00              | 0.00729 1 U       |                   | 0.00495 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1,1,1,2-Tepaquepositione    | 1                 | 0.594 50 J J      |                   | 0.273 1 E J       | 0.005 1 < U      | 0.005 1 <        | U 0.005 1 < U    | 0.005 1 < U      |
| VOLATILES        | 1.1.2.2 Tetrachioconthann   |                   | 0.00729 1 U       |                   | 0.00495 1 U       | 0.005 1 < U      | 0.005 1 <        | U 0.005 1 < U    | 0.005 1 < U      |
| VOLATILES        | 1.1.2.Trichloroethane       |                   | 0.00123 1 J       |                   | 0.0134 1          | 0.005 i < U      | 0.005 1 <        | U 0,005 1 < U    | 0.005 .1 < U     |
| VOLATILES        | t 1-Dichloroethane          |                   | 0.0382 1          |                   | 0.0561 1          | 0.005 1 < U      | 0.005 1 <        | U 0.005 1 < U    | 0.005 1 < U      |
| VOLATILES        | 1 1-Dichloroethene          |                   | 0.0993 1          |                   | 0.373 1 E J       | 0.005 1 « U      | 0.005 1 <        | U 0.005 1 < U    | 0.005 1 < U      |
| VOLATILES        | 1 t-Dichloropropene         |                   | 0.00729 1 U       |                   | 0.00495 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2.3-Trichlorobenzene      |                   | 0.00729 1 U       |                   | 0.00495 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2.3-Trichloroproease      |                   | 0.00729 i U       |                   | 0.00495 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2.4-Trichlorobenzene      |                   | 0.00729 1 U       |                   | 0,00495 1 U       |                  |                  |                  |                  |
| VOLATILES        | 1.2.4-Trimethylbenzene      |                   | 0.0106 1          |                   | 0.0112 1          |                  |                  |                  |                  |
|                  | .,                          |                   |                   |                   |                   |                  |                  |                  |                  |



| Table 3-104  |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 116 |

| [SUMP] = SUMP116<br>LOCATION _CODE |                                | 35SUM  | P116-SB01   | 35SUMP11        | 6-SB01   | 35      | SUMP11  | 6-SB02     | 35SUMP<br>35-SMP11 | 116-5      | B02     |      | ្រេ-<br>រ អ.ទា | 116-0<br>16-01 | 1<br>1 | L<br>LH     | H-S116       | 5-01<br>01 2 |    | С. И   | -S116-<br>S116-0 | 02<br>2_1 |   | _LH-S1<br>LH-S11 | 16-02<br>6-02_2 | ſ    |
|------------------------------------|--------------------------------|--------|-------------|-----------------|----------|---------|---------|------------|--------------------|------------|---------|------|----------------|----------------|--------|-------------|--------------|--------------|----|--------|------------------|-----------|---|------------------|-----------------|------|
| SAMPLE_NO                          |                                | 35-8MP | 110-3001-01 | 0/1170/00       | -0001-02 |         | 0/10/01 | 006        | 9/19               | /2006      |         |      | 7/7            | /1993          |        |             | 7/7/19       | 33           |    | 7      | 7/199            | 3         |   | 7/8/1            | 993             |      |
| SAMPLE_DATE                        |                                | 5/1    | 19/2000     | 5/13/2<br>6.56  | 55       |         | 5.5     | Et .       | 5.5 -              | 6.5 Ft     |         |      | 0.             | 2 FI           |        |             | 4-61         | ঀ            |    |        | 0 - 2 Ft         |           |   | 4 - 6            | 3 Ft            |      |
|                                    |                                | .0     | 650         | 0.0 - 0.<br>BE( | 310      |         | REC     | 3          | R                  | EG         |         |      | -<br>R         | REG            |        |             | REG          | i            |    |        | REG              |           |   | RE               | G               |      |
| SAMPLE_POHPOSE                     | Decemptor (Light - malka)      | Decuit |             | Recut Di        | י מו     | VO Best | il Dil  | μ<br>Γιονά | Result             | DIL        | ια ν    | VQ R | Result         | DIL            | LQ V   | ) Result    | DIL          | ιo           | VQ | Result | DIL              | LO VO     | R | iesuit D         | IL LC           | o vo |
| VOLATILES                          | 1 2 Diverso 3 chorpropage      | Teaun  | Dic 10 10   | 0.00729         | 0        |         |         |            | 0.00495            | 1          | U       |      |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | 1.2-Dibromosthane              |        |             | 0.00729         | บี       |         |         |            | 0.00495            | 1          | U       |      |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | 1 2-Dichiorobenzene            |        |             | 0.00729         | U        |         |         |            | 0.00495            | 1          | U       |      |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | 1.2-Dichloroethane             | {      |             | 0.00729         | U U      |         |         |            | 0.00131            | 1          | J       | J    | 0.005          | i              | < i    | 0.00        | 51           | <            | บ  | 0.005  | 1                | < U       | I | 0.005            | 1 <             | : U  |
| VOLATILES                          | 1.2-Dichlorpethene             |        |             |                 |          |         |         |            |                    |            |         |      | 0.005          | 1              | < L    | 0.00        | 51           | <            | U  | 0.005  | 1                | < U       |   | 0.005            | <               | : U  |
| VOLATILES                          | 1.2-Dichloropropane            |        |             | 0.00729         | U        |         |         |            | 0.00495            | t          | U       |      | 0.005          | 1              | < l    | 0.00        | 51           | <            | U  | 0.005  | 1                | < U       |   | 0.005            | 1 <             | : U  |
| VOLATILES                          | 1,2-Dimethylbenzene (o-Xylene) |        |             | 0.00484         | J        |         |         |            | 0.016              | 1          |         |      |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | 1,3,5-Trimethylbenzene         |        |             | 0.00371         | I J      | 1       |         |            | 0.00367            | 1          | J       |      |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | 1.3-Dichlorobenzene            | 1      |             | 0.00729         | U U      |         |         |            | 0.00495            | 1          | U       |      |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | 1,3-Dichloropropane            |        |             | 0.00729         | េ ប      |         |         |            | 0.00495            | 1          | ป       |      |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | 1,4-Dichlorobenzene            |        |             | 0.00729         | t U      |         |         |            | 0.00495            | 1          | U       |      |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | 2.2-Dichioropropane            |        |             | 0.00729         | 1 U      |         |         |            | 0.00495            | 1          | U       |      |                |                |        |             |              |              | 14 | 0.05   |                  |           |   | 0.05             |                 | ~ H  |
| VOLATILES                          | 2-Butanone                     |        |             | 0.0146          | 1 U      |         |         |            | 0,00938            | 1          | 3       | J    | 0.05           | 1              | < (    |             | 51           | <            |    | 0.05   |                  | < 0<br>   | , | 0.03             |                 |      |
| VOLATILES                          | 2-Chloraethyl vinyl ether      |        |             | 0.0145          | 1 U      |         |         |            | 0.00989            | 1          | U       |      | 0.01           | 1              | < (    | 0.0         | 113          | <            | U  | 0.01   | '                | < 0       | , | 0.01             |                 |      |
| VOLATILES                          | 2-Chlorotoluene                |        |             | 0.00729         | 1 U      |         |         |            | 0.00495            | 1          | U       |      |                | ,              |        |             | <i></i> .    |              | 11 | 0.05   | ,                | . 1       |   | 0.05             | 1.              | - 11 |
| VOLATILES                          | 2-Hexanone                     |        |             | 0.0146          | 1 U      |         |         |            | 0.00989            | 1          | 0       |      | 0.05           | 1              | < (    | 0.0         | 5 1          | ٠            | 0  | 0.05   | ,                | •••       | , | 0.00             |                 | · ·  |
| VOLATILES                          | 4-Chlorololuene                |        |             | 0.00729         | 1 1      |         |         |            | 0.00495            | 1          | U       |      |                |                |        |             |              |              |    | 0.5    |                  | - 1       | • | 0.1              | 1               | e [] |
| VOLATILES                          | Acstone                        |        |             | 0.0485          | 1        |         |         |            | 0.0477             | 1          |         | ,    | 0,1            | 1              | < (    | , u<br>, A0 | .I 1<br>NE 1 | ×            |    | 0.005  | ;                | - 1       | 1 | 0.005            | 1               | z U  |
| VOLATILES                          | Benzene                        |        |             | 0.00113         | 1 J      | J       |         |            | 0.00184            |            | 3       | 1    | 0.005          | 1              | < 1    | 1 0.00      |              | ``           | 0  | 0,000  | '                | • •       |   | 0,000            |                 |      |
| VOLATILES                          | Bromobenzene                   |        |             | 0.00729         | 1 U      |         |         |            | 0.00495            |            | U U     |      |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | Bromochloromethane             |        |             | 0.00729         |          |         |         |            | 0.00493            | -          | и<br>П  |      | 0.005          | 1              |        | 1 0.00      | 15 1         | ~            | 11 | 0.005  | 1                | < 1       | j | 0.005            | 1 .             | < U  |
| VOLATILES                          | Bromodichloromethane           |        |             | 0.00729         | 1 0      |         |         |            | 0.00495            | 1          | U U     |      | 0.005          | 1              | 2      | 1 0.0       | 15 1         | 2            | Ŭ  | 0.005  | 1                | < L       | j | 0.005            | 1 -             | < U  |
| VOLATILES                          | Bromolorm                      |        |             | 0.00729         | 1 Q      |         |         |            | 0.00080            |            | 11      |      | 0.003          | 1              | 2      | 1 0.        | 01 1         | ,<br>,       | Ŭ  | 0.01   | 1                | < 1       | j | 0.01             | 1.              | < U  |
| VOLATILES                          | Bromomelhane                   |        |             | 0.0145          | 1 0      |         |         |            | 0.00909            | 1          | 11      |      | 0.005          | ÷              | 2      | J 0.0       | )5 1         |              | Ū  | 0.005  | 1                | < 1       | J | 0.005            | 1 .             | < U  |
| VOLATILES                          | Carbon disulfide               |        |             | 0.00729         | 1 11     |         |         |            | 0.00495            | ÷          | Ð       |      | 0.005          | 1              | 2      | J 0.0       | 5 1          | ,<br><       | Ū  | 0.005  | 1                | < (       | j | 0.005            | 1               | < U  |
| VOLATILES                          | Garbon tetrachioride           |        |             | 0.00729         | , U      |         |         |            | 0.00495            | ÷          | Ŭ       |      | 0.005          | 1              | è i    | J 0.0       | )5 1         | <            | U  | 0.005  | 1                | < (       | J | 0.005            | 1               | < U  |
| VOLAHLES                           | Chlorobenzene                  |        |             | 0.00725         | 1 U      |         |         |            | 0.00989            | i.         | Ű       |      | 0.01           | 1              | <      | J 0.        | 1 1          | <            | U  | 0.01   | 1                | < (       | J | 0.01             | 1 -             | < U  |
| VOLANLES                           | Chlorolorm                     |        |             | 0.00198         | 1 1      | 3       |         |            | 0.000981           | 1          | j       | J    | 0.005          | 1              | <      | J 0.0       | 5 1          | <            | Ų  | 0.005  | 1                | < 1       | J | 0.005            | 1 -             | < U  |
| VOLATILES                          | Chioromethana                  |        |             | 0.0146          | 1 U      | •       |         |            | 0.00989            | 1          | U       |      | 0.01           | 1              | <      | ) O.        | 01 1         | <            | U  | 0.01   | 1                | < ۱       | J | 0.01             | 1 -             | < U  |
| VOLATILES                          | ris.1 2-Dichlomethene          |        |             | 3.61            | 50       |         |         |            | 11.8               | 1          | Ε       | J.   |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | cis-1 3-Dichloropropage        |        |             | 0.00729         | 1 U      |         |         |            | 0.00495            | 1          | U       |      | 0.005          | ٢              | <      | J 0.0       | DS 1         | <            | U  | 0.005  | 1                | < 1       | 3 | 0.005            | 1               | < V  |
| VOLATILES                          | Dibromochioromethane           |        |             | 0.00729         | t U      |         |         |            | 0.00495            | 1          | U       |      | 0.005          | 1              | <      | J 0.0       | DS 1         | <            | Ų  | 0.005  | 1                | < 1       | U | 0.005            | 1               | < U  |
| VOLATILES                          | Dibromomethane                 |        |             | 0.00729         | េប       |         |         |            | 0.00495            | 1          | U       |      |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | Dichlorodifluoromethane        |        |             | 0.0146          | 1 Մ      |         |         |            | 0.00989            | 1          | υ       |      |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | Ethylbenzene                   |        |             | 0.0739          | 1        |         |         |            | 2,44               | 1          | Ë       | J    | 0.005          | 1              | <      | ) 0.0       | 05 1         | <            | U  | 0.005  | 1                | < 1       | J | 0.005            | 1 .             | < U  |
| VOLATILES                          | Hexachlorobutadiene            | 1      |             | 0.00729         | 1 U      |         |         |            | 0.00495            | 1          | U       |      |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | isopropylbenzene               |        |             | 0.00729         | 1 U      |         |         |            | 0.00278            | 1          | J       | J    |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | m,p-Xylenes                    |        |             | 0.0107          | 1        |         |         |            | 0.0228             | 1          |         |      |                |                |        |             |              |              |    |        |                  |           |   | 0.05             |                 |      |
| VOLATILES                          | Methyl isobutyl ketone         |        |             | 0.0146          | 1 U      |         |         |            | 0,00989            | 1          | U       |      | 0.05           | 1              | <      | J 0.        | 95 1         | <            | 0  | 0.05   |                  | <         | 0 | 0.05             | -               | < U  |
| VOLATILES                          | Melhylene chloride             |        |             | 0.648           | 50 J     | 1       |         |            | 0.0792             | 1          |         |      | 0.005          | 1              | <      | J 0.0       | 05 1         | <            | U  | 0.005  |                  | < 1       | 0 | 0,005            | -1              | < 0  |
| VOLATILES                          | Naphihalene                    | 1      |             | 0.00388         | 1 J      |         |         |            | 0.0047             | 1          | J       | J    |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | n-BUTYLBENZENE                 |        |             |                 |          |         |         |            | 0.00102            | 1          | J       | 4    |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | n-PROPYLBENZENE                |        |             | 0.00116         | 1 J      | J       |         |            | 0.0022             | 1          | J       | 3    |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | p-ISOPROPYLTOLUENE             |        |             | 0.00292         | 1 J      |         |         |            | 0.0019             |            | J       | J    |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |
| VOLATILES                          | Sec-BUTYLBENZENE               | ĺ      |             | 0.00113         | 1 J      | J       |         |            | 0.000544           | : 1<br>: • | 3<br>E  | J    | 0.005          | 1              |        |             | 05           |              | п  | 0.004  | ; 1              | e         | u | 0.005            | 1               | < U  |
| VOLATILES                          | Styrene                        |        |             | 0.0462          | 1        |         |         |            | 0.633              |            | с<br> } | J    | 0.003          | 1              | •      |             | ~            |              | v  | 0.000  |                  | -         | - | 2.200            |                 | -    |
| VOLATILES                          | tert-BUTYLBENZENE              |        |             | 0.00729         | i U      |         |         |            | 0.00495            |            | u       |      | 0 00s          | 1              |        | 11 00       | 05           | 1 -          | IJ | 0.00   | 5 1              | ć         | υ | 0,005            | 1               | < U  |
| VOLATILES                          | Tetrachioroethene              |        |             | 0.0059          | 1 J      | J       |         |            | 0.0133             |            |         |      | 0.005          | 1              | è      | U 01        | 05           | 1 4          | Ū  | 0.00   | 5 1              | ć         | U | 0.005            | 1               | < U  |
| VOLATILES                          | Toluene                        | 1      |             | 0.0002          | 4 I      |         |         |            | 0.157              | . 1        |         |      | 0.000          | ,              | -      | - 0.0       | ~ •          |              |    |        | - ·              | -         | - |                  |                 |      |
| VOLATILES                          | trans-1,2+Uichiotöethene       | 1      |             | 0.00415         | i d      | J       |         |            | 0.00000            |            |         |      |                |                |        |             |              |              |    |        |                  |           |   |                  |                 |      |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



|  |                           | Concent  | trations of Chem  | icals in 50il 5am   | pies Associated   | and outlinp ino   |   |   |   |
|--|---------------------------|--|---|---|---|---|---|---|---|
| (SUMP) = SUMP116<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                           | 35SUMP116-SB01<br>35-SMP116-SB01-01<br>9/19/2006<br>.55 FI | 355UMP116-SB01<br>35:SMP115-SB01-02<br>9/19/2006<br>6.5 - 6.5 Ft<br>BEC | 355UMP118-SB02<br>35-SMP118-SB02-01<br>9/19/2006<br>.55 F1<br>BEC | 35SUMP116-SB02<br>35-SMP116-SB02-02<br>9/19/2006<br>6.5 - 6.5 Ft<br>FEG | LH-S116-01<br>LH-S116-01_1<br>7/7/1993<br>0 - 2 Ft<br>BEG | LH-\$116-01<br>LH-\$116-01_2<br>7/7/1993<br>4 - 8 Ft<br>REG | LH-\$116-02<br>LH-\$116-02_1<br>7/7/1993<br>0 - 2 Fl<br>REG | LH-S116-02<br>LH-S116-02_2<br>7/8/1993<br>4 - 6 Ft<br>REG |
| SAMPLE_PURPOSE   |                           |  |   | Regult DILLO VO   | Rectile Dit LO VO   | Result DIL LO VO  | Result OIL LO V   | Q Result Dit, LQ VQ   | Result DIL LO VQ  |
| Test Group   | Parameter (Units = mg/kg) | Hesuit DIL LO VO   | Hesuit DIL LO VO  | Heson Dit to to   |   | 0.005 1 4 11  | 0.005 1 < 1   | 1 0.005 1 < U   | 0.005 1 < U   |
| VOLATILES  | trans-1,3-Dichloropropene |  | 0.00729 1 U   |   | 0,00495 1 0   | 0.000 1 4 0   | 0.005 1 - 1   |   | 0.005 1 < U   |
| VOLATILES  | Trichloroelhene           |  | 11 50   |   | 9.93 1 E J  | 0.005 1 < 0   | 0.000 1 < 0   | . 0.003 1 < 0   | 0,000 1 4 0   |
| VOLATIEFS  | Trichlorofluoromethane    |  | 0.0146 1 U  |   | 0.00989 1 U   |   |   |   |   |
| VOLATHES   | Vinul analate             |  | 0.0146 I U  |   | 0.00989 1 U   | 0.05 1 < U  | 0.05 1 < L  | J 0.05 1 < U  | 0.05 1 < 0  |
| VOLATILES  | May aborde                |  | 0.094 1   |   | 4.75 1 E J  | 0.01 1 < U  | 0.01 1 < 1  | ) 0.01 1 < U  | 0.01 1 < U  |
| VULAHLES   | vinyi crioride            | 1  | 0.004   |   |   | 0.005 1 2 1   | 0.005 1 < L   | ) 0.005 1 < U   | 0.005 1 < U   |
| VOLATILES  | Xvienes, Total            |  |   |   |   | 0.000 1 4 0   |   |   |   |

Table 3-104 Concentrations of Chemicals in Soil Samples Associated with Sump 116

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| [SUMP] = SUMP117 |                            |                   | AFA(1) D(1) ( 004)    |                   | 14-0117-01       | LH-S117-01        |
|------------------|----------------------------|-------------------|-----------------------|-------------------|------------------|-------------------|
| LOCATION _CODE   |                            | 35SUMP117-SB01    | 35SUMP117-SB01        | 323UMP11/-3802    | LANS117-01 1     | LH-S117-01 2      |
| SAMPLE_NO        |                            | 35-SMP117-S801-01 | 35-SMP117-SB01-02     | 35-5MP117-5002-02 | 2/4/1003         | 8/4/1993          |
| SAMPLE_DATE      |                            | 9/19/2006         | 9/19/2006             | 9/19/2006         | 5 - 9 Et         | 5 - 7 Ft          |
| DEPTH            |                            | .55 Ft            | 10 · 10 Ft            | 050               | BEG              | REG               |
| SAMPLE_PURPOSE   |                            | REG               | REG<br>Devid DI LO VO | Reault Dil 10 VO  | Result DIL LO VO | Result Dil. LQ VQ |
| Test Group       | Parameler (Units = mg/kg)  | Result UIL LO VO  | Hesuit DIL LU VU      |                   | 0.33 1 < U       | 0.33 1 < U        |
| EXPLOSIVES       | 2.4-Dinitrotoluene         |                   |                       |                   | 0.33 t < U       | 0.33 1 < U        |
| EXPLOSIVES       | 2,6-Dinitrotoluene         | (0700 /           | 15700 1               | 15000 1           | 15600 1          | 14300 1           |
| METALS           | Aluminum                   | 12200 1           | 15700 1               | 0.126 1 11 11     | 3 1 < 1          | 31 < U            |
| METALS           | Antimony                   | 0.266 1           | 0.126 1 0 0           | 0.120 1 0 0       | 31 1             | 2.3 1             |
| METALS           | Arsenic                    | 4.79 1            | 0.45 1                | 0.523 1           | 255 1            | 124 1             |
| METALS           | Barlum                     | 79.3 1            | 315 1                 | 049 1             | 200 ,            | ,                 |
| METALS           | Beryllium                  | 0.51              | 0.784                 | 0.004 1           | 1124             | 11៤ បី            |
| METALS           | Cadmium                    | 0.185 1 J J       | 0.057                 | 3770 1            | 2660 1           | 1370 1            |
| METALS           | Calcium                    | 1570 1            | 3390 1                | 3770 1            | 2000 1           | 17.3 1            |
| METALS           | Chromium                   | 15.3 1            | 23 1                  | 22.4 1            | 20,7 1           | 8.3 1             |
| METALS           | Cobalt                     | 5.67 1            | 22.1                  | 0.1 1             | 820 1            | 9.7 1             |
| METALS           | Copper                     | 14.8 1            | 27.5                  | 20.1 1            | 16200 1          | 18700 1           |
| METALS           | Iron                       | 19200 1           | 23900                 | 21000 1           | 112.8 1          | 127 1             |
| METALS           | Lead                       | 13.1 1            | 16.5 1                | 6700 5            | 2090 1           | 1250 1            |
| METALS           | Magnesium                  | 1150 1            | 6810 1                | 0/6U I            | 540 1            | 316 1             |
| METALS           | Manganese                  | 160 1             | 2640 10               | · /14             | 01 1 4 11        |                   |
| METALS           | Mercury                    | 0.152 1 J J       | 0.0242 1 J J          | 0.0383 0 0        | 0.1 1 4 0        | V.I / ~ V         |
| METALS           | Nickel                     | 9,44 1            | 62.6                  | 33.9              | 720 (            | 567 1             |
| METALS           | Potassium                  | 550 1             | 1120 1                |                   | 1 1 4 11         | 1 1 ~ 1           |
| METALS           | Selenium                   | 0.295 1           | 0.273 1               | 0.251 1 0 0       |                  | 1120              |
| METALS           | Silver                     | 1.77 1 U U        | 1,91 1 U U            | 1,82 1 0 0        |                  | 11.0              |
| METALS           | Sodium                     | 30.1 1            | 1370 1                | 1420 1            | 06 f             | 28.4 1            |
| METALS           | Strontium                  |                   |                       | 0.0010            | 20               | 20.4              |
| METALS           | Thallium                   | 0.0658 1          | 0.167 1               | U.0942 1          |                  |                   |
| METALS           | Vanadium                   | 29.6 1            | 28.4 1                | 24,9 1            | E76 1            | 29 1              |
| METALS           | Zinc                       | 62,7 1            | 107 1                 |                   | 570              | 20                |
| RANGE_ORGANICS   | Carbon Range C12-C28       | 61.6 1 U U        | 62.4 1 0 0            |                   |                  |                   |
| RANGE_ORGANICS   | CARBON RANGE C28-C35       | 61.6 1 U U        | 52.4 1 U U            |                   |                  |                   |
| RANGE_ORGANICS   | Carbon Range C6-C12        | 61.6 1 U U        | 62,4 1 U U            | 03.7 1 0 0        | 0.22 1 - 11      | 033 1 2 0         |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene     |                   |                       |                   | 0.33 1 < 11      | 0.33 1 < 11       |
| SEMIVOLATILES    | 1,2-Dichlorobenzene        |                   |                       |                   | 0.33 1 < 1       | 0.33 1 < U        |
| SEMIVOLATILES    | 1,3 Dichlorobenzene        |                   |                       |                   |                  | 0.33 1 < U        |
| SEMIVOLATILES    | 1,4-Dichlorobenzene        |                   |                       |                   | 165 1 ~ 1        | 185 1 < U         |
| SEMIVOLATILES    | 2.4.5-Trichlorophenol      |                   |                       |                   | 0.33 1 < 1       | 033 1 < U         |
| SEMIVOLATILES    | 2,4,6-Trichlorophenoi      |                   |                       |                   | 0.33 1 < 1       | 0.33 1 < U        |
| SEMIVOLATILES    | 2,4-Dichlorophenol         |                   |                       |                   | 0.33 1 4 11      | 0.33 1 < U        |
| SEMIVOLATILES    | 2.4-Dimethylphenol         |                   |                       |                   | 1.65 1 ~ 1       | 185 1 < U         |
| SEMIVOLATILES    | 2,4-Dinitrophenol          | ļ                 |                       |                   |                  | 0.33 1 < U        |
| SEMIVOLATILES    | 2-Chloronaphthalene        |                   |                       |                   | 0.33 1 ~ 1       | 0.33 1 < 1        |
| SEMIVOLATILES    | 2-Chlorophenol             | 1                 |                       |                   | 0.33 1 < 0       | 033 1 < 1         |
| SEMIVOLATILES    | 2-Methylnaphthalene        |                   |                       |                   |                  | 0.33 1 < 1        |
| SEMIVOLATILES    | 2-Methylphenol             | ł                 |                       |                   | 165 4 - 11       | 165 1 2 1         |
| SEMIVOLATILES    | 2-Nitroaniline             |                   |                       |                   | 1,00 1 < 0       | 0.33 1 2 11       |
| SEMIVOLATILES    | 2-Nitrophenol              | 1                 |                       |                   |                  | 0.65 1 2 1        |
| SEMIVOLATILES    | 3.3 -Dichlorobenzidine     |                   |                       |                   |                  | 165 1 2 11        |
| SEMIVOLATILES    | 3-Nitroaniline             | Į                 |                       |                   | 165 1 - 1        | 165 1 2 1         |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol |                   |                       |                   | 1,02 1 < 0       |                   |



| Table | 3-105   |              |          |     |
|-------|---------|--------------|----------|-----|
|       | Complee | Accordated w | ith Sump | 117 |

|                  | Concentration               | is of Chemicals in Soi | il Samples Assoc | iated with Sump   | 117              |                           |
|------------------|-----------------------------|------------------------|------------------|-------------------|------------------|---------------------------|
| [SUMP] = SUMP117 |                             |                        | 0501 NID117 6001 | 35SUMP117-SB02    | LH-S117-01       | LH-S117-01                |
| LOCATION _CODE   |                             | 35SUMP117-SB01         | 3550MP117-5001   | 35.5MD117.5R02.02 | LH-S117-01 1     | LH-\$117-01_2             |
| SAMPLE_NO        |                             | 35-SMP117-S801-01      | 0100000          | 0/10/200E         | 8/4/1993         | 8/4/1993                  |
| SAMPLE_DATE      |                             | 9/19/2006              | 9/19/2008        | 10 - 10 Ft        | .5 - 2 Ft        | 5 - 7 Ft                  |
| DEPTH            |                             | .5 • .5 FL             |                  | BEG               | REG              | REG                       |
| SAMPLE_PURPOSE   |                             | HEG DI LO VO           |                  | Result DIL LO VO  | Result DIL LQ VQ | Result DIL LQ VQ          |
| Test Group       | Parameter (Units = mg/kg)   | Hesuit DIL LO VO       | ABSUIL DIL LO VO | Hostin Die Cul ru | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES    | 4-Bromophenyi phenyi ether  |                        |                  |                   | 0.65 1 < U       | 0.65 1 < U                |
| SEMIVOLATILES    | 4-Chloro-3-methylphenoi     |                        |                  |                   | 0.65 1 < U       | 0.65 1 < U                |
| SEMIVOLATILES    | 4-Chloroaniline             | 1                      |                  |                   | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether |                        |                  |                   | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES    | 4-Methylphenol              |                        |                  |                   | 1.65 1 < U       | 1.65 1 < U                |
| SEMIVOLATILES    | 4-Nitroaniline              |                        |                  |                   | 1.65 1 < U       | 1.65 1 < U                |
| SEMIVOLATILES    | 4-Nitrophenol               |                        |                  |                   | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES    | Acenaphthene                |                        |                  |                   | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES    | Acenaphthylene              |                        |                  |                   | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES    | Anthracene                  |                        |                  |                   | 0.33 1 < U       | 0.33 t < U                |
| SEMIVOLATILES    | Benzo(a)anthracene          |                        |                  |                   | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES    | Benzo(a)pyrene              |                        |                  |                   | 033 1 × U        | 0.33 t < U                |
| SEMIVOLATILES    | Benzo(b)fluoranthene        |                        |                  |                   | 0.33 1 2 11      | 0.33 1 < U                |
| SEMIVOLATILES    | Benzo(ghi)perylene          |                        |                  |                   | 0.33 1 < 1       | 0.33 1 < U                |
| SEMIVOLATILES    | Benzo(k)Ruoranthene         |                        |                  |                   |                  | 165 1 < U                 |
| SEMIVOLATILES    | Benzoic Acid                |                        |                  |                   |                  | 0.65 1 < 1                |
| SEMIVOLATILES    | Benzyl Alcohol              |                        |                  |                   |                  | 0.33 1 4 8                |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  | 1                      |                  |                   | 0.33 1 < U       | 0.33 1 < 1                |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |                        |                  |                   | 0.33 L < U       |                           |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether |                        |                  |                   | 0.33 1 4 1       | 0.33 1 4 1                |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |                        |                  |                   | 0.33 1 < 0       | 0.33 1 ~ 1                |
| SEMIVOLATILES    | Butyl benzyl phthalate      |                        |                  |                   | 0.00 1 < 1       | 0.33 1 ~ U                |
| SEMIVOLATILES    | Chrysene                    | ļ                      |                  |                   | 0,33 1 < 0       | 0.33 1 < 1                |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      |                        |                  |                   |                  | 0.00 1 4 1                |
| SEMIVOLATILES    | Dibenzoluran                |                        |                  |                   | 0.33 1 4 0       |                           |
| SEMIVOLATILES    | Diethyl phthalate           |                        |                  |                   | 0,33 1 4 0       | 0.00 1 < 0                |
| SEMIVOLATILES    | Dimethyl phthalate          |                        |                  |                   | 0,33 1 < 0       | 0.00 1 4 0                |
| SEMIVOLATILES    | di-n-Butyl phthalate        |                        |                  |                   | 0.33 ) < 0       | 0.00 1 < 11               |
| SEMIVOLATILES    | di-n-Octyl phthalate        | }                      |                  |                   | 0.33 1 < 0       |                           |
| SEMIVOLATILES    | Fluoranthene                |                        |                  |                   | 0.33 1 < 0       | 0.03 1 4 0                |
| SEMIVOLATILES    | Fluorene                    |                        |                  |                   | 0.33 1 < 0       |                           |
| SEMIVOLATILES    | Hexachlorobenzene           |                        |                  |                   | 0.33 1 < 0       |                           |
| SEMIVOLATILES    | Hexachlorobutadiene         |                        |                  |                   | 0,33 1 < 0       | 0.00 1 4 11               |
| SEMIVOLATILES    | Hexachlorocyclopentadiene   |                        |                  |                   | 0.33   < 0       | 0.33 1 4 0                |
| SEMIVOLATILES    | Hexachloroethane            | l                      |                  |                   | 0.33 1 < 0       | 0.00 1 4 0                |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene      | 1                      |                  |                   | 0.33 1 < ∪       |                           |
| SEMIVOLATILES    | Isophorone                  |                        |                  |                   | 0.33 1 < 0       |                           |
| SEMIVOLATILES    | Naphthalene                 | ļ                      |                  |                   | 0.33 1 < U       | 0.33 1 < 0                |
| SEMIVOLATILES    | Nitrobenzene                | 1                      |                  |                   | 0.33 1 < 0       | Q,33 I < U<br>0.00 1 - 11 |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |                        |                  |                   | 0.33 1 < U       | U > 1 66.0                |
| SEMIVOLATILES    | n-Nitrosodiohenylamine      |                        |                  |                   | 0,33 1 < 0       | 9,33 1 < U                |
| SEMIVOLATILES    | Pentachiorophenol           |                        |                  |                   | 1.65 1 < U       | 1.00 1 < U                |
| SEMIVOLATILES    | Phenanthrene                |                        |                  |                   | 0.33 1 < U       | 0.33 1 < U                |
| SEMIVOLATILES    | Phenoi                      | 1                      |                  |                   | 0.33 1 < U       | 0.33 1 < 0                |
| SEMIVOLATILES    | Pvrane                      |                        |                  |                   | 0.33 1 < U       | 0.33 1 < 0                |
| TPH              | TOTAL HYDROCARBONS          | 1                      |                  |                   | 41 1             | 10 1 < 0                  |
|                  | 1 i 1 2 Totrochloroethane   |                        | 0.00549 1 U U    | 0.00549 1 U U     |                  |                           |

VOLATILES

1,1.1,2-Tetrachloroethane

Data Evaluation Report Chemical Concentrations in Spil Associated with LHAAP-35/36 Sumps



| BIMP - SMP17         SBUMP - SMP17 - SMP1         SBUMP - SMP17 - SMP1         SBUMP - SMP17 - SMP1         SUMP - SMP17 - SMP1         LVA 517-01         17-01<="" th=""> <thlva517-01< th="">         &lt;</thlva517-01<></thlva>   |   | Concentrations   | of Chemicals in Soi   | I Samples Associ  | iated with Sump  | 117  |   |  |               |               |             |             |
|---|---|--|---|---|--|--|---|--|---------------|---------------|-------------|-------------|
| SMRLE_PUNCE         Pourser Units - mplog         Pour         Du         L0         VQ         Read DU         L0         VQ         Read DU         L0         VQ         Read DU         L0         VQ         Read DU         L0         VQ         Read DU         L0         VQ         Read DU         L0         VQ         Read DU         L0         VQ         Read DU         L0         VQ         Read DU         L0         VQ         Read DU         L0         VQ         Read DU<   | (SUMP) = SUMP117<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH   |  | 35SUMP117-SB01<br>35-SMP117-SB01-01<br>9/19/2008<br>.55 Ft<br>BEG   | 355UMP117-5801<br>35-SMP117-5801-02<br>9/19/2006<br>10 • 10 Ft<br>REG   | 355UMP117-SB02<br>35-SMP117-SB02-02<br>9/19/2006<br>10 • 10 Ft<br>REG  | LH-S117-01<br>LH-S117-01_1<br>8/4/1993<br>.5 - 2 Ft<br>REG | LH-S117-01<br>LH-S117-01_2<br>8/4/1993<br>5 - 7 Ft<br>REG |  |               |               |             |             |
| Hall Jobb         Jobb         D         Jobb         D         L         Other S         L         O         O         S         L         O         O         S         L         O         O         S         L         O         O         S         L         O         O         O         O         O         S         L         O         O         O         S         L         O   | SAMPLE_PURPUSE  | Decemptor (Linite – malta)   | Besult DII 10 VO  | Result DIL LQ VQ  | Result DIL LO VQ   | Result DIL LQ VQ   | Result DIL LQ VQ  |  |               |               |             |             |
| NULAILES         1.1.2.1*1000000000         0.005         1         U         0.005 <th>Test Group</th> <th>Parameter (Units = Hypky)</th> <th></th> <th>0.00549 1 U U</th> <th>0.00549 1 U U</th> <th>0,005 1 &lt; U</th> <th>0.005 1 &lt; U</th>  | Test Group  | Parameter (Units = Hypky)  |   | 0.00549 1 U U   | 0.00549 1 U U  | 0,005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| NULALES         1.12***********************************   | VOLATILES   | 1,1,2,2 Tetrashereethane   | ł   | 0.00549 1 U U   | 0.00549 1 U U  | 0.005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| NULAILES         I.1. Distributerations         NUMAILES         NUMAILES   | VOLATILES   | 1,1,2,2,4 Budginoroenano   |   | 0.00549 1 U U   | 0.00549 1 U U  | 0.005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| NUCLAIRLES         11-Debinominant         00056         1         U         0.0005         1 <t< td=""><td>VOLATILES</td><td>1.1 Disblerections</td><td></td><td>0.00453 1 J J</td><td>0.0329 1</td><td>0.005 1 &lt; U</td><td>0.005 1 &lt; U</td></t<>  | VOLATILES   | 1.1 Disblerections   |   | 0.00453 1 J J   | 0.0329 1   | 0.005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| VickAlles         11-Definitional partie         000540         1         U   | VOLATILES   | 1.1 Dichlomothane  |   | 0.00549 1 U U   | 0.00323 1 J J  | 0.005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| NUCATILES         1:23-find/indeparte         000549         1         U         VICATILES         1:23-find/indeparte         000549         1         U         VICATILES         1:23-find/indeparte         000549         1         U         VICATILES         1:23-find/indeparte         000549         1 <u< th="">         U         000549         1<u< th="">         U         000549         1<u< th="">         U         000549         1<u< th="">         U         000549         1<u< th="">         U         000549         1<u< th="">         U         000549         1<u< th="">         U         000549         1<u< th="">         U         000549         1<u< th="">         U         000549         1<u< th="">         U         000549         1<u< th="">         U         000549         1<u< th="">         U         000549         1<u< th="">         U         000559         1<u< th="">         0.0055         1<u< th="">         0.0055         1<u< th="">         0.0055         1<u< th="">         0.00559         1<u< th="">         0.0055         1<u< th="">         0.0055         1<u< th="">         0.00559         1<u< th="">         0.0055         1<u< th="">         0.0055         1<u< th="">         0.0055         1<u< th="">         0.0055         1<u< th="">         0.0055         1<u< th="">         0.0055         1<u< th="">         0.0055         1<u< th="">         0.0055         1<u< th="">         0.0055         1<u< td=""><td>VOLATILES</td><td></td><td></td><td>0.00549 1 U U</td><td>0.00549 1 U U</td><td></td><td></td></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<></u<> | VOLATILES   |  |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| OLGATILES         12.3 Instructure         D00549         1         U         0.00549         1         U         0           VOLATILES         12.4 Trichiodopagne         D00549         1         U         D00549         1         U         U         D00549         1         U         U         U         U         U         D00549         1         U         U         U         D00549         1         U         U         U         D00549         1         U         U         U         D0055         1         U         U         D0055         1         U         U         D0055         1         U         U         D0055         1         U         D0055         1         U         D0055         1         U         U         D0055         1         U         D0055         1         U         D0055         1         U         D0055         1         U         D0055         1         U         D0055         1         U         D0055         1         U         D0055         1         U         D0055         1         U         D0055         1         U         D0055         1         U         D0055         1 <td< td=""><td>VOLATILES</td><td>1.2.2 Trichlorobootopo</td><td></td><td>0.00549 1 U U</td><td>0.00549 1 U U</td><td></td><td></td></td<>   | VOLATILES   | 1.2.2 Trichlorobootopo   |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| VQLATLES         1.2.4 Transmissione         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1         U         0.0055         1<         U         0.0055         1<         U         0.0055         1<         U         0.0055         1   | VOLATILES   | 1.0.2 Trichlorographic   |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| UDLAILES         1.2.4* Individuality         DODS 1         U         DODS 1         U         U   | VOLATILES   | 1.2.3-Theneropropage   |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| UQLATLES         12.24 miningingature         000549         1         U         0.00549         1         U         U         0.00549         1         U         U         0.00549         1         U         U         0.00549         1         U         U         0.00549         1         U         U         0.00549         1         U         U         0.00549         1         U         0.005         1<         U         0.005         1<         U         0.005         1<         U         0.005         1<         U         0.005         1<         U         0.005         1<         U         0.005         1<         U         0.005         1<         U         0.005         1<         U         0.005         1<         U         0.005         1<         U         0.005         1<         U         0.005         1<         U         0.005         1<         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U <td>VOLATILES</td> <td>1.2.4 Themotopenzene</td> <td></td> <td>0.00549 1 U U</td> <td>0.00549 1 U U</td> <td></td> <td></td>   | VOLATILES   | 1.2.4 Themotopenzene   |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| VQLATLES         12-000000000000000000000000000000000000  | VOLATILES   | 1.2.4+Trameinyidenzene   |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| VULLINES         12-Diduktionale         0.0054         1         U         0.0054         1         U         0.005  | VOLATILES   | 1.2-Dibromo-3-Childropropane   |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| VOLATLES         1.2004/ModeRhame         0.00549         1         U         0.0055         1         C         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U          VOLATLES1.31.3<   | VOLATILES   | 1.2 Dichlerabenzane  |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| VDLATLES         12-0LUNISHINATION         0.005         1         0         0.005         1<         0         0.005         1<         0         0.005         1<         0         0.005         1<         0         0.005<   | VOLATILES   | 1.2 Dishiorachana  |   | 0.00549 1 U U   | 0.00549 1 U U  | 0.005 1 < U  | 0,005 i < U   |  |               |               |             |             |
| VOLATLES         12-bit Membrane         0.0054         1         U         0.005   | VOLATILES   | 1.2 Dichleracthone   | 1   |   |  | 0.005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| VDLATLES         12-Definitionanta         0.00549         1         U         0.00549         1         U         U         0.00549         1         U  | VOLATILES   |  |   | 0.00549 1 U U   | 0.00549 1 U U  | 0.005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| VOLATILES         1.2.001/mitigate/air (vertice)         0.00549         1         U         0.00549         1         U         0.00549         1         U         U         0.00549         1         U         U         0.00549         1         U         U         0.00549         1         U         U         0.00549         1         U         U         0.00549         1         U         U         0.00549         1         U         U         0.00549         1         U         U         0.00549         1         U         U         0.00549         1         U         U         0.0051         I         U         U         0.0051         I         U         U         0.0051         I         U         0.005         I<         U         U         0.0051         I         U         0.005         I<         U         U         0.0051         I          VOLATILES         2.20-0hropropane         0.011         I         U         0.0011         I         U         0.011         I         U         0.005 <td>VOLATILES</td> <td>1.2 Dimethylhenzene (a-Yulene)</td> <td>ł</td> <td>0.00549 1 U U</td> <td>0.00549 1 U U</td> <td></td> <td></td>  | VOLATILES   | 1.2 Dimethylhenzene (a-Yulene)   | ł   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| VOLATILES         L.S. Interviewe         0.0059         1         U         0.0059         1         U         0.0059         1         U         0.0059         1         U         0.0059         1         U         0.0059         1         U         0.0059         1         U         0.0059         1         U         0.0059         1         U         0.0059         1         U         0.0051         1         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1<         C         U         0.005         1<         U         0.005         1<         U         0.005         1<         U         0.005         1<< <tr></tr> U         U <td>VOLATILES</td> <td>1.2.5 Trimetry Denzone (Orkyrene)</td> <td></td> <td>0.00549 1 U U</td> <td>0.00549 1 U U</td> <td></td> <td></td>  | VOLATILES   | 1.2.5 Trimetry Denzone (Orkyrene)  |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
|   |   |  |   |   |  |  |   |  |               |               |             |             |
| VOLATILES         1.3/VALMONATELAN         0.00549         1         U         0.00549         1         U         U           VOLATILES         1.4/Dichtorgenzene         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.0051         1         C         U         0.0051         1         C         U         0.0051         1         C         U         0.0051         1         C         U         0.0051         1         C         U         0.0051         1         C         U         0.0051         1<         C   | VOLATILES   | 1.3.5-1101e01y0e1zene  |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| VOLATILES         1.3-VOLATILOPORT         0.00549         1         U         U         0.00549         1         U         U           VOLATILES         22-Dichloroporpane         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.005         1         <   | VOLATILES   | 1.2 Dishioropropage  |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| VOLATILES         1.º USANAUSENTERIE         0.00549         1         U         0.00449         1         U         0.00549         1         U         0.0051         1         U         0.005         1         V         0   | VOLATILES   | 1.4 Disblarabastana  | 1   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| VOLATILES         22-DUNIDAPPoint         DUIT         1         U         D.011         1         U         D.031         1         C         U  | VQLATILES   | 2.2 Disblereproperty   |   | 0.00549 1 U U   | 0,00549 1 U U  |  |   |  |               |               |             |             |
| VOLATILES         2-blander         0.011         1         U         U         0.011         1         U         0.005         1         C         U         0.0055         1         C         U         0.0055         1         U         0.0055         1         U         0.0055         1<         C         U         0.0055         1<         C         U         0.0055         1<         C         U         0.0055         1<         C         U  | VOLATILES   | 2.2-Dichipropane   | l   | 0.011 1 U U   | 0.011 1 U U  | 0.05 1 < U   | 0.05 1 < U  |  |               |               |             |             |
| VOLATILES       2-Charobiteme       0.00549       1       U       0.00549       1       U       0.005       1<       U       0.005       1<       U       0.005       1<  | VOLATILES   | 2-Dularione  |   | 0.011 T U U   | 0,011 1 U U  | 0.01 1 < U   | 0.01 1 < U  |  |               |               |             |             |
| VOLATILES         2-Hexanone         0.011         1         U         0.05         1         C         U         0.05         1         C         U           VOLATILES         2-Hexanone         0.0014         1         U         0.0054         1         U         0.0054         1         U         0.0054         1         U         0.005         1         C         U         0.011         1         U         0.011         1         U         0.011         1         U         0.011         1         U         0.011         1         U         0.011         1         U         0.011         1         U         0.011         1         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1         C         U         0.005         1<         C         U         0.005         1<         C         U         0.005         1<         C         U         0.005         1<         U         0.005         1<         U         0.005  | VOLATILES   | 2-Chlorobshippo  |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| VOLATILES       AChioroblane       D00549       1       U       D0.00549       1       U       U       D0.011       I       I       U       D.00549       1       U       U       D.00549       1       U       U       D.00549       1       U       U       D.011       1       I       U       D.00549       1       U       U       D.00549       1       U       U       D.00549       1       U       U       D.00549       1       U       U       D.00549       1       U       U       D.00549       1       U       U       D.00549       1       U       U       D.00549       1       U       U       D.00549       1       U       U       D.00549       1       U       U       D.005549       1       U       U       D.005549       1       U       U       D.0055       1<       U       U       D.005549       1       U       U       D.0055       1<       U       U       D.0055       1<       U       D.0055       1<       U       U       D.0055       1<<       U       U       D.0055       1<<       U       D.0055       1<<       U       D.0055       1<< <td>VOLATILES</td> <td></td> <td></td> <td>0.011 1 U U</td> <td>0.011 1 U U</td> <td>0,05 1 &lt; U</td> <td>0.05 1 &lt; U</td>   | VOLATILES   |  |   | 0.011 1 U U   | 0.011 1 U U  | 0,05 1 < U   | 0.05 1 < U  |  |               |               |             |             |
| VULATILES       Acetone       0.00548       1       J       J       0.011       1       V       0.11       1       V       0.11       1       V       0.011       1       V       0.011       1       V       0.011       1       V       0.011       1       V       0.011       1       V       0.011       1       V       0.011       1       V       0.011       1       V       0.005       1       V       0.0005       1 </td <td>VOLATILES</td> <td></td> <td></td> <td>0.00549 1 U U</td> <td>0.00549 1 U U</td> <td></td> <td></td>  | VOLATILES   |  |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| VOLATILES       Benzene       0.00549       1       U       0.00549       1       U       0.005       1       C       U       0.005       1<       C       U       0.005       1<       C       U       0.005       1<< <t></t> C       U       0.005       1<< <t></t> C       U       0.005       1<< <t l<="" th="">       U       0.005</t>   | VOLATILES   | Asoloto  |   | 0.00648 1 J J   | 0.011 1 U U  | 0.1 1 < U  | 0.1 1 < U   |  |               |               |             |             |
| VOLATILES       Bromobensene       0.00549       1       U       0.00549       1       U       0       0.00549       1       U       0         VOLATILES       Bromobnishane       0.00549       1       U       U       0.00549       1       U       U       0.00549       1       U       U       0.00559       1       U       U       0.00559       1       U       U       0.00559       1       U       U       0.00559       1       U       U       0.00559       1       U       U       0.00559       1       U       U       0.00559       1       U       U       0.00559       1       U       U       0.00559       1       U       U       0.00559       1       U       U       0.00555       1       C       U       0.00555       1       C       U       0.00555       1       C       U       0.00555       1       U       0.00555       1       C       U       0.0055       1<       C       U       0.0055       1<< <th>C       U       0.0055       1&lt;&lt;<th>C       U       0.0055       1&lt;&lt;<th>C       U       0.0055       1&lt;&lt;<th>C       U       0.0055       1&lt;<th>C       <t< td=""><td>VOLATILES</td><td>Popzona</td><td></td><td>0.00549 1 U U</td><td>0.00549 1 U U</td><td>0.005 1 &lt; U</td><td>0.005 1 &lt; U</td></t<></th></th></th></th></th>   | C       U       0.0055       1<< <th>C       U       0.0055       1&lt;&lt;<th>C       U       0.0055       1&lt;&lt;<th>C       U       0.0055       1&lt;<th>C       <t< td=""><td>VOLATILES</td><td>Popzona</td><td></td><td>0.00549 1 U U</td><td>0.00549 1 U U</td><td>0.005 1 &lt; U</td><td>0.005 1 &lt; U</td></t<></th></th></th></th> | C       U       0.0055       1<< <th>C       U       0.0055       1&lt;&lt;<th>C       U       0.0055       1&lt;<th>C       <t< td=""><td>VOLATILES</td><td>Popzona</td><td></td><td>0.00549 1 U U</td><td>0.00549 1 U U</td><td>0.005 1 &lt; U</td><td>0.005 1 &lt; U</td></t<></th></th></th> | C       U       0.0055       1<< <th>C       U       0.0055       1&lt;<th>C       <t< td=""><td>VOLATILES</td><td>Popzona</td><td></td><td>0.00549 1 U U</td><td>0.00549 1 U U</td><td>0.005 1 &lt; U</td><td>0.005 1 &lt; U</td></t<></th></th> | C       U       0.0055       1< <th>C       <t< td=""><td>VOLATILES</td><td>Popzona</td><td></td><td>0.00549 1 U U</td><td>0.00549 1 U U</td><td>0.005 1 &lt; U</td><td>0.005 1 &lt; U</td></t<></th> | C <t< td=""><td>VOLATILES</td><td>Popzona</td><td></td><td>0.00549 1 U U</td><td>0.00549 1 U U</td><td>0.005 1 &lt; U</td><td>0.005 1 &lt; U</td></t<> | VOLATILES  | Popzona   |  | 0.00549 1 U U | 0.00549 1 U U | 0.005 1 < U | 0.005 1 < U |
| VOLATILES       Dimonshironethane       0.00549       1       U       U       0.00549       1       U       U       0.00549       1       U       U       0.00549       1       U       U       0.00549       1       U       U       0.00549       1       U       U       0.00549       1       U       U       0.00549       1       U       U       0.00549       1       U       U       0.005       1       <       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1<       U       0.005       1<       U       0.005       1<       U       0.005       1<       U       0.005       1<       U       0.0005       1<       U       0.   | VOLATILES   | Bromohonzene   |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| OULATILES       Diomodial methane       0.00548       1       U       0.00549       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00555       1<       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554  | VOLATILES   | Bromoshioromethane   |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| VOLATILES       Biomodantamentance       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.001       1       U       0.005       1<       U       0.005       1<       U       0.005       1<       U       0.005       1<       U       0.005       1<       U       0.005       1<       U       0.005       1<       U       0.005       1<       U       0.005       1<       U       0.005   | VOLATILES   | Bromodichloramethane   |   | 0.00549 1 U U   | 0.00549 1 U U  | 0.005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| VOLATILES       Bromomethane       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.005       1 <td< td=""><td>VOLATILES</td><td>Bromotorm</td><td></td><td>0.00549 1 U U</td><td>0.00549 1 U U</td><td>0.005 1 &lt; U</td><td>0.005 1 &lt; U</td></td<>   | VOLATILES   | Bromotorm  |   | 0.00549 1 U U   | 0.00549 1 U U  | 0.005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| VOLATILES       Carbon tetrachloride       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.00554       1       U       0.0055       1<  | VOLATILES   | Bromomethane   |   | 0.011 1 U U   | 0.011 1 U U  | 0.01 1 < U   | 0.01 1 < U  |  |               |               |             |             |
| VOLATILES       Carbon tetrachioride       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.005549       1       U       0.00554       1       U       0.005549       1       U       0.005549       1       U       0.005549       1       U       0.00554       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1       U       0.0011       1  | VOLATILES   | Carbon disulfide   |   | 0.00549 1 U U   | 0.00549 1 U U  | 0.005 1 < U  | 0,005 1 < U   |  |               |               |             |             |
| VOLATILES       Chlorobenzone       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.00549       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.005       1       U       U       0.001       1       U       0.001       1       U       0.001       1       U       U       0.001       1       U       U       0.001       1       U       U       0.001       1       U       U       0.001       1       U       U       0.001       1       U       U       0.005       1<  | VOLATILES   | Carbon tetrachioride   |   | 0.00549 1 U U   | 0.00549 1 U U  | 0.005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| VOLATILES       Dindrodification         VOLATILES       Chloroefhane         VOLATILES       Chloroefhane         VOLATILES       Chloroefhane         VOLATILES       Chloroefhane         VOLATILES       Chloroefhane         VOLATILES       Chloroefhane         VOLATILES       Chloroefhane         VOLATILES       Chloroefhane         VOLATILES       Chloroefhane         VOLATILES       Chloroefhane         VOLATILES       cls-1,2-Dichloroethene         VOLATILES       cls-1,3-Dichloropropene         VOLATILES       Dibromochloromethane         0.00549       1       U         VOLATILES       Dibromochloromethane         0.00549       1       U         VOLATILES       Dibromochloromethane         0.00549       1       U         VOLATILES       Dibromochloromethane         0.00549       1       U         VOLATILES       Dibromochloromethane         0.00549       1       U         VOLATILES       Dibromochloromethane         0.00549       1       U         VOLATILES       Dibromochloromethane         0.00549       1 <t< td=""><td>VOLATILES</td><td>Chlorobenzene</td><td></td><td>0.00549 1 U U</td><td>0.00549 1 U U</td><td>0,005 1 &lt; U</td><td>0.005 1 &lt; U</td></t<>   | VOLATILES   | Chlorobenzene  |   | 0.00549 1 U U   | 0.00549 1 U U  | 0,005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| VOLATILES       Chlorodenane       0.00549       1       U       0.00549       1       U       0.0054       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.011       1       U       0.005       1<  | VOLATILES   | Chloroethane   |   | 0.011 1 U U   | 0.011 1 U U  | 0.01 1 < U   | 0.01 1 < U  |  |               |               |             |             |
| VOLATILES         Chioromethane         0.011         1         U         0.015         1<         U         0.005         1 <         U <t< td=""><td>VOLATILES</td><td>Chloroform</td><td>1</td><td>0.00549 1 U U</td><td>0,00549 1 U U</td><td>0.005 1 &lt; U</td><td>0.005 1 &lt; U</td></t<>   | VOLATILES   | Chloroform   | 1   | 0.00549 1 U U   | 0,00549 1 U U  | 0.005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| VOLATILES         cls-1,3-Dichloroptenene         0.00549         1         U         0.00124         1         J         J           VOLATILES         cls-1,3-Dichloroptenene         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.005   | VOLATILES   | Chiorometoane  |   | 0.011 1 U U   | 0.011 1 U U  | 0.01 1 < U   | 0.01 1 < U  |  |               |               |             |             |
| VOLATILES         Clarite         0.00549         1         U         0.00549         1         U         0.005 <th1< th="">         U         0.005</th1<>   | VOLATILES   | cis-1 2-Dichloroethene   |   | 0.00549 1 U U   | 0.00124 1 J J  |  |   |  |               |               |             |             |
| VOLATILES         Disromochloromethane         0.00549         1         U         0.00549         1         U         0.005         1         U         0.   | VOLATILES   | cie-1 3-Dichloropropene  |   | 0.00549 1 U U   | 0.00549 1 U U  | 0.005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| VOLATILES         Dibriomomethane         0.00549         1         U         0.00549         1         U           VOLATILES         Dibriomomethane         0.011         1         U         0.011         1         U           VOLATILES         Dichlorodifluoromethane         0.011         1         U         0.00549         1         U         0.0051          U         0.0051          U         0.0051          U         0.0051          U         0.00549         1         U         0.0051          U         0.0051          U         0.00549         1         U         0.0051          U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U         0.00549         1         U   | VOLATILEO   | Dibromoshloromethane   |   | 0.00549 1 U U   | 0.00549 1 U U  | 0.005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
| VOLATILES         Dichlorodifiuoromethane         0.011         1         U         0.011         1         U           VOLATILES         Dichlorodifiuoromethane         0.00549         1         U         0.00549         1         U         0.005         1   | VOLATILES   | Dibromomethane   | ļ   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |
| VOLATILES         Ethylbenzene         0.00549         1         U         0.005  |   | Dichlorodifluoromethane  | 1   | 0.011 1 U U   | 0.011 1 U U  |  |   |  |               |               |             |             |
| VCIATLES Hexachlorobutadiene 0.00549 1 U U 0.00549 1 U U  | VOLATILES   | Ethylicenzene  |   | 0.00549 1 U U   | 0.00549 1 U U  | 0.005 1 < U  | 0.005 1 < U   |  |               |               |             |             |
|   | VOLATILES   | Hexachlorobutadiene  |   | 0.00549 1 U U   | 0.00549 1 U U  |  |   |  |               |               |             |             |

Table 3-105

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas



| Table 3-105   |
|---|
| Concentrations of Chemicals in Soil Samples Associated with Sump 11 |

|  | and the second second second second second second second second second second second second second second second |   |  |  |  |   |
|--|--|---|--|--|--|---|
| SUMP) SUMP117<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |  | 355UMP117-SB01<br>35-SMP117-SB01-01<br>9/19/2006<br>.55 Ft<br>REG | 35SUMP117-SB01<br>35-SMP117-SB01-02<br>9/19/2006<br>10 - 10 Ft<br>REG<br>Peruth DIL J-0 - VO | 355UMP117-5B02<br>35-5MP117-SB02-02<br>9/19/2006<br>10 - 10 Ft<br>REG<br>Besuit DIL LO, VQ | LH-5117-01<br>LH-S117-01_1<br>8/4/1993<br>.5 - 2 Ft<br>REG<br>Result DIL LO VQ | LH-S117-01<br>LH-S117-01_2<br>8/4/1993<br>5 - 7 Ft<br>REG<br>Result DIL LO VQ |
| Test Group   | Parameter (Units = mg/Kg)  | HESUN DIE LO VO   | 0.00549 1 11 11  | 0.00549 1 U U  |  |   |
| VOLATILES  | Isopropyibenzene   |   | 0.00549 1 11 11  | 0.00549 1 U U  |  |   |
| VOLATILES  | m,p-Xylenes  |   | 0.00048 1 0 0  | 0.011 1 U U  | 0.05 1 < U   | 0.05 1 < U  |
| VOLATILES  | Methyl Isobutyl ketone   |   | 0.00549 1 11 11  | 0.00549 1 U U  | 0.005 1 < U  | 0.005 t < U   |
| VOLATILES  | Melhylene chloride   | ĺ   | 0.011 1 11 11  | 0.011 1 U U  |  |   |
| VOLATILES  | Naphhalene   |   | 0.00540 1 11 11  | 0.00549 1 U U  |  |   |
| VOLATILES  | n-BUTYLBENZENE   |   | 0.00549 1 11 11  | 0.00549 1 U U  |  |   |
| VOLATILES  | n-PROPYLBENZENE  |   | 0.00549 7 0 0  | 0.00549 1 U U  |  |   |
| VOLATILES  | p-ISOPROPYLTOLUENE   |   | 0.00549 1 0 0  | 0.00549 1 U U  |  |   |
| VOLATILES  | sec-BUTYLBENZENE   |   | 0.00540 1 11 13  | 0.00540 1 U U  | 0.005 1 < U  | 0.005 1 < U   |
| VOLATILES  | Styrene  |   | 0.00549 1 0 0  | 0.00549 1 11 11  |  |   |
| VOLATILES  | tert-BUTYLBENZENE  |   |  | 0.00549 1 0 0  | 0.005 1 < U  | 0.005 1 < U   |
| VOLATILES  | Tetrachloroethene  |   | 0.00549 1 0 0  | 0.00549 1 0 0  | 0.005 1 2 11   | 0.005 1 < U   |
| VOLATILES  | Toluene  |   | 0.00549 1 0 0  | 0.00549 1 0 0  | 0.000  | •••••   |
| VOLATILES  | trans-1,2-Dichloroethene   |   | 0.00549 1 0 0  |  | 0.005 1 2 11   | 0.005 t < U   |
| VOLATILES  | trans-1,3-Dichloropropene  |   | 0.00549 1 U U  | 0.00549 1 0 0  | 0.000 1 4 1  | 0.005 1 1 1   |
| VOLATILES  | Trichloroethene  |   | 0.00549 1 U U  | 0.000875 1 J J   | 0.000 1 4 0  | 0,000 1 4 0   |
| VOLATILES  | Trichlorofluoromethane   |   | 0.011 1 U U  | 0.011 1 U U  |  | 0.05 1 4 11   |
| VOLATILES  | Vinyl acetate  |   | 0.011 1 U U  | 0,011 1 0 0  | 0.05 1 < 0   |   |
| VOLATILES  | Vinyl chloride   |   | 0.011 1 U U  | 0.011 1 0 0  |  |   |
| VOLATILES  | Xylenes, Total   |   |  |  | 0.005 1 < 0  | 0.000 - C 0   |

. . . . . .

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| LOCATIONC, CODE         BSEUMPTI-BASIC         BSEUMPTI-BASIC         LOCATIONCADE <thlocationcade< th="">         LOCATIONCADE         LOCATIO</thlocationcade<>  | (SUMP) = SUMP118 |                            |        |       |         |        |         |        |     |        |        | ~ . |     | ıш           | 6119.0              | 11  |     | LH.    | -\$118 | .02  |     | LH-      | S118-( | )2  |         |
|---|------------------|----------------------------|--------|-------|---------|--------|---------|--------|-----|--------|--------|-----|-----|--------------|---------------------|-----|-----|--------|--------|------|-----|----------|--------|-----|---------|
| GAME_LO         SS-SUPTISSEND 2         CURVEDATE         Display <thdisplay< th="">         Display         Display</thdisplay<>   | LOCATION _CODE   |                            | 35SUN  | AP11  | 8-SB01  | 3550   | MP118   | -5801  |     | LH-    | -5118- | -01 |     | ម្ពា<br>មហិត | 2410 01             |     |     | 114.9  | 2118.  | 12 1 |     | 11-8     | 118-02 | 2 2 |         |
| SAMPLE_CATE         Pictrate         S.S.F         I.S.F         O.T.M         P.4.F         O.T.M         P.4.F         O.T.M         P.4.F         O.T.M         P.4.F         O.T.M         P.4.F         O.T.M         P.4.F  | SAMPLE_NO        |                            | 35-SMP | 118-  | SB01-01 | 35-SM  | P118-S  | B01-02 |     | LH-3   | 5118-0 | n_1 |     | LD*C<br>Z    | 2110*V:<br>/0/1002  | _2  |     | 7      | /я/100 | 4    |     | 7/       | 8/1993 |     |         |
| DBPTN         IS.5         FEG         DES <thdes< <="" th=""><th>SAMPLE_DATE</th><th></th><th>9/</th><th>19/20</th><th>)06</th><th>9</th><th>/19/20</th><th>08</th><th></th><th>1</th><th>/8/199</th><th>3</th><th></th><th></th><th>102 1930<br/>1 X 224</th><th></th><th></th><th></th><th>n.2F</th><th>ř</th><th></th><th>2</th><th>- 4 Ft</th><th></th><th></th></thdes<>  | SAMPLE_DATE      |                            | 9/     | 19/20 | )06     | 9      | /19/20  | 08     |     | 1      | /8/199 | 3   |     |              | 102 1930<br>1 X 224 |     |     |        | n.2F   | ř    |     | 2        | - 4 Ft |     |         |
| BARHE, C. PURCOSC         Parameter (Lintz = rolpha)         Red         DL         LO         VO         Parata         DL         LO         VO         Parata         DL         LO         VO         Parata         DL         LO         VO         Parata         DL         LO         VO         Parata         DL         LO         VO         Parata         DL         LO         VO         Parata         DL         LO         VO         Parata         DL         LO         VO         Parata         DL         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         Parata         LO         VO         VO <th< th=""><th>DEPTH</th><th></th><th></th><th>5.5</th><th>Ft</th><th></th><th>4 - 4 F</th><th>ł</th><th></th><th>(</th><th>0-21</th><th>ſ</th><th></th><th>1</th><th>050</th><th></th><th></th><th></th><th>050</th><th></th><th></th><th></th><th>REG</th><th></th><th></th></th<>  | DEPTH            |                            |        | 5.5   | Ft      |        | 4 - 4 F | ł      |     | (      | 0-21   | ſ   |     | 1            | 050                 |     |     |        | 050    |      |     |          | REG    |     |         |
| Tell Octow         Present (Ups = myrg)         Feed of LG / V         Result of LG / V   | SAMPLE_PURPOSE   |                            |        | REC   | i       |        | RĘG     |        |     |        | REG    |     | vo  | Decult       |                     | 10  | vo  | Becult | 0      | 10   | vo  | Result   | DIL    | LQ  | VQ      |
| EPR_GSNES       1.3.5.Trinibasevente       0.243       1       0       0.243       1       0         EPR_GSNES       1.3.6.Trinibasevente       0.243       1       0       0.243       1       0       0.233       1       e       0       0.33       1       e       0       0.33       1       e       0       0.33       1       e       0       0.33       1       e       0       0.33       1       e       0       0.33       1       e       0       0.33       1       e       0       0.33       1       e       0       0.33       1       e       0       0.33       1       e       0       0.33       1       e       0       0.33       1       e       0       0.33       1       e       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33   | Test Group       | Parameter (Units = mg/kg)  | Reșuli | DIL   | LO VO   | Result | DIL     | 10     | VQ. | Hesuit | Dic    |     | Vu  | nesuit       |                     |     |     | Huadh  | 010    |      |     |          |        |     |         |
| DPIC_0SMSS         1.0 lonimolectrane         0.243         I         U         0.244         I         U           DPIC_0SMSS         2.4.6 minolutions         0.244         I         U         0.23         I         U         0.33   | EXPLOSIVES       | 1.3.5-Trinitrobenzene      | 0.243  | 1     | U       | 0.24   | 1       | U      |     |        |        |     |     |              |                     |     |     |        |        |      |     |          |        |     |         |
| BPL, GONSS       2.4.Finimpolsione       D.23       I       U       D.23       I       V       D.24       I       U       D.23       I       V       D.23       I       V       D.23       I       V       D.23       I       V       D.23       I       V       D.23       I       U       D.23       I       U       D.23       I       U       D.23       I       V       D.23 <thd.23< th="">       D.23       D.23<td>EXPLOSIVES</td><td>1.3-Dinitrobenzene</td><td>0.243</td><td>1</td><td>U</td><td>0.24</td><td>1</td><td>U</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></thd.23<>  | EXPLOSIVES       | 1.3-Dinitrobenzene         | 0.243  | 1     | U       | 0.24   | 1       | U      |     |        |        |     |     |              |                     |     |     |        |        |      |     |          |        |     |         |
| EPR_QSNSES       2.4 0mmobileme       D.24       1       U       D.24       1       U       D.24       1       U       D.24       1       U       D.25       U       D.25       D.25       D.25       D.25       D.25       D.25 <thd.25< th="">       D</thd.25<>   | EXPLOSIVES       | 2.4.6-Trinitrotoluene      | 0.243  | 1     | U       | 0.24   | 1       | U      |     |        |        |     |     | 0.22         | 4                   | ,   | 11  | 0.33   | 1      | <    | u   | 0.33     | 1      | <   | U       |
| EVRL GRAVES       Zubinimo Lane       CLS2       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS3       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       U       QLS4       1       I       QLS4       1       I       I <t< td=""><td>EXPLOSIVES</td><td>2,4-Dinitrotoluene</td><td>0.243</td><td>1</td><td>U</td><td>0.24</td><td>1</td><td></td><td></td><td>0.33</td><td></td><td></td><td></td><td>0.00</td><td></td><td>Ì</td><td>ŭ</td><td>0.33</td><td>1</td><td>è</td><td>U.</td><td>0.33</td><td>1</td><td>&lt;</td><td>Ų</td></t<>  | EXPLOSIVES       | 2,4-Dinitrotoluene         | 0.243  | 1     | U       | 0.24   | 1       |        |     | 0.33   |        |     |     | 0.00         |                     | Ì   | ŭ   | 0.33   | 1      | è    | U.  | 0.33     | 1      | <   | Ų       |
| Der LOSNEGE         Admine A definitionane         Display and a set of a set o | EXPLOSIVES       | 2,5-Dinitrotaluene         | 0.252  | 1     | U       | 0.25   | 1       | 0      |     | 0.33   | '      | ¢   | 0   | 0.05         | •                   | `   | Ŭ   | 0.00   |        |      | -   |          |        |     |         |
| GPUC_DNUCE         Admint-2.64dinitrolume         0.28         1         U         0.27         1         U         0.27         1         U         0.27         1         U         0.27         1         U         0.27         1         U         0.27         1         U         0.27         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.26         1         U         0.27         1         3         1         3         1         2         27.00         1         1         1         1         1         1         1         1         1         1         1         1         1 <th1< th="">         1         1</th1<>   | EXPLOSIVES       | 2-Amino-4,6-dinitrotoluene | 0.252  | 1     | Ų       | 0.25   | 1       | U<br>  |     |        |        |     |     |              |                     |     |     |        |        |      |     |          |        |     |         |
| BYRLOSINGE         MUX         21.4         I         U         21.2         I         U         21.4         I         U         21.4         I         U         21.4         I         U         21.4         I         U         21.4         I         U         22.4         I         U         0.25.4         I         U         U         1.4         U         1.4         U         1.4         U <th1.4< th="">         U         1.4</th1.4<>   | EXPLOSIVES       | 4-Amina-2,6-dinitrololuene | 0.252  | 1     | U       | 0.25   | 1       | 0      |     |        |        |     |     |              |                     |     |     |        |        |      |     |          |        |     |         |
| EYR OSNES         minipolame         0.243         1         U         0.243         1         U         0.245         1         U           EYR OSNES         Metholanes         0.243         1         U         0.244         1         U         0.244         1         U           EYR OSNES         Primoulanes         0.243         1         U         0.242         1         U         0.244         1         U           EYR OSNES         Primoulanes         0.243         1         U         0.826         1         U         0.817         1         U         0.817         1         U         0.812         1         U         0.812         1         U         0.817         1         U         0.817         1         2         1         3         1         C         U         3.4         1         2         1         1         4         1         1.4         1         1.4         1         1.4         1         1.4         1.4         1.4         1.4         1.4         1.4         1.4         1.4         1.4         1.4         1.4         1.4         1.4         1.4 <th1.4< th="">         1.4         <th1.4< th=""> <th1.4< td=""><td>EXPLOSIVES</td><td>нмх</td><td>2.14</td><td>í</td><td>U</td><td>2.12</td><td>1</td><td>U</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th1.4<></th1.4<></th1.4<>   | EXPLOSIVES       | нмх                        | 2.14   | í     | U       | 2.12   | 1       | U      |     |        |        |     |     |              |                     |     |     |        |        |      |     |          |        |     |         |
| EXPL GNVES         Nitrobinane         0.282         I         U         0.282         I         U         0.284         I         U         0.2170         I         1.44         U         1.44         U         1.44         U         1.44         U         1.44         U         1.44         1.44         1.44         1.44         1.44         1.44  | EXPLOSIVES       | m-Nitrololuene             | 0.243  | 1     | U       | 0.24   | 1       | U      |     |        |        |     |     |              |                     |     |     |        |        |      |     |          |        |     |         |
| EXPLOSIVES       ANimobilane       OLAS       I       U       O.244       I       U       O.244       I       U       O.244       I       U       O.244       I       U       O.244       I       U       O.244       I       U       O.244       I       U       O.244       I       U       O.244       I       U       O.244       I       U       O.244       I       U       O.244       I       U       O.244       I       U       O.244       I       U       O.243       I       U       O.243       I       U       O.244       I       U       O.243       I       U       O.243       I       U       O.243       I       U       O.243       I       U       O.243       I       U       O.243       I       U       O.243       I       U       O.244       I       U       O.243       I       U       O.243       I       U       O.243       I       U       O.243       I       U       O.217       I       O.43       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I  | EXPLOSIVES       | Nitrobenzene               | 0,252  | 1     | U       | 0.25   | 1       | U      |     |        |        |     |     |              |                     |     |     |        |        |      |     |          |        |     |         |
| EXPLOSIVES         PANDROLUME         CA70         I         U         O.24         I         U         O.242         I         U        U         U         U  | EXPLOSIVES       | o-Nitrotoluene             | 0.243  | 1     | ប       | 0.24   | 1       | Ų      |     |        |        |     |     |              |                     |     |     |        |        |      |     |          |        |     |         |
| EXA CONVES         POX         0.971         1         U         0.962         1         U           DEVELORVES         Terly         0.51         1         U         0.625         1         U           METALS         Auminum         METALS         Auminum         0.51         1         U         0.625         1         U         0.627         1         2         27.0         1         3         1         2         27.0         1         3         1         2         27.0         1         3         1         0         3         1         0         3         1         2         27.0         1         1         3         1         2         27.0         1        1         1 <th< td=""><td>EXPLOSIVES</td><td>p-Nitrotoluene</td><td>0.243</td><td>1</td><td>U</td><td>0.24</td><td>1</td><td>U</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>   | EXPLOSIVES       | p-Nitrotoluene             | 0.243  | 1     | U       | 0.24   | 1       | U      |     |        |        |     |     |              |                     |     |     |        |        |      |     |          |        |     |         |
| ENPLOSIMES         Telyl         0.631         1         U         0.625         1         U         9500         1         9500         1         0570         1         21700         1           METALS         Antmony         3         1         U         0.637         1         U         3         1         U         3         1         U         4.3         1         .         21700         1           METALS         Antmony         2.4         1         3.1         2         U         1.1         2         1.1         1.4         U         1.1         4             1.1         2.000         1.1         2.000         1.1         2.010         1.1         2.010         1.1         2.010         1.1         2.010         1.1         2.010         1.1         2.010         1.1         2.0100         1.1         2.0100 <th< td=""><td>EXPLOSIVES</td><td>ADX</td><td>0.971</td><td>i</td><td>U</td><td>0.962</td><td>1</td><td>U</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>   | EXPLOSIVES       | ADX                        | 0.971  | i     | U       | 0.962  | 1       | U      |     |        |        |     |     |              |                     |     |     |        |        |      |     |          |        |     |         |
| METALS       Auminum       Curron  | EXPLOSIVES       | Tetryl                     | 0.631  | 1     | U       | 0.625  | 1       | U      |     |        |        |     |     |              | ,                   |     |     | 65.70  |        |      |     | 21700    | 1      |     |         |
| METALS       Animony       N <t< td=""><td>METALS</td><td>Aluminum</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>9560</td><td>1</td><td></td><td></td><td>19500</td><td>1</td><td></td><td></td><td>6570</td><td>- L.</td><td></td><td></td><td>21700</td><td></td><td></td><td></td></t<>   | METALS           | Aluminum                   |        |       |         |        |         |        |     | 9560   | 1      |     |     | 19500        | 1                   |     |     | 6570   | - L.   |      |     | 21700    |        |     |         |
| METALS       Barium       Metals       Metals       Metals       Metals       Metals       Metals       Metals       Metals       Metals       Metals       Metals       Metals   | METALS           | Antimony                   |        |       |         |        |         |        |     | 3      | 1      | <   | U   | 3            | 1                   | <   | U   | 4.3    | 1      |      |     | 3<br>• 4 |        | •   | Ŷ       |
| METALS       Barlum       Image of the set of the          | METALS           | Arsenic                    |        |       |         |        |         |        |     | 2.4    | 1      |     |     | 3.2          | 1                   |     |     | 3.4    | 1      |      |     | 1.9      |        |     |         |
| METALS       Cadmium       I <t< td=""><td>METALS</td><td>Barium</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td>109</td><td>1</td><td></td><td></td><td>85.2</td><td>1</td><td></td><td></td><td>70.7</td><td>1</td><td></td><td></td><td>100</td><td></td><td></td><td>11</td></t<>   | METALS           | Barium                     | 1      |       |         |        |         |        |     | 109    | 1      |     |     | 85.2         | 1                   |     |     | 70.7   | 1      |      |     | 100      |        |     | 11      |
| METALS       Calum       110       1       397       1       896       1       163       1       163       1       163       1       163       1       163       1       163       1       163       1       163       1       163       1       163       1       163       1       163       1       1700       1       163       1       1700       1       1000       1       1       1000  | METALS           | Cadmium                    |        |       |         |        |         |        |     | 1      | 1      | <   | U   | 1            | 1                   | <   | U   | 1      | 1      | <    | U   | 700      |        |     | ų       |
| METALS       Chronium       10.3       1       16.4       1       9.1       1       2.1       1         METALS       Cobalt       2       1       7.7       1       3.8       1       1.11,7       1  | METALS           | Calcium                    |        |       |         |        |         |        |     | 1810   | 1      |     |     | 397          | 1                   |     |     | 896    | 1      |      |     | 103      |        |     |         |
| METALS       Cobalt       4.2       1       7.7       1       3.8       1       3.2       1         METALS       Copper'       8.1       1       8       1       7.7       1       3.8       1       20600       1         METALS       Iron       117300       1       17800       1       10100       1       20600       1       14.9       1       14.0       10.0       1       14.9       1       14.0       10.0       1       14.0       1  | METALS           | Chromium                   | ]      |       |         |        |         |        |     | 10.3   | 1      |     |     | 16.4         | 1                   |     |     | 9,1    | 1      |      |     | 21       |        |     |         |
| METALS       Copper       8.1       1       8       3       4.7       3       8,47       3       8       1       1,4       4       1,33       1       1,43       1       1,43       1       1,43       1       1,43       1       1,43       1       1,43       1       1,43       1       1,43 <th< td=""><td>METALS</td><td>Coball</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>4.2</td><td>1</td><td></td><td></td><td>7,7</td><td>1</td><td></td><td></td><td>3.8</td><td>1</td><td></td><td></td><td>3.2</td><td>4</td><td></td><td></td></th<>   | METALS           | Coball                     |        |       |         |        |         |        |     | 4.2    | 1      |     |     | 7,7          | 1                   |     |     | 3.8    | 1      |      |     | 3.2      | 4      |     |         |
| METALS       Iron       177600       1       10100       1       1       10100       1  | METALS           | Copper                     |        |       |         |        |         |        |     | 8.1    | 1      |     |     | 8            | 1                   |     |     | 4,7    | 1      |      |     | P,6      |        |     |         |
| METALS       Lead       11.7       1       14.4       1       10.3       1       14.9       1         METALS       Manganese       583       1       883       1       386       1       202       1       1         METALS       Manganese       338       1       10.1       1       2       0.0       1       1       202       1       1       203       1       237       1       29.4       1       1       203       1       202       1       1       203       1       202       1       1       203       1       202       1       1       203       1       203       1       203       1       203       1       203       1       203       1       1       203       1       1       203       1       1       203       1       1       203       1       1       203       1       1       203       1       1       1       203       1       1       203       1       1       203       1       1       203       1       1       203       1       1       203       1       203       1       203       1       20  | METALS           | ron                        |        |       |         |        |         |        |     | 17300  | 1      |     |     | 17600        | 1                   |     |     | 10100  | 1      |      |     | 20000    |        |     |         |
| METALS       Magnesium       B83       1       C  | METALS           | Lead                       |        |       |         |        |         |        |     | 11.7   | 1      |     |     | 14           | 1                   |     |     | 10.3   | 1      |      |     | 14.9     | 1      |     |         |
| Marganese       336       1       338       1       338       1       294       1         METALS       Marganese       0.1       1       4       0       0.1       1  | METALS           | Magneslum                  |        |       |         |        |         |        |     | 683    | 1      |     |     | 883          | 1                   |     |     | 402    | 1      |      |     | 1200     | 1      |     |         |
| Matrales       Marrouy       Matrales       Marrouy       Marrouy         METALS       Polassium       389 1       627 1       237 1       669 1         METALS       Silver       1       1       2       0       1       1       2       0       1       1       207 1       669 1         METALS       Silver       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       2       0       1       1       1       2       0       1       1       1       2       0       1 <td< td=""><td>METALS</td><td>Manganese</td><td>}</td><td></td><td></td><td></td><td></td><td></td><td></td><td>358</td><td>ា</td><td></td><td></td><td>135</td><td>1</td><td></td><td></td><td>336</td><td>1</td><td></td><td></td><td>29.4</td><td></td><td></td><td></td></td<>   | METALS           | Manganese                  | }      |       |         |        |         |        |     | 358    | ា      |     |     | 135          | 1                   |     |     | 336    | 1      |      |     | 29.4     |        |     |         |
| METALS       Potassium       B009       I       227       I       227       I       009       I         METALS       Selenium       I   | METALS           | Mercury                    |        |       |         |        |         |        |     | 0.1    | 1      | <   | U   | 0.1          | 1                   | <   | U   | 0.1    | 1      | <    | U   | 0.1      | 1      | <   | 0       |
| METALS       Selenium       1       1       C       U       <   | METALS           | Potassium                  |        |       |         |        |         |        |     | 393    | 1      |     |     | 627          | 1                   |     |     | 237    | 1      |      |     | 669      | 1      |     |         |
| METALS       Silver       1       1       -       U       1       1       -       U       1       1       -       U       1       1       -       U       1       1       -       U       1       1       -       U       1       1       -       U       1 <th< td=""><td>METALS</td><td>Selenium</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>1</td><td>&lt;</td><td>: ប</td><td>1</td><td>1</td><td>4</td><td>U</td><td>1</td><td>1</td><td></td><td>. 0</td><td>1</td><td>1</td><td>&lt;</td><td>U<br/>II</td></th<>  | METALS           | Selenium                   |        |       |         |        |         |        |     | 1      | 1      | <   | : ប | 1            | 1                   | 4   | U   | 1      | 1      |      | . 0 | 1        | 1      | <   | U<br>II |
| METALS       Strontium       11.6       1       10.6       1       17       1         METALS       Zinc       21.9       1       24.2       1       11.8       1       25.5       1         RANGE_ORGANICS       Carbon Range C12-C28       57.7       1       U       66.3       1       U       24.2       1       11.8       1       25.5       1         RANGE_ORGANICS       Carbon Range C12-C28       57.7       1       U       66.3       1       U       24.2       1       11.8       1       25.5       1         RANGE_ORGANICS       Carbon Range C2-C28       57.7       1       U       66.3       1       U       33.1       0       0.33       1       2       0.33       1       2       0.33       1       2       0.33       1       2       0.33       1       2       0.33       1       2       0.33       1       2       0.33       1       2       0.33       1       2       0.33       1       2       0.33       1       2       0.33       1       2       0.33       1       2       0.33       1       2       0.33       1       2       0.3  | METALS           | Silver                     |        |       |         |        |         |        |     | 1      | 1      |     | : U | 1            | 1                   | •   | U   | 1      | 1      | •    | U   | 1        | 1      | <   | U       |
| METALS       Zinc       21.9       1       24.2       1       11.8       1       25.5       1         RANGE_ORGANICS       Carbon Range C12-C28       57.7       1       U       66.3       1       U       1       1.8       1       25.5       1         RANGE_ORGANICS       Carbon Range C12-C28       57.7       1       U       66.3       1       U       1       1.8       1       25.5       1       1       1       25.5       1       1       1       25.5       1       1       1       25.5       1       1       1       25.5       1       1       1       25.5       1       1       1       25.5       1       1       1       1       25.5       1       1       1       25.5       1       1       1       1       25.5       1  | METALS           | Strontium                  |        |       |         |        |         |        |     | 18.3   | 1      |     |     | 11.6         | 1                   |     |     | 10.6   | 1      |      |     | 1/       |        |     |         |
| RANGE_ORGANICS       Carbon Range C12-C28       57.7       1       U       66.3       1       U         RANGE_ORGANICS       CARBON RANGE C28-C35       57.7       1       U       66.3       1       U         RANGE_ORGANICS       Carbon Range C28-C35       57.7       1       U       66.3       1       U         RANGE_ORGANICS       Carbon Range C6-C12       57.7       1       U       66.3       1       U         SEMIVOLATILES       1.2-Dichlorobenzene       57.7       1       U       66.3       1       U         SEMIVOLATILES       1.2-Dichlorobenzene       57.7       1       U       66.3       1       U         SEMIVOLATILES       1.2-Dichlorobenzene       57.7       1       U       66.3       1       U         SEMIVOLATILES       1.2-Dichlorobenzene       57.7       1       U       66.3       1       U       0.33       1       C       U       0.33       1       U       0.33       1       U       0.33       1       U       0.33       1       U       0.33       1       U       0.33       1       U       0.33       1       U       0.33       1       U   | METALS           | Zinc                       |        |       |         |        |         |        |     | 21.9   | 1      |     |     | 24.2         | 1                   |     |     | 11.8   | 1      |      |     | 25.5     | '      |     |         |
| RANGE_ORGANICS       CARBON RANGE C28-C35       57.7       1       U       66.3       1       U         RANGE_ORGANICS       Carbon Range C6-C12       57.7       1       U       66.3       1       U         SEMIVOLATILES       1.2.4-Trichiorobenzene       57.7       1       U       66.3       1       U         SEMIVOLATILES       1.2.6-Trichiorobenzene       0.33       1       C       U       0.33       1       U       0.  | BANGE ORGANICS   | Carbon Range C12-C28       | 57.7   | 1     | U       | 66.3   |         | I U    |     |        |        |     |     |              |                     |     |     |        |        |      |     |          |        |     |         |
| RANCE_ORGANICS       Carbon Range C6-C12       57.7       1       U       66.3       1       U         SEMIVOLATILES       1.2.4-Trichlorobenzene       1.2.4-Trichlorobenzene       0.33       1       <   | RANGE OBGANICS   | CARBON RANGE C28-C35       | 57.7   | 1     | U       | 66.3   |         | I U    |     |        |        |     |     |              |                     |     |     |        |        |      |     |          |        |     |         |
| SEMIVOLATILES       1.2.4-Trichlorobenzene       0.33       1       <   | BANGE OBGANICS   | Carbon Range C6-C12        | 57.7   | 1     | U       | 66.3   |         | 1 U    |     |        |        |     |     |              |                     |     |     |        |        |      |     |          |        |     |         |
| SEMIVOLATILES       1,2-Dichlorobenzene       0,33       1       <  | SEMIVOLATILES    | 1.2.4-Trichlorobenzene     |        |       |         |        |         |        |     | 0.33   | 1      | •   | ¢υ  | 0.33         | 1                   |     | : U | 0.33   | 1      | •    | : U | 0.33     | 1      | <   | 0       |
| SEMIVOLATILES       1.3-Dichlorobenzene       0.33       1       V       0.33 <td>SEMIVOLATILES</td> <td>1.2-Dichlorobenzene</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Q.33</td> <td>1</td> <td></td> <td>e U</td> <td>0.33</td> <td>1</td> <td></td> <td>: U</td> <td>0.33</td> <td>1</td> <td>•</td> <td>: U</td> <td>0.33</td> <td>1</td> <td>&lt;</td> <td>U<br/>U</td>   | SEMIVOLATILES    | 1.2-Dichlorobenzene        |        |       |         |        |         |        |     | Q.33   | 1      |     | e U | 0.33         | 1                   |     | : U | 0.33   | 1      | •    | : U | 0.33     | 1      | <   | U<br>U  |
| SEMIVOLATILES       1.4-Dichlorobenzane       0.33       1       2       0       0       0  | SEMIVOLATILES    | 1 3-Dichlorobenzene        |        |       |         |        |         |        |     | 0.33   | 1      |     | < U | 0.33         | 1                   |     | < l | 0.33   | 1      | •    | : 0 | 0.33     | 1      | <   | 0       |
| SEMIVOLATILES       2.4.5-Trichlorophenol       1.65       1       U       1.65       1       U       1.65       1       U       1.65       1       U       1.65       1       U       1.65       1       U       1.65       1       U       1.65       1       U       1.65       1       U       1.65       1       U       1.65       1       U       1.65       1       U       1.65       1       U       0.33<   | SEMIVOLATILES    | 1.4-Dichlorobenzene        |        |       |         |        |         |        |     | 0.33   | 1      |     | < U | 0.33         | 1                   |     | e i | 0.33   | 1      |      | ¢ U | 0,33     | 1      | <   | 0       |
| SEMIVOLATILES       2.4.6.Trichlorophenol       0.33       1       U       0.33<   | SEMIVOLATILES    | 2.4.5-Trichlorophenol      |        |       |         |        |         |        |     | 1.65   | 1      |     | < U | 1.65         | 1                   |     | < L | 1.65   | 1      |      | < U | 1.65     |        |     | U<br>   |
| SEMIVOLATILES       2.4-Dichlorophenol       0.33       1       U       0.33       1       U       0.33       1       C       U <t< td=""><td>SEMINOLATILES</td><td>2.4.6-Trichlorophenol</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.33</td><td>1</td><td>; ,</td><td>&lt; U</td><td>0.33</td><td>1</td><td>i .</td><td>c i</td><td>0.33</td><td>1</td><td></td><td>c U</td><td>0.33</td><td></td><td>· &lt;</td><td>. U</td></t<>   | SEMINOLATILES    | 2.4.6-Trichlorophenol      |        |       |         |        |         |        |     | 0.33   | 1      | ; , | < U | 0.33         | 1                   | i . | c i | 0.33   | 1      |      | c U | 0.33     |        | · < | . U     |
| SEMIVOLATILES         2.4-Dimethylphenol         0.33         1         U         0.33         1         U         0.33         1         C         U         0.33         <  | SEMIVOLATIE ES   | 2.4-Dichlorophenol         | Ì      |       |         |        |         |        |     | 0.33   | 1      |     | < U | 0.33         | 1                   |     | < ( | 0.33   | 1      |      | e U | 0.33     |        | •   | . 0     |
| SEMIVOLATILES         2.4-Dinitrophenol         1.65         1         U         1.65         1         U         1.65         1         U         1.65         1         C         U         1.65         1         C         U         1.65         1         C         U         1.65         1         C         U         1.65         1         C         U         1.65         1         C         U         1.65         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1         C         U         0.33         1 <t< td=""><td>SEMIVOLATILES</td><td>2.4-Dimethylohenol</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.33</td><td>1</td><td>   </td><td>&lt; U</td><td>0.33</td><td></td><td></td><td>&lt;١</td><td>0.33</td><td>•</td><td></td><td>&lt; U</td><td>0.33</td><td></td><td>ι «</td><td>: U</td></t<>   | SEMIVOLATILES    | 2.4-Dimethylohenol         |        |       |         |        |         |        |     | 0.33   | 1      |     | < U | 0.33         |                     |     | <١  | 0.33   | •      |      | < U | 0.33     |        | ι « | : U     |
| SEMIVOLATILES         2-Chloronaphihalene         0.33         1         U         0.33         1         U         0.33         1    | SEMIVOLATILES    | 2.4-Dinitrophenol          |        |       |         |        |         |        |     | 1.65   | 1      | i - | < દ | 1.65         | •                   |     | < l | ) 1.65 |        | i -  | < U | 1,65     |        | i « | : U     |
| SEMINOLATIES 2-Chlorophenel 0.33 1 < U 0.33 1 < U 0.33 1 < U 0.33 1 < U   | SEMIVOLATILES    | 2-Chloronaphthalene        | 1      |       |         |        |         |        |     | 0.33   | 1      |     | < L | 0.33         |                     | 1   | < ا | J 0.33 |        | 1    | < U | 0.33     |        | •   | : 0     |
|   | SEMIVOLATILES    | 2-Chlorophenol             |        |       |         |        |         |        |     | 0.33   | 1      | f   | < l | 0.33         |                     | 1   | < 1 | 0.33   |        | 1    | < U | 0.33     |        |     | : U     |

Table 3-106

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



|  | Conce  | ntration | s of Ci | nemi    | cals               | in S   | oil San              | nples   | As   | 50                      | cia | tec     | i with          | Sum   | ip 1        | 18     |                  |   |                 | ·          |                |  |           |             |
|--|--|----------|---------|---------|--------------------|--|----------------------|---------|--|-------------------------|-----|---------|-----------------|---|-------------|--------|------------------|---|-----------------|------------|----------------|--|-----------|-------------|
| (SUMP) = SUMP118<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH | MP] = SUMP118           :ATION _CODE           #PLE_NO           #PLE_DATE           >TH           #PLE_PURPOSE           1 Group           Parameter (Units = mg/kg)           #UCI ATLES |          |         | 1<br>01 | 35SU<br>35-SM<br>9 | MP118<br>P118-S<br>I/19/200<br>4 • 4 F1<br>BEG | -SB01<br>801-02<br>6 | U<br>LH | I-S111<br>-S118-<br>7/8/19<br>0 - 2<br>REC | 8-01<br>01_<br>93<br>Ft | 1   |         | LH<br>LH-3<br>7 | -S118-0<br>S118-01<br>//8/1993<br>2 • 4 Ft<br>REG | )1<br>_2    |        | ե                | H-S118-<br>-S118-0<br>7/8/199<br>0 - 2 F<br>REG | 02<br> 2_1<br>3 |            | ՄԲ<br>ԼԲԻ<br>Շ | -S118-0<br>S118-0<br>7/8/1993<br>2 - 4 Ft<br>REG | 12<br>!_2 |             |
| SAMPLE_PURPOSE   | • • • • • • • • • • • • • • • • • • •  | Booult   |         | vo      | Rosult             | nii  | 10 VO                | Result  | DIL  | Ē                       | ٥ ١ | vo      | Result          | DIL   | LQ          | VQ     | Result           | DIL   | LQ              | VQ         | Result         | DIL  | LQ        | VQ          |
| Test Group   | Parameter (Units = mg/kg)  | nesui    |         |         | 1100010            | 0.0  |                      | 0.33    | 1  |                         | <   | υ       | 0.33            | í   | <           | υ      | 0.33             | 1   | <               | U          | 0.33           | 1  | <         | ŰU          |
| SEMIVOLATILES  | 2-Metrymaphinalene   |          |         |         |                    |  |                      | 0.33    | 1  |                         | <   | U       | 0.33            | 1   | <           | U      | 0.33             | 1   | <               | ប          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | 2-Metryiprieral  |          |         |         |                    |  |                      | 1.65    | 1  |                         | <   | U       | 1.65            | 1   | <           | υ      | 1.65             | 1   | <               | υ          | 1.65           | 1  | <         | U           |
| SEMIVOLATILES  | 2-Nutroannine  |          |         |         |                    |  |                      | 0.33    | 1  |                         | <   | U       | 0.33            | 1   | <           | U      | 0.33             | 1   | <               | U          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | 2-Nitrophenol  |          |         |         |                    |  |                      | 0.65    | 1  |                         | <   | U       | 0.65            | 1   | <           | U      | 0.65             | 1   | <               | U          | 0.65           | 1  | <         | U           |
| SEMIVOLATILES  | 3,3-Dichlorobenzioine  | ļ        |         |         |                    |  |                      | 1.65    | 1  |                         | <   | U       | 1,65            | 1   | <           | U      | 1.65             | 1   | <               | U          | 1.65           | 1  | <         | Ų           |
| SEMIVOLATILES  | 3-twittoaniline  | 1        |         |         |                    |  |                      | 1.65    | 1  | ,                       | <   | Ū       | 1.65            | 1   | <           | U      | 1.65             | 1   | <               | U          | 1.65           | 1  | <         | Ų           |
| SEMIVOLATILES  | 4.5-Dinkro-2-methylphenol  |          |         |         |                    |  |                      | 0.33    | 1  |                         | <   | Ū       | 0.33            | 1   | <           | U      | 0.33             | 1   | <               | IJ         | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | 4-Bromophenyi phenyi emer  |          |         |         |                    |  |                      | 0.65    | 1  |                         | <   | U       | 0.65            | 1   | <           | U      | 0.65             | 1   | <               | ປ          | 0.65           | 1  | <         | U           |
| SEMIVOLATILES  | 4-Chioro-3-methylphenol  | j        |         |         |                    |  |                      | 0.65    | 1  |                         | <   | U       | 0.65            | 1   | <           | U      | 0.65             | 1   | <               | U          | 0.65           | 1  | <         | Ų           |
| SEMIVOLATILES  | 4-Chloroaniline  |          |         |         |                    |  |                      | 0.33    | 1  |                         | <   | ŭ       | 0.33            | 1   | <           | U      | 0.33             | 1   | <               | υ          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | 4-Ghlorophenyi phenyi ether  |          |         |         |                    |  |                      | 0.33    | ,  |                         | è   | ŭ       | 0.33            | 1   | <           | Ú      | 0.33             | 1   | ~               | U          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | 4-Methylphenol   |          |         |         |                    |  |                      | 1.65    | 1  |                         | è   | Ŭ.      | 1.65            | 1   | ۲           | U      | 1,65             | 1   | <               | U          | 1.65           | 1  | <         | U           |
| SEMIVOLATILES  | 4-Nitroaniline   |          |         |         |                    |  |                      | 1.65    | 1  |                         | è   | Ū.      | 1.65            | 1   | <           | U      | 1.65             | 1   | <               | U          | 1.65           | 1  | <         | U           |
| SEMIVOLATILES  | 4-Nitrophenol  |          |         |         |                    |  |                      | 0.33    | 1  |                         | è   | Ū.      | 0.33            | 1   | <           | U      | 0.33             | 1   | <               | U          | 0.33           | 1  | ۲         | U           |
| SEMIVOLATILES  | Acenaphthane   |          |         |         |                    |  |                      | 0.00    | , 1  |                         | 2   | n       | 0.33            | 1   | <           | U      | 0.33             | 1   | <               | U          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | Acenaphihylene   |          |         |         |                    |  |                      | 0.33    | i  |                         | 2   | ŭ       | 0.33            | 1   | <           | Ū      | 0.33             | 1   | <               | บ          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | Anthracene   |          |         |         |                    |  |                      | 0.00    | ,<br>K                                     |                         | Ĵ   | -11     | 0.33            | 1   | ~           | Ū.     | 0.33             | 1   | <               | U          | 0.33           | 1  | ¢         | U           |
| SEMIVOLATILES  | Benzo(a)anthracene   |          |         |         |                    |  |                      | 0.33    |  |                         | 2   | ы<br>П  | 0.33            | 1   | è           | ŭ      | 0.33             | 1   | <               | U          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | Benzo(a)pyrene   |          |         |         |                    |  |                      | 0.00    | 1  |                         | 2   | ų.      | 0.33            | 1   | ć           | Ū.     | 0.33             | 1   | <               | U          | 0,33           | 1  | <         | U           |
| SEMIVOLATILES  | Benzo(b)fluoranthene   |          |         |         |                    |  |                      | 0.00    |  |                         | 2   | υ.<br>υ | 0.00            |   |             | Ū.     | 0.33             | 1   | ć               | U          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | Benzo(ghi)perylene   |          |         |         |                    |  |                      | 0.00    |  |                         | 2   |         | 0.00            | ÷   | Ż           | Ū      | 0.33             | 1   | <               | U          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | Benzo(k)fluoranthene   |          |         |         |                    |  |                      | 0.33    |  |                         | 2   | 11      | 1.65            |   |             | 11     | 1.65             | 1   | <               | Ŭ          | 1.65           | 1  | <         | U           |
| SEMIVOLATILES  | Benzoic Acid   |          |         |         |                    |  |                      | 0.00    |  | (<br>(                  | 2   | ü       | 0.65            | , ,   | 2           | ň      | 0.65             | 1   | <               | U          | 0.65           | 1  | <         | U           |
| SEMIVOLATILES  | Benzyl Alcohol   | 1        |         |         |                    |  |                      | 0.00    |  | ;<br>;                  | Ĵ   | ų<br>II | 0.00            |   | 2           | Ŭ      | 0.33             | 1   | <               | Ū          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane   |          |         |         |                    |  |                      | 0,33    |  | 1                       | ۲.  | 0       | 0.00            |   | 2           | 10     | 0.33             | 1   |                 | Ū          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | bis(2-Chlaroethyl)ether  | ļ        |         |         |                    |  |                      | 0.33    |  | 1<br>4                  | Ś   | 0       | 0.33            | , 1   | 2           | U U    | 0.33             | 1   | ~               | Ŭ          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | bis(2-Chloroisopropyl)ether  |          |         |         |                    |  |                      | 0.33    |  | 1                       | 5   |         | 0.00            |   | 2           | U U    | 0.33             | . 1   |                 | U          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate   |          |         |         |                    |  |                      | 0.33    |  | •                       | ŝ   |         | 0.00            | 4   | 2           | 11     | 0.33             | 1   | 2               | Ū          | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | Butyl benzyl phthalate   |          |         |         |                    |  |                      | 0.33    |  | }<br>4                  | \$  | Ц       | 0.00            | 1   | 2           | ii ii  | 0.33             | . 1   | 2               | . u        | 0.33           | 1  | <         | U           |
| SEMIVOLATILES  | Chrysene   |          |         |         |                    |  |                      | 0.33    |  | 1                       | <   |         | 0.00            |   | 2           | 1      | 0.33             | . 1   | 2               | . 1        | 0.33           | 1  | <         | ປ           |
| SEMIVOLATILES  | Dibenzo(a.h)anthracene   |          |         |         |                    |  |                      | 0.33    |  | 1                       | <   |         | 0.00            |   | 2           |        | 0.00             |   | 2               | - H        | 0.33           | 1  | <         | Ū           |
| SEMIVOLATILES  | Dibenzofuran   |          |         |         |                    |  |                      | 0.33    |  | 1                       | <   | 0       | 0.33            | ,   |             | о<br>п | . 0.35           | , ,<br>. 1                                      | 2               |            | 0.33           | 1  | ć         | U           |
| SEMIVOLATILES  | Diethyl phthalate  |          |         |         |                    |  |                      | 0.33    |  | )<br>4                  | <   |         | 0.33            |   | Č           | 1      | 0.00             | , .<br>1  |                 | έŪ         | 0.33           | 1  | <         | U.          |
| SEMIVOLATILES  | Dimethyl phthalate   |          |         |         |                    |  |                      | 0.33    |  | 1                       | ٢.  |         | 0.00            | 1   |             | 1      | 0.00             | , ,<br>2 1                                      |                 | - ŭ        | 0.33           | 1  | <         | . U         |
| SEMIVOLATILES  | di-n-Butyl phthalate   | ļ        |         |         |                    |  |                      | 0.33    |  | 1                       | <   | 0       | 0.33            | ،<br>۱  |             | - U    | 0.00             | , i<br>1  | 2               | . и        | 0.33           | -  |           | . Ū         |
| SEMIVOLATILES  | di-n-Octyl phthalate   | ł        |         |         |                    |  |                      | 0.33    |  | 1                       | <   |         | 0.33            |   |             | 0      | 0.00             | , ,<br>, ,                                      |                 | - 11       | 0.33           |  |           | : ป         |
| SEMIVOLATILES  | Fluoranthene   |          |         |         |                    |  |                      | 0,33    |  | 1                       | <   | 0       | 0,33            | ا<br>ب  |             | U<br>U | 0.00             | , ,<br>2 1                                      |                 | - 11       | 0.33           |  |           | εŪ          |
| SEMIVOLATILES  | Fluorene   | ļ        |         |         |                    |  |                      | 0.33    | 6  | 1                       | <   |         | 0,33            |   |             |        | 0.0              | , ,<br>, ,                                      |                 | 2 11       | 0.33           |  |           | 2 U         |
| SEMIVOLATILES  | Hexachlorobenzene  |          |         |         |                    |  |                      | 0.33    | ļ  | 1                       | <   | 0       | 0.33            |   | <           | . V    | 0.0              | 2 1<br>2 1                                      |                 | - 16       | 0.33           |  |           | 2 U         |
| SEMIVOLATILES  | Hexachiorobutadiene  |          |         |         |                    |  |                      | 0,33    | }  | 1                       | <   | U.      | 0.33            | -   |             |        | i 0.0-           | , ,<br>, ,                                      |                 |            | 0,00           |  |           | - 11        |
| SEMIVOLATILES  | Hexachlorocyclopentadiene  |          |         |         |                    |  |                      | 0.33    | 3  | 1                       | <   | U<br>   | 0.33            | 1   | <           | U<br>1 | 0.3              | )<br>  (  |                 | 2 U        | 0.00           |  | í,        | - U         |
| SEMIVOLATILES  | Hexachloroethane   |          |         |         |                    |  |                      | 0.33    | 3  | 1                       | <   | 0       | 0.33            |   | <           |        | 1 (J.)<br>1 0 0  | ا در<br>• م                                     |                 | - 1        | 0.00           |  | ι.        | . 0<br>2 11 |
| SEMIVOLATILES  | Indenc(1,2,3-cd)pyrene   |          |         |         |                    |  |                      | 0.33    | 3  | 1                       | <   | U       | 0.33            | ]   | <           | : L    | , 0,3            | 0 )<br>0 4                                      |                 |            | 0.00           |  | 1         | . u         |
| SEMIVOLATILES  | Isophorone   | ļ        |         |         |                    |  |                      | 0.33    | 3  | 1                       | <   | U       | 0.33            | 1   | <pre></pre> |        | ) (J.3)<br>I 0.7 | 0 I   |                 | s u<br>2 r | 0.00           |  |           | - U         |
| SEMIVOLATILES  | Naphthalene  |          |         |         |                    |  |                      | 0.33    | 3  | 1                       | <   | U       | 0.33            | 1   |             | ļ      | , 0.3<br>, 0.5   | ו נ<br>י  |                 |            | 0.00           |  | 1         | , u         |
| SEMIVOLATILES  | Nitrobenzene   |          |         |         |                    |  |                      | 0.33    | 3  | 1                       | <   | U       | 0.33            |   | •           | : L    | 1 0.3            | ა I<br>ი -                                      |                 |            | 0.00           |  | 1         | . U         |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine   |          |         |         |                    |  |                      | 0.33    | 3  | 1                       | <   | Ų       | 0.33            |   | · <         |        | J 0,3            | a I   | I               |            | . v.aa         |  |           | . 0         |

Table 3-106

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

|                  | Concer                         | trations of Q | Chen | nicals i | in S   | oil Sa | mples    | Ass     | soc     | iate    | ed with  | Sun      | 1p 1 | 18          |        |        |          |     |        |        |    |             |
|------------------|--------------------------------|---------------|------|----------|--------|--------|----------|---------|---------|---------|----------|----------|------|-------------|--------|--------|----------|-----|--------|--------|----|-------------|
| (SUMP) = SUMP118 |                                |               |      |          |        |        |          |         |         |         |          | L.C110.  | 11   |             | 1 H    | -\$118 | .02      |     | LB     | S118-0 | 2  |             |
| LOCATION _CODE   |                                | 35SUMP118-SI  | B01  | 355UN    | /P118  | -5801  | E)       | H-5118  | PQ1     |         | L        | 01101    | 1.2  |             | 14.4   | S118./ | 102      |     | 18.5   | 118-02 | 2  |             |
| SAMPLE_NO        |                                | 35-SMP118-SB0 | 1-01 | 35-SMP   | 118-5  | 801-02 | LH       | -5118-  | 01_1    |         | LL       | V01101   | -2   |             | 7      | 19/100 | 3        |     | 7/     | R/1993 |    |             |
| SAMPLE_DATE      |                                | 9/19/2006     |      | 9/       | 19/200 | 36     |          | //8/195 | 93<br>  |         |          | 110/1330 | ,    |             | ,      | 0.25   | ŀ        |     |        | - 4 Ft |    |             |
| DEPTH            |                                | .55 Ft        |      | 4        | 4-4 F  | t      |          | 0-21    | -1      |         |          | DEG      |      |             |        | REG    | •        |     | •      | REG    |    |             |
| SAMPLE_PURPOSE   |                                | REG           |      |          | HEG    |        | <b>6</b> | REG     |         | 20      | Deput    |          | 10   | vo          | Recuit | DI     | 10       | vo  | Besult | DIL    | LΟ | VQ          |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LO | a va | Result   | Dit    | LQ VQ  | Result   | - DiL   | <u></u> | 11      | 2 Hesuat |          | - 10 |             | 0.33   | 1      | ~        | 0   | 0.33   | 1      | <  | Ū           |
| SEMIVOLATILES    | n-Nitrosodiphenylamine         |               |      |          |        |        | 0.33     | 1       | Ś       | 0<br>11 | 1.65     |          | 2    | ŭ           | 1.65   | 1      | Ż        | Ŭ   | 1.65   | í      | <  | Ū           |
| SEMIVOLATILES    | Pentachlorophenol              |               |      |          |        |        | 0.00     |         | Ĵ       |         | 0.00     | ÷        | 2    | ŭ           | 0.33   | 1      | 2        | ũ   | 0.33   | 1      | <  | υ.          |
| SEMIVOLATILES    | Phenanthrene                   |               |      |          |        |        | 0.00     | 1       | Ĵ       | 1       | 0.00     | į        | 2    | 1E          | 0.33   | 1      | k        | Ū   | 0.33   | 1      | <  | U           |
| SEMIVOLATILES    | Phenol                         | ļ             |      |          |        |        | 0.33     | 4       | 2       | 11      | 0.00     | í        | 2    | ň           | 0.33   | 1      | è        | Ű   | 0.33   | 1      | <  | υ           |
| SEMIVOLATILES    | Pyrene                         | 1             |      |          |        |        | 0.55     | ,       | •       | Ŷ       | 0,00     | •        | •    | Ŭ           | 0.00   |        |          | -   |        |        |    |             |
| VOLATILES        | 1.1.1.2-Tetrachloroethane      |               |      | 0.00626  |        | Ų      | 0.005    |         |         | 11      | 0.005    | •        |      | П           | 0.005  | 1      | <        | U   | 0.005  | 1      | <  | U           |
| VOLATILES        | 1,1,1-Trichloroethane          |               |      | 0.00626  | 1      | 0      | 0.005    |         | Ĵ       | 0       | 0,000    |          | 2    | ŭ           | 0.005  | 1      | ż        | ย   | 0.005  | 1      | <  | U           |
| VOLATILES        | 1,1,2,2-Tetrachloroethane      | 1             |      | 0.00626  | 1      | 0      | 0.005    | -       |         | U<br>11 | 0.005    | 1        | C    | ň           | 0.000  | ÷      | è        | ŭ   | 0.005  | 1      | <  | Ų           |
| VOLATILES        | 1,1.2-Trichloroethane          |               |      | 0.00526  | )      | U      | 0.005    | 1       |         |         | 0.005    | ,<br>,   | C    | ŭ           | 0.000  |        | è        | ŭ   | 0.005  | 1      | <  | U           |
| VOLATILES        | 1.1-Dichloroethane             |               |      | 0.00526  | 1      | U      | 0.005    |         | ×       | 1       | 0.005    |          | 2    | 11          | 0.005  | ÷      | ż        | Ű   | 0.005  | 1      | <  | U           |
| VOLATILES        | 1,1-Dichloroethene             |               |      | 0.00626  | 1      |        | 0.005    |         | ٠       | 0       | 0.003    | ,        | `    | Ũ           | 0.000  |        | -        | -   | ••••   |        |    |             |
| VOLATILES        | 1,1-Dichloropropene            |               |      | 0.00626  | 1      | U      |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |
| VOLATILES        | 1.2.3-Trichlorobenzene         |               |      | 0.00626  | 1      | U      |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |
| VOLATILES        | 1.2.3 Trichloropropane         | ł             |      | 0.00626  | 1      | 0      |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |
| VOLATILES        | 1,2,4-Trichlorobenzene         |               |      | 0.00626  | 1      | U      |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |
| VOLATILES        | 1.2.4-Trimethylbenzene         |               |      | 0.00626  | 1      | U      |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    |               |      | 0.00626  | 1      | U      |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |
| VOLATILES        | 1.2-Dibromoethane              |               |      | 0.00626  | 1      | U      |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |
| VOLATILES        | 1,2-Dichlorobenzene            |               |      | 0.00626  | 1      | U      |          |         |         |         | 0.000    |          | ,    |             | 0.005  | 1      |          | н   | 0.005  | 1      | 5  | U           |
| VOLATILES        | 1.2-Dichloroefhana             |               |      | 0.00628  | 1      | U      | 0.005    | 1       | <       | ւ       | 0.000    | . I.     | 5    | н           | 0.005  |        | Ì        | ŭ   | 0.005  | 1      | ę  | Ū           |
| VOLATILES        | 1,2-Dichloraethene             | 1             |      |          |        |        | 0,005    | 1       | <       | ι       | J 0.005  |          |      | U<br>11     | 0.005  | -      | 2        | 11  | 0.005  | 1      | Ż  | Ŭ           |
| VOLATILES        | 1,2-Dichloropropane            |               |      | 0.00626  | 1      | U      | 0.005    | 1       | <       | ι       | 0.005    | 1        | ~    | U           | 0.004  |        | `        | 0   | 0.000  |        |    | Ū           |
| VOLATILES        | 1.2-Dimethylbenzene (o-Xylene) |               |      | 0.00626  | 1      | U      |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |
| VOLATILES        | 1.3.5 Trimethylbenzene         |               |      | 0.00625  | 1      | U      |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |
| VOLATILES        | 1.3-Dichlorobenzene            |               |      | 0.00626  | 1      | U      |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |
| VOLATILES        | 1,3-Dichloropropane            |               |      | 0.00626  | 1      | 0      |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |
| VOLATILES        | 1.4-Dichlorobenzene            | ł             |      | 0.00626  | 1      | 0      |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |
| VOLATILES        | 2.2-Dichloropropane            |               |      | 0.00626  | 1      | U      |          |         |         |         | 0.05     |          |      | 11          | 0.05   | 1      |          | 11  | 0.05   | 1      | 6  | ป           |
| VOLATILES        | 2-Butanone                     |               |      | 0.0125   | 1      | U      | 0.05     | 1       | <       |         | 0 0.05   |          | Ĵ    | 51          | 0.00   | ÷      | 2        | П   | 0.00   | 1      | ć  | Ŭ           |
| VOLATILES        | 2-Chloroethyl vinyl ether      |               |      | 0.0125   | 1      | U      | 0.01     | 1       |         | : (     | 0 0.01   | ,        | ~    | U           | 0.01   |        |          | v   | 0.01   |        |    | -           |
| VOLATILES        | 2-Chlorotaluene                |               |      | 0.00626  | i 1    | U      |          |         |         |         |          |          |      |             | 0.05   | 1      |          | 11  | 0.05   | 1      | ~  | IJ          |
| VOLATILES        | 2-Hexanone                     |               |      | 0.0125   | 1      | U      | 0.05     | 1       | <       | : (     | 0 0.05   |          | ×    | 0           | 0.05   | ,      |          | v   | 0.00   |        |    | ŭ           |
| VOLATILES        | 4-Chlorotoluene                |               |      | 0.00626  | 5 1    | U      |          | ,       |         |         |          |          |      |             | 0.1    | 1      | ,        | п   | 01     | 1      | ć  | Ð           |
| VOLATILES        | Acelone                        |               |      | 0.0125   | 1      | U      | 0.1      |         | <       |         | U 0.1    |          |      |             | 0.1    | 4      | Ĵ        | Н   | 0.005  | i      | ę  | - Ū         |
| VOLATILES        | Benzene                        |               |      | 0.00626  | 5 1    | U      | 0.005    | 5 1     | •       | < (     | 0 0.00   |          |      |             | 0.000  |        | `        |     | 0.000  |        |    | ·           |
| VOLATILES        | Bromobenzene                   |               |      | 0.00626  | 3 1    | U      |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |
| VOLATILES        | Bromochloromethane             | Į             |      | 0.00626  | 5 1    | U      |          |         |         |         |          |          |      | . н         | 0.005  |        |          | н   | 0.005  | 1      | e  | н           |
| VOLATILES        | Bramodichloromethane           | 1             |      | 0.00626  | 5 1    | U      | 0.005    | 5 I     | •       | < 1     | 0.00     |          |      | : 0         | 0.005  |        |          |     | 0.005  |        | )  | . 11        |
| VOLATILES        | Bromolorm                      |               |      | 0.00626  | 5 1    | υ      | 0.005    | 5 1     | •       | < !     | 0.00     | 5 1      | <    | : U         | 0.005  |        |          | 11  | 0.005  |        | Ĵ  | , II        |
| VOLATILES        | Bromomethane                   |               |      | 0.0125   | . 1    | U      | 0.01     | . 1     |         | < !     | 0 0.0    | . 1      | <    | : U         | 0.01   |        | 5        | 1   | 0.05   | 1      | )  | , u         |
| VOLATILES        | Carbon disulfide               | 1             |      | 0.00626  | 6 '    | I U    | 0.00     | 5 1     | i •     | <       | 0.00     | 5        | 4    | : U         | 0.005  |        |          |     | 0.005  | 1      | )  | . 1         |
| VOLATILES        | Carbon tetrachloride           |               |      | 0.00626  | 6      | 1 U    | 0.00     | 5 1     |         | <       | U 0.00   | 5        | •    | : U         | 0.005  | 1      |          | . ก | 0,000  |        |    | - U         |
| VOLATILES        | Chlorobenzene                  |               |      | 0.00626  | 6      | U      | 0.00     | 5       | 1 ·     | <       | U 0.00   | o '      |      | : U         | 0.005  |        |          | . U | 0.003  |        |    | , U         |
| VOLATILES        | Chloroethane                   |               |      | 0.0125   |        | 1 U    | 0.01     | . 1     | ۱۰      | <       | ບ 0.0"   |          | •    | ς U<br>, ιι | 0.01   | 1      | <u>د</u> | . U | 0.01   |        |    | . u         |
| VOLATILES        | Chloroform                     |               |      | 0.00626  | 6      | 1 U    | 0.00     | 5 1     | 1       | <       | U 0.00   | 0        |      | . U         | 0.005  | · 1    |          | . u | 0.005  | 4      |    | . U<br>. II |
| VOLATILES        | Chloromethane                  |               |      | 0.0125   | ;<br>; | 1 U    | 0.01     |         | 1       | <       | 0 0.0    | 1        |      | c U         | 0.01   | ,      |          |     | 0.01   |        |    |             |
| VOLATILES        | cis-1,2-Dichloroethene         |               |      | 0.0062   | 6      | 1 U    |          |         |         |         |          |          |      |             |        |        |          |     |        |        |    |             |



|  | Conci                                 | entrations             |                                 | remica         | ទំពាន                       | 5011 3                   | ampies    | Maa                          |                  | ater      |                 | <u>oun</u>                   | <u>ч</u> р |        |                 |                             |                  |          | · · · · · · · · · · · · · · · · · · · |                              |           |         |
|--|---------------------------------------|------------------------|---------------------------------|----------------|-----------------------------|--------------------------|-----------|------------------------------|------------------|-----------|-----------------|------------------------------|------------|--------|-----------------|-----------------------------|------------------|----------|---------------------------------------|------------------------------|-----------|---------|
| [SUMP] = SUMP118<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE | · · · · · · · · · · · · · · · · · · · | 35SUM<br>35-SMP<br>9/1 | P118-SB0<br>118-SB01-<br>9/2006 | 1 35<br>01 35- | SUMP11<br>SMP118<br>9/19/20 | 8-5B01<br>SB01-02<br>X08 | LH        | H-S118<br>-S118-1<br>7/8/199 | -01<br>01_1<br>3 |           | LH<br>LH-1<br>7 | •S118-0<br>S118-0<br>/8/1993 | 01<br> _2  |        | ۲۲<br>۱۲۹۰<br>۲ | I-S118<br>S118-(<br>7/8/199 | -02<br>)2_1<br>3 |          | LH-5<br>LH-5<br>7                     | -S118-0<br>5118-0<br>/8/1993 | )2<br>2_2 |         |
| OEPTH  |                                       | .5                     | 5 Ft                            |                | 4 • 4                       | FI                       |           | 0-21                         | t                |           | i               | 2-4 Pt                       |            |        |                 | DEC                         | L                |          |                                       | REG                          |           |         |
| SAMPLE_PURPOSE   |                                       |                        | REG                             |                | REC                         | i                        |           | REG                          |                  |           |                 | REG                          |            | -      | Decide          | nçu<br>Di                   | 10               | vo       | Porult                                | Dit                          | 10        | VO      |
| Test Group   | Parameter (Units = mg/kg)             | Result                 | DIL LQ                          | VQ Res         | jit Di                      | <u>. LQ V</u>            | /Q Result |                              | LQ               | <u>vQ</u> | Hesun           |                              |            |        | 0.005           | 1                           |                  |          | 0.005                                 | 1                            | ~         |         |
| VOLATILES  | cis-1.3-Dichloropropene               |                        |                                 | 0.006          | 26 1                        | U                        | 0,005     | 1                            | <                | 0         | 0.005           |                              | 5          |        | 0.000           |                             | Ì                |          | 0.005                                 |                              | è         | Ŭ.      |
| VOLATILES  | Dibromochloromethane                  |                        |                                 | 0.006          | 26 1                        | υ                        | 0.005     | 1                            | <                | U         | 0.005           | 1                            | <          | Ų      | 0.005           | '                           | `                | Ŭ        | 0.000                                 | •                            | -         | •       |
| VOLATILES  | Dibromomethane                        |                        |                                 | 0.000          | 26 1                        | u                        |           |                              |                  |           |                 |                              |            |        |                 |                             |                  |          |                                       |                              |           |         |
| VOLATILES  | Dichlorodifluoromethane               |                        |                                 | 0.01           | 25 1                        | U                        |           |                              |                  |           |                 |                              |            | н      | 0.005           | 4                           |                  | н        | 0.005                                 | 1                            |           | ti      |
| VOLATILES  | Ethylbenzene                          |                        |                                 | 0.00           | 26 1                        | U                        | 0.005     | 1                            | <                | Ų         | 0.005           | ,                            | <          | Ų      | 0.005           | '                           | •                | 0        | 0.000                                 | •                            |           | Ŷ       |
| VOLATILES  | Hexachlorobutadiene                   |                        |                                 | 0.00           | 626 1                       | U                        |           |                              |                  |           |                 |                              |            |        |                 |                             |                  |          |                                       |                              |           |         |
| VOLATILES  | isopropylbenzene                      |                        |                                 | 0.00           | 526 1                       | U                        |           |                              |                  |           |                 |                              |            |        |                 |                             |                  |          |                                       |                              |           |         |
| VOLATILES  | m.p-Xylenes                           |                        |                                 | 0.00           | 526 1                       | U                        |           |                              |                  |           |                 |                              |            |        | 0.05            |                             |                  | n        | 0.05                                  |                              | ,         | n       |
| VOLATILES  | Methyl isobutyl ketone                |                        |                                 | 0.01           | 25 1                        | U                        | 0.05      | 1                            | <                | U         | 0.05            | 1                            | <          | U<br>U | 0.05            | 1                           | <                |          | 0.00                                  | ۲<br>۲                       | 2         | л.<br>П |
| VOLATILES  | Methylene chloride                    | 1                      |                                 | 0,00           | 526 1                       | U                        | 0.005     | 1                            | <                | U         | 0,005           | 1                            | <          | U      | 0.005           | 1                           | <                | 0        | 0.005                                 | '                            | Ì         | U       |
| VOLATILES  | Naphthalene                           | 1                      |                                 | 0.01           | 25 1                        | U                        |           |                              |                  |           |                 |                              |            |        |                 |                             |                  |          |                                       |                              |           |         |
| VOLATILES  | n-BUTYLBENZENE                        |                        |                                 | 0.00           | 526 1                       | U                        |           |                              |                  |           |                 |                              |            |        |                 |                             |                  |          |                                       |                              |           |         |
| VOLATILES  | n-PROPYLBENZENE                       |                        |                                 | 0.00           | 526                         | U                        |           |                              |                  |           |                 |                              |            |        |                 |                             |                  |          |                                       |                              |           |         |
| VOLATILES  | p-ISOPROPYLTOLUENE                    |                        |                                 | 0,00           | 526                         | U                        |           |                              |                  |           |                 |                              |            |        |                 |                             |                  |          |                                       |                              |           |         |
| VOLATILES  | sec-BUTYLBENZENE                      |                        |                                 | 0.00           | 526 <sup>-</sup>            | U                        |           |                              |                  |           |                 |                              |            |        |                 |                             |                  |          | 0.007                                 |                              |           | 41      |
| VOLATILES  | Styrene                               |                        |                                 | 0.00           | 626                         | U                        | 0.005     | 1                            | <                | U         | 0.005           | 1                            | <          | U      | 0.005           | 1                           | <                | U        | 0,005                                 | 1                            | <         | u       |
| VOLATILES  | tert-BUTYLBENZENE                     |                        |                                 | 0.00           | 626                         | U                        |           |                              |                  |           |                 |                              |            |        |                 |                             |                  |          | 0.005                                 |                              |           | н       |
| VOLATILES  | Teirachloroethene                     |                        |                                 | 0.00           | 626                         | บ                        | 0.005     | 1                            | <                | Ų         | 0.005           | 1                            | <          | U      | 0,005           | 1                           | <                | 0        | 0.005                                 | 1                            | <         | 11      |
| VOLATILES  | Toluene                               |                        |                                 | 0.00           | 628                         | υ                        | 0.005     | 1                            | <                | U         | 0.005           | 1                            | <          | Ų      | 0.005           | 1                           | <                | U        | 0.005                                 | 1                            | <         | U       |
| VOLATILES  | trans-1,2-Dichloroethene              |                        |                                 | 0,00           | 626                         | I U                      |           |                              |                  |           |                 |                              |            |        | 4               |                             |                  |          |                                       |                              |           |         |
| VOLATILES  | trans-1.3-Dichloropropene             |                        |                                 | 0.00           | 626                         | ιŲ                       | 0.005     | 1                            | <                | υ         | 0.005           | 1                            | <          | U      | 0.005           | 1                           | <                | u        | 0.005                                 | 1                            | < .       | 0       |
| VOLATILES  | Trichloroethene                       |                        |                                 | 0.00           | 626                         | I Ų                      | 0.005     | 1                            | <                | U         | 0.005           | 1                            | <          | U      | 0.005           | 1                           | <                | U        | 0.005                                 | 1                            | <         | U       |
| VOLATILES  | Trichlorofluoromethane                | ļ                      |                                 | 0.0            | 25                          | 1 U                      |           |                              |                  |           |                 |                              |            |        |                 |                             |                  |          |                                       |                              |           |         |
| VOLATILES  | Vinyl acetate                         | 1                      |                                 | 0.0            | 25                          | t U                      | 0.05      | 1                            | <                | U         | 0.05            | 1                            | ۲          | U      | 0.05            | 1                           | <                | 0        | 0.05                                  |                              | <         | 0       |
| VOLATILES  | Vinyl chloride                        |                        |                                 | 0.0            | 125                         | េប                       | 0.01      | 1                            | <                | Ų         | 0.01            | 1                            | <          | U      | 0.01            | 1                           | <                | U        | 0.01                                  | 1                            | <         | U       |
| VOI ATILES   | Xvienes, Total                        |                        |                                 |                |                             |                          | 0.005     | 1                            | <                | U         | 0.005           | 1                            | <          | U      | 0.005           | 1                           | <                | <u>U</u> | 0.005                                 | 1                            | <         | Ų       |

Table 3-106

Footnotes are shown on cover page to Tables Section.

~

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

|  |   |        |   |         |    |              |        |        |    |              |       |     |     |              |            |     |        |        |            |     | -   |        |            |    |     |
|--|---|--------|---|---------|----|--------------|--------|--------|----|--------------|-------|-----|-----|--------------|------------|-----|--------|--------|------------|-----|-----|--------|------------|----|-----|
| LOCATION CODE  |   | 35SUN  | VP121-SB01 35SUM<br>>121-SB01-01 35-SMP |         |    | 35SUMP       | 121-5  | B01    |    | LH-S         | 121-0 | )1  |     | LH-8         | 5121-0     | 31  |        | LH-    | S121-      | 02  |     | LH-5   | 121-6      | 14 |     |
|  |   | 35-SMP | 121-S                                   | B01-0   | 1  | 35-SMP1      | 21-580 | 01-02  |    | LH-S1        | 21-01 | 1_1 |     | LH-S         | 121-0      | 1_2 |        | LH-S   | 121-0      | 2_1 |     | LH-SI  | 21-04      | ~~ |     |
| CANADIE DATE   |   | 9/     | 4/200                                   | 6       |    | 9/14         | /2006  |        |    | 8/4          | /1993 | ł.  |     | 8/4          | /1993      | •   |        | 8/-    | 4/199      | 3   |     | 8/4    | 1993       |    |     |
| DEDTU  |   | 0.9    | i - 0.5                                 | Ft      |    | 10 -         | 10 Ft  |        |    | 0.5 -        | 1.57  | Ŧ   |     | 5            | - 6 Ft     |     |        | 0.5    | - 1.5      | Ft  |     | 5-     | 611        |    |     |
|  |   |        | REG                                     |         |    | R            | EG     |        |    | R            | leg   |     |     | I            | REG        |     |        |        | REG        |     |     | R      | EG         |    |     |
| SAMPLE_FORFOSE   | Parameter () inits = ma/kn)                   | Result | DIL                                     | ۱Q      | /Q | Result       | DIL    | LQ V   | va | Result       | DIL   | LQ  | VQ  | Result       | DIL,       | LQ  | VQ     | Result | DIL        | LQ  | VQ  | Result | JIL        | LQ | va  |
| Test Group   | 2 ( Distratelyone                             |        |   |         |    |              |        |        | -  | 0.33         | 1     | <   | U   | 0.33         | 1          | <   | υ      | 0.33   | 1          | <   | U   | 0.33   | 1          | <  | Ų   |
| EXPLOSIVES   | 2.4-Dinitrateluone                            | 1      |   |         |    |              |        |        |    | 0.33         | 1     | <   | υ   | 0.33         | 1          | ۲   | U      | 0.33   | 1          | <   | Ų   | 0.33   | 1          | <  | ป   |
| EXPLOSIVES   | 2,0-Dimotoldene                               |        |   |         |    |              |        |        |    | 12200        | 1     |     |     | 16200        | 1          |     |        | 6470   | 1          |     |     | 24000  | 1          |    |     |
| METALS   | AUSTROUGH                                     |        |   |         |    |              |        |        |    | 4.3          | 1     |     |     | 3            | 1          | <   | U      | 3      | 1          | <   | U   | 3      | 1          | <  | U.  |
| METALS   | Antimony                                      |        |   |         |    |              |        |        |    | 2.7          | 1     |     |     | 4.5          | 1          |     |        | 2      | 1          |     |     | 3.8    | 1          |    |     |
| METALS   | Arsenic                                       |        |   |         |    |              |        |        |    | 103          | i.    |     |     | 161          | 1          |     |        | 115    | 1          |     |     | 129    | 1          |    |     |
| METALS   | Barium  |        |   |         |    |              |        |        |    | 100          | ÷     | ۲   | н   | 1            | 1          | <   | U      | 1      | 1          | <   | U   | 1      | 1          | <  | υ   |
| METALS   | Cadmium                                       |        |   |         |    |              |        |        |    | 835          | ÷     |     | -   | 431          | 1          |     |        | 569    | 1          |     |     | 771    | 1          |    |     |
| METALS   | Calcium                                       |        |   |         |    |              |        |        |    | 17.4         | ł     |     |     | 24           | í          |     |        | 16.6   | 1          |     |     | 22.5   | 1          |    |     |
| METALS   | Chromium                                      | 1      |   |         |    |              |        |        |    | \$1.4<br>7.0 | ł     |     |     | 26.7         | ÷          |     |        | 13.2   | 1          |     |     | 9.5    | 1          |    |     |
| METALS   | Cobait  |        |   |         |    |              |        |        |    | 1.2          | •     |     |     | 5 2 5 2      | i          |     |        | 34     | 1          |     |     | 6.5    | 1          |    |     |
| METALS   | Copper  |        |   |         |    |              |        |        |    | 9.4          | -     |     |     | 3.4<br>97600 |            |     |        | 0830   | 1          |     |     | 22400  | 1          |    |     |
| METALS   | iron  |        |   |         |    |              |        |        |    | 10000        | 1     |     |     | 42.0         | 4          |     |        | 10.5   | ÷.         |     |     | 11     | 1          |    |     |
| METALS   | Lead  |        |   |         |    |              |        |        |    | 9.3          | 1     |     |     | 12.0         | 4          |     |        | 467    | 4          |     |     | 1760   | 1          |    |     |
| METALS   | Magnesium                                     |        |   |         |    |              |        |        |    | 739          | 1     |     |     | 9/9          | }          |     |        | 407    | 4          |     |     | 472    | 1          |    |     |
| METALS   | Manganese                                     |        |   |         |    |              |        |        |    | 351          | 1     |     |     | 582          | 1          |     |        | 107    | 4          |     | n   | 01     | 4          | ~  | 11  |
| METALS   | Mercury                                       |        |   |         |    |              |        |        |    | 0.1          | 1     | <   | Ų   | Q.1          | 1          | ٩.  | U      | U.1    |            | •   | U   | 4000   |            |    | Ū   |
| METALS   | Potassium                                     |        |   |         |    |              |        |        |    | 541          | 1     |     |     | 707          | 3          |     |        | 420    | 1          |     |     | 1000   | 4          |    | u   |
| METALS   | Selenium                                      |        |   |         |    |              |        |        |    | 1            | 1     | <   | Ų   | 1            | 1          | <   | U      | 1      | 1          | <   | U . | 1      |            | 2  |     |
| METALS   | Silver  |        |   |         |    |              |        |        |    | 1            | 1     | <   | U   | 1            | 1          | <   | Ų      | 1      | 1          | <   | U   |        | 1          | •  | U   |
| METALS   | Stropturn                                     |        |   |         |    |              |        |        |    | 11.8         | 1     |     |     | 11.6         | 1          |     |        | 7.9    | 1          |     |     | 22.4   | 1          |    |     |
|  | Zinc  | 1      |   |         |    |              |        |        |    | 21.7         | 1     |     |     | 30.2         | 1          |     |        | 19.3   | 1          |     |     | 47.6   | 3          |    |     |
|  | 1.2 4 Trichlorobenzene                        | 0.182  | 1                                       | U       | U  | 3.78         | 20     | U      | U  | 0.33         | 1     | <   | Ð   | 0.33         | 1          | <   | U      | 0.33   | 1          | <   | U   | 0.33   | 1          | <  | 0   |
| SEMIVOLATILES<br>CEUVOLATILES  | 1 2-Dichlorobenzene                           | 0.182  | 1                                       | Ū       | Ú  | 3.78         | 20     | υ      | U  | 0.33         | 1     | <   | U   | 0.33         | 1          | <   | Ų      | 0.33   | 1          | <   | U   | 0.33   | 1          | <  | 0   |
| SEMIVOLATILES  | 1 2 Dichlorabenzone                           | 0.182  | 1                                       | ŭ       | บ่ | 3.78         | 20     | ປ      | Ų  | 0.33         | 1     | <   | U   | 0.33         | 1          | <   | Ų      | 0.33   | 1          | <   | U   | 0.33   | 1          | <  | U   |
| SEMIVOLATILES  | 1 A Dishlerahan tana                          | 0.182  | 1                                       | Ū.      | Ū  | 3.78         | 20     | U      | υ  | 0.33         | 1     | <   | ÷U  | 0.33         | 1          | <   | ປ      | 0.33   | 1          | <   | υ   | 0.33   | 1          | <  | Ų   |
| SEMIVOLATILES  | 1,4-Oicidorobenzene<br>8.4.5. Trichlerenhenel | 0.182  |   | ŭ       | ū. | 3 78         | 20     | Ū      | ย่ | 1.65         | 1     | <   | U   | 1,65         | 1          | <   | U      | 1.65   | 1          | <   | Ų   | 1.65   | \$         | <  | υ   |
| SEMIVOLATILES  | 2,4,5-Trichlorophenol                         | 0.102  | ,                                       | -<br>11 | บ  | 3 78         | 20     | ŭ      | ŭ  | 0.33         | 1     | <   | U   | 0.33         | 1          | <   | U      | 0.33   | 1          | <   | ย   | 0.33   | 1          | <  | Ų   |
| SEMIVOLATILES  | 2,4,6-3 nonkorophenol                         | 0.102  | 4                                       | 11      | ц. | 3.78         | 20     | ŭ      | Ū  | 0.33         | 1     | <   | Ű   | 0.33         | 1          | <   | ប      | 0.33   | 1          | <   | Ų   | 0.33   | 1          | ۲  | Ų   |
| SEMIVOLATILES  | 2,4-Dichlorophenol                            | 0.102  | 4                                       | , U     | 1  | 3.78         | 20     | а<br>ы | บ  | 0.33         | 1     | <   | Ū   | 0.33         | 1          | <   | υ      | 0.33   | 1          | <   | U   | 0.33   | 1          | <  | U   |
| SEMIVOLATILES  | 2,4-Dimetryphenol                             | 0.102  | 4                                       |         | u. | 18.0         | 20     | ň      | ŭ  | 1.65         | 1     | <   | ย   | 1.65         | 1          | <   | U      | 1.65   | 1          | <   | U   | 1.65   | 1          | <  | V   |
| SEMIVOLATILES  | 2,4-Dinitrophenol                             | 0.912  | 1                                       |         |    | 10.0         | 20     | ň      | ŭ  |              |       |     | •   |              |            |     |        |        |            |     |     |        |            |    |     |
| SEMIVOLATILES  | 2,4-Dinitrotoluene                            | 0.162  |   |         | ň  | 278          | 20     | ŭ      | ŭ  |              |       |     |     |              |            |     |        |        |            |     |     |        |            |    |     |
| SEMIVOLATILES  | 2,6-Dinitrotoluene                            | 0.104  |   | 0       |    | 3.75         | 20     | Ř      | ň  | 0.33         | 1     | ح   | u   | 0.33         | 1          | <   | ย      | 0.33   | ŧ          | <   | ប   | 0.33   | 1          | <  | U   |
| SEMIVOLATILES  | 2-Chloronaphthalene                           | 0,182  |   |         |    | 3.10<br>9.70 | 20     | ň      | ň  | 0.00         | ÷     | é   | ÷й  | 0.33         | . 1        | <   | Ū      | 0.33   | 1          | <   | U   | 0.33   | 1          | <  | U   |
| SEMIVOLATILES  | 2-Chlorophenol                                | 0.182  |   |         | 0  | 3.70         | 20     |        |    | 0.03         | ÷     | è   | ŭ   | 0.33         | 1          | <   | Ū      | 0.33   | 1          | <   | υ   | 0.33   | 1          | <  | Ų   |
| SEMIVOLATILES  | 2-Methylnaphthalene                           | 0.382  | : 1                                     | 0       | 0  | 3.70         | 20     |        |    | 0.00         | ÷     | 2   | - ŭ | 0.13         | 1 1        | ć   | - ŭ    | 0.33   | 1          | <   | ป   | 0.33   | 1          | <  | U   |
| SEMIVOLATILES  | 2-Methylphenol                                | 0.18   | 1                                       | U       | U  | 3.78         | 20     |        |    | 0.33         |       |     |     | 1.64         | , ,<br>: 1 | ż   | . ii   | 1.65   | 1          | <   | Ū   | 1.65   | 1          | <  | ប   |
| SEMIVOLATILES  | 2-Nitroaniline                                | 0.913  | 1                                       | U       | U  | 18.9         | 20     | 0      | 0  | 1.05         |       | 2   | Ц   | 0.00         | 2 I<br>2 I | - 2 |        | 0.33   |            | è   | ŭ   | 0.33   | 1          | <  | Ū   |
| SEMIVOLATILES  | 2-Nitrophenol                                 | 0.16   | 2 1                                     | υ       | U  | 3.78         | \$ 20  | U      | U  | 0.33         |       |     |     | 0.5          | , ,<br>, , | Ĵ   | У      | 0.00   |            | ~   | . ŭ | 0.65   | 1          | <  | U   |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine                        | 0.36   | 5 1                                     | U       | U  | 7.5          | 5 20   | U      | U  | 0.65         | 1     | <   | υ   | 0.53         |            | 2   | ี<br>เ | 1.45   |            | 2   | в   | 1.65   | 1          | 2  | - 1 |
| SEMIVOLATILES  | 3-Nitroaniline                                | 0.91   | ! 1                                     | U       | U  | 18.9         | 9 20   | U      | U  | 1.65         | 1     | <   | U   | 1.0          | 5 1        |     |        | 1.03   |            | 5   |     | 1.00   | ì          | Ż  | ů.  |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol                    | 0.91   | 2 1                                     | U       | บ  | 18.9         | 9 20   | ບ      | U  | 1.65         | i 1   | <   | U   | 1.6          | 5 1        |     |        | 1.03   | )  <br>\ 4 | 5   |     | 0.33   | 4          | Ż  | Ŭ,  |
| SEMIVOLATILES  | 4-Bromophenyi phenyi ether                    | 0.18   | 2 1                                     | U       | U  | 3.76         | 3 20   | U      | U  | 0.33         | 5 1   | <   | ย   | 0.3          | 3 3        | <   | U      | 0.33   |            | <   | 0   | 0.33   | - 1<br>- + | )  | 1   |
| SEMIVOLATILES  | 4-Chloro-3-methylphenol                       | 0.18   | 2 1                                     | U       | Ų  | 3.78         | 3 20   | Ų      | Ų  | 0.65         | i 1   | <   | U   | 0.6          | 5 1        | <   | U      | 0,65   | ) 1        | <   |     | 0.05   |            | Ĵ  | - U |
| SEMIVOLATILES  | 4-Chloroaniline                               | 0.18   | 21                                      | Ų       | U  | 3.78         | 8 20   | U      | ប្ | 0.65         | i 1   | <   | : U | 0.6          | 5 1        | <   | ÷ U    | 0.65   | 1          | <   | U   | 0.65   | 1          |    |     |
| SEMIVOLATILES  | 4-Chlorophenvi phenvi ether                   | 0.18   | 2 1                                     | Ų       | υ  | 3.71         | B 20   | Ų      | U  | 0.33         | 3 1   | <   | : U | 0,3          | 31         | <   | U U    | 0.33   | 5 1        | <   | Ų   | 0.33   | 1          | <  |     |
| SEMIVOLATILES  | 4-Methylphenol                                | 0.18   | 21                                      | Ų       | U  | 3.7          | 8 20   | Ų      | U  | 0.33         | 3 1   | <   | ະປ  | I 0.3        | 31         | <   | ะย     | 0.33   | 3 1        | <   | Ų   | 0.33   | 1          | <  |     |
| SEMIVOLATILES  | 4-Nitroaniline                                | 0.91   | 2 1                                     | Ų       | U  | 18.9         | 9 20   | U      | U  | 1.65         | 51    | <   | : U | 1.6          | 51         | <   | t t    | 5 1.65 | 51         | <   | U   | 1,65   | 1          | <  | ป   |
| All and a second s |   |        |   |         |    |              |        |        |    |              |       |     |     |              |            |     |        |        |            |     |     |        |            |    |     |

Table 3-107 Concentrations of Chemicals in Soil Samples Associated with Sump 121

.

| Table 3-107  |
|--|
| Concentrations of Chemicals in Soil Samples Associated with Sump 121 |

| [SUMP] = SUMP121                      |                             | 25SUM0121_SB01    | 35SUMP121-SB01              | LH-S121-01       | LH-S121-01       | LH-S121-02       | LH-\$121-02      |
|---------------------------------------|-----------------------------|-------------------|-----------------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE                        |                             | 25 SMP121-SP01-01 | 35-SMP121-SB01-02           | 1H-S121-01 1     | LH-\$121-01_2    | LH-\$121-02_1    | LH-S121-02_2     |
| SAMPLE_NU                             |                             | 0/14/2008         | 0/14/2006                   | 8/4/1993         | 8/4/1993         | B/4/1993         | 8/4/1993         |
| SAMPLE_DATE                           |                             | 05,055            | 10 - 10 Ft                  | 0.5 - 1.5 Ft     | 5 - 6 Ft         | 0.5 - 1.5 Fi     | 5-6Ft            |
| DEPTH                                 |                             | PEG               | REG                         | REG              | REG              | REG              | REĠ              |
| SAMPLE_PURPUSE                        | Decomptor (Loite + mafka)   | Result DIL LO VO  | Result Dil 10 VO            | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| Test Group                            | A Nitrashanal               | B 012 1 11 13     | 18.9 20 11 11               | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES                         | 4-5100005800                | 0.312 1 0 0       | 378 20 U U                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                         | Acenaphonene                | 0.182 1 0 0       | 378 20 U U                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                         | Acenaphinylene              | 0.182 1 1 1       | 378 20 11 11                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                         | Antaracene                  | 0.182 1 11 13     | 3.78 20 11 11               | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                         | Benzo(a)annracene           | 0.102 1 0 0       | 378 20 11 11                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                         | Senzo(a)pyrane              | 0.102 5 0 0       | 378 20 11 11                | 033 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                         | Benzo(b)fluoranthene        | 0.802 1 0 0       | 3,78 20 0 0                 | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                         | Benzo(gni)perviene          | 0.102 1 0 0       | 379 20 0 0                  | 033 1 < 1        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                         | Benzo(k)nuoranmene          | 0.102 1 0 0       | 3.70 20 U U                 | 165 1 < 15       | 165 1 < 1        | 1.65 1 < U       | 1.65 1 < U       |
| SEMIVOLATILES                         | Benzoic Acid                | 0.912 1 0 0       | 10,9 20 0 0<br>970 20 31 11 | 0.05 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 t < 긴       |
| SEMIVOLATILES                         | Benzyl Alcohol              | 0.182 1 0 0       | 3.75 20 0 0                 |                  | 633 1 < U        | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                         | bis(2-Chloroethoxy)methane  | 0,182 1 0 0       | 3.76 20 0 0                 | 0.00 1 < 0       | 0.33 5 < 11      | 0.33 1 < 1       | 0.33 1 < U       |
| SEMIVOLATILES                         | bis(2-Chloroethyl)ether     | 0.182 1 0 0       | 3.78 20 0 0                 | 0.33 1 4 0       | 0.33 1 < 13      | 0.33 1 < U       | 0.33 1 < U       |
| SEMIVOLATILES                         | bis(2-Chloroisopropyl)ether | 0.182 5 0 0       | 3.75 20 0 0                 | 0.33 1 4 0       | 0.00 1 . 0       | n 447 1          | 0.33 1 < U       |
| SEMIVOLATILES                         | bis(2-Ethylhexyl)phthalate  | 8.107 1 J J       | 3,78 20 0 0                 | 0.03 1 < 0       | 0.403 1 2 1      | ( 0.33 t < 1)    | 0.33 1 < U       |
| SEMIVOLATILES                         | Butyt benzyl phthalate      | 0.182 1 U U       | 3.78 20 0 0                 |                  | 0.03 1 4 1       | 0.33 1 < 11      | 0.33 1 < U       |
| SEMIVOLATILES                         | Chrysene                    | 0.182 1 U U       | 3.78 20 0 0                 | 0,33 1 4 0       | 0.33 1 4 0       | 2 0 33 1 < U     | 0.33 1 < 1       |
| SEMIVOLATILES                         | Dibenzo(a,h)anthracene      | 0.182 1 U U       | 3,78 20 0 0                 |                  | 0.33 1 4 0       |                  | 0.33 1 < 13      |
| SEMIVOLATILES                         | Dibenzofuran                | 0.182 1 U U       | 3.78 20 0 0                 | 0.33 1 4 0       | 0.23 1 - 0       |                  | 0.33 1 < U       |
| SEMIVOLATILES                         | Diethyl phthalate           | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < 0       | 0,33 1 4 0       | 0.33 1 < 0       | 0.33 1 < 1       |
| SEMIVOLATILES                         | Dimethyl phthalate          | 0.182 1 U U       | 3,78 20 0 0                 | 0.33 1 < 0       | 0.33 1 4 0       | 0.33 1 4 0       | 0.00 1 4 0       |
| SEMIVOLATILES                         | di-n-Butyl phthalate        | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < 0       | 0.33 1 4 0       |                  | 0.33 1 < 1       |
| SEMIVOLATILES                         | di-n-Octyl phthalate        | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < U       | 0.33 1 4 0       | ) 0.33 1 < 0     | 0.00 1 4 0       |
| SEMIVOLATILES                         | Fluoranthene                | 0.182 1 U U       | 3,78 20 U U                 | 0.33 1 < 0       | 0.33 1 < 0       | ) 0.33 I < U     | 0.30 1 4 0       |
| SEMIVOLATILES                         | Fluorene                    | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < 0       | 0.33 1 4 0       |                  | 0.00 1 4 0       |
| SEMIVOLATILES                         | Hexachlorobenzene           | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < 0       | 0.33 1 < 0       | 1 0.33 1 < U     | 0.33 1 4 0       |
| SEMIVOLATILES                         | Hexachlorobutadiene         | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < 0       | 0.33 1 < 0       |                  | 0.33 1 4 0       |
| SEMIVOLATILES                         | Hexachlorocyclopentadiene   | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < 0       | 0.33 1 < 0       | ) 0.33 1 < U     | 0.33 1 < 0       |
| SEMIVOLATILES                         | Hexachloroethane            | 0.182 1 ปีป       | 3,78 20 U U                 | 0.33 1 < U       | 0.33 1 < 0       | J 0.33 3 < 0     | 0.33 1 4 0       |
| SEMIVOLATILES                         | Indeno(1,2,3-cd)pyrene      | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < U       | 0.33 1 < 6       | J 0.33 1 < U     | 0.33 1 4 0       |
| SEMIVOLATILES                         | Isophorone                  | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < U       | 0.33 1 < U       | 3 0.33 1 4 0     |                  |
| SEMIVOLATILES                         | Naphthalene                 | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < U       | 0.33 1 < U       | J 0.33 1 < U     | 0,33 1 4 0       |
| SEMIVOLATILES                         | Nitrobenzene                | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < 0       | 0,33 1 < L       | J 8.33 1 < U     | 0.33 1 4 0       |
| SEMIVOLATILES                         | n-Nitroso-di-n-propylamine  | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < U       | 0.33 1 < 1       | J 0.33 1 < U     | 0.33 1 < 0       |
| SEMIVOLATILES                         | n-Nitrosodiphenylamine      | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < U       | 0.33 1 < l       | 3 0.33 1 < U     | 0.33 1 < 0       |
| SEMIVOLATILES                         | Pentachiorophenol           | 0.912 \$ U U      | 18.9 20 U U                 | 1.65 1 < U       | 1.65 1 < l       | J 1.65 1 < U     | 1.65 1 < U       |
| SEMIVOLATILES                         | Phenanthrene                | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < U       | 0.33 1 < l       | J 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES                         | Phenol                      | 0,182 1 U U       | 3.78 20 U U                 | 0.33 1 < ป       | 0.33 1 < 1       | J 0.33 1 < U     | 0.33 1 < U       |
| SEMIVOLATILES                         | Pyrene                      | 0.182 1 U U       | 3.78 20 U U                 | 0.33 1 < U       | 0.33 1 < I       | ⊔ 0.33 1 < U     | 0.33 1 < U       |
| VOLATILES                             | 1.1.1.2-Tetrachloroethane   |                   | 0.00454 1 U U               |                  |                  |                  |                  |
| VOLATILES                             | 1.1.1-Trichloroethane       |                   | 0.00454 1 U U               | 0.005 1 < U      | 0.005 1 < 0      | ∪ 0.005 1 < U    | 0.005 1 < U      |
| VOLATILES                             | 1.1.2.2-Tetrachloroethane   |                   | 0.00454 1 U U               | 0.005 t < U      | 0.005 1 < 1      | U 0.005 1 < U    | 0.005 1 < U      |
| VOLATILES                             | 1.1.2-Trichioroethane       |                   | 0.00454 1 U U               | 0.005 1 < U      | 0.005 1 < 1      | ປ 0.005 1 < ປ    | 0.005 1 < U      |
| VOLATILES                             | 1.1-Dichloroethane          |                   | 0.00454 1 U U               | 0.005 1 < U      | 0.005 1 <        | U 0.005 1 < U    | 0.005 t < U      |
| VOLATILES                             | 1.1-Dichloroethene          |                   | 0.00454 1 U U               | 0.005 1 < U      | 0.005 1 <        | U 0.005 1 < U    | 0.005 1 < 난      |
| VOLATILES                             | 1.1-Dichloropronene         |                   | 0.00454 1 U U               |                  |                  |                  |                  |
| VOLATILES                             | 1.2.3-Trichlorobenzene      |                   | 0.00454 t U U               |                  |                  |                  |                  |
| · · · · · · · · · · · · · · · · · · · |                             |                   |                             |                  |                  |                  |                  |

Shaw Environmental, Inc.

00066319

٠

| Barrow C. |  |
|-----------|--|
|           |  |
|           |  |
|           |  |

## Shaw Environmental, Inc. 00066320

|  | Concentra                              | ations of Chemi  | als in                       | Sol                                   | IS                        | amı     | oles As                  | sso                                     | ocia                      | ited    | with \$            | Sun  | np                      | 121    |                      |     |                             |        |                 |   |                         |         |
|--|--|--|------------------------------|---------------------------------------|---------------------------|---------|--------------------------|---|---------------------------|---------|--------------------|--|-------------------------|--------|----------------------|-----|-----------------------------|--------|-----------------|---|-------------------------|---------|
| [SUMP] = SUMP121<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |  | 35SUMP121-SB01<br>35-SMP121-SB01-01<br>9/14/2006<br>0.5 - 0.5 Ft<br>REG  | 35SUM<br>35-SMP<br>9/1<br>10 | P121<br>121-S<br>4/200<br>- 10<br>REG | -SB0<br>801-4<br>96<br>Ft | i<br>02 | LH-<br>LH-S<br>8/<br>0.5 | S121<br>121-<br>4/199<br>5 - 1.5<br>REG | -01<br>01_1<br>13<br>5 Ft |         | ี LH<br>โ.H-ร<br>8 | -S121<br>5121-<br>/4/199<br>5 - 6 F<br>REG | -01<br>01_2<br>)3<br>'t |        | ւ։<br>Լ։<br>Հ.<br>0. |     | 1-02<br>-02_1<br>93<br>5 Ft |        | ՆH<br>LH-3<br>8 | -S121<br>3121-4<br>/4/199<br>5 • 6 F<br>REG | -02<br>)2_2<br> 3<br> 1 |         |
| Test Group   | Parameter (Units = mg/kg)              | Result DIL LQ VQ   | Result                       | DIL                                   | LQ                        | VQ      | Result                   | DIL                                     | ιQ                        | VQ      | Result             | DIL  | ٤Q                      | VQ     | Result               | DIL | LQ                          | VQ     | Result          | DIL   | LQ                      | VQ      |
| VOLATILES  | 1,2,3-Trichloropropane                 |  | 0.00454                      | 1                                     | U                         | U       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | 1,2,4-Trichlorobenzene                 |  | 0.00454                      | 1                                     | U                         | U       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | 1,2,4-Trimethylbenzene                 |  | 0.00454                      | 1                                     | Ų                         | Ų       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | 1,2-Dibromo-3-chioropropane            |  | 0.00454                      | 1                                     | U                         | U       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | 1,2-Dibromoethane                      |  | 0.00454                      | 1                                     | Ų                         | U       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | 1,2-Dichlorobenzene                    |  | 0.00454                      | ţ                                     | ß                         | Ų       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | 1,2-Dichloroethane                     |  | 0.00454                      | 1                                     | U                         | U       | 0.005                    | 1                                       | <                         | U       | 0.005              | 1  | <                       | U      | 0.005                | 1   | <                           | 0      | 0.005           | 1   | <                       | U<br>   |
| VOLATILES  | 1,2-Dichloroethene                     |  |                              |                                       |                           |         | 0.005                    | 1                                       | <                         | Ų       | 0.005              | 1  | <                       | 8      | 0.005                | 1   | <                           | U      | 0.005           | 1   | ٢.                      | U<br>U  |
| VOLATILES  | 1,2-Dichloropropane                    | 1  | 0.00454                      | 1                                     | U                         | U       | 0.005                    | 1                                       | <                         | U       | 0.005              | 1  | <                       | U      | 0.005                | 1   | <                           | U      | 0.005           | 1   | <                       | Ų       |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylene)         |  | 0.00454                      | 1                                     | U                         | บ       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | 1,3,5-Trimethylbenzene                 | 1  | 0.00454                      | 1                                     | ย                         | U       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | 1,3-Dichlorobenzene                    |  | 0.00454                      | 1                                     | U                         | U       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | 1,3-Dichloropropane                    |  | 0.00454                      | 1                                     | U                         | U       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | 1,4-Dichlorobenzene                    |  | 0.00454                      | 1                                     | Ų                         | U       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | 2,2-Dichloropropane                    |  | 0.00454                      | 1                                     | 0                         | U       |                          |   |                           |         |                    | ,  | -                       |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | 2-Butanone                             |  | 806000                       | 1                                     | U                         | U       | 0.05                     | 1                                       | <                         | 0       | 0.05               | 3  | <                       | 0      | 0.05                 | 1   | 5                           | 0      | 0.05            | 1   | 5                       |         |
| VOLATILES  | 2-Chloroethyl vinyl ether              |  | 80000.0                      | 1                                     | 0                         | 0       | 0.01                     | 1                                       | <                         | U       | 0.01               | 1  | <                       | ŋ      | 0.01                 | 3   | <                           | U      | Ų.U1            | 1   | Ś                       | U       |
| VOLATILES  | 2-Chlorotoluene                        |  | 0.00454                      | 1                                     | U                         | U       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | 2-Hexanone                             |  | 0.00908                      | 1                                     | 0                         | บ       | 0.05                     | 1                                       | <                         | U       | 0.05               | 1  | <                       | U      | 0.05                 | 1   | ۲                           | Ų      | 0.05            | 1   | ¢.                      | U       |
| VOLATILES  | 4-Chlorotoluene                        |  | 0,00454                      | 1                                     | 0                         | 0       |                          |   |                           |         |                    |  |                         |        | • •                  |     |                             |        |                 |   |                         |         |
| VOLATILES  | Acetone                                |  | 0.00908                      | 1                                     | 0                         | U       | 0.1                      | 1                                       | ٢.                        | U       | ¥.1                | 1  | <                       | U<br>  | 0.1                  | 1   | Ś                           | 0      | 0.1             | 1   | š.                      | U<br>U  |
| VOLATILES  | Benzene                                |  | 0.00454                      | 1                                     | U                         | 0       | 0,005                    | 1                                       | <                         | U       | 0.005              | 1  | ٢                       | Ų      | 0.005                | 1   | <                           | U      | 0.005           | 1   | ۲.                      | ų       |
| VOLATILES  | Bromobenzene                           |  | 0.00454                      | 1                                     | 0                         | 0       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | Bromochloromethane                     |  | 0.00454                      | 1                                     | 0                         | ບ       |                          |   |                           |         |                    |  |                         |        | 0.005                |     | ,                           |        | 0.005           |   |                         | 11      |
| VOLATILES  | Bromodichloromethane                   |  | 0.00454                      | 1                                     | 0                         | U       | 0.005                    | 1                                       | <                         |         | 0.005              | 1  |                         |        | 0.005                | 1   | 5                           |        | 0.005           | 1   | 2                       | 0       |
| VOLATILES  | Bromotorm                              |  | 0.00454                      | 1                                     | บ                         | U<br>   | 0.005                    | 1                                       | <                         | 0       | 0.005              | 1  | Ś.                      |        | 0.005                | 1   | 5                           |        | 0.005           | 1   | 5                       | U<br>14 |
| VOLATILES  | Bromomethane                           |  | 0.00908                      | 1                                     | 0                         | U<br>   | 0.01                     | 1                                       | <                         | 0       | 0.01               | 1  | <                       |        | 0.01                 | 1   | <u>د</u>                    |        | 0.01            | 1   | 5                       | 0       |
| VOLATILES  | Carbon disulfide                       |  | 0.00454                      | 1                                     | 0                         | U       | 0.005                    | 1                                       | ×                         |         | 0.005              | 1  | 5                       | 0      | 0.005                | 1   | Ś                           |        | 0.005           | 4   | 2                       | 0       |
| VULATILES  | Carbon tetrachionde                    |  | 0.00454                      | 1                                     |                           | 0       | 0.005                    | 1                                       | 5                         | 0       | 0.005              |  | 2                       |        | 0.005                | 1   | 2                           |        | 0.005           | -   | 2                       |         |
| VOLABLES   | Chloropenzene                          |  | 0.00454                      | 1                                     | U II                      | U D     | 0.005                    | 1                                       | ŝ                         | 0       | 0.005              | 1  | 5                       |        | 0.005                | -   | 2                           | 0      | 0.000           | 4   | 2                       | ň       |
| VOLAGLES   | Chlorofernane                          | ·  | 0.00900                      | -                                     | 0                         | 0       | 0.01                     | 1                                       | Ż                         | υ<br>11 | 0.01               | 2<br>4                                     | 2                       | Ц      | 0.07                 | -   | Ù                           |        | 0.01            | ÷   | 2                       | ň       |
| VOLABLES   | Chlorom                                |  | 0.00404                      | *                                     | И<br>И                    | 0       | 0,00                     | 4                                       | C                         | 21      | 0.000              | 4  | 2                       | บ<br>ย | 0.003                | ;   | 2                           | บ<br>ม | 0.003           | ÷   | 2                       | ň       |
| VOLAGLES   | choromeurane                           | E Contraction of the second se | 0.00900                      | ،<br>•                                | v                         | v       | 0.01                     |   | Ì                         | U       | 0.01               | 4  | ì                       | U      | 0.01                 | •   | 1                           | U      | 0.01            |   |                         |         |
| VOLAHLES   | cis-1,2-Dichloroethene                 |  | 0.0321                       | 4                                     |                           |         | a 605                    | 4                                       | ,                         |         | 0.005              | 4  |                         | 1 F    | 0.005                | 4   |                             | 11     | 0.006           | 1   |                         | Π.      |
| VOLATILES  | Disconchildromothopa                   |  | 0.00404                      | 4                                     | ň                         |         | 0,000                    | 4                                       | 2                         |         | 0.000              | 4  | 2                       |        | 0.000                | ÷   | 2                           | ň      | 0.003           |   | Ż                       | П       |
| VOLATILES  | Distomocritoriorestasie                |  | 0.00454                      |                                       |                           |         | 0.005                    |   | `                         | Ų       | 0.000              |  |                         | U      | 0.003                | '   |                             | Ŷ      | 0,000           | •   | •                       | v       |
| VOLATILES  | Diblorediluseesthate                   |  | 0.00404                      | 4                                     | 11                        | о<br>л  |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | District of the press                  |  | 0.00900                      | 4                                     |                           | 0       | 0.005                    | +                                       |                           |         | 0.006              | 1  |                         | ш      | 0.005                | 4   | 2                           | п      | 0.005           | 1   | ~                       | ы       |
| VOLATILES  | Lay soblers but alloss                 |  | 0.00454                      | 4                                     | Ц                         |         | 0.003                    | •                                       | `                         | •       | 0.000              |  | •                       | •      | 0.000                | '   | •                           | v      | 0.000           |   | •                       | Ŭ       |
| VOLATILES  | Inencepulleonzono                      |  | 0.00454                      | 1                                     |                           | U R     |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | naupropyrocaediid<br>m.n.Yulonae       |  | 0.00434                      | 4                                     | - U                       |         |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLAHILEO<br>VOLATI ES   | m,p*Ayistics<br>Mothid isobubil katopo |  | 0.00409                      | - 1<br>- 1                            | 14                        | ii ii   | 0.05                     | 1                                       |                           | 41      | 0.05               |  | ~                       | н      | 0.05                 | 1   | e                           | 11     | 0.04            | 1   | <                       | я       |
| VOLATILES  | Mathidana chlorida                     |  | 0.00900                      | . +<br>. +                            | - U                       |         | 0.00                     | 4                                       | 2                         | 1       | 0.03               | 1  | 2                       | 11     | 0.03                 |     | ž                           |        | 0.00            | 1   | è                       | ű       |
| VOLATIES   | Nanhthalena                            |  | 0.00434                      |                                       | 11                        |         | 0,000                    | '                                       | -                         | v       | 0.003              |  | •                       | J      | 0.000                | •   | •                           | ~      | 0,000           | •   | -                       | ÷       |
| VOLATICES  |  |  | 0.00300                      | 1                                     | - U                       | ii.     |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
| VOLATILES  | n-PROPYLSENZENE                        |  | 0.00454                      | 1                                     | Ű                         | ม       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |
|  |  | 1  |                              |                                       | -                         | •       |                          |   |                           |         |                    |  |                         |        |                      |     |                             |        |                 |   |                         |         |

| Table 3-107   |    |   |
|---|----|---|
| Concentrations of Chemicals in Soil Samples Associated with Sur | np | 1 |
| Shaw Environmental, Inc. |
|--------------------------|
| 00066321                 |

|                  | Concen                                | rations | of C     | hemic    | als in  | Soi      | I Sa  | amp | les As | so    | ocia | ted | with S | Sun   | י קו | 121      |        |        |      |          |        |          |          |          |
|------------------|---------------------------------------|---------|----------|----------|---------|----------|-------|-----|--------|-------|------|-----|--------|-------|------|----------|--------|--------|------|----------|--------|----------|----------|----------|
| (SUMP) = SUMP121 | · · · · · · · · · · · · · · · · · · · |         |          |          |         |          |       |     |        |       |      |     |        |       |      |          |        |        |      |          |        | ~~~      |          |          |
| LOCATION_CODE    |                                       | 358     | UMP12    | 1-SB01   | 35SUN   | IP121-   | -SB01 |     | LH-    | S121  | -01  |     | LH-    | S121  | -01  |          | LH     | I-S121 | -02  |          | LH     | \$123    | -02      |          |
| SAMPLE_NO        |                                       | 35-\$4  | AP121-   | \$801-01 | 35-SMP  | 121-\$   | B01-0 | 2   | LH-S   | 121-0 | 01_1 |     | LHS    | 121-0 | )1_2 |          | LH-    | 5121-  | 02_1 |          | LH-S   | 5121-(   | 12_2     |          |
| SAMPLE_DATE      |                                       |         | 9/14/20  | 006      | 9/1     | 14/200   | 6     |     | 8/     | 4/199 | 33   |     | 8/     | 4/199 | 3    |          | 5      | 8/4/19 | 93   |          | 8      | 4/199    | 3        |          |
| DEPTH            |                                       |         | Q.5 - O. | 5 Ft     | 10      | ) - 10 F | Ft    |     | 0.5    | - 1.5 | Ft   |     | 5      | -6F   | t    |          | 0.     | 5 - 1. | SFt  |          | 1      | ) - 13 F | 1        |          |
| SAMPLE_PURPOSE   |                                       |         | REC      | 3        |         | REG      |       |     |        | REG   |      |     |        | REG   |      |          |        | REG    | •    |          |        | REG      |          |          |
| Test Group       | Parameter (Units = mg/kg)             | Result  | DIL      | LQ VQ    | Result  | DiL      | ίQ    | VQ  | Result | DIL   | LQ   | VQ  | Result | DiL   | LQ   | VQ       | Result | DIL    | LQ   | VQ       | Result | DIL      | 10       | VQ       |
| VOLATILES        | p-ISOPROPYLTOLUENE                    |         |          |          | 0.00454 | 1        | U     | U   |        |       |      |     |        |       |      |          |        |        |      |          |        |          |          |          |
| VOLATILES        | sec-BUTYLBENZENE                      |         |          |          | 0.00454 | 1        | U     | U   |        |       |      |     |        |       |      |          |        |        |      |          |        |          |          |          |
| VOLATILES        | Styrene                               |         |          |          | 0.00454 | 1        | Ų     | U   | 0.005  | 1     | <    | Ų   | 0.005  | 1     | <    | Ų        | 0.005  | 1      | <    | υ        | 0.005  | 1        | <        | Ų        |
| VOLATILES        | tert-BUTYLSENZENE                     |         |          |          | 0.00454 | 1        | ປ     | ប   |        |       |      |     |        |       |      |          |        |        |      |          |        |          |          |          |
| VOLATILES        | Tetrachioroethene                     |         |          |          | 0.00454 | 1        | U     | Ų   | 0.005  | 1     | <    | U   | 0.005  | 1     | <    | U        | 0.005  | 1      | <    | U        | 0.005  | 1        | <        | U        |
| VOLATILES        | Toluene                               |         |          |          | 0.00454 | ۱        | Ų     | ٠U  | 0.005  | 1     | <    | ย   | 0.005  | 1     | <    | U        | 0.005  | 1      | <    | U        | 0.005  | 1        | <        | Ų        |
| VOLATILES        | trans-1,2-Dichloroethene              |         |          |          | 0,00454 | 1        | U     | U   |        |       |      |     |        |       |      |          |        |        |      |          |        |          |          |          |
| VOLATILES        | trans-1,3-Dichloropropene             |         |          |          | 0.00454 | 1        | U     | ម   | 0.005  | 1     | <    | U   | 0.005  | 1     | <    | U        | 0.005  | 1      | <    | U        | 0.005  | 1        | <        | 0        |
| VOLATILES        | Trichloroethene                       |         |          |          | 0.0845  | 1        |       |     | 0.005  | 1     | <    | U   | 0.005  | 1     | <    | Ų        | 0.005  | 1      | <    | Ų        | 0.005  | 1        | <        | U        |
| VOLATILES        | Trichlorofluoromethane                |         |          |          | 0.00908 | 1        | Ų     | ₽   |        |       |      |     |        |       |      |          |        |        |      |          |        |          |          |          |
| VOLATILES        | Vinyl acetate                         |         |          |          | 0.00908 | 1        | U     | U   | 0,05   | 1     | <    | ប   | 0.05   | 1     | <    | U        | 0.05   | 1      | <    | U        | 0.05   | 1        | <        | U        |
| VOLATILES        | Vinyl chloride                        |         |          |          | 0.00908 | 1        | U     | U   | 0.01   | 1     | <    | U   | 0.01   | 1     | <    | U        | 0.01   | 1      | <    | U        | 0.01   | 1        | <        | U        |
| VOLATILES        | Xylenes, Total                        |         |          |          |         |          |       |     | 0.005  | 1     | <    | V   | 0.005  | 1     | <    | <u> </u> | 0.005  | 1      | <    | <u> </u> | 0.005  |          | <u> </u> | <u> </u> |

Table 3-107

Footnotes are shown on cover page to Tables Section.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-108 Concentrations of Chemicals in Soil Samples Associated with Sump 122

| [SUMP] = SUMP 122        |  |                  |                   |                                 |                             |                                 |                    |                  |                  |                     |                      |                        |
|--------------------------|--|------------------|-------------------|---------------------------------|-----------------------------|---------------------------------|--------------------|------------------|------------------|---------------------|----------------------|------------------------|
| LOCATION CODE            |  | 04SB02           | 04SB02            | 04SB05                          | 04SB05                      | 04\$B05                         | LH-\$122-01        | LH-S122-01       | LH-S122-01       | LH-S122-02          | LH-S122-02           | EH-S122-02             |
| SAMPLE_NO<br>SAMPLE DATE |  | 6/2/2000         | 6/2/2000          | 12/14/2000                      | 12/6/2000                   | 12/6/2000                       | 83/1993            | 8/3/1993         | 8/3/1993         | 8/3/1993            | 8/3/1993             | 8/3/1993               |
| DEPTH                    |  | 0-0.5 Ft         | 1-2 F!            | 0-05Ft                          | 1-3Ft                       | 3-5FI                           | 0.5 - 1.2 Ft       | 0.5 - 1.2 F1     | 4-45Ft           | 0.5 - 1 Ft          | 4-4.5Ft              | 5.4 - 5.9 Ft           |
| SAMPLE_PURPOSE           |  | REG              | REG               | REG                             | REG                         | REG                             | FD                 | REG              | REG              | REG                 | REG                  | REG                    |
| Test Group               | Parameter (Units = mg/kg)              | Result DIL LQ VQ | Result DII: LQ VQ | Result Dil LQ VQ                | Result DIL LQ VQ            | Result DIL LQ VQ                | Result Dill. LO VO | Result DIL LO VQ | Result DIL LQ VQ | Result DIL LO VO    | Result DIL LO VO     | Result DIL LO VO       |
| DIOXINS_FURANS           | 1.2.3.4.6.7.8-Heptachlorod/benzoturan  |                  |                   | 1.50E-05 1 < E                  | 7.60E-05 1                  | 6.70E-07 1 J                    |                    |                  |                  |                     |                      |                        |
| DIOXINS FURANS           | 1,2,3,4,7,8,9-Heptachiorodibenzoluran  |                  |                   | 7.60E-07 1 J                    | 6.20E-06 1 < I              | 3.40£-07 1 < U                  |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | 1,2,3,4,7.8-Hexachlorodibenzofuran     |                  |                   | 4.30E-07 1 < 1                  | 3.20E-06 1 < E              | 2.10E-07 1 < El                 |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | 1,2,3,4,7,8-Hexachiorodibenzo-p-dioxin |                  |                   | 7.00E-07 1 J                    | 1.90E-06 1 J                | 9.50E-07 1 < U                  |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | 1,2,3,6,7,8-Hexachtordibenzo-p-dioxin  |                  |                   | 1.20E-06 1 J                    | 7.60E-06 1                  | 5.90E-07 1 < U                  |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | 1,2,3,5,7,8-Hexachiordithenzouran      |                  |                   | 460E-07 1 1                     | 3.50E-06 1 J                | 1.50E-07 1 < 1                  |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | 1.2.3,7,8.9 Hexachlorodibenzofuran     |                  |                   | 3.90E-07 1 < 1                  | 1.50E-06 1 J                | 5.80E-07 1 < U                  |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | 1,2,3,7,8-Pentachlordibenzo-p-dioxin   |                  |                   | 5.00E-07 1 < 1                  | 7.70E-07 1 < 1              | 2:40E-07 1 < U                  |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | 1,2,3,7,8-Pentachlorodibenzoluran      |                  |                   | 1.30E-07 1 < U                  | 5.70E-07 1 J                | 2.60E-07 1 < U                  |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | 2.3.4.6.7.8-Hexachlorodibenzofuran     |                  |                   | 6.50E-07 1 J                    | 4.50E-06 1 J                | 3.30E-07 1 < U<br>170€-07 1 < U |                    |                  |                  |                     |                      |                        |
| DIOXINS FURANS           | 2.3.7.8-TCDD                           |                  |                   | 3.40E-07 1 < U                  | 4.60E-07 1 < U              | 2.80E-07 1 < U                  |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | 2.3.7.8-TCDF                           |                  |                   | 2.60E-07 1 < U                  | 4.10E-07 1 < U              | 2.00E-07 t < U                  |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | Heptachlorodibenzofuran                |                  |                   | 1.20E-05 1 UB                   | 2.30E-04 1                  | 2.50E-06 1 J                    |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | Heptachlorodibenzo-p-dioxin            |                  |                   | 4.00E-05 1 B                    | 4.60E-04 1                  | 1.50E-05 1                      |                    |                  |                  |                     |                      |                        |
| DIDXINS_FURANS           | Hexachlondibenzofuran                  |                  |                   | 0.50E-06 1<br>867E-06 1         | 4.40E-05 1<br>0.50E-05 1    | 7.20E-07 1 < 0                  |                    |                  |                  |                     |                      |                        |
| DIOXINS FURANS           | Oclashkorodibenzofuran                 |                  |                   | 1.70E-05 1 UB                   | 1.90E-04 1                  | 1.90E-06 1 J                    |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | Octachlorodibenzo-p-dioxin             |                  |                   | 8.10E-04 1                      | 7.00E-03 1                  | 1.40E-03 1                      |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | Pentachiorodibenzoturan                |                  |                   | 1.80E-07 1 < U                  | 3.00E-05 1                  | 2.60E-07 1 < U                  |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | Pentachlorodibenzo-p-dioxin            |                  |                   | 1.20E-06 1 J                    | 2.20E-06 1 J                | 2.40E-07 1 < U                  |                    |                  |                  |                     |                      |                        |
| DIOXINS_FURANS           | Tetrachlorodiberzone-dioxin            |                  |                   | 2.60E-07 1 < U<br>349F-07 1 < U | 4.605-06 1                  | 2804E-07 t J                    |                    |                  |                  |                     |                      |                        |
| EXPLOSIVES               | 1,3,5-Trinkrobenzene                   |                  |                   | 0.200 1 < U                     | 0.2 1 < U                   | 0.19 1 < U                      |                    |                  |                  |                     |                      |                        |
| EXPLOSIVES               | 1,3-Dinstrobenzene                     |                  |                   | 0.098 1 < U                     | 0.099 1 < U                 | 0.096 1 < U                     |                    |                  |                  |                     |                      |                        |
| EXPLOSIVES               | 2,4,6-Trinkrotokuene                   |                  |                   | 0.200 1 < U                     | . 02 1 < U                  | 0.19 1 < U                      |                    |                  |                  |                     |                      |                        |
| EXPLOSIVES               | 2,4-Dinarologiene                      |                  |                   | 0200 1 < 0                      |                             | 0.19 1 < 0                      |                    |                  |                  |                     |                      |                        |
| EXPLOSIVES               | 2-Amino-4,6-dinitrotoluene             |                  |                   | 0.098 1 < U                     | 0.099 1 < U                 | 0.096 1 < U                     |                    |                  |                  |                     |                      |                        |
| EXPLOSIVES               | 4-Amino-2,6-dinitrotoluene             |                  |                   | 0.490 1 < U                     | 0.5 t < U                   | 0.48 1 < U                      |                    |                  |                  |                     |                      |                        |
| EXPLOSIVES               | HMX                                    |                  |                   | 0.290 1 < U                     | 0.3 1 < U                   | 029 1 < U                       |                    |                  |                  |                     |                      |                        |
| EXPLOSIVES<br>EXPLOSIVES | m-Ndrololuene                          |                  |                   | 0.390 1 < U                     | 0.4 } < U                   | 0.38 1 < U                      |                    |                  |                  |                     |                      |                        |
| EXPLOSIVES               | o-Nitrotoluene                         |                  |                   | 0.490 1 < U                     | 0.5 1 < U                   | 0.48 1 < U                      | •                  |                  |                  |                     |                      |                        |
| EXPLOSIVES               | p-Nitrotoluene                         |                  |                   | 0.490 1 < U                     | 0.5 t < U                   | 0.48 1 < U                      |                    |                  |                  |                     |                      |                        |
| EXPLOSIVES               | RDX                                    |                  |                   | 0.290 î < U                     | 0.3 1 < U                   | 0.29 1 < U                      |                    |                  |                  |                     |                      |                        |
| EXPLOSIVES               | l etryl                                |                  |                   | 0.200 1 < U                     | 0.2 t < U                   | U > 1 91.0                      | 16200 1            | 17900 f          | 17900. 1         | 14000 1             | 14300 1              | 15300 1                |
| METALS                   | Antimony                               |                  |                   | 1.100 100 < UJ                  | 1.1 100 < 03                | 1.15 100 < UJ                   | 3 1 < U            | 3 1 < U          | 3 1 < U          | 1 1 < U             | 3.1 < U              | 3 1 < U                |
| METALS                   | Arsenic                                |                  |                   | 3.670 100                       | 4.15 100                    | 2.16 100                        | 4.2 1              | 4.2 1            | 3.9 1            | 4.6 1               | 3.8 1                | 4.3 1                  |
| METALS                   | Basium                                 |                  |                   | 103.000 100 J                   | 65.4 109 J                  | 45.5 100 J                      | 95.2 1             | 110 1            | 76.6 1           | 86 1                | 92.8 1               | 169 1                  |
| METALS                   | Berystum<br>Continue                   |                  |                   | 0.707 100 J                     | 0.453 100                   | 0.301 100                       | 1 1 - 11           | 1 ÷ , 11         | 1 1 . 11         | ال م <del>ا</del> ا | 1121                 | 1 1 2 11               |
| METALS                   | Calcium                                |                  |                   | 572.000 100 J                   | 1060 100                    | 776 100 < U                     | 322 1              | 540 1            | 1050 1           | 1080 1              | 1520 1               | 1350 1                 |
| METALS                   | Chromium                               |                  |                   | 14.000 100 J                    | 14.4 100                    | 12.6 100                        | 22.6 1             | 20.6 1           | 19 1             | 19,3 1              | 16.3 1               | 18.3 1                 |
| METALS                   | Cobalt                                 |                  |                   | 6.830 100                       | 6.61 100                    | 4.12 100                        | 6.4 1              | 6.5 1            | 10.2 1           | 6 1                 | 5.8 1                | 8 1                    |
| METALS                   | Copper                                 |                  |                   | 5.550 100                       | 5.95 100                    | 3.65 100                        | 6.5 1              | 7.2 1            | 4.5 1            | 5 1                 | 5.6 1                | 5.7 1                  |
| METALS                   | lead                                   |                  |                   | 11400.000 100                   | 9.19 100                    | 5.75 100                        | 7.3 1              | 11.2 1           | 99 1             | 11.5                | 10.1 1               | 14.1 1                 |
| METALS                   | Magnesium                              |                  |                   | 722.000 100 J                   | 693 100                     | 771 100                         | 1120 1             | 1290 1           | 1220 1           | 951 1               | 1120 1               | 1230 1                 |
| METALS                   | Manganese                              |                  |                   | 204.000 100 J                   | 162 100 J                   | 55.1 100 U                      | 207 1              | 190 t            | 332 1            | 294 \$              | 219 1                | 610 1                  |
| METALS                   | Mercury                                | *                |                   | 0.044 1 < U                     | 0.047 1 < U                 | 0.045 1 < U                     | 0.1 1 < U          | 0.1 ¥ < U        | 0.1 1 < U        | 0.1 1 < U           | 0.1 <sup>1</sup> < U | 0.1 1 < U              |
| METALS                   | Nickel<br>Potassium                    |                  |                   | 485,990,100 .i                  | 5.59 100<br>784 100 .1      | 514 100 .1                      | 1590 1             | 1910 1           | 710 1            | 617 1               | 631 1                | 679 t                  |
| METALS                   | Selenium                               |                  |                   | 0.670 100 J                     | 0.572 100 J                 | 0.58 100 < U                    | 11 < ₩             | 11 < U           | 11 < U           | 11 < U              | 11 < U               | 11 < U                 |
| METALS                   | Silver                                 |                  |                   | 0.110 100 < U                   | 0.11 100 < U                | 0.12 100 < U                    | 11 < U             | 11 < U           | t 1 < U          | 1 1 < U             | 11 < U               | 11 < U                 |
| METALS                   | Sodium                                 |                  |                   | 86.100 100 J                    | 1050 100                    | 762 100                         |                    |                  |                  | 40 F 4              |                      | <b>D4</b> G <b>- 1</b> |
| METALS                   | Stronglum<br>Theatform                 |                  |                   | 1100 100 2 11                   | 15_4 100<br>11 100 c 11     | 15.4 100                        | 40.3 1             | 40.1 1           | 19.3 1           | 10.5 1              | 21 1                 | 21.0                   |
| METALS                   | Vanadium                               |                  |                   | 26.900 100                      | 25.6 100                    | 20.2 100                        |                    |                  |                  |                     |                      |                        |
| METALS                   | Zinc                                   |                  |                   | 15.700 100                      | 20.3 100                    | 15.5 100                        | 36.5 1             | 33.9 1           | 28 1             | 26.3 1              | 26.9 1               | 30.5 t                 |
| PCBS                     | Aroclor 1016                           |                  |                   | 0.053 1 < U                     | 0.057 1 < U                 | 0.056 t < U                     |                    |                  |                  |                     |                      |                        |
| PCBS                     | Arockor 1221<br>Ampler 1232            |                  |                   | 0.053 1 < U                     | 0.057 t < U                 | 0.055 1 < U                     |                    |                  |                  |                     |                      |                        |
| PCBS                     | Arocky 1242                            |                  |                   | 0.053 1 < 1/                    | 0.057 t < U<br>0.057 t ∠ li | 0.056 t < U                     |                    |                  |                  |                     |                      |                        |
| PCB\$                    | Aroclor 1248                           |                  |                   | 0.053 i < U                     | 0.057 1 < U                 | 0.056 t < U                     |                    |                  |                  |                     |                      |                        |
| PCBS                     | Arockor 1254                           |                  |                   | 0.053 t < U                     | 0.057 1 < U                 | 0.056 1 < U                     |                    |                  |                  |                     |                      |                        |
| PCBS                     | Arocior 1260                           | 45.4.50          | <b>10</b> C C D   | 0.053 1 < U                     | 0.057 1 < U                 | 0.055 1 < U                     |                    |                  |                  |                     |                      |                        |
| 1640                     | FERGINATE                              | 40.4 50          | 33.0 50           | 1.220 10                        | 10.9 200                    | 49.8 500                        |                    |                  |                  |                     |                      |                        |





Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-108 Concentrations of Chemicals in Soil Samples Associated with Sump 122

| [SUMP] = SUMP122               |   | A19002 (M                  |                             |           | 049805                        | OdSB05           | 18-5122-01               | 111-5122-01              | 1H-S122-01               | LH-S122-02                 | LH-S122-02               | LH-S122-02                |
|--------------------------------|---|----------------------------|-----------------------------|-----------|-------------------------------|------------------|--------------------------|--------------------------|--------------------------|----------------------------|--------------------------|---------------------------|
| SAMPLE NO                      |   | 04SB02(0-0_5) 04SB         | 3602 043<br>802(1-2) 04\$80 | i(0-0_5)  | 04SB05(1-3)                   | 04\$805(3-5)     | LH-S122-01 QC            | LH-S122-01_1             | LH-S122-01_2             | LH-S122-02_1               | LH-S122-02_2             | 114-\$122-02_3            |
| SAMPLE DATE                    |   | 6/2/2000 6/2               | /2000 12/14                 | /2000     | 12/6/2000                     | 12/6/2000        | 8/3/1993                 | 8/3/1993                 | 8/3/1993                 | 8/3/1993                   | 8/3/1993                 | 8/3/1993                  |
| DEPTH                          |   | 0-0.5Ft 1-                 | -2Ft 0-0                    | 5Ft       | 1-3Ft<br>BEG                  | 3-5Ft<br>8EG     | 0.5 - 1.2 Ft<br>ED       | 0.5 - 1.2 H<br>8EG       | 4-4.5 Ft<br>8FG          | U.5 - T PT<br>REG.         | 4 - 4.5 Ft<br>REG        | 5.4-5.971<br>REG          |
| Test Group                     | Parameter (Units = mo/kg)                   | Result DilL LQ VO Result D | NLLQ:VQ: Result             | DIL LQ VQ | Result Dil, LQ VQ             | Result DIL LQ VQ | Result DiL LO VQ         | Result Dil LQ VQ         | Result DIL LQ VQ         | Result Dil. LQ VQ          | Result DIL LQ VQ         | Result DHL LQ VQ          |
| PESTICIDES                     | 4,4'-DDD                                    |                            | 0.003                       | 1 < U     | 0.0034 1 < U                  | 0.0034 1 < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | 4,4'-DDE                                    |                            | 0.003                       | 1 < 0     | 0.0034 1 < U                  | 0.0034 t < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | 4,4'-DD4                                    |                            | 0.003                       | 1 < 1     | 0.0034 1 < U                  | 0.0034 1 < 0     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | alpha-BHC                                   |                            | 0.003                       | 1 < UJ    | 0.0034 1 < U                  | 0.0034 1 < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | alpha-Chiordane                             |                            | 0.003                       | 1 < U     | 0.0034 1 < U                  | 0.0034 1 < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | beta-BHC                                    |                            | 0.003                       | 1 < 0     | 0.0034 1 < U                  | 0.0034 1 < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | delta-BHC                                   |                            | 0.003                       | 1 < 10    | 0.0034 1 < U                  | 0.0034 1 < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | Dieldrin                                    |                            | 0.003                       | 1 < U     | 0.9034 1 < U                  | 0.0034 1 < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | Endosulfan I                                |                            | 0.003                       | t < ⊎     | 0.0034 1 < U                  | 0.0034 1 < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | Endosultan II<br>Endosultan Suttata         |                            | 0.003                       |           | 0.0034 1 < 0<br>0.0034 1 < ∛1 | 0.0034 1 < 0     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | Endran                                      |                            | 0.003                       | 1 < 0     | 0.0034 1 < U                  | 0.0034 1 < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | Endrin aldehyde                             |                            | 0.003                       | 1 < UJ    | 0.0034 1 < U                  | 0.0034 I < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | Endan ketone                                |                            | 0.003                       | 1 < U     | 0.0034 1 < U                  | 0.0034 1 < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | gamma-BHC (Lindane)                         |                            | 0.003                       | 1 < 0     | 0.0034 1 < U<br>0.0634 1 < U  | 0.0034 1 < 0     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | Heptachior                                  |                            | 0.003                       | 1 < U     | 0.0034 t < U                  | 0.0034 1 < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | Heptachlor epoxide                          |                            | 0.003                       | 1 < ⊍     | 0.0034 1 < U                  | 0.0034 1 < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES                     | METHOXYCHLOR                                |                            | 0.003                       | 1 < U     | 0.0034 1 < U                  | 0.0034 1 < U     |                          |                          |                          |                            |                          |                           |
| PESTICIDES<br>SEMINO ATHES     | Loxaphene                                   |                            | 0.230                       | 1 < 1     | 0.23 1 < 0                    | 0.024 1 < UJ     | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene                         |                            | 0.230                       | 1 < U     | 0.23 1 < U                    | 0.036 1 < UJ     | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | 1,3-Dichlorobenzene                         |                            | 0.230                       | 1 < U     | 0.23 1 < U                    | 0.06 t < UJ      | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 9.33 1 < U                |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene                         |                            | 0.230                       | 1 < U     | 023 1 < 0                     | 0.06 1 < 0.0     | 0.33 1 < 0               | 1,33 1 < 0               | 0.33 t < 0<br>t65 t < 1/ | 0.33 i < 0<br>1.65 1 < 0   | 1.65 1 < U               | 1.65 1 < U                |
| SEMIVOLATILES<br>SEMIVOLATILES | 2,4,5-incheropheno:                         |                            | 0,230                       | 1 < U     | 0.23 1 < €                    | 0.085 1 < U      | 0.33 1 < U               | 0.33 1 < 1               | 0.33 t < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | 2,4-Dichlorophenol                          |                            | 0.230                       | 1 < 0     | 0.23 1 < U                    | 0.073 1 < UJ     | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 9.33 1 < U                 | 0.33 1 < U               | 0.33 t < U                |
| SEMIVOLATILES                  | 2,4-Dimethylphenol                          |                            | 0.230                       | 1 < 0     | 0.23 t < U                    | 0.097 1 < UJ     | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < 0               | 0.33 1 < U.<br>1.65 1 < 11 | 0.33 1 < U<br>165 1 ∠ 1  | 0.33 1 < U<br>165 1 < U   |
| SEMIVOLATILES                  | 2,4-Dinitrophenos<br>2,4-Dinitrotoluegos    |                            | U.790<br>0.230              | 1 < 1/2   | 0.82 1 < 0                    | 0.073 1 < 03     | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 t < U                |
| SEMIVOLATILES                  | 2,6-Dinarotoluene                           |                            | 0.110                       | 1 < U     | 0.12 1 < U                    | 0.06 1 < UJ      | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 t < U                |
| SEMIVOLATILES                  | 2-Chioronaphthatene                         |                            | 0.230                       | 1 < U     | 0.23 1 < U                    | 0.048 1 < UJ     | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | 2-Chiorophenol                              |                            | 0.230                       | 1 < 0     | 0.23 1 < U                    | 0.06 1 < 0.1     | 0.33 1 < 0               | 0.33 1 < U               | 10.33 1 < U              | 0.33 1 < 0                 | 0.33 1 < 0               | 0.33 1 < U                |
| SEMIVOLATILES                  | 2-Methylahenci                              |                            | 0.110                       | 1 < U     | 0.12 1 < U                    | 0.085 1 < UJ     | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U                 | 0.33 t < U               | 0.33 1 ≺ U                |
| SEMIVOLATILES                  | 2-Nitroaniline                              |                            | 0.230                       | 1 < U     | 0.23 <b>!</b> < U             | 0.06 f < UJ      | 1.65 1 < <del>U</del>    | 1.65 1 < U               | 1.65 t < U               | 1.65 t < U                 | 1,65 1 < U               | 1.65 1 < U                |
| SEMIVOLATILES                  | 2-Naropheno!                                |                            | 0.110                       | 1 < U     | 0.12 1 < U                    | 0.085 1 < UJ     | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 0               | 0.33 1 < 0                 | 0.33 1 < 0               | -0.33 i < U<br>0.65 i < U |
| SEMIVOLATILES<br>SEMIVOLATILES | 3,3-Dicheorabenzidine<br>3-Nitmaciline      |                            | 0.230                       | 1 < U     | 0.23 1 < 0                    | 0.048 1 < U3     | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U               | 1.65 i < U                 | 1.65 t < U               | 1.65 1 < U                |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol                  |                            | 0.450                       | t < U     | 0.47 1 < U                    | 0.097 1 < UJ     | 1.65 t < U               | 1.65 1 < U               | 1.65 1 < V               | 1.65 1 < U                 | 1.65 1 < U               | 1.65 t < U                |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether                  |                            | 0.230                       | t < U     | 0.23 1 < U                    | 0.036 1 < U      | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol<br>4-Chloropaeilice | -                          | 0.230                       |           | 023 1 < 0                     | 0.06 1 < U       | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U                 | 0.65 1 < U               | 0.65 1 < 0                |
| SEMIVOLATILES                  | 4-Chiorophenyl phenyl ether                 |                            | 0.230                       | 1 < U     | 0.23 1 < U                    | 0.036 1 < UJ     | 0.33 1 < U               | 0.33 I < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | 4-Methylphenol                              | ł                          | 0.230                       | 1 · < U   | 0.23 1 < U                    | 0.12 1 < UJ      | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | 4-Nitzoaniline                              |                            | 0.230                       | 1 < 9     | 0.23 1 < U                    | 0.085 1 < UJ     | 1.65 1 < 0               | 1.65 7 < U               | 1.65 1 < 0               | 1.65 1 < 1                 | 1.65 1 < U<br>165 1 < U  | 1.65 1 < 1                |
| SEMIVOLATILES<br>SEMIVOLATILES | 4-Nitropheno!<br>Acenanisthene              |                            | 0.230                       | 1 < 0     | 0.23 1 < U                    | 0.048 1 < UJ     | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | Acenaphthylene                              |                            | 0.230                       | 1 < U     | 0.23 1 < V                    | 0.06 1 < UJ      | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | Anthracene                                  |                            | 0.230                       | 1 < U     | 0.23 I < U                    | 0.024 t < UJ     | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < 0                |
| SEMIVOLATILES                  | Benzo(a)anthracene<br>Benzo(a)avrene        |                            | 0.230                       |           | 0.23 1 < 0                    | 0.024 1 < UJ     | 0.33 1 < 10              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | Benzo(b)/luoranthene                        |                            | 0.230                       | 1 < U     | 0.23 1 < U                    | 0.035 1 < UJ     | 0.33 1 < U               | 0.33 1 < U               | 0.33 i < U               | 9.33 1 < U                 | 0.33 1 < U               | 0.33 t < U                |
| SEMIVOLATILES                  | Benzo(ghi)perylene                          |                            | 0.230                       | 1 < U     | 0.23 1 < U                    | 0.073 1 < UJ     | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | Benzo(k)fluoranthene                        |                            | 0.230                       | 1 < U     | 0.23 1 < U                    | 0.06 1 < UJ      | 0.33 1 < U<br>165 1 < U  | 0.33 t < U<br>165 t < H  | 0.33 t < U<br>165 1 < U  | 0.33 1 < U<br>1.65 1 < U   | 0.33 i < U<br>1.65 1 < U | 1.65 1 < 0                |
| SEMIVULATLES                   | Benzoic Acia<br>Benzoi Alcohot              |                            | 0.230                       | 1 < U     | 0.23 1 < U                    | 0.048 1 < UJ     | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U                 | 0.65 1 < U               | 0.65 1 < U                |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane                  | 1                          | 0.110                       | t < U     | 0.12 1 < U                    | 0.06 1 < U3      | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether                     |                            | 0.230                       | 1 < U     | 0.23 1 < U                    | 0.085 1 < UJ     | 0.33 1 < U               | 0.33 1 < Ŭ               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < 9                |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether                 |                            | 0.110<br>0.230              |           | 0.12 1 < U                    | 0.048 1 < UJ     | 0.33 t < U<br>0.33 t < U | 0.33 1 < 0<br>0.33 1 < 0 | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 0                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | Butyl benzyl phthalate                      |                            | 0.230                       | 1 < 0     | 0.23 1 < ⊎                    | 0.12 1 < 0.3     | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | Carbazole                                   | ]                          | 0.230                       | 1 < U     | 0.23 1 < U                    | 0.048 1 < UJ     |                          |                          |                          |                            |                          | 0.00                      |
| SEMIVOLATILES                  | Chrysene                                    |                            | 0.110                       | 1 < U     | 0.12 1 < U                    | 0.036 t < UJ     | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | Dibenzo(a.h)anthracene                      |                            | 0.230                       | 1 < U     | 023 1 < U<br>023 1 < U        | 0.048 t < 1∐     | บ.33 I < ป<br>0.33 I < ป | 0.33 1 < 1               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | Dietkyl phthalate                           |                            | 0.230                       | 1 < 0     | 0.12 1 < U                    | 0.12 1 < UJ      | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U                 | 0.33 1 < U               | 0.33 t < U                |
| SEMIVOLATILES                  | Dimethyl phihalate                          | 1                          | 0.230                       | 1 < ⊍     | 0.23 1 < U                    | 0.12 1 ≺ UJ      | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                 | 0.33 t < U               | 0.33 1 < U                |
| SEMIVOLATILES                  | oi-n-Butyi phthalate                        | 1                          | 0.230                       | 1 < U     | 0.23 1 < U                    | 0.12 1 < UJ      | 0.33 1 < 10              | 0.33 1 < U               | 0.33 1 < U               | 0.347 1                    | 0.33 1 < 0               | 10.33 € < U               |



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-108 Concentrations of Chemicals in Soil Samples Associated with Sump 122

| [SUMP] = SUMP122 |                                |                   |                  |                  |                  |                  | •                |                    |                  |                 |                  |                         |
|------------------|--------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|--------------------|------------------|-----------------|------------------|-------------------------|
| LOCATION_CODE    |                                | 04SB02            | 04SB02           | 04SB05           | 04S805           | 04\$805          | LH-S122-01       | LH-S122-01         | LH-S122-01       | LH-\$122-02     | LH-S122-02       | LH-\$122-02             |
| SAMPLE_NO        |                                | 04SB02(0-0_5)     | 04SB02(1-2)      | 04SB05(0-0_5)    | 04SB05(1-3)      | 045805(3-5)      | LH-\$122-01 QC   | LH-S122-01_1       | LH-S122-01_2     | LH-S122-02_1    | LH-\$122-02_2    | LH-S122-02_3            |
| SAMPLE_DATE      |                                | 6/2/2000          | 6/2/2000         | 12/14/2000       | 12/6/2000        | 12/6/2000        | 8/3/1993         | 8/3/1993           | 8/3/1993         | 8/3/1993        | 8/3/1993         | 8/3/1993                |
| DEPTH            |                                | 0-0.5F1           | 1-2Fi            | 0-0.5 Ft         | 1-3Ft            | 3-5Ft            | 05-12Ft          | 0.5 - 1.2 Ft       | 4-4.5 Ft         | 0.5 - 1 Ft      | 4-4.5+1          | 5.4 - 5.9 FI            |
| SAMPLE_PURPOSE   |                                | AEG               | REG              | REG              | REG              | REG              | FD               | HEG                | REG              | HEG             | HEG              | HEG<br>Denuit Dil LO MO |
| Test Group       | Parameler (Units = mg/kg)      | Result Dill LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VQ | Hesult DIL LO VU | Hesuri Dil LO VQ | Result DAL LO VO   | Hesuit DIL LU VU | Heste Dil LU VU | Hesuri Dil LQ VQ | ASSAR DIL LU VU         |
| SEMIVOLATILES    | d-n-Octyl phihalate            |                   |                  | 0.230 1 < 0      | 023 1 < 0        | 0.12 1 < 03      | 0.33 1 < 0       | 0.33 1 < 11        | 0.33 1 < 0       | 0.33 1 < 11     | 0.33 1 < 0       | 0.33 t < 0              |
| SEMIVOLATILES    | Huoranthene                    | 1                 |                  | 0230 1 < 0       | 0.23 1 < 0       | 0.025 1 4 11     | 0.33 1 < 0       | 0.33 1 < 0         | 0.33 1 < 0       | 633 1 < 1       | 0.33 1 < 13      | 0.33 1 < 0              |
| SEMIVOLATILES    | t-Morene                       |                   |                  | 0.220 1 < 1      | 0.12 3 < 0       | 0.000 1 < 00     | 0.33 1 < 0       | 0.30 1 < U         | 0.33 1 < 1       | 0.33 1 < 1      | 0.33 1 < 0       | 0.33 1 < 1              |
| SEMIVOLATILES    | Hevenhambutadiene              | 1                 |                  | 0230 1 < 0       | 023 7 4 0        | D.0%5 1 < 11     | 033 1 < 1        | 0.33 t < 1         | 0.33 1 < U       | 0.33 1 < 1/     | 0.33 1 < U       | 0.33 1 < 0              |
| SENAVOLATILES    | Hexachlorocucionantarliano     |                   |                  | 0110 1 4 1       | A12 1 c 13       | 0.073 1 < 91     | 0.33 1 < 1       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U              |
| SEMBICI ATHES    | Herachlomothane                | -                 |                  | 8110 1 < 1       | 0.12 1 < 0       | 0.06 1 < UJ      | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES    | Indeno(1.2.3-rd)ovrepe         |                   |                  | 0.230 1 < U      | 023 1 < U        | 0.06 1 < UJ      | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 t < U      | 0.33 t < U       | 0.33 1 < U              |
| SEMIVOLATILES    | Isophome                       |                   |                  | 0.230 t < U      | 0.23 1 < U       | 0.048 1 < UJ     | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 t < U              |
| SEMIVOLATILES    | Naphhalene                     | }                 |                  | 0.230 1 < U      | 023 1 < U        | 0.048 1 < UJ     | 0.33 1 < U       | 0.33 t < U         | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES    | Nitrobenzene                   |                   |                  | 0.110 1 < U      | 0.12 1 < U       | 0.085 1 < UJ     | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES    | n Nitroso-di-n-propylamine     |                   |                  | 0.230 I < U      | 0.23 1 < U       | 0.06 1 < UJ      | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES    | n-Nitrosodiphenylamine         |                   |                  | 0.230 t < U      | 0-23 1 < U       | 0.036 1 < UJ     | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES    | Pentachilorophenol             | 1                 |                  | 9.560 1 < U      | 0.59 1 < U       | 0.11 1 < UJ      | 1.65 1 < U       | 1.65 1 < U         | 1.65 1 < U       | 1.65 1 < U      | 1…65 1 < U       | 1.65 1 < U              |
| SEMIVOLATILES    | Phenanthrene                   |                   |                  | 0230 1 < U       | 0.23 1 < U       | 0.036 1 < UJ     | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES    | Phenol                         | <b>1</b> .        |                  | 0.110 1 < U      | 0.12 1 < U       | 0.073 1 < UJ     | 0.33 1 < U       | 0.33 1 < U         | 0.33 t < U       | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U              |
| SEMIVOLATILES    | Pyrene                         |                   |                  | 0.230 1 < U      | 0.23 1 < U       | 0.024 1 < UJ     | 0.33 1 < U       | 0.33 1 < U         | 0.33 1 < U       | 0.33 t < U      | 0.33 1 < U       | 0.33 1 < U              |
| VOLATILES        | 1,1,1-Trichioroethane          |                   |                  | 0.001 1 < U      | 0.0096 1 < U     | 0.0016 1 < U     | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 t < U             |
| VOLATILES        | 1,1,2,2-Tetrachloroethane      | 1                 |                  | 0.001 1 < U      | 0.0012 1 < U     | 0.0012 1 < U     | 0.005 1 < U      | 0:005 1 < U        | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES        | 1,1,2-Trichloroethane          |                   |                  | 0.001 1 < U      | 0.0013 1 < U     | 0.0013 1 < U     | 0.005 1 < U      | 0.005 1 < 1        | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < 0      | 0.005 1 < 0             |
| VOLATILES        | 1,1-Dichloroethane             |                   |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < 0      | 0.005 1 < 0     | 0.005 1 < 0      | 0.005 1 < 0             |
| VOLATILES        | 1,1-Dichloroethene             |                   |                  | 0.001 1 < U      | 0.0013 1 < 0     | 0.0013 1 < U     | 0.005 1 < 0      | 0.005 1 < 0        | 0.005 1 < 0      | 0.005 1 < U     | 0.005 1 < 0      | 0.005 1 < 0             |
| VOLATILES        | t_2-Dichloroethane             |                   |                  | 0.002 1 < 0      | 0.0017 1 < 0     | 0.0017 1 < U     | 0.005 1 < 0      | 0.005 1 < 0        | 0.005 1 < 1      | 0.005 1 < U     | 0.005 1 < 0      | 0.005 1 < 0             |
| VOLATHES         | 1,2-Dichloroethene             | 1                 |                  |                  | 0.0010 1         | D 004C 1         | 0.005 1 < 0      | 0.005 1 < U        | 0.005 1 < 0      | 0.005 1 < 0     | 0.005 1 < 0      | 0.005 3 < 0             |
| VOLATILES        | 1,2-Dichloropropane            |                   |                  | 0.001 1 < 0      | 0.0010 1 < 0     | 0.0010 1 < 0     | 0.005 1 < 0      | 0.005 1 < 0        | 0.000 1 4 0      | 2.000 V C O     | 0.000 1 < 0      | 0.000 1 4 0             |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) |                   |                  | 0.001 1 < 0      | 0.0012 1 < 0     | 0.0012 1 < 0     | 0.05 1 4 11      | 0.06 1 2 11        | 0.05 1 2 11      | 0.05 1 4 11     | 0.05 1 < 11      | 0.05 t < 1)             |
| VOLATILES        | 2-Butanone                     | 1                 |                  | U.U.J F < U      | 0.014 1 < 0      | 0.015 1 4 0      | 0.00 1 < 0       |                    | 0.03 1 < 10      | U > 1 00.0      | 0.00 1 < 0       | 0.01 1 < U              |
| VOLATILES        | 2-LANDIGENIYA VANJI ENRA       |                   |                  | 0.007 1 4 34     | 80084 1 < U      | 0.0085 1 c H     | 0.05 1 < 1       | 005 1 < U          | 0.05 1 < U       | 0.05 1 < U      | 0.05 1 < U       | 0.05 1 < U              |
| VOLATILES        | åretope                        | +                 |                  | 0.052 1 < U      | 0.06 1 < U       | 0.06 1 < U       | 0.1 1 < U        | 0.1 1 < U          | 0_1 1 < U        | 0.1 1 < U       | 0.1 1 < U        | 0.1 1 < U               |
| VOLATIES         | Benzene                        |                   |                  | 0.001 1 < U      | 0.0014 1 < U     | 0.0015 1 < U     | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES        | Bromodichloromethane           |                   |                  | 0.001 1 < U      | 0.0012 1 < U     | 0.0012 1 < U     | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES        | Bromolom                       |                   |                  | 0.001 1 < U      | 0.0012 1 < U     | 0.0012 1 < U     | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 ≺ U             |
| VOLATILES        | Bromomethane                   | 1                 |                  | 0.002 1 < U      | 0.0024 1 < U     | 0.0024 † < U     | 0.01 1 < U       | 0.01 1 < U         | 0.01 1 < U       | 0.01 t < U      | 0.01 1 < U       | 0.01 1 < U              |
| VOLATILES        | Carbon disultide               |                   |                  | 0.007 1 < U      | 0.0079 1 < U     | 0.008 f < U      | 0.005 1 < U      | 0.005 1 < U        | €.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | -0.005 1 < U            |
| VOLATILES        | Carbon tetrachioride           | 1                 |                  | 0.001 1 < U      | 0.0012 1 < U     | 0.0012 1 < U     | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES        | Chlorobenzene                  |                   |                  | 0.001 1 < U      | 0.0012 1 < U     | 0.0012 1 < U     | 0.005 1 < 9      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < 1     | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES        | Chloroethane                   |                   |                  | 0.001 1 < U      | 0.0012 1 < U     | 0.0912 1 < U     | 0.01 1 < U       | 0.01 1 < U         | 0.01 1 < U       | 0.01 1 < 0      | 8.01 1 < U       | 0.01 1 < U              |
| VOLATILES        | Chloroform                     |                   |                  | 0.001 1 < U      | 0.0016 1 < U     | 0.0016 1 < U     | 0.005 1 < U      | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < 0     | 0.005 1 < 0      | 0.005 1 < 0             |
| VOLATILES        | Chieromethane                  |                   |                  | 9.002 t < U      | 0.0024 1 < U     | 0.0024 1 < U     | 0.01 1 < 0       | Q.Q1 1 < U         | 9.01 1 < U       | 0101 I < U      | 0.01 1 < 0       | U.Us + < U              |
| VOLATILES        | cis-1,2-Dichloroethene         |                   |                  | 0.001 t < U      | 0.0012 1 < U     | 0.0012 1 < 0     | 0.000 1          | 0.005 1 . 31       | 0.005 1 . 11     | A 006 t         | 0.005 1          | 0.005 1 4 11            |
| VOLATILES        | cis-1,3-Dichloropropene        |                   |                  | 9.001 î < U      | 0.0014 1 < 0     | 0.0013 1 < 0     | 0.005 1 < 0      |                    | 0.005 1 < 11     | 0.005 t < U     | 0.000 1 < 0      | 0.005 1 < 1             |
| VOLATILES        | Dibromochlozometnane           |                   |                  | 0.001 5 < 0      | 0.0012 1 < 1     | 0.0013 1 < 0     | 0.005 1 < 0      | 0.003 \$ < 0       | 8.005 1 4 11     | 0.000 / < 8     | 0.005 1 < 0      | 0.005 t < tt            |
| VOLATILES        | Ethyberizene                   |                   |                  | 10.001 t < U     | 0.0012 1 < 0     | 0.0012 1 4 0     | 10.000 I K U     |                    | 0.000 / < 0      |                 |                  |                         |
| VOLATILES        | m,p-Aylenes                    |                   |                  | 0.001 F < 0      | 0.0012 1 < 0     | 0.0012 1 < 0     | 005 1 < 11       | 0105 t <b>∠</b> 11 | 0.05 1 < 11      | 005 1 < U       | 0051 < V         | 0.05 1 < U              |
| VOLATILES        | Methyl Isoburyl Actorie        |                   |                  | 0.000 1 < 0      | 0.000 1 < 1      | 0.006 1 < 11     | 0.06 1 < 1       | 0.005 1 < U        | 0.005 t < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 t < U             |
| VOLATILES        | Shirana                        | ļ.                |                  | 0.000 1 < 0      | 0.0012 1 < U     | 0.0012 1 < U     | 0.005 1 < U      | 0.005 1 < U        | 9.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 i < U             |
| VOLATIES         | Tetrachlomethene               |                   |                  | 0.001 1 < U      | 0.0012 1 < U     | 0.0012 1 < U     | 0.005 i < U      | 0.005 t < ⊎        | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES        | Toluene                        |                   |                  | 0.003 1 < U      | 0.0036 1 < U     | 0.0036 1 < U     | 0.005 t < U      | 0.005 t < U        | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U             |
| VOLATEES         | trans-1,2-Dichtoroethene       | 1                 |                  | 0.001 1 < U      | 0.0012 1 < U     | 0.0012 1 < U     |                  |                    |                  |                 |                  |                         |
| VOLATILES        | trans-1.3-Dichloropropene      |                   |                  | 0.002 1 < U      | 0.0017 t < U     | 0.0017 1 < U     | 0.005 1 < U      | 0.005 t < U        | 0.005 1 < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES        | Trichkoroethene                | 1                 |                  | 0.002 1 < U      | 0.0022 1 < U     | 0.0022 1 < U     | 0.005 1 < U      | 0.005 t < U        | .0.005 1 < U     | 0.005 t < U     | 0.005 1 < U      | 0.005 1 < U             |
| VOLATILES        | Trichlorofluoromethane         | 1                 |                  | 0.002 1 < U      | 0.0024 t < U     | 0.0024 1 < U     |                  |                    |                  |                 |                  |                         |
| VOLATILES        | Vinyl acetate                  |                   |                  | 0.014 1 < U      | 0.016 1 < U      | U > 1 010.0      | 0.05 1 < U       | 0.05 1 < U         | 0:05 1 < U       | 0.05 1 < U      | 0…05 1 ≺ U       | 9.05 1 < U              |
| VOLATILES        | Vinyt chkoride                 |                   |                  | 0.002 1 < U      | 0.0024 ! < U     | 0.0024 1 < U     | 0.01 1 < U       | 0.01 1 < U         | 0.01 1 < U       | 0.01 1 < U      | 0.01 1 < U       | 0.01 1 < U              |
| VOLATILES        | Xylenes, Total                 |                   |                  |                  |                  |                  | 0.005 1 < U      | 0.005 1 < U        | 0.005 t < U      | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < 0             |

Footnotes are shown on cover page to Tables Section.



Table 3-109 Concentrations of Chemicals in Soil Samples Associated with Sump 125

| [SUMP] = SUMP125 |                                       |                  |                  |                  |                       |                   |                    |                 |                      |                  |                   |                   |                  | 1100 011 04      |
|------------------|---------------------------------------|------------------|------------------|------------------|-----------------------|-------------------|--------------------|-----------------|----------------------|------------------|-------------------|-------------------|------------------|------------------|
| LOCATION _CODE   |                                       | 35ASB03          | 35ASB03          | 35ASB03          | 35ASB03               | 35SUMP125-SB01    | 35SUMP125-SB02     | LH-DL723-01     | LH-DL723-01          | LH-S723-01       | LH-S723-01        | LH-S723-02        | LH-S7Z3-02       | LHS-SH-04        |
| SAMPLE NO        |                                       | 35ASB03(0-0_5)   | 35ASB03(0-0_5)QC | 35ASB03(1-3)     | 35ASB03(3-5)          | 35-SMP125-SB01-02 | 35-SMP125-SB02-02  | LH-DL723-01     | LH-DL723-01-BERASS02 | LH-S723-01_1     | LH-\$723-01_2     | LH-S723-02_1      | LH-S723-02_2     | LHS-SH-04        |
| SAMPLE DATE      |                                       | 7/26/1998        | 7/26/1998        | 7/26/1998        | 7/26/1998             | 9/20/2006         | 9/20/2006          | 6/26/1993       | 10/5/2006            | 6/26/1993        | 6/26/1993         | 6/26/1993         | 6/26/1993        | 1/12/1995        |
| DEDTU            |                                       | 0- 5 Ft          | 0-5Ft            | 1-3Ft            | 3-5Ft                 | 10 - 10 Ft        | 10 - 10 Ft         | 1-2 Ft          | 0-0 Ft               | .5 - 1.5 Ft      | 4 - 4.5 Ft        | .5 - 1.5 Ft       | 4-5F1            | 05 Ft            |
|                  |                                       | 0-311            | 50.011           | 950              | PEG                   | PEG               | REG                | REG             | REG                  | REG              | REG               | REG               | REG              | REG              |
| SAMPLE_PORPOSE   |                                       | KEG              |                  | REG NO           |                       |                   | Reput DI 10 VO     |                 | Result Dil +0 VO     |                  | Result Dill LO VO | Result Dill 10 VD | Result DII LO VO | Result Dil LO VO |
| Test Group       | Parameter (Units = mg/kg)             | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ      | Result DIL LQ VQ  | Result DIL LO2 VO2 | RESUL DIE EQ VQ | Nesul DIL LO VO      | Nesdit Die Ed Vo | RESUL DIE EU TU   | Acour Die Eu Tu   |                  |                  |
| DIOXINS_FURANS   | 1,2,3,4,6,7,8-Heptachlorodibenzofuran | 1.4E-05 1        | 8.5E-06 1        | 1.4E-06 1        | 4.2E-07 1 < UJ        |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | 1,2,3,4,6,7,8-HpCDD                   | 8.5E-05 1        | 5.5E-05 1        | 1.1E-05 1        | 4.2E-06 1             |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | 1,2,3,4,7,8,9-Heptachlorodibenzofuran | 8.9E-07 1 < U    | 1.2E-06 1        | 2.7E-07 1 < U    | 1.1E-07 1 < U         |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS FURANS   | 1.2.3.4.7.8-Hexachlorodibenzofuran    | 1.8E-05 1 < UJ   | 1.1E-05 1        | 5.4E-06 1 < UJ   | 1.9E-06 1 < UJ        |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS FURANS   | 123478-Hexachloradihenzo-n-dioxin     | 30F-06 1 < U     | 3.9E-07 1 < U    | 2.6E-07 1 < U    | 1.3E-07 1 < U         |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOYINS ELIPANS  | 12367 R-Heverblortibenzon-diavin      | 175-06 1 < 11    | 205-06 1         | 24F-07 1 < U     | 12F-07 1 < U          |                   |                    |                 |                      |                  |                   |                   |                  |                  |
|                  | 12257 R Hexaelised the set of the     |                  | 2 25 05 1        | 305.07 1 < 1     | 2 55.07 1             |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | 1,2,3,6,7,8-Hexachiorodibenzoturan    | 2.46-00 1 4 0    | 2.22-00 1        |                  |                       |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | 1,2,3,7,8,9-Hexachlordibenzo-p-dioxin | 2.0E-05 1 < U    | 1.25-06 1        | 2.3E-0/ 1 < 0    | 1.2E-0/ 1 < U         |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | 1,2,3,7,8,9-Hexachkorodibenzofuran    | 4.1E-06 1 < U    | 4.7E-07 1 < U    | 4.9E-07 1 < U    | 8.65-08 1 < 0         |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | 1,2,3,7,8-Pentachlordibenzo-p-dioxin  | 1.0E-05 1 < U    | 1.815-06 1 < U   | 3.9E-07 1 < U    | 1.2E-07 1 < U         |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | 1,2,3,7,8-Pentachlorodibenzofuran     | 5.0E-05 1        | 2.8E-05 1        | 2.4E-06 1        | 4.1£-07 1 < UJ        |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS FURANS   | 2.3.4.6.7.8-Hexachlorodibenzofuran    | 3.2E-06 1 < U    | 2.2E-06 1        | 1.0E-06 1        | 4.8E-07 1             |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOVING ELIDANS  | 33 & 7 9. Bentachlam dihan rahman     | 52E.06 1         | 1.8E-06 1 < 11   | 3.3E-07 1 < U    | 9.6F-08 1 < U         |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXING_FURANS   |                                       |                  |                  | 175.07 1 - 11    | 955.09 1 - 1          |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| UIUXINS_FURANS   | 2,3,7,8-1000                          | 1.55-00 1 5 0    | 242-01 1 0       |                  |                       |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | 2,3,7,8-1CDF                          | 4.3E-07 1 < UJ   | 6.0E-05 T        | 1.5E-07 1 < 0    | 2.12-07 1 < 0         |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | Heptachlorodibenzofuran               | 1.4E-05 1        | 9.7E-06 1        | 1.4E-06 1        | 5.7E-07 1             |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | Heptachlorodibenzo-p-dioxin           | 8.1E-05 1        | 1.1E-04 1        | 2.4E-05 1        | 1.2E-05 f             |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | Hexachioridibenzo-p-dioxin            | 1.7E-06 1 < UJ   | 9.5E-06 1 J      | 2.4E-07 1 < U    | 1.2E-07 1 < U         |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS FURANS   | Hexachlorodibenzofuran                | 1.6E-05 1        | 2.7E-05 1        | 1.5E-05 1        | 6.4E-06 1             |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS FURANS   | Octachlorodiheozofitran               | 31E-05 t         | 1.7E-05 1        | 2.1E-06 1        | 6.5E-07 1             |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOVING FURANS   | Octochlorodibenzo o diovia            | 155.03 1 B       | 7 95-04 1        | 54E-04 1 B       | 26F-04 1 B            |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXING_FUNDING  |                                       |                  | 376 04 1         | 276.05 1         | 1/E.05 1              |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | Penachiologioenzouran                 |                  |                  |                  |                       |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | Pentachlorodibenzo-p-dioxin           | 1.012-05 1 < 0   | 1.85-05 1 < 0    | 3.92-07 1 < 0    | 1.22-07 1 4 0         |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | Tetrachlorodibenzofuran, Totai        | 1.7E-04 1        | 1.3E-04 1        | 5.45-06 1        | 2.1E-06 1             |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| DIOXINS_FURANS   | Tetrachlorodibenzo-p-dioxin           | 1.5E-06 1 < U    | 2.4E-07 1 < U    | 1.7E-07 1 < U    | 9.6E-08 i < U         |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| EXPLOSIVES       | 1,3,5-Trinitrobenzene                 | 0,150 1 < U      | 0.150 1 < U      | 0.150 1 < U      | 0.150 1 < U           |                   |                    |                 |                      |                  |                   |                   |                  | 0.23 1 < 0       |
| EXPLOSIVES       | 1.3-Dintrobenzene                     | 0.050 t < U      | 0.050 1 < U      | 0.050 1 < U      | 0.050 1 < U           |                   |                    |                 |                      |                  |                   |                   |                  | 0.23 1 < U       |
| EXPLOSIVES       | 2.4.6-Trinitrotoluene                 | 0.100 1 < U      | 0.100 1 < U      | 0.100 i < U      | 0.100 1 < U           |                   |                    |                 |                      |                  |                   |                   |                  | 0.23 1 < U       |
| EXPLOSIVES       | 2 & Dimitratoluone                    | 1 > 1 0010       | 0100 1 < U       | 0.100 1 < U      | 0.100 1 < 1/          |                   |                    | 1.299 1 < U     |                      | 2.703 1 < U      | 1.299 1 < U       | 1.235 1 < U       | 1.266 1 < U      | 0.23 1 < U       |
| EXPLOSATES       |                                       |                  | 0.100 1 4 11     | 11 > 1 0010      | 0 100 1 < 11          |                   |                    | 1299 1 < 1      |                      | 2703 1 < 1       | 1_299 1 < U       | 1,235 1 < U       | 1.266 1 < U      | 0.25 1 < U       |
| EAPLUSIVES       | 2,0-Dinku olokoene                    | 0.100 1 0        |                  |                  |                       |                   |                    | 1200            |                      |                  |                   |                   |                  |                  |
| EXPLOSIVES       | 2-Amano-4,6-dimbrotoluene             | 0.050 1 < 0      | 0.050 1 < 0      | 0.050 1 < 0      | 0.050 1 < 0           |                   |                    |                 |                      |                  |                   |                   |                  | 048 1 < II       |
| EXPLOSIVES       | 4-Amino-2,6-diritrotoluene            | 0.050 1 < 0      | 0.050 1 < 0      | 0.050 1 < 0      | 0.050 1 < 0           |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| EXPLOSIVES       | HMX                                   | 0.100 1 < U      | 0.100 1 < U      | 0.100 1 < U      | 0.100 1 < U           |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| EXPLOSIVES       | m-Nitrotoluene                        | 0.100 1 < U      | 0.100 1 < U      | 0.100 1 < U      | 0.100 1 < U           |                   |                    |                 |                      |                  |                   |                   |                  | 0.96 1 < 0       |
| EXPLOSIVES       | Nitrobenzene                          | 0.100 1 < U      | 0.100 1 < U      | 0.100 1 < U      | 0.100 <b>1 &lt;</b> U |                   |                    |                 |                      |                  |                   |                   |                  | 0.25 1 < U       |
| EXPLOSIVES       | o-Nitrotoluene                        | 0.100 1 < U      | 0.100 1 < U      | 0.100 1 < U      | 0.100 1 < U           |                   |                    |                 |                      |                  |                   |                   |                  | 0.96 1 < U       |
| EXPLOSIVES       | n-Nifmioluene                         | 0.100 1 < U      | 0.100 1 < U      | 0.100 1 < U      | 0.109 1 < U           |                   |                    |                 |                      |                  |                   |                   |                  | 2.9 1 < U        |
| EXPLOSIVES       | BUX                                   | 0.100 1 < 11     | £100 1 < U       | 0100 1 < U       | 0.100 1 < U           |                   |                    |                 |                      |                  |                   |                   |                  | 11 < U           |
| EVELOGINES       | Total                                 | 0.100 t < P      | 0100 1 < R       | 0.100 1 < R      | 0100 1 < R            |                   |                    |                 | -                    |                  |                   |                   |                  | 0.71 1 < U       |
| EXECUSIVES       |                                       |                  | 4200 4           | 7600 1           | 9900.000 1            |                   |                    | 5A30. 1         | 3700 1               | 16300 1          | 8510 1            | 14400 1           | 13100 1          | 2740 1           |
| METALS           |                                       | 4500 1           | 4300 1           | 7500 1           | 2000 4 4 111          |                   |                    |                 | 017 1 P I            | 185 1 4 1        | 596 1 < 11        | 1048 1 < il       | 724 1 < 1        | 111 1 < 11       |
| METALS           | Antimony                              | 6.710 1 < UJ     | 6.5/U 1 < UJ     | 7.070 1 < UJ     | 7.200 1 < 0J          |                   |                    | 0.4 1 5         |                      | 10.5 1 1 0       | 0.00 1 4 0        | 475 4 E           | 0.041 1 5        | £1 1 1           |
| METALS           | Arsenic                               | 9.050 1          | 7.840 1          | 2.650 1          | 3.390 1               |                   |                    | 0./04 T E       | 1.9 1 JL             | 17.8 1           | 2.80              | 1.75 J E          | 0.341 1 2        |                  |
| METALS           | Barium                                | 42 1             | 41 1             | 90 1             | 77.000 1              |                   |                    | 81.3 1          | 52.5 1 J             | 171 1            | (2./ 1            | 87.3 1            | 126 1            | 39.4 1           |
| METALS           | BeryEum                               | 0.559 1 < U      | 0.548 1 < U      | 0.589 1 < U      | 0.605 1 < U           |                   |                    |                 | 0.27 1               |                  |                   |                   |                  |                  |
| METALS           | Cadmium                               | 0.559 1 < U      | 0.548 1 < U      | 0.589 1 < U      | 0.605 1 < U           |                   |                    | 2.46 1 E        | 0.095 1 B J          | 18.5 1           | 4.38 1            | 4.74 1 E          | 3.51 1 E         | 1.1 1 < U        |
| METALS           | Calcium                               | 15000 1          | 2000 1 .         | 2100 1           | 1000.000 1            |                   |                    | 1240 1          | 2160 1 J             | 3360 1           | 1020 1            | 2210 1            | 1940 1           | 5770 1           |
| METALE           | Chromium                              | 20,000 1         | 24,000 1         | 11,000 1         | 12 000 1              |                   |                    | 171 1           | 11.7 ť               | 28.3 1           | 16.7 1            | 15 1              | 11.4 1           | 11.5 1           |
| METALO           | Cabak                                 | 5600 1 4 11      | 5 500 1 < H      | 6000 t < 11      | 6020 1 < 11           |                   |                    | 173 1           | 93 1                 | 129 1            | 4.35 1            | 4.08 1            | 3.55 1           | 2.2 1 < U        |
| METALS           | Cobat                                 | 3.000 + < 0      | 5.500 1 5 0      | 3.500 f < 0      | 0.000 1 1 0           |                   |                    | 26 1            | 4 1 1                | 152 1            | 578 1             | 8.86 1            | 746 1            | 15.5 1           |
| METALS           | Copper                                | 6.220 1          | 5.920 1          | 4.000 1          | 4.200 1               |                   |                    | 23 1            |                      | 70000 1          | 45300 1           | 14400 1           | 11000 1          | 12800 1          |
| METALS           | Iron                                  | 27000 1          | 20000 1          | 9900 1           | 11000.000 1           |                   |                    | 4380 1          | 6930 1               | 72800            | 10/00 1           |                   | 11900 1          |                  |
| METALS           | Lead                                  | 30.200 1         | 32.600 1         | 10.700 1         | 10.300 1              |                   |                    | 44.5 1          | 38.5 1 J             | 123 1            | 19.4 1            | 26.9 1 E          | 24.9 1           | 44.5 1           |
| METALS           | Magnesium                             | 560.000 1 < U    | 550.000 1 < U    | 590 1 < U        | 650.000 1             |                   |                    | 524 1           | 303 1 J J            | 742 1            | 431 1             | 590 1             | 898 1            | 241 1            |
| METALS           | Manganese                             | 113.000 1        | 103.000 1        | 179.000 1        | 131.000 1             |                   |                    | 86.4 1          | 321 1 J J            | 856 1            | 311 1             | 247 1             | 75.5 1           | 321 1            |
| METALS           | Mercury                               | 0110 1 < 1       | 0110 1 < U       | 0.120 1 < U      | €.120 1 < U           |                   |                    | 1.1 1           |                      | 0.09 t < U       | 0.042 1 < U       | 0.088 1 E         | 0.054 1 < U      | 0.14 1 < U       |
| METALS           | Nickal                                | 6 200 1          | 5,800 1          | 5 500 1          | 7 900 1               |                   |                    |                 | 3.6 t                |                  |                   |                   |                  |                  |
| METALS           |                                       | 0.200            | 600 1            | 1000 1           | 1400.000 1            |                   |                    | 370 1           | 183 1                | 701 1            | 413 1             | 580 1             | 395 1            | 222 1 < U        |
| METALS           | Potassium                             | 010              | 000 1            |                  | 1400.000 1            |                   |                    |                 |                      | 105 1 2 11       | 1 > 1 202.0       | 0048 1 < 11       | 0724 1           | 0.51 1           |
| METALS           | Selenium                              | 2.410 1          | 2.590 1          | 1.180 1 < 0      | 1.410 1               |                   |                    | 0.04 1 2 0      | 0.41 1 5 5           | 1.85 1 4         | 0.000 1 4 0       |                   | 0.026 1          | 44 4 4 10        |
| METALS           | Silver                                | 1.300 1          | 1.600 1          | 1.300 1          | 1.200 1 < U           |                   |                    | 109 I           | 0.061 T B J          | U./00 T          | 0.053 I E         | 0.047 1 4 0       | 0.000 1          |                  |
| METALS           | Sodium                                | 560.000 1 < U    | 550.000 1 < U    | 590 1 < U        | 600.000 i < U         |                   |                    |                 | 43.4 1 J             |                  |                   |                   |                  |                  |
| METALS           | Strontium                             | 20.000 t J       | 5.500 t < U      | 6.400 1 J        | 6.200 1 J             |                   |                    |                 |                      |                  |                   |                   |                  | 13.1 1           |
| METALS           | Thalfum                               | 0.559 1 < U      | 0.548 1 < U      | 0.589 1 < U      | 0.605 1 < U           |                   |                    |                 | 0.072 1 B J          |                  |                   |                   |                  | 55.6 1 < U       |
| METALS           | Vapadium                              | 36.000 1         | 32.000 1         | 21.000 t         | 22.000 1              |                   |                    |                 | 16.9 1 J             |                  |                   |                   |                  |                  |
| METALS           | Zinc                                  | 34,000 1         | 34,000 1         | 13 000 1         | 18 000 1              |                   |                    | 72.2 1          | 28.1 1 J             | 141 1            | 21.1 1            | 28.4 1            | 20.9 1           | 114 1            |
| WICT/NEG         | Life<br>Anona-Milana                  | 0.007 4 - 14     | 0.027 1 - 1      | 10.000           | 10.000                |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| ran              | Acenaphistene                         | 0.03/ 1 < 0      | 0.007 1 4 0      |                  |                       |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| PAH              | Acenaphthylene                        | 0.03/ 1 < 0      | 0.037 1 < U      |                  |                       |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| PAH              | Anthracene                            | 0.037 1 < U      | 0.037 1 < U      |                  |                       |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| PAH              | Benzo(a)anthracene                    | 0.037 1 < U      | 0.037 1 < U      |                  |                       |                   |                    |                 |                      |                  |                   |                   |                  |                  |
| PAH              | Benzo(a)pyrene                        | 0.037 1 < U      | 0.037 1 < U      |                  |                       |                   |                    | · · · ·         |                      |                  |                   |                   |                  |                  |
| PAH              | Benzo(b)fluoranthene                  | 0.037 1 < U      | 0.037 1 < U      |                  |                       |                   |                    |                 |                      |                  | · ·               |                   |                  |                  |
|                  | ATE                                   |                  | -                |                  |                       |                   |                    |                 |                      |                  |                   |                   |                  |                  |

Shaw Environmental, Inc.

stay.

Table 3-109 Concentrations of Chemicals in Soil Samples Associated with Sump 125

| [SUMP] = SUMP125               |                             |                             |                            |                  |                            |                                     | 20010101010000                      | 14 51722 04                | 1002001                             | 14 6772 04                  | (1) \$772.01     | 1 4. 6772.02              | 111.5773.07               | 149-241          |
|--------------------------------|-----------------------------|-----------------------------|----------------------------|------------------|----------------------------|-------------------------------------|-------------------------------------|----------------------------|-------------------------------------|-----------------------------|------------------|---------------------------|---------------------------|------------------|
| LOCATION_CODE                  |                             | 35ASB03                     | 35ASB03                    | 35ASB03          | 35ASB03                    | 35SUMP125-SB01<br>35-SMP125-SB01-02 | 35SUMP125-SB02<br>35.SMP125-SB02.02 | 1H-DL/23-01-               | LH-DL/23-01<br>HH-DL/23-01-BERASS02 | LH-S723-01 1                | 1 H-S723-01 2    | LH-S723-02 1              | LH-\$723-02 2             | LHS-SH-04        |
| SAMPLE_NO                      |                             | 33A3DU3(0-0_3)<br>7/26/1998 | 7/26/1998                  | 7/76/1098        | 7/26/1998                  | 9/20/2006                           | 9/20/2006                           | 6/26/1993                  | 10/5/2006                           | 6/26/1993                   | 6/26/1993        | 6/26/1993                 | 6/26/1993                 | 1/12/1995        |
| DEPTH                          |                             | 05 Ft                       | 05Ft                       | 1-3Ft            | 3-5Ft                      | 10 - 10 Ft                          | 10 - 10 Ft                          | 1-2 Ft                     | 0-0Ft                               | .5 - 1.5 Ft                 | 4-4.5 Ft         | .5 - 1.5 Ft               | 4-5Ft                     | 05Ft             |
| SAMPLE PURPOSE                 |                             | REG                         | FD                         | REG              | REG                        | REG                                 | REG                                 | REG                        | REG                                 | REG                         | REG              | REG                       | REG                       | REG              |
| Test Group                     | Parameter (Units = mg/kg)   | Result DIL LQ VQ            | Result DIL LQ VQ           | Result DIL LQ VQ | Result DIL LQ VQ           | Result DIL LQ VQ                    | Result DIL LQ VQ                    | Result DIL LQ VQ           | Result DIL LQ VQ                    | Result DIL LQ VQ            | Result DIL LQ VQ | Result DIL LQ VQ          | Result DIL LQ VQ          | Result DIL LQ VQ |
| РАН                            | Benzo{ghi)perylene          | 0.037 1 < U                 | 0.037 1 < U                |                  |                            |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| РАН                            | Benzo(k)fluoranthene        | 0.037 1 < U                 | 0.037 1 < U                |                  |                            |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PAH                            | Chrysene                    | 0.037 1 < U                 | 0.037 1 < U                |                  |                            |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PAH                            | Dibenzo(a,h)anthracene      | 0.037 1 < U                 | 0.037 1 < U                |                  |                            |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
|                                | Fluoranthene                | 0.037 1 < U                 | 0.037 1 < 0                |                  |                            |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| 7A0<br>944                     | Indepoit 2 3 ordinarene     | 0.037 1 < 1                 | 0.037 1 < U                |                  |                            |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PAH                            | Naphthalene                 | 0.037 1 < U                 | 0.037 1 < U                |                  |                            |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PAH                            | Phenanthrene                | 0.037 1 < U                 | 0.037 1 < U                |                  |                            |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PAH                            | Pyrene                      | 0.037 t < U                 | 0.037 1 < U                |                  |                            |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PCBS                           | Aroclor 1016                | 0.037 1 < U                 | 0.037 1 < U                | 0.039 1 < U      | 0.040 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PCBS                           | Aroclor 1221                | 0.075 1 < U                 | 0.073 1 < U                | 0.079 1 < U      | 0.081 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PCBS                           | Aroclor 1232                | 0.037 1 < U                 | 0.037 1 < 0                | 0.039 1 < U      | 0.040 1 < 0                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PCBS                           | Arocior 1242                | 0.037 1 < 0                 | 0.037 1 < 0                | 0.039 1 < 0      | 0.040 1 < 0                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PUBS                           | Arocior 1246                | 1300 10                     | 0.03/ 7 ~ 0                | 0.039 1 < 0      | 0.040 1 < 0                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| FUBS                           | Arocior 1254                | 0.037 1 < 0                 | 0.037 1 < 11               | 0.039 1 < U      | 0.040 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PERC                           | Perchlorate                 |                             |                            |                  |                            |                                     |                                     |                            | 0.0433 1 U U                        |                             |                  |                           |                           |                  |
| PESTICIDES                     | 4.4-DDD                     | 0.004 1 < U                 | 0.004 1 < U                | 0.004 1 < U      | 0.004 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | 4,4-DDE                     | 0.004 1 < U                 | 0.004 1 < U                | 0.004 1 < U      | 0.004 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | 4,4'-DDT                    | 0.004 1 < U                 | 0.004 1 < U                | 0.004 1 < U      | 0.004 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | Aldrin                      | 0.002 1 < U                 | 0.002 1 < U                | 0.002 1 < U      | 0.002 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | alpha-BHC                   | 0.002 1 < U                 | 0.002 1 < U                | 0.002 1 < U      | 0.002 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | beta-BHC                    | 0.002 1 < U                 | 0.002 1 < 0                | U.UU2 1 < U      | 0.002 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | Chlordane                   | 0.037 1 < 0                 | 0.03/1 < 0                 | 0.039 1 < 0      | 0.040 1 < 0                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | Dialdin                     | 0.002 7 < 0                 | 0.002 1 < 0                | 0.002 r < 0      | 0.002 1 < 0                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | Endosulfan i                | 0.002 1 < U                 | 0.002 1 < U                | 0.002 1 < U      | 0.602 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | Endosulfan II               | 0.004 1 < U                 | 0.004 1 < U                | 0.004 1 < U      | 0.004 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | Endosutian Sulfate          | 0.004 1 < U                 | 0.004 t < U                | 0.004 1 < U      | 0.004 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | Endrin                      | 0.004 1 < U                 | 0.004 t < U                | 0.004 t < U      | 0.004 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | Endrin aldehyde             | 0.004 1 < U                 | 0.004 1 < U                | 0.004 1 < U      | 0.004 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | Endrin ketone               | 0.004 1 < U                 | 0.004 1 < U                | 0.004 1 < U      | 0.001 1 < 0                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | gamma-BHC (Lindane)         |                             | 0.002 1 < 0                | 0.002 1 < 0      | 0.002 1 < 0                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | Hentachtor enoxide          | 0.002 1 < U                 | 0.002 1 < U                | 0.002 1 < U      | 0.002 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | METHOXYCHLOR                | 0.019 1 < U                 | 0.018 1 < U                | 0.020 1 < U      | 0.020 t < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| PESTICIDES                     | Toxaphene                   | 0.037 1 < U                 | 0.037 1 < U                | 0.039 1 < U      | 0.040 t < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           |                  |
| SEMIVOLATILES                  | 1,2,4-Trichkorobenzene      | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     | 1.299 1 < U                |                                     | 2.703 1 < U                 | 1,299 1 < U      | 1.235 1 < U               | 1.266 1 < U               | 0.54 1 < 0       |
| SEMIVOLATILES                  | 1,2-Dichłorobenzene         | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 t < U                |                                     |                                     | 1.299 1 < U                |                                     | 2.703 1 < U                 | 1.299 1 < U      | 1.235 1 < 0               | 1,266 1 < U               | 0.54 1 < 0       |
| SEMIVOLATILES                  | 1,3-Dichlorobenzene         | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     | 1.299 1 < 0                |                                     | 2.703 1 < 0                 | 1.299 1 < 1      | 1235 1 < 1                | 1266 1 < 1                | 0.54 1 < 1       |
| SEMIVOLATILES                  | 1,4-Dictilorobenzene        | 1.900 1 < U                 | 1.600 1 < 0                | 0.090 1 < U      | 1,400 1 4 0                |                                     |                                     | 1.235 1 < 0                |                                     | 2703 1 < 1                  | 1299 1 < 1       | 1235 1 < U                | 1.266 t < U               | 27 1 < U         |
| SEMIVULATILES<br>SEMIVOLATILES | 2,4,5-11CIROlopheno:        | 1900 1 < 1                  | 1800 1 < 0                 | 0.390 1 < 11     | 0.400 1 < U                |                                     |                                     | 1.299 1 < U                |                                     | 2.703 1 < U                 | 1.299 1 < U      | 1.235 1 < U               | 1.266 1 < U               | 0.54 1 < U       |
| SEMIVOLATILES<br>SEMIVOLATILES | 2 4-Dichlorophenoi          | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     | 1.299 1 < U                |                                     | 2.703 1 < U                 | 1.299 1 < U      | 1.235 1 < U               | 1.266 1 < U               | 0.54 1 < U       |
| SEMIVOLATILES                  | 2.4-Dimethylphenol          | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     | 0.649 1 < U                |                                     | 1.351 1 < U                 | 0.649 1 < U      | 0.617 1 < U               | 0.633 1 < U               | 0.54 1 < U       |
| SEMIVOLATILES                  | 2,4-Dinitrophenol           | 4.700 1 < U                 | 4.600 t < U                | 0.980 1 < U      | 1.000 1 < U                |                                     |                                     | 12.987 1 < U               |                                     | 27.027 1 < U                | 12.987 1 < U     | 12.346 1 < U              | 12.658 1 < U              | 2.7 1 < U        |
| SEMIVOLATILES                  | 2,4-Dinitrotoluene          | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           |                           | 0.54 1 < U       |
| SEMIVOLATILES                  | 2,6-Dinitrotoluene          | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     |                            |                                     |                             |                  |                           | 6 20 <b>6</b> - 11        | 0.54 1 < U       |
| SEMIVOLATILES                  | 2-Chloronaphthalene         | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     | 0.39 1 < 0                 |                                     | 0.811 1 < 0                 | 0.39 1 < 0       | 0.5/ 1 4 0                | 0.38 1 < 0                | 0 24 1 20        |
| SEMIVOLATILES                  | 2-Chlorophenol              | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < 0                |                                     |                                     | 0.049 1 < 0                |                                     | 0.811 1 < 11                | 0.049 1 < 0      | 037 1 < 1                 | 0.033 1 < U               | 0.54 1 < U       |
| SEMIVOLATILES<br>SEMIVOLATILES | 2-Methylabanak              | 1900 1 < U                  | 1.000 1 < 0                | 0.390 1 < 0      | 0.400 1 < 0                |                                     |                                     | 0.53 1 < 0                 |                                     | 1.351 1 < 1                 | 0.649 1 < U      | 0.617 1 < U               | 0.633 1 < U               | 0.54 1 < U       |
| SEMINOLATILES                  | 2-Nitmaniline               | 4.700 1 < U                 | 4.600 t < U                | 0.980 1 < U      | 1.000 1 < U                |                                     |                                     | 3.896 1 < U                |                                     | 8.108 1 < U                 | 3.896 1 < U      | 3.704 1 < U               | 3.797 1 < U               | 27 t < U         |
| SEMIVOLATILES                  | 2-Nitrophenol               | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     | 1.299 1 < U                |                                     | 2.703 1 < U                 | 1.299 1 < U      | 1.235 1 < U               | 1.266 1 < U               | 0.54 1 < U       |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzidine      | 1.900 1 < U                 | 1.800 t < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     | 0.649 1 < U                |                                     | 1.351 1 < U                 | 0.649 1 < U      | 0.617 1 < U               | 0.633 1 < U               | 1.1 1 < U        |
| SEMIVOLATILES                  | 3-Nitroaniline              | 4.700 1 < U                 | 4.600 1 < U                | 0.980 1 < U      | 1.000 1 < U                |                                     |                                     | 3.896 1 < U                |                                     | 8.108 1 < U                 | 3.895 1 < U      | 3.704 1 < U               | 3.797 1 < U               | 2.7 1 < U        |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol  | 4.700 1 < U                 | 4.600 1 < U                | 0.980 1 < U      | 1.000 1 < U                |                                     |                                     | 6.494 1 < U                |                                     | 13.514 1 < U                | 6.494 1 < U      | 6.173 1 < U               | 6.329 1 < U               | 2.7 1 < U        |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether  | 1.900 1 < U                 | 1.800 t < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     | 1.299 1 < U                |                                     | 2,703 1 < U                 | 1.299 1 < U      | 1.235 1 < U               | 1.266 1 < U               | 0.54 1 < U       |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol     | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     | 0.649 t < U                |                                     | 1.351 1 < U                 | 0.649 1 < U      | U.61/ 1 < U               | U.D.J.J 1 < U             | 0.54 1 < U       |
| SEMIVOLATILES                  | 4-Chloroaniline             | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 9.400 1 < U                |                                     |                                     | 3.896 1 < U                |                                     | 8.108 1 < U<br>2702 ≮ - ₩   | 3.890 1 < U      | J./U4 1 < U<br>1935 1 - □ | a./9/ I ≤ U<br>1266 1 - ™ | 0.04 1 < 0       |
| SEMIVOLATILES                  | 4-Chiorophenyl phenyl ether | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < 0      | 0.400 1 < U<br>0.400 1 - U |                                     |                                     | 1,299 1 < U<br>0,649 1 < ₩ |                                     | 2./03 r ⊂ 0<br>1.351 1 < 10 | 0.649 1 < U      | 0.617 1 < 11              | 0.633 1 < 11              | 0.54 1 < 11      |
| SEMIVULATILES<br>SEMINOLATILES | 4-weavphenov                | 4.700 1 < 1                 | 1.000 i < 0<br>4.600 t < □ | 0.090 1 < 0      | 1000 t < 11                |                                     |                                     | 6.494 1 < 1                |                                     | 13.514 1 < 1                | 6.494 1 < U      | 6.173 1 < U               | 6.329 1 < U               | 27 1 < U         |
| SEMINOLATILES                  | 4-Nitronbenol               | 4700 1 < 9                  | 4.600 1 < R                | 0.980 1 < R      | 1.000 1 < R                |                                     |                                     | 6.494 1 < 13               |                                     | 13.514 1 < U                | 6.494 1 < U      | 6.173 1 < U               | 6.329 1 < U               | 2.7 1 < U        |
| SEMIVOLATILES                  | Acenaphthene                | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     | 0.39 1 < U                 |                                     | 0.811 1 < U                 | 0.39 1 < U       | 0.37 1 < U                | 0.38 1 < U                | 0.54 1 < U       |
| SEMIVOLATILES                  | Acenaphthylene              | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     | 0.649 1 < U                |                                     | 1.351 1 < U                 | 0.649 1 < U      | 0.617 1 < U               | 0.633 1 < U               | 0.54 1 < U       |
| SEMIVOLATILES                  | Anthracene                  | 1.900 t < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     | 0.649 1 < U                |                                     | 1.351 1 < U                 | 0.649 1 < U      | 0.617 1 < U               | 0.633 1 < U               | 0.27 1 J         |
| SEMIVOLATILES                  | Benzo(a)anthracene          | 1.900 1 < U                 | 1.800 1 < U                | 0.390 1 < U      | 0.400 1 < U                |                                     |                                     | 0.39 1 < U                 |                                     | 0.811 1 < U                 | 0.39 1 < U       | 0.37 1 < U                | 0.38 1 < U                | 1.6 1            |

Shaw Environmental, Inc.

New York

Table 3-109 Concentrations of Chemicals in Soil Samples Associated with Sump 125

| [SUMP] = SUMP125 |                                |                  |                  |                  |                        |                   |                   | 111 01 700 04    | 111 51 700 04        | 111 6709 04           | 111 0792 04      | 11 0792 03       | 112 6712 02      | INC CH M         |
|------------------|--------------------------------|------------------|------------------|------------------|------------------------|-------------------|-------------------|------------------|----------------------|-----------------------|------------------|------------------|------------------|------------------|
| LOCATION_CODE    |                                | 35ASB03          | 35ASB03          | 35ASB03          | 35ASB03                | 35SUMP125-SB01    | 35SUMP125-SBUZ    | LH-DL/23-01      | LINDL/23-01          | LH-5/23-01            | 10-5/20-01 2     | 10-3/23-02       | 14.9723.07 2     | 1HS.SHIM         |
| SAMPLE_NO        |                                | 35ASB03(0-0_5)   | 35ASB03(0-0_5)QC | 35ASB03(1-3)     | 35ASB03(3-5)           | 35-SMP125-SB01-02 | 35-SMP125-SB02-02 | UH-DL/23-01      | LH-DE/23-01-BERASS02 | LH-3/23-01_1          | LIPS/23-01_2     | LIN-0/23-02_1    | ENDEMODO         | 110-01-04        |
| SAMPLE_DATE      |                                | 7/26/1998        | 7/26/1998        | 7/26/1998        | 7/26/1998              | 9/20/2006         | 9/20/2006         | 6/26/1993        | 10/5/2006            | 6/26/1993             | 0/20/1993        | 0/20/1995        | 0/20/1993        | 0 5 5            |
| DEPTH            |                                | 05 Ft            | 05Ft             | 1-3Ft            | 3-5Ft                  | 10 - 10 Ft        | 10 - 10 Ft        | 1-2Ft            | 0-0Ft                | .5-1.5Ft              | 4-4.5 FL         | .0-1.0F(         | 4-371            | 050              |
| SAMPLE_PURPOSE   |                                | REG              | FD               | REG              | REG                    | REG               | REG               | REG              | REG                  | REG                   | REG              | REG NO NO        | KEG              |                  |
| Test Group       | Parameter (Units = mg/kg)      | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LQ VQ       | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ     | Result DIL LQ VQ      | Result DIL LU VQ | Result UIL LU VU | Result DIL LO VO | Result Dil LQ VQ |
| SEMIVOLATILES    | Benzo(a)pyrene                 | 0.930 1 < U      | 0.910 1 < U      | 0.200 1 < U      | 0.200 f < U            |                   |                   | 0.649 1 < 0      |                      | 1.351 1 < 0           | 0.649 1 < U      | 0.61/ 1 < 0      | 0.633 1 4 0      | 1.9 1            |
| SEMIVOLATILES    | Benzo(b)fluoranthene           | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 1.299 1 < U      |                      | 2./03 1 < 0           | 1.299 1 < U      | 1.235 1 < 0      | 1.266 1 < 0      | 3.1 I<br>4 F 4   |
| SEMIVOLATILES    | Benzo(ghi)perylene             | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 2.597 1 < U      |                      | 5.405 1 < U           | 2.59/ 1 < U      | 2469 1 < 0       | 2.532 1 < 0      | 1.5 1            |
| SEMIVOLATILES    | Benzo(k)fluoranthene           | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 1.299 1 < 0      |                      | 2.703 1 < 0           | 1.299 1 < 0      | 1.235 1 < 0      | 1.200 1 4 0      | 1.3 1            |
| SEMIVOLATILES    | Benzoic Acid                   | 4.700 1 < U      | 4.600 1 < U      | 0.980 1 < U      | 1.000 1 < U            |                   |                   |                  |                      |                       |                  |                  |                  |                  |
| SEMIVOLATILES    | Benzyf Alcohol                 | 4.700 1 < U      | 4.600 1 < U      | 0.980 1 < U      | 1.000 1 < U            |                   |                   |                  |                      |                       |                  |                  | A 200 4 4 11     | 0.54 1 4 0       |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane     | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 0.649 1 < U      |                      | 1.351 1 < U           | 0.649 1 < U      | 0.61/ 1 < 0      | U.633 1 < U      | 0.54 1 4 0       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether        | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 0.649 1 < U      |                      | 1.351 1 < 0           | 0.649 1 < U      | 0.617 1 < 0      | 0.633 1 < U      | 0.54 1 < 0       |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether    | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 1,299 1 < U      |                      | 2.703 1 < U           | 1.299 1 < U      | 1.235 1 < 0      | 1.266 1 < U      | 0.54 1 < 0       |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate     | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 0.234 1 < U      |                      | 0.405 1 < U           | 0.13 1 < U       | 1.012 1 < 0      | 0.633 1 < U      | 0.54 1 < 0       |
| SEMIVOLATILES    | Butyi benzyi phthalate         | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 0.649 1 < U      |                      | 1.351 1 < U           | 0.649 1 < U      | 0.617 1 < U      | 0.633 1 < U      | 0.54 T < U       |
| SEMIVOLATILES    | Carbazole                      | 1.900 1 < U      | 1.800 1 < U      | 0.390 t < U      | 0.400 1 < U            |                   |                   | 1.299 1 < U      |                      | 2.703 1 < U           | 1.299 1 < U      | 1.235 1 < U      | 1.266 1 < U      |                  |
| SEMIVOLATILES    | Chrysene                       | 1.900 t < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 6.494 1 < U      |                      | 13.514 1 < U          | 6.494 1 < U      | 6.173 1 < U      | 6.329 1 < U      | 3.6 1            |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene         | 1.900 f < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 2.597 1 < U      |                      | 5.405 1 < U           | 2.597 1 < U      | 2.469 1 < U      | 2.532 1 < U      | 0.3 1 J          |
| SEMIVOLATILES    | Dibenzofuran                   | 1,900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 1.299 1 < U      |                      | 2.703 1 < U           | 1.299 1 < U      | 1.235 1 < U      | 1.265 1 < U      | 0.54 1 < U       |
| SEMIVOLATILES    | Diethyl phthalate              | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 0.494 1          |                      | 0.541 f J             | 0.649 1 < U      | 0.123 1 J        | 0.633 1 < U      | 0.54 1 < U       |
| SEMIVOLATILES    | Dimethyl phthalate             | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 0.649 1 < U      |                      | 1.351 1 < U           | 0.649 1 < U      | 0.617 1 < U      | 0.633 1 < U      | 0.54 1 < U       |
| SEMIVOLATILES    | di-n-Butyl phthalate           | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 4.987 1 < U      |                      | 6.73 1 < U            | 6.701 1 < U      | 4.321 1 < U      | 1.481 1 < U      | 0.54 1 < 0       |
| SEMIVOLATILES    | di-n-Octyl phthalate           | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 f < U            |                   |                   | 0.649 1 < U      |                      | 1.351 1 < U           | 0.649 1 < U      | 0.617 1 < U      | 0.633 1 < U      | 0.54 1 < 0       |
| SEMIVOLATILES    | Fluoranthene                   | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 0.649 1 < U      |                      | 1.351 1 < U           | 0.649 1 < U      | 0.617 1 < U      | 0.633 1 < 0      | 3.7 1            |
| SEMIVOLATILES    | Fluorene                       | 1.900 1 < U      | 1.800 t < U      | 0.390 1 < U      | 0.400 t < U            |                   |                   | 0.649 1 < U      |                      | 1.351 1 < U           | 0.649 1 < U      | 0.617 1 < U      | 0.633 1 < U      | 0.54 1 < U       |
| SEMIVOLATILES    | Hexachiorobenzene              | 0.930 1 < U      | 0.910 t < U      | 0.200 1 < U      | 0.200 1 < U            |                   |                   | 1,299 1 < U      |                      | 2.703 1 < U           | 1.299 1 < U      | 1.235 1 < U      | 1.266 1 < U      | 0.54 1 < U       |
| SEMIVOLATILES    | Hexachlorobutadiene            | 1.900 1 < U      | 1.800 t < U      | 0.390 1 < U      | 0.400 t < U            |                   |                   | 3.896 1 < U      |                      | 8.108 <b>1 &lt;</b> U | 3.896 1 < U      | 3.704 1 < U      | 3.797 1 < U      | 0.54 1 < U       |
| SEMIVOLATILES    | Hexachiorocyclopentadiene      | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 3.896 1 < U      |                      | 8.108 1 < U           | 3.896 1 < U      | 3.704 1 < U      | 3.797 1 < U      | 0.54 1 < U       |
| SEMIVOLATILES    | Hexachloroethane               | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 1.299 1 < U      |                      | 2.703 1 < U           | 1.299 1 < U      | 1.235 1 < U      | 1.266 1 < U      | 0.54 1 < U       |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene         | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 1.299 1 < U      |                      | 2.703 1 < U           | 1.299 1 < U      | 1.235 1 < U      | 1.266 1 < U      | 1.5 1            |
| SEMIVOLATILES    | Isophorone                     | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 0.649 1 < U      |                      | 1.351 1 < U           | 0.649 1 < U      | 0.617 1 < U      | 0.633 1 < U      | 0.54 1 < U       |
| SEMIVOLATILES    | Naphthalene                    | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 0.39 1 < U       |                      | 0.811 1 < U           | 0.39 1 < U       | 0.37 1 < U       | 0.38 1 < U       | 0.54 1 < U       |
| SEMIVOLATILES    | Nitrobenzene                   | 1.900 t < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < <del>U</del> |                   |                   | 0.649 1 < U      |                      | 1.351 1 < U           | 0.649 1 < U      | 0.617 1 < U      | 0.633 1 < U      | 0.54 1 < U       |
| SEMIVOLATILES    | n-Nitrosodimethylamine         | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   |                  |                      |                       |                  |                  |                  |                  |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine     | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.409 1 < U            |                   |                   | 1.299 1 < U      |                      | 2.703 1 < U           | 1.299 1 < U      | 1.235 1 < U      | 1.266 1 < U      | 0.54 1 < U       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine         | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 0.649 1 < U      |                      | 1.351 1 < U           | 0.649 1 < U      | 0.617 t < U      | 0.633 1 < U      | 0.54 1 < U       |
| SEMIVOLATILES    | Pentachlorophenol              | 0.930 1 < U      | 0.910 1 < U      | 0.200 1 < U      | 0.200 1 < U            |                   |                   | 6.494 1 < U      |                      | 13.514 1 < U          | 6.494 1 < U      | 6.173 1 < U      | 6.329 1 < U      | 2.7 1 < U        |
| SEMIVOLATILES    | Phenanthrene                   | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 0.649 1 < U      |                      | 1.351 1 < U           | 0.649 1 < U      | 0.617 1 < U      | 0.633 1 < U      | 1.2 1            |
| SEMIVOLATILES    | Phenol                         | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 0.649 1 < U      |                      | 1.351 1 < U           | 0.649 1 < U      | 0.617 1 < U      | 0.633 1 < U      | 0.54 1 < U       |
| SEMIVOLATILES    | Pyrene                         | 1.900 1 < U      | 1.800 1 < U      | 0.390 1 < U      | 0.400 1 < U            |                   |                   | 0.649 1 < U      |                      | 1.351 t < U           | 0.649 1 < V      | 0.617 1 < U      | 0.633 1 < U      | 5.2 1 J          |
| TOC              | Total Organic Carbon           |                  |                  |                  |                        |                   |                   |                  | 2820 1               |                       |                  |                  |                  |                  |
| VOLATILES        | 1,1,1,2-Tetrachloroethane      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         |                  |                      |                       |                  |                  |                  | 0.016 1 < U      |
| VOLATILES        | 1.1.1-Trichloroethane          | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U            | 0.00429 1 U       | 0.005 1 U         | 0.006 1 < U      |                      | 0.014 1 < U           | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.008 1 < U      |
| VOLATILES        | 1,1,2,2-Tetrachioroethane      | 0.005 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         | 0.006 1 < U      |                      | 0.014 1 < U           | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.008 1 < U      |
| VOLATILES        | 1.1.2-Trichloroethane          | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         | 0.005 1 < U      |                      | 0.014 1 < U           | Ð.096 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.008 1 < U      |
| VOLATILES        | 1.1-Dichloroethane             | 0.005 1 < U      | 0.095 1 < U      | 0.006 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         | 0.006 1 < U      |                      | 0.014 1 < U           | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.008 1 < U      |
| VOLATILES        | 1,1-Dichloroethene             | 0.005 1 < 단      | 0.005 1 < U      | 0.006 1 < U      | 0.006 t < U            | 0.00429 1 U       | 0.005 t U         | 0.006 1 < U      |                      | 0.014 1 < U           | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.008 1 < U      |
| VOLATILES        | 1,1-Dichloropropene            | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         |                  |                      |                       |                  |                  |                  |                  |
| VOLATILES        | 1,2,3-Trichlorobenzene         | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         |                  |                      |                       |                  |                  |                  |                  |
| VOLATILES        | 1,2,3-Trichloropropane         | 0.017 1 < U      | 0.016 1 < U      | 0.017 1 < U      | 0.018 1 < U            | 0.00429 1 U       | 0.005 1 U         |                  |                      |                       |                  |                  |                  | 0.016 1 < U      |
| VOLATILES        | 1,2,4-Trichlorobenzene         | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         |                  |                      |                       |                  |                  |                  |                  |
| VOLATILES        | 1,2,4-Trimethylbenzene         | 0.006 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         |                  |                      |                       |                  |                  |                  |                  |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    | 0.011 1 < U      | 0.011 1 < U      | 0.011 1 < U      | 0.012 1 < U            | 0.00429 1 U       | 0.005 1 U         |                  |                      |                       |                  |                  |                  | 0.032 1 < U      |
| VOLATILES        | 1.2-Dibromoethane              | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         |                  |                      |                       |                  |                  |                  | 0.032 1 < U      |
| VOLATILES        | 1,2-Dichlorobenzene            | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         |                  |                      |                       |                  |                  |                  |                  |
| VOLATILES        | 1.2-Dichloroethane             | 0.005 1 < U      | 0.006 t < U      | 0.006 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         | 0.006 1 < U      |                      | 0.014 1 < U           | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.008 1 < U      |
| VOLATILES        | 1.2-Dichloroethene             |                  |                  |                  |                        |                   |                   | 0.006 1 < U      |                      | 0.014 1 < U           | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.008 1 < U      |
| VOLATILES        | 1.2-Dichloropropage            | 0.006 t < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         | 0.006 1 < U      |                      | 0.014 1 < U           | 0.006 1 < U      | 0.005 1 < U      | 0.006 1 < U      | 0.008 1 < U      |
| VOLATILES        | 1.2-Dimethylbenzene (o-Xviene) |                  |                  |                  |                        | 0.00429 1 U       | 0.005 1 U         |                  |                      |                       |                  |                  |                  |                  |
| VOLATILES        | 1.3.5-Trimethylbenzepe         | 0.006 1 < ±1     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         |                  |                      |                       |                  |                  |                  |                  |
| VOLATILES        | 1 3-Dichlorobenzene            | 0.006 1 < 11     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            | 0.00429 1 U       | 0.005 1 U         |                  |                      |                       |                  |                  |                  |                  |
| VOLATILES        | 1 3-Dichloropronage            | 0.006 1 < 1      | 0.096 1 < 13     | 0.006 1 < U      | 0.005.1 < U            | 0.00429 1 U       | 0.005 1 U         |                  |                      |                       |                  |                  |                  |                  |
| VOLATILES        | 1 A Dichloro 2 butane          | 0.005 1 < 1      | 0.006 1 < 11     | 0.006 1 < 1      | 0.006 1 < 1            |                   |                   |                  |                      |                       |                  |                  |                  |                  |
|                  | 1 4-Dichlorohenzene            | 0.006 1 < 1      | 0.006 1 < 11     | 0.006 1 < 1      | 0.005 1 < 11           | 0.00429 1 1/      | 0.005 1 11        |                  |                      |                       |                  |                  |                  |                  |
| VOLATILES        | 1 & Director                   | 1100 1 2 11      | 1100 1 2 11      | 1100 1 < 1       | 1,200 1 < 11           |                   |                   |                  |                      |                       |                  |                  |                  |                  |
|                  | 2.2. Dichierpronance           |                  | 1001 - 0         | 0.017 1 2 11     | 0.018 1 4 11           | 0 00429 1 11      | 0.005 1 11        |                  |                      |                       |                  |                  |                  |                  |
|                  | 2,2-Dicition optioplane        |                  |                  | 0.073 1 - 17     | 0.010 1 2 11           | 0.00858 1 11      | 0.000 1 0         | በብናል 1           |                      | 0135 1 < H            | 0.055 1 < 11     | 0.062 1 < 11     | 0.063 1 < 11     | 0.016 1 < U      |
|                  | 2 Chierenthyl yinyd ethor      | 0.022 1 0        | 0.022 7 5 0      | 0.020 1 - 0      | 0.027 1 7 0            | 0.00858 1 11      | 001 1 11          | 0.007 1          |                      |                       |                  |                  |                  | 0.016 1 < U      |
| VULATILES        | 2-Chilorgethyl whyl ether      | 0.006 1          | 0.005 + - 11     | 0.000 1 - 11     | 6 006 1 - U            | 0.00000 1 0       | 0.01 1 0          |                  |                      |                       |                  |                  |                  |                  |
| VOLATILES        | 2-Uniorotoluene                | 0.000 i < U      | 0.000 1 < 0      | 0.000 1 4 4      | 0.000 1 5 0            | 0.00423 1 U       | 0.000 1 0         | 0.065 1 · ·      |                      | N 135 1 - 11          | 0.055 1 < P      | 0.062 1 < 44     | 0.053 1 < 11     | 0.016 1 < 11     |
| VOLATILES        | 2-rexanone                     | 0.022 2 < U      | V.VZZ I < U      | 0.023 I S U      | 0.02** 1 5 0           | 0.00000 1 0       | 0.01 1 U          | 0.000 1 1 0      |                      |                       |                  |                  |                  | 0.8 1 < 1)       |
| VOLATILES        | Z-Propenal                     | 0.110 1 < 0      | 0.110 i < U      |                  | 0.006 4 - P            | 6 00420 4 17      | 0.005 1 17        |                  |                      |                       |                  |                  |                  |                  |
| VOLATILES        | 4-Uniorotoiuene                | 0.006 1 < U      | 0.006 ĩ < U      | U.000 T < U      | 0.000 F < U            | 0.00429 I U       | 0.000 1 0         | 0.047 1 × 11     |                      | 6048 1 - H            | AA32 1 - H       | AD31 1 2 11      | 0311 t < ™       | 0.016 1 < #3     |
| VOLATILES        | Acetone                        | 0.022 1 < U      | 0.022 1 < U      | 0.023 1 < 0      | U.024 1 < U            | U.00858 1 U       | 0.01 1 0          | 0.217 + < 0      |                      | U.040 i < U           | 0.032 1 1 0      | 0.001 / V Ú      | 0.511 1 ~ 0      |                  |
|                  |                                |                  | •                |                  |                        |                   |                   |                  |                      |                       |                  |                  |                  |                  |

Shaw Environmental, Inc.

Table 3-109 Concentrations of Chemicals in Soil Samples Associated with Sump 125

| Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Control<br>Con   | [St IMD] - St IMD125 |                             |                  |   |                  |                  |  | Dampies Associa        |                 |                        |                       |                    |                   |                         | 000000       |
|--|----------------------|-----------------------------|------------------|---|------------------|------------------|--|------------------------|-----------------|------------------------|-----------------------|--------------------|-------------------|-------------------------|--------------|
| Date: Solution: Condition: Co                | LOCATION CODE        |                             | 3645803          | 3545803                                 | 3545803          | 3545803          | 3551 BAD125_SB01                       | 355HMP125-5802         | 18-01723-01     | ( HLD) 773-01          | LH-S723-01            | 18-\$723-01        | LH-S723-02        | 11-5723-02              | 185-584-04   |
| Data bar bar bar bar bar bar bar bar bar ba  | COURTEN A            |                             | 3645003/0 0 4)   | 3545803(0.0.5)00                        | 3545802(1 3)     | 3545803/3-5)     | 35 SNP125 SP01 02                      | 35.SMD175.SB02.02      | 14.01723.01     | 1 H.D. 723.01.8ERASS02 | 14.5723.01 1          | 14.5722.01 2       | H-S723.02 1       | 111-5723-02 2           | LHS-SH-04    |
| Definition       Lat   | CAMPLE_NO            |                             | 20A0D00(0-0_0)   | 200000000000000000000000000000000000000 | 7/20/00/         | 7/06/10/09       | 0/20/2000 1-02                         | 020/2002-02            | 6/06/1003       | 10/5/2006              | 6/26/1902             | 6/26/1003          | 6/26/1993         | 6/26/1003               | 1/12/1005    |
| Dist        Dist        Dist         D  | SAMPLE_DATE          |                             | 7120/1998        | 1120/1990                               | 1/20/1990        | 7/20/1390        | 3/20/2000                              | 10 10 54               | 1 201355        | 0.05+                  | C 1 5 5               | A A E E            | 5.150             | A . 5 Et                | A. 5 C+      |
| International property mark biolInternational property mark biolNUCLENUCLENUCLENUCLE <t< th=""><th>DEPTH</th><th></th><th>05FE</th><th>05 H</th><th>1-JF(</th><th>3-51</th><th>10-10Ft</th><th>10-10-10</th><th>1-21</th><th>0-071</th><th>.3-1.3 rt</th><th>4-4.3 FL</th><th>.3+1.3 FL</th><th>9+371</th><th>0+.371</th></t<>   | DEPTH                |                             | 05FE             | 05 H                                    | 1-JF(            | 3-51             | 10-10Ft                                | 10-10-10               | 1-21            | 0-071                  | .3-1.3 rt             | 4-4.3 FL           | .3+1.3 FL         | 9+371                   | 0+.371       |
| NAME        NAME        NAME         N  | SAMPLE_PURPOSE       |                             | REG              | FU<br>Devite Dite 10 100                | REG              | REG              | KEG                                    | REG<br>Davit Dil 10 10 |                 | REG 10 10              | REG<br>Devit DI LO VO |                    |                   | REU<br>Result Dil LO VO |              |
| Name<   | Test Group           | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Kesur UIL LU VU                         | Result DIL LU VU | Result DIL LO VO | Result DIL LO VO                       | Result DIL LQ VQ       | Resur DIL LQ VQ | Result Dil LQ VQ       | RESUR DIL LQ VQ       | RESULT DIE LOG VOL | Restel pit Lot vo | RESURE DIL LO VO        | Alc 1 4      |
| Walles Wal   | VOLATILES            | Acetonitrile                |                  |   |                  |                  |  |                        |                 |                        |                       |                    |                   |                         | U16 1 < U    |
| VALUE          | VOLATILES            | Acrylonitale                | 0.110 1 < U      | 0.110 1 < U                             | 0.110 1 < U      | 0.120 1 < U      |  |                        |                 |                        |                       |                    |                   |                         | U.10 7 < U   |
| Ox1012         Ox1014        Ox1014         Ox1014         Ox1014         Ox1014         Ox1014         Ox1014         Ox1014         Ox1014         Ox1014        Ox1014         Ox1014        Ox1014        Ox1014   | VOLATILES            | Allyl chloride              |                  |   |                  |                  |  |                        |                 |                        |                       |                    |                   |                         | 0.016 1 < 0  |
| VALUE        VALUE        VALUE        VALUE        VALUE        VALUE        VALUE       VALUE        VALUE        VALUE <th>VOLATILES</th> <th>Benzene</th> <th>0.006 1 &lt; U</th> <th>0.006 1 &lt; U</th> <th>0.006 1 &lt; U</th> <th>0.006 f &lt; U</th> <th>0.00429 1 U</th> <th>0.005 1 U</th> <th>0.006 1 &lt; U</th> <th></th> <th>0.014 1 &lt; U</th> <th>0.006 1 &lt; U</th> <th>0.006 1 &lt; U</th> <th>0.005 1 &lt; U</th> <th>0.008 1 &lt; 0</th>  | VOLATILES            | Benzene                     | 0.006 1 < U      | 0.006 1 < U                             | 0.006 1 < U      | 0.006 f < U      | 0.00429 1 U                            | 0.005 1 U              | 0.006 1 < U     |                        | 0.014 1 < U           | 0.006 1 < U        | 0.006 1 < U       | 0.005 1 < U             | 0.008 1 < 0  |
| Ochele         One-level         One-level         Andele        Andele        Andele        Ande  | VOLATILES            | Bromobenzene                | 0.006 1 < U      | 0.006 1 < U                             | 0.006 1 < U      | 0.006 t < U      | 0.00429 f U                            | 0.005 1 U              |                 |                        |                       |                    |                   |                         |              |
| Value        Value         Value   | VOLATILES            | Bromochloromethane          | 0.606 1 < U      | 0.006 1 < U                             | 0.006 t < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              |                 |                        |                       |                    |                   |                         |              |
| Name        Name        Name        Na  | VOLATILES            | Bromodichloromethane        | 0.006 1 < U      | 0.006 1 < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              | 0.006 1 < U     |                        | 0.014 1 < U           | 0.005 1 < U        | 0.006 1 < U       | 0.006 1 < U             | 0.008 1 < U  |
| CALLES         Serund Max        Serund Max <tt< th=""><th>VOLATILES</th><th>Bromoform</th><th>0.006 1 &lt; U</th><th>0.005 1 &lt; U</th><th>0.006 1 &lt; U</th><th>0.006 1 &lt; U</th><th>0.00429 1 U</th><th>0.005 1 U</th><th>0.096 1 &lt; U</th><th></th><th>0.014 1 &lt; U</th><th>0.006 1 &lt; U</th><th>0.006 1 &lt; U</th><th>0.006 1 &lt; U</th><th>0.008 1 &lt; U</th></tt<>  | VOLATILES            | Bromoform                   | 0.006 1 < U      | 0.005 1 < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              | 0.096 1 < U     |                        | 0.014 1 < U           | 0.006 1 < U        | 0.006 1 < U       | 0.006 1 < U             | 0.008 1 < U  |
| VRAITE         Order basis <t< th=""><th>VOLATILES</th><th>Bromomethane</th><th>0.011 1 &lt; U</th><th>0.011 1 &lt; U</th><th>0.011 1 &lt; U</th><th>0.012 t &lt; U</th><th>0.00858 1 U</th><th>0.01 1 U</th><th>0.032 1 &lt; U</th><th></th><th>0.068 1 &lt; U</th><th>0.032 1 &lt; U</th><th>0.031 1 &lt; U</th><th>0.032 1 &lt; U</th><th>0.016 1 &lt; U</th></t<>  | VOLATILES            | Bromomethane                | 0.011 1 < U      | 0.011 1 < U                             | 0.011 1 < U      | 0.012 t < U      | 0.00858 1 U                            | 0.01 1 U               | 0.032 1 < U     |                        | 0.068 1 < U           | 0.032 1 < U        | 0.031 1 < U       | 0.032 1 < U             | 0.016 1 < U  |
| VALUES         Concorrector        Concorrector        Concorrector  | VOLATILES            | Carbon disulfide            | 0.006 1 < U      | 0.005 1 < U                             | 0.006 1 < U      | 0.006 t < U      | 0.00429 1 U                            | 0.005 1 U              | 0.033 1         |                        | 0.014 1 < U           | 0.006 1 < U        | 0.006 1 < U       | 0.006 1 < U             | 0.008 1 < U  |
| WALES         Obsolution         Conductor         C   | VOLATILES            | Carbon tetrachloride        | 0.011 1 < U      | 0.011 1 < U                             | 0.011 1 < U      | 0.012 1 < U      | 0.00429 1 U                            | 0.005 1 U              | 0.096 1 < U     |                        | 0.014 1 < U           | 0.006 1 < U        | 0.006 1 < U       | 0.006 1 < U             | 0.008 1 < U  |
| VDAIRS         Obviolation <t< th=""><th>VOLATILES</th><th>Chiorobenzene</th><th>0.006 1 &lt; U</th><th>0.006 t &lt; U</th><th>0.006 1 &lt; 1/</th><th>0.006 1 &lt; U</th><th>0.00429 1 U</th><th>0.005 1 U</th><th>0.006 1 &lt; U</th><th></th><th>0.014 1 &lt; U</th><th>0.006 1 &lt; U</th><th>0.006 1 &lt; U</th><th>0.006 1 &lt; U</th><th>0.008 1 &lt; U</th></t<>   | VOLATILES            | Chiorobenzene               | 0.006 1 < U      | 0.006 t < U                             | 0.006 1 < 1/     | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              | 0.006 1 < U     |                        | 0.014 1 < U           | 0.006 1 < U        | 0.006 1 < U       | 0.006 1 < U             | 0.008 1 < U  |
| VDATES         Object        Object        Object <th>VOLATILES</th> <th>Chioroethane</th> <th>0.011 1 &lt; U</th> <th>0.011 1 &lt; U</th> <th>0.011 1 &lt; U</th> <th>0.012 1 &lt; U</th> <th>0.00858 1 U</th> <th>0.01 1 U</th> <th>0.032 1 &lt; U</th> <th></th> <th>0.068 1 &lt; U</th> <th>0.032 1 &lt; Ų</th> <th>0.031 1 &lt; U</th> <th>0.032 1 &lt; U</th> <th>0.016 1 &lt; U</th>   | VOLATILES            | Chioroethane                | 0.011 1 < U      | 0.011 1 < U                             | 0.011 1 < U      | 0.012 1 < U      | 0.00858 1 U                            | 0.01 1 U               | 0.032 1 < U     |                        | 0.068 1 < U           | 0.032 1 < Ų        | 0.031 1 < U       | 0.032 1 < U             | 0.016 1 < U  |
| VRLATE         Other words <t< th=""><th>VOLATILES</th><th>Chloroform</th><th>0.006 1 &lt; U</th><th>0.006 t &lt; U</th><th>0.006 1 &lt; U</th><th>0.006 1 &lt; U</th><th>0.00429 1 U</th><th>0.005 1 U</th><th>0.006 1 &lt; U</th><th></th><th>0.014 1 &lt; U</th><th>0.006 1 &lt; U</th><th>0.006 1 &lt; U</th><th>0.006 t &lt; U</th><th>0.008 1 &lt; U</th></t<>   | VOLATILES            | Chloroform                  | 0.006 1 < U      | 0.006 t < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              | 0.006 1 < U     |                        | 0.014 1 < U           | 0.006 1 < U        | 0.006 1 < U       | 0.006 t < U             | 0.008 1 < U  |
| Vibration         Observation         Observation         Outpervalue         Vibration         Observation         <  | VOLATILES            | Chloromethane               | 0.011 1 < U      | 0.011 1 < U                             | 0.011 1 < U      | 0.012 1 < U      | 0.00858 1 U                            | 0.01 1 Li              | 0.032 1 < U     |                        | 0.068 1 < U           | 0.032 1 < U        | 0.031 1 < U       | 0.032 1 < U             | 0.016 1 < U  |
| VXXVIIIS         or 1 dimension         or 0 for 1         c         0 <th0< th="">         0       0         0        0<!--</th--><th>VOLATILES</th><th>Chlomorege</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>0.16 1 &lt; U</th></th0<>  | VOLATILES            | Chlomorege                  |                  |   |                  |                  |  |                        |                 |                        |                       |                    |                   |                         | 0.16 1 < U   |
| VXXATES         Observations   | VOLATILES            | cis.1 2-Dichlomethene       | 0.006 1 < U      | 0.006 t < II                            | 0-006 1 < U      | 0:006 1 < 11     | 0.00429 1 1                            | 0.005 1 1/             |                 |                        |                       |                    |                   |                         |              |
| VALUES         Discontrasconderes         Operation  | VOLATILES            | cis_1 1 Dichlomomene        | 0.006 1 < 1      | 0.006 1 < 11                            | 0.005 1 < H      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 1/             | 0.006 1 < tJ    |                        | 0.014 1 < U           | 0.006 1 < U        | 0.006 t < 1)      | 0.006 1 < U             | 0.008 1 < U  |
| VALMARS         Descention         Corr J         C         U  | VOLATILES            | Dibromochianmethane         | 0.006 1 < U      | 0.006 1 < 11                            | 0.006 t < 1      | 0.006 1 < 11     | 0.00429 1 11                           | 0.005 1 1              | 0006 1 < H      |                        | 0.014 1 < 11          | 0.006 f < U        | 0.006 1 < U       | 0.006 1 < U             | 0.008 1 < U  |
| VAUME         Display         Columne <thc< th=""><th>VOLATILES</th><th>Bibromomethan</th><th></th><th>0.000 1 4 0</th><th></th><th>0.012 t &lt; 11</th><th>0.00120 1 11</th><th>0.005 1 11</th><th>0.000</th><th></th><th></th><th></th><th></th><th></th><th>0.032 1 &lt; 11</th></thc<>   | VOLATILES            | Bibromomethan               |                  | 0.000 1 4 0                             |                  | 0.012 t < 11     | 0.00120 1 11                           | 0.005 1 11             | 0.000           |                        |                       |                    |                   |                         | 0.032 1 < 11 |
| VAURE         Englands         VAURE         Englands         VAURE         Englands         VAURE         Englands         VAURE         Englands         VAURE         Englands         VAURE         Englands         VAURE         Englands         VAURE         VAURE         Englands         VAURE        VAURE        VAURE         <   | VOLATILLO            | Distanciileurane            | 0.017 1 < 11     |   | 0.017 1 4 11     | 0.012 1 < 0      | 0.00959 1 11                           | 0.005 1 C              |                 |                        |                       |                    |                   |                         | 0.032 1 < 11 |
| NAME         Explana         No.         I         V        V          V   | VOLATILES            | Ethol method and            |                  | 0.006 f < U                             |                  |                  | 0.00000 1 0                            | 0.07 1 0               |                 |                        |                       |                    |                   |                         | 0.032 1 < 11 |
| Normality         Provide         Dool         I         V         Dool         Dool         I  | VOLATILEO            | Eury meuraci yraie          |                  |   |                  |                  | 0.00400 4 11                           | 0.005 t 13             | 0.006 1 2 1     |                        | 0.01# 1 < 11          | 0.006 1 c 11       | 0.006 1 c 11      | 0.006 1 < H             | 0.002 1 4 0  |
| Maximum        | VOLATILES            | Eurypenzene                 |                  |   |                  |                  | 0.00425 1 0                            | 0.003 1 0              | 0.000 1 0       |                        | 0.014 1 < 0           |                    | 0.000 1 - 0       | 0.000 1 - 0             | 0.000 1 - 0  |
| VALUE       UADE  | VOLATILES            | Hexachicroputadiene         |                  | 0.006 1 < 0                             |                  |                  | 0.00429 1 0                            | 0.000 1 0              |                 |                        |                       |                    |                   |                         | 0.016 1 c H  |
| VALARS       SUMPLY ACUPUX       1.00       1       2       0       1.00       1       2       0       1.00       1       2       0       1.00       1       2       0       1.00       1       2       0       1.00       1       2       0       0.000       1       0 <t< th=""><th>VOLATILES</th><th>IULOME I HANE</th><th>0.005 1 &lt; 0</th><th>0.005 7 &lt; 0</th><th>0.006 1 &lt; 0</th><th>0.006 1 &lt; 0</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>  | VOLATILES            | IULOME I HANE               | 0.005 1 < 0      | 0.005 7 < 0                             | 0.006 1 < 0      | 0.006 1 < 0      |  |                        |                 |                        |                       |                    |                   |                         |              |
| NULLING         Important         Oute         I         C         O         Oute         I         C         O         O         I         C         O  | VOLATILES            | ISUBULYL ALCOHOL            | 1.100 1 < 0      | 1.100 I < U                             |                  | 1.200 1 < 0      | 0.00100 4 11                           | 0.00C A 11             |                 |                        |                       |                    |                   |                         | 3.2 1 1 0    |
| NGAPERS         NUMBERS         "><th>VOLATILES</th><th>Isopropylbenzene</th><th>0.006 1 &lt; 0</th><th>0.006 1 &lt; 0</th><th>0.006 1 &lt; 0</th><th>0.006 1 &lt; 0</th><th>0.00425 1 0</th><th>0.005 1 U</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>  | VOLATILES            | Isopropylbenzene            | 0.006 1 < 0      | 0.006 1 < 0                             | 0.006 1 < 0      | 0.006 1 < 0      | 0.00425 1 0                            | 0.005 1 U              |                 |                        |                       |                    |                   |                         |              |
| WCALLES         Methychole         0.10         I         V         0         0.10         I         V         0         0.02         I         V         0         0.02         I         V         0         0.02         I         V         0         0.02         I         V         0         0.02         I         V         0         0.02         I         V         0         0.02         I         V         0         0.02         I         V         0         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I         V         0.02         I <th< th=""><th>VOLATILES</th><th>m,p-Xylenes</th><th></th><th>···· ·</th><th> · · · ·</th><th></th><th>0.00429 1 0</th><th>0.005 1 0</th><th></th><th></th><th></th><th></th><th></th><th></th><th>0.000 4 4 11</th></th<>  | VOLATILES            | m,p-Xylenes                 |                  | ···· ·                                  | · · · ·          |                  | 0.00429 1 0                            | 0.005 1 0              |                 |                        |                       |                    |                   |                         | 0.000 4 4 11 |
| Methy lackdy lackes       0.022       1       V       0.022       1       V       0.017       V       0.006       1       V       0.017       V       0.006       1       V       0.017       V       0.006       1       V       0.017       V       0.006       1       V       0.006  | VOLATILES            | Methacrylonibile            | 0.110 1 < U      | 0.110 1 < 0                             | 0.110 1 < 0      | 0.120 1 < 0      |  |                        |                 |                        |                       |                    | A 4 4 4 4 4       |                         | 0.032 1 K U  |
| MCHARLS        | VOLATILES            | Methyl isobutyl ketone      | 0.022 1 < U      | 0.022 1 < U                             | 0.023 1 < U      | 0.024 1 < 0      | 0.00858 1 0                            | 0.01 1 U               | 0.055 1 < 0     |                        | U.135 1 < U           | 0.065 1 < 0        | 0.062 1 < 0       | 0.053 1 < 0             | 0.016 1 < U  |
| Methydene Charide       0.006       1       <  | VOLATILES            | METHYL METHACRYLATE         | 0.056 1 < U      | 0.055 f < U                             | 0.057 1 < U      | 0.060 t < U      |  |                        |                 |                        |                       |                    |                   |                         | 0.032 1 < 0  |
| VCLATLES         neptrodemine         0.006         1         <  | VOLATILES            | Methylene chloride          | 0.066 1 < U      | 0.006 1 < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              | 0.002 1 < U     |                        | 0.006 1 < U           | 0.006 1 < U        | 0.006 1 < U       | 0.005 1 < 0             | 0.008 1 < 0  |
| vicual Less       neurone less estimation of less   | VOLATILES            | Naphthalene                 | 0.006 1 < U      | 0.006 1 < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00858 1 U                            | 0.01 t U               |                 |                        |                       |                    |                   |                         |              |
| VOLATLES       PROPYLEB/ZENE       0.006       1       <   | VOLATILES            | n-BUTYLBENZENE              | 0.006 1 < U      | 0.006 1 < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00429 t U                            | 0.005 1 U              |                 |                        |                       |                    |                   |                         |              |
| VOLATILES       Pertachtorebane       0.011       1       <  | VOLATILES            | R-PROPYLBENZENE             | 0.006 1 < U      | 0.006 1 < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              |                 |                        |                       |                    |                   |                         |              |
| v0LATLES       pdSOPROPYLOUENCE       0.006       1       <  | VOLATILES            | Pentachloroethane           | 0.011 1 < U      | 0.011 1 < U                             | 0.011 1 < U      | 0.012 1 < U      |  |                        |                 |                        |                       |                    |                   |                         | 0.032 1 < U  |
| VOLATLES       Projonintia       endine       1       <  | VOLATILES            | p-ISOPROPYLTOLUENE          | 0.005 1 < U      | 0.006 1 < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              |                 |                        |                       |                    |                   |                         |              |
| VOLATLES       Seve-BUTYLEPAZENE       0.006       1       <   | VOLATILES            | Propionitrile               | 0.110 1 < U      | 0.110 1 < U                             | 0.110 1 < U      | 0.120 t < U      |  |                        |                 |                        |                       |                    |                   |                         | 0.08 1 < U   |
| VOLATLES       Sygne       0.006       1       <   | VOLATILES            | sec-BUTYLBENZENE            | 0.006 1 < U      | 0.006 1 < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              |                 |                        |                       |                    |                   |                         |              |
| VOLATLES       tet-BUTYLEBNZENE       0.006       1       <  | VOLATILES            | Styrene                     | 0.006 1 < U      | 0.006 1 < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              | 0.006 1 < U     |                        | 0.014 1 < U           | 0.006 1 < U        | 0.006 1 < U       | 0.036 t < U             | 0.008 1 < U  |
| VOLATILES       Tetachkoroethene       0.006       1       <   | VOLATILES            | text-BUTYLBENZENE           | 0.006 1 < U      | 0.006 1 < U                             | 0.006 t < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              |                 |                        |                       |                    |                   |                         |              |
| VOLATILES       Toluene       0.006       1       <  | VOLATILES            | Tetrachloroethene           | 0.005 1 < U      | 0.006 t < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              | 0.006 1 < U     |                        | 0.014 1 < U           | 0.006 1 < U        | 0.006 1 < U       | 0.006 1 < U             | 0.008 1 < U  |
| VOLATILES       trans-1,2-bickhoresthene       0.005       1       <   | VOLATILES            | Toluene                     | 0.006 1 < U      | 0.006 1 < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              | 0.096 1 < U     |                        | 0.014 1 < U           | 0.006 1 < U        | 0.006 1 < U       | 0.006 1 < U             | 0.008 1 < U  |
| VOLATILES       trans-13-Dichloropropene       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.006       1       V       0.008       1       V       0.006       1       V       0.008       1       V       0.006       1       V       0.008       1       V       0.006       1       V       0.008       1       V       0.008       1       V       0.008       1       V       0.006       1       V       0.008       1       V       0.008       1       V       0.008       1       V       0.008       1       V       0.008       1       V       0.008       1       V       0.008       1       V       0.008       1       V       0.008       1 <th>VOLATILES</th> <th>trans-1,2-Dichloroethene</th> <th>0.006 1 &lt; U</th> <th>0.006 1 &lt; U</th> <th>0.006 1 &lt; U</th> <th>0.006 1 &lt; U</th> <th>0.00429 1 U</th> <th>0.005 1 U</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>  | VOLATILES            | trans-1,2-Dichloroethene    | 0.006 1 < U      | 0.006 1 < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              |                 |                        |                       |                    |                   |                         |              |
| VOLATLES       trans-14-Dichloro-2-buttene       0.011       1       V       0.011       1<  | VOLATILES            | trans-1,3-Dichloropropene   | 0.006 1 < U      | 0.006 1 < U                             | 0.006 1 < U      | 0.006 1 < U      | 0.00429 1 U                            | 0.005 1 U              | 0.006 t < U     |                        | 0.014 1 < U           | 0.006 1 < U        | 0.006 1 < U       | 0.006 1 < U             | 0.008 1 < U  |
| VOLATLES       Trichlorothene       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.012       I       U       0.012       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.012       I       U       0.011       I       U       0.012       I       U       0.011       I       U       0.012       I       U       0.011       I       U       0.011       I       U       0.012       I       U       0.011       I       U       0.012       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I       U       0.011       I <t< th=""><th>VOLATILES</th><th>trans-1.4-Dichloro-2-butene</th><th></th><th>7</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>0.032 1 &lt; U</th></t<>  | VOLATILES            | trans-1.4-Dichloro-2-butene |                  | 7                                       |                  |                  |  |                        |                 |                        |                       |                    |                   |                         | 0.032 1 < U  |
| VOLATILES       Trichlorofluoromethane       0.011 1 < U   | VOLATILES            | Trichloroethene             | 0.011 1 < U      | 0.011 1 < Li                            | 0.011 1 < U      | 0.012 1 < U      | 0.00429 1 U                            | 0.005 1 U              | 0.002 1         |                        | 0.014 1 < U           | 0.006 1 < U        | 0.006 1 < U       | 0.006 1 < U             | 0.008 1 < U  |
| VOLATILES       Vinyl acetate       0.022       I       U       0.023       I       U       0.024       I       U       0.016       I <t< th=""><th>VOLATILES</th><th>Trichlorofiuoromethane</th><th>0.011 1 &lt; 11</th><th>0.011 1 &lt; 11</th><th>0.011 1 &lt; U</th><th>0.012 1 &lt; U</th><th>0.00858 1 U</th><th>0.01 1 U</th><th></th><th></th><th>·····</th><th></th><th></th><th></th><th>0.016 1 &lt; U</th></t<>  | VOLATILES            | Trichlorofiuoromethane      | 0.011 1 < 11     | 0.011 1 < 11                            | 0.011 1 < U      | 0.012 1 < U      | 0.00858 1 U                            | 0.01 1 U               |                 |                        | ·····                 |                    |                   |                         | 0.016 1 < U  |
| VOLATILES         Vinjekloriđe         0.011          U         0.012          U         0.011         U         0.011          U         0.012         I         U         0.011         U         0.011         I         U         0.012         I         U         0.011         U         0.012         I         U         0.011         U         0.016         I         U           VOLATILES         Xwees, Total         0.006         I         U         0.006         I         U         0.006         I         U         0.006         I         U         0.006         I         U         0.006         I         U         0.006         I         U         0.006         I         U         0.006         I         U         0.006         I         U         0.006         I         U         0.006         I         U         0.008         I         U         0.006         I         U         0.006         I         U         0.008         I         U         0.008         I         U         0.008         I         U         0.008         I         U         0.008         I         U         0.008   | VOLATILES            | Vinvi acetate               | 0.022 1 < 11     | 0.022 1 < 11                            | 0.023 1 < 11     | 0.024 1 < 11     | 0.00858 1 11 111                       | 0.01 t U H1            |                 |                        |                       |                    |                   |                         | 0.016 1 < 1  |
| VOLATILES Xvienes, Total 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 1 < U 0.006 | VOLATILES            | Vind chloride               | 0.011 1 < 11     | 0.011 1 < 11                            | 0.011 1 < 11     | 0.012 1 < 11     | 0.00858 1 U                            | 0.01 1 U               | 0.032 1 < 1/    |                        | 0.068 1 < 1)          | 0.032 1 < U        | 0.031 1 < U       | 0.032 1 < U             | 0.016 1 < 1  |
|  | VOLATILES            | Xvienes, Total              | 0.006 1 < LI     | 0.006 1 < 14                            | 0.006 1 < U      | 0.006 1 < U      | ······································ | ····· •                | 0.006 1 < U     |                        | 0.014 1 < U           | 0.006 1 < U        | 0.006 1 < U       | 0.006 1 < U             | 0.008 1 < U  |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

Table 3-110 Concentrations of Chemicals in Soil Samples Associated with WR Sump 004

| [SUMP] ≈ WRSUMP004             |                               |                     |                      |                  |                     |                          |                  |                         |                          |                          |                    |                         |                          |                             | 1170704 ( DDA1               | WEDDA ODA                   |
|--------------------------------|-------------------------------|---------------------|----------------------|------------------|---------------------|--------------------------|------------------|-------------------------|--------------------------|--------------------------|--------------------|-------------------------|--------------------------|-----------------------------|------------------------------|-----------------------------|
| LOCATION_CODE                  |                               | 35SUMP001-SB01      | 35SUMP001-SB01       | 35SUMP001-SB02   | 35SUMP001-SB02      | LH-S01-01                | LH-S01-01        | LH-S01-01               | LH-\$01-02               | 1H-S01-02                | LH-501-02          | LHS-2-09                | LH-WRS4-01               | LH-WRS4-01<br>1 H-WRS4-01 2 | WHS04-SB01<br>WRS04-SB01-01  | WRS04-SB01<br>WRS04-SB01-02 |
| SAMPLE DATE                    |                               | 9/7/2006            | 9/7/2006             | 9/7/2006         | 9/7/2006            | 6/26/1993                | 6/26/1993        | 6/26/1993               | 6/26/1993                | 6/26/1993                | 6/26/1993          | 1/10/1995               | 7/10/1993                | 7/10/1993                   | 9/25/2006                    | 9/25/2006                   |
| DEPTH                          |                               | 0.5 - 1 Ft          | 6-6Ft                | 0 - 0.5 Ft       | 6-6Ft               | 0.5 - 1.5 Ft             | 5.7 - 6.5 Ft     | 7.9 - 8.9 Ft            | 0.5 - 1.5 Ft             | 5 - 5.8 Ft               | 14.4 - 15.3 Ft     | 0~0.5 Ft                | 0.5 - 1.5 Ft             | 3.5 - 4.3 Ft                | 0.5 - 0.5 Ft                 | 4.5 - 4.5 Ft                |
| SAMPLE_PURPOSE                 |                               | REG                 | REG                  | REG              | REG                 | REG                      | REG              | REG                     | REG                      | REG                      | REG                | REG                     | REG                      | REG                         | REG                          | REG                         |
| Test Group                     | Parameter (Units = mg/kg)     | Result DIL LQ VQ    | Result Dil LQ VQ     | Result DIL LQ VQ | Result DIŁ LO VO    | Result DIL LQ VQ         | Result DIL LO VO | Result DIL LQ VQ        | Result D/L LO VO         | Result DIL LQ VQ         | Result DIL LQ VO   | Result Dil. LQ VQ       | Result D/L LQ VQ         | Result Dill LO VQ           | Hesult Dil, LQ, VQ           | Result DifL LO VO           |
| EXPLOSIVES                     | 1.3-Dinimbenzene              |                     |                      |                  |                     |                          |                  |                         |                          |                          |                    | 0.22 1 < 0              |                          |                             |                              |                             |
| EXPLOSIVES                     | 2,4,6-Trinitotoluene          |                     |                      |                  |                     |                          |                  |                         |                          |                          |                    | 0.22 1 < U              |                          |                             |                              |                             |
| EXPLOSIVES                     | 2,4-Dinitrotoluene            |                     |                      |                  |                     |                          |                  |                         |                          |                          |                    | 0.22 1 < U              | 0.33 1 < U               | 0.33 t < U                  |                              |                             |
| EXPLOSIVES                     | 2,6-Dinitrotoluene            |                     |                      |                  |                     |                          |                  |                         |                          |                          |                    | 0.24 1 < U              | 0.33 t < U               | 0.33 T < U                  |                              |                             |
| EXPLOSIVES                     | 4-Amino-2,6-dinitrotoluene    |                     |                      |                  |                     |                          |                  |                         |                          |                          |                    | 0.46 1 < U              |                          |                             |                              |                             |
| EXPLOSIVES<br>EXPLOSIVES       | m-Nitrotoluene                |                     |                      |                  |                     |                          |                  |                         |                          |                          |                    | 0.91 1 < U              |                          |                             |                              |                             |
| EXPLOSIVES                     | Nitrobenzene                  |                     |                      |                  |                     |                          |                  |                         |                          |                          |                    | 0.24 1 < U              |                          |                             |                              |                             |
| EXPLOSIVES                     | o-Nitrotoluene                |                     |                      |                  |                     |                          |                  |                         |                          |                          |                    | 0.91 1 < U              |                          |                             |                              |                             |
| EXPLOSIVES                     | p-Nitrotoluene                |                     |                      |                  |                     |                          |                  |                         |                          |                          |                    | 2.7 1 < U               |                          |                             |                              |                             |
| EXPLOSIVES                     | RDX                           |                     |                      |                  |                     |                          |                  |                         |                          |                          |                    | 10.99/1 < U             |                          |                             |                              |                             |
| METALS                         | Alaminum                      | 4640 1              | 5460 1               | 7060 1           | 6510 1              | 17200 1                  | 8970 t           | 10000 1                 | 31400 1                  | 6210 1                   | 12100 1            | 8430 1                  | 11200 1                  | 8060 1                      | 7500 t                       | 10200 1                     |
| METALS                         | Antimony                      | 0.0549 1 J J        | 0.113 1 U            | 0.12 1           | 0.114 1 U           | 5.6 1                    | 31               | 31 < 1                  | 3 1 < U                  | 31 < 1                   | 3 t < U            | 17.8 1 < UJ             | 31 < 1/                  | 31 < 1                      | 0.109 t U UJL                | 0.113 1 U UJL               |
| METALS                         | Arsenic                       | 1.25 1              | 0.752 1              | 2.59 1           | 0.832 1             | 3 1                      | 2.8 1            | 1_1 1                   | 24 1                     | 1.5 1                    | 3.2 1              | 2.6 1 J                 | 25 1                     | 3.2 1                       | 1.05 1 JL                    | 0.385 1 JL                  |
| METALS                         | Barium                        | 30.2 1              | 26.2 1               | 71.5 1           | 29.9 1              | 63.6 1                   | 92.8 1           | 123 1                   | \$06 1                   | 69.9 1                   | 55.3 t             | 183 1                   | 114 1                    | 368 1                       | 39.8 1                       | 21.3 1                      |
| METALS                         | Servilium<br>Codmium          | 0.208 3 J J         | 0.475 1              | 0.545 1          | 0.891 1             | 1 1 4 11                 | 1121             | 1123                    | 1 1 2 11                 | 1121                     | 1 1 2 11           | 18 1 2 18               | 1121                     | 1121                        | 0.0943 1                     | 10.403 FJJ<br>11.413 1 11 H |
| METALS                         | Calcium                       | 500 1               | 716 1                | 3710 1           | 962 1               | 1890 1                   | 857 1            | 2110 1                  | 836 1                    | 810 1                    | 895 1              | 1200 1                  | 894 1                    | 1160 1                      | 1310 1                       | 514 1                       |
| METALS                         | Chromium                      | 8.41 1              | 7.16 1               | 31.6 1           | 20.3 1              | 14.4 1                   | 27.3 1           | 15.8 1                  | 24.5 1                   | 7.3 1                    | 20.7 1             | 27.5 1                  | 11.6 1                   | 10 1                        | 41.5 1                       | 10.7 1                      |
| METALS                         | Cobalt                        | 1.57 1              | 6.71 1               | 3.88 1           | 7.88 1              | 5.1 1                    | 14.2 \$          | 12 1                    | 7.1 1                    | 6.7 1                    | 7 1                | 3.6 1 < U               | 5.1 1                    | 13.3 1                      | 1.75 1                       | 6.36 1                      |
| METALS                         | Copper                        | 1.7 1               | 3.48 1               | 31.6 1           | 7.14 1              | 5.7 1                    | 9.3 1            | 11.5 1                  | 8 1                      | 6.2 1                    | 7.4 1              | 10.1 1                  | 3.8 1                    | 4 1                         | 2.12 1                       | 2.49 1                      |
| METALS                         | lion                          | 6/10 1<br>535 1     | 457 1                | 54400 10         | 23/00 5             | 21/00 1                  | 2/500 !          | 13.3 1                  | 136 1                    | 58 1                     | 1/800 1            | 462 1                   | 92 1                     | 13.4 1                      | 10.1 1                       | 5.09 1                      |
| METALS                         | Magnesium                     | 229 1               | 973 1                | 2080 1           | 1350 1              | 1080 1                   | 1380 1           | 3010 1                  | 2140 1                   | 1200 1                   | 4870 1             | 491 1                   | 973 1                    | 1640 1                      | 325 1 JH                     | 890 1 JH                    |
| METALS                         | Manganese                     | 48.8 1              | 30.8 1               | 132 1            | 58.3 1              | 372 t                    | 89.9 1           | 242 1                   | 53 1                     | 57.5 1                   | 234 1              | 77.4 1                  | 26.1 1                   | 118 1                       | 97.7 1 J                     | 17 <u>1</u> 1 J             |
| METALS                         | Mercury                       | 0.0101 1 J J        | 0.265 1 U            | 0.026 1 J J      | 0.273 1 U           | 0.1 1 < U                | 0.1 1 < U        | 0.1 1 < U               | 0.1 1 < U                | 0.1 1 < U                | 0.1 1 < U          | 0.13 1 < U              | 0.1 1 < U                | 0.1 1 < U                   | 0.0206 1 J J                 | 0.0111 1 J J                |
| METALS                         | Nickel                        | 2.27 1              | 10.1 1               | 7.1 1            | 16.9 1              | <i>ci0</i> 1             | con 4            | 012 1                   | 1400 +                   | 407 4                    | 1400 1             | 255 1 4 11              | 202 1                    | 440 1                       | 3.18 1                       | 9.57 1                      |
| METALS                         | Potassium<br>Setenium         | 221 I<br>0145 I.I.I | 2/4 1<br>0/214 1 J J | 1/4 1            | 307 I<br>0117 1 J J | 11<1                     | 11<1             | 913 I<br>1 1 < 1        | 1480 1                   | 497 L<br>11 < U          | 14-00 I<br>1 1 < U | 330 ₹ ₹ U<br>04 1       | ୍<br>ସା ସ ଏ ଥ            | 11<                         | 0.134 1 J JL                 | 0.226 1 U UJL               |
| METALS                         | Silver                        | 1.5 1 U             | 1.8 1 U              | 1.69 1 U         | 1.69 1 U            | 1 1 < U                  | 11< U            | 1 1 < U                 | 1 1 < U                  | 11<                      | 11 < U             | t.8 1 < U               | 11< 1                    | 1 t < U                     | 1.72 1 U U                   | 1.65 1 U U                  |
| METALS                         | Sodium                        | 91.1 1              | 376 1                | 53.1 1           | 528 1               |                          |                  |                         |                          |                          |                    |                         |                          |                             | 35 1                         | 254 1                       |
| METALS                         | Strontium                     |                     |                      |                  |                     | 21 1                     | 23.6 1           | 55.3 1                  | 25.4 1                   | 20.1 1                   | 54.6 1             | 17.8 1 < U              | 20.3 1                   | 35.7 1                      | 0.00055 4                    |                             |
| METALS                         | Thallium<br>Maaadium          | 0.0423 1            | 0.061 1              | 0.028 1          | 0.0967 1            |                          |                  |                         |                          |                          |                    | 89 1 < U                |                          |                             | 46.7 1                       | 13.9 1                      |
| METALS                         | Zinc                          | 5.95 1              | 19.6 1               | 115 1            | 32.8 1              | 44.2 1                   | 44.5 1           | 57.7 1                  | 38.2 1                   | 29.6 1                   | 89.1 1             | 209 1                   | 20.5 1                   | 33.8 1                      | 13.3 1                       | 17.8 1                      |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene        |                     |                      |                  |                     |                          | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U         | 0.62 1 < U              | 0.33 1 < U               | 0.33 1 < U                  | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene           |                     |                      |                  |                     |                          | 0.33 i < U       | 0.33 1 < U              | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U         | 0.62 t < U              | 0.33 t < U               | 0.33 1 < U                  | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 1,3-Dichlorobenzene           | -                   |                      |                  |                     |                          | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U         | 0.62 1 < U              | 0.33 1 < U               | 0.33 1 < 0                  | 1.84 10 U U<br>1.84 10 U U   | 0.187 1 U U                 |
| SEMIVOLATILES<br>SEMIVOLATILES | 2.4.5-Trichloronbenol         |                     |                      |                  |                     |                          | 1.65 1 < 1/      | 1.65 1 < U              | 1.65 1 < 1               | 1.65 1 < 0               | 1.65 1 < 9         | 3.1 1 < U               | 1.65 1 < U               | 1.65 1 < U                  | 1.84 10 0 0                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol         |                     |                      |                  |                     |                          | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U         | 0.62 1 < U              | 0.33 1 < U               | 0.33 1 < ⊍                  | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 2,4-Dichlorophenol            |                     |                      |                  |                     | -                        | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U         | 0.62 1 < U              | 0.33 1 < U               | 0.33 1 < U                  | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 2,4-Dimethylphenol            |                     |                      |                  |                     |                          | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U         | 0.62 1 < U              | 0.33 1 < U               | 0.33 1 < U                  | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 2,4-Dautropheno!              |                     |                      |                  |                     | 033 1 × 11               | 1.05 1 < 0       | 1.65 1 < U              | 7.05 1 < 0               | 1.05 1 < 0               | 1.55 1 < 0         | 3.1 I < U<br>0.62 1 < ∐ | 1.65 1 < 0               | 1.65 1 < 12                 | 3.19 10 0 0                  | 0.934 1 0 0                 |
| SEMIVOLATILES                  | 2,6-Dinitrotaluene            |                     |                      |                  |                     | 0.33 1 < U               | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < 0               | 0.33 1 < U         | 0.62 1 < U              |                          |                             | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 2-Chloronaphthalene           |                     |                      |                  |                     | 0.33 t < U               | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U         | 0.62 1 < U              | 0.33 1 < U               | 0.33 1 < U                  | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 2-Chlorophenol                |                     |                      |                  |                     | 0.33 t < U               | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U         | 0.62 1 < U              | 0.33 t < U               | 0.33 1 < U                  | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 2-Methylnaphthalene           |                     |                      |                  |                     | 0.33 1 < U               | 0.33 1 < 0       | 0.33 t < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 0         | 0.62 1 < 0              | 0.33 ł < U               | 0.33 1 < 0                  | 1.84 10 0 0                  | 0.187 1 U U<br>0.187 1 U U  |
| SEMIVOLATILES<br>SEMIVOLATILES | 2-Memyphendi<br>2-Nitroantine | •                   |                      |                  |                     | 1.65 1 < U               | 1.65 1 < U       | 1.65 1 < U              | 1.65 1 < 1               | 1.65 1 < 9               | 1.65 1 < 1         | 3.1 1 < 0               | 1.65 t < U               | 1.65 1 < U                  | 9,19 10 U U                  | 0.934 1 U U                 |
| SEMIVOLATILES                  | 2-Nitrophenol                 |                     |                      |                  |                     | 0.33 1 < U               | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U         | 0.62 1 < U              | 0.33 1 < U               | 0.33 1 < 1                  | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzidine        |                     |                      |                  |                     | 0.65 1 < U               | 0.65 1 < U       | 0.65 1 < U              | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U         | 1.2 1 < U               | 0.65 1 < U               | 0.65 1 < U                  | 3.67 10 U U                  | 0.373 1 U U                 |
| SEMIVOLATILES                  | 3-Nitroaniline                |                     |                      |                  |                     | 1.65 t < U               | 1.65 1 < U       | 1.65 1 < U              | 1.65 1 < U               | 1.65 1 < 0               | 1.65 1 < U         | 3.1 1 < U               | 1.65 1 < U               | 1.65 1 < U                  | 9.19 10 U U                  | 0.934 1 U U                 |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol    |                     |                      |                  |                     | 1.65 1 < U               | 1.65 1 < 0       | 1.65 1 < U              | 1.65 1 < 0               | 1.65 1 < U               | 1.65 1 < U         | 3.1 1 < U               | 1.05 1 < 0               | 1.65 I < 8<br>033 I < 8     | 9.19 IU U U<br>1.84 10 U U   | 0.934 I U U                 |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol       |                     |                      |                  |                     | 0.65 1 < U               | 0.65 1 < U       | 0.65 1 < U              | 0.65 t < U               | 0.65 1 < U               | 0.65 1 < U         | 0.62 1 < U              | 0.65 1 < U               | 0.65 1 < U                  | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 4-Chioroaniline               |                     |                      |                  |                     | 0.65 1 < U               | 0.65 1 < U       | 0.65 1 < U              | 0.65 1 < U               | 0.65 1 < U               | 0.65 1 < U         | 0.62 1 < U              | 0.65 1 < U               | 0.65 1 < U                  | 1.84 10 Ư U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 4-Chlorophenyl phenyl ether   |                     |                      |                  |                     | 0.33 1 < U               | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < じ               | 0.33 t < U               | 0.33 1 < U         | 0.62 1 < U              | 0.33 1 < U               | 0.33 1 < U                  | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 4-Methylphenol                |                     |                      |                  | -                   | 0.33 t < U               | 0.33 t < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U         | 0.62 1 < U              | 0.33 t < U               | 0.33 1 < 1                  | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | 4-Netroaniline                |                     |                      |                  |                     | 1.65 1 < U<br>1.65 1 - U | 1.85 T < U       | 1.65 1 < U<br>165 1 ∠ U | 1.65 1 < U<br>1.65 1 - B | 1.65 1 < U<br>1.65 1 - U | 1.05 1 < U         | 3.1 1 < U<br>3.1 1 - U  | 1.05 i < U<br>1.65 i > U | 1.65 I < 1J                 | 9,19 10 0 0<br>9,19 10 17 11 | 0.934 I U U<br>0.934 I U I  |
| SEMIVOLATILES                  | Acenaphtene                   |                     |                      |                  |                     | 0.33 1 < U               | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < 0               | 0.33 1 < U         | 0.62 1 < U              | 0.33 t < U               | 0.33 1 < U                  | 1.84 10 U U                  | 0.187 T U U                 |
| SEMIVOLATILES                  | Acenaphthylene                |                     |                      |                  |                     | 0.33 1 < U               | 0.33 1 < U       | 0.33 1 < U              | 0.33 t < U               | 0.33 1 < U               | 0.33 1 < U         | 0.62 1 < U              | 0.33 1 < U               | 0.33 1 < Ű                  | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | Anthracene                    |                     |                      |                  |                     | 0.33 t < U               | 0.33 1 < U       | 0.33 1 < U              | 0.33 t < €               | 0.33 1 < U               | 0.33 1 < U         | 0.62 1 < U              | 0.33 1 < U               | 0.33 1 < U                  | 1.84 10 U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | Benzo(a)anthracene            |                     |                      |                  |                     | 0.33 1 < U               | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U         | 0.62 1 < U              | 0.33 t < U               | 0.33 1 < U                  | 1.84 TO U U                  | 0.187 1 U U                 |
| SEMIVOLATILES                  | Benzo(a)pyrene                |                     |                      |                  |                     | 0.33 1 < 0               | 0.33 1 < U       | 0.33 1 < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 0         | 0.62 1 < U              | £9.33 1 < U              | 0.33 1 < 0                  | 1.84 10 0 0                  | 0.187 1 0 0                 |

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-110 Concentrations of Chemicals in Soil Samples Associated with WR Sump 004

·· -

| [SUMP] = WRSUMP004             |                                |                  |                  |                  | oonoom           |                  |                  | ampico roso      |                  | Camp 004         |                  |                           |                  |   |                  |                  |
|--------------------------------|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------------------------|------------------|---|------------------|------------------|
| LOCATION _CODE                 |                                | 35SUMP001-SB03   | 35SUMP001-SB01   | 35SUMP001-SB02   | 35SUMP001-\$B02  | LH-S01-01        | LH-S01-01        | LH-S01-01        | LH-S01-02        | LH-\$01-02       | LH-S01-02        | LHS-2-09                  | LH-WRS4-01       | LH-WRS4-01  | WRS04-S801       | WRS04-5801       |
| SAMPLE_NO                      |                                | 35-SMP01-SB01-01 | 35-SMP01-SB01-02 | 35-SMP01-SB02-01 | 35-SMP01-SB02-02 | LH-S01-01_1      | LH-S01-01_2      | LH-S01-01_3      | LH-S01-02_1      | LH-S01-02_2      | LH-S01-02_3      | LHS-2-09                  | LH-WRS4-01_1     | LH-WRS4-01_2  | WRS04-SB01-01    | WRS04-SB01-02    |
| SAMPLE_DATE                    |                                | 9/7/2006         | 9/7/2006         | 9/7/2006         | 9/7/2006         | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        | 1/10/1995                 | 7/10/1993        | 7/10/1993   | 9/25/2006        | 9/25/2006        |
| DEPTH                          |                                | 0.5 - 1 Ft       | 6 - 6 Ft         | 0-0.5 Ft         | 6 - 6 Ft         | 0.5 - 1.5 Ft     | 5.7 - 6.5 Ft     | 7_9 - 8.9 Fi     | 0.5 - 1.5 Ft     | 5 - 5.8 Ft       | 14.4 - 15.3 Ft   | 0 - 0.5 Ft                | 0.5 - 1.5 Ft     | 3.5 - 4.3 Ft  | 0.5 - 0.5 Ft     | 4.5 - 4.5 Ft     |
| SAMPLE_PURPOSE                 |                                | REG                       | REG              | REG   | REG.             | REG              |
| Test Group                     | Parameter (Units = mg/kg)      | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LO VO | Result DIL LQ VQ          | Result DIL LQ VO | Result DIL LQ VQ                                      | Result DIL LO VQ | Result DIL LO VO |
| SEMIVOLATILES                  | Benzo(b)fluoranthene           |                  |                  |                  |                  | 0.33 1 < 13      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.62 1 < U                | 0.33 1 < U       | 0.33 1 < U  | 1.84 10 U U      | 0.187 1 U U      |
| SEMIVOLATILES                  | Benzo(ghi)oerylene             |                  |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.62 1 < U                | 0.33 1 < U       | 0.33 1 < U  | 1.84 10 U U      | 0.187 1 U U      |
| SEMIVOLATILES                  | Benzo(k)fluoranthene           |                  |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.62 1 < 0                | 0.33 1 < U       | 9.33 1 < U  | 1.84 10 0 0      | 0.187 1 0 0      |
| SEMIVOLATILES                  | Benzoic Acid                   |                  |                  |                  |                  | 1.65 1 < 0       | 1.65 1 < 0       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 0       | 1.65 1 < U       | 3.1 1 < 0                 | 1.65 1 < U       | 1.65 1 < U  | 9.19 10 0 03     | 0.934 T U UJ     |
| SEMIVOLATILES                  | Benzył Alcohol                 |                  |                  |                  |                  | 0.65 1 < 0       | 0.65 1 < 0       | 0.65 1 < 0       | 0.65 ! < U       | 0.65 1 < U       | 0.65 1 < U       | 0.62 1 < U                | 0.65 1 < U       | 9.65 1 < U  | 1.84 10 8 0      | 0.187 1 0 0      |
| SEMIVOLATILES                  | bis{2-Chloroethoxy)methane     |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 10.33 t < U      | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.62 1 < U                | 0.33 1 < 0       | 0.33 1 < U  | 1.84 10 0 0      | 0.187 1 0 0      |
| SEMIVOLATILES                  | bis{2-Chloroethyl}ether        |                  |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 8.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | -0.62 1 < U               | 0.33 1 < 0       | 0.33 1 < 0  | 1.84 10 0 0      | 0.187 1 U U      |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether    |                  |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.62 1 < 0                | 0.33 1 < 0       | 0.33 1 < 0  | 1.84 10 0 0      | 0.387 1 0 0      |
| SEMIVOLATILES                  | bis{2-Ethylhexyl)phthalate     |                  |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 10.33 1 < U      | 0.33 1 < 0       | 0.62 1 < 0                | 0.33 1 < 0       | 0.33 1 < 0  | 1.84 10 0 0      | 0.187 1 0 0      |
| SEMIVOLAHLES                   | Butyl benzyl primalate         | 1                |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 10.33 t < U      | 0.33 1 < 0       | 0.33 J < U       | 0.33 1 < 0       | 0.62 1 < 0                | 0.33 1 < 0       | 0.33 1 < 0  | 1.84 10 0 0      | 0.167 1 1 1      |
| SEMIVOLATILES                  | Chrysene                       |                  |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 ( < 0       | 0.62 1 < 0                | 0.33 1 < 0       | 0.33 1 < 0  | 1.84 10 0 0      | 0.187 1 1 1      |
| SEMIVULATRES                   | Ubenzo(a,n)anthracene          |                  |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 1       | 0.33 1 < 0       | 0.33 1 < 0       | 0.62 1 < 0                | 0.00 1 0         | 0.33 1 < 0  | 1.84 10 0 0      | 0.487 1 0 0      |
| SEMIVULATILES                  | Dibenzoluran                   |                  |                  |                  |                  | 0.33 1 < 0       | 0.33   < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 F < U       | 0.62 1 < 0                | 19_33 I < U      | 0.33 ( < 0  | 1.04 10 0 0      | 0.387 1 0 0      |
| SEMIVULARILES<br>COMPOLIATE CO | Usernyi primalate              |                  |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 1       | 0.33   < 0       | 0.62 1 < 0                | 0.33   < 0       | 0.33 1 < 0  | 1.04 10 0 U      | V.107 I U U      |
| SEMINOLATILES                  | Danemyi primalale              |                  |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.303 1 < 0      | 0.33   < U       | 0.62 1 < 0                | 0.00 1 < 0       | 0.03 1 < 0  | 1.04 10 0 0      | 0.107 1 0 0      |
| SEMIVOLATILES<br>SEMIVOLATILES | ol-n-ounyi primalare           |                  |                  |                  |                  | 0.33 1 < 0       | 0.33   < U       | 0.325 1          | 0.33 1 < 0       | 0.393 1 - 13     | 0.33 I < U       | 0.52 1 < 0                | 0.33 1 < 0       | 0.33 1 < 0  | 1.04 10 0 0      | 0.107 1 11 11    |
| SCHIVOLATILES                  | Gran-Ocaya pribitatale         | 1                |                  |                  |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.22 1 4 1       | 0.33 1 4 1       | 0.00 1 < 0       | 0.02 1 20.0               | 0.33 1 < 0       |   | 1.04 10 0 0      | 0.107 1 U U      |
| SEMINULATILES<br>SCHRIDLATILES | riborandiete                   |                  |                  |                  |                  |                  | 0.00 1 < 0       |                  | 0.33 1 4 1       | 0.30 1 < 0       | 0.33 1 < 0       | 0.02 1 < 0                | 0.33 1 4 1       |   | 1.84 10 0 0      | 0.107 1 0 0      |
| SEMIVOLANCES<br>SEMIVOLANCES   | FILMETE                        |                  |                  |                  |                  | 0.33 1 < 0       | 0.92 1 - 17      | 0.22 1 < 0       | 123 I < U        | 1.30 1 < 1       | 0.33 I < U       | 0.02 1 < 0                | 0.00 1 < 0       | 0.00 1 < 0  | 1.64 10 0 0      | 0.107 F U U      |
| SEMBIOLATILES<br>COMBIOLATE CC | nexacritorosenzene             |                  |                  |                  |                  | 0.22 1 . 1       | 0.00 1 4 14      | 0.33 1 < 0       | 0.53 1 < 0       | 0.23 1 < 0       | 0.33 1 < 0       |                           | 0.33 1 < 0       | 0.33 1 < 0  | 1.04 10 0 0      | 0.107 1 U U      |
| SEMIVULATILES                  | Pexactiloropulatione           |                  |                  |                  |                  | 0.33 1 < 0       |                  | 0.35 1 < 0       | 0.35 1 4 0       | 0.35 1 < 0       | 0.33 1 < 0       | 0.02 1 < 0                | 0.33 1 < 0       | 0.03 1 4 0  | 1.64 10 0 0      | 0.107 1 0 0      |
| SEMIVOLATICES                  | Maxaablamathana                |                  |                  |                  |                  | 0.33 1 4 11      | 0.03 1 4 17      | 0.00 1 < 0       | 0.20 1 4 1       | 0.00 1 < 0       | 0.00 1 < 0       | 0.62 1 < 0                | 0.00 1 < 0       |   | 1.84 10 0 U      | 0.197 7 11 21    |
| SEMINOLATILES                  | Independent 2.3-edhowene       | ļ                |                  |                  |                  | 033 1 < 0        |                  |                  | 0.33 1 < 1       | 633 1 < U        | 0.33 1 < 0       |                           |                  |   | 184 10 81 10     | 0.187 1 11 11    |
| SEMINOLATILES                  | Indeno(1,2,5-Cu)pytene         |                  |                  |                  |                  |                  | 0.33 1 < 11      |                  | 0.30 1 < 0       | 033 1 < 0        | 0.30 I C U       | 0.02 1 < 0<br>0.62 1 < 11 | 0.33 1 < 0       | 0.33 1 < 11   | 184 10 10 10     | 0.107 1 U U      |
| SEMINOLATILES                  | Nachthalana                    |                  |                  |                  |                  |                  | 0.00 1 4 0       | 0.33 1 < 11      | 033 1 < 11       | 0.001 < 0        | 0.00 1 < 0       | 0 2 1 20.0                | 0.30 1 < 0       | 0.00 1 4 0  | 1.84 10 11 11    | 0187 1 11 11     |
| SEMINOLATILES                  | Nitrobanzona                   |                  |                  |                  |                  | 033 1 < 0        |                  |                  | 033 1 2 1        | 0.30 1 < 1       | 0.33 1 < 1       | 0.62 1 < 11               | 0.33 1 < 1       | 0.33 1 4 17   | 184 10 11 11     | 0.187 1 1 10     |
| SEMIVOLATILES                  | n-Nitroso-di-o-providentina    | 1                |                  |                  |                  | 033 1 < 0        | 033 1 4 1        | 0.93 1 < 1       | 033 1 < U        | 0.33 1 2 1       | 0.33 1 < 11      | 0.62 1 < 1                | 0.33 1 < 1       |   | 184 10 10 11     | 0187 1 11 11     |
| SEMIVOLATILES                  | n-Nitrosotiohenvlamine         |                  |                  |                  |                  | 0.33 1 < U       |                  | 0.33 1 < U       | 0.33 1 < 1       | 0.33 1 < 1       | 0.33 1 < 11      | 0.62 1 < 11               | 133 1 < 8        | 0.33 1 < 0  | 1.84 10 U U      | 0.187 1 U U      |
| SEMIVOLATILES                  | Pentachloronheoni              |                  |                  |                  |                  | 165 1 < 11       | 165 1 < 1        | 1.65 t < 1       | 1.65 1 < 1       | 165 1 < 1        | 165 1 < 1        | 311 < 0                   | 165 1 < 0        | 165 1 < 0   | 9.19 10 U U      | 0.934 1 U U      |
| SEMIVOLATILES                  | Phenanttrene                   |                  |                  |                  |                  | 033 1 < 0        | 0.33 1 < 11      | 033 1 < 0        | 0.33 1 < U       | 0.33 1 < 1       | 0.33 1 < 11      | 0.62 1 < 11               | 0.33 1 < U       | 0.33 1 < 0  | 1.84 10 U U      | 0.187 1 U U      |
| SEMIVOLATILES                  | Phenol                         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < 17      | 0.33 1 < 1       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < 1       | 0.62 1 < U                | 0.33 1 < U       | 0.33 1 < U  | 1.84 10 U U      | 0.187 1 U U      |
| SEMIVOLATILES                  | Pyrene                         |                  |                  |                  |                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.62 1 < U                | 0.33 1 < 1       | 0.33 t < U  | 1.84 10 U U      | 0.187 T U U      |
| VOLATILES                      | 1.1.1.2-Tetrachioroethane      |                  | 0.00467 1 14     |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  | 0.019 1 < U               |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1.1.1-Trichloroethane          |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.009 1 < U               | 0.0144 1         | 0.0127 1  |                  | 0.00448 1 U U    |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane      |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.009 1 < U               | 0.005 1 < U      | 0.005 t < U   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1,1,2-Trichloroethane          |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.009 1 < U               | 0.005 1 < U      | 0.005 t < U   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1,1-Dichloroethane             | 1                | 0.00467 1 U UJ   |                  | 0.00472 1 U UJ   | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.009°1 < U               | 0.005 1 < U      | 0.005 1 < U   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1,1-Dichloroethene             |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.009 1 < U               | 0.005 1 < U      | 0.005 1 < U   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1,1-Dichloropropene            |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  |                           |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1.2.3-Trichlorobenzene         |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  |                           |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1,2,3-Trichloropropane         |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  | 0.019 1 < U               | •                |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1.2.4-Trichlorobenzene         |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.33 1 < U       |                  |                  |                  |                  |                  |                           |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1,2,4-Trimethylbenzene         |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  |                           |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1.2-Dibromo-3-chloropropane    |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  | 0.038 1 < 1J              |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1,2-Dibromoethane              |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  | 0.038 1 < U               |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1,2-Dichlorobenzene            |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.33 1 < U       |                  |                  |                  |                  |                  |                           |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1,2-Dichloroethane             |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.009 1 < U               | 0.005 1 < U      | 0.005 1 < U   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1,2-Dichloroethene             |                  |                  |                  |                  | 0.005 t < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.009 1 < U               | 0.005 t < U      | 0.005 t < U   |                  |                  |
| VOLATILES                      | 1.2-Dichloropropane            |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.009 1 < U               | 0.005 1 < U      | 0.005 t < U   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1,2-Dimethylbenzene (o-Xylene) | 1                | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  |                           |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1.3.5-Trimethylbenzene         |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  |                           |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1.3-Dichlorobenzene            | ]                | 0.00467 1 U      |                  | 0.00472 1 U      | 0.33 1 < U       |                  |                  |                  |                  |                  |                           |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1.3-Dichloropropane            |                  | 0.00467 t U      |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  |                           |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 1,4-Dichlorobenzene            |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.33 1 < U       |                  |                  |                  |                  |                  |                           |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 2.2-Dichloropropane            |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  |                           |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 2,4,5-Trichlarophenol          |                  |                  |                  |                  | 1.65 1 < ⊍       |                  |                  |                  |                  |                  |                           |                  |   |                  |                  |
| VOLATILES                      | 2.4.6-Trichlorophenol          | 1                |                  |                  |                  | 0.33 1 < U       |                  |                  |                  |                  |                  |                           |                  |   |                  |                  |
| VOLATILES                      | 2,4-Dichlorophenol             | 1                |                  |                  |                  | 0.33 t < Ư       |                  |                  |                  |                  |                  |                           |                  |   |                  |                  |
| VOLATILES                      | 2.4-Dimethylphenol             | 1                |                  |                  |                  | 0.33 1 < U       |                  |                  |                  |                  |                  |                           |                  |   |                  |                  |
| VOLATILES                      | 2.4-Dinitrophenol              | 1                |                  |                  |                  | 1.65 1 < U       |                  |                  |                  |                  |                  |                           |                  |   |                  |                  |
| VOLATILES                      | 2-Butanone                     | 1                | 0.00935 t U      |                  | 0.00945 1 U      | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.019 1 < U               | 0.05 1 < U       | 0.05 1 < U  |                  | 0.00895 1 U U    |
| VOLATILES                      | 2-Chloroethyl vinyl ether      | 1                | 0.00935 1 U      |                  | 0.00945 1 U      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.019 1 < U               | 0.01 1 < V       | 0.01 1 < U  |                  | 0.00895 1 U U    |
| VOLATILES                      | 2-Chlorotoluene                |                  | 0.00467 1 년      |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  |                           |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | 2-Hexanone                     | 1                | 0.00935 1 U      |                  | 0.00945 1 U      | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.019 1 < V               | 0.05 1 < ⊍       | 0.05 1 < U  |                  | 0.00895 1 U U    |
| VOLATILES                      | 2-Propenal                     | }                |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.94 1 < 9                |                  |   |                  |                  |
| VOLATILES                      | 4-Chloratoluene                |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                  |                  |                  |                           |                  |   |                  | 0.00448 1 U U    |
| VOLATILES                      | Acetone                        | 1                | 0.00935 1 U      |                  | 0.00945 1 U -    | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        | Q.1 1 < U        | 0.1 1 < U.       | 0.1 .1 < U       | 0.38 1 < 0                | 0.1 1 < U        | 0.1 1. <u< td=""><td></td><td>0.00895 1 U U</td></u<> |                  | 0.00895 1 U U    |
| VOLAHLES                       | Acetonitrie                    | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.19 1 < 0                |                  |   |                  |                  |

Shaw Environmental, Inc.

Table 3-110 Concentrations of Chemicals in Soil Samples Associated with WR Sump 004

| (SUMP) = WRSUMP004 |                             |                  |                  |                  | CONCERN          | auons of one     |                  | ampies Assoc     | Maleu Willi HIV   | oump vv4         |                  |                   |                  |                  |                  | 0000             |
|--------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|
| LOCATION CODE      |                             | 35SUMP001-SB01   | 35SUMP001-SB01   | 35SUMP001-S802   | 35SUMP001-SB02   | 1H-S01-01        | LH-S01-01        | LH-S01-01        | LH-S01-02         | LH-S01-02        | LH-S01-02        | LHS-2-09          | LH-WRS4-01       | LH-WRS4-01       | WRS04-SB01       | WRS04-SB01       |
| SAMPLE NO          |                             | 35-SMP01-SB01-01 | 35-SMP01-SB01-02 | 35-SMP01-SB02-01 | 35-SMP01-SB02-02 | LH-S01-01 1      | LH-S01-01 2      | LH-S01-01 3      | LH-S01-02 1       | LH-S01-02 2      | LH-S01-02 3      | LHS-2-09          | LH-WRS4-01_1     | LH-WRS4-01_2     | WRS04-SB01-01    | WRS04-SB01-02    |
| SAMPLE DATE        |                             | 9/7/2006         | 9/7/2006         | 9/7/2006         | 9/7/2006         | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993         | 6/26/1993        | 6/26/1993        | 1/10/1995         | 7/10/1993        | 7/10/1993        | 9/25/2006        | 9/25/2006        |
| DEPTH              |                             | 0.5 - 1 Ft       | 6-6Ft            | 0 - 0.5 Ft       | 6-6Ft            | 0.5 - 1.5 Ft     | 5.7 - 6.5 Ft     | 7.9 - 8.9 Ft     | 0.5 - 1.5 Ft      | 5 - 5.8 Ft       | 14.4 - 15.3 Ft   | 0-0.5 Ft          | 0.5 - 1.5 Ft     | 3.5 - 4.3 Ft     | 0.5 - 0.5 Ft     | 4.5 - 4.5 Ft     |
| SAMPLE_PURPOSE     |                             | REG               | REG              | REG              | REG               | REG              | REG              | REG              | REG              |
| Test Group         | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result Dil. LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result Dil. LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DK. LO VQ |
| VOLATILES          | Acrylonitrile               | 1                |                  |                  |                  |                  |                  |                  |                   |                  |                  | 0.19 1 < U        |                  |                  |                  |                  |
| VOLATILES          | Ally! chioride              |                  |                  |                  |                  |                  |                  |                  |                   |                  |                  | 0.019 1 < U       |                  |                  |                  |                  |
| VOLATILES          | Benzene                     |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U       | 9.005 t < U      | 0.005 t < U      | 0.009 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES          | Bromobenzene                |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00448 1 U U    |
| VOLATILES          | Bromochloromethane          |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00448 1 U U    |
| VOLATILES          | Bromodichloromethane        |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.009 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES          | Bremoform                   |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.009 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES          | Bromomethane                |                  | 0.00935 t U UJ   |                  | 0.00945 1 U UJ   | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.019 1 < U       | 0.01 t < U       | 0.01 1 < U       |                  | 0.00895 1 U U    |
| VOLATILES          | Carbon disulfide            |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.009 1 < U       | -0.005 t < ∛J    | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES          | Carbon tetrachloride        |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U       | 0.005 1 < U      | 0.005 1 < U      | 0.009 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 t U U    |
| VOLATILES          | Chlorobenzene               |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.065 t < U      | 0.005 1 < U      | 0.909 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES          | Chloroethane                |                  | 0.00935 1 U      |                  | 0.00945 1 U      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.019 1 < U       | 0.01 1 < U       | 9_01 1 < U       |                  | 0.00895 1 U U    |
| VOLATILES          | Chlaroform                  |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.009 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES          | Chloromethane               |                  | 0.00935 1 U      |                  | 0.00945 1 U      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.019 1 < U       | 0.01 t < U       | 0.01 1 < U       |                  | 0.00895 1 U U    |
| VOLATILES          | Chloroprene                 |                  |                  |                  |                  |                  |                  |                  |                   |                  |                  | 0_19 1 < U        |                  |                  |                  |                  |
| VOLATILES          | cis-1,2-Dichloroethene      |                  | 0.00467 1 U UJ   |                  | 0.00472 1 U UJ   |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00448 1 U U    |
| VOLATILES          | cis-1,3-Dichloropropene     |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.006 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.065 1 < U      | 0.005 1 < U      | 0.009 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES          | Dibromochloromethane        |                  | 0.00467 t U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < ⊍      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.009 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES          | Dibromomethane              |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                   |                  |                  | 0.038 1 < U       |                  |                  |                  | 0.00448 1 U U    |
| VOLATILES          | Dichlorodifluoromethane     |                  | 0.00935 1 U      |                  | 0.00945 1 U      |                  |                  |                  |                   |                  |                  | 0.038 1 < U       |                  |                  |                  | 0.00895 1 U U    |
| VOLATILES          | Ethyl methacrylate          |                  |                  |                  |                  |                  |                  |                  |                   |                  |                  | 0.038 1 < U       |                  |                  |                  |                  |
| VOLATILES          | Ethylbenzene                |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < ⊍      | 0.905 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.009 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES          | Hexachlorobutadiene         |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00448 1 U U    |
| VOLATILES          | IODOMETHANE                 |                  |                  |                  |                  |                  |                  |                  |                   |                  |                  | 0.019 1 < U       |                  |                  |                  |                  |
| VOLATILES          | ISOBUTYL ALCOHOL            |                  |                  |                  |                  |                  |                  |                  |                   |                  |                  | 3.8 1 < U         |                  |                  |                  |                  |
| VOLATILES          | Isopropylbenzene            |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00448 1 U U    |
| VOLATILES          | m.p-Xylenes                 | 1                | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00448 1 0 0    |
| VOLATILES          | Methacrylonitrile           |                  |                  |                  |                  |                  |                  |                  |                   |                  |                  | 0.038 1 < U       | -                |                  |                  |                  |
| VOLATILES          | Methyl isobutyl ketone      |                  | 0.00935 1 U      |                  | 0.00945 1 U      | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.019 1 < U       | 0.05 1 < U       | 0.05 1 < U       |                  | 0.00895 1 U U    |
| VOLATILES          | METHYL METHACRYLATE         |                  |                  |                  |                  |                  |                  |                  |                   |                  |                  | 0.038 1 < U       |                  |                  |                  |                  |
| VOLATILES          | Methylene chloride          |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.009 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00448 1 U U    |
| VOLATILES          | Naphthalene                 |                  | 0.00935 1 U      |                  | 0.00945 1 U      |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00895 1 U U    |
| VOLATILES          | n-BUTYLBENZENE              |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00448 1 U U    |
| VOLATILES          | n-PROPYLBENZENE             | }                | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00448 1 0 0    |
| VOLATILES          | Pentachloroethane           | 1                |                  |                  |                  |                  |                  |                  |                   |                  |                  | 0.038 1 < 0       |                  |                  |                  |                  |
| VOLATILES          | p-ISOPROPYLTOLUENE          |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00448 1 U U    |
| VOLATILES          | Propionitrile               |                  |                  |                  |                  |                  |                  |                  |                   |                  |                  | 0.094 1 < 0       |                  |                  |                  |                  |
| VOLATILES          | sec-BUTYLBENZENE            |                  | 0.00467 1 U      |                  | 0.00472 1 U      |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00448 1 U U    |
| VOLATILES          | Styrene                     |                  | 0.00467 1 U      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < U       | 0.805 1 < 0      | 0.005 1 < 0      | $0.009 \ 1 < 0$   | 0.005 1 < 0      | 0.005 1 < 0      |                  | 0.00448 1 0 0    |
| VOLATILES          | tert-BUTYLBENZENE           |                  | 0.00467 1 U      |                  | 0.00472 t U      |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00448 1 0 0    |
| VOLATILES          | Tetrachioroethene           |                  | 0.00467 1 0      |                  | 0.00472 1 U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < 0      | 0.005 1 < 0      | 0.009 1 < 0       | 0.005 1 < U      | 0.005 1 < 0      |                  | 0.00448 1 0 0    |
| VOLATILES          | Toluene                     |                  | 0.00467 1 U      |                  | 0.00472 1 0      | 0.005 1 < U      | 0,005 1 < U      | 0.005 1 < 0      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < 0      | 0.009 1 < 0       | 0.005 1 < U      | U.005 1 < U      |                  | 0.00448 1 0 0    |
| VOLATILES          | trans-1,2-Dichloroethene    |                  | 0.00467 1 U UJ   |                  | 0.00472 1 U UJ   |                  |                  |                  |                   |                  |                  |                   | 0.005 d 11       | A 495 4          |                  | 0.00448 1 8 0    |
| VOLATILES          | trans-1,3-Dichoropropene    | 1                | 0.00467 1 0      |                  | 0.00472 1 0      | 0.005 1 < U      | 0.005 1 < 1      | 0.005 1 < U      | 0.005 1 < 0       | 0.005 1 < U      | 0.005 1 < 0      | 0.009 T < 0       | 0.005 1 < 0      | 0.005 1 < 0      |                  | 0.00448 1 0 0    |
| VOLATILES          | trans-1,4-Dichloro-2-butene |                  | 0.00107          |                  |                  | a. 605 4 55      | 0.00F 4 **       | 0.00F t          |                   | 0.00F 4          | 0.000            | U.U38 1 < U       | 0.005 1 1        | 0.005 1          |                  | 0.00449 1 11 11  |
| VOLAHLES           | Inchloroethene              | 1                | U.0046/ 1 U      |                  | 0.00472 1 0      | 0.005 1 < U      | 10.005 1 < 0     | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < 0      | 0.005 1 < 0      | 0.009 1 < 0       | 0.005 1 < 0      | 0.005 1 < 0      |                  | 0.00945 I U U    |
| VOLAIILES          | Inchlorofluoromethane       | 1                | 0.00935 1 U      |                  | 0.00945 1 0      |                  |                  |                  |                   | 0.05 4 **        |                  | 0.019 1 < 0       | 0.05 1           | 0.05 1           |                  | U.UU895 I U U    |
| VOLATILES          | VIRVI acetate               | 1                | 0.00935 1 U      |                  | 0.00945 1 U      | 0.05 1 < 1/      | 0.05 1 < 0       | 0.05 1 < 0       | 0.05 1 < 0        | 0.05 1 < 0       | 0.05 1 < 10      | 0.019 1 < 0       | 0.03 1 < 0       | V.UC 1 < U       |                  | 0.00000 ( U U    |
| VOLATILES          | Vinyi chionde               |                  | 0.00935 1 U      |                  | 0.00945 1 U      | 0.01 1 < 0       | 0.01 1 < 0       | 0.01 1 < 0       | 0.01 1 < 0        | 0.01 1 < 0       | 0.01 1 < 0       | 0.019 1 < 10      | 0 000 1 1 10.0   | 0.01 1 < 0       |                  | 0.00000 1 0 0    |
| VULATILES          | Xylenes, Total              | 1                |                  |                  |                  | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0       | 0.005 1 < 0      | 0.005 1 < 0      | 0.009 1 < 0       | 0.005 1 < 0      | 0.005 1 < 0      |                  |                  |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

 $\langle \langle \cdot \rangle \rangle$ 

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-111 Concentrations of Chemicals in Soil Samples Associated with WR Sump 005

| [SUMP] = WRSUMP005             |   | 35511MPM        | 08.5801     | 95\$[]MP0  | 00.5801  | 14.          | 569.01         | (H.        | 508.01             | 111.51    | NR-02       | 18.4       | \$08-02        | 14-500             | រា៖              | 18-5            | 09-01          | 1 H-S04         | 2.01        | LH-S0             | 1-01        | t H-S09           | -02         | 18-509             | -02         | th-S        | 09-02          |
|--------------------------------|---|-----------------|-------------|------------|----------|--------------|----------------|------------|--------------------|-----------|-------------|------------|----------------|--------------------|------------------|-----------------|----------------|-----------------|-------------|-------------------|-------------|-------------------|-------------|--------------------|-------------|-------------|----------------|
| SAMPLE_NO                      |   | 35-SMP08-       | SB01-02     | 35-SMP09-  | -SB01-02 | UH-S         | 508-01_1       | LH-S       | 08-01_2            | 1H-S0     | 8-02_1      | LH-SI      | 08-02_2        | LH-S09-0           | 4 OC             | LH-S0           | 19-01_1        | LH-S09          | 01_2        | LH-S09-           | 01_3        | LH-S09-I          | 02_1        | 11-509-0           | )2_2        | LH-SO       | 9-02_3         |
| SAMPLE_DATE                    |   | 9/8/20          | 006         | 9/11/2     | 2006     | 7/1:         | 2/1993         | 7/1        | 2/1993             | 7/12/     | /1993       | 7/12       | 2/1993         | 6/26/19            | 93               | 6/26/           | /1993          | 6/26/1          | 993         | 6/26/1            | 993<br>5 Fa | 6/26/19           | 193<br>- Ch | 6/26/19            | 93          | 6/26        | 1993           |
| Depth<br>Sample purpose        |   | 0-0<br>RÉ       | G           | 8-8<br>RE  | G        | 0            | REG            | ۹<br>ا     | ieg                | RE        | Z F1<br>EG  | 4 -<br>. f | ieg            | 0.5- 1.<br>FD      | o <del>r</del> t | 0.5 -<br>Rí     | EG             | BEC             | 3<br>3      | 5.3-7.<br>REG     | 3 FI<br>3   | REG               | ) mi        | S- 5.6<br>REG      | <b>F</b> L  | , - ,<br>RI |                |
| Test Group                     | Parameter (Units = mg/kg)                   | Result OIL      | LO VO       | Result Dil | LQ VQ    | Result (     | DIL LQ VO      | ) Result f | DIL LQ VQ          | Result Di | L LQ VQ     | Result D   | NL LO VQ       | Result Dil.        | LO VO            | Result D        | IL LQ VQ       | Result DiL      | LQ VQ       | Result DiL        | to vo       | Result DIL        | LQ VQ       | Result DIL         | LO VO       | Result D    | L LQ VQ        |
| EXPLOSIVES                     | 1,3,5-Trinitrobenzene                       | 0.283 1         | U           | 0.245 1    | U        |              |                |            |                    |           |             |            |                |                    |                  |                 |                | -               |             |                   |             |                   |             |                    |             |             |                |
| EXPLOSIVES                     | 1,3-Dinitrobenzene<br>2,4,5-Trinitrotoluene | 0.283 1         | U<br>U      | 0.245 1    | ម<br>ប   |              |                |            |                    |           |             |            |                |                    |                  |                 |                |                 |             |                   |             |                   |             |                    |             |             |                |
| EXPLOSIVES                     | 2,4-Dinitrotoluene                          | 0.283           | U           | 0.245 1    | U        | 0.33         | 1 < U          | 0.33       | t < U <sup>.</sup> | 0.33 1    | < U         | 0.33       | 1 < ⊍          | 1.111 1            | < U              | 1.176 1         | 1 < U          | 1.266 1         | < U         | 1.176 1           | < U         | 1.149 1           | < U         | 1.351 1            | < U         | 1.163       | < 1            |
| EXPLOSIVES                     | 2,6-Dinitrotatuene                          | 0.294 1         | U           | 0.255 1    | U        | 0.33         | 1 < U          | 0.33       | 1 < U              | 0.33 1    | < U         | 0.33       | 1 < U          | 1.111 1            | < U              | 1.176           | 1 < U          | 1.266 1         | < U         | 1.176 1           | < U         | 1.149 1           | < U         | 1.351 1            | < U         | 1.163       | < U            |
| EXPLOSIVES                     | 2-Amino-4,6-dinitrotoluene                  | 0.294 1         | U<br>IL     | 0.255 1    | U        |              |                |            |                    |           |             |            |                |                    |                  |                 |                |                 |             |                   |             |                   |             |                    |             |             |                |
| EXPLOSIVES                     | HMX   | 2.49 1          | U           | 2.16 1     | IJ       |              |                |            |                    |           |             |            |                |                    |                  |                 |                |                 |             |                   |             |                   |             |                    |             |             |                |
| EXPLOSIVES                     | m-Nitrotoluene                              | 0.283 1         | ម           | 0.245 1    | ប        |              |                |            |                    |           |             |            |                |                    |                  |                 |                |                 |             |                   |             |                   |             |                    |             |             |                |
| EXPLOSIVES                     | Nitrobenzene                                | 0.294 1         | U           | 0.255 1    | ម        |              |                |            |                    |           |             |            |                |                    |                  |                 |                |                 |             |                   |             |                   |             |                    |             |             |                |
| EXPLOSIVES<br>EXPLOSIVES       | p-narobuene<br>p-Nitrotokiene               | 0.283           | U<br>U      | 0.245 1    | U<br>U   |              |                |            |                    |           |             |            |                |                    |                  |                 |                |                 |             |                   |             |                   |             |                    |             |             |                |
| EXPLOSIVES                     | RDX   | 1.13 1          | U           | 0.98 1     | U        |              |                |            |                    |           |             |            |                |                    |                  |                 |                |                 |             |                   |             |                   |             |                    |             |             |                |
| EXPLOSIVES                     | Tetryi                                      | 0.735 1         | U           | 0.637 1    | ບ        |              |                |            |                    |           |             |            |                |                    |                  |                 |                |                 |             |                   |             |                   |             |                    |             |             | _              |
| METALS                         | Aluminum                                    | 8220 1          | the later   | 12300 1    | 11       | 6100         | 1              | 11800      | 1<br>1 2 II        | 5310 1    |             | 9500       | 1<br>1 < 11    | 10500 1            | E                | 6920 1<br>5.2 1 | 1              | 9860 1<br>574 1 | < 11        | 8050 1<br>6.12 1  | c 11        | 10400 1           | c 11        | 19800 1            | < 11        | 6320<br>5   |                |
| METALS                         | Ansenic                                     | 3.46 1          | 0 00C<br>JL | 0.49 1     | Ū        | 3            | 1 2 0          | 1.7        | 1                  | 92 1      |             | 2.4        | 1              | 6.66 1             | Ľ                | 3.74            | 1              | 3.24 1          | <b>`</b> •  | 2.57 1            |             | 0.697 1           | Ē           | 2.19 1             | ```         | 0.5         | (< ป           |
| METALS                         | Banum                                       | 39 1            |             | 25.3 1     |          | 66.3         | 1              | 77.5       | 1                  | 53.4 1    |             | 57.9       | 1              | 131 1              | < U              | 100 1           | 1 < Ľ          | 27.8 t          | < ⊍         | 272 1             | < U         | 68.2 1            | < U         | 104 1              | < U         | 45.8        | < U            |
| METALS                         | Bery&urs                                    | 0.517 1         |             | 0.793 1    |          |              |                |            |                    |           |             |            |                |                    |                  |                 |                |                 |             |                   |             |                   |             |                    |             |             |                |
| METALS                         | Cadmium                                     | 0.0624 1        | 1 1         | 0.0789 1   | 1 1      | 1            | 1 < 13         | 1          | t < U              | 1 1       | < ប         | 1          | t < U          | 7.18 1             |                  | 4.16 1          | 1              | 4.59 1          |             | 4.5 1             |             | 2,49 1            |             | 6.02 1<br>3170 1   |             | 1.25        | . < U          |
| METALS                         | Chromium                                    | 420 I<br>8.67 I | JH          | 11.4 1     | C.       | 97           | 1              | 2130       | 1                  | 16.8 1    |             | 14.8       | 1              | 27.7 1             |                  | 12.2 1          | 1              | 10.1 1          |             | 10.8 1            |             | 10.8 1            |             | 16.3 1             |             | 7.3         | i              |
| METALS                         | Cobalt                                      | 7.53 1          | JH          | 10.1 1     | ł        | 5            | 1              | 9.5        | 1                  | 4,1 1     | ŕ           | 8.8        | 1              | 8.24 1             |                  | 3.09 1          | 1              | 8.15 1          |             | 8.14 1            |             | 4.56 1            |             | 8.08 1             |             | 9.18        | 1              |
| METALS                         | Copper                                      | 4.36 1          |             | 3.8 1      |          | 2.4          | 1              | 5.5        | 1                  | 2.3 1     |             | 3.9        | 1              | 6.84 1             | < U              | 4.89 1          | 1 < U          | 8.29 1          | < U         | 9.73 1            | < 0         | 7.84 1            | < U         | 8. <del>94</del> 1 | < U         | 4.38        | < U            |
| METALS                         | Cyanide, Total                              | 0050 1          |             | 10600 1    |          | 11200        |                | 19200      | 1                  | 00500 1   |             | 21200      |                | 22500 1            |                  | 19200 1         | 1              | 10000 1         |             | 17300 1           |             | 6220 1            |             | 22200 1            |             | 4280        | ı              |
| METALS                         | Lead  | 5.52 1          | JL          | 5.57 1     | J        | 7.5          | 1              | 11.5       | 1                  | 8 1       |             | 11.4       | 1              | 24.3 1             |                  | 14 1            | 1 E            | 19.5 1          |             | 18.6 1            |             | 19.5 1            | Е           | 27.9 1             |             | 10.6        | i E            |
| METALS                         | Magnesium                                   | 912 1           |             | 2170 1     |          | 404          | 1              | 1010       | 1                  | 264 1     |             | 858        | 1              | 1060 1             |                  | 753 1           | 1              | 1530 1          |             | 943 1             |             | 491 t             |             | 1510 t             |             | 1100        | i              |
| METALS                         | Manganese                                   | 23.6 1          |             | 21.9 1     |          | 189          | 1              | 71.1       | 1                  | 196 1     |             | 107        | 1              | <i>6</i> 52 1      |                  | 130 1           | 1              | 91.4 1          |             | 66.2 1            |             | 67.3 1            |             | 138 1              |             | 12.6        |                |
| METALS                         | Mercury                                     | 0.0147 1        | JJ          | 0.276 1    | U        | 0.1          | 1 < U          | 0.1        | 1 < U              | 0.1 1     | < U         | 0.1        | 1 < U          | 0.129 1            |                  | 0.053 1         | 1 < U          | 0.056 1         | < 0         | 0.053 1           | < U         | 0.052 3           | < U         | 0.057 1            | < U         | 0.65        | < U            |
| METALS                         | Potassium                                   | 426 1           | JH          | 509 1      |          | 253          | 1              | 505        | 3                  | 216 1     |             | 363        | 1              | 420 1              |                  | 332 1           | t ·            | 334 1           |             | 390 1             |             | 618 1             |             | 1370 1             |             | 287         | t              |
| METALS                         | Selenium                                    | 0.164 1         | JJ          | 0.221 1    | U        | 1            | 1 < 0          | 1          | 1 < ២              | 1 1       | < U         | t          | 1 < U          | 0.45 1             | < U              | 0.52            | 1 < U          | 0.574 1         | < U         | 0.612 1           | < U         | 0.922 1           | < U         | 0.634 1            | < U         | 0.5         | រ < ប          |
| METALS                         | Silver                                      | 1.8 1           | U           | 1.71 1     | U        | 1            | 1 < Ü          | 1          | 1 < ប              | 1 1       | < ປ         | 1          | 1 < U          | 0.09 1             |                  | 0.026           | 1 < 1          | 0.029 1         | < U         | 0.031 1           | < U         | 0.046 1           | < U         | 0.632 1            | < U         | 0.025       | < U            |
| METALS                         | Sodium                                      | 188 1           |             | 550 1      |          | 10.2         |                | 00.4       |                    |           |             |            |                |                    |                  | 0.07            | II             | 125 <b>1</b>    |             | 571 1             | < 11        | 10.0 1            | < 11        | A75 \$             | < 11        | 20.0        | 11 - 11        |
| METALS                         | Thallium                                    | 0.0736 1        |             | 0.0731 1   |          | 10.3         | 1              | 20.4       | 1                  | 5.0 1     |             | 14.4       | 1              | 14 1               | < 0              | 0.0/            | ,              | 22.3            |             | 57.1 1            |             | 10.5              |             | 42.0 1             |             | 20.5        |                |
| METALS                         | Vanadium                                    | 18.8 1          |             | 16.5 1     |          |              |                |            |                    |           |             |            |                |                    |                  |                 |                |                 |             |                   |             |                   |             |                    |             |             |                |
| METALS                         | Zinc  | 34.5 1          |             | 31.6 1     |          | 16.1         | 1              | 25.7       | 1                  | 22.3 1    | 1           | 21.9       | 1              | 44.5 1             |                  | 32.1            | 1              | 49.6 1          |             | 21.7 1            |             | 20.9 1            |             | 39.8               |             | 16.8        |                |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene                      |                 |             |            |          | 0.33         | 1 < 0          | 0.33       | 1 < U              | 0.33 1    | (           | 0.33       |                | 1.311 1            | < U              | 1.176           | 1 < U<br>1 < U | 1.266 1         | < U         | 1.1/6 }           | < 0         | 1,149 1           | < 0<br>< 11 | 1.351 1            | < U         | 1.163       | < 0<br>1 < 11  |
| SEMIVOLATILES                  | 1,3-Dichlorobenzene                         | ļ               |             |            |          | 0.33         | 1 < 0          | 0.33       | 1 < U              | 0.33 1    | < U         | 0.33       | 1 < U          | 1.111 1            | < U              | 1.176           | 1 < U          | 1.266 1         | < U         | 1.176 1           | < U         | 1.149 1           | < U         | 1.351 1            | < U         | 1.163       | (< บ           |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene                         |                 |             |            |          | 0.33         | 1 < 0          | 0.33       | 1 < U              | 0.33 1    | < ป         | 0.33       | 1 < U          | 1.111 1            | < U              | 1.176           | 1 < U          | 1.266 1         | < U         | 1.176 1           | < U         | 1.149 1           | < U         | 1.351 1            | < U         | 1.163       | < U            |
| SEMIVOLATILES                  | 2,4.5-Trichiorophenot                       |                 |             |            |          | 1.65         | 1 < 8          | 1.65       | 1 < U              | 1.65 1    | < U         | 1.65       | 1 < U          | 1,111 1            | < ປ              | 1.176           | 1 < U          | 1.266 1         | < U         | 1.176 1           | < U         | 1.149 1           | < 1)        | 1.351 1            | < 0         | 1.163       | < U            |
| SEMIVOLATILES<br>SEMIVOLATILES | 2,4,6-1 nchlorophenol<br>2,4,Dichlorophenol |                 |             |            |          | 0.33         | 1 < 0          | 0.33       |                    | 0.33 1    | < 11        | 0.33       | 1 < U<br>1 < D | 1.313 1            | < U<br>< H       | 1.176           | 1 < U<br>1 < U | 1266 1          | < U<br>< U  | 1.176 1           | < 0<br>< 19 | 1.149 1           | < 1)        | 1.351 1            | < U<br>< U  | 1,103       | < 10<br>( < 10 |
| SEMIVOLATILES                  | 2,4-Dimethylphenol                          |                 |             |            |          | 0.33         | 1 < 0          | 0.33       | 1 < U              | 0.33 1    | < 1)        | 0.33       | 1 < U          | 0.556 1            | < U              | 0.588           | 1 < U          | 0.633 1         | < Ŭ         | 0.588 1           | < U         | 0.575 1           | < U         | 0.676 1            | < Ū         | 0.581       | i < υ          |
| SEMIVOLATILES                  | 2,4-Dinitrophenol                           | 1               |             |            |          | 1.65         | 1 < 1          | 1.65       | 1 < U              | 1.65 1    | < บ         | 1.65       | 1 < U          | 11.111 1           | < ∛              | 11.765          | 1 < U          | 12.658 1        | < U         | 11.765 1          | < U         | 11.494 1          | < U         | 13.514 1           | < U         | 11.628      | < U            |
| SEMIVOLATILES                  | 2.4-Dinitrotoluene                          |                 |             |            |          |              |                |            |                    |           |             |            |                |                    |                  |                 |                |                 |             |                   |             |                   |             |                    |             |             |                |
| SEMIVOLATILES                  | 2.6-Dimitrotoluene                          | ]               |             |            |          | 0.33         | 1 . 11         | 0 33       | 1 ~ 11             | 033 1     | ~ 11        | 0.33       | 1 2 11         | 0 3 3 3 1          | ۲ JI             | 0.353           | 1 2 11         | 0.38 t          | ۲I ک        | 0.353 t           | z 11        | 0.345 1           | < 11        | 0.405 1            | < 11        | 0.349       | स र स          |
| SEMIVOLATILES                  | 2-Chlorophenol                              | 1               |             |            |          | 0.33         | 1 < 0          | 0.33       | 1 < U              | 0.33 1    | < 8         | 0.33       | 1 < U          | 0.556 1            | < 1J             | 0.588           | 5<br>1 < ย     | 0.633 1         | < U         | 0.588 1           | < Ŭ         | 0.575 1           | < U         | 0.676 1            | < U         | 0.581       | - U            |
| SEMIVOLATILES                  | 2-Methylnaphthalene                         |                 |             |            |          | 0.33         | 1 < U          | 0.33       | t < U              | 0.33 1    | < U         | 0.33       | 1 < U          | 0.333 1            | < 0              | 0.353           | 1 < U          | 0.38 1          | < U         | 0.353 1           | < U         | 0.345 1           | < U         | 0.405 1            | < U         | 0.349       | < U            |
| SEMIVOLATILES                  | 2-Methylphenol                              |                 |             |            |          | 0.33         | 1 < 9          | 0.33       | 1 < U              | 0.33 1    | < 0         | 0.33       | 1 < U          | 0.556 1            | < U              | 0.588           | 1 < U          | 0.633 1         | < U         | 0.588 1           | < U         | 0.575 1           | < U         | 0.676 1            | < 0         | 0.581       | < 1            |
| SEMIVOLAIRLES                  | 2-Nitropaniine<br>3-Nitrophanal             |                 |             |            |          | 1.65         | 1 < 17         | 1.65       | 1 < U<br>1 < U     | 1.65 1    | < 0         | 1.65       |                | 3,333 1            | < 1)             | 3.529           | 1 < U          | 3./9/ 1         | < U<br>< II | 3.529 I<br>1176 1 | ~ 0         | 3.448 I<br>1149 1 | < U<br>< Ⅱ  | 4.054 1            | < U<br>< 11 | 3.966       | < 10<br>1 < 10 |
| SEMIVOLATILES                  | 3.3'-Dichlorobenzidine                      |                 |             |            |          | 0.55         | 1 < 0          | 0.65       | 1 < U              | 0.65 1    | < U         | 0.65       | , < 0<br>1 < U | 0.556 1            | < U              | 0.588 1         | U              | 0.633 1         | < U         | 0.588 1           | < Ŭ         | 0.575 1           | < U         | 0.676 1            | < U         | 0.581       | i < U          |
| SEMIVOLATILES                  | 3-Nitroaniline                              |                 |             |            |          | 1.65         | 1 < 0          | 1.65       | 1 < U              | 1.65 1    | < U         | 1.65       | 1 < U          | 3.333 1            | < U              | 3.529 1         | t < U          | 3.797 1         | V >         | 3.529 1           | ∢ ∪         | 3.448 1           | < U         | 4.054 1            | < U         | 3.488       | < U            |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol                  |                 |             |            |          | 1.65         | 1 < 0          | 1.65       | 1 < U              | 1.65 1    | < U         | 1.65       | 1 < U          | 5.556 1            | < U              | 5.882           | 1 < U          | 6.329 1         | < U         | 5.882 1           | < 0         | 5.747 1           | < U         | 6.757 1            | < 13        | 5.814       | < 1)           |
| SEMIVOLATILES<br>SEMIVOLATILES | 4-Bromophenyi phenyi ether                  |                 |             |            |          | 0.33<br>0.45 | 1 < U          | 0.33       | 1 < U<br>1 - U     | 0.33 1    | < U<br>> H  | 0.33       | 1 < U<br>1 - 1 | 1.111 1<br>0.556 1 | < 1)             | 1,176           | 1 2 U          | 1.266 1         | < U<br>< 11 | 0.588 1           | < U<br>< H  | 0.575 1           | < U<br>< 11 | 1.35T 1<br>0.676 1 | < U<br>< H  | 0.581       | < U<br>( < 1)  |
| SEMIVOLATILES                  | 4-Chloroaniline                             |                 |             |            |          | 0.65         | 1 < 11         | 0.65       | . < U<br>1 < U     | 0.65 1    | < U         | 0.65       | <br>1          | 3.333 1            | < ປ              | 3.529           | u<br>t < U     | 3.797 1         | < 10        | 3.529 1           | < U         | 3.448 1           | < 1)        | 4.054 1            | < U         | 3.488       | i < U          |
| SEMIVOLATILES                  | 4-Chlorophenyi phenyl ether                 |                 |             |            |          | 0.33         | 1 < 0          | 0.33       | t < U              | 0.33 1    | < U         | 0.33       | 1 < U          | 1.311 1            | < 1J             | 1.176           | 1 < 1          | 1.266 1         | < U         | 1.176 1           | < U         | 1.149 1           | < U         | 1.351 1            | < U         | 1.163       | i < U          |
| SEMIVOLATILES                  | 4-Methylphenol                              |                 |             |            |          | 0.33         | 1 < U          | 0.33       | 1 < U              | 0.33 1    | < V         | 0.33       | t < U          | 0.556 1            | < U              | 0.588           | 1 < U          | 0.633 1         | < U         | 0.588 1           | < U         | 0.575 1           | < U         | 0.676 1            | ≺ Ų         | 0.581       | < U            |
| SEMIVOLATILES                  | 4-Nitroaniline                              |                 |             |            |          | 1.65         | 1 < 1          | 1.65       | t < U              | 1.65 1    | < U         | 1.65       | 1 < U          | 5.556 1            | < U              | 5.882           | t < U          | 6.329 1         | < U         | 5.882 1           | v لا<br>بان | 5.747 1           | < U         | 6.757 1            | < U         | 5.814       | V ><br>۲ - ۲   |
| SEMIVOLATILES<br>SEMIVOLATILES | 4-maophenou<br>Aceraphthene                 |                 |             |            |          | 0.33         | 1 < U<br>1 < I | 0.33       | i < ∪<br>† < 1)    | 0.33 1    | < 0<br>< 13 | 0.33       | i ku<br>t ku   | 0.333 1            | < U<br>< U       | 0.353           | , . U<br>t . U | 0.329 1         | < U         | 0.353 1           | < U         | 0.345 1           | < U         | 0.405 1            | < U         | 0.349       | । < 1          |
| SEMIVOLATILES                  | Acenaphthylene                              | · ·             |             |            |          | 0.33         | 1 < 1          | 0.33       | t < Ŭ              | 0.33 1    | < U         | 0.33       | ⊺ < Ü          | 0.556 1            | < ປັ             | 0.588           | t < U          | 0.633 1         | < U         | 0.588 1           | < U         | 0.575 1           | < U         | 0.676 1            | < U         | 0.581       | e < U          |
| SEMIVOLATILES                  | Anthracene                                  |                 |             |            |          | 0.33         | 1 < U          | 0.33       | 1 < U              | 0.33 1    | < U         | 0.33       | 1 < U          | 0.556 1            | < U              | 0.588 1         | 1 < U          | 0.633 1         | < U         | 0.588 1           | .< U        | 0.575 1           | < U         | 0.676 1            | < U         | 0.581       | - < U          |

-

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-111 Concentrations of Chemicals in Soil Samples Associated with WR Sump 005

| {SUMP} = WRSUMP005<br>LOCATION CODE |   | 35SUMP008-S801       | 35SUMP009-SB01        | LH-SO8             | 01           | LH-SO      | 18-01         | LH-S      | 08-02          | ٤H               | -\$08-02  | U                  | I-S09-01              | LH-3     | 509-01             | LH-SO      | 9-01         | LH-SC            | 19-01         | TH-8     | 09-02          | 1                  | LH-S09-02               |           | LH-SC              | )9-02        |
|-------------------------------------|---|----------------------|-----------------------|--------------------|--------------|------------|---------------|-----------|----------------|------------------|-----------|--------------------|-----------------------|----------|--------------------|------------|--------------|------------------|---------------|----------|----------------|--------------------|-------------------------|-----------|--------------------|--------------|
| SAMPLE_NO                           |   | 35-SMP08-SB01-02     | 35-SMP09-SB01-02      | LH-S08-0           | )1_1         | LH-SO      | +01_2         | LH-S0     | 8-02_1         | CH-S             | \$08-02_2 | ίH-                | 509-01 OC             | LH-S     | 09-01_T            | LH-S09     | -01_2        | LH-S09           | +01_3         | LH-SC    | 9-02_1         | L                  | H-S09-02_2              |           | LH-S09             | +02_3        |
| SAMPLE_DATE                         |   | 9/8/2006<br>6 - 6 Ft | 9/11/2006<br>8 - 8 Ft | 7/12/19<br>0 - 2 F | 93<br>7      | 7/12/1     | 1993<br>5 Ft  | 7/12/     | /1993<br>2 Ft  | 7/1              | 2/1993    | 6<br>ג             | 26/1993<br>5 - 1 5 Ft | 6/20     | 6/1993<br>- 1 5 Ft | 6/26/1     | 993<br>5 Ft  | 6/26/<br>5.5 - 7 | 1993<br>75.Ft | 6/26     | /1993<br>15 Ft |                    | 6/26/1993<br>5 - 5 6 Ft |           | 6/26/1<br>7 - 7    | .993<br>5 Ft |
| SAMPLE_PURPOSE                      |   | REG                  | REG                   | REG                |              | RE         | G             | R         | EG             |                  | REG       | U.                 | FD                    | F        | REG                | RE         | G            | RE               | G             | Â        | EG             |                    | REG                     |           | RE                 | .G           |
| Test Group                          | Parameter (Units = mg/kg)                             | Result DIL LQ VO     | ) Result DIL LQ VQ    | Result DIL         | 10 VO        | Result Dil | . LQ VQ       | Result DI | LLQ VO         | Q Result         | DIL LO V  | O Result           | DIL LO VO             | Result ( | DIL LO VO          | Aesult Dil | LO VO        | Result DI        | L LQ VQ       | Result D | IL LO V        | Q Result           | DIL LQ                  | <u></u> F | Result DI          | <u>LO VQ</u> |
| SEMIVOLATILES<br>SEMIVOLATILES      | Benzo(a)anthracene<br>Benzo(a)ovrene                  |                      |                       | 0.33 1<br>0.33 1   | < 1)<br>< 11 | 0.33 1     | < U<br>< 11   | 0.33 1    | < U<br>< 11    | 0.33             | 1 < 1     | U 0.333<br>U 0.556 | 1 < 1                 | 0.353    | 1 < U<br>1 < U     | 0.38 1     | < 1)<br>< 1) | 0.353 1          | < 1)<br>< 1)  | 0.345    | 1 < 1<br>1 < 1 | ) U.400<br>) 0.676 | 13 <<br>61 <            | บ<br>บ    | 0.349 1<br>0.581 t | < 0          |
| SEMIVOLATILES                       | Benzo(b)fkoranthene                                   |                      |                       | 0.33 1             | < 10         | 0.33 1     | < U           | 0,33 1    | U              | 0.33             | 1 <       | U 1.111            | 1 < 1                 | 1.176    | 1 < U              | 1,266 1    | < U          | 1,176 1          | < U           | 1.149    | 1 < 1          | J 1.351            | 1 1 <                   | ប         | 1.163 1            | < 1          |
| SEMIVOLATILES                       | Benzo(ghi)perylene                                    |                      |                       | 0.33 1             | < U          | 0.33 1     | < 1           | 0.33 1    | < 0            | 0.33             | 1 c i     | U 2.222            | 1 < U                 | 2.353    | 1 < U              | 2.532 1    | < U          | 2.353 1          | < U           | 2.299    | 1 < l          | ) 2.703            | 31 <                    | U         | 2.326 1            | < U          |
| SEMIVOLATILES                       | Benzo(k)suoranthene                                   |                      |                       | 0.33 1             | < U          | 0.33 1     | < 1)          | 0.33 1    | < 1)           | 0.33             | 1 < 1     | U 1.111            | 1 < U                 | 1.176    | 1 < U              | 1.266 1    | < U          | 1.176 1          | < U           | 1.149    | 1 < 1          | 1.351              | 1 1 <                   | U         | 1,163 1            | < U          |
| SEMIVOLATILES<br>SEMIVOLATILES      | Benzok: Acki<br>Benzid Alcobol                        |                      |                       | 1.65 1             | < U          | 1:05 1     | < 1)<br>< 11  | 1.00 7    | < U<br>  < 11  | 1.55<br>0.65     | 1 < 1     | U<br>LI            |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| SEMIVOLATILES                       | bis(2-Chkroethoxy)methane                             |                      |                       | 0.33 1             | < U          | 0.33 1     | ت ،<br>ت >    | 0.33 1    | <br>           | 0.33             | 1 <       | •<br>U 0.556       | 1 < U                 | 0.588    | 1 < U              | 0.633 1    | < U          | 0.588 1          | < U           | 0.575    | 1 < 1          | J 0.676            | 31 <                    | U         | 0.581 1            | < U          |
| SEMIVOLATILES                       | bis(2-Chloroethyl)ether                               | 1                    |                       | 0.33 1             | < U          | 0.33 1     | < U           | 0.33 t    | < U            | 0.33             | 1 <       | U 0.555            | 1 < U                 | 0.588    | 1 < U              | 0.633 1    | < U          | 0.588 1          | < U           | 0.575    | 1 < 1          | J 0.676            | j1 <                    | U         | 0.581 1            | < U          |
| SEMIVOLATILES                       | bis(2-Chloroisopropyl)ether                           |                      |                       | 0.33 1             | < U          | 0.33 1     | < U           | 0.33 1    | < 10           | 0.33             | 1 < 1     | U 1.111            | 1 < U                 | 1.176    | 1 < 1              | 1.266 1    | < U          | 1.176 1          | < U           | 1,149    | 1 < 1          | J 1,351            |                         | U         | 1.163 1            | < 1          |
| SEMIVOLATILES<br>SEMIVOLATILES      | Butvi benzvi ohthalate                                |                      |                       | 0.33 1             | < U          | 0.33 1     | < 1J          | 0.33 1    | : < U          | , 0.33<br>I D.33 | 1 < 1     | U 0.556            | 1 < 0                 | 0.588    | 1 < U              | 0.633 1    | < U          | 0.588 1          | < U           | 0.575    | r < 1<br>1 < 1 | J 0.676            | 51<                     | U         | 0.581 1            | < U          |
| SEMIVOLATILES                       | Carbazole   |                      |                       |                    | -            |            | -             |           | -              |                  |           | 1.111              | 1 < U                 | 1.176    | 1 < U              | 1,266 1    | < U          | 1.176 1          | < U           | 1.149    | 1 < 1          | J 1.351            | 11 <                    | U         | 1.163 1            | < ' U        |
| SEMIVOLATILES                       | Chrysene  |                      |                       | 0.33 1             | < U          | 0.33 1     | < U           | 0.33 1    | < U            | 0.33             | 1 <       | U 5.556            | 1 - < ⊍               | 5.882    | 1 < U              | 6.329 1    | < U          | 5.882 1          | < U           | 5.747    | 1 < 1          | J 6.757            | / 1 <                   | U         | 5.814 1            | < U          |
| SEMIVOLATILES                       | Dibenzo(a,h)anthracene                                |                      |                       | 0.33 1             | < U          | 0.33 1     | < 14          | 0.33 1    | < 10<br>       | 0.33             | 1 < 1     | U 2.222            | 1 < 1                 | 2.353    | 1 < U              | 2.532 1    | < U          | 2.353 1          | < 1           | 2.299    | 1 < 1          | J 2.703            | ) 1 <                   | เ         | 2.326 1            | < U          |
| SEMIVOLATILES<br>SEMIVOLATILES      | Dietzoluran<br>Dietzoluran                            |                      |                       | 0.33 1             | < U          | 0.33 1     | < U           | 0.33 1    | i < 1)         | 0.33             | 1 <       | U (.111<br>U 0.556 | 1 < U                 | 0.588    | 1 < U              | 0.19 1     | ς υ          | 0.212 1          | × 0           | 0.575    | 1 < 1          | J 0.676            | 51 <                    | U         | 0.581 1            | < U          |
| SEMIVOLATILES                       | Dimethyl phthalate                                    |                      |                       | 0.33 1             | < U          | 0.33 1     | < U           | 0.33 1    | i < U          | 0.33             | 1 <       | U 0.556            | 1 < U                 | 0.588    | 1 < U              | 0.633 1    | < U          | 0.588 1          | < U           | 0.575    | 1 < 1          | J 0.676            | 5 f <                   | ប         | 0.581 1            | < ป          |
| SEMIVOLATILES                       | di-n-Butyl phthalate                                  |                      |                       | 0.33 1             | < U          | 0.33 1     | 1J >          | 0.33 1    | I < U          | 0.33             | 1 <       | U 4.211            | 1                     | 6.788    | 1                  | 5.684 1    |              | 5.894 1          |               | 3.287    | 1              | 4.351              | 11.                     |           | 4.628 1            |              |
| SEMIVOLATILES                       | di-n-Octyl phihalate                                  |                      |                       | 0.33 1             | < 1)         | 0.33 1     | < 1           | 0.33 1    | i < U          | 0.33             | 1 < 1     | U 0.556            | 1 < 1                 | 0.588    | 1 < 1              | 0.633 1    | < U          | 0.588 1          | < 1           | 0.575    | 1 < 1          | J 0.676            | ) 1 <<br>5 1 /          | U<br>U    | 0.581 1            | < U          |
| SEMIVOLATILES                       | Flooraninene  |                      |                       | 0.33 1             | < U          | 0.33 1     | < U           | 0.33 1    | : < U          | 0.33             | 1 < 1     | U 0.556            | 1 < U                 | 0.588    | 1 < 1              | 0.633 1    | د ت<br>د 1   | 0.588 1          | < U           | 0.575    | 1 < 1<br>1 < 1 | J 0.676            | 51<                     | U<br>U    | 0.581 1            | < U          |
| SEMIVOLATILES                       | Hexachlorobenzene                                     |                      |                       | 0.33 1             | < U          | 0.33 1     | < U           | 0.33 1    | < U            | 0.33             | 1 <       | U 1.111            | 1 < U                 | 1.176    | 1 < U              | 1.266 1    | < U          | 1.176 1          | < U           | 1.149    | 1 < 1          | J 1.351            | i 1 <                   | U         | 1.163 1            | < U          |
| SEMIVOLATILES                       | Hexachlorobutadiene                                   |                      |                       | 0.33 1             | < U          | 0.33 1     | < U           | 0.33 1    | < U            | 0.33             | 1 <       | U 3.333            | 1 < U                 | 3.529    | 1 < U              | 3,797 1    | < U          | 3.529 1          | < U           | 3.448    | 1 < 1          | J 4.054            | i 1 <                   | U         | 3.488 1            | < U          |
| SEMIVOLATILES                       | Hexachlorocyclopentadiene<br>Hovachlorocithana        |                      |                       | 0.33 1             | < U          | 0.33 1     | < U           | 0.33 1    | < 10<br>  < 11 | 0.33<br>0.33     | 1 < 1     | U 3.333            | 1 < U                 | 3.529    | 1 < 1              | 3.797 1    | · < U        | 3.529 1          | < 0           | 3.448    | 1 < 1<br>1 < 1 | J 4.054            | ) 1 <<br>1 1 ~          | ย<br>ม    | 3.488 1            | < 11         |
| SEMIVOLATILES                       | Indeno(1,2,3-cd)pyrene                                |                      |                       | 0.33 1             | < 1          | 0.33 1     | < U           | 0.33 1    | י ג ט<br>י ג ט | 0.33             | 1 <       | U 1.111            | 1 < 0                 | 1.176    | 1 < 0              | 1.266 1    | < U          | 1.176 1          | < 1           | 1,149    | 1 < 1          | J 1.351            | 11 <                    | Ŭ         | 1.163 1            | < บ          |
| SEMIVOLATILES                       | Isophorone  |                      |                       | 0.33 1             | < U          | 0.33 1     | < U           | 0.33 1    | I < U          | 0.33             | 1 <       | U 0.556            | 1 < ⊎                 | 0.588    | 1 < U              | 0.633 1    | < 13         | 0.588 1          | < บ           | 0.575    | 1 < I          | J 0.676            | ĵ1 <                    | U         | 0.581 1            | < U          |
| SEMIVOLATILES                       | Naphthalene   |                      |                       | 0.33 1             | < U          | 0.33 1     | < U           | 0.33 1    | < ⊎            | 0.33             | 1 < .     | U 0.333            | 1 < U                 | 0.353    | 1 < U              | 0.38 1     | < U          | 0.353 1          | < U           | 0.345    | 1 < 1          | J 0.405            | > 1 ز<br>-              | U         | 0.349 1            | < U          |
| SEMIVOLATILES<br>SEMIVOLATILES      | Nitrobenzene<br>n-Nitroso-di-a-pronvlatzioe           |                      |                       | 0.33 1             | < U<br>< H   | 0.33 1     | < U<br>< 11   | 0.33 1    | < U<br>  <     | F 0.33<br>F 0.33 |           | 0 0.556            |                       | 0.588    |                    | 0.633 1    | < U<br>< U   | 0.588 1          | < U<br>< U    | 0.575    | i < 1<br>i < 1 | J 1351             | )   <<br>    <          | U<br>U    | 0.581 E            | < ປ<br>< ປ   |
| SEMIVOLATILES                       | n-Nitrosodiphenylamine                                | 1                    |                       | 0.33 1             | < U          | 0.33 1     | < U           | 0.33 1    | i < U          | 0.33             | 1 <       | U 0.556            | 1 < U                 | 0.588    | 1 < U              | 0.633 1    | < U          | 0.588 1          | < U           | 0.575    | 1 < 1          | J 0.670            | ô 1 <                   | U         | 0.581 1            | < U          |
| SEMIVOLATILES                       | Pentachlorophenol                                     |                      |                       | 1.65 1             | < U          | 1.65 1     | < U           | 1.65 1    | i < 1          | 1.65             | 1 <       | U 5.556            | 1 < U                 | 5.882    | 1 < ⊍              | 6.329 1    | < U          | 5.882 1          | < U           | 5.747    | 1 < 1          | J 6.757            | / 1 <                   | U         | 5.814 1            | < U          |
| SEMIVOLATILES                       | Phenanthrene  |                      |                       | 0.33 1             | < U          | 0.33 1     | < U           | 0.33 1    | < U            | 1. 0.33          | 1 <       | U 0.556            | 1 < U                 | 0.588    | 1 < U              | 0.633 1    | < U          | 0.588 1          | < U           | 0.575    | 1 < 1          | J 0.676            | ) 1 <                   | U         | 0.581 1            | < U          |
| SEMIVOLATILES<br>SEMIVOLATILES      | Prieno  |                      |                       | 0.33 1             | < U          | 0.33 1     | v ><br>v 11 > | 0.33 1    | ; < U          | I 0.33<br>I 0.33 | 1 <       | 0 0.556            | 1 < U                 | 0.588    | 1 < U              | 0.633 1    | < U<br>< U   | 0.588 1          | < U           | 0.575    | 1 < 1<br>1 < 1 | J 0.676            | 51 <                    | U         | 0.581 1            | < 10         |
| VOLATILES                           | 1,1,1,2-Tetrachloroethane                             |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| VOLATILES                           | 1,1,1-Trichloroethane                                 |                      |                       | 0.005 1            | < U          | 0.005 1    | < U           | 0.005 1   | < U            | 0.005            | 1 <       | 0.006              | 1 < U                 | 0.006    | 1 < U              | 0.006 1    | < U          | 0.006 1          | < 0           | 0.006    | 1 < I          | J 00.00            | 31 <                    | U         | 0.006 1            | < U          |
| VOLATILES                           | 1,1,2,2-Tetrachloroethane                             |                      |                       | 0.005 1            | < U          | 0.005 1    | < 10          | 0.005 1   | < U<br>        | 0.005            | 1 <       | 0.006              | 1 < 0                 | 0.006    | 1 < U              | 0.006 1    | < \U         | 0.006 1          | < 1)          | 0.006    | 1 < I<br>1 < I | 300.0 U            | ) 1 <<br>6 1 ~          | U<br>T    | 0.006 1            | < 9<br>2 Å   |
| VOLATILES                           | 1,1-Dichloroethane                                    |                      |                       | 0.005 1            | < U          | 0.005 1    | < U           | 0.005 1   | . < U          | 0.005            | 1 < 1     | U 0.006            | 1 < 0                 | 0.005    | 1 < U              | 0.006 1    | < U          | 0.005 1          | < U           | 0.006    | <br>1 < 1      | J 0.000            | ö 1 <                   | Ŭ         | 0.006 1            | < U          |
| VOLATILÉS                           | 1,1-Dichtoroethene                                    |                      |                       | 0.005 1            | < U          | 0.005 1    | < U           | 0.005 1   | < 0            | 0.005            | 1 < I     | U 0.006            | 1 < U                 | 0.006    | 1 < U              | 0.006 1    | < U          | 0.006 1          | < U           | 0.006    | 1 < 1          | j 0.006            | i 1 <                   | U         | 0.006 1            | < U          |
| VOLATILES                           | 1,1-Dichloropropene                                   |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| VOLATILES<br>VOLATILES              | 1,2,3- (nonkorobenzene<br>1,2,3-Trichkorozoane        |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| VOLATILES                           | 1,2,4-Trichlorobenzene                                |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| VOLATILES                           | 1,2,4-Trimethylbenzene                                |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| VOLATRES                            | 1,2-Dibromo-3-chloropropane                           |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| VOLATILES                           | 1,2-Dichlorobenzene                                   |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| VOLATILES                           | 1,2-Dichloroethane                                    |                      |                       | 0.005 1            | < U          | 0.005 t    | < U           | 0.005 1   | < U            | 0.005            | 1 <       | U 0.006            | 1 < U                 | 0.006    | 1 < U              | 0.006 1    | < U          | 0.005 1          | < U           | 0.006    | 1 < 1          | 900.0 U            | j1 <                    | U         | 0.006 1            | < U          |
| VOLATILES                           | 1,2-Dichioroethene                                    |                      |                       | 0.005 1            | < U          | 0.005 1    | < U           | 0.005 1   | < U            | 0.005            | 1 <       | U 0.006            | 1 < U                 | 0.006    | 1 < U              | 0.006 1    | < U          | 0.006 1          | < U           | 0.006    | 1 < 1          | J 0.000            | à1 <                    | U         | 0.006 1            | < U          |
| VOLATILES<br>VOLATILES              | 1,2-Dichioropropane<br>t 2-Dimethylhenzene (o-Yulane) | ł                    |                       | 0.005 1            | < 1/         | 0.005 1    | < U           | 0.005 1   | < U            | 0.005            | 1 <       | 0 0.006            | 1 < 0                 | 0.006    | 1 < 0              | 0.006 1    | < U          | 0.005 1          | < 0           | 0.006    | ; < I          | J 0.006            | ) ] <                   | U         | 0.006              | < 0          |
| VOLATILES                           | 1,3,5-Trimethylbenzene                                |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| VOLATILES                           | 1,3-Dichlorobenzene                                   |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| VOLATILES                           | 1,3-Dichkoropropane                                   |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| VULANLES<br>VOLATILES               | 1,4-Uichiorobenzene<br>2 2-Dichioropropane            |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    | -            |
| VOLATILES                           | 2-Butanone  |                      |                       | 0.05 1             | < U          | 0.05 1     | < U           | 0.05 1    | < U            | 0.05             | 1 <       | U 0.11             | 1 < 1)                | 0.11     | 1 < U              | 0.12 1     | < U          | 0.12 1           | < U           | 0.12     | 1 < 1          | J 0.13             | 31<                     | υ         | 0.12 1             | < U          |
| VOLATILES                           | 2-Chloroethyl vinyl ether                             |                      |                       | 0.01 1             | < ป          | 0.01 1     | < U           | 0.01 1    | < ป            | 1 0.0†           | 1 < 1     | U                  |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| VOLATILES                           | 2-Chlorotoluene                                       | ł                    |                       | A.05 4             | , H          | A 05 4     | ,             | 0.0¢ 4    |                | 1 0.00           |           | 11 0.000           | 1 . "                 | 0.000    | 1                  | 0.020 1    | , II         | A 050 4          | . 0           | 0.050    | 1              | 1 0.05             | 4 1 -                   | 11        | 0058 <b>1</b>      |              |
| VOLATILES                           | 2-Dexample<br>2-Propenal                              |                      |                       | 0.05 I             | ເປ           | U.U.S 1    | < U           | 0.05 1    | < 0            | , 0.05           | • < 1     | . 0.055            | i < U                 | 0.055    | , < U              | 0.002 1    | ×υ           | 0.009 1          | < U           | 0.000    |                | J U.U64            | <                       | J         | 0.000              | 、 U          |
| VOLATILES                           | 4-Chiorotoivene                                       |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| VOLATILES                           | Acetone   | l                    |                       | 0.1 1              | < U          | 0.1 1      | < U           | 0.1 1     | < U            | 0.1              | 1 <       | U 0.11             | 1 < U                 | 0.11     | t < U              | 0.12 1     | < ⊎          | 0.12 1           | < U           | 0.12     | t < 1          | J 0.1;             | 11 <                    | ป         | 0.12 1             | < U          |
| VOLATILES                           | Acetonánie<br>Acetonánie                              |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
| VOLATILES                           | Allyi chloride  |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            |              |                  |               |          |                |                    |                         |           |                    |              |
|                                     |   |                      |                       |                    |              |            |               |           |                |                  |           |                    |                       |          |                    |            | -            |                  |               |          |                |                    |                         | •         |                    |              |

Table 3-111 Concentrations of Chemicals in Soil Samples Associated with WR Sump 005

| (SUMP) = WRSUMPU05 |                            |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
|--------------------|----------------------------|------------------|------------------|-----------------|--------------------|------------------|---------------------|-------------------------|--------------------|-----------------------|-------------------|------------------|------------------|------------------|
| LOCATION _CODE     |                            | 35SUMP008-SB01   | 355UMP009-SB01   | LH-S08-01       | LH-S08-01          | LH-S08-02        | LH-\$08-02          | LH-S09-01               | LH-S09-01          | LH-S09-01             | LH-S09-01         | LH-S09-02        | LH-S09-02        | LH-509-02        |
| SAMPLE_NO          |                            | 35-SMP08-SB01-02 | 35-SMP09-SB01-02 | LH-\$08-01_1    | LH-S08-01_2        | LH-S08-02_1      | LH-S08-02_2         | LH-S09-01 QC            | LH-S09-01_1        | LH-S09-01_2           | LH-S09-01_3       | LH-S09-02_1      | LH-S09-02_2      | LH-S09-02_3      |
| SAMPLE_DATE        |                            | 9/8/2006         | 9/11/2005        | 7/12/1993       | 7/12/1993          | 7/12/1993        | 7/12/1993           | 6/26/1993               | 6/26/1993          | 6/26/1993             | 6/26/1993         | 6/26/1993        | 6/26/1993        | 6/26/1993        |
| Depth              |                            | 6-6Ft            | 8-8Ft            | 0-2Ft           | 4-6Ft              | 0-2Ft            | 4-6Ft               | 0.5 - 1.5 Ft            | 0.5 - 1.5 Ft       | 5 - 5.5 Ft            | 6.5 - 7.5 Ft      | 0.5 - 1.5 FI     | 5 - 5.6 Ft       | 7 - 7.5 Ft       |
| SAMPLE_PURPOSE     |                            | REG              | REG              | REG             | REG                | REG              | REG                 | FD                      | REG                | REG                   | REG               | REG              | REG              | REG              |
| Test Group         | Parameter (Units = mg/kg)  | Result DIL 1Q VC | Result DIL LQ VQ | Result DIL LQ V | ) Result DIL LQ VC | Result DIL LQ VC | Q Result Dil. LQ VQ | ) Result DilL LO VQ     | i Result DIL LQ V( | ) Result DIL LO VO Re | esuit DIL LQ VQ P | lesult DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ |
| VOLATILES          | Benzene                    |                  |                  | 0.005 1 < U     | 0.005 t < U        | 0.005 1 < U      | 0.005 1 < U         | 0.006 1 < U             | 0.006 1 < U        | 0.005 1 < U           | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES          | Bromobenzene               |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | Bromochloromethane         |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | Bromodichloromethane       |                  |                  | 0.005 1 < U     | 0.005 t < U        | 0.005 1 < U      | 0.005 1 < U         | 0.006 1 < U             | 0.005 1 < U        | 0.006 1 < U           | 0.006 t < U       | 0.006 t < U      | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES          | Bromoform                  |                  |                  | 0.005 1 < U     | 0.005 t < U        | 0.005 1 < U      | I 0.005 1 < U       | 0.096 1 < U             | 0.006 1 < U        | 0.006 1 < U           | 0.005 1 < U       | 0.005 1 < U      | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES          | Bromomethane               |                  |                  | 0.01 1 < U      | 0.01 1 < U         | 0.01 1 < U       | 0.01 1 < U          | 0.006 1 < U             | 0.006 1 < ଧ        | 0.006 1 < U           | 9.005 1 < U       | 0.005 1 < U      | 0.006 1 < U      | 0.006 f < U      |
| VOLATILES          | Carbon disutide            |                  |                  | 0.005 1 < U     | 0.005 1 < U        | 0.005 t < U      | 0.005 1 < U         | 0.006 1 < U             | 0.006 1 < ଧ        | 9.006 1 < U           | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES          | Carbon tetrachloride       |                  |                  | 0.005 1 < U     | 0.005 t < U        | 0.005 t < U      | 0.005 1 < U         | 0.006 1 < U             | 0.006 1 < U        | 0.006 1 < U           | 0.005 1 < U       | 0.006 1 < U      | 0⊥006 1 < U      | 0.096 1 < U      |
| VOLATILES          | Chlorobenzene              |                  |                  | 0.005 1 < U     | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U         | 0.006 1 < U             | 0.006 1 < U        | 0.006 t < U           | 0.006 1 < U       | 0.005 1 < U      | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES          | Chloroethane               |                  |                  | 0.01 1 < U      | 0.01 t < U         | 0.01 1 < U       | 0.01 1 < U          | 0.006 1 < U             | 0.006 1 < U        | 0.006 1 < U           | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES          | Chloroform                 |                  |                  | 0.005 1 < U     | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U         | 0.006 t < U             | 0.006 1 < U        | 0.006 t < U           | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES          | Chlosomethane              |                  |                  | 0.01 f < U      | 0.01 1 < U         | 0.01 1 < U       | 0.01 1 < U          | 0.006 1 < U             | 0.006 1 < U        | 0.006 1 < U           | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 t < U      |
| VOLATILES          | Chloroprene                |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | cis-1,2-Dichloroethene     |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | cis-1,3-Dichloropropene    |                  |                  | 0.005 t < U     | 0.005 1 < U        | 0.005 1 < 1J     | 0.005 1 < U         | 0.006 1 < U             | 0.006 1 < 0        | 0.006 t < U           | 0.006 1 < U       | 0.096 1 < U      | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES          | Dibromochloromethane       |                  |                  | 0.005 1 < 1     | 0.005 1 < U        | 0.005 1 < U      | i 0.005 1i < ti     | 0.006 t < U             | 0.006 1 < U        | 0.006 1 < U           | 0.006 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      |
| VOLATILES          | Dibromomethane             |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | Dichlorodifluoromethane    |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | Ethyl methacrylate         |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | Ethylbenzene               |                  |                  | 0.005 1 < U     | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < U         | 0.006 1 < 1             | 0.006 1 < U        | 0.006 1 < U           | 0.006 1 < U       | 0,006 1 < U      | 0.006 1 < 11     | 0.006 .1 < U     |
| VOLATILES          | Hexachlorobutadiene        |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | IODOMETHANE                |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | ISOBUTYL ALCOHOL           |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | lsopropyibenzene           |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | m.pXvlenes                 |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | Methacryknitrije           |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | Methyl isobutyl ketone     |                  |                  | 0.05 t < 0      | 0.05 1 < 1         | 0.05 1 < U       | 0.05 1 < 1          | 0.055 t < U             | 0.055 1 < U        | 0.062 1 < 11          | 0.059 1 < 11      | 0.058 1 < U      | 0.064 1 < U      | 0.058 t < 11     |
| VOLATILES          | METHYL METHACBYLATE        |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   | 0.000 1 1 0      |                  | 0.000 / 4 0      |
| VOLATILES          | Methylene chloride         |                  |                  | 0.005 1 < U     | 0.005 1 < U        | 0.005 1 < U      | 0.005 1 < 1         | 0.006 1 < 0             | 0.006 1 < 1        | 0.006 1 < 13          | 0.006 1 < U       | 0,006 1 < U      | 0-006 it e ti    | 0.006 1 < B      |
| VOLATILES          | Naphthalene                |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  | 0.000 / 4 0      |
| VOLATILES          | n-BUTYLBENZENF             |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | n-PBOPYLBENZENE            |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | Pentachioroethane          |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | p-ISOPROPYLTOLUENE         |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOI ATILES         | Pronionitrile              |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOI ATITES         | SEC-BUTYI BENZENE          |                  |                  |                 |                    |                  |                     |                         |                    |                       |                   |                  |                  |                  |
| VOLATILES          | Styrene                    |                  |                  | 0.005 1 < 11    | 0.005 1 < 11       | 0.005 t < 13     | 0.005 1 < 11        | 11 > 1 200.0            | 0.006 1 c 11       | 0.006 1 < 1           | 0.906 1 × U       | 8006 1 < U       | 0.006 1 4 13     | 0.005 t < B      |
| VOLATILES          | tert-BUTVI BENZENE         |                  |                  | 0.000 / 0       | 0.003              | 0.000 1 4 0      | 0.000 0             | 0.000                   | 0.000 / 0          |                       |                   | 0.000 1 1 0      | 0.000 1 2 0      | 0.000 1 1 0      |
| VOLATILES          | Tetrachomethene            |                  |                  | 0.005 1 2 11    | 0.005 1 ~ []       | 8.005 1 - 11     | 0.005 t ~ Ił        | A 006 1 / 11            | 0.005 1 - 11       | 0.006 1 < 11          | 0.006 1 - 11      | 0.006 1 / 11     | 0.005 1 / 11     | 0.000 t - Ut     |
| VOLATILES          | Toluene                    |                  |                  | 0.005 1 < 0     | 0.005 1 < 12       | 0.005 1 < 0      |                     | 0.006 1 < 11            | 0.005 1 < 0        |                       | 0.000 1 < 0       |                  | 0.000 1 < 0      | 0.006 1 < 1      |
| VOLATILES          | trans-1 2-Dichlomethene    |                  |                  | 0.003 7 4 0     | 0.005 1 1 0        | 0.000 1 1 0      | 0.003 1 1 0         | 0.000 1 1 0             | 0.000 1 1 1 0      | 0.000 1 2 0           | 0.000 1 1 0       |                  | 0.000 1 4 0      | 0.000 1 < 0      |
| VOLATHES           | trace-13-Dichlomomorage    |                  |                  | 0.005 1 - 11    | 0.005 1 4 15       | 0.005 1 - 11     | 0.005 1 - 11        | 0.006 1 - 11            | 0.006 1 - 11       | 0.006 1 - 13          | 0.006 1           | A 000 1 . U      | 0.005 1 . 11     | 0.055 1 . 11     |
| VOLATILES          | trace 1 d Dichlon 7 hutens |                  |                  | 0.000 1 1 0     |                    | 0.000 / 1 1      | 0.000 1 < 0         |                         | 0.000 / < 0        | 0.000 1 < 0           | 0.000 1 < 0       | 0.000 1 2 0      | 0.000 I < 0      | 0.000 1 < 0      |
| VOLATILES          | Trichlorogithene           |                  |                  | 0.005 1 - 11    | 0.005 1 - 11       | 0.006 1 c II     | 0.005 1 - 11        | 0.005 1 < <sup>11</sup> | 0.005 1 - 11       | 0.006 1 / 1/          | 0.006 1 4 19      | 0.000 1 . 11     | 0.005 1          | n ooe +          |
| VOLATILES          | Trichlorofiusromethane     |                  |                  | v.vvo i < U     | 0.000 r < 0        | A'003 1 < 0.     | 0.000 F < U         | 0.000 1 < 0             | 0.000 1 < 0        | 0.000 i < U           | 0.000 1 < 1       | 0.000 1 < 0      | 0.000 1 < 1      | 0.000 F < U      |
| VOLATHES           | View scatters              |                  |                  | 0.05 t - 14     | 0.06 1 - 10        | 0.05 1 - 17      | 0.05 1              |                         |                    |                       |                   |                  |                  |                  |
| VOLATI ES          | Vind chanda                |                  |                  |                 | 0.00 1 < 0         | 0.00 1 < 0       |                     | 0.002 1 20              | A 000 1            | 0.005 1               | 0.000 1           | 0.896 1 . 11     | 0.000 1          | 0.000 1          |
| VOLATILEO          | Villy Classifie            |                  |                  | 0.01 1 < 0      | 0.01 1 < U         | 0.01 1 < 0       |                     | U > 1 000.0             | 0.000 1 < 0        | 0.006 1 < 0           |                   | 0.000 1 < 0      | 0.000 1 < U      | U.UUD 1 < U      |
| VULLILES           | Ayrenes, IUIZ:             |                  |                  | ່ມ.ຫມລ I < ປ    | v.uvo i < U        | v.uus + < 10     | 0 > 1 0000          | 0.000 1 < 0             | 0.006 1 < 0        | 0.006 1 < 0           | ບ.ບບວ I < ປ       | 0.000 i < U      | ບ.ບປວ 1 < ປ      | u.⊎uta 1 < U     |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas



Ć.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-111 Concentrations of Chemicals in Soil Samples Associated with WR Sump 005

| [SUMP] = WRSUMP005<br>LOCATION _CODE<br>SAMPLE_NO |   | t        | JHS-2-(<br>JHS-2-( | Б<br>Б  |          | ប<br>អេ | 1-WRS  | S-5<br>-5_1 |          | 1<br>13 | H-WR         | S-5<br>-5_2 |         | WRSU<br>WRSM | impor<br>Poos- | 15-SB0<br>SB01-0 | 01<br>01 | WRSL<br>WRSM | IMP90<br>P005-\$ | 5-580:<br>5801-0 | 5<br>12 | WRSU<br>WRSM | MP00<br>P005- | 5-SB02<br>SB02-0 | 2       | WRSU<br>WRSMPD | MP005-<br>05-SB0 | -SB02<br>2-02-C | œ       |
|---|---|----------|--------------------|---------|----------|---------|--------|-------------|----------|---------|--------------|-------------|---------|--------------|----------------|------------------|----------|--------------|------------------|------------------|---------|--------------|---------------|------------------|---------|----------------|------------------|-----------------|---------|
| SAMPLE_DATE                                       |   | 1        | /10/19             | 15<br>• |          | 7.      | /12/19 | 193<br>•    |          |         | 7/12/19      | 93          |         | 9            | /22/20         | 906<br>- Ta      |          | 9            | /22/20           | 06               |         | 94           | 22/20         | 06               |         | 9/             | 22/2000          | 5               |         |
| SAMPLE_PURPOSE                                    |   | ,        | REG                | -1      |          |         | REG    | - <b>1</b>  |          |         | a 4.5<br>REG | n<br>i      |         | 0.           | REG            | 571              |          |              | REG              | ·                |         |              | REG           | 1                |         |                | FD               |                 |         |
| Test Group  | Parameter (Units = mg/kg)                   | Result   | DIL                | LQ      | ٧Q       | Aesult  | Dit    | LQ          | ٧Q       | Result  | Dil          | LO          | VQ      | Result       | DIL            | LÛ               | va       | Result       | DIL              | LQ               | VQ      | Result       | DIL           | LQ               | VQ      | Result         | DIL              | LQ              | VQ      |
| EXPLOSIVES<br>EXPLOSIVES                          | 1,3,5-1 nutrobenzene<br>1.3-Dinitrobenzene  | 0.23     | 1                  | <       | 0        |         |        |             |          |         |              |             |         | 0.242        | 1              | 0<br>11          | U<br>+1  | 0.238        | 1                | U<br>H           | ម       | 0.245        | 1             | U                | U       | 0.242          | 1                | U               | U<br>U  |
| EXPLOSIVES  | 2,4,6-Trinitrotoluene                       | 0.23     | 1                  | <       | Ŭ        |         |        |             |          |         |              |             |         | 0.242        | 1              | U                | Ŭ        | 0.238        | ;                | Ŭ                | U<br>U  | 0.245        | 1             | Ū                | Ű       | 0.242          | 1                | Ŭ               | Ŭ       |
| EXPLOSIVES  | 2,4-Dinitrotokuene                          | 0.23     | 1                  | <       | U        | 0.33    | 1      | <           | U        | 0.33    | 1            | <           | ឋ       | 0.242        | 1              | ប                | U        | 0.238        | 1                | U                | U       | 0.245        | 1             | U                | U       | 0.242          | 1                | U               | U       |
| EXPLOSIVES  | 2,6-Dintrotosuene                           | 0.25     | 1                  | <       | ម        | 0.33    | 1      | <           | U        | 0.33    | 1            | <           | U       | 0.251        | 1              | U                | U        | 0.248        | 1                | U                | U       | 0.255        | 1             | U                | U       | 0.251          | 1                | U               | U       |
| EXPLUSIVES<br>EXPLOSIVES                          | 2-Ammo-4,6-dinitrotoluene                   | 0.47     | 4                  | ,       | 14       |         |        |             |          |         |              |             |         | 0.251        | 1              | 0                | 0<br>11  | 0.248        | 3                | U<br>13          | ป<br>ป  | 0.255        | 1             | U                | 1       | 0.251          | 1                | U               | U<br>LL |
| EXPLOSIVES  | HMX   | 2.1      | ÷                  | ۰<br>۲  | บ        |         |        |             |          |         |              |             |         | 2.13         | 1              | U U              | U        | 2.1          | ;                | Ð                | บ<br>ป  | 2.16         | 1             | U U              | U<br>U  | 2.13           | 1                | บ<br>บ          | U<br>U  |
| EXPLOSIVES  | m-Nitrotoluene                              | 0.94     | 1                  | <       | U        |         |        |             |          |         |              |             |         | 0.242        | 1              | U                | U        | 0.238        | 1                | U                | U       | 0.245        | 1             | U                | U       | 0.242          | 1                | Ų               | U       |
| EXPLOSIVES  | Nitrobenzene                                | 0.25     | 1                  | <       | ប        |         |        |             |          |         |              |             |         | 0.251        | 1              | U                | U        | 0.248        | 1                | U                | U       | 0.255        | 5             | U                | U       | 0.251          | 1                | V               | U       |
| EXPLOSIVES  | o-Nitrotobuene                              | 0.94     | 1                  | <       | ย<br>    |         |        |             |          |         |              |             |         | 0.242        | 1              | U                | B        | 0.238        | 1                | U                | U       | 0.245        | 1             | U                | U       | 0.242          | 1                | U               | U<br>   |
| EXPLOSIVES  | PHNIDODDene<br>RIDY                         | 2.8      | 1                  | ~       | บ<br>ม   |         |        |             |          |         |              |             |         | 0.242        | 1              | 11               | บ<br>ม   | 0.238        | 1<br>1           | U .              | 11      | 0.245        | 1             | U<br>H           | U       | 0.242          | 1                | 0<br>11         | U<br>U  |
| EXPLOSIVES  | Tetryl                                      | 0.7      | 1                  | ٠<br>۲  | Ŭ        |         |        |             |          |         |              |             |         | 0.628        | 1              | Ű                | U        | 0.552        | 1                | ប                | บ       | 0.637        | 1             | Ð                | U       | 0.500          | 1                | U               | υ       |
| METALS  | Aluminana                                   | 5140     | 1                  |         |          | 10800   | 1      |             |          | 4270    | 1            |             |         | 9100         | 1              |                  |          | 18800        | 1                |                  |         | 20900        | 1             |                  |         | 16000          | ĩ                |                 |         |
| METALS  | Antimony                                    | 10.2     | 1                  | <       | UJ       | 3       | t      | <           | U        | 3       | 1            | <           | U       | 0.113        | 1              | U                | UUL      | 0.115        | 1                | U                | UJL     | 0.0758       | 1             | J                | JL.     | 0.12           | 1                | U               | UJL     |
| METALS  | Arsenic                                     | 5.7      | 1                  |         | J        | 4.5     | 1      |             |          | 22      | 1            |             |         | 4.26         | 1              |                  |          | 1.33         | 1                |                  |         | 1.77         | 1             |                  |         | 1.73           | 1                |                 |         |
| METALS  | Banum                                       | 60       | 1                  |         |          | 117     | ł      |             |          | 43.6    | 1            |             |         | 129          | 1              |                  | ĴΗ       | 51.4         | 1                |                  | JH      | 55.6<br>100  | 1             |                  | JΗ      | 61.9<br>0 849  | 1                |                 | JH      |
| METALS  | Cadmium                                     | 1        | 1                  | <       | บ        | 1       | 1      | <           | U        | 1       | 1            | <           | U       | 0.151        | 1              | J                | J        | 0.0758       | 1                | 3                | J       | 0.0727       | 1             | J                | J       | 0.0985         | 1                | J               | J       |
| METALS  | Calcium                                     | 578      | 1                  |         |          | 2100    | 1      |             |          | 1120    | 1            |             |         | 1510         | 1              |                  |          | 940          | 1                |                  |         | 610          | 1             |                  |         | 662            | 1                |                 |         |
| METALS  | Chronsium                                   | 14.9     | 1                  |         |          | 20.3    | 1      |             |          | 8.3     | 1            |             |         | 14.1         | 1              |                  | ĴΗ       | 16.9         | 1                |                  | JH      | 24.1         | 1             |                  | JH      | 16.5           | 1                |                 | JH      |
| METALS  | Cobait                                      | 3.1      | 1                  |         |          | 9.2     | 1      |             |          | 3.8     | 1            |             |         | 4.22         | 1              |                  |          | 7.33         | 1                |                  |         | 9.06         | 1             |                  |         | 7.54           | 1                |                 |         |
| METALS  | Copper<br>Cvanide Total                     | 0.0      | •                  |         |          | 3.0     | 1      | <           | 11       | 2.1     | 1            |             |         | 221          | ı              |                  |          | 5.02         | 1                |                  |         | 0.0          | 1             |                  |         | 9.92           | i                |                 |         |
| METALS  | lron  | 17100    | t                  |         |          | 25100   | 1      | -           | U        | 11200   | 1            |             |         | 28700        | 1              |                  | J        | 19200        | 1                |                  | J       | 24500        | 1             |                  | J       | 18500          | 1                |                 | J       |
| METALS  | Lead  | 18.3     | 1                  |         |          | 9.2     | 1      |             |          | 6.1     | 1            |             |         | 8.97         | 1              |                  |          | 11.5         | 1                |                  |         | 11.9         | 1             |                  |         | 10.7           | 1                |                 |         |
| METALS  | Magnesium                                   | 224      | 1                  |         |          | 694     | 1      |             |          | 334     | 1            |             |         | 550          | 1              |                  |          | 1550         | 1                |                  | •       | 1500         | 1             |                  |         | 1180           | 1                |                 |         |
| METALS  | Manganese                                   | 89.4     | 1                  |         | 12       | 676     | 1      | ,           |          | 106     | 1            |             | 41      | 129          | 1              |                  | 1        | 27.7         | 1                |                  | 3       | 592          | 1             |                  | J<br>L  | 63.1<br>0.0117 | 1                |                 | J       |
| METALS  | Nickel                                      |          | '                  |         | U        | 0.1     | ,      |             | v        | 0.1     | ,            |             | 0       | 4.76         | t              | 0                | Ъ        | 10.5         | 1                | U                | ગા      | 11.7         | 1             | v                | JH      | 8,94           | 1                | J               | JH      |
| METALS  | Potassium                                   | 203      | 1                  | ٢       | U        | 459     | 1      |             |          | 250     | 1            |             |         | 262          | 1              |                  | JH       | 467          | 1                |                  | JH      | 522          | 1             |                  | JH      | 401            | 3                |                 | JR      |
| METALS  | Selenium                                    | 0.43     | 1                  |         |          | 1       | 1      | <           | U        | 1       | 1            | <           | U       | 0.293        | 1              |                  |          | 0.148        | 1                | Ł                | J       | 0.247        | 1             | 3                | J       | 0.262          | 1                |                 |         |
| METALS  | Silver                                      | 1        | 1                  | <       | U        | 1       | 1      | <           | U        | 1       | 1            | <           | U       | 1.68         | 1              | U                | U        | 1.87         | 1                | U                | U       | 1.82         | 1             | U                | บ       | 1.92           | 1                | U               | U       |
| METALS  | Strontum                                    | 10.2     | 1                  | ~       | U        | 174     | 1      |             |          | 92      | 1            |             |         | 42.0         | '              |                  |          | 320          | 1                |                  |         | 243          | 1             |                  |         | 212            | 1                |                 |         |
| METALS  | Thallium                                    | 50.8     | 1                  | <       | Ū        |         |        |             |          |         |              |             |         | 0.0584       | 1              |                  |          | 0.114        | 1                |                  |         | 0.107        | 1             |                  |         | 0.105          | 1                |                 |         |
| METALS  | Vanadium                                    |          |                    |         |          |         |        |             |          |         |              |             |         | 31.7         | 1              |                  | JH       | 29.7         | 1                |                  | JH      | 41           | \$            |                  | JH      | 28.9           | 1                |                 | JH      |
| METALS  | Zinc  | 21.6     | 1                  |         |          | 26.1    | 1      |             | .,       | 13.3    | 1            |             |         | 18.3         | 1              |                  | 1H       | 26.6         | 1                |                  | JH      | 31.8         | 1             |                  | ЗН      | 23.5           | 1                |                 | JH      |
| SEMIVOLATILES<br>SEMIVOLATILES                    | 1,2,4-17Ch0robenzene<br>1 2-Dichhrobenzene  | 0.44     | 1                  | ~       | U<br>IS  | 0.33    | 1      | ~           | U<br>11  | 0.33    | ة<br>1       | ~           | บ<br>เเ | 0.922        | 5              | U                | 0        | 0.201        | 1                | U                | 0       | 0.207        | )<br>1        | U                | ט<br>נו | 0.204          | 1                | ย<br>ย          | 0<br>11 |
| SEMIVOLATILES                                     | 1,3-Dichlorobenzene                         | 0.44     | 1                  | <       | Ŭ        | 0.33    | 3      | ~           | Ŭ        | 0.33    | t            | <           | υ       | 0.922        | 5              | U                | U        | 0.201        | í                | ប                | U       | 0.207        | 1             | Ű                | Ü       | 0.204          | 1                | U               | Ŭ       |
| SEMIVOLATILES                                     | 1,4-Dichlorobenzene                         | 0.44     | 1                  | <       | U        | 0.33    | 1      | <           | U        | 0.33    | 1            | <           | ប       | 0.922        | 5              | U                | ប        | 0.201        | 1                | ប                | U       | 0.207        | 1             | U                | บ       | 0.204          | 1                | U               | ບ       |
| SEMIVOLATILES                                     | 2,4,5-Trichkorophenol                       | 22       | 1                  | <       | U        | 1.65    | 1      | <           | U        | 1.65    | 1            | <           | U       | 0.922        | 5              | U                | U        | 0.201        | 1                | U                | U       | 0.207        | 1             | U                | U       | 0.204          | 1                | U               | ບ       |
| SEMIVOLAHLES<br>SEMIVOLATILES                     | 2,4,6-1 achierophenol<br>2,4,0ichterophenol | 0.44     | 1                  | ۲<br>۲  | 0<br>11  | 0.33    | 3      | <           | U<br>11  | 0.33    | 1            | <           | 1       | 0.922        | 5              | 11               | U        | 0.201        | 1                | Ц                | 0       | 0.207        | 1             | 0                | บ<br>ม  | 0.204          | 1                | 0               | U<br>41 |
| SEMIVOLATILES                                     | 2,4-Dimethylphenot                          | 0.44     | 1                  | ~       | υ        | 0.33    | 1      | ~           | บ        | 0.33    | 1            | ~           | U       | 0.922        | 5              | ŭ                | U        | 0.201        | ,<br>1           | U                | Ŭ       | 0.207        | ;             | Ŭ                | U       | 0.204          | 1                | Ŭ               | U       |
| SEMIVOLATILES                                     | 2,4-Dinitrophenol                           | 2.2      | 1                  | <       | U        | 1.65    | 1      | <           | U        | 1.65    | 1            | <           | U       | 4.61         | 5              | U                | U        | 1.01         | 1                | U                | U       | 1.03         | 1             | υ                | υ       | 1.02           | 1                | U               | IJ      |
| SEMIVOLATILES                                     | 2,4 Dinitrotoluene                          | 0.44     | 1                  | <       | U        |         |        |             |          |         |              |             |         | 0.922        | 5              | U                | U        | 0.201        | t                | U                | U       | 0.207        | 1             | U                | U       | 0.204          | 1                | U               | U       |
| SEMIVOLATILES                                     | 2,6-Dindrotoluene                           | 0.44     | 1                  | <       | ປ        | 0.72    |        |             |          | .0.22   | 1            |             | **      | 0.922        | 5              | U                | U        | 0.201        | 1                | U                | 0       | 0.207        | 1             | U                | U       | 0.204          | 1                | U               | -U<br>л |
| SEMIVOLATILES<br>SEMIVOLATILES                    | 2-Chiomhenni                                | 0.44     | 1                  | ~       | 10<br>11 | 0.33    | 1      | <<br>~      | U<br>11  | 0.33    | 1            | ~           | U<br>U  | 0.922        | 5              | 0                | 11       | 0.201        | 1                | U<br>II          | U       | 0.207        | 1             | U<br>U           | 0       | 0.204          | 1                | U<br>IF         | บ       |
| SEMIVOLATILES                                     | 2-Methylnapinthalene                        | 0.44     | 1                  | <       | Ū        | 0.33    | 1      | <           | Ð        | 0.33    | 1            | <           | Ū       | 0.922        | 5              | IJ               | υ        | 0.201        | 1                | Ð                | U       | 0.207        | 1             | Ű                | U       | 0.204          | 1                | U               | Ð       |
| SEMIVOLATILES                                     | 2-Methyliphenol                             | 0.44     | 1                  | <       | υ        | 0.33    | 1      | <           | U        | 0.33    | 1            | <           | U       | 0.922        | 5              | ប                | IJ       | 0.201        | 1                | U                | U       | 0.207        | 1             | U                | U       | 0.204          | 1                | U               | U       |
| SEMIVOLATILES                                     | 2-Nitroandine                               | 22       | 1                  | <       | U        | 1.65    | 1      | <           | U        | 1.65    | 1            | <           | U       | 4.61         | 5              | U                | U        | 1.01         | 1                | U                | . U     | 1.03         | 1             | U                | U       | 1.02           | 1                | U               | U       |
| SEMIVULATILES<br>SEMIVULATILES                    | 2-Netophenol<br>3-2'-Dichiozobanzidina      | 0.44     | 1<br>f             | <       | บบ       | 0.33    | 1      | <           | 0        | 0.33    | 1            | <           | U<br>U  | 0.922        | 5              | U                | 1)<br>11 | 0.201        | 1                | U                | U       | 0.207        | 1             | ม<br>อ           | U       | 0.204          | 1                | U<br>II         | U<br>H  |
| SEMIVOLATILES                                     | 3-Nitroaniline                              | 22       | 1                  | ,       | U        | 1.65    | 1      | ~           | บ        | 1.65    | 1            | ۲<br>۲      | U       | 4.61         | 5<br>5         | ย<br>ย           | บ        | 1.01         | t t              | U<br>U           | 0<br>17 | 1.03         | 1             | 8                | U       | 1.02           | 1                | U               | U<br>U  |
| SEMIVOLATILES                                     | 4,6-Dinitro-2-methylphenol                  | 2.2      | ŧ                  | <       | U        | 1.65    | 1      | <           | U        | 1.65    | 1            | <           | U       | 4.61         | 5              | ย                | U        | 1.01         | t                | Ū                | U       | 1.03         | 1             | U                | U       | 1.02           | 1                | U               | U       |
| SEMIVOLATILES                                     | 4-Bromophenyl phenyl ether                  | 0.44     | ŧ                  | <       | U        | 0.33    | 1      | <           | U        | 0.33    | 1            | <           | U       | 0.922        | 5              | U                | U        | 0.201        | 1                | U                | U       | 0.207        | 1             | U                | U       | 0.204          | 2                | U               | U       |
| SEMIVOLATILES                                     | 4-Chloro-3-methylphenol                     | 0.44     | 1                  | <       | U        | 0.65    | 1      | <           | U        | 0.65    | 1            | <           | U       | 0.922        | 5              | U                | ປ        | 0.201        | 1                | ŋ                | U       | 0.207        | 1             | U                | U       | 0.204          | 1                | U               | U       |
| SEMIVOLATILES<br>SEMIVOLATILES                    | 4-Chloroaniine                              | 0.44     | 1                  | ٠<br>٢  | U<br>D   | 0.65    | 1      | <           | U<br>H   | 0.65    | 1            | ۲<br>۲      | U<br>U  | 0.922        | 5<br>£         | U                | U<br>11  | 0.201        | 1                | U                | U       | 0.207        | 1             | U<br>IT          | U<br>II | 0.204          | 1                | ป<br>บ          | U       |
| SEMIVOLATILES                                     | 4-Methylphenol                              | 0.44     | 1                  | ۰<br>۲  | U        | 0.33    | 1      | ,<br>,      | U        | 0.33    | 1            | `           | บ       | 0.922        | 5              | U                | U        | 0.201        | 1                | U                | บ       | 0.207        | 1             | U                | ย       | 0.204          | ;                | U               | U       |
| SEMIVOLATILES                                     | 4-Nitroanitine                              | 2.2      | t                  | <       | U        | 1.65    | 1      | <           | U        | 1.65    | 1            | <           | ป       | 4.61         | 5              | Ű                | U        | 1.03         | 1                | U                | U       | 1.03         | t             | U                | U       | 1.02           | 1                | U               | U       |
| SEMIVOLATILES                                     | 4-Nitrophenol                               | 2.2      | 1                  | <       | U        | 1.65    | 1      | <           | U        | 1.65    | 1            | <           | ป       | 4.61         | 5              | ĥ                | U        | 1.01         | 1                | U                | U       | 1.03         | 1             | U                | บ       | 1.02           | 1                | U               | U       |
| SEMIVOLATILES                                     | Acenaphthene                                | 0.44     | 1                  | ۲       | U<br>    | 0.33    | 1      | <           | U        | 0.33    | 1            | <           | บ       | 0.922        | 5              | U                | U        | 0.201        | 1                | U                | U       | 0.207        | 1             | U                | U       | 0.204          | 1                | U               | U       |
| SEMIVOLATILES<br>SEMIVOLATILES                    | Acenaphthylene                              | 0.44     | 1                  | ۲<br>۲  | U        | 0.33    | 1      | <           | 10<br>TE | 0.33    | 1<br>1       | <           | บ       | 0.922        | 5              | U<br>12          | U<br>IB  | 0.201        | 1                | 0<br>0           | ป<br>เบ | 0.207        | 1             | U                | ម<br>អ  | 0.204          | }<br>1           | 9<br>11         | U<br>1F |
| OCINITOLATILLU                                    | · =   | L . V.44 | '                  | *       | 0        | 0.00    | ,      | `           | 0        | 0.00    |              | `           | 0       | 0.322        | 3              | U                | v        | 0.201        |                  | J.               | v       | 0.207        | •             | v                | v       | 9.2VH          | •                | U               | 0       |



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

### Table 3-111 Concentrations of Chemicals in Soil Samples Associated with WR Sump 005

| [SUMP] ≈ WRSUMP005<br>LOCATION _CODE<br>SAMPLE NO |   |        | LHS-2<br>LHS-2 | -05      |         | U<br>U       | H-WRS-      | 5-5<br>51 |        | 1H<br>LH- | -WRS-          | 5-5<br>5_2 |         | WRSUM    | 1P005-<br>005-SE | -SB01<br>801-0 | 1      | WRSU           | MP008<br>2005-S | -SB01<br>B01-02 | 2       | WRSU<br>WRSM   | IMP005<br>P005-S | 5-SB02   | 2       | WRSU<br>WRSMP0 | MP005<br>)5-SB0 | -SB02<br>12-02-0 | xc      |
|---|---|--------|----------------|----------|---------|--------------|-------------|-----------|--------|-----------|----------------|------------|---------|----------|------------------|----------------|--------|----------------|-----------------|-----------------|---------|----------------|------------------|----------|---------|----------------|-----------------|------------------|---------|
| SAMPLE_DATE                                       |   |        | 1/10/1         | 995      |         | 7            | /12/19      | 93        |        | 7/        | 12/19          | 93         |         | 9/2      | 2/2006           | 6              |        | 9/             | 22/200          | 6               |         | 9              | /22/200          | 06       |         | 9/3            | 22/200          | 6                |         |
| Depth<br>Sample Purpose                           |   |        | 0~0.5<br>RE(   | 5Ft<br>G |         |              | 0-2F<br>BFG | t         |        | 3         | - 4.5 I<br>REG | Ft -       |         | 0.5 ·    | - 0.5 F<br>REG   | Ft             |        | 5              | 5 - 5 Fi<br>REG |                 |         |                | 5-5H<br>REG      | t        |         | 5              | FD              |                  |         |
| Test Group  | Parameter (Units = mg/kg)                         | Result | Dil,           | ίQ       | ٧Q      | Result       | DIL         | LQ        | VQ     | Result    | DIL            | LQ         | VQ      | Result C | DIL              | LO             | VQ     | Result         | DIE             | 10              | VQ      | Result         | DIL              | ιa       | VQ      | Result         | Dil             | LQ               | VQ      |
| SEMIVOLATILES                                     | Benzo(a)anthracene                                | 0.44   | 1              | <        | U       | 0.33         | t           | <         | U      | 0.33      | 1              | <          | U       | 0.922    | 5                | U              | U      | 0.201          | 1               | U               | U.      | 0.207          | 1                | U        | U       | 0.204          | 1               | U                | U       |
| SEMIVOLATILES                                     | Benzo(a)pyrene                                    | 0.44   | 1              | <        | U       | 0.33         | 1           | · <       | 0      | 0.33      | 1              | <          | U       | 0.922    | 5<br>r           | 0              | U      | 0.201          | 1               | U<br>H          | 0       | 0.207          | 1                | 0        | · U     | 0.204          | 1               | U<br>II          | U<br>II |
| SEMIVULATILES<br>SEMIVULATILES                    | Benzo(philozofene                                 | 0.44   | 1              | ~        | 0<br>11 | 0.33         | 1           | <         | 0      | 0.33      | 1              | ~          | ю<br>П  | 0.922    | 5<br>5           | U<br>II        | 11     | 0.201          | 1               | 11              | U<br>U  | 0.207<br>0.207 | 1                | 11       | u       | 0.204          | 1               | 0<br>11          | U<br>II |
| SEMIVOLATILES                                     | Benzolkitauranthene                               | 0.44   | 1              | è        | ŭ       | 0.33         | 1           | è         | 6      | 0.33      | 1              | ž          | U       | 0.922    | 5                | Ŭ              | Ű      | 0,201          | 1               | υ               | Ŭ       | 0.207          | 1                | Ŭ        | Ü       | 0.204          | 1               | Ũ                | Ŭ       |
| SEMIVOLATILES                                     | Benzoic Acid                                      | 2.2    | 1              | <        | Ű       | 1.65         | 1           | ڊ<br>د    | Ū      | 1.65      | 1              | <          | U       | 4,61     | 5                | U              | UJ     | 1,01           | 1               | U               | UJ      | 1.03           | 1                | U        | UJ      | 1.02           | 1               | U                | UJ      |
| SEMIVOLATILES                                     | Benzyl Alcohol                                    | 0.44   | 1              | <        | Ð       | 0.65         | 1           | <         | U      | 0.65      | 1              | <          | U       | 0.922    | 5                | U              | U      | 0.201          | 1               | U               | U       | 0.207          | 1                | U        | Ð       | 0.204          | 1               | U                | U       |
| SEMIVOLATILES                                     | bis(2-Chloroethoxy)methane                        | 0.44   | 1              | <        | υ       | 0.33         | 1           | <         | U      | 0.33      | 1              | <          | U       | 0.922    | 5                | U              | U      | 0.201          | 1               | υ               | U       | 0.207          | 1                | U        | ບ       | 0.204          | 1               | ų                | U       |
| SEMIVOLATILES                                     | bis(2-Chloroethyl)ether                           | 0.44   | 1              | <        | U       | 0.33         | 1           | <         | U      | 0.33      | 1              | <          | U       | 0.922    | 5                | U              | U      | 0.201          | 1               | U               | U       | 0.207          | 1                | U        | U       | 0.204          | 1               | U                | U       |
| SEMIVOLATILES                                     | bis{2-Chloroisopropyl)ether                       | 0.44   | 1              | <        | U       | 0.33         | 1           | <         | U      | 0.33      | 1              | <          | U       | 0.922    | 5                | 0              | U      | 0.201          | 1               | ย<br>เห         | ບ       | 0.207          | 1                | 0        | 9       | 0.204          | 1               | 0                | 0       |
| SEMIVOLATILES                                     | Dis(2-Envirexy)phihaiate<br>Brind becad ontholate | 0.44   | 1              | ~        | 0<br>11 | V.33<br>D 73 | 1           | <         | บ<br>ห | 0.33      | 5<br>1         | <          | บ<br>11 | 0.922    | 5                | u<br>u         | 0      | 9.201<br>D 201 | ;               | 11              | U<br>H  | 0.207          | 1                | u        | ม.<br>- | 0.204          | 1               | U U              | U<br>Li |
| SEMIVOLATILES                                     | Carbazole   |        | •              |          | 5       | 0.00         | •           | `         | v      | 0.00      | •              | `          | Ũ       | 0.011    | 5                | v              | Ŭ      | 0.201          | •               | v               | 0       | 0.207          |                  | č        | Ũ       | 0.201          | •               | Ť                | 5       |
| SEMIVOLATILES                                     | Chrysene  | 0.44   | 1              | <        | U       | 0.33         | 1           | ~         | U      | 0.33      | 1              | <          | U       | 0.922    | 5                | U              | U      | 0.201          | 1               | U               | υ       | 0.207          | 1                | ប        | υ       | 0.204          | 1               | U                | U       |
| SEMIVOLATILES                                     | Dibenzo(a,h)anthracene                            | 0.44   | 1              | <        | U       | 0.33         | 1           | <         | ŧ      | 0.33      | 1              | <          | ម       | 0.922    | 5                | U              | U      | 0.201          | 1               | U               | υ       | 0.207          | 1                | ប        | υ       | 0.204          | 1               | ប                | Û.      |
| SEMIVOLATILES                                     | Dibenzoluran                                      | 0.44   | 1              | <        | U       | 0.33         | 1           | <         | U      | 0.33      | 1              | <          | U       | 0.922    | 5                | U              | U      | 0.201          | t               | U               | U       | 0.207          | 1                | U        | U       | 0.204          | 1               | U                | U       |
| SEMIVOLATILES                                     | Diethyl phthalate                                 | 0.44   | 1              | <        | ប       | 0.33         | 1           | <         | 8      | 0.33      | 1              | <          | U       | 0.922    | 5                | 0              | U      | 0.201          | 1               | 0               | U       | 0.207          | 1                | 0        | U       | 0.204          | 1               | US IN            | 0       |
| SEMIVOLATILES                                     | Dimethyl phthalate                                | 0.44   | 1              | ۲        | บ       | 0.33         | 1           | <         | U      | 0.33      | 1              | <          | U       | 0.922    | 5                | U<br>II        | U<br>H | 0.201          | Т<br>+          | U               | U       | 0.207          | 1                | U<br>11  | 0<br>11 | 0.204          | 1               | U<br>H           | บ<br>บ  |
| SEMIVOLAPILES<br>SEMIVOLATILES                    | di-n-Butyl patriciate                             | 0,49   | 1              | ~        | 11      | 0.33         | 1           | ~         | U      | 0.33      | 1              | 2          | U<br>H  | 0.922    | 5                | บ<br>11        | 1      | 0.201          | i<br>t          | 0               | 11      | 0.207          | 1                | 11       | 11      | 0.204          | 1               | 11               | н<br>Н  |
| SEMIVOLATILES                                     | Fluoranthene                                      | 0.44   | 1              | ~        | 11      | 0.33         | 1           | Ì         | υ      | 0.33      | 1              | č          | Ŭ       | 0.922    | 5                | Ŭ              | Ű      | 0.201          | 1               | Ŭ               | Ŭ       | 0.207          | 1                | Ŭ        | Ŭ       | 0.204          | 1               | Ű                | U       |
| SEMIVOLATILES                                     | Fluorene  | 0.44   | 1              | <        | Ū       | 0.33         | 1           | <         | Ū      | 0.33      | 1              | <          | U       | 0.922    | 5                | U              | U      | 0.201          | 1               | U               | U       | 0.207          | 1                | U        | U       | 0.204          | 1               | ប                | U       |
| SEMIVOLATILES                                     | Hexact#orobenzene                                 | 0.44   | 1              | <        | U       | 0.33         | Ŧ           | <         | U      | 0.33      | 1              | <          | U       | 0.922    | 5                | U              | U      | 0.201          | 1               | U               | U       | 0.207          | 1                | U        | U       | 0.204          | 1               | υ                | U       |
| SEMIVOLATILES                                     | Hexactsorobutadiene                               | 0.44   | 1              | <        | IJ      | 0.33         | t           | <         | U      | 0.33      | 1              | <          | U       | 0.922    | 5                | U              | U      | 0.201          | ŧ               | U               | U       | 0.207          | 1                | U        | U       | 0.204          | 1               | ប                | U       |
| SEMIVOLATILES                                     | Hexachlorocyclopentadiene                         | 0.44   | 1              | <        | U       | 0.33         | 1           | <         | U      | 0.33      | 1              | <          | U       | 0.922    | 5                | U              | ·U     | 0.201          | 1               | ម               | U       | 0.207          | 1                | U        | U       | 0.204          | 1               | U                | U       |
| SEMIVOLATILES                                     | Hexachieroethane                                  | 0.44   | 1              | <        | U       | 0.33         | 1           | <         | 11     | 0.33      | 1              | <          | U<br>   | 0.606    | 5<br>r           | J              | 1      | 0.201          | 1               | 0               | U       | 0.207          | 1                | U<br>U   | 0       | 0.204          | 1               | 0                | 0       |
| SEMIVOLATILES                                     | Indenci 1,2,3-cajpyrene                           | 0.44   | 1              | <        | U<br>13 | 0.33         | 1           | <         | И      | 0.33      | 1              | <          | 0       | 0.922    | 5                | 0<br>11        | 11     | 0.201          | 1               | 11              | 0       | 0.207          | 1                | 11       |         | 0.204          | 1               | U<br>U           | U II    |
| SEMIVOLATILES                                     | Nantithalene                                      | 0.44   | 1              | ~        | U U     | 0.33         | 1           | Ì         | U      | 0.33      | 1              | ~          | U       | 0.922    | 5                | U              | Ű      | 0.201          | 1               | Ð               | Ŭ       | 0.207          | 1                | Ŭ        | U       | 0.204          | 1               | ប                | Ŭ       |
| SEMIVOLATILES                                     | Nitrobenzene                                      | 0.44   | 1              | <        | Ū       | 0.33         | 1           | <         | Ū      | 0.33      | 1              | <          | υ       | 0.922    | 5                | U              | U      | 0.201          | 1               | U               | U       | 0.207          | 1                | U        | U       | 0.204          | t               | U                | U       |
| SEMIVOLATILES                                     | n-Nitroso-di-n-propylamine                        | 0.44   | t              | <        | U       | 0.33         | 1           | <         | U      | 0.33      | 1              | <          | U       | 0.922    | 5                | U              | υ      | 0.201          | 1               | υ               | U       | 0.207          | 1                | U        | U       | 0.204          | 1               | U                | ប       |
| SEMIVOLATILES                                     | n-Nitrosodiphenylamine                            | 0.44   | 1              | <        | U       | 0.33         | 1           | <         | U      | 0.33      | 1              | <          | U       | 0.922    | 5                | U              | υ      | 0.201          | 1               | U               | U       | 0.207          | 1                | U        | U       | 0.204          | 1               | U                | U       |
| SEMIVOLATILES                                     | Pentachlorophenol                                 | 22     | 1              | ۲        | U       | 1.65         | 1           | <         | U      | 1.65      | 1              | ۲          | U       | 4.61     | 5                | U              | U      | 1.01           | 1               | U               | 0       | 1.03           | 1                | 0        | บ       | 1.02           | 1               | U                | U       |
| SEMIVOLATILES                                     | Phenanthrene                                      | 0.44   | 1              | <        | U       | 0.33         | 1           | <         | 0      | 0.33      | 1              | <          | 0       | 0.922    | 5                | U              | 0      | 0.201          | 1               | υ               | 0       | 0.207          | 1                | U<br>11  | 9<br>N  | 0.204          | 1               | 0                |         |
| SEMMOLATILES<br>SEMMOLATILES                      | Prieno  | 0.44   | 1              | ~        | 0       | 0.33         | 1           | 2         | 11     | 0.33      | 1              | 2          | 0       | 0.922    | 5                | 11             | U U    | 0.201          | 1               | U II            | ม       | 0.207          | ;                |          | ย       | 0.204          | 1               | u<br>U           | ยั      |
| VOLATILES   | 1.1.1.2-Tetrachloroethane                         | 0.013  | 1              | ~        | Ŭ       | 0.00         | •           |           | v      | 0.00      | ·              |            | U       | 0.022    | •                | č              | Ŭ      | 0.0055         | 1               | Ŭ               | U       | 0.0058         | 1                | ย        | ບ       | 0.00591        | 1               | Ŭ                | Ũ       |
| VOLATILES   | 1.1.1-Trichloroethane                             | 0.007  | 1              | <        | U       | 0.005        | 1           | <         | U      | 0.005     | 1              | <          | บ       |          |                  |                |        | 0.0055         | 1               | IJ              | U       | 0.0058         | 3                | U        | ບ       | 0.00591        | 1               | U                | U       |
| VOLATILES   | 1,t.2.2-Tetrachloroethane                         | 0.007  | 1              | <        | U       | 0.005        | 1           | <         | U      | 0.005     | 1              | <          | U       |          |                  |                |        | 0.0055         | 1               | U               | υ       | 0.0058         | 1                | υ        | IJ      | 0.00591        | 1               | U                | U       |
| VOLATILES   | 1,1,2-Trichloroethane                             | 0.007  | ' 1            | <        | U       | 0.005        | 1           | <         | U      | 0.005     | 1              | <          | U       |          |                  |                |        | 0.0055         | 1               | U               | υ       | 0.0058         | 1                | U        | ປ       | 0.00591        | 1               | 0                | U       |
| VOLATILES   | 1,1-Dichloroethane                                | 0.007  | 1              | <        | U       | 0.005        | 1           | <         | U      | 0.005     | 1              | <          | U       |          |                  |                |        | 0.0055         | 1               | U               | U       | 0.0058         | 1                | U        | U       | 0.00591        | 1               | 8                | U U     |
| VOLATILES   | 1,1-Dichloroethene                                | 0.007  | 1              | <        | U       | 0.005        | 1           | <         | U      | 0.005     | ş              | <          | U       |          |                  |                |        | 0.0055         | 1               | 0               | 0       | 0.0058         | 1                | U<br>11  | U<br>11 | 0.00591        | 1               | 0                | 1       |
| VOLATILES   | 1, P.D.Chiosophopeane                             |        |                |          |         |              |             |           |        |           |                |            |         |          |                  |                |        | 0.0055         | 1               | 0               | U<br>U  | 0.0058         | 1                | ŭ        | บ       | 0.00591        | .1              | ย                | Ð       |
| VOLATILES   | 1.2.3-Trichtoropone                               | 0.013  | 1              | <        | U       |              |             |           |        |           |                |            |         |          |                  |                |        | 0.0055         | 1               | Ŭ               | υ       | 0.0058         | 1                | Ŭ        | Ű       | 0.00591        | 1               | U                | U       |
| VOLATILES   | 1.2.4 Trichtorobenzene                            |        |                |          |         |              |             |           |        |           |                |            |         |          |                  |                |        | 0.0055         | 1               | U               | ນ       | 0.0058         | 1                | U        | U       | 0.00591        | 1               | U                | U       |
| VOLATILES   | 1,2,4-Trimethylbenzene                            |        |                |          |         |              |             |           |        |           |                |            |         |          |                  |                |        | 0.0055         | 1               | U               | U       | 0.0058         | 1                | U        | U       | 0.00591        | 1               | U                | U       |
| VOLATILES   | 1.2-Dibromo-3-chloropropane                       | 0.027  | 1              | < -      | U       |              |             |           |        |           |                |            |         |          |                  |                |        | 0.0055         | 1               | U               | U       | 0.0058         | 1                | U        | U       | 0.00591        | 1               | U                | U       |
| VOLATILES   | 1.2-Dibromoethane                                 | 0.027  | 1              | <        | U       |              |             |           |        |           |                |            |         |          |                  |                |        | 0.0055         | 1 .             | U               | U       | 0.0058         | 1                | ម        | U       | 0.00591        | 1               | 0                | 0       |
| VOLATILES   | 1,2-Dichloroberizene                              | 0.007  |                |          | ы       | 0.005        |             | -         |        | D 005     |                |            |         |          |                  |                |        | 0.0055         | }<br>1          | ы<br>Н          | U<br>11 | 0.0058         | 1                | 11<br>11 | U<br>11 | 0.00591        | 1               | U<br>IT          | U<br>H  |
| VOLATILES   | 1.2-Dichloroethane                                | 0.007  | , 1            | ~        | н       | 0.005        | 1           | Ś         | 11     | 0.005     | 1              | è          | 11      |          |                  |                |        | 0.0055         | '               | U               | 0       | 0.0038         |                  | U        | U       | 0.00397        | '               | v                | v       |
| VOLATILES   | 1.2-Dichloropropage                               | 0.007  | . 1            | ~        | บั      | 0.005        | 1           | <         | Ŭ      | 0.005     | 1              | <          | υ       |          |                  |                |        | 0.0055         | 1               | U               | υ       | 0.0058         | 1                | U        | U       | 0.00591        | 1               | ម                | U       |
| VOLATILES   | 1,2-Dimethylbenzene (o-Xylene)                    |        |                |          |         |              |             |           |        |           |                |            |         |          |                  |                |        | 0.0055         | 1               | U               | U       | 0.0058         | 1                | U        | U       | 0.00591        | 1               | IJ               | U       |
| VOLATILES   | 1,3,5-Trimethylbenzene                            |        |                |          |         |              |             |           |        |           |                |            |         |          |                  |                |        | 0.0055         | 1               | Ð               | U       | 0.0058         | 1                | บ        | U       | 0.00591        | 1               | ប                | IJ      |
| VOLATILES   | 1,3-Dichlorobenzene                               |        |                |          |         |              |             |           |        |           |                |            |         |          |                  |                |        | 0.0055         | 1               | U               | U       | 0.0058         | 1                | U        | U       | 0.00591        | 1               | U                | U       |
| VOLATILES   | 1,3-Dichloropropane                               | ł      |                |          |         |              |             |           |        |           |                |            |         |          |                  |                |        | 0.0055         | 1               | U               | U       | 0.0058         | 1                | U        | U       | 0.00591        | 1               | 0                | U       |
| VOLATILES   | 1.4-Uichlorobenzene                               |        |                |          |         |              |             |           |        |           |                |            |         |          |                  |                |        | 0.0055         | 1               | U<br>11         | U<br>11 | 0.0058         | 1                | 0        | U<br>U  | 0.00591        | 1               | 0                | 0       |
| VOLATILES   | 2.2-0.000000000000000000000000000000000           | 0.012  | 1              |          | D       | 20.05        | 1           | ~         | 11     | 6.05      | 1              | ~          | 11      |          |                  |                |        | 0.0005         | 1               | U<br>U          | U<br>H  | 0.0058         | 1                | บ        | B       | 0.0118         | '<br>1          | IJ               | Ŭ       |
| VOLATILES   | 2-Chloroethyl vinyl ether                         | 0.013  | 1              | ~        | Ū       | 0.03         | 1           | <<br><    | υ      | 0.00      | 1              | ~          | U       |          |                  |                |        | 0.011          | 1               | Ŭ               | Ű       | 0.0116         | 1                | Ű        | ប       | 0.0118         | t               | Ų                | U.      |
| VOLATILES   | 2-Chilorotoluene                                  | 1      |                | -        | -       | 0.01         | ,           | -         | -      |           |                |            | 2       |          |                  |                |        | 0.0055         | ;               | U               | Ų       | 0.0058         | 1                | U        | U       | 0.00591        | 1               | U                | U       |
| VOLATILES   | 2-Hexanone  | 0.013  | 1              | <        | U       | 0.05         | 1           | <         | ป      | 0.05      | 1              | <          | U       |          |                  |                |        | 0.011          | 1               | U               | U       | 0.0116         | 1                | U        | U       | 0.0118         | 1               | Ų                | U       |
| VOLATILES   | 2-Propenal  | 0.67   | 1              | <        | U       |              |             |           |        |           |                |            |         |          |                  |                |        |                |                 |                 |         |                |                  |          |         |                |                 |                  |         |
| VOLATILES   | 4-Chlorotoluene                                   | 1      |                |          |         |              |             |           |        |           |                |            |         |          |                  |                |        | 0.0055         | ŧ               | U.              | U       | 0.0058         | 1                | U        | U       | 0.00591        | 1               | U                | U       |
| VOLATILES   | Acetone   | 0.13   | 1              | <        | 0       | 0.1          | 1           | <         | U      | 0.1       | 1              | <          | U       |          |                  |                |        | 0.011          | t               | U               | U       | 0.0116         | 1                | U        | U       | 0.0118         | 1               | U                | U       |
|   | Activitative                                      | 0.13   | 1<br>  1       | <<br>/   | 9<br>11 |              |             |           |        |           |                |            |         |          |                  |                |        |                |                 |                 |         |                |                  |          |         |                |                 |                  |         |
| VOLATILES   | Alivi chloride                                    | 0.13   | 1              | د<br>ح   |         |              |             |           |        |           |                |            |         |          |                  |                |        |                |                 |                 |         |                |                  |          |         |                |                 |                  |         |
|   |   | 1      | •              | -        | -       |              |             |           |        |           |                |            |         |          |                  |                |        |                |                 |                 |         |                |                  |          |         |                |                 | -                |         |



N. 12

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-111 Concentrations of Chemicals in Soil Samples Associated with WR Sump 005

| [SUMP] = WRSUMP005 |                           |        |           |    |        |        |        |     |            |        |         |      |    |        |         |         |    |        |       |        |     |        |          |        |     |         |        |        |       |
|--------------------|---------------------------|--------|-----------|----|--------|--------|--------|-----|------------|--------|---------|------|----|--------|---------|---------|----|--------|-------|--------|-----|--------|----------|--------|-----|---------|--------|--------|-------|
| LOCATION _CODE     | ION_CODE                  |        |           |    |        | 1      | H-WRS  | 5-5 |            | L      | H-WR    | S-5  |    | WRS    | UMP(    | 005-SB6 | )1 | WRSU   | MP00  | 5-SB01 |     | WRSU   | MP005    | -S802  |     | WRSU    | AP005  | -\$802 |       |
| SAMPLE_NO          |                           | U      | HS-2-0    | 5  |        | LH     | -WRS-  | 5_1 |            | 1.H    | WRS     | -5_2 |    | WRSP   | MP00    | 5-SB01- | 01 | WRSM   | P005- | B01-0  | 2   | WRSMP  | 005-S    | B02-02 | 2   | WRSMPO  | 15-SBC | 2-02-0 | x     |
| SAMPLE_DATE        |                           | 1/     | /10/199   | 95 |        | 7      | /12/19 | 93  |            | 7      | /12/19  | 93   |    |        | 9/22/2  | 2005    |    | 9      | 22/20 | 76     |     | 9/2    | 22/200   | 6      |     | 9/2     | 2/200  | 6      |       |
| Depth              |                           | 0      | ) - 0.5 F | Ft |        |        | 0-2F   | 1   |            | :      | 3 - 4.5 | Ft   |    |        | 0.5 - 0 | ).5 Ft  |    | ł      | 5-5F  | t      |     | 5      | 5 - 5 Ft |        |     | 5       | - 5 Ft |        |       |
| SAMPLE_PURPOSE     |                           |        | REG       |    |        |        | REG    |     |            |        | REG     | i    |    |        | RE      | G       |    |        | REG   |        |     |        | REG      | -      |     |         | FD     |        |       |
| Test Group         | Parameter (Units = mg/kg) | Result | DIL       | LQ | VQ     | Result | DIL    | LQ  | .VQ        | Result | DL      | LQ   | VQ | Result | ÐIL     | . LQ    | VQ | Result | DIL   | LQ     | YQ  | Result | DIL      | LQ     | VQ  | Result  | DIL    | LQ     | VQ    |
| VOLATILES          | Benzene                   | 0.007  | 1         | <  | 6      | 0.005  | 1      | <   | U          | 0.005  | 1       | <    | U  |        |         |         |    | 0.0055 | 1     | U      | บ   | 0.0058 | 1        | U      | 8   | 0.00591 | 1      | U      | U     |
| VOLATILES          | Bromobenzene              |        |           |    |        |        |        |     |            |        |         |      |    |        |         |         |    | 0.0055 | 1     | U      | U   | 0.0058 | 1        | IJ     | U   | 0.00591 | t      | U      | U     |
| VOLATILES          | Bramochloromethane        |        |           |    |        |        | -      |     |            |        |         |      |    |        |         |         |    | 0.0055 | 1     | U      | U   | 0.0058 | 1        | U      | U   | 0.00591 | i      | υ      | U     |
| VOLATILES          | Bromodichloromethane      | 0.007  | 1         | <  | U      | 0.005  | 1      | <   | U          | 0.005  | 1       | <    | Ð  |        |         |         |    | 0.0055 | 1     | U      | U   | 0.0058 | 1        | U      | U   | 0.00591 | 1      | U      | IJ    |
| VOLATILES          | Bramoform                 | 0.007  | Ŧ         | <  | U      | 0.005  | 1      | <   | U          | 0.005  | 1       | <    | U  |        |         |         |    | 0.0055 | 1     | U      | U   | 0.0058 | 1        | IJ     | U   | 0.00591 | 1      | U      | U     |
| VOLATILES          | Bromomethane              | 0.013  | 1         | <  | U      | 0.01   | 1      | <   | U          | 0.01   | 1       | < .  | Ð  |        |         |         |    | 0.011  | 1     | U      | U   | 0.0116 | 1        | U      | U   | 0.0118  | 1      | υ      | υ     |
| VOLATILES          | Carbon disulfide          | 0.007  | 1         | <  | U      | 0.005  | 1      | <   | U          | 0.005  | 1       | <    | U  |        |         |         |    | 0.0055 | 1     | U      | υ   | 0.0058 | 1        | U      | U   | 0.00591 | 1      | U      | U     |
| VOLATILES          | Carbon tetrachloride      | 0.007  | 1         | <  | U      | 0.005  | 1      | <   | U          | 0.005  | 1       | <    | U  |        |         |         |    | 0.0055 | 1     | U      | ប   | 0.0058 | 1        | U      | U   | 0.00591 | 1      | U      | U     |
| VOLATILES          | Chlorobenzene             | 0.007  | 1         | <  | IJ     | 0.005  | 1      | <   | IJ         | 0.005  | 1       | <    | U  |        |         |         |    | 0.0055 | 1     | Ų      | U   | 0.0058 | 1        | ¥      | IJ  | 0.00591 | 1      | U      | U     |
| VOLATILES          | Chloroethane              | 0.013  | 1         | <  | U      | 0.01   | 1      | <   | U          | 0.01   | 1       | <    | U  |        |         |         |    | 0.011  | 1     | U      | U   | 0.0116 | 1        | U      | U   | 0.0118  | 1      | U      | U     |
| VOLATILES          | Chloroform                | 0.007  | 1         | <  | U      | 0.005  | t      | <   | U          | 0.005  | 1       | <    | υ  |        |         |         |    | 0.0055 | 1     | U      | υ   | 0.0058 | 1        | U      | U   | 0.00591 | 1      | U      | U     |
| VOLATILES          | Chloromethane             | 0.013  | 1         | <  | l}     | 0.01   | 1      | <   | ป          | 0.01   | 1       | <    | U  |        |         |         |    | 0.011  | 1     | U      | U   | 0.0116 | 1        | U      | U   | 0.0118  | 1      | U      | U     |
| VOLATILES          | Chloroprene               | 0.13   | 1         | <  | ម      |        |        |     |            |        |         |      |    |        |         |         |    |        |       |        |     |        |          |        |     |         |        |        |       |
| VOLATILES          | cis-1,2-Dichloroethene    |        |           |    |        |        |        |     |            |        |         |      |    |        |         |         |    | 0.0055 | 1     | U      | U   | 0.0058 | 1        | U      | Ų   | 0.00591 | 1      | U      | U     |
| VOLATILES          | cis-1,3-Dichloropropene   | 0.007  | 1         | <  | U      | 6.005  | t      | <   | υ          | 0.005  | 1       | <    | U  |        |         |         |    | 0.0055 | 1     | U      | U   | 0.0058 | 1        | U      | υ   | 0.00591 | 1      | U      | U     |
| VOLATILES          | Dibromochlozomethane      | 0.007  | 1         | <  | U      | 0.005  | 1      | <   | U          | 0.005  | 1       | <    | U  |        |         |         |    | 0.0055 | 1     | IJ     | U   | 0.0058 | 1        | U      | U   | 0.00591 | 1      | U      | ŧ     |
| VOLATILES          | Dibromomethane            | 0.027  | 1         | <  | U      |        |        |     |            |        |         |      |    |        |         |         |    | 0.0055 | 1     | U      | U · | 0.0058 | 1        | U      | ប   | 0.00591 | 1      | U      | U     |
| VOLATILES          | Dichlorodifluoromethane   | 0.027  | 1         | <  | U      |        |        |     |            |        |         |      |    |        |         |         |    | 0.011  | 1     | U      | U   | 0.0116 | 1        | υ      | U   | 0.0118  | 1      | U      | ម     |
| VOLATILES          | Ethyl methacrylate        | 0.027  | 1         | <  | U      |        |        |     |            |        |         |      |    |        |         |         |    |        |       |        |     |        |          |        |     |         |        |        |       |
| VOLATILES          | Ethybenzene               | 0.007  | 1         | <  | U      | 0.005  | 1      | <   | υ          | 0.005  | 1       | <    | U  |        |         |         |    | 0.0055 | 1     | U      | U   | 0.0058 | 1        | U      | υ   | 0.00591 | 1      | U      | U     |
| VOLATILES          | Hexachlorobutadiene       |        |           |    |        |        |        |     |            |        |         |      |    |        |         |         |    | 0.0055 | 1     | U      | υ   | 0.0058 | 1        | U      | υ   | 0.00591 | 1      | U      | U     |
| VOLATILES          | IODOMETHANE               | 0.013  | 1         | <  | U      |        |        |     |            |        |         |      |    |        |         |         |    |        |       |        |     |        |          |        |     |         |        |        |       |
| VOLATILES          | ISOBUTYL ALCOHOL          | 2.7    | 1         | <  | U      |        |        |     |            |        |         |      |    |        |         |         |    |        |       |        |     |        |          |        |     |         |        |        |       |
| VOLATILES          | Isopropylbenzene          |        |           |    |        |        |        |     |            |        |         |      |    |        |         |         |    | 0.0055 | 1     | U      | U   | 0.0058 | 1        | U      | U   | 0.00591 | 1      | U      | U     |
| VOLATILES          | m.p-Xvtenes               |        |           |    |        |        |        |     |            |        |         |      |    |        |         |         |    | 0.0055 | 1     | U      | υ   | 0.0058 | 1        | U      | U   | 0.00591 | 1      | U      | U     |
| VOLATILES          | Methacryloniaile          | 0.027  | 1         | <  | ប      |        |        |     |            |        |         |      |    |        |         |         |    |        |       |        |     |        |          |        |     |         |        |        |       |
| VOLATILES          | Methyl isobutyl ketone    | 0.013  | 1         | <  | U      | 0.05   | 1      | <   | U          | 0.05   | 1       | <    | U  |        |         |         |    | 0.011  | 1     | U      | ប   | 0.0116 | 1        | ប      | υ   | 0.0118  | 1      | U      | U     |
| VOLATILES          | METHYL METHACRYLATE       | 0.027  | 1         | <  | Ш      |        |        |     |            |        |         |      |    |        |         |         |    |        |       |        |     |        |          |        |     |         |        |        |       |
| VOLATILES          | Methylene chloride        | 0.007  | 1         | <  | U      | 0.005  | 1      | <   | U          | 0.005  | 1       | <    | U  |        |         |         |    | 0.0019 | 1     | J      | J   | 0.0058 | ĩ        | U      | U   | 0.00591 | 1      | U      | U     |
| VOLATILES          | Naphthalene               |        |           |    |        |        |        |     |            |        |         |      |    |        |         |         |    | 0.011  | 1     | U      | U   | 0.0116 | 1        | U      | ປ   | 0.0118  | 1      | U      | υ     |
| VOLATILES          | p-BUTYLBENZENE            |        |           |    |        |        |        |     |            |        |         |      |    |        |         |         |    | 0.0055 | 1     | υ      | U   | 0.0058 | 1        | U      | U   | 0.00591 | 1      | U      | U     |
| VOLATILES          | D-PROPYLBENZENE           |        |           |    |        |        |        |     |            |        |         |      |    |        |         |         |    | 0.0055 | 3     | ß      | U   | 0.0058 | 3        | U      | บ   | 0.00591 | 1      | U      | U     |
| VOLATILES          | Pentachloroethane         | 0.027  | 1         | ~  | 11     |        |        |     |            |        |         |      |    |        |         |         |    |        |       |        |     |        |          |        |     |         |        |        |       |
| VOLATILES          | p-ISOPROPYLTOL HENE       |        | •         |    | -      |        |        |     |            |        |         |      |    |        |         |         |    | 0.0055 | 1     | u      | ŧ   | 0.0058 | 1        | ŧ      | ย   | 0.00591 | 1      | U      | U     |
| VOLATILES          | Provinsitrile             | 0.067  | 1         | ¢  | U      |        |        |     |            |        |         |      |    |        |         |         |    |        |       | -      | -   |        |          | -      | -   |         |        |        | •     |
| VOLATILES          | sec-BLITYI BENZENE        | 0.001  |           |    | ~      |        |        |     |            |        |         |      |    |        |         |         |    | 0.0055 | 1     | ư      | U   | 0.0058 | 1        | U      | υ   | 0.00591 | 1      | ŧ      | U     |
| VOLATILES          | Storepe                   | 6.007  | 1         |    | н      | 0.005  | 1      | ~   | 11         | 8 005  | 1       | ~    | 6  |        |         |         |    | 0.0055 | 1     | 14     | 0   | 0.0058 | 1        | H      | ม   | 0.00591 | 1      | ů      | Ū     |
| VOLATIES           | tert-BLITVI BENZENE       | 0.001  |           |    | Ŭ      | 0.000  |        | •   | Ť          | 4.000  | •       |      | Ũ  |        |         |         |    | 0.0055 | ,     | н      | 11  | 0.0058 | 1        | 1      | IJ. | 0.00591 | 1      | ň      | ň     |
| VOLATILES          | Tatrachomethane           | 0.007  | 1         | ,  | 44     | 0.005  | 1      |     | 11         | 0.005  | 1       |      | 51 |        |         |         |    | 0.0005 | 1     | 11     | й   | 0.0058 | ÷        | n      | ŭ   | D 00591 | 1      | 11     | U U   |
|                    | Toluane                   | 0.007  |           | 2  | ü      | 0.005  | 1      | 2   |            | 0.005  | 1       |      | 0  |        |         |         |    | 0.0005 | ,     | 11     |     | 0.0058 | 1        |        | u U | 0.00591 | ,<br>1 | ม      | Ď     |
|                    | tongene                   | 0.007  | ,         | <  | 0      | 0.005  | '      | •   | 0          | 0.005  | 1       | ·    | 0  |        |         |         |    | 0.0055 | ,     | 11     |     | 0.0056 | ;        |        | 1   | 0.00091 | 1      |        |       |
| VOLATILES          | trans 1.2 Disblessemesse  | 0.007  |           |    | л      | 0.005  |        |     |            | 0.005  |         |      |    |        |         |         |    | 0.0055 |       | 11     | 0   | 0.0058 |          | 11     | 2   | 0.00391 | 1      | ü      | 13    |
| VOLATILES          | baris-1,3-Dictioropiopene | 0.007  |           | ~  |        | 0.005  |        | ×   | 0          | 0.005  | 1       | •    | 0  |        |         |         |    | 0.0055 |       | U      | 0   | 0.0050 | '        | 0      | U   | 0.00391 | '      | 0      | 0     |
|                    | uans-1,4-D/CROID-2-DUIEne | 0.027  | 1         | <  | 0      | 0.000  |        | ~   | <b>,</b> , | 0.007  |         | -    | 14 |        |         |         |    | BASE   |       |        | 11  | 0.0000 |          |        |     | 0.00004 | •      | 14     | 12    |
| VOLATILES          | Tricktorefluore mothere   | 0.007  | 1         | <  | U      | 0.005  |        | <   | U          | 0.005  | 1       | <    | v  |        |         |         |    | 0.0055 | •     | 0      | 0   | 0.0008 | •        | 11     | 0   | 0.00091 | 1      | 11     | 0     |
| VOLATILES          | LISCINOTORIUGIOMETRARE    | 0.013  | 1         | <  | U<br>U |        |        |     |            | 0.00   |         |      |    |        |         |         |    | 0.011  | 1     | 0      | 0   | 0.0116 | 1        | U<br>U | 0   | 0.0116  | 1      | U      | 0     |
| VULAHLES           | vinyi acetate             | 0.013  | 1         | <  | U      | 0.05   | 1      | <   | U          | 0.05   | 1       | <    | 0  |        |         |         |    | 0.011  | •     | 0      | U   | 0.0116 | t<br>A   | U<br>  | 03  | 0.0118  | 1      | U      | U<br> |
| VULATILES          | Veryi chionde             | 0.013  | 1         | <  | U      | 0.01   | 1      | <   | U          | 0.01   | 1       | <    | U  |        |         |         |    | 0.011  | Ŧ     | υ      | U   | 0.0176 | 1        | U      | υ   | 0.0118  | 1      | U      | U     |
| VOLATILES          | Xylenes, lotal            | 0.007  | 3         | <  | U      | 0.005  | 1      | <   | U          | 0.005  | 1       | <    | U  |        |         |         |    |        |       |        |     |        |          |        |     |         | -      |        |       |

Footnotes are shown on cover page to Tables Section.



Table 3-112 Concentrations of Chemicals in Soil Samples Associated with WR Sump 006

| {SUMP} = WRSUMP006<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |   | 35SUMP012-SB01<br>35-SMP12-SB01-02<br>9/12/2006<br>11 - 11 Ft | 355UMP013-5801<br>35-5MP13-5801-01<br>9/12/2006<br>0.5 - 0.5 Ft | 35SUMP013-SB01<br>35-SMP13-SB01-02<br>9/12/2006<br>10 - 10 Ft | LH-\$12-01<br>LH-\$12-01_1<br>7/14/1993<br>0 - 2 Ft | LH-\$12-01<br>LH-\$12-01_2<br>7/11/1993<br>9-11 Ft | LH-S12-02<br>LH-S12-02_1<br>7/11/1993<br>0-2 F1 | LH-\$12-02<br>LH-\$12-02_2<br>7/11/1993<br>9-11 Ft | LH-\$13-01<br>LH-\$13-01 QC<br>7/10/1993<br>0 - 2 Ft | LH-S13-01<br>LH-S13-01_1<br>7/10/1993<br>0-2 Ft | LH-\$13-01<br>LH-\$13-01_2<br>7/10/1993<br>8 - 10F1 | LH-\$13-02<br>LH-\$13-02_1<br>7/10/1993<br>0-2 Ft | LH-\$13-02<br>LH-\$13-02_2<br>7/10/1993<br>8 - 10 Ft | LHS-2-01<br>LHS-2-01<br>1/9/1995<br>0 - 0.5 Ft |
|--|---|---|---|---|---|--|---|--|--|---|---|---|--|--|
| SAMPLE_PURPOSE<br>Test Gmup  | Parameter (Units - marke)                     | REG<br>Result D/I I O VO                                      | REG<br>Result DIL 10 VO   | REG<br>Besuit DIL LO VO                                       | RÉG<br>Besult 01 IO VO                              | REG<br>Result Dill I:O VO                          | REG<br>Result DB IO VO                          | RÉG<br>Result Dit. FO VO                           | FD<br>Result DIL IO VO                               | REG<br>Result DBL I D VO                        | HEG<br>Result DIL 10 VO                             | REG<br>Besuet DIL 10 VO                           | REG<br>Result DL 10 VO                               | REG<br>Result Dil LO VO                        |
| EXPLOSIVES   | 1,3,5-Tholobenzene                            |   |   |   | HOULDE EN YO  | NOUN DIE LOS TO                                    |   | HUMBE DIE EUZ YU                                   | -10000 072 20 70                                     |   |   | -10001 212 202 902                                | Income on the Phy                                    | 0.22 1 < U                                     |
| EXPLOSIVES   | 1,3-Dinitrobenzene                            |   |   |   |   |  |   |  |  |   |   |   |  | 0.2½ t < U                                     |
| EXPLOSIVES   | 2,4,6-Trinitrototuene                         |   |   |   |   |  |   |  |  |   |   |   |  | 0.22 1 < U                                     |
| EXPLOSIVES   | 2,4-Dinitrotoluene<br>2,5-Dinitrotoluene      |   |   |   | 0.33 1 < 0  | 9.33 1 < U   | 0.33 1 < U                                      | 0.33 1 < U   | 0.33 1 < 9<br>0.33 1 < 11                            | 0.33 1 < U                                      | 0.33 1 < 0  | 0.33 1 < U  | 0.33 1 < 0   | 0.22 1 < 0                                     |
| EXPLOSIVES   | 4-Amino-2.6-dinitrotoluene                    |   |   |   | 0.35 T K U  | 0.33   < 0   | 0.00 1 < 0                                      | 0.33 I K U   | 0.35 1 4 6   | 0.20 3 4 0                                      | 0.03 7 5 0  | 0.00 1 4 0  |  | 0.45 1 < U                                     |
| EXPLOSIVES   | нмх   |   |   |   |   |  |   |  |  |   |   |   |  | 2 1 < U  |
| EXPLOSIVES   | m-Nitrotokuene                                |   |   |   |   |  |   |  |  |   |   |   |  | 0.9 1 < U                                      |
| EXPLOSIVES   | Nitrobenzene                                  |   |   |   |   |  |   |  |  |   |   |   |  | 0.23 1 < U                                     |
| EXPLOSIVES   | o-Nitrotoluene                                |   |   |   |   |  |   |  |  |   |   |   |  | 0.9 1 < 0                                      |
| EXPLOSIVES<br>EXPLOSIVES   | p-miroibiliterie<br>RDX                       |   |   |   |   |  |   |  |  |   |   |   |  | 0.97 1 < U                                     |
| EXPLOSIVES   | Tetryl  |   |   |   |   |  |   |  |  |   |   |   |  | 0.67 1 < U                                     |
| METALS   | Aluminum                                      |   |   |   | 8080 1  | 19000 1  | 20809 1   | 9800 1   | <b>6940 1</b>  | 8010 1  | 9560 1  | 8260 1  | 10600 1  | 12700 1  |
| METALS   | Antimony                                      |   |   |   | 31 < U  | 3 1 < 1/   | 31 < U  | 31 < U   | 31 < U   | 3 1 < U   | 3 1 < U   | 31 < U  | 31 < U   | 13.7 1 < UJ                                    |
| METALS   | Arsenic                                       |   |   |   | 1.4 1   | 1 1  | 4.8 1   | 1.7 1  | 2.3 1  | 3.7 1   | 1.6 1   | 1.9 1   | 1.3 1  | 8.1 1 J  |
| METALS   | Banten<br>Cadmium                             |   |   |   | 1/3 1   | 230  | 124 3   | 4/,4  <br>1 1 < II                                 | /4.00 k<br>1 1 c 11                                  | 08.0 I<br>1 1 < Jł                              | 3 1 < 11  | 90.4 I<br>1 1 < 11                                | 35.4 €<br>1 1 < II                                   | 14 1 < 8                                       |
| METALS   | Calcium                                       |   |   |   | 490 1   | 1660 1   | 1810 1  | 1520 1   | 897 1  | 982 1   | 1760 1  | 1250 1  | 1030 1   | 1650 1   |
| METALS   | Chromium                                      |   |   |   | 8.3 t   | 25.5 1   | 34 1  | 14.7 1   | 14.5 1   | 17.4 1  | 12.5 1  | 12 1  | 12.3 1   | 37.8 1 J                                       |
| METALS   | Cobait  |   |   |   | 3.4 1   | 7.9 1  | 9.6 1   | 37.9 1   | 6.4 1  | 6.6 1   | 27.9 1  | 10.8 1  | 9.9 1  | 9.8 1  |
| METALS   | Copper  |   |   |   | 2.1 1   | 7.8 1  | 2.6 1   | 7 1  | 1.4 1  | 2.7 1   | 9.4 1   | 2.6 1   | 3.6 1  | 15.3 1   |
| METALS   | lion  |   |   |   | 8260 T  | 31800 1  | 39800 T   | 10.7 1   | 15600 1  | 20/00 1   | 18000 1   | 13500 1   | 13200 3  | 35000 I<br>24.4 1                              |
| METALS   | Magnesium                                     |   |   |   | 435 1   | 2800 1   | 1260 1  | 1990 1   | 343 1  | 451 1   | 1920 1  | 505 1   | 1080 1   | 818 1  |
| METALS   | Manganese                                     |   |   |   | 64.1 1  | 145 1  | 255 1   | 228 1  | 287 1  | 191 1   | 299 1   | 431 1   | 76.7 1   | 350 1 J  |
| METALS   | Mercury                                       |   |   |   | 0.1 1 < U   | 0.1 1 < U  | 0.1 1 < U                                       | 0.1 1 < U  | 0.1 1 × U  | 0.1 1 < U                                       | 0.1 1 < U   | 0.1 1 < Ŭ   | 0.1 1 < U  | 0.18 1   |
| METALS   | Potassium                                     |   |   |   | 538 1   | 1050 1   | 988 1   | 550 1  | 347 1  | 354 1   | 654 1   | 413 1   | 479 1  | 619 1  |
| METALS   | Selenium                                      |   |   |   | 11<0  | 11< 0  | 1 1 < U   |  | 11<0   | 1140  | 11<0  | 11<0  |  | 0.58 T J                                       |
| METALS   | Strontium                                     |   |   |   | 159 1   | 39.3 1   | 24 1  | 29.6 1   | 6.3 1  | 8.6 t   | 32.3 1  | 10 1  | 16.7 1   | 320 1  |
| METALS   | Thallium                                      |   |   |   |   |  |   |  |  |   |   |   |  | 68.4 1 < U                                     |
| METALS   | Zinc  |   |   |   | 13.1 1  | 58.1 1   | 31.6 1  | 49.3 1   | 15.2 1   | 33.5 t  | 50.9 1  | 18.2 1  | 28.1 1   | 222 1  |
| RANGE_ORGANICS   | Carbon Range C12-C28                          | 59.4 T U  | 62.8 1 U  | 60.8 1 U  |   |  |   |  |  |   |   |   |  |  |
| RANGE_ORGANICS   | CARBON RANGE C28-C35                          | 59.4 1 U  | 62.8 1 U  | 60.8 1 U  |   |  |   |  |  |   |   |   |  |  |
| SEMIVOLATILES  | 1 2.4-Trichlorohenzene                        | 39.4 1 0  | 02.0 1 0  | 00.a I 0  | 0.33 1 < 1  | 0.33 1 < 1/  | 033 1 < l∳                                      | 033 t < lt   | 0.33 1 < U   | 0.33 1 < U                                      | 0.33 1 < U  | 0.33 1 < 1J                                       | 0.33 1 < 8   | 0.56 1 < U                                     |
| SEMIVOLATILES  | 1,2-Dichiorobenzene                           |   |   |   | 0.33 1 < 0  | 0.33 1 < U   | 0.33 t < U                                      | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U-                                     | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < 0   | 0.56 1 < U                                     |
| SEMIVOLATILES  | 1,3-Dichlorobenzene                           |   |   |   | 0.33 1 < U  | 0.33 1 < U   | 0.33 1 < U                                      | 0.33 1 < U   | 6.33 1 < U   | 0.33 t < ⊍                                      | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U   | 0.56 1 < U                                     |
| SEMIVOLATILES  | 1,4-Dichlorobenzene                           |   |   |   | 0.33 1 < 0  | 0.33 1 < 0   | 0.33 1 < U                                      | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U                                      | 0.33 t < U  | 0.33 1 < U  | 0.33 1 < U   | 0.56 1 < U                                     |
| SEMIVOLATILES  | 2,4,5-1nchlorophenol                          |   |   |   | 1.65 1 < 1  | 1.65 1 < 0   | 1.65 1 < U                                      | 1.65 1 < U   | 1.65 1 < 0   | 1.65 1 < U                                      | 1.65 T < U<br>0.22 1 ∠ U                            | 1.65 T < U  | 1.65 1 < 1/  | 2.8 1 < U                                      |
| SEMIVOLATILES  | 2.4.0-11chlorophenol                          |   |   |   | 0.33 1 < 9  | 0.33 1 < 0   | 9.33 1 < U                                      | 0.33 1 < 13  | 0.33 1 < 0   | 0.33 1 < U                                      | 0.33 t < U  | 0.33 1 < 0  | 0.33 1 < 0   | 0.56 1 < U                                     |
| SEMIVOLATILES  | 2,4-Dimethylphenol                            |   |   |   | 0.33 1 < U  | 0.33 1 < U   | 0.33 1 < U                                      | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U                                      | 0.33 1 < U  | 0.33 1 < U  | 0.33 t < U   | 0.56 1 < U                                     |
| SEMIVOLATILES  | 2,4-Dinitrophenoi                             |   |   |   | 1.65 1 < U  | 1.65 1 < U   | 1.65 1 < U                                      | 1.65 t < U   | 1.65 1 < U   | 1.65 1 < U                                      | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U   | 2.8 1 < U                                      |
| SEMIVOLATILES  | 2,4-Dirstrotoluene                            |   |   |   |   |  |   |  |  |   |   |   |  | 0.56 1 < U                                     |
| SEMIVOLATILES<br>SEMIVOLATILES   | 2,6-Dimitrotoluene                            |   |   |   | 033 1 × H   | 099 5 2 11   | 813 1 2 11                                      | 023 1 2 1  | 0.92 1 4 11  | 033 t / H                                       | 033 1 2 11  | 0.33 1 4 11                                       | 033 1 4 1  | 0.56 1 < 1                                     |
| SEMIVOLATILES  | 2-Chlorophenot                                |   |   |   | 0.33 1 < U  | 0.33 1 < U   | 0.33 1 < U                                      | 0.33 1 < U   | 0.33 T < U   | 0.33 1 < U                                      | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U   | 0.56 T < U                                     |
| SEMIVOLATILES  | 2-Methylnaphthalene                           |   |   |   | 0.33 1 < U  | 0.33 1 < U   | 0.33 1 < U                                      | 0.33 1 < U   | 0.33 1 < U   | 0.33 t < U                                      | 0.33 t < U  | 0.33 1 < U  | 0.33 1 < U   | 0.56 1 < U                                     |
| SEMIVOLATILES  | 2-Methylphenol                                |   |   |   | 0.33 1 < U  | 0.33 1 < U   | 0.33 1 < U                                      | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U                                      | 0.33 t < U  | 0.33 1 < U  | 0.33 1 < U   | 0.56 1 < U                                     |
| SEMIVOLATILES  | 2-Nitroantine                                 |   |   |   | 1.65 1 < U  | 1.65 1 < U   | 1.65 1 < U                                      | 1.65 1 < U   | 1.65 1 < U   | 1.65 1 < U                                      | 1.65 1 < U  | 1.65 1 < 10                                       | 1.65 1 < U   | 2.8 1 < U                                      |
| SEMIVOLATILES  | 2-Nitrophenol<br>2-2: Disblombooxidioo        |   |   |   | 0.33 1 < U  | 0.33 1 < U   | 0.33 3 < U                                      | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U                                      | 0.33 1 < 0  | 0.33 1 < 0  | 0.33 1 < 0   | 0.56 T < U                                     |
| SEMIVOLATILES  | 3.5 - Octionoberaduale<br>3-Nitroaniline      |   |   |   | 1.65 1 < U  | 165 1 < 1  | 1.65 1 < 11                                     | 1.65 1 < 1/  | 1.65 1 < 17  | 1.65 1 < U                                      | 1.65 1 < U  | 1.65 1 < 1  | 1.65 1 < 0   | 2.8 t < U                                      |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol                    |   |   |   | 1.65 1 < U  | 1.65 1 < U   | 1.65 1 < U                                      | 1.65 1 < U   | 1.65 1 < U   | 1.65 t < U                                      | 1.65 1 < U  | 1.65 1 < 1  | 1.65 1 < 0   | 2.8 1 < U                                      |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether                    |   |   | · · · · · · · · · · · · · · · · · · ·                         | 0.33 1 < U  | 0.33 t < U   | 0.33 1 < U                                      | 0.33 1 < ⊍   | 0.33 1 < U   | 0.33 t < U                                      | 0.33 1 < U  | 0.33 1 < ∜  | 0.33 1 < U   | 0.56 1 < U                                     |
| SEMIVOLATILÉS  | 4-Chlora-3-methylphenol                       | 1   |   |   | 0.65 1 < U  | 0.65 t < U   | 0.65 t < U                                      | 0.65 1 < U   | 0.65 t < U   | 0.65 1 < U                                      | 0.65 1 < U  | 0.65 1 < U  | 0.65 1 < U   | 0.56 1 < U                                     |
| SEMIVOLATILES  | 4-Chioroaniline                               |   |   |   | 0.65 1 < U  | 0.65 t < U   | 0.65 1 < U                                      | 0.65 1 < U   | 0.65 1 < U   | 0.65 t < U                                      | 0.65 t < U  | 0.65 t < U  | 0.65 1 < U   | 0.56 1 < U                                     |
| SEMIVOLATILES  | 4-Chiorophenyl phenyl ether<br>4-Methylahanol |   |   |   | 0.33 1 < U<br>0.33 1 - U                            | 0.33 1 < U<br>0.33 1 - U                           | 0.33 i < U                                      | 0.33 1 < U<br>∩33 1 ∠ U                            | 0.33 1 < U<br>0.93 1 - 14                            | 0.33 1 < U<br>0.33 1 < U                        | ⊎.≾.s i < U<br>833 1 ∠ U                            | 0.33 1 < 10<br>0.33 1 - 11                        | U.33 i < U   | 0.570 i < U<br>0.56 t ∠ U                      |
| SEMIVOLATILES<br>SEMIVOLATILES   | 4-Nitroaniline                                |   |   |   | 1.65 1 < U  | 1.65 1 < 11  | 1.65 1 < 1                                      | ∪ > ۱ درس<br>ا! > 1,65                             | 1,65 t < U   | 1.65 t < U                                      | 1,65 1 < U  | 1.65 1 < 1  | 1.65 1 < U   | 2.8 t < U                                      |
| SEMIVOLATILES  | 4-Nitrophenol                                 |   |   |   | 1.65 1 < U  | 1.65 1 < U   | 1.65 1 < 1                                      | 1.65 1 < U   | 1.65 1 < U   | 1.65 1 < U                                      | 1.65 1 < U  | 1.65 1 < U  | 1.65 1 < U   | 2.8 1 < U                                      |
| SEMIVOLATILES  | Acenaphthene                                  |   |   |   | 0.33 1 < U  | 9.33 1 < U   | 0.33 1 < U                                      | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U                                      | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U   | 0.56 1 < U                                     |
| SEMIVOLATILES  | Acenaphthylene                                |   |   |   | 0.33 1 < U  | 0.33 t < U   | 0.33 1 < U                                      | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 ≺ U                                      | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U   | 0.56 1 < U                                     |
| SEMIVOLATILES  | Anthracene                                    | 1   |   |   | 0.33 1 < U  | 0.33 1 < U   | 0.33 1 < U                                      | 0.33 1 < U   | 0.33 1 < U   | 0.33 1 < U                                      | 0.33 1 < U  | 0.33 1 < U  | 0.33 1 < U   | 0.56 1 < U                                     |
| SEMIVOLATILES  | Benzo(a)anthracene<br>Benzo(a)nyrrane         |   |   |   | 0.33 I < U  | 9.33 T < U<br>633 t ∠ U                            | 0.33 1 < U<br>∩33 1 < U                         | 10.333 1 < U<br>0.33 1 ∠ U                         | 0.33 1 < U   | 0.33 1 < U<br>0.33 1 < H                        | 9.33 1 < U<br>833 1 ≁ ₽                             | 0.33 1 < 10<br>0.33 1 - 24                        | - 1,33 1 < U<br>- 1,33 1 ∠ U                         | 0.50 1 < U<br>0.077 1 J                        |
| SEMIVOLATILES  | Serrolappiere<br>Berzo(b)Auxranhene           | 1   |   |   | u.a⇒r< u<br>8,33 1 < l≯                             | 0.33 t < 11  | 0.33 t < H                                      | u⇔orr≮ ∪<br>0,33-1 < †i                            | 0,33 t < li  | 9,33 1 < Lł                                     | 0.33 t < 11   | 0.33 1 < 1J                                       | 0.33 1 < U   | 0.13 1 1                                       |
|  |   | 1 .   |   |   |   |  |   |  |  |   |   | • • • •   |  | -  |

Shaw Environmental, Inc.

Table 3-112 Concentrations of Chemicals in Soil Samples Associated with WR Sump 006

| [SUMP] ≈ WRSUMP006<br>±OCATION_CODE |   | 35SUMP012-SB01              | 35SUMP013-SB01            | 35SUMP013-S801           | LH-S12-01                      | LH-\$12-01                 | 1.14-512-02                    | LH-\$12-02                     | LH-\$13-01               | LH-S13-01                      | LH-S13-01                      | LH-\$13-02                     | LH-S13-02                | LHS-2-01                  |
|-------------------------------------|---|-----------------------------|---------------------------|--------------------------|--------------------------------|----------------------------|--------------------------------|--------------------------------|--------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------|---------------------------|
| SAMPLE_NO                           |   | 35-SMP12-SB01-02            | 35-SMP13-SB01-01          | 35-SMP13-SB01-02         | LH-\$12-01_1                   | LH-S12-01_2                | LH-\$12-02_1                   | LH-\$12-02_2                   | LH-St3-01 QC             | LH-\$13-01_1                   | LH-S13-01_2                    | LH-\$13-02_1                   | LH-\$13-02_2             | LHS-2-01                  |
| SAMPLE_DATE<br>DEPTH                |   | 9/12/2006<br>11 - 11 Ft     | 9/12/2006<br>0.5 - 0.5 Ft | 9/12/2006<br>10 - 10 Ft  | 0-2 Ft                         | 7/11/1993<br>9-11 Ft       | 0 - 2 Ft                       | 7/11/1993<br>9 - 11 Ft         | 0-2 Ft                   | //10/1993<br>0-2 Ft            | 7/10/1993<br>8 - 10 Ft         | 0-2 Ft                         | 7/10/1993<br>8 - 10 Ft   | 0-0.5 Ft                  |
| SAMPLE_PURPOSE                      |   | REG                         | REG                       | REG                      | REG                            | REG                        | REG                            | REG                            | FD                       | REG                            | REG                            | REG                            | REG                      | REG                       |
| Test Group<br>SEMIVOLATILES         | Parameter (Units = mg/kg)<br>Benzo(obilgen/ene            | Result DIL LQ VQ            | Result DIL LQ VQ          | Result DIL 1.0 VO        | Result DIL LQ VQ<br>0.33 t < U | Result DIL LO VO           | Result DIL LQ VQ<br>0.33 1 < U | Result D1L LQ VQ<br>0.33 1 < U | 0.33 1 < 10              | Result DIL LQ VQ<br>0.33 1 < U | Result DIL LQ VQ<br>0.33 1 < U | Result DIL LQ VQ<br>0.33 1 < U | 0.33 1 < U               | 0.56 1 < U                |
| SEMIVOLATILES                       | Benzo(k)fluoranthene                                      | ]                           |                           |                          | 0.33 t < U                     | 0.33 1 < U                 | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < U                     | 0.33 f < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.56 1 < U                |
| SEMIVOLATILES                       | Benzoic Acid<br>Romad Alexabel                            |                             |                           |                          | 1.65 1 < U<br>0.65 t ∠ U       | 1.65 1 < U<br>0.65 1 < U   | 1.65 1 < U                     | 1.65 1 < U                     | 1.65 1 < U<br>9.65 1 < U | 1.65 1 < 1                     | 1.65 1 < U                     | 1.65 1 < U                     | 1.65 1 < U<br>0.65 1 < U | 2.8 1 < U<br>056 1 < 1    |
| SEMIVOLATILES                       | bis(2-Chloroethoxy)methane                                |                             |                           |                          | 0.33 1 < U                     | 0.33 t < U                 | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < 0                     | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.56 1 < U                |
| SEMIVOLATILES                       | bis(2-Chloroethyl)ether                                   | ]                           |                           | -                        | 0.33 1 < U                     | 0.33 t < U                 | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < U                     | 0.33 t < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.56 1 < U                |
| SEMIVOLATILES<br>SEMIVOLATILES      | bis(2-Chloroisopropyl)ether<br>his(2-Eftwihexyliohthalate | -                           |                           |                          | 0.33 1 < U<br>0.33 1 < U       | 0.33 1 < U<br>0.33 1 < U   | 0.33 1 < U<br>0.33 1 < U       | 0.33 1 < U<br>0.33 1 < U       | 0.33 1 < U<br>0.349 1    | 0.33 1 < 0                     | 0.33 1 < 0                     | 0.33 1 < 0<br>0.33 1 < 0       | 0.33 1 < U<br>0.33 1 < U | 0.56 1 < U<br>0.11 1 J    |
| SEMIVOLATILES                       | Butyl benzyl phthalate                                    | ]                           |                           |                          | 0.33 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < 1                     | €.33 1 < U               | 0.56 1 < U                |
| SEMIVOLATILES                       | Chrysene  |                             |                           |                          | 0.33 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0156 1 < U                |
| SEMIVOLATILES                       | Dibenzo(a,njaninracene<br>Dibenzofuran                    |                             |                           |                          | 0.33 1 < U                     | 0.33 1 < U                 | 0.33 1 < 0                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < 0                     | 0.33 1 < 0                     | 0.33 1 < U                     | 0.33 1 < U               | 0.56 1 < U                |
| SEMIVOLATILES                       | Diethył phthalate   |                             |                           |                          | 0.33 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 t < U               | 0.56 1 < U                |
| SEMIVOLATILES                       | Dimethyl phthalate  |                             |                           |                          | 0.33 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                     | 0.33 1 < U<br>0.33 1 < U       | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 1                     | 0.33 1 < 0                     | 0.33 1 < U<br>£33 1 < ∐        | 0.33 1 < U<br>0.33 1 < U | 0.56 1 < U<br>0.56 1 < U  |
| SEMIVOLATILES                       | di-n-Octyl phthalate                                      |                             |                           |                          | 0.33 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < U                     | 0.33 1 < 0                     | 0.33 1 < U                     | 0.33 1 < U               | 0.56 1 < U                |
| SEMIVOLATILES                       | Ruoranthene   |                             |                           |                          | 0.33 1 < U                     | 0.33 I < U                 | 0.33 t < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.56 1 < U                |
| SEMIVOLATILES<br>SEMIVOLATILES      | Huorene<br>Hexachlorobenzene                              | 1                           |                           |                          | 0.33 1 < 0<br>0.33 1 < 0       | 0.33 1 < U                 | 0.33 1 < 0                     | 0.33 1 < U<br>0.33 1 < U       | 0.33 1 < 0               | 0.33 i < 0<br>0.33 1 < 0       | 0.33 i < 0<br>0.33 i < 0       | 0.33 1 < 0                     | 0.33 t < 0               | 0.56 1 < U                |
| SEMIVOLATILES                       | Hexachlorobutadiene                                       |                             |                           |                          | 0.33 1 < V                     | 0.33 .1 < U                | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.56 1 < U                |
| SEMIVOLATILES                       | Hexachlorocyclopentadiene                                 |                             |                           |                          | 0.33 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < 1/                    | 0.33 t < U               | 0.56 1 < U                |
| SEMIVOLATILES                       | Indeno(1,2,3-cd)pyrene                                    |                             |                           |                          | 0.33 1 < U                     | 0.33 1 < U                 | 0.33 1 < 0                     | 0.33 1 < U                     | 0.33 1 < 1/              | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < 4                     | 0.33 1 < U               | 0.56 1 < U                |
| SEMIVOLATILES                       | Isophorone  |                             |                           |                          | 0.33 1 < 1/                    | 0.33 1 < U                 | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < IJ              | 0.33 1 < U                      1 < U                |
| SEMIVOLATILES<br>SEMIVOLATILES      | Naphthalene<br>Nitrohenzene                               |                             |                           |                          | 0.33 1 < 1)<br>0.33 1 < 1)     | 0.33 1 < €<br>0.33 1 < €   | 0.33 1 < U<br>0.33 1 < U       | £0.33 1 < U<br>0.33 1 < U      | 0.33 1 < U<br>0.33 1 < U | 0.33 1 < 0<br>0.33 1 < U       | 0.33 1 < U<br>0.33 1 < U       | 0.33 1 < U<br>0.33 1 < U       | 0.33 1 < U<br>0.33 1 < U | 0.56 1 < 0<br>0.56 1 < 0  |
| SEMIVOLATILES                       | n-Nitroso-di-n-propylamine                                |                             |                           |                          | 0.33 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.56 1 < U                |
| SEMIVOLATILES                       | n-Nitrosodiphenylamine                                    | ]                           |                           |                          | 0.33 1 < U                     | 0.33 1 < U                 | 0.33 1 < 9                     | 0.33 t < U                     | 0.33 1 < U               | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < 6                     | 0.33 1 < U               | 0.56 1 < U                |
| SEMIVOLATILES                       | Pentachiorophenol<br>Phenanthrene                         |                             |                           |                          | 0.33 1 < 0                     | 1.65 1 < 10<br>0.33 1 < 10 | 0.33 1 < 1                     | 0.33 1 < U                     | 0.33 1 < 10              | 0.33 1 < U                      1 < U                |
| SEMIVOLATILES                       | Phenol  |                             |                           |                          | 0.33 1 < U                     | 0.33 1 < U                 | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.56 1 < U                |
| SEMIVOLATILES                       | Pyrene<br>1.1.1.2-Tetrachlomethane                        | 0.00536 1 11                |                           | 0.0051 1 11              | 0.33 1 < U                     | 0.33 î < U                 | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < U               | 0.33 1 < U                     | 0.33 1 < U                     | 0.33 1 < 0                     | 0.33 1 < U               | 0.56 1 < U<br>0.017 1 < U |
| VOLATILES                           | 1.1.1-Trichloroethane                                     | 0.00536 1 U                 |                           | 0.0051 1 U               | 0.005 1 < U                    | 0.005 1 < U                | 0.005 1 < U                    | 0.005 1 < U                    | 0.005 t < U              | 0.005 1 < U                    | 0.005 1 < U                    | 0.005 1 < U                    | 0.005 1 < U              | 0.008 1 < U               |
| VOLATILES                           | 1,1,2,2-Tetrachloroethane                                 | 0.00536 1 U                 |                           | 0.0051 1 U               | 0.005 1 < 0                    | 0.005 1 < U                | 0.005 1 < U                    | 0.005 1 < U                    | 0.005 1 < U              | 0.005 1 < U                    | 0.005 1 < U                    | 0.005 1 < U                    | 0.005 1 < U              | 0.008 1 < U               |
| VOLATILES                           | 1,1-Dichioroethane  | 0.00536 1 U                 |                           | 0.0051 1 U               | 0.005 1 < 0<br>0.005 1 < 0     | 0.005 1 < U                | 0.005 1 < U                    | 0.005 t < U                    | 0.005 t < U              | 0.005 1 < 0                    | 0.005 1 < U                    | 0.005 1 < U                    | 0.005 1 < U              | 0.008 t < U               |
| VOLATILES                           | 1,1-Dichloroethene  | 0.00536 1 U                 |                           | 0.0051 1 U               | 0.005 1 < U                    | 0.005 1 < U                | 0.005 1 < U                    | 0.905 % < U                    | 0.005 1 < U              | 0.005 1 < U                    | 0.005 1 < U                    | 0.005 1 < U                    | 0.905 1 < U              | 0.008 1 < U               |
| VOLATILES<br>VOLATILES              | 1,1-Dichloropropene<br>1,2,3-Trichloropenzeze             | 0.00536 1 U                 |                           | 0.0051 1 U<br>0.0051 1 U |                                |                            |                                |                                |                          |                                |                                |                                |                          |                           |
| VOLATILES                           | 1,2,3-Trichloropropane                                    | 0.00536 1 U                 |                           | 0.0051 T U               |                                |                            |                                |                                |                          |                                |                                |                                |                          | 0.017 1 < U               |
| VOLATILES                           | 1,2,4-Trichlorobenzene                                    | 0.00536 t U                 |                           | 0.0051 1 U               |                                |                            |                                |                                |                          |                                |                                |                                |                          |                           |
| VOLATILES                           | 1,2-Dibromo-3-chloropropane                               | 0.00536 1 U                 |                           | 0.0051 1 U               |                                |                            |                                |                                |                          |                                |                                |                                |                          | 0.034 1 < U               |
| VOLATILES                           | 1,2-Dibromoethane   | 0.00536 1 U                 |                           | 0.0051 1 U               |                                |                            |                                |                                |                          |                                |                                |                                |                          | 0.034 1 < U               |
| VOLATILES<br>VOLATILES              | 1,2-Dichlorobenzene<br>1,2-Dichloroethane                 | 0.00536 1 U<br>0.00536 1 1} |                           | 0.0051 1 U               | 0.005 1 < €                    | 0.005 1 < 0                | 9.005 1 < ⊎                    | 0.005 1 < U                    | 0.005 1 < U              | 0.005 1 < U                    | 0.905 1 < U                    | 0.005 i < U                    | 0.005 1 < U              | 0.008 1 < U               |
| VOLATILES                           | 1.2-Dichloroethene  |                             |                           |                          | 0.005 t < U                    | 0.005 1 < U                | 0.005 1 < U                    | 0.005 1 < U                    | U > 1 ∂00.0              | 0.005 t < U                    | 0.005 t < U                    | 0.005 1 < U                    | 0.005 t < U              | 0.008 1 < U               |
| VOLATILES                           | 1,2-Dichloropropane<br>1,2-Dimethylacopone (o. Vylana)    | 0.00536 1 U                 |                           | 0.0051 1 U               | 0.005 1 < U                    | 0.005 t < U                | 0.005 1 < U                    | 0.005 1 < U                    | 0.005 1 < U              | 0.005 1 < U                    | 0.005 1 < U                    | 0.005 1 < U                    | 0.005 t < U              | 0.908 1 < U               |
| VOLATILES                           | 1,3,5-Trimethylbenzene                                    | 0.00536 1 U                 |                           | 0.000986 1 J J           |                                |                            |                                |                                |                          |                                |                                |                                |                          |                           |
| VOLATILES                           | 1,3-Dichlorobenzene                                       | 0.00536 1 U                 |                           | 0.0051 1 U               |                                |                            |                                |                                |                          |                                |                                |                                |                          |                           |
| VOLATILES                           | 1,3-Dichloropropane<br>1,4-Dichlorobenzene                | 0.90536 1 U<br>0.90536 1 U  |                           | 0.0051 1 U               |                                |                            |                                |                                |                          |                                |                                |                                |                          |                           |
| VOLATILES                           | 2.2-Dichloropropane                                       | 0.00536 1 U                 |                           | 0.0051 1 U               |                                |                            |                                |                                |                          |                                |                                |                                |                          |                           |
| VOLATILES                           | 2-Butanone  | 0.0107 1 8                  |                           | 0.0102 1 U               | 0.05 1 < U                     | 0.05 t < U                 | 0.05 1 < 0                     | 0.05 t < U                     | 0:05 1 < U               | 0.05 1 < U                     | 0.05 1 < U                     | 0.05 1 < U                     | 0.05 1 < U               | 0.017 1 < U               |
| VOLATILES                           | 2-Chilorotoluene  | 0.00536 1 U                 |                           | 0.0051 1 U               | 0,01 1 < 0                     | 0.07 1 < 0                 | 0.01 / < 0                     | 0.04 F C O                     | 0.01 1 2 0               | 0.01 1 2 0                     | 0.01 1 2 0                     | 0.01 1 1 0                     | 0.01 1 4 0               |                           |
| VOLATILES                           | 2-Hexanone  | 0.0107 1 U UJ               |                           | 0.0102 1 U UJ            | 0.05 1 < U                     | 0.05 1 < U                 | 0.05 1 < U                     | 0.05 t < U                     | 0.05 t < U               | 0.05 1 < U                     | 0.05 1 < U                     | 0.05 1 < U                     | 0.05 1 < U               | 0.017 1 < U               |
| VOLATILES<br>VOLATILES              | 2-Propenai<br>4-Chlorotoluene                             | 0.00536 1 11                |                           | 0.0951 1 11              |                                |                            |                                |                                |                          |                                |                                |                                |                          | 0.85 1 < U                |
| VOLATILES                           | Acelone   | 0,0107 1 U UJ               |                           | 0.0102 1 U UJ            | 0.1 1 < U                      | 0.1 1 < U                  | 0.1 1 < U                      | 0.1 1 < U                      | 0.1 1 < U                | 0.1 t < U                      | 0.1 1 < U                      | 0.1 1 < U                      | 0.1 1 < U                | 0.017 1 < U               |
| VOLATILES                           | Acetonitrile  |                             |                           |                          |                                |                            |                                |                                |                          |                                |                                |                                |                          | 0.17 1 < U                |
| VOLATILES                           | Acryionimie<br>Allyl chloride                             |                             |                           |                          |                                |                            |                                |                                |                          |                                |                                |                                |                          | 0.034 1 < U               |
| VOLATILES                           | Benzene   | 0.00536 1 U                 |                           | 0.0051 1 U               | 0.005 1 < U                    | 0.005 1 < U                | 0.005 t < U                    | 0.005 1 < U                    | 0.005 1 < U              | 0.005 1 < U                    | 0.005 1 < U                    | 0.005 1 < U                    | 0.005 1 < U              | 0.008 1 < U               |
| VOLATILES                           | Bromobenzene<br>Bromochlommethanna                        | 0.00536 1 U                 |                           | 0.0051 1 U<br>0.0051 1 U |                                |                            |                                |                                |                          |                                |                                |                                |                          |                           |
| VOLATILES                           | Bromodichloromethane                                      | 0.00536 1 U                 |                           | 0.0051 1 U               | 0.005 ¥ < U                    | 0.005 1 < U                | 0.005 1 < U                    | 0.005 1 < U                    | 0,005 t < U              | .0.005 t < U                   | 0.905 1 < U                    | 0.005 1 < U                    | 0.005 1 < U              | 0.008 1 < U               |
|                                     |   | •                           |                           |                          |                                |                            |                                |                                |                          |                                |                                |                                |                          |                           |

 $\langle \langle \rangle \rangle$ 

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-112 Concentrations of Chemicals in Soil Samples Associated with WR Sump 006

| [SUMP] = WRSUMP006 |                             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|--------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION CODE      |                             | 35SUMP012-SB01   | 35SUMP013-SB01   | 35SUMP013-SB01   | LH-S12-01        | LH-S12-01        | LH-S12-02        | LH-\$12-02       | LH-S13-01        | LH-S13-01        | LH-S13-01        | LH-S13-02        | LH-S13-02        | LHS-2-01         |
| SAMPLE_NO          |                             | 35-SMP12-SB01-02 | 35-SMP13-S801-01 | 35-SMP13-SB01-02 | LH-\$12-01_1     | LH-S12-01_2      | LH-S12-02_1      | LH-S12-02_2      | LH-S13-01 QC     | LH-\$13-01_1     | LH-\$13-01_2     | LH-S13-02_1      | LH-S13-02_2      | LHS-2-01         |
| SAMPLE_DATE        |                             | 9/12/2006        | 9/12/2006        | 9/12/2006        | 7/11/1993        | 7/11/1993        | 7/11/1993        | 7/11/1993        | 7/10/1993        | 7/10/1993        | 7/10/1993        | 7/10/1993        | 7/10/1993        | 1/9/1995         |
| DEPTH              |                             | 11 - 11 Ft       | 0.5 - 0.5 Ft     | 10 - 10 Ft       | 0-2Ft            | 9-11Fi           | 0-2ft            | 9-11 Ft          | 0-2Ft            | 0-2ft            | 8-10Ft           | 0-2Ft            | 8 - 10 Ft        | 0 - 0.5 Ft       |
| SAMPLE_PURPOSE     |                             | REG              | ₽D               | REG              | REG              | REG              | REG              | REG              |
| Test Group         | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result Dal LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO |
| VOLATILES          | Sromoform                   | 0.00536 1 U      |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 19     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.908 1 < 0      |
| VOLATILES          | Bromomethane                | 0.0107 1 U       |                  | 0.0102 1 U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 0       | 0.01 1 < 0       | 0.017 1 < U      |
| VOLATILES          | Carbon disulfide            | 0.00536 1 U      |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < V      | 0.008 1 < 0      |
| VOLATILES          | Carbon tetrachloride        | 0.00536 1 U      |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.008 1 < 0      |
| VOLATILES          | Chlorobenzene               | 0.00536 1 U      |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 1      | 0.005 1 < U      | 0.005 1 < 1      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < 0      |
| VOLATILES          | Chioroethane                | 0.0107 1 U       |                  | 0.0102 1 U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 0       | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U       | 0.01 1 < 0       | 0.01 1 < U       | 0.01 1 < 0       | 0.017 1 < U      |
| VOLATILES          | Chloroform                  | 9.00536 1 U      |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 1      | 0.905 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.008 1 < 0      |
| VOLATILES          | Chloromethane               | 0.0107 1 U       |                  | 0.0102 1 U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 10      | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 0       | 0.017 1 < U      |
| VOLATILES          | Chioroprene                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.17 1 < 0       |
| VOLATILES          | cis-1,2-Dichloroethene      | 0.00536 1 U      |                  | 0.0051 1 U       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES          | cis-1,3-Dichloropropene     | 0.00536 1 U      |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < 0      | 0.008 T < U      |
| VOLATILES          | Dibromochloromethane        | 0.00536 1 U      |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < 0      |
| VOLATILES          | Dibromomethane              | 0.00536 1 U      |                  | 0.0051 1 U       |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.017 1 < U      |
| VOLATILES          | Dichlorodifluoromethane     | 0.0107 1 U       |                  | 0.0102 1 U       |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.034 1 < U      |
| VOLATILES          | Ethyl methacrylate          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.034 1 < U      |
| VOLATILES          | Ethylbenzene                | 0.00536 1 U      |                  | 0.00486 1 J J    | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.008 1 < 0      |
| VOLATILES          | Hexachlorobutadiene         | 0.00536 1 U      |                  | 0.0051 1 U       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES          | IODOMETHANE                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.017 1 < U      |
| VOLATILES          | ISOBUTYL ALCOHOL            | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3.4 1 < U        |
| VOLATILES          | isopropyibenzene            | 0.00536 1 U      |                  | 0.000526 1 J J   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES          | m,p-Xylenes                 | 0.00536 1 U      |                  | 0.0101 1         |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Methacrylonitrile           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.034 1 < U      |
| VOLATILES          | Methyl isobutyl ketone      | 0.0107 1 U       |                  | 0.0102 1 U       | 0.05 t < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < 0       | 0.05 t < U       | 0.05 1 < 10      | 0.017 1 < U      |
| VOLATILES          | METHYL METHACRYLATE         | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.034 1 < U      |
| VOLATILES          | Methylene chloride          | 0.00536 1 U      |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < ⊍      | 0.005 t < U      | 0.005 1 < U      | 9.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      |
| VOLATILES          | Naphthalene                 | 0.0107 1 U       |                  | 0.0102 1 U       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES          | n-BUTYLBENZENE              | 0.00536 1 U      |                  | 0.0051 1 U       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES          | n-PROPYLBENZENE             | 0.00536 1 U      |                  | 0.00114 1 J J    |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Pentachloroethane           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.034 1 < U      |
| VOLATILES          | p-ISOPROPYLTOLUENE          | 0.00536 1 U      |                  | 0.0051 1 U       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Propionitrile               | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.085 1 < U      |
| VOLATILES          | sec-BUTYLBENZENE            | 0.00536 1 U      |                  | 0.0051 1 U       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Styrene                     | 0.00536 1 U      |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      |
| VOLATILES          | tert-BUTYLBENZENE           | 0.00536 1 U      |                  | 0.0051 1 U       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Tetrachloroethene           | 0.00536 1 U      |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.008 1 < U      |
| VOLATILES          | Toluene                     | 0.00536 1 U      |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      |
| VOLATILES          | trans-1,2-Dichtoroethene    | 0.00536 1 U      |                  | 0.0051 1 U       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES          | trans-1,3-Dichtoropropene   | 0.00536 1 U      |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | €.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      |
| VOLATILES          | trans-1,4-Dichtoro-2-butene | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.034 1 < U      |
| VOLATILES          | Trichloroethene             | 0.00536 1 U      |                  | 0.0051 1 U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      |
| VOLATILES          | Trichtorofluoromethane      | 0.0107 1 U       |                  | 0.0102 1 U       |                  |                  |                  |                  |                  |                  |                  |                  |                  | 0.017 1 < U      |
| VOLATILES          | Vinyi acetate               | 0.0107 1 U       |                  | 0.0102 1 19      | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < Ü       | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U       | 0.017 1 < U      |
| VOLATILES          | Vinyi chloride              | 0.0107 1 U       |                  | 0.0102 1 U       | 0.01 1 < U       | 0.01; 1 < U      | 0.01 1 < U       | 0.01 t < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < 1       | 0.01 1 < U       | 0.01 1 < U       | 0.017 1 < U      |
| VOLATILES          | Xylenes, Total              | 1                |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.008 1 < U      |

Table 3-112 Concentrations of Chemicals in Soil Samples Associated with WR Sump 006

| [SUMP] = WRSUMP006<br>LOCATION _CODE |   | LH-WRS-6                 | LH-WRS-6                  | LH-WRS-6                 | WRS06-SB01                 | WRS06-SB01                 |
|--------------------------------------|---|--------------------------|---------------------------|--------------------------|----------------------------|----------------------------|
| SAMPLE_NO                            |   | LH-WRS-6_1               | LH-WRS-6_2                | LH-WRS-6_3               | WRS06-SB01-01              | WRS06-SB01-02              |
| SAMPLE_DAIL                          |   | 7/10/1993<br>0 - 2 Ft    | 7/10/1993<br>2.5 - 4.5 Ft | 7724/1993<br>18 - 20 Ft  | 9/25/2006<br>05 - 05 Et    | 9/25/2006<br>4.5 - 4.5 Ft  |
| SAMPLE_PURPOSE                       |   | REG                      | REG                       | REG                      | REG                        | REG                        |
| Test Group                           | Parameter (Units = mg/kg)                     | Result DIL LQ VQ         | Result DIL LQ VQ          | Result DIL LQ VQ         | Result Dil. LQ VQ          | Result DIL LQ VQ           |
| EXPLOSIVES                           | 1,3,5-Trinitrobenzene                         |                          |                           |                          |                            |                            |
| EXPLOSIVES                           | 1,3-Dinitrobenzene                            |                          |                           |                          |                            |                            |
| EXPLOSIVES                           | 2,4,6-1000000000                              | 033 1 4 11               | 11.33 1 c H               |                          |                            |                            |
| EXPLOSIVES                           | 2,6-Dinitrotoluene                            | 0.33 1 < U               | 0.33 1 < U                |                          |                            |                            |
| EXPLOSIVES                           | 4-Amino-2,6-dinitrotoluene                    |                          |                           |                          |                            |                            |
| EXPLOSIVES                           | нмх   |                          |                           |                          | -                          |                            |
| EXPLOSIVES                           | m-Nitrotaluene                                |                          |                           |                          |                            |                            |
| EXPLOSIVES                           | Ninobenzene                                   |                          |                           |                          |                            |                            |
| EXPLOSIVES                           | o-Nitrotokuene                                |                          |                           |                          |                            |                            |
| EXPLOSIVES                           | RDX   |                          |                           |                          |                            |                            |
| EXPLOSIVES                           | Tettyl  |                          |                           |                          |                            |                            |
| METALS                               | Aluminum                                      | 7050 1                   | 7840 1                    | 6880 1 < U               |                            |                            |
| METALS                               | Antimony                                      | 31 < 0                   | 31 < 8                    | 31< U                    |                            |                            |
| METALS                               | Arsenic                                       | 5.9 i<br>81.2 t          | 2./ 1                     | 2.9 1                    |                            |                            |
| METALS                               | Cadmium                                       | 11< 1                    | 11< U                     | 1 t < U                  |                            |                            |
| METALS                               | Calcium                                       | 1100 1                   | 562 1                     | t650 1                   |                            |                            |
| METALS                               | Chromium                                      | 19.7 1                   | 17.2 1                    | 13.8 1                   |                            |                            |
| METALS                               | Cobalt  | 9.1 1                    | 3.8 1                     | 6.6 1                    |                            |                            |
| METALS                               | Copper  | 2.5 1                    | 25 1                      | 9.3 1                    |                            |                            |
| METALS                               | Lead  | 14.3 1                   | 6.7 1                     | 9.1 1                    |                            |                            |
| METALS                               | Magnesium                                     | 329 1                    | 380 1                     | 2230 1                   |                            |                            |
| METALS                               | Manganese                                     | 382 1                    | 93.6 1                    | 95.2 t                   |                            |                            |
| METALS                               | Mercury                                       | 0.1 1 < 0                | 0.1 1 < U                 | 0.1 1 < ⊎                |                            |                            |
| METALS                               | Potassium .                                   | 249 1                    | 262 1                     | 613 1                    |                            |                            |
| METALS                               | Silver  | 11<0                     | 11<0                      | 11 < U                   |                            |                            |
| METALS                               | Strontium                                     | 8.3 1                    | 5.1 1                     | 29 1                     |                            |                            |
| METALS                               | Thallium                                      |                          |                           |                          |                            |                            |
| METALS                               | Zinc  | 21.3 1                   | 12.2 1                    | 42 1                     |                            |                            |
| RANGE_ORGANICS                       | Carbon Range C12-C28                          |                          |                           |                          | 36.2 1 J B                 | 40.8 1 J B                 |
| RANGE ORGANICS                       | Carbon Bange C6-C12                           |                          |                           |                          | 562 1 U U                  | 56.4 1 J J<br>61.4 1 U U   |
| SEMIVOLATILES                        | 1,2,4-Trichlorobenzene                        | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILE\$                       | 1,2-Dichlorobenzene                           | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < Ŭ               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES                        | 1,3-Dichkrobenzene                            | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES                        | 1,4-Dichlorobenzene                           | 9.33 1 < U               | 0.33 1 < 9                | 0.33 t < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES                        | 2,4,5-Dichlorophenol                          | 033 1 2 1                | 1.05 1 < 0                | 0.33 1 < 11              | 1.82 10 0 0<br>1.82 10 H H | 0205 1 0 0                 |
| SEMIVOLATILES                        | 2,4-Dichlorophenol                            | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES                        | 2.4-Dimethylphenol                            | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES                        | 2,4-Dinitrophenol                             | 1.65 <del>1</del> < U    | 1.65 1 < U                | 1.65 1 < U               | 9.12 10 U U                | 1.03 1 U U                 |
| SEMIVOLATILES                        | 2,4-Dinitrotoluene                            |                          |                           | 0.33 1 < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES<br>SEMIVOLATILES       | 2.6-Dinatropolicene<br>2.Chiorocontribalene   | 033 1 < 1                | 033 1 4 1                 | 0.33 1 < U<br>0.33 1 < U | 1.82 10 0 U                | 0.205 1 0 0                |
| SEMIVOLATILES                        | 2-Chloropheno!                                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < 0               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES                        | 2-Methylnaphthalene                           | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES                        | 2-Methylphenol                                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES                        | 2-Nitroaniline                                | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U               | 9.12 10 U U                | 1.03 1 U U                 |
| SEMIVOLATILES                        | 2-Nitrophenot                                 | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < 0               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES<br>SEMIVOLATILES       | 3,3-Dichioropenzione<br>3-Nitmapiùne          | 1.65 1 < 1               | 165 1 < 1                 | 0.05 I< U<br>165 I< U    | 3.00 10 U U<br>9.12 10 U U | 103 1 11 11                |
| SEMIVOLATILES                        | 4.6-Dinitro-2-methylphenol                    | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U               | 9.12 10 U U                | 1.03 1 U U                 |
| SEMIVOLATILES                        | 4-Bromophenyl phenyl ether                    | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES                        | 4-Chloro-3-methylphenol                       | 0.65 1 < U               | 0.65 1 < U                | 0.65 1 < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES                        | 4-Chloroaniline                               | 0.65 1 < U               | 0.65 1 < U                | 0.65 1 < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLARLES<br>SEMIVOLATILES        | 4-Uniorophenyi phenyi ether<br>A-Methylohanoj | 0.33 1 < U<br>0.33 1 < U | V.33 1 < U<br>033 1 - U   | 0.33 1 < U<br>0.33 1 < U | 1.82 10 U U<br>1.82 10 U U | 0.205 1 U U<br>0.205 1 U U |
| SEMIVOLATILES                        | 4-Nitroaniline                                | 1.65 1 < U               | 1.65 1 < 1                | 1.65 1 < U               | 9.12 10 U B                | 1.03 t U U                 |
| SEMIVOLATILES                        | 4-Nitrophenol                                 | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U               | 9.12 10 U U                | 1.03 1 U U                 |
| SEMIVOLATILES                        | Acenaphthene                                  | 0.33 1 < U               | 0.33 1 < U                | 0.33 t < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES                        | Acenaphthylene                                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES                        | Anthracene                                    | 0.33 1 < 0               | 0.33 1 < U                | 0.33 1 < U               | 1.82 10 U U                | 0.205 1 U U                |
| SEMIVOLATILES                        | Benzofa)ovrene                                | 0.33 1 < U               | 0.33 1 < 1                | 0.33 t < U               | 1.82 10 11 11              | 0.203 1 0 0                |
|                                      |   | • • •                    | • • •                     |                          |                            |                            |



÷

 Table 3-112

 Concentrations of Chemicals in Soil Samples Associated with WR Sump 006

| [SUMP] = WRSUMP006<br>LOCATION_CODE |                                | LH-WRS-   | 5  |        | LH-1            | WRS      | 5-6    |         | LH-A          | ØR:    | S-6 |         | W      | 1506      | SB01    |         | WRS      | 06-5      | B01     |            |
|-------------------------------------|--------------------------------|-----------|----|--------|-----------------|----------|--------|---------|---------------|--------|-----|---------|--------|-----------|---------|---------|----------|-----------|---------|------------|
| SAMPLE_NO                           |                                | LH-WRS-6  | 1  |        | iH-W            | RS       | 6_2    |         | LH-W          | RS     | 6_3 |         | WR     | 306-S     | B01-0   | n       | WRSO     | 6-SB      | )1-02   |            |
| SAMPLE_DATE                         |                                | 7/‡0/1993 | \$ |        | 7/14            | 19       | 93     |         | 7/24          | 1/19   | 93  |         | 9      | /25/2     | 006     |         | 9/2      | 5/200     | 6       |            |
| DEPTH                               |                                | 0-2 Ft    |    |        | 2.5             | 4.5      | Ft     |         | 18-           | 20     | Ft  |         | 0      | .5 - D    | 5 Ft    |         | 4.5      | - 4.5     | Ft      |            |
| SAMPLE_PURPOSE                      | Parameter il luite – malice)   | Reg Reg   | ^  | wh     | t<br>Docube Fil | ieg<br>I | 10     | vo      | H<br>Docut OK | 11:Li  | 10  | vo      | Docuft | HE<br>Dil | 9<br>10 | vo      | Recult F | 1EG<br>NI | 10      | VO         |
| SEMINOLATILES                       | Beozo/b)fluoranttiene          | 0.33 1 <  |    | 11     | 0.33            | 1        | <      | 0       | 8 001         | 1      | <   | 11      | 1.82   | 10        | 10      | <u></u> | 0.205    | 1         | 11      | U U        |
| SEMIVOLATILES                       | Benzolohiluerviene             | 0.33 1 <  |    | υ      | 0.33            | 1        | <<br>< | Ŭ       | 0.33          | 1      | <   | ŭ       | 1.82   | 10        | Ū       | ย       | 0.205    | 1         | บ       | Ŭ ·        |
| SEMIVOLATILES                       | Benzo(k)fluoranthene           | 0.33 1 <  | :  | ប      | 0.33            | 1        | <      | U       | 0.001         | 1      | <   | U       | 1.82   | 10        | U       | U       | 0.205    | 1         | U       | U          |
| SEMIVOLATILES                       | Benzoic Acid                   | 1.65 1 <  |    | U      | 1.65            | 1        | <      | U       | 0.001         | 1      | <   | U       | 9.12   | 10        | U       | 03      | 1.03     | 1         | Ų       | UJ         |
| SEMIVOLATILES                       | Benzyl Alcohol                 | 0.65 1 <  |    | U      | 0.65            | 1        | <      | υ       | 0.65          | 1      | <   | U       | 1.82   | 10        | U       | U       | 0.205    | 1         | U       | U          |
| SEMIVOLATILES                       | bis{2-Chloroethoxy}methane     | -0.33 T < |    | U      | 0.33            | 1        | <      | υ       | 0.33          | t      | <   | U       | 1.82   | 10        | U       | U       | 0.205    | 1         | U       | U          |
| SEMIVOLATILES                       | bis(2-Chloroethyl)ether        | 0.33 1 <  |    | U      | 0.33            | 1        | <      | 0       | 0.33          | 1      | <   | U ·     | 1.82   | 10        | 0       | 0       | 0.205    | 1<br>+    | U       | U<br>IL    |
| SEMIVULATILES<br>SEMIVULATILES      | bis/2-Chiorosopropyljemer      | 0.33 1 4  |    | U<br>H | 0.33            | 1        | ~      | о<br>11 | 0.33          | •      | ~   | U<br>IF | 1.02   | 10        | 11      | 11      | 0.205    | 1         | U<br>15 | U<br>(!    |
| SEMIVOLATILES<br>SEMIVOLATILES      | Butyl benzyl obthalate         | 0.33 1 4  |    | U      | 0.33            | 1        | è      | 11      | 0.33          | :      | è   | U U     | 1.82   | 10        | Ü       | U U     | 0.205    | 1         | ŭ       | Ü          |
| SEMIVOLATILES                       | Chrysene                       | 0.33 1 <  |    | IJ     | 0.33            | 1        | <      | Ū       | 0.33          | 1      | <   | U       | 1.82   | 10        | U       | Û.      | 0.205    | 1         | U       | U          |
| SEMIVOLATILES                       | Dibenzo(a,h)anthracene         | 0.33 1 <  | ;  | U      | 0.33            | 1        | <      | U       | 0.33          | ١      | <   | U       | 1.82   | 10        | U       | U       | 0.205    | 1         | IJ      | U          |
| SEMIVOLATILES                       | Dibenzofuran                   | 0.33 1 <  | :  | U      | 0.33            | t        | <      | Ð       | 0.33          | 1      | <   | U       | 1.82   | 10        | U       | ប       | 0.205    | 1         | U       | U          |
| SEMIVOLATILES                       | Diethyl phthalate              | 0.33 1 <  | :  | U      | 0.33            | 1        | <      | U       | 0.33          | 1      | <   | U       | 1.82   | 10        | U       | U       | 0.205    | 1         | U       | U          |
| SEMIVOLATILES                       | Dimethyl phthalate             | 0.33 1 <  | :  | U      | 0.33            | t        | <      | ປ       | 0.33          | 1      | <   | U       | 1.82   | 10        | U       | U       | 0.205    | 1         | U       | บ          |
| SEMIVOLATILES                       | di-n-Butyi phthalate           | 0.33 1 <  |    | U      | 0.33            | 1        | <      | U       | 0.33          | 1      | <   | บ       | 1.82   | 10        | U<br>II | 0       | 0.205    | 1         | U<br>U  | บ<br>11    |
| SEMIVULATILES                       | dHa-Ociyi pamalate             | 0.33 1 <  |    | 13     | 0.33            | 1        | ~      | 11      | 0.33          | 1      | Ś   | и<br>11 | 1.02   | 10        | 11      | n       | 0.205    | 1         | ы<br>11 | 11         |
| SEMIVOLATILES<br>SEMIVOLATILES      | Florens                        | 0.33 1 4  |    | a a    | 0.00            | 1        | 2      | 1       | 0.33          | 1      | 2   | 11      | 1.02   | 10        | 11      | ŭ       | 0.205    | 1         | 11      | й<br>Л     |
| SEMIVOLATILES                       | Hexachlomberzene               | 0.33 1 <  |    | Ŭ      | 0.33            | 1        | è.     | υ       | 0.33          | 1      | ~   | Ű       | 1.82   | 10        | Ũ       | ย้      | 0.205    | 1         | ບັ      | U          |
| SEMIVOLATILES                       | Hexachlorobutadiene            | 0.33 1 <  | :  | U      | 0.33            | 1        | <      | U       | 0.33          | 1      | <   | U       | 1.82   | 10        | ¥       | U       | 0.205    | 1         | U       | U          |
| SEMIVOLATILES                       | Hexachlorocyclopentadiene      | 0.33 1 <  | :  | U      | 0.33            | 1        | <      | U       | 0.33          | 1      | <   | U       | 1.82   | 10        | U       | U       | 0.205    | 1         | U       | U          |
| SEMIVOLATILES                       | Hexachloroethane               | 0.33 1 <  | :  | U      | 0.33            | 1        | <      | U       | 0.33          | 1      | <   | υ       | 1.82   | 10        | Ų       | U       | 0.205    | 1         | U       | U          |
| SEMIVOLATILES                       | Indeno(1,2,3-cd)pyrene         | 0.33 1 <  | :  | U      | 0.33            | 1        | <      | U       | 0.33          | 1      | <   | υ       | 1.82   | 10        | U       | U       | 0.205    | 1         | U       | U          |
| SEMIVOLATILES                       | Isophorane                     | 0.33 1 <  | :  | U      | 0.33            | 1        | <      | U       | 0.33          | 1      | <   | U       | 1.82   | 10        | U       | บ       | 0.205    | 1         | U       | U          |
| SEMIVOLATILES                       | Naphthalene                    | 0.33 1 <  | :  | U<br>U | 0.33            | 1        | <      | U       | 0.33          | 1      | <   | U       | 1.82   | 10        | 0       | U<br>U  | 0.205    | 1         | U       | U          |
| SEMIVOLATILES                       | Nitrobenzene                   | 0.33 1 <  |    | บ      | 0.33            | 1        | <      | U<br>H  | 0.005         | 1<br>1 | <   | 0       | 1.62   | 10        | U<br>H  | U<br>41 | 0.205    | 1         | 11      | U<br>B     |
| SEMINOLATILES<br>SEMINOLATILES      | n-Nitmoodinhenvlamine          | 0.33 1 4  |    | U<br>A | 0.33            | 1        | 2      | u       | 0.001         | 1      | 2   | 11      | 1.02   | 10        | 11      | 11      | 0.205    | 4         | 11      | 0          |
| SEMIVOLATILES                       | Pentachlorochenol              | 1.65 1 <  |    | บ      | 1.65            | 1        | ٠<br>۲ | ŭ       | 1.65          | 1      | <   | Ŭ       | 9.12   | 10        | U       | Ŭ       | 1.03     | 1         | U       | Ū          |
| SEMIVOLATILES                       | Phenantixene                   | 0.33 1 <  | ۲. | υ      | 0.33            | 1        | <      | U       | 0.33          | 1      | <   | U       | 1.82   | 10        | U       | U       | 0.205    | 1         | U       | ប          |
| SEMIVOLATILES                       | Phenol                         | 0.33 1 <  | :  | บ      | 0.33            | 1        | <      | บ       | 0.33          | 1      | <   | U       | t.82   | 10        | U       | U       | 0.205    | 1         | U       | U          |
| SEMIVOLATILES                       | Pyrene                         | 0.33 1 <  | :  | U      | 0.33            | 1        | <      | U       | 0.33          | 1      | <   | U       | 1.82   | 10        | U       | U       | 0.205    | 1         | U       | U          |
| VOLATILES                           | 1,1,1,2-Tetrachioroethane      |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         | 0.00629  | 1         | U       | U          |
| VOLATILES                           | 1,1,1-Trichloroethane          | 0.0142 1  |    |        | 0.0117          | 1        |        |         | 0.005         | 1      | <   | u       |        |           |         |         | 0.00629  | 1         | U       | U          |
| VOLABLES                            | 1,1,2,2-1 etrachioroethane     | 0.005 1 < |    | U      | 0.005           | 1        | <      | U<br>U  | 0.005         | 1      | ٢   | 0       |        |           |         |         | 0.00029  | 1         | 0       | <u>и</u> . |
| VOLATILES                           | 1.1.2-11Graugebane             | 0.005 1 < |    | 11     | 0.005           | 1        | 2      | 11      | 0.005         | 1      | 2   | 11      |        |           |         |         | 0.00629  | 1         | 0       | บ          |
| VOLAT! ES                           | 1.1-Dichloroethene             | 0.005 1 < |    | ບັ     | 0.005           | 1        | 2      | υ       | 0.005         | 1      | č   | Ŭ       |        |           |         |         | 0.00529  | 1         | Ũ       | ບ          |
| VOLATILES                           | 1,1-Dichioropropene            |           |    | -      |                 |          |        | -       |               |        |     |         |        |           |         |         | 0.00629  | 1         | U       | U          |
| VOLATILES                           | 1,2,3-Trichlorobenzene         |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         | 0.00629  | 1         | U       | U          |
| VOLATILES                           | 1,2,3-Trichloropropane         |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         | 0.00629  | 1         | ប       | U          |
| VOLATILES                           | 1,2,4-Trichlorobenzene         |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         | 0.00629  | 1         | U       | U          |
| VOLATILES                           | 1,2,4-Trimethylbenzene         |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         | 0.00629  | 1         | U       | U          |
| VOLATILES                           | 1.2-Dibromo-3-chloropropane    |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         | 0.00629  | 1         | 9<br>11 | U          |
| VOLATILES                           | 1.2-Dipromoemane               |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         | 0.00629  | 1         | 11      | 11         |
| VOLATILES                           | 1,2-Dichlomethane              | 0.005 1   |    | 11     | 0.005           | 1        | 2      | 11      | 0.005         | 1      | ~   | a       |        |           |         |         | 0.00629  | 1         | Ð       | U          |
| VOLATILES                           | 1.2-Dichioroethene             | 0.005 1 < |    | Ŭ      | 0.005           | 1        | <      | U       | 0.005         | 1      | <   | υ       |        |           |         |         |          |           | -       | _          |
| VOLATILES                           | 1,2-Dichloropropane            | 0.005 1 < | :  | U      | 0.005           | 1        | <      | U       | 0.005         | 1      | <   | U       |        |           |         |         | 0.00629  | 1         | U       | U          |
| VOLATILES                           | 1,2-Dimethylbenzene (o-Xylene) |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         | 0.00629  | 1         | υ       | U          |
| VOLATILES                           | 1,3,5-Trimethylbenzene         |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         | 0.00629  | 1         | Ð       | U          |
| VOLATILES                           | 1,3-Dichlorobenzene            |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         | 0.00629  | 1         | U       | U          |
| VOLATILES                           | 1,3-Dichloropropane            |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         | 0.00629  | 1         | Û       | U          |
| VOLATILES                           | 1.4-Dichlorobenzene            |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         | 0.00529  | 1         | U<br>II | 0          |
| VOLARLES                            | 2,2-Dichieroproparte           | 0.05 t    |    | 11     | 0.05            |          |        |         | a 04          | ,      |     |         |        |           |         |         | 0.00629  | 1         | U<br>II | 0          |
| VOLATILES                           | 2-Chiaroathal virad athor      | 0.05 1 4  |    | 0      | 0.05            | ו<br>ז   | Ś      | U<br>II | 0.05          | 1      | 2   | 0       |        |           |         |         | 0.0120   | 1         | IJ      | u<br>U     |
| VOLATILES                           | 2-Chlorotoluene                | 0.01 1 3  | -  | 5      | 2.01            | <i>.</i> | 1      | ř       | 0.01          |        | •   | -       |        |           |         |         | 0.00629  | 1         | U       | U          |
| VOLATILES                           | 2-Hexanone                     | 0.05 1 <  |    | υ      | 0.05            | 1        | < .    | U       | 0.05          | 1      | <   | Ð       |        |           |         |         | 0.0126   | 1         | U       | U          |
| VOLATILES                           | 2-Propenal                     |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         |          |           |         |            |
| VOLATILES                           | 4-Chlorotoluene                |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         | 0.00629  | 1         | U       | U          |
| VOLATILES                           | Acetone                        | 0.1 1 <   | 2  | U      | 0.1             | 1        | <      | U       | 0.1           | 1      | <   | U       |        |           |         |         | 0.0126   | 1         | U       | U          |
| VOLATILES                           | Acetorsitrile                  |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         |          |           |         |            |
| VOLATILES                           | Acrylonitrile                  |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         |          |           |         |            |
| VOLATILES                           | Airyi chionde                  | 0.00E 4   |    |        | D 000           | 1        | ,      | 11      | 0.005         | 1      |     | 11      |        |           |         |         | 0.00620  | ,         | 11      | U          |
| VOLATILES<br>VOLATILES              | Bromohenzere                   | • 1 GUU.U | •  | U      | 0.005           | 1        | 4      | U       | 0.005         | '      | ~   | 0       |        |           |         |         | 0.00029  | 1         | 1       | Ŭ          |
| TOCHICLO                            | STOLING LINE STOLEN            |           |    |        |                 |          |        |         |               |        |     |         |        |           |         |         |          | •         | -       | -          |



Table 3-112 Concentrations of Chemicals in Soil Samples Associated with WR Sump 006

| [SUMP] = WRSUMP006       |                             |          |      |    |     |        |        |     |     |          |        |    |               |                  |          |       |      |    |
|--------------------------|-----------------------------|----------|------|----|-----|--------|--------|-----|-----|----------|--------|----|---------------|------------------|----------|-------|------|----|
| LOCATION_CODE            | LH                          | WRS      | 5-6  |    | LH  | -WR    | S-6    |     | LH  | -WR      | S-6    |    | WRS06-SB01    | WRS              | 06-S     | 801   |      |    |
| SAMPLE_NO                | ξH-1                        | NRS      | 6_1  |    | LH- | WRS    | -6_2   |     | UH- | WRS      | -6_3   |    | WRS06-SB01-01 | WRSO             | 5-SB     | 01-02 |      |    |
| SAMPLE_DATE              |                             | 7/       | 0/19 | 93 |     | 7/     | 10/19  | 193 |     | 7/       | 24/19  | 93 |               | 9/25/2006        | 9/2      | 5/200 | 06   |    |
| DEPTH                    |                             | 6        | -25  | ł  |     | 2.     | 5 - 4. | SR  |     | 14       | 8 - 20 | Ft |               | 0.5 - 0.5 Ft     | 4.5      | - 4.5 | Ēt - |    |
| SAMPLE_PURPOSE           |                             |          | REG  |    |     |        | REG    |     |     |          | REG    | ì  |               | REG              | Ŧ        | REG   |      |    |
| Test Group               | Parameter (Units = mg/kg)   | Result I | )IL  | LQ | VQ  | Result | 39L    | LQ  | VQ  | Result E | 別      | LQ | VQ            | Result DIL LQ VQ | Result ( | JIL   | ŁQ   | VQ |
| VOLATILES                | Bromochloromethane          |          |      |    |     |        |        |     |     |          |        |    |               |                  | 0.00629  | 1     | U    | U  |
| VOLATILES                | Bromodichloromethane        | 0.005    | 1    | <  | U   | 0.005  | 1      | <   | Ų   | 0.005    | 1      | <  | U             |                  | 0.00629  | 1     | U    | U  |
| VOLATILES                | Bromoform                   | 0.005    | 1    | <  | U   | 0.005  | 1      | <   | υ   | 0.005    | 1      | <  | U             |                  | 0.00629  | 1     | U    | Ð  |
| VOLATILES                | Bromomethane                | 0.01     | 1    | <  | U   | 0.01   | 1      | <   | IJ  | 0.01     | 1      | <  | U U           |                  | 0.0126   | 1     | U    | U  |
| VOLATILES                | Carbon disutide             | 0.005    | 1    | <  | U   | 0.005  | 1      | <   | ป   | 0.005    | 1      | <  | ប             |                  | 0.00629  | 1     | IJ   | U  |
| VOLATILES                | Carbon tetrachloride        | 0.005    | 1    | <  | U   | 0.005  | 1      | <   | U   | 0.005    | 1      | <  | U             |                  | 0.00629  | ł     | U    | U  |
| VOLATILES                | Chlorobenzene               | 0.005    | 1    | <  | £   | 0.005  | 1      | <   | IJ  | 0.005    | 1      | <  | U             |                  | 0.00629  | t     | U    | υ  |
| VOLATILES                | Chioroethane                | 0.01     | 1    | <  | U   | 0.01   | 1      | <   | U   | 0.01     | 1      | <  | U             |                  | 0.0126   | ŧ     | U    | U  |
| VOLATILES                | Chloroform                  | 0.005    | 1    | <  | U   | 0.005  | 1      | <   | 1J  | 0.005    | 1      | <  | U             |                  | 0.00629  | t     | U    | บ  |
| VOLATILES                | Chloromethane               | 0.01     | 1    | <  | U   | 0.01   | 1      | <   | U   | 0.01     | 1      | <  | U             |                  | 0.0126   | 1     | U    | U  |
| VOLATILES                | Chloroprene                 |          |      |    |     |        |        |     |     |          |        |    |               |                  |          |       |      |    |
| VOLATILES                | cis-1,2-Dichloroethene      |          |      |    |     |        |        |     |     |          |        |    |               |                  | 0.00629  | 1     | U    | ប  |
| VOLATILES                | cis-1,3-Dichloropropene     | 0.005    | 1    | <  | U   | 0.005  | 1      | <   | U   | 0.005    | 1      | <  | U             |                  | 0.00629  | 1     | U    | ម  |
| VOLATILES                | Dibromochloromethane        | 0.005    | 1    | <  | U   | 0.005  | 1      | <   | U   | 0.005    | 1      | <  | Ð             |                  | 0.00629  | 1     | υ    | U  |
| VOLATILES                | Dibromomethane              |          |      |    |     |        |        |     |     |          |        |    |               |                  | 0.00629  | 1     | U    | U  |
| VOLATILES                | Dichlorodifluoromethane     |          |      |    |     |        |        |     |     |          |        |    |               |                  | 0.0126   | 1     | IJ   | U  |
| VOLATILES                | Ethyl methacrylate          |          |      |    |     |        |        |     |     |          |        |    |               |                  |          |       |      |    |
| VOLATILES                | Ethylbenzene                | 0.005    | 1    | <  | บ   | 0.005  | 1      | <   | U   | 0.005    | 1      | <  | ម             |                  | 0.00629  | 1     | υ    | U  |
| VOLATILES                | Hexachlorobutadiene         |          |      |    |     |        |        |     |     |          |        |    |               |                  | 0.00629  | 1     | U    | U  |
| VOLATILES                | IODOMETHANE                 |          |      |    |     |        |        |     |     |          |        |    |               |                  |          |       |      |    |
| VOLATILES                | ISOBUTYL ALCOHOL            |          |      |    |     |        |        |     |     |          |        |    |               |                  |          |       |      |    |
| VOLATILES                | Isopropylbenzene            |          |      |    |     |        |        |     |     |          |        |    |               |                  | 0.00629  | 1     | U    | U  |
| VOLATILES                | m.p-Xvienes                 |          |      |    |     |        |        |     |     |          |        |    |               |                  | 0.00629  | 1     | U    | U  |
| VOLATILES                | Methacrylonitale            |          |      |    |     |        |        |     |     |          |        |    |               |                  |          |       |      |    |
| VOLATILES                | Methyl isobutyl ketone      | 0.05     | 1    | <  | U   | 0.05   | 1      | <   | U   | 0.05     | 1      | <  | U             |                  | 0.0126   | 1     | U    | U  |
| VOLATILES                | METHYL METHACRYLATE         |          |      |    |     |        |        |     |     |          |        |    |               |                  |          |       |      |    |
| VOLATILES                | Methylene chloride          | 0.005    | 1    | <  | U   | 0.005  | 1      | <   | U   | 0.005    | 1      | <  | U             |                  | 0.00629  | 1     | U    | U  |
| VOLATILES                | Naphthalene                 |          |      |    |     |        |        |     |     |          |        |    |               |                  | 0.0126   | 1     | U    | U  |
| VOLATILES                | n-BUTYLBENZENE              |          |      |    |     |        |        |     |     |          |        |    |               |                  | 0.00629  | 1     | υ    | U  |
| VOLATILES                | n-PROPYLBENZENE             |          |      |    |     |        |        |     |     |          |        |    |               |                  | 0.00629  | 1     | U    | U  |
| VOLATILES                | Pentachioroethane           |          |      |    |     |        |        |     |     |          |        |    |               |                  |          |       |      |    |
| VOLATILES                | p-ISOPROPYLTOLUENE          |          |      |    |     |        |        |     |     |          |        |    |               |                  | 0.00629  | 1     | υ    | U  |
| VOLATILES                | Propionitrile               |          |      |    |     |        |        |     |     |          |        |    |               |                  |          |       |      |    |
| VOLATILES                | sec-BUTYI BENZENE           |          |      |    |     |        |        |     |     |          |        |    |               |                  | 0.00629  | 1     | U    | ນ  |
| VOLATILES                | Styrene                     | 0.005    | 1    | <  | U   | 0.005  | 1      | <   | U   | 0.005    | 1      | <  | U             |                  | 0.00629  | 1     | U    | U  |
| VOLATILES                | tert-BUTY1 RENZENE          |          |      |    | -   |        |        |     | -   |          |        |    |               |                  | 0.00629  | 1     | U    | U  |
| VOLATILES                | Tetrachlomethene            | 0.005    | 1    | <  | U   | 0.005  | 1      | <   | ŧŧ  | 0.005    | 1      | <  | U             |                  | 0.00629  | 1     | U    | U  |
| VOLATIES                 | Toluene                     | 0.005    | 1    | <  | U U | 0.005  | 1      | ç   | ŭ   | 0.005    | 1      | <  |               |                  | 0.00629  | 1     | υ    | U  |
| VOLATRES                 | trans-1 2-Dichloroethene    |          |      | -  | 0   |        | •      | -   | •   |          |        |    | -             |                  | 0.00629  | 1     | U    | U  |
| VOI ATELES               | trans-1 3-Dichloromonene    | 0.005    | 1    | <  | 13  | 0.005  | 1      | <   | IJ  | 0.005    | 1      | <  | U             |                  | 0.00629  | 1     | U    | U  |
| VOLATILES                | trans-1 4-Dichlom-2-butene  | 0.000    | •    | -  | 0   |        | •      |     | ~   |          |        |    | -             |                  |          |       | -    |    |
| VOLATILES                | Trictiomethene              | 0.005    | 1    | <  | 9   | 0.005  | t      | <   | U   | 0.005    | 1      | <  | U             |                  | 0,00629  | 1     | U    | U  |
| VOLATILES                | Trichloroftkommethane       | 5.000    | •    | -  | •   | 5.000  | ·      | -   | -   | 2.000    | •      | _  | -             |                  | 0.0126   | 1     | Ű    | U  |
| VOLATILES                | Vindaretate                 | 0.05     | 1    |    | i I | ሰበፍ    | 1      | ć   | ti  | 0.05     | 1      | <  | ŧŧ            |                  | 0.0126   | 1     | U    | U  |
| VOLATILES                | Vind chloride               | 0.05     | 1    | è  | 11  | 0.00   | 1      | è   | 6   | 0.00     | t      | è. | 11            |                  | 0.0126   | 1     | Ű    | u  |
| VOLATILES                | Yvienes Total               | 0.005    | 1    | Ì  | ม   | 200.0  | 1      | 2   | ü   | 0.005    | 1      | ž  | ม             |                  | 0.0.20   | •     | ·    | •  |
| Footnoles are shown on c | over page to Tables Section | 3.003    |      | -  | ~   | 5.000  | •      |     | -   | 2.000    |        |    | ~             | •                |          |       |      |    |

Footnotes are shown on cover page to Tables Section



Table 3-113 Concentrations of Chemicals in Soil Samples Associated with WR Sump 007

| [SUMP] = WRSUMP007             |                                      |                  |                  |   |                           |                           |                          |                              |                    |                       |
|--------------------------------|--------------------------------------|------------------|------------------|---|---------------------------|---------------------------|--------------------------|------------------------------|--------------------|-----------------------|
| LOCATION_CODE                  |                                      | LH-WR\$07-01     | LH-WRS07-01      | LH-WRS07-01   | LH-WRS07-01               | LHS-2-04                  | WRS07-SB01               | WRSD7-SB01                   | WRS07-SB02         | WRS07-SB02            |
| SAMPLE_NO                      |                                      | LH-WRS07-01 QC   | LH-WRS07-01_1    | LH-WRS07-01_2   | LH-WRS07-01_3             | LHS-2-04                  | WRS07-SB01-01            | WRS07-SB01-02                | WRS07-S802-01      | WHS07-SB02-02         |
| SAMPLE_DATE                    |                                      | (122/1993        | //22/1993        | 7/22/1993   | 1122/1993<br>61-65 Et     | 0-05 Ft                   | 9/20/2000                | 9/20/2000<br>4.5 - 4.5 Ft    | 9/29/2000          | 9/20/2000<br>45-45 Ft |
| SAMPLE PLIRPOSE                |                                      | 53-1Fi<br>ED     | BEG              | REG   | 8FG ·                     | REG                       | BEG                      | REG                          | REG                | REG                   |
| Test Group                     | Parameter (Units = mo/kg)            | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ  | Result DIL LQ VQ          | Result DIL LQ VQ          | Result DIL LQ VQ         | Result DR. LQ VQ             | Result DIL LQ VQ   | Result DIL LO VQ      |
| EXPLOSIVES                     | 2,4-Dinitrotoluene                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U                | 0.23 1 < U                |                          |                              |                    |                       |
| EXPLOSIVES                     | 2,6-Dinitrotoluene                   | 0.33 ·1 < U      | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < IJ               | 0.25 t < U                |                          |                              |                    |                       |
| EXPLOSIVES                     | 1,3,5-Trinitrobenzene                |                  |                  |   |                           | 023 1 < U                 |                          |                              |                    |                       |
| EXPLOSIVES                     | 1,3-Dinitrobenzene                   |                  |                  |   |                           | 0.23 1 < U                |                          |                              |                    |                       |
| EXPLOSIVES                     | 2,4,6-Trinitrotokuene                |                  |                  |   |                           | 0.23 1 < U                |                          |                              |                    |                       |
| EXPLOSIVES                     | 4-Amino-2,6-dinitrotoluene           |                  |                  |   |                           | 0.48 1 < U                |                          |                              |                    |                       |
| EXPLOSIVES                     | HMX                                  |                  |                  |   |                           | 2.1 1 < U                 |                          |                              |                    |                       |
| EXPLOSIVES                     | m-Nitroteluene                       |                  |                  |   |                           | 0.95 1 < 0                |                          |                              |                    |                       |
| EXPLUSIVES                     | o Nitrotokiego                       |                  |                  |   |                           | 0.25 1 < 0                |                          |                              |                    |                       |
| EXPLOSIVES                     | n-NitroInluene                       |                  |                  |   |                           | 29 1 < 1                  |                          |                              |                    |                       |
| EXPLOSIVES                     | BDX                                  |                  |                  |   |                           | t 1 < U                   |                          |                              |                    |                       |
| EXPLOSIVES                     | Tetryl                               |                  |                  |   |                           | 0.71 1 < U                |                          |                              |                    |                       |
| METALS                         | Aluminum                             | 1670 1           | 1390 1           | 10500 1   | 7680 1                    | 8970 1                    | 5040 1                   | 10500 1                      | 8470 1             | 6820 1                |
| METALS                         | Antimony                             | 31 < U           | 31 < U           | 31 < U  | 3 1 < ⊍                   | 10.7 1 < UJ               | 0.118 1 JL               | 0.114 1 U U.JL               | 0.293 1 JL         | 0.108 1 U UJL         |
| METALS                         | Arsenic                              | 11<0             | 1 1 < U          | 1.6 t   | 1.1 1                     | 8 1 J                     | 2.53 1 JL                | 0.708 1 JL                   | 0.831 1 JL         | 0.483 1 JL            |
| METALS                         | Banum                                | 7.6 1            | 6.3 1            | 60.8 1  | 132 1                     | 46.9 1                    | 27.7 1                   | 70.8 1                       | 40.5 1             | 24.2 1                |
| METALS                         | Beryllium                            |                  |                  |   |                           |                           | 0.341 1 J J              | 0.431 1                      | 0.376 1 J J        | 0.267 1 J J           |
| METALS                         | Cadmium                              | 11< U            | 11< U            | 11 <u< th=""><th>1 1 &lt; U</th><th>1.1 1 &lt; U</th><th>0.133 1 J J</th><th>0.0442 1 J J</th><th>0.345 1 J J</th><th>0.414 1 U U</th></u<> | 1 1 < U                   | 1.1 1 < U                 | 0.133 1 J J              | 0.0442 1 J J                 | 0.345 1 J J        | 0.414 1 U U           |
| METALS                         | Calcium                              | 232 1            | 222 1            | 476 1   | 667 t                     | 1040 1                    | 430 1                    | 1240 1                       | 1020 1             | 406 1                 |
| METALS                         | Chromium                             | 4.7 1            | 4 1              | 9.1 1   | 9.9 t                     | 11.3 1 J                  | 35.5 1                   | 11.7 1                       | 13 1               | 9.48 1                |
| METALS                         | Cobalt                               | 1 1 < U          | 1 1 < U          | 4 1   | 7.4 1                     | 2.9 1                     | 0.887 1 U U              | 4.65 1                       | 3.63 1             | 4.27 1                |
| METALS                         | Copper                               | 1 1 < U          | 1 1 < U          | 3.7 1   | 3.6 1                     | 4.2 1                     | 1.77 1                   | 2.68                         | 2.74 1             | 2.11 1                |
| METALS                         | Iron                                 | 7540 1           | 5340 t           | 12200 1   | 7360 1                    | 11200 1                   | 46100 2                  | 11400 1                      | 13900 1            | 4970 1                |
| METALS                         | Lead                                 | 2.1 1            | 1.9 1            | 9.9 1   | 5.9 1                     | 14.8 1                    | 3.46 1                   | 6.09 1                       | 5.84 1             | 4.09 1                |
| METALS                         | Magnesium                            | 82.1 1           | 71.7 1           | 767 1   | 1060 1                    | 431 1                     | 186 1 JH                 | 530 1 JH                     | 455 1 JR           | 672 1 JH              |
| METALS                         | Manganese                            | 5.6 1            | 4.9 1            | 92 1  | 15.8 1                    | 153 1 J                   | 37.8 1 J                 | 166 1 3                      | 150 1 J            | 11.7 1 J              |
| METALS                         | Mercury                              | 0.1 1 < U        | 0.1 i < U        | 0.1 1 < U   | 0.1.3 < U                 | 0.11 1 < 0                | 0.026 <sup>.</sup> 1 J J | 0.0271 1 J J                 | 0.0222 1 J J       | 0.257 1 0 0           |
| METALS                         | Nickel                               |                  |                  |   |                           | 100 1                     | 1.19 1 J J               | 5.33 1                       | 4.72 1             | 6.1/ 1                |
| METALS                         | Potassium                            |                  | /6./ 1           | 291 1   | 4/4 1                     | 403 1                     | 139 1                    | 320 1                        | 257 1              | 200 1                 |
| METALS                         | Selenium                             |                  | 11 < 0           | 11 < 0  | 11<0                      | 8.51 I J                  | 0.12 1 J JL              | 1,149 I J 3L<br>1,65 1 11 17 | 0.183 I J JL       | 166 1 16 16           |
| METALS                         | Siver                                | 1 1 < U          | 1 1 < 0          | i 1 < D   | 1 ] < U                   | 1.1 1 < U                 | 3.33 2 U U               | 1.60 1 0 0                   | 1.00 FU U<br>220 f | 1.60 3 0 0            |
| METALS                         | Sociality                            | 0.0 1            | 10 1             | 12.0. 1   | 10 1                      | 10.7 1 c  1               | 023 1 3 3                | 33.0 1                       | 202 1              | 155 1                 |
| METALO                         | Thellium                             | 2.3 1            | 1.9              | 13.9 1  | 19 1                      | 53 / 1 / 11               | 0.0400 1                 | 0.202 1                      | 0.227 1            | 0.0471 1              |
|                                | Vanadam                              |                  |                  |   |                           | 30.4 1 2 0                | 983 1                    | 216 1                        | 23.3 1             | 778 1                 |
| METALS                         | Zine                                 | 34 1             | 38 1             | 129 1   | 25.4 1                    | 24.9 1                    | 14.1 1                   | 13.8 1                       | 179 1              | 124 1                 |
| SEMINOLATILES                  | 124 Trichlorobenzene                 | 0.33 1 2 11      | 033 1 < 13       | 033 1 c ll  | 0.33 1 < 1                | 044 1 < U                 | 0.189 1 11 (2            | 0.192 t U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 1.2-Dichlorobenzene                  | 0.33 1 < 1       | 0.33 1 < U       | 833 t < U   | 0.33 1 < U                | 0.44 1 < U                | 0.189 1 U U              | 0.192 1 U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 1.3-Dichlorobenzene                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U                | 0.44 1 < U                | 0.189 1 U U              | 0.192 1 U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 1.4-Dichlorobenzene                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U  | 0.33 1 < U                | 0.44 1 < U                | 0.189 1 U U              | 0.192 1 U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenol                | 1.65 1 < U       | 1.65 1 < 0       | 1.65 1 < U  | 1.65 1 < U                | 22 1 < U                  | 0.189 1 U U              | 0_192 1 U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 2,4,6 Trichlarophenol                | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U                | €.44 1 < U                | 0.189 1 U U              | 0.192 1 U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 2,4-Dichlorophenol                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U  | 0.33 1 < U                | 0.44 1 < U                | 0.189 1 U U              | 0.192 1 U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 2,4-Dimethylphenol                   | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U                | 0.44 1 < U                | 0.189 1 U U              | 0.192 1 U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 2,4-Dinitrophenol                    | 1.65 1 < U       | 1.65 1 < 1       | 1.65 t < U  | 1.65 1 < 1J               | 2.2 1 < U                 | 0.947 1 U U              | 0.958 1 U U                  | 9.14 10 U U        | 0.881 1 U U           |
| SEMIVOLATILES                  | 2.4-Dinitrotoluene                   |                  |                  |   |                           | 0.44 1 < U                | 0.189-1 U U              | 0.192 t U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 2,6-Dimitrotoluene                   |                  |                  |   |                           | 0.44 1 < U                | 0.189 1 U U              | 0.192 1 U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 2-Chloronaphthalene                  | 0.33 1 < U       | 9.33 1 < U       | 0.33 1 < U  | 0.33 1 < U                | 0.44 1 < U                | 0.189 1 U U              | 0.192 1 U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 2-Chlorophenol                       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U  | 0.33 1 < U                | 0.44 1 < U                | 0.189 1 U U              | 0.192 t U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 2-Methyinaphthalene                  | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U                | 0.44 1 < U                | 0.189 1 U U              | 0.192 1 U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 2-Methylphenol                       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U  | 0.33 1 < U                | 0.44 1 < U                | 0.189 t U U              | 0.192 1 U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | 2-Nitroaniline                       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U  | 1.65 1 < U                | 2.2 1 < U                 | 0.947 1 U U              | 0.958 1 U U                  | 9.14 10 U U        | 0.881 1 U U           |
| SEMIVOLATILES                  | 2-Nitrophenol                        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U  | 0.33 1 < U                | 0.44 1 < U                | 0.189 1 U U              | 0.192 1 U U                  | 1.83 10 U U        | 0.1/6 1 U U           |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzidine               | 0.65 1 < U       | 0.65 1 < 0       | 0.65 1 < U  | 0.65 1 < U                | 0.89 1 < U                | 0.379 T U U              | 0.383 1 U U                  | 3.66 10 U          | 0.352 1 0 0           |
| SEMIVOLATILES                  | 3-Nitroanâne                         | 1.65 1 < U       | 1.65 1 < 0       | 1.65 T < U  | 1.65 1 < U                | 22 1 < 0                  | 0.947 1 U U              | 0.958 7 V U                  | 9.14 10 U U        | 0.881 1 0 0           |
| SEMIVOLARLES                   | 4,6-Dinitro-2-methyaphenol           | 1.65 1 < U       | 1.05 1 < 0       | 1.65 1 < 0  | 1.65 1 < U                | 2.2 t < U                 | 0.947 1 0 0              | 0.958 1 0 0                  | 9.14 10 U U        | 0.001 1 0 0           |
| SEMIVULATILES                  | 4-Bromophenyi phenyi emer            | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 I < U  | 0.33 1 < 0                | 0.44 1 < 0                | 0.169 1 0 0              | 0.192 1 0 0                  | 1.03 10 10 0       | 0.176 1 1 1           |
| SEMIVULATILES .                | ч-сноте-з-періурпелої<br>4 Сыстройна | 0.65 1 < U       | 0.00 I < U       | V.00 I < U  | 0.00 I < U                | 0,44 I < U<br>0.44 I - ∐  | 0.109 I U U              | 0.102 1 -0 0                 | 1.83 10 U U        | 0.176 1 1 1           |
| SEMINULATILES                  | 4-United and about attac             | 0.00 1 < 0       | 0.05 I < U       | ₩.00 I < U<br>0.23 1 - H  | v.uo i < U<br>∩133 1 - 11 | 0.44 i < U<br>10.44 i ∠ H | 0.103 I U U              | 0.192 I U U                  | 1.83 10 0 0        | 0.176 1 U U           |
| SEMIYULATILES<br>SEMIYULATILES | 4-controphicity: pricity: ether      |                  | 0-00 I < U       | 0.33 1 - 11   | 0.00 F C U                | 0.44 1 - 11               | 0.100 1 11 11            | 0.102 1 U U                  | 1.83 10 11 17      | 0.176 1 1/ 1/         |
| SEMINOLATILEO                  | - menyprend<br>A-Nitroaniline        | 165 1 - 10       | 165 1 - 1        | 165 1 × H   | 165 1 - 1                 | 22 1 2 11                 | 0.947 1 11 11            | 0.458 1 11 11                | 9.14 10 11 11      | 0.881 1 11 21         |
| SEMINOLATILES                  | 4-Nitronhenol                        |                  | 165 1 - 8        | 165 1 × U   | 1.65 1 < 1/               | 22 1 2 1                  | 0947 1 13 11             | 0.958 1 13 11                | 9.14 10 U U        | 0.681 1 11 11         |
| SEMIVOLATILES                  | Acenaphthene                         | 0.33 1 2 11      | 0.33 1 c 1       | 0.33 1 < 1  | 0.33 1 < U                | 0.44 1 < U                | 0.189 T U U              | 0.192 1 U U                  | 1.83 10 U U        | 0.176 1 U U           |
| SEMIVOLATILES                  | Acenaphthylene                       | 0.33 1 2 11      | 0.33 1 < 11      | 0.33 t < U  | 0.33 1 < 1                | 0.44 1 < U                | 0.189 1 U U              | 0.192 1 1/ 1/                | 1.83 10 U U        | 0.176 1 U U           |
| CONTREE OF                     |                                      | 1                |                  |   |                           |                           |                          |                              |                    |                       |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Karnack, Texas



1.1

Table 3-113 Concentrations of Chemicals in Soil Samples Associated with WR Sump 007

| [SUMP] = WRSUMP007             |                                |                   |                          |                       |                  |                  |                  |                     |                  |                     |
|--------------------------------|--------------------------------|-------------------|--------------------------|-----------------------|------------------|------------------|------------------|---------------------|------------------|---------------------|
| LOCATION _CODE                 |                                | LH-WRS07-01       | LH-WRS07-01              | LH-WRS07-01           | LH-WRS07-01      | LHS-2-04         | WRS07-SB01       | WRS07-SB01          | WRS07-SB02       | WR\$07-SB02         |
| SAMPLE_NO                      |                                | LH-WRS07-01 QC    | LH-WRS07-01_1            | LH-WRS07-01_2         | LH-WRS07-01_3    | LHS-2-04         | WRS07-SB01-01    | WRS07-SB01-02       | WRS07-SB02-01    | WRS07-SB02-02       |
| SAMPLE_DATE                    |                                | 7/22/1993         | 7/22/1993                | 7/22/1993             | 7/22/1993        | 1/10/1995        | 9/25/2006        | 9/25/2006           | .9/25/2005       | 9/25/2006           |
| DEPTH                          |                                | 0.5~1+1<br>ED     | 0.5 - 1 - 1              | 3.5-4 H<br>RFG        | 0.1-0.5 Fi       | V-U.5 Fi         | REG              | 4.3 - 4.3 FI<br>RFG | 234001           | 4.3 - 4.3 F1<br>RFG |
| Test Group                     | Parameter (Units = mo/ko)      | Result Dil. LO ∀O | Result DB. 1.0 VO        | Result Dil. 1.0 VO    | Result DIL 10 VO | Result DiL 10 VQ | Result Dil LO VO | Result DIL LQ VQ    | Result DIL LQ VQ | Result Dil. LQ VQ   |
| SEMIVOLATILES                  | Antiracene                     | 0.33 1 < U        | 0.33 1 < U               | 0.33 t < U            | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Benzo(a)anthracene             | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 t < U       | 0.072 1 J        | 0.189 1 U U      | 0.192 1 U Ü         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Benzo(a)pyrene                 | 0.33 1 < U        | 0.33 t < U               | 0.33 1 < 1            | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Benzo(b)fluoranthene           | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < U       | 0.24 1 J         | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Benzo(ghi)perviene             | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < ⊍       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Benzo(k)fluoranthene           | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 9.33 1 < U       | 0.065 1 J        | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Benzoic Acid                   | 1.65 1 < U        | 1.65 1 < U               | 1.65 1 < U            | .1.65 1 < U      | 2.2 1 < U        | 0.947 1 U UJ     | 0.958 1 U UJ        | 9.14 10 U UJ     | 0.881 1 U UJ        |
| SEMIVOLATILES                  | Benzył Alcohoł                 | 0.65 1 < U        | 0.65 1 < U               | 0.65 1 < U            | 0.65 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane     | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 t < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether        | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether    | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < U       | 0.44 1 < U       | 0.189 T U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthatate     | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Butyl benzyl phthalate         | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Chrysene                       | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < U       | 0.19 1 J         | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Dibenzo(a,h)anthracene         | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1£3 10 U U       | 0.176 1 U U         |
| SEMIVOLATILES                  | Dibenzofuran                   | 0.33 t < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Diethyl phthalate              | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < U       | 0.44 1 < U       | 0.189 I U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Dimethyl phthalate             | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | di-n-Butyl phthalate           | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < 0            | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | di-n-Octyl phthalate           | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 0 0         | 1.83 19 9 0      | 0.176 1 U U         |
| SEMIVOLATILES                  | Fluoranthene                   | 0.33 1 < U        | 0.33 1 < 0               | 0.33 1 < U            | 0.33 1 < U       | 0.12 1 J         | 0.189 1 U U      | 0.192 1 0 0         | 1.83 10 0 0      | 0.176 3 0 0         |
| SEMIVOLATILES                  | Fluorene                       | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 0 0         | 1.83 10 0 0      | 0.176 1 U U         |
| SEMIVULATILES                  | Hexactiorobenzene              | 0.33 1 < U        | 10,33 1 < U              | 0.33 1 < 0            | 0.33 1 < U       | 0.44 1 < 0       | 0.189 1 0 0      | 0.192 1 0 0         | 1.63 10 0 0      | 0.176 1 0 0         |
| SEMIVOLATILES                  | Hexachlorobutadiene            | 0.33 1 < U        | 0.33 1 < 0               | 0.33 1 < 0            | 0.33 1 < U       | 0.44 1 < 0       | 0.189 1 0 0      | 0.192 1 0 0         | 1.53 10 0 0      | 0.176 1 1 1         |
| SEMIVOLATILES                  | Hexachiorocycopeniaolene       | 0.33   < 0        | 0.33 1 < 1               | 0.33 1 < 0            | 0.33 1 < 0       | 0.44 1 < 0       | 0.109   0 0      | 0.192 1 0 0         | 1.00 10 0 0      | 0.176 1 11 11       |
| SEMIVOLATILES                  | nexacisoroenane                | 0.33 I < U        | 0.33 I < U<br>0.32 1 ∠ U |                       | 0.33 1 < 0       | 0.44 1 < 0       | 0.109 1 0 0      | 0.192 1 0 0         | 1.55 10 0 0      | 0.176 1 1 1         |
| SEMINOLATILES<br>SEMINOLATILES | incent(1,2,3-ca)pyrene         | 0.00 1 < 0        | 0.23 1 < 1               |                       | 0.33 1 < 0       |                  | 0.100 1 0 0      | 0.132 t 0 0         | 1.50 10 0 0      | 0.176 1 11 11       |
| SEMIVOLATILES                  | Nachthalana                    | 833 1 4 13        |                          | 0.30 1 < 0            | 0.33 1 4 15      | 0.44 1 < 1       | 0.189 1 11 11    | 0.192 1 11 13       | 183 10 9 8       | 0.176 1 1 1         |
| SEMIVOLATILES                  | Nitrobenzene                   | 0.33 t < U        | 0.33 1 < 11              | 0.33 1 < 11           | 0.33 1 < 1       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 IUU           |
| SEMIVOLATILES                  | n-Nitroso-di-n-oronytamine     | 0.33 1 4 1        | 0.33 1 < 1               | 0.33 1 < 10           | 0.33 1 < 17      | 0.44 1 < U       | 0.189 1 11 12    | 0.192 t U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | n-Nitrosodinbervlamine         | 0.33 1 < 1        | 0.33 1 < 1               | 0.33 1 < U            | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 t U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Pentachlorophenol              | 1.65 1 < U        | 1.65 1 < U               | 1.65 1 < U            | 1.65 1 < U       | 2.2 1 < U        | 0.947 1 U U      | 0.958 1 U U         | 9.14 10 U U      | 0.881 1 U U         |
| SEMIVOLATILES                  | Phenanthrene                   | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < <del>U</del> | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Phenol                         | 0.33 1 < U        | 0.33 1 < U               | 0.33 t < U            | 0.33 1 < U       | 0.44 1 < U       | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| SEMIVOLATILES                  | Pyrene                         | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U            | 0.33 1 < U       | 0.12 1 J         | 0.189 1 U U      | 0.192 1 U U         | 1.83 10 U U      | 0.176 1 U U         |
| VOLATILES                      | 1.1.1.2-Tetrachloroethane      |                   |                          |                       |                  | 0.014 1 < U      |                  | 0.00449 1 U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,1,1-Trichloroethane          | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U           | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane      | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U           | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449.1 U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,1,2-Trichkoroethane          | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U           | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 t U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,1-Dichloroethane             | 0.005 t < U       | 0.005 1 < U              | 0.905 1 < U           | 0.005 1 < U      | 0.007 1 < 년      |                  | 0.00449 1 U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,1-Dichloroethene             | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U           | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 t U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,1-Dichkoropropene            |                   |                          |                       |                  |                  |                  | 0.00449 1 U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,2,3-Trichlorobenzene         |                   |                          |                       |                  |                  |                  | 0.00449 1 U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,2,3-Trichloropropane         |                   |                          |                       |                  | 0.014 1 < U      |                  | 0.00449 1 U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,2,4-Trichlorobenzene         |                   |                          |                       |                  |                  |                  | 0.00449 t U V       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,2,4-Trimethylbenzene         |                   |                          |                       |                  |                  |                  | 0.00449 1 U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,2-Dibromo-3-chloropropane    |                   |                          |                       |                  | 0.027 1 < U      |                  | 0.00449 1 U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,2-Dibromoethane              |                   |                          |                       |                  | 10.027 1 < U     |                  | 0.00449 1 U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,2-Dichlorobenzene            |                   |                          |                       |                  |                  |                  | 0.00449 t U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 1,2-Dichloroethane             | 0.005 1 < U       | 0.005 1 < U              | 0.005 1 < U           | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 U U       |                  | 0.0055 1 0 0        |
| VOLATILES                      | 1,2-Dichloroethene             | 0.005 1 < €       | 0.005 1 < U              | 0.005 1 < U           | 0.005 1 < 0      | 0.007 1 < U      |                  |                     |                  | 6 6055 d 31 U       |
| VOLATILES                      | 1,2-Dichloropropane            | 0.065 1 < U       | 0.005 1 < 0              | 0.005 1 < 0           | 0.005 1 < 0      | 0.007 T < U      |                  | 0.00449 1 0 0       |                  | 0.0055 1 0 0        |
| VOLATILES                      | 1,2-Dimethylbenzene (o-Xylene) |                   |                          |                       |                  |                  |                  | 0.00449 1 0 0       |                  | 0.0055 1 0 0        |
| VOLAHLES                       | 1,3,5-Trimethylbenzene         |                   |                          |                       |                  |                  |                  | 0.00449 1 0 0       |                  | 0.0055 1 0 0        |
| VOLAHLES                       | 1.3-Dichiorobenzene            |                   |                          |                       |                  |                  |                  | 0.00449 1 0 0       |                  | 0.0055 1 0 0        |
| VOLANLES                       | 1,0-Dichloroborrane            |                   |                          |                       |                  |                  |                  | 0.0040 1 0 0        |                  | 0.0000 1 0 U        |
| VOLATILES                      | 2 2-Dichloroprocesso           |                   |                          |                       |                  |                  |                  | 0.00449 1 11 11     |                  | 80055 1 U U         |
| VOLATILES<br>VOLATILES         | 2-8utanone                     | 0.05 1 - 11       | 0.05 1 × 11              | 0.05 1 - 11           | 005 t - 11       | 0.014 1 - 11     |                  | 0.00897 1 1/ 1/     |                  | 0.041 1 U U         |
| VOLATES                        | 2-Chloroethyl vinyl ether      |                   |                          | 0.01 1 < 1            | 0.01 1 < 1       |                  |                  | 0.00897 1 11 11     |                  | 0.011 1 U U         |
| VOLATUES                       | 2-Chlorotoluene                | 9.01 I S U        |                          |                       | V.V. 1 7 U       |                  |                  | 0.00449 1 U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | 2-Hexanone                     | 0.05 1 < H        | 0.05 1 < il              | 0.05 1 < U            | 0.05 1 < 1       | 0.014 1 < U      |                  | 0.00897 1 U U       |                  | 0.011 1 U U         |
| VOLATILES                      | 4-Chiorotoluene                |                   |                          | ···· · · ·            |                  |                  |                  | 0.00449 1 U U       |                  | 0.0055 1 U U        |
| VOLATILES                      | Acetone                        | 0.1 1 < 1         | 0.1 1 < ±1               | 0.1 1 < -U            | 0.1 1 < U        | 0.014 1 < U      |                  | 0.00897 T U U       |                  | 0.011 1 U U         |
|                                |                                |                   |                          |                       |                  |                  |                  |                     |                  |                     |



Table 3-113 Concentrations of Chemicals in Soil Samples Associated with WR Sump 007

| (SUMP) = WRSUMP007 |                             |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|--------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION CODE      |                             | LH-WRS07-01      | LH-WRS07-01      | LH-WRS07-01      | LH-WRS07-01      | LHS-2-04         | WRS07-SB01       | WRS07-SB01       | WR\$07-\$B02     | WRS07-SB02       |
| SAMPLE_NO          |                             | LH-WRS07-01 QC   | LH-WRS07-01_1    | LH-WRS07-01_2    | LH-WR\$07-01_3   | LHS-2-04         | WRS07-SB01-01    | WRS07-SB01-02    | WR\$07-\$802-01  | WRS07-SB02-02    |
| SAMPLE_DATE        |                             | 7/22/1993        | 7/22/1993        | 7/22/1993        | 7/22/1993        | 1/10/1995        | 9/25/2006        | 9/25/2006        | 9/25/2006        | 9/25/2006        |
| Depth              |                             | 0.5 - 1 Ft       | 0.5 - 1 Ft       | 3.5 - 4 Ft       | 6.1 - 6.5 Ft     | 0-0.5 Ft         | 0.5 - 0.5 Ft     | 4.5 - 4.5 Ft     | 0.5 - 0.5 Ft     | 4.5 - 4.5 Ft     |
| SAMPLE_PURPOSE     |                             | FD               | REG              |
| Test Group         | Parameter (Units = mg/kg)   | Result DH. LQ VQ | Result DR. LQ VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO |
| VOLATILES          | Benzene                     | 0.005 1 < 17     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Bromobenzene                |                  |                  |                  |                  |                  |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Bromochloromethane          |                  |                  |                  |                  |                  |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Bromodichloromethane        | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Bromoform                   | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < Ü      | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Bromomethane                | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.014 1 < U      |                  | 0.00897 1 U U    |                  | 0.011 1 U U      |
| VOLATILES          | Carbon disultide            | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Carbon tetrachloride        | 0.005 1 < U      | 0:005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Chiorobenzene               | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Chioroethane                | 0.01 1 < U       | 0.01 1 < U       | 0.91 1 < U       | 0.01 1 < U       | 0.014 1 < U      |                  | 0.00897 1 U U    |                  | 0.011 1 U U      |
| VOLATILES          | Chioroform                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Chloromethane               | 0.01 1 < ป       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.014 1 < Ù      |                  | 0.00897 1 U U    |                  | 0.911 1 U V      |
| VOLATILES          | cis-1,2-Dichloroethene      |                  |                  |                  |                  |                  |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | cis-1,3-Dichloropropene     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < Ü      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Dioromochloromethane        | 0.005 1 < ⊍      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Dibromomethane              |                  |                  |                  |                  | 0.014 1 < U      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Dichlorodifluoromethane     |                  |                  |                  |                  | 0.027 1 < U      |                  | 0.00897 1 U U    |                  | 0.011 1 U U      |
| VOLATILES          | Ethylbenzene                | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Hexachlorobutadiene         |                  |                  |                  |                  |                  |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Isopropyibenzene            |                  |                  | -                |                  |                  |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | m,p-Xylenes                 |                  |                  |                  |                  |                  |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Methyl isobutyl ketone      | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.014 1 < U      |                  | 0.00897 1 U U    |                  | 0.011 1 U U      |
| VOLATILES          | Methylene chloride          | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 Ü U    |                  | 0.0055 1 U U     |
| VOLATILES          | Naphthalene                 |                  |                  |                  |                  |                  |                  | 0.00897 1 U U    |                  | 0.011 1 U U      |
| VOLATILES          | n-BUTYLBENZENE              |                  |                  |                  |                  |                  |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | n-PROPYLBENZENE             |                  |                  |                  |                  |                  |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | p-ISOPROPYLTOLUENE          |                  |                  |                  |                  |                  |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | sec-8UTYLBENZENE            |                  |                  |                  |                  |                  |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Styrene                     | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.007 f < U      |                  | 0.00449 1 U U    |                  | 0.0655 1 U U     |
| VOLATILES          | tert-BUTYLBENZENE           |                  |                  |                  |                  |                  |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Tetrachloroethene           | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Toluene                     | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 t < U      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | trans-1,2-Dichloroethene    |                  |                  |                  |                  |                  |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | trans-1,3-Dichloropropene   | 0.005 1 ≺ U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < ⊍      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Trichloroethene             | 0.905 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.007 1 < U      |                  | 0.00449 1 U U    |                  | 0.0055 1 U U     |
| VOLATILES          | Trichlorofluoromethane      |                  |                  |                  |                  | 0.014 1 < U      |                  | 0.00897 1 U U    |                  | 0.011 1 U U      |
| VOLATILES          | Vinyl acetate               | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.014 1 < U      |                  | 0.00897 1 U U    |                  | 0.011 1 U U      |
| VOLATILES          | Vinyl chloride              | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.014 t < U      |                  | 0.00897 1 U U    |                  | 0.011 1 U U      |
| VOLATILES          | Xylenes, Total              | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.007 1 < U      |                  |                  |                  |                  |
| VOLATILES          | 2-Propenal                  |                  |                  |                  |                  | 0.68 1 < U       |                  |                  |                  |                  |
| VOLATILES          | Acetonitrile                |                  |                  |                  |                  | 0.14 1 < U       |                  |                  |                  |                  |
| VOLATILES          | Acrylonärile                |                  |                  |                  |                  | 0.14 1 < U       |                  |                  |                  |                  |
| VOLATRES           | Allyl chloride              |                  |                  |                  |                  | 0.027 1 < U      |                  |                  |                  |                  |
| VULATILES          | Chloroprene                 |                  |                  |                  |                  | 0.14 1 < U       |                  |                  |                  |                  |
| VOLATILES          | ETTYI METALANE              |                  |                  |                  |                  | 0.027 1 < U      |                  |                  |                  |                  |
| VOLATILES          |                             |                  |                  |                  |                  | 0.014 1 < U      |                  |                  |                  |                  |
| VOLATILES          | Notional ALGORICE           |                  |                  |                  |                  | 2./ 1 < U        |                  |                  |                  |                  |
| VOLATILES          | METHY NETHACOVIATE          |                  |                  |                  |                  | 0.027 1 < U      |                  |                  |                  |                  |
| VOLATIES           | MCITIL MCTRAUTILATC         |                  |                  |                  |                  | 0.027 1 < 0      |                  |                  |                  |                  |
| VOLABLES           | Propionitrile               |                  |                  |                  |                  | 0.027 1 < 0      |                  |                  |                  |                  |
| VOLATILES          | trans-1 4-Dichloro-2-hutene |                  |                  |                  |                  | 0.000 1 2 0      |                  |                  |                  | •                |
|                    |                             | L                |                  |                  |                  |                  |                  |                  |                  |                  |

Footnotes are shown on cover page to Tables Section.

.



Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



|                    |  | Concentration | s of Chemicals in              | Soli Samples A   | ssociated with V | WR Sump 008      |                  |                  |
|--------------------|--|---------------|--------------------------------|------------------|------------------|------------------|------------------|------------------|
| [SUMP] = WRSUMPOOB |  | 1 45.5.10     | 1 4.36000.01                   | 14.00000.01      | W/95008-5801     | WRS008-SB01      | WRSONR SB02      | WBS008-SB02      |
|                    |  | (HS.3.16      | 1 H.M/RS1.6( 1                 | LHWASSAL 2       | WRS008-SR01-01   | WRS008-SB01-02   | W85008-SB02-01   | WRS008-SB02-02   |
| SAMPLE DATE        |  | 1/11/1995     | 8/6/1993                       | 8/6/1993         | 9/14/2006        | 9/14/2006        | 9/14/2005        | 9/14/2006        |
| DEPTH              |  | 0 - 0.5 FI    | 0.5 - 1 FI                     | 3.5 - 4 FI       | 0.5 - 0.5 FI     | 4 - 4 F1         | 0.5 · 0.5 FI     | 4 - 4 FI         |
| SAMPLE_PURPOSE     |  | REG           | REG                            | REG              | REG              | REG              | REG              | REG              |
| Test Group         | Parameter (Units = mg/kg)                | Result OIL LO | /Q Result Dit LQ VQ            | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO |
| EXPLOSIVES         | 1,3,5-Trinitrobenzene                    | 0,21 1 <      | j                              |                  | 0.245 1 U        | 0.238 1 U        | 0,242 1 U        | 0.239 1 U        |
| EXPLOSIVES         | 1,3-Dinitrobenzene                       | 0.21 1 <      | J                              |                  | 0.245 1 U        | 0.238 1 U        | 0.242 1 U        | 0.239 1 U        |
| EXPLOSIVES         | 2.4.6 Tonirploluene                      | 0.21 1 <      | J.                             |                  | 0.245 1 U        | 0.238 1 U        | 0.242 1 U        | 0.239 1 U        |
| EXPLOSIVES         | 2,4-Dinitrololuene                       | 0.21 1 <      | J 0.33 1 < U                   | 0.33 1 < U       | 0.245 1 U        | 0.238 1 U        | 0.242 1 U        | 0.239 ) U        |
| EXPLOSIVES         | 2,5 Dinitrololuene                       | 0.23 1 <      | J 0.33 1 < U                   | 0.33 1 < 0       | 0.255 1 U        | 0.248 ) 0        | 0.251 1 0        | 0.249 1 0        |
| EXPLUSIVES         | 2-Amino-4,6-Opinotoluene                 | 0.45          | 4                              |                  | 0.205 0 0        | 0.248 1 0        | 0.251 1 1        | 0.249 1 11       |
| EXPLOSIVES         | 4-Minio-2,6-Oranoi0idena                 | 2 1 4         | <b>.</b>                       |                  | 216 1 1          | 21 1 1           | 2.13 1 U         | 2.11 1 U         |
| EXPLOSIVES         | m-Mitrolowene                            | 0.69 1 4      | U                              |                  | 0.245 1 U        | 0.238 1 U        | 0.242 1 U        | 0,239 1 U        |
| EXPLOSIVES         | Nitrobenzane                             | 0.23 1 <      | U                              |                  | 0.255 1 U        | 0.248 1 U        | 0.261 1 U        | 0.249 1 U        |
| EXPLOSIVES         | o-Nitrotoluene                           | 0.89 1 <      | ប                              |                  | 0.245 1 U        | 0.238 1 U        | 0.242 1 U        | 0.239 / U        |
| EXPLOSIVES         | p-Nitrotoluene                           | 2.7 1 <       | U                              |                  | 0.245 1 U        | 0.238 1 U        | 0.242 1 U        | 0.239 1 U        |
| EXPLOSIVES         | RDX                                      | 0.96 1 <      | U                              |                  | 0.98 1 U         | 0.952 1 U        | 0.966 1 U        | 0.957 1 U        |
| EXPLOSIVES         | Tetryi                                   | 0.66 1 <      | U                              |                  | 0.637 1 U        | 0.619 1 U        | 0.628 1 U        | 0.622 1 U        |
| METALS             | Aluminum                                 | 7160 1        | 8640 1                         | 20500 1          |                  |                  |                  |                  |
| METALS             | Antimony                                 | 14,6 1 <      | UJ 3 5 < U                     | 3 I < U          |                  |                  |                  |                  |
| METALS             | Arsenic                                  | 7 1           | 2.3 1                          | 2.8              | •                |                  |                  |                  |
| METALS             | Banum                                    | 159 1         | 75.8 1                         | 442 1            |                  |                  |                  |                  |
| METALS             | Calonium                                 | 1.0 1         |                                | 0 5 1 1          |                  |                  |                  |                  |
| METALS             | Chromium                                 | 270 1         | 134 1                          | 100 1            |                  |                  |                  |                  |
| METALS             | Cobalt                                   | 7.8 1         | 4.8 1                          | 11.2 1           |                  |                  |                  |                  |
| METALS             | Copper                                   | 27.8          | 4,3 1                          | 6,1 1            |                  |                  |                  |                  |
| METALS             | hon                                      | 28300 1       | 10700 f                        | 17200 1          |                  |                  |                  |                  |
| METALS             | Lead                                     | 62.7 1        | 21.5 1                         | 10.8 1           |                  |                  |                  |                  |
| METALS             | Magnesium                                | 519 f         | 528 1                          | 1870 1           |                  |                  |                  |                  |
| METALS             | Manganese                                | 175 1         | 387 1                          | 38.7 1           |                  |                  |                  |                  |
| METALS             | Mercury                                  | 0.12 1 <      | U 0.1 i < U                    | 0.1 1 < U        |                  |                  |                  |                  |
| METALS             | Polassium                                | 314 1         | 418 1                          | 728 1            |                  |                  |                  |                  |
| METALS             | Selenium                                 | 0.48          |                                | 11               |                  |                  |                  |                  |
| METALS             | Skootium                                 | 102 (         | 921                            | 29.6 1           |                  |                  |                  |                  |
| METALS             | Thellum                                  | 73 1 <        | U                              |                  |                  |                  |                  |                  |
| METALS             | Zinc                                     | 182 1         | J 37.9 1                       | 33.6 1           |                  |                  |                  |                  |
| SEMIVOLATILES      | 1,2.4-Trichlorobenzene                   | 0.6 1 <       | ป 0.33 î< ป                    | 0.33 f < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 1,2-Dichlorobenzene                      | 0.6 1 ≺       | Ų 0.33 1 < U                   | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 1.3-Dichlorobenzene                      | 0.6 i <       | U 0.33 1 < U                   | 0.33 i < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 1,4-Dichlorobenzene                      | 0.6 1 <       | U 0.33 1 < U                   | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 2,4,5-Trichlorophenol                    | 3 1 <         | 0 1.65 1 < 0                   | 1.65 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 2.4.5-Inchiorophenol                     | 0,6 1 <       | 0 0.33 1 < 0                   | 0.33 > < U       |                  |                  |                  |                  |
| SENIVOLATILES      | 2.4-Dichidropheno/                       | 0.6 1 4       | U 0.33 I < U                   | 0.33 1 < 0       |                  |                  |                  |                  |
| SEMIVOLATILES      | 2.4-Dinitronhenol                        | 314           | U 1.65 1 < U                   | 1.65 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 2.4-Dinitrololuena                       | 0.51 <        | U                              |                  |                  |                  |                  |                  |
| SEMIVOLATILES      | 2,6-Dinitrololuena                       | 0.6 1 <       | U                              |                  |                  |                  |                  |                  |
| SEMIVOLATILES      | 2-Chloronaphthalane                      | 0.6 1 <       | ป 0.33 1 < ป                   | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 2-Chlorophenol                           | 0.6 1 <       | U 0.33 1 < U                   | 0.33 i < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 2-Methylnaphthalene                      | 0.6 1 <       | U 0,33 1 < U                   | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 2-Methylphenol                           | 0.6 1 <       | U 0.33 1 < U                   | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 2-Nitroaniline                           | 314           | ∪ 1.55 1 < U                   | 1,65 1 < 0       |                  |                  |                  |                  |
| SEMIVOLATILES      | 2-Nitrophenol<br>2 3' Diablerabar aldina | 0.6 1 <       | U 0.33 1 < U                   | 0.50 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 3.a -cricinorocenzione<br>3.Nitroaniline | 31-           | 0 0.00 / K U<br>11 1.65 1 - 11 | 1.65 1 2 1       |                  |                  |                  |                  |
| SEMIVOLATILES      | 4.5-Dinitro-2-methylohapol               | 314           | U 1.85 1 < 1                   | 1.65 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 4-Bromophenyl phenyl eiher               | 0.6 1 <       | U 0.33 1 < U                   | 0.33 1 < 1       |                  |                  |                  |                  |
| SEMIVOLATILES      | 4-Chloro-3-methylphanol                  | 0.6 1 <       | U 0.65 1 < U                   | 0,65 i < Ü       |                  |                  |                  |                  |

### Table 3-114 Concentrations of Chemicals in Soil Samples Associated with WR Sump 008

Data Evaluation Report





|                    | (                           | Concentration  | ns (    | of Chemica    | als in  | Soil Samples A   | ssociated with V | VR Sump 008      |                  |                  |
|--------------------|-----------------------------|----------------|---------|---------------|---------|------------------|------------------|------------------|------------------|------------------|
| [SUMP] = WRSUMP008 |                             |                |         |               |         |                  |                  |                  |                  |                  |
| LOCATION CODE      |                             | UHS-2-19       |         | LH-WRSa-0     | 1       | LH-WRS8-01       | WRS008-SB01      | WRS008-SB01      | WRS008-SB02      | WR5008-5802      |
| SAMPLE_NO          |                             | LHS-2-19       |         | LH-WHS8-01    | _1      | LH-WRS8-01_2     | WRS008-SB01-01   | WRS008-SB01-02   | WRS008-S802-01   | WRS008-SB02-02   |
| SAMPLE_DATE        |                             | 1/11/1995      |         | 8/6/1993      |         | 8/6/1993         | 9/14/2006        | 9/14/2006        | 9/14/2006        | 9/14/2006        |
| DEPTH              |                             | 0 - 0.5 FI     |         | 0.5 - 1 Ft    |         | 3.5 - 4 FI       | 0.5 - 0.5 Ft     | 4 - 4 Fi         | 0.5 - 0.5 Ft     | 4 • 4 Ft         |
| SAMPLE_PURPOSE     |                             | REG            |         | REG           |         | REG              | REG              | REG              | REG              | REG              |
| Test Group         | Parameter (Units = mg/kg)   | Result Dil. LO | VO      | Result DIL LO | o vo    | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO |
| SEMIVOLATILES      | 4-Chloroaniline             | 0.6 1 <        | Ų       | 0.65 i <      | IJ      | 0.65 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 4 Chlorophenyl phenyl elher | 0.6 1 <        | U       | 0.33 1 <      | U       | 0.33 1 < 0       |                  |                  |                  |                  |
| SEMIVOLATILES      | 4-Methylphenol              | 0.6 1 <        | U       | 0.33 1 <      | U       | 0.33 1 < U       |                  | 1                |                  |                  |
| SEMIVOLATILES      | 4-NitroanIline              | 31<            | U       | 1.65 1 <      | Ų       | 1,65 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | 4-Nitrophanol               | 3 1 <          | ₩.      | 1.65 1 <      | U       | 1.65 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Acenaphthene                | 0.6 1 <        | U       | 0.33 1 <      | IJ      | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Acenaphthylene              | 0.6 1 <        | U       | 0.33 1 <      | U       | 0.33 i < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Anthracene                  | 0.6 1 <        | U       | 0.33 1 <      | U       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Benzo(a)anthracene          | 0,6 1 <        | U       | 0.33 1 <      | U       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Benzo(a)pyrene              | 0.8 í <        | U       | 0.33 1 <      | U       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Benzo(b)fluoranthene        | 0.6 1 <        | U       | 0.33 i <      | Ų       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Benzo(ghi)perylene          | 0.6 1 <        | U       | 0.33 ' <      | U       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Senzo(k)Ruoranthere         | 0.6 1 <        | U       | 0.33 1 <      | U       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Benzoic Acid                | 31 <           | U       | 1.65 1 <      | U       | 1.65 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Benzyl Alcohol              | 0.6 1 <        | U       | 0.65 1 <      | U       | 0.65 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | bis(2-Chloroethoxy)methane  | 0.6 1 <        | U       | 0.33 1 <      | U       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | bis(2-Chloroethyi)ether     | 0.6 1 <        | Ų       | 0.33 1 <      | U       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | bis{2-Chioroisopropyi)ether | 0.5 1 <        | U       | 0.33 i <      | U       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | bis(2-Ethylhexyl)phthalate  | 0.25 1         | J       | Q.33 i <      | U       | 0.33 f < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Butyl benzyl phthalate      | 0.6 1 <        | U       | 0.33 1 <      | U       | 0.33 i < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Chrysene                    | 0.6 1 <        | Ų       | 0.33 1 <      | Ų       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Dibenzo(a,h)anthracene      | 0.6 1 <        | U       | 0.33 1 <      | U       | 0.33 1 < 0       |                  |                  |                  |                  |
| SEMIVOLATILES      | Dibenzoluran                | 0.6 1 <        | U       | 0.33 1 <      | Û       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Disthyl phihalale           | 0.6 1 <        | U       | 0.33 1 <      | U       | 0.33 1 < 0       |                  |                  |                  |                  |
| SEMIVOLATILES      | Dimethyl phthalate          | 0.6 1 <        | U       | 0.33 1 <      | U.      | 0.33 1 < 0       |                  |                  |                  |                  |
| SEMIVOLATILES      | di-n-Butyl phthalate        | 0.6 1 <        | U       | 0.33 1 <      | U<br>   | 0.33 1 < 0       |                  |                  |                  |                  |
| SEMIVOLATILES      | di-n-Octyl phthalate        | 0.6 1 <        | U       | 0.33 1 <      | U<br>   | 0.33 1 < 0       |                  |                  |                  |                  |
| SEMIVOLATILES      | Fluoranthene                | 0.6 1 <        | 0       | 0.33 1 <      | 0       | 0.33 1 < 0       |                  |                  |                  |                  |
| SEMIVOLATILES      | Fluorene                    | 0.6 1 <        | 0       | 0.33 1 <      | U<br>U  | 0.03 1 4 10      |                  |                  |                  |                  |
| SEMIVOLATILES      | Hexachioropenzene           | 0.6 1 <        |         | 0.33 1 <      | 0<br>31 | 0.33 1 4 1       |                  |                  |                  |                  |
| SEMIVOLATILES      | Mexachioroduladiene         | 0.6 1          | 0       | 0.33 1 4      |         | 0.33 1 4 11      |                  |                  |                  |                  |
| SEMIVOLATILES      | HexachioroLyLioparitacienta |                | ň       | 0.12          | ň       | 0.33 1 4 1       |                  |                  |                  |                  |
| SENIVOLATILES      | Indepa/1.2.2 criteurono     | 0.6 1 -        | 0       | 0.33 1 4      | U.      | 033 1 e U        |                  |                  |                  |                  |
| SEMIVOLATILES      | Ingene(1.2,3-cu)pyrene      | 0.5 1 4        | LI I    | 0.33 1 6      | Ű       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Naphihalage                 | 0.6 1 -        |         | 0.33 1 4      | ii.     | 0.33 1 < 1       |                  |                  |                  |                  |
| CENIVOLATILES      | Nitrobeazane                | 06 1 -         | ы.<br>Е | 0.33 1 <      | ŭ       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | n-Nitroso-di-n-promulamine  | 0.6 1 <        | ũ       | 0.33 1 <      | ŭ       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | n-Mitrosodinhenvlamine      | 0.8 1 <        | Ū       | 0.33 1 <      | Ū       | 0,33 1 < U       |                  |                  |                  |                  |
| SEMINOLATILES      | Pentachiorophego            | 314            | Ŭ       | 1.65 1 <      | U       | 1.65 1 < U       |                  |                  |                  |                  |
| SEMIVOLATUES       | Phenanibrene                | 0.6 1 <        | Ū       | 0.33 1 <      | Ű       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Phenol                      | 0.6 1 <        | U       | 0.33 1 <      | U       | 0.33 1 < U       |                  |                  |                  |                  |
| SEMIVOLATILES      | Pyrene                      | 0.6 1 <        | U       | 0.33 1 <      | U       | 0,33 1 < U       |                  |                  |                  |                  |
| VOLATILES          | 1.1.1.2-Teirachloroethana   | 0.018 1 <      | Ű       |               |         |                  |                  |                  |                  |                  |
| VOLATILES          | 1.1.1-Trichloroethane       | 0.009 1 <      | Ú       | 0.005 1 <     | Ų       | 0.005 1 < U      |                  |                  |                  |                  |
| VOLATILES          | 1,1,2,2-Tetrachioroethane   | 0.009 1 <      | U       | 0.005 1 <     | Ų       | 0.005 1 < U      |                  |                  |                  |                  |
| VOLATILES          | 1.1.2-Trichloroelhane       | 0,009 1 <      | U       | 0.005 1 <     | U       | 0,005 1 < U      |                  |                  |                  |                  |
| VOLATILES          | 1,1-Dichloroethane          | 0.009 1 <      | U       | 0.005 1 <     | U       | 0.005 1 < U      |                  |                  |                  |                  |
| VOLATILES          | 1,1-Dichlorgethene          | 0.009 1 <      | U       | 0.005 1 <     | U       | 0.005 1 < U      |                  |                  |                  |                  |
| VOLATILES          | 1,2,3-Trichloropropane      | 0.018 1 <      | U       |               |         |                  |                  |                  |                  |                  |
| VOLATILES          | 1,2-Dibromo-3-chloropropane | 0.036 i <      | U       |               |         |                  |                  |                  |                  |                  |
| VOLATILES          | 1.2-Dibromosthane           | 0.036 1 <      | U       |               |         |                  |                  |                  |                  |                  |
| VOLATILES          | 1.2-Dichloroethane          | 0.009 1 <      | U       | 0.005 1 <     | U       | 0.005 1 < Ü      |                  |                  |                  |                  |
| VOLATILES          | 1,2-Dichlomethens           | 0.009 1 <      | U       | 0.005 1 <     | U       | 0.005 1 < U      |                  |                  |                  |                  |
| VOLATILES          | 1,2-Dichloropropane         | 0.009 1 <      | U       | 0,005 1 <     | U       | 0.005 1 < U      |                  |                  |                  |                  |
| VOLATILES          | 2-Butanone                  | 0.018 1 <      | U       | 0.05 1 <      | U       | 0.05 1 < U       |                  |                  |                  |                  |

Table 3-114

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



|                    |                                  |                  |                  | 14010-114        |                  |                  |                  |                  |
|--------------------|----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                    | (                                | Concentrations   | of Chemicals in  | Soil Samples A   | ssociated with v | VR Sump 008      |                  |                  |
| (SUMP) = WRSUMP008 |                                  |                  |                  |                  |                  |                  |                  |                  |
| LOCATION CODE      |                                  | LHS-2-19         | LH-WRSB-01       | LH-WRS8-01       | WRS008-SB01      | WRS008-SB01      | WRS008-SB02      | WR\$008-\$802    |
| SAMPLE NO          |                                  | LHS-2-19         | LH-WR58-01_1     | LH-WRS8-01_2     | WR\$008-\$B01-01 | WRS008-SB01-02   | WRS008-SB02-01   | WRS008-S802-02   |
| SAMPLE DATE        |                                  | 1/11/1995        | 8/6/1993         | 8/6/1993         | 9/14/2006        | 9/14/2006        | 9/14/2006        | 9/14/2006        |
| DEPTH              |                                  | 0 0.5 FL         | 0.5 - 1 FI       | 3.5 • 4 Ft       | 0.5 - 0.5 FL     | 4 - 4 Fl         | 0.5 - 0.5 FI     | 4 - 4 F1         |
| SAMPLE PURPOSE     |                                  | BEG              | REG              | REG              | REG              | REG              | REG              | REG              |
| Tasl Group         | Parameter (Linits - mr/kn)       | Besult DIL LO VO | Besult DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO |
| VOLATILES          | 2-Chloroethul vizvi ether        | 0.018 1 < 11     | 0.01 1 < U       | 0.01 f < U       |                  |                  |                  |                  |
| VOLATILES          | 2-Hevanone                       | 0.018 1 < U      | 0.05 1 < U       | 0.05 f < U       |                  |                  |                  |                  |
| VOLATILES          | 2-Pronenal                       | 09 1 < 0         |                  |                  |                  |                  |                  |                  |
| VOLATHES           | Acelone                          | 0018 1 - U       | 0.1 1 < 11       | 0.1 1 < U        |                  |                  |                  |                  |
| VOLATILES          | Acatonicia                       | 0.18 1 2 11      |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Academinia                       | 0.18 1 < 1/      |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Allul chlarida                   | 0.019 1 < 1      |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Repress                          |                  | 0.005 1 - 11     | 0.005 1 < U      |                  |                  |                  |                  |
| VOLATILES          | Denzene<br>Drama disklassmathans | 0,009 1 < 0      | 0,005 1 < 1      | 0.005 1 < 0      |                  |                  |                  |                  |
| VOLATILES          | Bramodicnioromeinane             | 0.000 1 - 1      |                  | 0.005 1 4 0      |                  |                  |                  |                  |
| VOLATILES          | Bramolorm                        | 0.009 1 < 0      | 0.005 7 < 0      | 0.000 / 0 0      |                  |                  |                  |                  |
| VOLATILES          | Biomomeinane                     |                  |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Caroon disulide                  | 0.009 1 < 0      | 0.005 1 < 0      | 0.005 1 4 0      |                  |                  |                  |                  |
| VOLATILES          | Carbon leirachionde              | 0.009 1 < 0      | 0.005 1 < 0      | 0.005 1 < 0      |                  |                  |                  |                  |
| VOLATILES          | Chlorobenzene                    | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < 0      |                  |                  |                  |                  |
| VOLATILES          | Chiprosthane                     | 0,018 1 < 0      | 0.01 1 4 0       | 0.01 1 < 0       |                  |                  |                  |                  |
| VOLATILES          | Chioraíorm                       | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < 0      |                  |                  |                  |                  |
| VOLATILES          | Chloromelhane                    | 0.018 1 < U      | 0.01 1 < V       | 0.01 i < U       |                  |                  |                  |                  |
| VOLATILES          | Chloroprena                      | 0.18 1 < U       |                  |                  |                  |                  |                  |                  |
| VOLATILES          | cis-1,3-Dichloropropene          | 0.009 1 < V      | 0.005 1 < U      | 0.005 1 < 0      |                  |                  |                  |                  |
| VOLATILES          | Dibromochloromethane             | 0,009 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  |                  |                  |                  |
| VOLATILES          | Dibromomethane                   | 0.035 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Dichlorodifluoromethane          | 0.036 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Ethyl methacrylate               | 0.036 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Ethylbenzene                     | 0.009 I < U      | 0.005 1 < U      | 0.005 1 < U      |                  |                  |                  |                  |
| VOLATILES          | IODOMÉTHANE                      | 0.018 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES          | ISOBUTYL ALCOHOL                 | 3.6 i U          |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Methacrylonitrile                | 0.036 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Methyl isobutyl ketone           | 0.018 1 < U      | 0.05 1 < U       | 0.05 1 < U       |                  |                  |                  |                  |
| VOLATILES          | METHYL METHACRYLATE              | 0.036 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Methylene chloride               | 0,009 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  |                  |                  |                  |
| VOLATILES          | Pantachloroathane                | 0.036 f < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Propionitrile                    | 0.09 f < U       |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Sivrene                          | 0.009 i < U      | 0.005 1 < U      | 0.005 1 < U      |                  |                  |                  |                  |
| VOLATILES          | Tetrachloroelhene                | 0.009 1 < U      | 0.005 i < U      | 0.005 i < U      |                  |                  |                  |                  |
| VOLATILES          | Toluene                          | 0.009 1 < U      | 0.005 1 < U      | 0.005 i e U      |                  |                  |                  |                  |
| VOLATILES          | trans-1.3-Dichlorogropene        | 0.009 1 < U      | 0.005 1 < U      | 0.005 i < U      |                  |                  |                  |                  |
| VOLATILES          | trans+1.4-Dichloro-2-butene      | 0.036 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Trichlaroethane                  | 0.009 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  |                  |                  |                  |
| VOLATILES          | Trichlorofluoromethane           | 0.018 1 < U      |                  |                  |                  |                  |                  |                  |
| VOLATILES          | Vinvi aceiste                    | 0.018 1 < U      | 0.05 1 < U       | 0.05 1 < U       |                  |                  |                  |                  |
| VOLATILES          | Vinyl chloride                   |                  | 0.01 1 < 0       | 0.01 1 < U       |                  |                  |                  |                  |
| VOLATE ES          | Yulanas Tolal                    |                  | 0.005 1 < 1      | 0.005 1 < U      |                  |                  |                  |                  |
|                    |                                  |                  |                  |                  |                  |                  |                  |                  |

Table 3-114

VOLATILES Xylenes, Total Footnotes are shown on cover page to Tables Section.

Table 3-115 Concentrations of Chemicals in Soil Samples Associated with WR Sump 009

| [SUMP] = WRSUMP009 |  |                  |                  |                  |                  |                  |                  |                   |
|--------------------|--|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|
| LOCATION_CODE      |  | 46SB03           | 46SB03           | 46SB03           | 46SB03           | LH-WRS9-01       | LH-WR\$9-01      | WRS09-SB01        |
| SAMPLE_NO          |  | 46\$803(0-0_5)   | 46SB03(0-0_5)QC  | 46SB03(1-3)      | 46SB03(3-5)      | LH-WRS9-01_1     | LH-WRS9-01_2     | WRS09-SB01-01     |
| SAMPLE_DATE        |  | 7/27/1998        | 7/27/1998        | 7/27/1998        | 7/27/1998        | 8/6/1993         | 8/6/1993         | 9/15/2006         |
| DEPTH              |  | 0-0.5 Ft         | 0-0.5 Ft         | 1-3Ft            | 3 - 5 Ft         | 0.5 - 1 Ft       | 3.5 - 4 Ft       | 1-1Ft             |
| SAMPLE_PURPOSE     |  | REG              | FD               | REG              | REG              | REG              | REG              | REG               |
| Test Group         | Parameter (Units = mg/kg)              | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ  |
| DIOXINS_FURANS     | 1,2,3,4,6,7,8-Heptachloroofbenzoluran  | 1.08E-05 1 J     | 6.42E-06 1       | 1.76E-06 1 < UJ  | 2.10E-07 1 < U   |                  |                  |                   |
| DIOXINS_FURANS     | 1,2,3,4,6,7,8-HpCDD                    | 8.48E-05 1 J     | 6.37E-05 1       | 1.56E-05 1       | 2.59E-06 1       |                  |                  |                   |
| DIOXINS_FURANS     | 1,2,3,4,7,8,9-Heptachlorodibenzoluran  | 9.68E-07 1 < U   | 9.65E-07 1 < U   | 2.32E-07 1 < U   | 2.47E-07 1 < U   |                  |                  |                   |
| DIOXINS_FURANS     | 1,2,3,4,7,8-Hexachlorodibenzoluran     | 2.83E-06 1 < UJ  | 1.55E-06 1       | 5.42E-06 1 < UJ  | 2.29E-07 1 < U   |                  |                  |                   |
| DIOXINS_FURANS     | 1,2,3,4,7,8-Hexactvorodibenzo-p-dioxin | 4.32E-07 1 < U   | 4.11E-07 1 < U   | 7.80E-08 1 < U   | 3.14E-07 1 < U   |                  |                  |                   |
| DIOXINS_FURANS     | 1,2,3,6,7,8-Hexachlordibenzo-p-dioxin  | 4.00E-07 1 < UJ  | 1.69E-06 1 J     | 6.46E-07 1       | 2.35E-07 1 < U   |                  |                  |                   |
| DIOXINS_FURANS     | 1,2,3,6,7,8-Hexactelorodibenzofuran    | 4.57E-07 1 < U   | 5.08E-07 1 < U   | 9.90E-08 1 < U   | 1.97E-07 1 < U   |                  |                  |                   |
| DIOXINS_FURANS     | 1,2,3,7,8,9-Hexachlordibenzo-p-dioxin  | 3.83E-07 1 < UJ  | 1.52E-06 1 J     | 6.90E-08 1 < U   | 2.47E-07 1 < U   |                  |                  |                   |
| DIOXINS_FURANS     | 1,2,3,7,8,9 Hexacrisorodi Denzonuran   | 8.0TE-0/ 1 < UJ  | 6.69E-07 1 < U   | 1.24E-07 1 < U   | 2.60£-07 1 < U   |                  |                  |                   |
| DIUXINS_FURANS     | 1,2,3,7,8-Pentachtordipenzo-p-dioxin   | 3.9/E-0/ 1 < 0   | 3.92E-07 1 < U   | 1.18E-07 1 < U   | 4.21E-07 1 < U   |                  |                  |                   |
| DIOXING_FURANS     | 1,2,3,7,8-Peliaciaciocodoeizorolas     | 1./02-00 1 3     | 4.60E-07 1 < U   | 9.9/E-0/         | 3.01E-07 1 < U   |                  |                  |                   |
| DIOXING_FURANG     | 2,3,4,0,7,6-Relacilloiodibescolulati   | 5.14E-0/ I < U   | 6.45E-07 1 < U   | 1.11E-0/ 1 < U   | 2.51E-07 1 < 0   |                  |                  |                   |
| DIOXING_FURANS     | 2,2,4,7,0,7,0,12,00,00,00,00,00,00,00  | 959E07 1 < U     | 4.40E-07 1 < U   | 1.135-07 1 < 13  | 2.91E-07 1 < U   |                  |                  |                   |
| DIOXING_FURANS     | 2378-TCDE                              | 2.032-07 1 0     | 7955-07 1 < 11   | 0.205.00 1 < 11  | 5.03E-07 1 < U   |                  |                  |                   |
| DIOXING_TURANS     | Hentachlorodibenzofigan                | 1085-06 1        | 6.42E-06 1 I     | 1855-07 1 < 15   | 2105-07 1 < 12   |                  |                  |                   |
| DIOXINS FUBANS     | Hentachlorodibenzo-n-dioxin            | 1 795-04 1       | 1.34E-04 1       | 2545-05 1        | 5.48E-06 1       |                  |                  |                   |
| DIOXINS FURANS     | Hexachloridibenzo-p-dioxin             | 2.15E-05 1       | 1.52E-05 1       | 3.65E-06 1       | 2.35E-07 1 < 11  |                  |                  |                   |
| DIOXINS FURANS     | Hexachiorodibenzofuran                 | 1.50E-05 1       | 1.06E-05 t J     | 2.76E-06 1       | 1.97F-07 1 < 1   |                  |                  |                   |
| DIOXINS FURANS     | Octachlorodibenzofuran                 | 2.66E-05 1 J     | 1.59E-05 1       | 1.04E-05 1       | 4.66E-07 1 < U   |                  |                  |                   |
| DIOXINS_FURANS     | Octachlorodibenzo-p-dioxin             | 2.41E-03 1 J     | 1.15E-03 1       | 2.59E-04 1       | 1.75E-04 1       |                  |                  |                   |
| DIOXINS_FURANS     | Pentachtorodibenzofuran                | 4.87E-06 1       | 3.38E-06 1       | 4.68E-06 1       | 2.91E-07 1 < U   |                  |                  |                   |
| DIOXINS_FURANS     | Pentachlorodibenzo-p-dioxin            | 3.97E-07 1 < U   | 3.92E-07 1 < U   | 1.18E-07 1 < U   | 4.21E-07 1 < U   |                  |                  |                   |
| DIOXINS_FURANS     | Tetrachlorodibenzofuran, Total         | 2.47E-06 1 J     | 5.73E-07 1 .J    | 3.53E-06 1       | 4.74E-07 1 < U   |                  |                  |                   |
| DIOXINS_FURANS     | Tetrachlorodiberzo-p-dioxin            | 2.53E-07 1 < U   | 3.31E-07 1 < U   | 1.25E-07 1 < U   | 5.03E-07 1 < U   |                  |                  |                   |
| EXPLOSIVES         | 1,3,5-Trinitrobenzene                  | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       | 0.15 1 < U       |                  |                  |                   |
| EXPLOSIVES         | t,3-Dinitrobenzene                     | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 t < U       |                  |                  |                   |
| EXPLOSIVES         | 2,4,6-Trinibotoluene                   | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        | 0.t 1 < U        |                  |                  |                   |
| EXPLOSIVES         | 2,4-Dinitrotoluene                     | 0.1 1 < U        | 0.1 1 < U        | 0.1 t < U        | 0.1 1 < U        | 0.33 1 < U       | 0.33 1 < U       |                   |
| EXPLOSIVES         | 2,6-Dinitrololuene                     | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < 0        | 0.33 1 < U       | 0.33 1 < U       |                   |
| EXPLOSIVES         | 2-Amino-4,6-Gimeolouene                |                  | 0.05 1 < 0       | 0.05 1 < 0       | 0.05 1 < 0       |                  |                  |                   |
| EXPLOSIVES         | HMY                                    |                  | 0.05 1 < 0       | 0.05 1 < 0       |                  |                  |                  |                   |
| EXPLOSIVES         | m-Nitrotoluene                         |                  |                  |                  |                  |                  |                  |                   |
| EXPLOSIVES         | Nitrobenzene                           |                  | 01 1 < 0         | 01 1 < 1         | 0.1 1 < B        |                  |                  |                   |
| EXPLOSIVES         | o-Nitrotoluene                         | 0.1 T < U        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        |                  |                  |                   |
| EXPLOSIVES         | p-Nitrotoluene                         | 0.1 t < U        | 0.1 1 < 1        | 0.1 1 < U        | 0.1 1 < U        |                  |                  |                   |
| EXPLOSIVES         | RDX                                    | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        | 0.1 1 < U        |                  |                  |                   |
| EXPLOSIVES         | Tebyi                                  | 0.1 1 < R        | 0.1 1 < R        | 0.1 i < R        | 0.1 1 < R        |                  |                  |                   |
| METALS             | Aluminum                               | 9400 1           | 8600 1           | 12000 1          | 27000 1          | 15900 1          | 12500 1          | 11800 1           |
| METALS             | Antimony                               | 6.78 1 < UJ      | 6.8 1 < UJ       | 6.8 1 < UJ       | 7.42 1 < UJ      | 3 t < U          | 31 < U           | 0.107 1 U U       |
| METALS             | Arsenic                                | 9.22 1           | 7.27 t           | 5.22 1           | 3.84 1           | 4.5 1            | 2.8 1            | 4.59 1            |
| METALS             | Barium                                 | 66 1             | 66 1             | 82 1             | 150 1            | 180 1            | 149 1            | 116 1             |
| METALS             | Beryllium                              | 0.608 1          | 0.575 1          | 0.567 1 < U      | 0.91 1           |                  |                  | 0.44 1            |
| METALS             | Cadmium                                | 0.565 1 < U      | 0.566 1 < U      | 0.567 1 < U      | 0.618 1 < U      | 11< U            | 11 < U           | 0.12 1 J J        |
| METALS             | Calcium                                | 26000 1          | 24000 1          | 2600 t           | 750 1            | 3370 1           | 818 1            | 2010 1            |
| METALS             | Cabolt                                 |                  | 22 1             | 20 1             | 23 1             | 18.2 1           | 13.8 1           | 14 1              |
| METALS             | Contail                                | 0.0 1 < U        | 5./ I < U        | 5.7 L < U        | 6.2 1 < U        | 6.9 1            | 8.3 1            | 3.65 1            |
| METALS             | Trop                                   | 14.0 1           | 10,01            | 4.57 1           | 1,00 1           | 0.0 I            | 12200 4          | 5.89              |
| METALS             | lion<br>Lead                           | 191 1            | 19.0 1           | 20000 1          | 12 1             | 10000 1          | 13200 1          | 14700 I<br>10.7 t |
| METALS             | Magnesium                              | 1000 t           | 920 1            | 0.0 1            | 1000 1           | 10.0 1           | 1420 1           | 10.7 L<br>0.40 1  |
| METALS             | Magnapese                              | 172 1            | 141 1            | 132 1            | 405 1            | 129 1            | 120 1            | 62.4 1            |
| METALS             | Mercary                                | 0.11 1 < U       | 0.11 1 < 1       | 011 7 < 9        | (112 1 c 1)      |                  |                  | 0.0203 1 .1 .1    |
| METALS             | Nickel                                 | 7.5 1            | 8,6 1            | 8.6 1            | 15 1             | ,                | v.i i <b>v v</b> | 7.18 1            |
| METALS             | Potassium                              | 610 1            | 640 1            | 960 1            | 1400 1           | 561 1            | 608 1            | 329 1             |
| METALS             | Selenium                               | 2.75 1           | 2.91 1           | 1.96 1           | 1.89 1           | 1 1 < U          | 11 < 11          | 0.326 1           |
| METALS             | Silver                                 | 1.1 1 < U        | 1.1 1 < U        | 1.1 1 < U        | 1.2 1 < U        | 1 1 < U          | 11<              | 1.47 1 U U        |
| METALS             | Sodium                                 | 560 1 < U        | 570 1 < U        | 570 t < U        | 620 1 < U        | -                | -                | 39.6 1            |
| METALS             | Strontium                              | 33 1             | 30 1             | 7.2 1            | 11 1             | 23.6 1           | 23 t             |                   |
| METALS             | Thallium                               | 0.565 1 < U      | 0.566 1 < U      | 0.567 1 < U      | 0.618 1 < U      |                  |                  | 0.0795 1          |
| METALS             | Vanadium                               | 49 1             | 43 1             | 41 1             | 41 1             |                  |                  | 25 1              |
| METALS             | Zinc                                   | 59 1             | 55 1             | 20 1             | 42 1             | 37 1             | 45.6 1           | 19.2 1            |
| PCBS               | Aroclor 1016                           | 0.038 1 < U      | 0.038 t < U      | 0.038 1 < U      | 0.041 1 < U      |                  | -                |                   |

Ę.

| WRS09-SB01       | WRS09-SB02        |  |  |  |  |  |
|------------------|-------------------|--|--|--|--|--|
| WRS09-SB01-02    | WRS09-SB02-01     |  |  |  |  |  |
| 9/15/2006        | 9/15/2006         |  |  |  |  |  |
| 4 - 4 Ft         | 0.5 - 0.5 Ft      |  |  |  |  |  |
| REG              | REG               |  |  |  |  |  |
| Result DiL LQ VQ | Result Dil. LQ VQ |  |  |  |  |  |

| 10800 | 1 |   |   | 7420   | 1 |   |   |
|-------|---|---|---|--------|---|---|---|
| 0.111 | ; | ប | U | 0.107  | 1 | U | U |
| 1.38  | ł |   |   | 3.95   | 1 |   |   |
| 614   | 1 |   |   | 88.4   | 1 |   |   |
| 0.629 | ş |   |   | 0.362  | ŧ | J | J |
| 0.438 | 1 |   |   | 0.181  | 1 | J | J |
| 957   | 1 |   |   | 1430   | ŧ |   |   |
| 11.1  | 1 |   |   | 17.6   | 1 |   |   |
| 7.84  | 1 |   |   | 2.96   | 1 |   |   |
| 5.03  | 1 |   |   | 4,74   | 1 |   |   |
| 9060  | 1 |   |   | 15000  | 1 |   |   |
| 9.45  | 1 |   |   | 11.4   | 1 |   |   |
| 1180  | 1 |   |   | 513    | 1 |   |   |
| 38. t | 1 |   |   | 114    | 1 |   |   |
| 0.264 | 1 | U | U | 0.0179 | 1 | J | 1 |
| 9.3   | 1 |   |   | 4.24   | 1 |   |   |
| 402   | 1 |   |   | 254    | 1 |   |   |
| 0.202 | 1 | J | J | 0.228  | 1 |   |   |
| 1.7   | 1 | ប | U | 1,54   | 1 | υ | U |
| 568   | 1 |   |   | 38.1   | 1 |   |   |
|       |   |   |   |        |   |   |   |
| 0.104 | 1 |   |   | 0.0508 | 1 |   |   |
| 13.7  | 1 |   |   | 25.2   | 1 |   |   |
| 35.3  | 1 |   |   | 26     | 1 |   |   |
|       |   |   |   |        |   |   |   |

Table 3-115 Concentrations of Chemicals in Soil Samples Associated with WR Sump 009

| [SUMP] = WRSUMP009             |  |  |                        |                           |                  |                            |                          |                           |
|--------------------------------|--|--|------------------------|---------------------------|------------------|----------------------------|--------------------------|---------------------------|
| LOCATION _CODE                 |  | 46SB03                                 | 46SB03                 | 46SB03                    | 46SB03           | LH-WRS9-01                 | LH-WRS9-01               | WRS09-SB01                |
| SAMPLE_NO                      |  | 46SB03(0-0_5)                          | 46S803(0-0_5)QC        | 46SB03(1-3)               | 46SB03(3-5)      | LH-WRS9-01_1               | LH-WRS9-01_2             | WRS09-SB01-01             |
| SAMPLE_DATE                    |  | 7/27/1998                              | 7/27/1998              | 7/27/1998                 | 7/27/1998        | 8/6/1993                   | 8/6/1993                 | 9/15/2006                 |
| DEPTH<br>CAMPLE PURPOSE        |  | 0-0.5 Ft                               | 0-0.5 Ft               | 1-311                     | 3-51             | 0.5-1 Ft                   | 3.5 - 4 Ft               | 1~1FI                     |
| JAMPLE_PUHPUSE                 | Parameter (Units - mo/ko)  | Result Dill IO VO                      | FU<br>Result DIL 10 VO | Result OIL LO VO          | Result Dil IO VO | Result Dill 10 VO          | Result 01 10 VO          | Result Dit 10 \m          |
| PCBS                           | Aracler 1221   | 0.075 1 < U                            | 0.075 1 < 1            | 0.076 1 < U               | 0.082 1 < U      |                            |                          |                           |
| PCES                           | Aroclor 1232   | 0.038 1 < U                            | 0.038 1 < U            | 0.038 t < U               | 0.041 t < U      |                            |                          |                           |
| PCBS                           | Aroclor 1242   | 0.038 1 < U                            | 0.038 1 < U            | 0.038 t < U               | 0.041 1 < U      |                            |                          |                           |
| PCBS                           | Aroclor 1248   | 0.038 1 < U                            | 0.038 1 < U            | 0.038 t < U               | 0.041 1 < U      |                            |                          |                           |
| PCBS                           | Aroclor 1254   | _0.038 1 < U                           | 0.038 1 < U            | 0.038 1 < U               | 0.041 1 < U      |                            |                          |                           |
| PCBS                           | Aroclar 1260   | 0.038 1 < U                            | 0.038 1 < U            | 0.038 1 < U               | 0.041 1 < U      |                            |                          |                           |
| PESTICIDES                     | 4,4'-DDD   | 0.0038 1 < UJ                          | 0.0038 1 < UJ          | 0.0039 1                  | 0.0041 1 < U     |                            |                          |                           |
| PESTICIDES                     | 4,4-DDE  | 0.0038 1 < UJ                          | 0.0038 1 < UJ          | 0.0033 f J                | 0.0041 1 < U     |                            |                          |                           |
| PESTICIDES                     | 4,4-DD1  | 0.0036 I < 0J                          | 0.0036 I < 0.F         | U.UU2 I J                 | 0.0041 1 < 0     |                            |                          |                           |
| PESTICIDES                     | aloha-BHC  | 0.0019 1 < 1.0                         | 0.0013 1 < 0.1         | 0.0019 1 < U              | 0.0021 7 < U     |                            |                          |                           |
| PESTICIDES                     | beta-BHC   | 0.0019 1 < UJ                          | 0.0019 1 < UJ          | 0.0019 1 < U              | 0.0021 1 < U     |                            |                          |                           |
| PESTICIDES                     | Chlordane  | 0.038 1 < 1U                           | 0.038 1 < UJ           | 0.038 1 < U               | 0.041 1 < U      |                            |                          |                           |
| PESTICIDES                     | delta-BHC  | 0.0019 1 < UJ                          | 0.0019 1 < UJ          | 0.0019 1 < IJ             | 0.0021 1 < Ü     |                            |                          |                           |
| PESTICIDES                     | Dieldrin   | 0.0038 1 < UJ                          | 0.0038 1 < UJ          | 0.0038 1 < U              | 0.0041 1 < U     |                            |                          |                           |
| PESTICIDES                     | Endosulfan I   | 0.0019 1 < UJ                          | 0.0019 1 < UJ          | 0.0019 1 < U              | 0.0021 1 < U     |                            |                          |                           |
| PESTICIDES                     | Endosulfan li  | 0.0038 1 < UJ                          | 0.0038 1 < UJ          | 0.0038 1 < U              | 0.0041 1 < U     |                            |                          |                           |
| PESTICIDES                     | Endosulfan Sulfate   | 0.0038 1 < UJ                          | 0.0038 1 < UJ          | 0.0038 1 < U              | 0.0041 1 < U     |                            |                          |                           |
| PESTICIDES                     | Endin<br>Factional de la companya de la companya de la companya de la companya de la companya de la companya de la compa | 0.0038 t < UJ                          | 0.0038 1 < UJ          | 0.0038 1 < U              | 0.0041 1 < U     |                            |                          |                           |
| PESTICIDES                     | Endría ketope  | 0.0038 1 < 0.0                         | 0.0038 I < UJ          | 0.0038 1 < 0              | 0.0041 1 < 0     |                            |                          |                           |
| PESTICIDES                     | camma-8HC (Lindane)  | 0.0019 1 < 1.1                         | 0.0030 1 < 0.0         | 0.0030 1 < 0              | 0.0021 1 < 1     |                            |                          |                           |
| PESTICIDES                     | Heotachlor   | 0.0019 1 < 0.0                         | 0.0019 1 < UJ          | 0.0019 1 < 1              | 0.0021 1 < U     |                            |                          |                           |
| PESTICIDES                     | Heptachlor epoxide   | 0.0019 1 < UJ                          | 0.0019 1 < UJ          | 0.0019 1 < U              | 0.0021 1 < U     |                            |                          |                           |
| PESTICIDES                     | METHOXYCHLOR   | 0.019 1 < UJ                           | 0.019 1 < UJ           | 0.019 1 < U               | 0.021 1 < U      |                            |                          |                           |
| PESTICIDES                     | Toxaphene  | 0.038 1 < UJ                           | 0.038 1 < UJ           | 0.038 1 < U               | 0.041 1 < U      |                            |                          |                           |
| RANGE_ORGANICS                 | Carbon Hange C12-C28   |  |                        |                           |                  |                            |                          | 53.2 1 U U                |
| RANGE_ORGANICS                 | CARBON RANGE C28-C35   |  |                        |                           |                  |                            |                          | 53.2 1 U U                |
| RANGE_ORGANICS                 | Carbon Range C6-C12  |  |                        | ·                         |                  | 500 A II                   |                          | 53.2 1 U U                |
| SEMIVOLATILES<br>CEMINOLATILES | 1,2,4-Inchiorobenzene  | 1.9 1 < 0                              | 19 1 < 0               | 0.38 1 < U                | 0.41 1 < 0       | 0.33 T < U                 | 0.33 1 < 0               | 0.18 1 0 0                |
| SEMIVOLATILES                  | 1.3-Dichlombenzene   | 19 1 < 0                               | 19120                  | 0.36 F < U<br>£1348 1 < ∐ | 0.41 1 < 11      | 0.33 1 < 1                 | 0.33 1 < 0               | 0.18 1 12 13              |
| SEMIVOLATILES                  | 1.4-Dichlorobenzene  | 1.9 1 < U                              | 1.9 1 < 0              | 0.38 t < U                | 0.41 1 < U       | 0.33 1 < U                 | 0.33 1 < U               | 0.18 1 U U                |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenol  | 4.7 1 < U                              | 4.7 1 < U              | 0.95 t < U                | 11< 0            | 1.65 1 < U                 | 1.65 1 < U               | 0.18 1 U U                |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol  | 1.9 1 < U                              | 1.9 1 < U              | 0.38 t < U                | 0.41 1 < U       | 0.33 1 < U                 | 0.33 1 < U               | 0.18 I U U                |
| SEMIVOLATILES                  | 2,4-Dichlorophenol   | 1.9 1 < U                              | 1.9 1 < U              | 0.38 1 < U                | 0.41 1 < U       | 0.33 1 < U                 | 0.33 1 < U               | 0.18 1 U U                |
| SEMIVOLATILES                  | 2,4-Dimethylphenol   | 1.9 1 < U                              | 1.9 1 < U              | 0.38 1 < U                | 0.41 1 < U       | 0.33 1 < U                 | 0.33 1 < U               | 0.18 1 U U                |
| SEMIVOLATILES                  | 2,4-Dinitrophenol  | 4.7 1 < U                              | 4.7 1 < U              | 0.95 1 < U                | 1 1 < ⊍          | 1.65 1 < U                 | 1.65 1 < U               | 0.899 1 U U               |
| SEMIVOLATILES                  | 2,4-Dinitrotoluene   | 1.9 1 < U                              | 1.9 1 < U              | 0.38 1 < U                | 0.41 1 < U       |                            |                          | 0.18 1 U U                |
| SEMIVOLATILES                  | 2,6-Dinitroickuene   | 1,9 1 < 1                              | 1.9 1 < 0              | 0.38 1 < U                | 0.41 1 < U       | 022 1 4 11                 | 0.00 t . tł              | 0.18 1 U U                |
| SEMIVOLATILES                  | 2-Chloronhend  | 10 1 ~ 1                               | 1.9 1 < 0              | 0.38 t < 11               |                  | 0.33   < 0                 | 0.33 1 < 0               | 0.10 1 0 0                |
| SEMIVOLATILES                  | 2-Methylnaphtbalene  | 1.9 1 < U                              | 19 1 < 1               | 0.38 1 < 1/               | 0.41 1 < U       | 0.33 1 < U                 | 0.33 1 < 11              | 0.18 1 U U                |
| SEMIVOLATILES                  | 2-Methylphenol   | 1.9 1 < U                              | 1.9 1 < U              | 0.38 1 < U                | 0.41 1 < U       | 0.33 1 < U                 | 0.33 1 < U               | 0.18 1 U U                |
| SEMIVOLATILES                  | 2-Nitroaniline   | 4.7 1 < U                              | 4.7 1 < U              | 0.95 1 < U                | 11 < 1/          | 1.65 1 < U                 | 1.65 1 < U               | 0.899 1 U U               |
| SEMIVOLATILES                  | 2-Nitrophenoi  | 1.9 1 < U                              | 1.9 î < U              | 0.38 1 < U                | 0.41 1 < U       | 0.33 1 < U                 | 0.33 1 < U               | 0.18 1 U U                |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzidine   | 1.9 T < U                              | 1.9 1 < U              | 0.38 1 < V                | 0.41. 1 < U      | 0.65 1 < U                 | 0.65 1 < U               | 0.36 1 U U                |
| SEMIVOLATILES                  | 3-Nitroaniline   | 4.7 t < U                              | 4.7 1 < U              | 0.95 1 < U                | 1 1 < U          | 1.65 1 < U                 | 1.65 1 < U               | 0.899 t U U               |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol   | 4.7 1 < U                              | 4.7 1 < 0              | 0.95 t < U                | 11 < U           | 1.65 1 < U                 | 1.65 1 < U               | 0.899 1 U U               |
| SEMIVOLATILES                  | 4-bromopheny phenyl emer   | 1.9 1 < 0                              | 1.9 1 < 0              | 0.38 1 < 0                | U.41 1 < U       | 0.33 1 < 0                 | 0.33 1 < 0               | 0.18 1 U U                |
| SEMIVOLATILES                  | 4-Caloroanitine  | 10, 1 < 16                             | 191 < 0                | 0.38 1 < 0                |                  | 0.65 1 < 17                | 0.65 1 < 11              | 0.10 1 0 0                |
| SEMIVOLATILES                  | 4-Chiocophenyl phenyl ether  | 1.9 1 < 1                              | 1.9 1 < U              | 0.38 1 < U                | 0.41 1 < U       | 0.33 1 < U                 | 0.33 1 < U               | 0.18 1 U U                |
| SEMIVOLATILES                  | 4-Methylphenol   | 1.9 1 < U                              | 1.9 1 < U              | 0.38 1 < U                | 0.41 1 < U       | 0.33 1 < U                 | 0.33 1 < U               | 0.18 1 U U                |
| SEMIVOLATILES                  | 4-Nitroaniline   | 4.7 1 < U                              | 4.7 1 < U              | 0.95 1 < U                | 11 < U           | 1.65 1 < U                 | 1.65 1 < U               | 0.899 1 U U               |
| SEMIVOLATILES                  | 4-Nitrophenol  | 4.7 1 < R                              | 4.7 1 < R              | 0.95 1 < R                | 11< R            | 1.65 1 < U                 | 1.65 1 < U               | 0.899 1 U U               |
| SEMIVOLATILES                  | Acenaphthene   | 1.9 1 < U                              | 1.9 1 < U              | 0.38 1 < U                | 0.41 1 < U       | 0.33 1 < U                 | 0.33 t < U               | 0.18 1 U U                |
| SEMIVOLATILES                  | Acenaphthylene   | 1.9 1 < U                              | 1.9 1 < U              | 0.38 1 < U                | 0.41 1 < U       | 0.33 1 < U                 | 0.33 1 < U               | 0.18 1 U U                |
| SEMIVOLATILES                  | Anthracene   | 1.9 1 < U                              | 1.9 1 < V              | 0.38 1 < U                | 0.41 t < U       | 0.33 1 < U                 | 0.33 1 < U               | 0.18 1 U U                |
| SEMIVOLATILES                  | Benzo(a)anthracene   | 1.9 1 < U                              | 1.9 1 < U              | 0.38 1 < U                | 0.41 1 < U       | 0.33 1 < U                 | 0.33 1 < U               | 0.18 1 U U                |
| SEMIVOLATILES                  | Benzo(a)pyrene   | 0.94 I < U                             | 0.94 1 < U             | 0,19 1 < U                | 0.21 1 < U       | 10.33 1 < U                | 0.33 1 < 0               | U.18 1 U U                |
| SEMINOLATILES                  | Perzo(upiluorantielle<br>Benzo(nhi)nervlene  | 1,3r i < U<br>10, 1 , 11               | 10, 1 × U              | 0.36 I < U<br>038 1 ∠ 11  | 0.41 1 < U       | 10.33 1 < U<br>.033 1 ∠ II | U.J.S I < U<br>A33 1 - H | v.io i ∪ U<br>∆18 1 11 11 |
| SEMIVOLATILES                  | Berizo/kiftkgranthene  | 1.9 t < 11                             | 1.9 1 2 17             | 0.38 1 < 17               | 0.41 1 < 11      | 0.33 1 < 11                | 0.33 1 < 11              | 0.18 1 11 11              |
|                                | ,, 1   | ······································ | ···· · · · ·           |                           |                  | ··· · · · ·                | ···· · · · ·             | - · · · ·                 |



| WRS09-SB01       | WRS09-SB02       |  |  |  |  |  |
|------------------|------------------|--|--|--|--|--|
| WRS09-SB01-02    | WRS09-SB02-01    |  |  |  |  |  |
| 9/15/2006        | 9/15/2006        |  |  |  |  |  |
| 4 - 4 Ft         | 0.5 ~ 0.5 Ft     |  |  |  |  |  |
| REG              | REG              |  |  |  |  |  |
| Result DIL LQ VQ | Result DIL LQ VQ |  |  |  |  |  |

| 55.4  | 3  | U  | U | 34.3 | 1  | J  | ł   |
|-------|----|----|---|------|----|----|-----|
| 55.4  | 1  | U  | U | 32.7 | 1  | J  | t   |
| 55.4  | 1  | U  | U | 52.5 | 1  | U  | U   |
| 0.179 | 1  | υ  | U | 1.74 | 10 | U  | U   |
| 0.179 | 1  | U  | U | 1.74 | 10 | U  | U   |
| 0.179 | 1  | Ð  | U | 1.74 | 10 | U  | U   |
| 0.179 | 1  | U  | U | 1.74 | 10 | U  | υ   |
| 0,179 | 1  | U  | U | 1.74 | 10 | U  | U   |
| 0.179 | i  | U  | U | 1.74 | 10 | U  | U   |
| 0.179 | 1  | U  | U | 1.74 | 10 | U  | U   |
| 0.179 | 1  | U  | υ | 1,74 | 10 | U  | U   |
| 0.895 | 1  | U  | U | 8.71 | 10 | υ  | U   |
| 0.179 | 1  | U  | U | 1.74 | 10 | U  | U   |
| 0.179 | 1  | υ  | U | 1.74 | 10 | U  | U   |
| 0.179 | 1  | U  | U | 1.74 | 10 | U  | U   |
| 0.179 | -1 | U  | U | 1.74 | 10 | U  | U   |
| 0.179 | t  | U  | U | 1.74 | 10 | U  | U   |
| 0.179 | 1  | U  | U | 1.74 | 10 | U  | U   |
| 0.895 | 1  | U  | U | 8.71 | 10 | U  | U   |
| 0.179 | 1  | ប  | U | 1,74 | 10 | U  | U   |
| 0.358 | 1  | IJ | U | 3.48 | 10 | U  | U   |
| 0.895 | t  | U  | U | 8.71 | 10 | U  | U   |
| 0.895 | 1  | U  | U | 8.71 | 10 | υ  | U   |
| 0,179 | t  | U  | U | 1.74 | 10 | U  | U   |
| 0.179 | t  | U  | U | 1.74 | 10 | U  | U   |
| 0.179 | 1  | IJ | U | 1.74 | 10 | υ  | U   |
| 0.179 | 1  | U  | U | 1.74 | 10 | U  | U   |
| 0.179 | 1  | U  | ប | 1.74 | 10 | U  | U   |
| 0.895 | 1  | U  | ย | 8.71 | 10 | U  | ប   |
| 0.895 | 1  | U  | U | 8.71 | 10 | U  | U · |
| 0.179 | 1  | U  | ប | 1.74 | 10 | U  | υ   |
| 0.179 | 1  | U  | ប | 1.74 | 10 | U  | U   |
| 0.179 | 1  | U  | ម | 1.74 | 10 | U  | U   |
| 0.179 | 1  | U  | U | 1.74 | 10 | υ  | U   |
| 0.179 | 1  | U  | U | 1.74 | 10 | U  | U   |
| 0.179 | 1  | U  | U | 1.74 | 10 | U  | U   |
| 0.179 | 1  | U  | ប | 1.74 | 10 | U  | U   |
| 0.179 | 1  | U  | U | 1.74 | 10 | .U | Ð   |

Table 3-115 Concentrations of Chemicals in Soil Samples Associated with WR Sump 009

| [SUMP] = WRSUMP009      |                                |               |                  |  |  |                  |                |                          |  |
|-------------------------|--------------------------------|---------------|------------------|--|--|------------------|----------------|--------------------------|--|
| LOCATION _CODE          |                                | 46SB03        | 46SB03           | 46SB03                                 | 46SB03                                       | LH-WRS9-01       | LH-WRS9-01     | WRS09-SB01               |  |
| SAMPLE_NO               |                                | 46SB03(0-0_5) | 46SB03(0-0_5)QC  | 465B03(1-3)                            | 46SB03(3-5)                                  | LH-WRS9-01_1     | LH-WRS9-01_2   | WRS09-SB01-01            |  |
| SAMPLE_DATE             |                                | 7/27/1998     | 7/2/11998        | //2//1998                              | 7/27/1998                                    | 8/6/1993         | 8/6/1993       | 9/15/2006                |  |
| DEPTH<br>CANDLE DUODOCE |                                | 0-0.5 Ft      | 0-0.5 H          | 1-311                                  | 3-5Ft  | 0.5 - 1 Ft       | 3.5 - 4 +1     | 1-1+1                    |  |
| SAMPLE_PURPUSE          | Documentes (Unite maller)      | HEG           |                  | HEG                                    | HEG  | HEG              | HEG            | HEG<br>Result Dill 10 10 |  |
| PENNON ATHER            | Paraneter (Units = Indykg)     |               | HESUIT DIL LQ VQ | Hesuk DIL LO VO                        | HESUIC DIL LO VO                             | Hesult Dil LU VU | RESOLUTE LO VO | ABOULDIE EU VU           |  |
| SEMIVOLATILES           | Denzoit Mashal                 | 4.7 1 < 0     | 4.7 1 4 11       | 0.95 ! < 0                             |  |                  | 1.00 1 < 0     | 0.699 1 0 0              |  |
| SEMIVOLATILES           | bic/2_blocosthon//mathane      |               | 10 1 4 11        |  | 041 1 - 11                                   | 0.00 1 < 1       | 0.00 1 < 0     | 0.10 1 0 0               |  |
| SEMINOLATILES           | his/24 hlornothullather        |               | 1.9 1 < 0        |  | 0.41 1 < 0                                   | 0.33 1 < 0       | 0.33 1 < 11    | 0.18 1 11 11             |  |
| SEMIVOLATILES           | bis/2-Chloroisonrowdiathar     |               | 1.9 1 < 11       |  | 0.41 1 < 0                                   |                  | 0.33 1 < 11    | 0.10 1 0 0               |  |
| SEMIVOLATILES           | his/2-Ethylhexylinhthalate     |               | 191 < 11         | 0.38 1 < U                             | 0.41 1 < 0                                   |                  |                | 0.18 1 1 1               |  |
| SEMIVOLATILES           | Butvi benzvi obthalate         | 1.9 1 < 11    | 19 1 < 1         | 0.38 1 < U                             | 0.41 1 < 1)                                  | 0.33 1 < U       | 0.33 1 ¢ U     | 0.18 1 1/ 1/             |  |
| SEMIVOLATILES           | Carbazole                      | 1.9 1 < U     | 1.9 1 < U        | 0.38 t < U                             | 0.41 1 < 13                                  |                  |                |                          |  |
| SEMIVOLATILES           | Chrysene                       | 1.9 1 < U     | 1.9 t < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 1 < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | Dibenzo(a,h)anthracene         | t.9 1 < U     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 1 < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | Dibenzofuran                   | 1.9 1 < U     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 t < U       | 0.33 1 < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | Diethyl phthalate              | 1.9 1 < ₩     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 1 < U     | 0,18 1 U U               |  |
| SEMIVOLATILES           | Dimethyl phthalate             | 1.9 1 < U     | 2.4 t            | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 1 < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | di-n-Butyl phihalate           | 1.9 1 < U     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 1 < U     | 0.18 1 Ü Ü               |  |
| SEMIVOLATILES           | di-n-Octyl phthalate           | 1.9 1 < U     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 9.33 t < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | Fluoranthene                   | 1.9 1 < U     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 1 < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | Fluorene                       | 1.9 1 < U     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 1 < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | Hexachlorobenzene              | 0.94 1 < U    | 0.94 1 < U       | 0.19 1 < U                             | 0.21 1 < U                                   | 0.33 1 < U       | 0.33 1 < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | Hexachlorobutadiene            | 1.9 1 < U     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 1 < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | Hexachlorocyclopentadiene      | 1.9 1 < U     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 1 < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | Hexachloroethane               | 1.9 1 < U     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 1 < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | Indeno(1,2,3-cd)pyrene         |               | 1.9 1 < 0        | 0.38 1 < U                             | 0.41 1 < 0                                   | 0.33 1 < U       | 0.33 1 < U     | 0.18 1 0 0               |  |
| SEMMOLATILES            | Nanhthalana                    | 1.9 7 < 0     | 1.9 1 < 0        | 0.30 I < U<br>839 I < 1F               | 0.41 1 < 17                                  | 0.22 1 4 11      | 0.33 F < U     | 0.10 1 11 11             |  |
| SEMIVOLATILES           | Nitrobenzene                   |               | 191 < 1          | 0.38 1 ~ 11                            |  | 0.33 1 < 11      | 0.33 1 < 0     | 0.10 1 0 0               |  |
| SEMIVOLATILES           | n-Nitrosodimethylamine         |               | 19 1 < 1         | 0.38 1 < 11                            |  | 0.00 1 1 0       |                |                          |  |
| SEMIVOLATILES           | n-Nitroso-di-n-propylamine     | 1.9 t < U     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 t < U       | 0.33 1 < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | n-Nitrosodiphenylamine         | 1.9 1 < U     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 t < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | Pentachlorophenol              | 0.94 t < U    | 0.94 1 < U       | 0.19 1 < U                             | 0.21 1 < U                                   | 1.65 1 < U       | 1.65 .1 < U    | 0.899 1 U U              |  |
| SEMIVOLATILES           | Phenanthrene                   | 1.9 1 < U     | 1.9 t < U        | 0.38 1 ≺ U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 t < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | Phenof                         | 1.9 1 < U     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 1 < U     | 0.18 1 U U               |  |
| SEMIVOLATILES           | Pyrene                         | 1.9 t < U     | 1.9 1 < U        | 0.38 1 < U                             | 0.41 1 < U                                   | 0.33 1 < U       | 0.33 1 < U     | 0.18 1 U U               |  |
| VOLATILES               | 1,1,1,2-Tetrachloroethane      | 0.0056 1 < U  | 0.0056 1 < U     | 0.0057 1 < U                           | 0.0062 1 < U                                 |                  |                |                          |  |
| VOLATILES               | 1,1,1-Trichloroethane          | 0.0056 1 < U  | 0.0056 1 < U     | 0.0057 1 < U                           | 0.0062 1 < U                                 | 0.005 1 < U      | 0.005 1 < U    |                          |  |
| VOLATILES               | 1,1,2,2-1 etrachloroethane     | 0.0056 1 < U  | 0.0056 1 < U     | 0.0057 1 < U                           | 0.0062 t < U                                 | 0.005 1 < U      | 0.005 1 < U    |                          |  |
| VOLATILES               | t, 1,2-1 nonkoroemane          |               | 0.0056 1 < 0     | 0.0057 1 < 0                           | 0.0062 1 < 0                                 | 0.005 1 < U      | 0.005 1 < 0    |                          |  |
| VOLATILES               | 1,1-Dichloroethene             |               | 0.0056 1 < 1     | 0.0057 t < ()                          | 0.0062 1 < 0                                 | 0.005 1 < 0      | 0.005 1 < 0    |                          |  |
|                         | 1 1-Dichlovonronene            |               | 0.0056 1 < 1     | 0.0057 1 < 1                           | 0.0002 1 < 1                                 | 0.005 1 4 0      | 0.003 7 4 0    |                          |  |
| VOLATILES               | 1.2.3-Trichlorobenzene         | 0.0056 1 < 1  | 0.0056 1 < U     | 0.0057 1 < U                           | 0.0062 1 < U                                 |                  |                | -                        |  |
| VOLATILES               | 1.2.3-Trichloropropane         | 0.017 1 < U   | 0.017 1 < U      | 0.017 1 < U                            | 0.019 1 < U                                  |                  |                |                          |  |
| VOLATILES               | 1,2,4-Trichlorobenzene         | 0.0056 1 < U  | 0.0056 1 < U     | 0.0057 1 < U                           | 0.0062 t < U                                 |                  |                |                          |  |
| VOLATILES               | 1,2,4-Trimethylbenzene         | 0.0056 1 < U  | 0.0056 1 < U     | 0.0057 1 < U                           | 0.0062 t < U                                 |                  |                |                          |  |
| VOLATILES               | 1,2-Dibromo-3-chloropropane    | 0.011 1 < U   | 0.011 1 < U      | 0.011 1 < V                            | 0.012 t < U                                  |                  |                |                          |  |
| VOLATILES               | 1,2-Dibromoethane              | 0.0056 1 < U  | 0.0056 1 < U     | 0.0057 1 < V                           | 0.0062 1 < U                                 |                  |                |                          |  |
| VOLATILES               | 1,2-Dichlorobenzene            | 9.0056 1 < U  | 0.0056 1 < U     | 0.0057 1 < U                           | 0.0062 1 < U                                 |                  |                |                          |  |
| VOLATILES               | 1,2-Dichloroethane             | 0.0056 1 < U  | 0.0056 1 < U     | 0.0057 1 < U                           | 0.0062 1 < U                                 | 0.005 1 < U      | 0.005 1 < U    |                          |  |
| VOLATILES               | 1,2-Dichloroethene             |               |                  |  |  | 0.005 1 < U      | 0.005 1 < U    |                          |  |
| VOLATILES               | 1,2-Dichloropropane            | 0.0056 1 < U  | 0.0056 t < U     | 0.0057 1 < U                           | 0.0062 1 < U                                 | 0.005 1 < U      | 0.005 1 < U    |                          |  |
| VOLATILES               | 1,2-Dimethylbenzene (o-Xylene) |               |                  | A ANT                                  | 6 <b>6</b> 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 |                  |                |                          |  |
| VOLATILES               | 1,3,5-1 nmeinylbenzene         | 0.0056 1 < U  | 0.0056 1 < U     | 0.0057 1 < U                           | $0.0062 \ 1 < 0$                             |                  |                |                          |  |
| VOLATILES               | 1,3-Dichloropenzene            |               | 0.0056 1 < U     | 0.0057 1 < 0                           | 0.0062 1 < 0                                 |                  |                |                          |  |
| VOLATILES               | 1.4 Dichlere 2 butene          |               | 0.0056 1 < 0     | 0.0057 1 4 1                           | 0.0062 I < 0                                 |                  |                |                          |  |
| VOLATILES               | 1 4-Dichlorobenzene            |               | 0.0056 t < U     | 0.0057 1 < 11                          | 0.0062 1 < 0                                 |                  |                |                          |  |
| VOLATILES               | 1.4-Dioxane                    |               | 1.1 1 < 11       | 1.1 1 < 11                             | 1.2 1 < H                                    |                  |                |                          |  |
| VOLATILES               | 2 2-Dichloropropage            |               | 0.017 1 < 1      | 0.017 1 < U                            | 0019 1 < 1                                   |                  |                |                          |  |
| VOLATILES               | 2-Butanone                     | 0.023 1 < U   | 0.023 1 < U      | 0.023 1 < U                            | 0.025 1 < U                                  | 0.05 1 < U       | 0.05 1 < ป     |                          |  |
| VOLATILES               | 2-Chloroethyl visyl ether      | · · · ·       | ······           | ······································ | · · · ·                                      | 0.01 1 < U       | 0.01 1 < U     |                          |  |
| VOLATILES               | 2-Chlorotokuene                | 0.0056 1 < U  | 0.0056 1 < U     | 0.0057 1 < U                           | 0.0062 t < U                                 | -                | -              |                          |  |
| VOLATILES               | 2-Hexanone                     | 0.023 1 < U   | 0.0079 1 J       | 0.023 1 < U                            | 0.025 1 < U                                  | 0.05 1 < U       | 0.05 1 < U     |                          |  |
| VOLATILES               | 2-Propenal                     | 0.11 1 < U    | 0≟11 1 < U       | 0.11 1 < U                             | 0.12 1 < U                                   |                  |                |                          |  |
| VOLATILES               | 4-Chlorotoluene                | 0.0056 1 < U  | 0.0056 1 < U     | 0.0057 1 < U                           | 0.0062 t < U                                 |                  |                |                          |  |
| VOLATILES               | Acetone                        | 0.023 1 < U   | 0.018 1 J        | 0.023 1 < U                            | 0.025 1 < U                                  | 0.1 1 < U        | 0.1 1 < U      |                          |  |



| WRS09<br>WRS09<br>9/15 | 9-SI<br>-SB(<br>200 | 301<br>)1-02<br>16 |                     | WRS09-SB02<br>WRS09-SB02-01<br>9/15/2006 |    |         |         |  |  |  |
|------------------------|---------------------|--------------------|---------------------|--|----|---------|---------|--|--|--|
| 4-<br>R                | 4 Ft<br>EG          |                    | 0.5 - 0.5 Ft<br>REG |  |    |         |         |  |  |  |
| Result [               | <u>ж</u>            | LQ                 | VQ                  | VQ Result DIL L                          |    |         |         |  |  |  |
| 0.895                  | 1                   | 0                  | 0                   | 8.71                                     | 10 | U       | U       |  |  |  |
| 0.179                  | 1                   | ы<br>1             | 0                   | 1./4                                     | 10 | 0       | U<br>IV |  |  |  |
| 0.179                  | 1                   | U                  | U.<br>11            | 1./4                                     | 10 | U<br>II | U       |  |  |  |
| 0.179                  | !                   |                    |                     | 1.74                                     | 10 | U .     | 0       |  |  |  |
| 0.179                  | -                   |                    | 0                   | 1.74                                     | 10 | 0       | 0       |  |  |  |
| 0.179                  | 1                   | .0                 | U-                  | 1./4                                     | 10 | 0       | 0       |  |  |  |
| 0.179                  | 1                   | U                  | U                   | 1./4                                     | ŦŪ | 0       | Ű       |  |  |  |
| ſ) 179                 | 1                   | ы                  | 11                  | 178                                      | 10 | 11      | 11      |  |  |  |
| 0.179                  | 1                   | 6                  | ü                   | 174                                      | 10 | 11      | 11      |  |  |  |
| 0.179                  | 1                   | E E                | IJ.                 | 1.74                                     | 10 | n       | 1F      |  |  |  |
| 0 179                  | 1                   | . <del>U</del>     | ň                   | 174                                      | 10 | ŭ       | a       |  |  |  |
| 0.179                  |                     | 11                 |                     | 174                                      | 10 | ŭ       | a       |  |  |  |
| 0 179                  | 1                   | ย                  | ŭ                   | 1 74                                     | 10 | ũ       | ŭ       |  |  |  |
| 0 179                  | 1                   | มั                 | 1)                  | 1 74                                     | 10 | ũ       | ų.      |  |  |  |
| 0.179                  | 1                   | ม                  | Ū                   | 1.74                                     | 10 | U.      | Ū.      |  |  |  |
| 0 179                  | 1                   | U U                | 11                  | 1 74                                     | 10 | ŭ       | 11      |  |  |  |
| 0 179                  | 1                   | -                  | ŭ                   | 1 74                                     | 10 | ü       | 11      |  |  |  |
| 0 179                  | 1                   | н                  | 11                  | 1 74                                     | 10 | ŭ       |         |  |  |  |
| 0 179                  | 1                   | ม                  | ü                   | 174                                      | 10 | n i     | ŭ       |  |  |  |
| 6.179                  | 1                   | п                  | 11                  | 1.74                                     | 10 | й       | 11      |  |  |  |
| 0.179                  | 4                   | й                  | н                   | 1.74                                     | 10 | 11      | 11      |  |  |  |
| 0.179                  | 1                   | н                  | ŭ                   | 1.74                                     | 10 | n       | 11      |  |  |  |
| 0.170                  | 1                   | н                  | н                   | 1.74                                     | 10 | ы       | ы       |  |  |  |
| 0.170                  | 1                   | ы                  | 11                  | 174                                      | 10 |         | 11      |  |  |  |
| 0.113                  | 1                   | U                  | Υ.                  | 1./4                                     | 10 | Ů       | Ŷ       |  |  |  |
| 0.179                  | 1                   | U                  | U                   | 1.74                                     | 10 | u       | U       |  |  |  |
| 0.179                  | \$                  | U                  | Đ                   | 1.74                                     | 10 | Ū       | Ū       |  |  |  |
| 0.895                  | 1                   | Ð                  | Ð                   | 8.71                                     | 10 | U       | Ū       |  |  |  |
| 0.179                  | 1                   | Ð                  | Ū                   | 1.74                                     | 10 | ũ       | Ū.      |  |  |  |
| 0.179                  | 1                   | ັບ                 | U                   | 1.74                                     | 10 | Ŭ       | U.      |  |  |  |
| 0.179                  | 1                   | Ū                  | Ū                   | 1.74                                     | 10 | U       | U.      |  |  |  |
| 0.00549                | 1                   | U                  | ΰ                   |  |    | -       | -       |  |  |  |
| 0.00549                | 1                   | ับ                 | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | t                   | IJ                 | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | υ                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | ឋ                  | U                   |  |    |         |         |  |  |  |
|                        |                     |                    |                     |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U.                  |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00540                | ,                   | 11                 | н                   |  |    |         |         |  |  |  |
| 0.00043                | ,                   | ~                  | 5                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | υ                   |  |    |         |         |  |  |  |
| 0.011                  | 1                   | Ð                  | U                   |  |    |         |         |  |  |  |
| 0.011                  | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.011                  | 1                   | ម                  | υ                   |  |    |         |         |  |  |  |
|                        |                     |                    |                     |  |    |         |         |  |  |  |
| 0.00549                | 1                   | U                  | U                   |  |    |         |         |  |  |  |
| 0.011                  | 1                   | U                  | U                   |  |    |         |         |  |  |  |

### Table 3-115 Concentrations of Chemicals in Soil Samples Associated with WR Sump 009

| [SUMP] = WRSUMP009 |                           |                    |                  |                  |                  |                  |                  |                   |
|--------------------|---------------------------|--------------------|------------------|------------------|------------------|------------------|------------------|-------------------|
| LOCATION _CODE     |                           | 46S803             | 46SB03           | 46SB03           | 46SB03           | LH-WRS9-01       | LH-WRS9-01       | WRS09-SB01        |
| SAMPLE_NO          |                           | 46SB03(0-0_5)      | 46SB03(0-0_5)QC  | 46SB03(1-3)      | 46SB03(3-5)      | LH-WRS9-01_1     | LH-WRS9-01_2     | WRS09-SB01-01     |
| SAMPLE_DATE        |                           | 7/27/1998          | 7/27/1998        | 7/27/1998        | 7/27/1998        | 8/6/1993         | 8/6/1993         | 9/15/2006         |
| DEPTH              |                           | 0 - 0.5 Ft         | 0-0.5 Ft         | 1-3Ft            | 3-5 Ft           | 0.5 - 1 Ft       | 3.5 - 4 Ft       | 1 - 1 FI          |
| SAMPLE_PURPOSE     |                           | REG                | FD               | REG              | REG              | REG              | REG              | REG               |
| Test Group         | Parameter (Units = mg/kg) | Result DIL LQ VQ   | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result Dil. LQ VQ |
| VOLATILES          | Acrylonitrile             | 0.11 1 < U         | 0.11 1 < U       | 0.11 1 < U       | 0.12 1 < U       |                  |                  |                   |
| VOLATILES          | Benzene                   | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                   |
| VOLATILES          | Bromobenzene              | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     |                  |                  |                   |
| VOLATILES          | Bromochloromethane        | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     |                  |                  |                   |
| VOLATILES          | Bromodichloromethane      | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                   |
| VOLATILES          | Bromotorm                 | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                   |
| VOLATILES          | Bromomethane              | 0.011 <b>1</b> < U | 0.011 1 < U      | 0.011 1 < U      | 0.012 1 < U      | 0.01 1 < U       | 0.01 1 < U       |                   |
| VOLATILES          | Carbon disulfide          | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                   |
| VOLATILES          | Carbon tetrachloride      | 0.011 1 < U        | 0.011 1 < U      | 0.011 1 < U      | 0.012 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                   |
| VOLATILES          | Chlorobenzene             | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                   |
| VOLATILES          | Chloroethane              | 0.011 ‡ < U        | 0.011 1 < U      | 0.011 1 < U      | 0.012 1 < U      | 0.01 1 < U       | 0.01 1 < U       |                   |
| VOLATILES          | Chloraform                | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     | 0.005 1 < 13     | 0.005 1 < U      |                   |
| VOLATILES          | Chloromethane             | 0.011 1⊧ < U       | 0.011 1 < U      | 0.011 1 < U      | 0.012 1 < U      | 0.01 1 < U       | 0.01 1 < U       |                   |
| VOLATILES          | cis-1,2-Dichtoroethene    | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 t < Ü     | 0.0062 1 < U     |                  |                  |                   |
| VOLATILES          | cis-1,3-Dichloropropene   | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                   |
| VOLATILES          | Dibromochloromethane      | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                   |
| VOLATILES          | Dibromomethane            | 0.011 1 < U        | 0.011 1 < U      | 0.011 1 < U      | 0.012 1 < U      |                  |                  |                   |
| VOLATILES          | Dichlorodifluoromethane   | 0.017 1 < U        | 0.017 1 < U      | 0.017 1 < U      | 0.019 1 < U      |                  |                  |                   |
| VOLATILES          | Ethyl methacrylate        | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     |                  |                  |                   |
| VOLATILES          | Ethylbenzene              | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 t < U     | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                   |
| VOLATILES          | Hexachlorobutadiene       | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 t < U     | 0.0062 1 < U     |                  |                  |                   |
| VOLATILES          | IODOMETHANE               | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     |                  |                  |                   |
| VOLATILES          | ISOBUTYL ALCOHOL          | 1.1 1 < Ų          | 1.1 1 < U        | 1.1 1 < 1        | 1.2 1 < U        |                  |                  |                   |
| VOLATILES          | Isopropylbenzene          | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     |                  |                  |                   |
| VOLATILES          | m,p-Xylenes               |                    |                  |                  |                  |                  |                  |                   |
| VOLATILES          | Methacrylonitrile         | 0.11 1 < U         | 0.11 1 < U       | 0.11 1 < U       | 0.12 1 < U       |                  |                  |                   |
| VOLATILES          | Methyl isobutyl ketone    | 0.023 1 < U        | 0.023 1 < U      | 0.023 1 < U      | 0.025 1 < U      | 0.05 1 < U       | 0.05 1 < U       |                   |
| VOLATILES          | METHYL METHACRYLATE       | 0.057 1 < U        | 0.057 1 < U      | 0.057 1 < 0      | 0.062 1 < U      |                  |                  |                   |
| VOLATILES          | Methylene chloride        | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                   |
| VOLATILES          | Naphthalene               | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     |                  |                  |                   |
| VOLATILES          | n-BUTYLBENZENE            | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 t < U     |                  |                  |                   |
| VOLATILES          | n-PROPYLBENZENE           | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     |                  |                  |                   |
| VOLATILES          | Pentachloroethane         | 0.011 1 < U        | 0.011 1 < U      | 0.011 1 < 0      | 0.012 t < U      |                  |                  |                   |
| VOLATILES          | p-ISOPROPYLTOLUENE        | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < 0     | 0.0062 1 < 0     |                  |                  |                   |
| VOLATILES          | Propionitrile             | 0.11 1 < U         | 0.11 1 < 0       | 0.11 1 < U       | 0.12 1 < U       |                  |                  |                   |
| VOLATILES          | sec-BUTYLBENZENE          | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     |                  |                  |                   |
| VOLATILES          | Styrene                   | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     | 0.005 1 < 0      | 0.005 1 < U      |                   |
| VOLATILES          | tert-BUTYLBENZENE         | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     |                  |                  |                   |
| VOLATILES          | Tetrachloroethene         | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 t < U     | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                   |
| VOLATILES          | Tolvene                   | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 t < U     | 0.005 1 < U      | 0.005 1 < U      |                   |
| VOLATILES          | trans-1,2-Dichloroethene  | 0.0056 t < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     |                  |                  |                   |
| VOLATILES          | trans-1,3-Dichloropropene | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 1 < U     | 0.005 1 < U      | 0.005 1 < U      |                   |
| VOLATILES          | Trichloroethene           | 0.011 1 < U        | 0.011 1 < U      | 0.011 1 < U      | 0.012 1 < U      | -0.005 1 < U     | 0.905 1 < U      |                   |
| VOLATILES          | Trichlorofluoromethane    | 0:011 1 < U        | 0.011 1 < U      | 0.011 1 < U      | 0.012 1 < U      |                  |                  |                   |
| VOLATILES          | Vinyl acetate             | 0.023 1 < U        | 0.023 1 < U      | 0.023 1 < U      | 0.025 1 < U      | 0.05 1 < U       | 0.05 1 < U       |                   |
| VOLATILES          | Vinyl chloride            | 0.011 1 < U        | 0.011 1 < U      | 0.011 1 < U      | 0.012 t < U      | 0.01 1 < U       | 0.01 1 < U       |                   |
| VOLATILES          | Xylenes, Total            | 0.0056 1 < U       | 0.0056 1 < U     | 0.0057 1 < U     | 0.0062 t < U     | 9.005 1 < U      | 0.005 1 < U      |                   |

Footnotes are shown on cover page to Tables Section.



| WRS0<br>WRS09<br>9/15<br>4 -<br>R | 9-51<br>-580<br>/200<br>4 Fi<br>EG | 301<br>01-02<br>16 |       | WRS09-SB02<br>WRS09-SB02-01<br>9/15/2006<br>0.5 - 0.5 Ft<br>REG |
|-----------------------------------|------------------------------------|--------------------|-------|---|
| Result [                          | ЯŁ                                 | LQ                 | VQ    | Result DIL LQ VQ  |
|                                   |                                    |                    |       |   |
| 0.00549                           | ١                                  | U                  | U     |   |
| 0.00549                           | 1                                  | U                  | U     |   |
| 0.00549                           | 1                                  | U                  | ប     |   |
| 0.00549                           | 1                                  | U                  | U     |   |
| 0.00549                           | 1                                  | U                  | U     |   |
| 0.011                             | 1                                  | U                  | U     |   |
| 0.00549                           | 1                                  | U                  | U     |   |
| 0.00549                           | 1                                  | บ                  | U     |   |
| 0.00549                           | 1                                  | ບ<br>              | U<br> |   |
| 0.011                             | T                                  | U                  | U     |   |
| 0.00549                           | 1                                  | 0                  | 0     |   |
| 0.011                             | 1                                  | 0                  | 0     |   |
| 0.00549                           | 1                                  |                    |       |   |
| 0.00549                           | 1                                  |                    | U     |   |
| 0.00549                           |                                    | 0                  | 0     |   |
| 0.00549                           | 1                                  | 10<br>14           |       |   |
| 0.011                             | ŀ                                  | U                  | 0     |   |
| 0.00540                           |                                    | п                  | ы     |   |
| 0.00549                           | ;                                  | П                  | 11    |   |
| 0.00349                           | •                                  | 0                  | 0     |   |
|                                   |                                    |                    |       |   |
| 0.00549                           | 1                                  | н                  | 15    |   |
| 0.00549                           | 1                                  | 1                  | ม     |   |
| 0.00010                           | •                                  | Ũ                  | v     |   |
| 0.011                             | 1                                  | ย                  | U     |   |
|                                   |                                    | •                  | -     |   |
| 0.00549                           | 1                                  | U                  | U     |   |
| 0.011                             | t                                  | U                  | U     |   |
| 0.00549                           | 1                                  | U                  | U     |   |
| 0.00549                           | 1                                  | U                  | U     |   |
|                                   |                                    |                    |       |   |
| 0.00549                           | 1                                  | U                  | ប     |   |
|                                   |                                    |                    |       |   |
| 0.00549                           | 1                                  | ប                  | U     |   |
| 0.00549                           | 1                                  | ប                  | U     |   |
| 0.00549                           | 1                                  | ប                  | U     |   |
| 0.000916                          | 1                                  | J                  | J     |   |
| 0.00549                           | 1                                  | U                  | ប     |   |
| 0.00549                           | 1                                  | U                  | U     |   |
| 0.00549                           | 1                                  | U                  | U     |   |
| 0.00549                           | t                                  | U                  | U     |   |
| 0.011                             | 1                                  | U                  | υ     |   |
| 0.011                             | 1                                  | υ                  | υ     |   |
| 0.011                             | 1                                  | U                  | U     |   |
|                                   |                                    |                    |       |   |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-116 Concentrations of Chemicals in Soil Samples Associated with WR Sump 010

| [SUMP] = WRSUMPOTO             |                              |                               |                    |                          |                          |                          |                           |                          |                           |                           |                              |                            |
|--------------------------------|------------------------------|-------------------------------|--------------------|--------------------------|--------------------------|--------------------------|---------------------------|--------------------------|---------------------------|---------------------------|------------------------------|----------------------------|
| LOCATION_CODE                  |                              | 35SUMP018-SB02                | 35SUMP037-SB01     | LH-S018-01               | LH-S018-01               | LH-S018-01               | LH-S37-01                 | LH-S37-01                | LH-WRS10-01               | LH-WRS10-01               | WRS10-SB02                   | WBS10-SB02                 |
| SAMPLE_NO<br>SAMPLE DATE       |                              | 35-5MP18-5B02-02<br>9/11/2006 | 35-5MP37-5801-02   | 1H-5018-01_1<br>8/8/1993 | LH-SU18-VI_2<br>8/8/1993 | EH-5018-01_3<br>8/8/1993 | 7/25/1903                 | 7/25/1001                | LH-WH510-01_1<br>8/8/1003 | 2H-WHS10-01_2<br>8/8/1903 | 9/25/2006                    | WH310-SBUZ-02<br>9/25/2006 |
| DEPTH                          |                              | 6 - 6 Ft                      | 4 - 4 Ft           | 0.5 - 1.1 Ft             | 1.1 - 1.6 Ft             | 5-6Ft                    | 0.5 - 1 Ft                | 3-4.5 Ft                 | 0.5 - 1 Ft                | 3.5 - 4 Ft                | 5- 5R                        | 4 5 - 4 5 Ft               |
| SAMPLE_PURPOSE                 |                              | REG                           | REG                | REG                      | REG                      | REG                      | REG                       | REG                      | REG                       | REG                       | REG                          | REG                        |
| Test Group                     | Parameter (Units = mg/kg)    | Result DIL LQ VO              | 0 Result DIL LQ VQ | Result DIL LO VO         | Result Dil, LQ VO        | Result DIL LQ VQ         | Result DIL LQ VO          | Result DIL LQ VQ         | Result Dil. LO VQ         | Result DIL LO VO          | Result DIL LQ VQ             | Result DIL LQ VQ           |
| EXPLOSIVES                     | 1,3,5-Triniorobenzene        | 0.238 1 1                     | 0.246 1 U          |                          |                          |                          |                           |                          |                           | -                         | 0.245 1 U U                  | 0.249 1 U U                |
| EXPLOSIVES                     | 1,3-Dinitrobenzene           | 0.238 1 0                     | 0.245 1 0          |                          |                          |                          |                           |                          |                           |                           | 0.245 1 U U                  | 0.249 1 U U                |
| EXPLOSIVES<br>EXPLOSIVES       | 2.4-Dinitrotokiene           | 0.238 T U                     | 0246 1 0           | 0.33 1 < 12              | 0.33 1 < 11              | 0.33 1 < U               | 0.33 1 < U                | 0.33 t < ⊎               | 0.33 1 < tJ               | 0.33 1 < U                | 0.245 1 1 1                  | 0.249 1 0 0                |
| EXPLOSIVES                     | 2,6-Dinitrotoluene           | 0.248 T U                     | 0.256 1 U          | 0.33 T < U               | 0.33 1 < 1               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 0.255 1 1 10                 | 0.259 1 U U                |
| EXPLOSIVES                     | 2-Amino-4,6-dinitrotoluene   | 0.248 1 U                     | 0.256 \$ U         |                          |                          |                          |                           |                          |                           |                           | 0.255 1 U U                  | 0.259 1 U U                |
| EXPLOSIVES .                   | 4-Amino-2,6-dinitrotoluene   | 0.248 1 💔                     | 0.256 1 U          |                          |                          |                          |                           |                          |                           |                           | 0.255 1 U U                  | 0.259 1 U U                |
| EXPLOSIVES                     | НМХ                          | 2.1 1 U                       | 2.17 1 U           |                          |                          |                          |                           |                          |                           |                           | 2.16 t U U                   | 2,19 1 U U                 |
| EXPLOSIVES<br>EXPLOSIVES       | m-Nitroloituene              | 0.238 1 0                     | 0.245 T U          |                          |                          |                          |                           |                          |                           |                           | 0.245 1 0 0                  | 0.249 T U U<br>0.250 1 H U |
| EXPLOSIVES<br>EXPLOSIVES       | o-Nitrotoluene               | 0238 1 1                      | 0.236 1 1          |                          |                          |                          |                           |                          |                           |                           | 0.235 1 0 0                  | 0.239 1 0 6                |
| EXPLOSIVES                     | p-Nitrotoluene               | 0.238 1 U                     | 0.246 t U          |                          |                          |                          |                           |                          |                           |                           | 0.245 1 U U                  | 0.249 1 U U                |
| EXPLOSIVES                     | RDX                          | 0.952 1 19                    | 0.985 t U          |                          |                          |                          |                           |                          |                           |                           | 0.98 1 U U                   | 0.995 1 U U                |
| EXPLOSIVES                     | Tetry                        | 0.619 1 U                     | 0.64 t U           |                          |                          |                          |                           |                          |                           |                           | 0.637 1 U U                  | 0.647 1 U U                |
| METALS                         | Aluminum                     | 15200 1                       |                    | 7220 1 D                 | 10100 1 D                | 7950 1 D                 | 8430 1 < U                | 22000 1 < U              | 5500 1 D                  | 6320 1 D                  | 8760 1                       | 28700 1                    |
| METALS                         | Antimony                     | 0.109 1 U                     |                    | 51 < 0                   | 51 < U                   | 51 < U                   | 31 < U                    | 31 < U                   | 51 < U                    | 51 < U                    | 0.112 1 U UJL                | 0.123 1 U UJL              |
| METALS                         | Barkum                       | 78.4 1                        |                    | 55.3 1                   | 45.8 1                   | 24.2 1                   | 67.8 1                    | 74 1                     | 88.3 t                    | 70.1 1                    | 76.5 1                       | 53.3 1                     |
| METALS                         | Beryiisum                    | 0.631 1                       |                    |                          |                          |                          |                           |                          |                           |                           | 0.375 1 J J                  | 0.757 1                    |
| METALS                         | Cadmium                      | 0.114 1 J                     | J                  | 11 < U                   | 11 < U                   | 11 < U                   | 11 < U                    | 11 < U                   | 11 < U                    | 11 < U                    | 0.369 1 J J                  | 0.063 1 J J                |
| METALS                         | Calcium                      | 1250 1                        | J                  | 589 1                    | 893 1                    | 507 1                    | 1290 1                    | 1190 1                   | 1210 1                    | 1490 1                    | 51000 10                     | 828 1                      |
| METALS                         | Chromium                     | 16.1 1                        |                    | 18.9 1                   | 14.3 1                   | 7 1                      | 19.7 1                    | 22.6 1                   | 7.9 1                     | 7.3 1                     | 24.1 1                       | 23.3 1                     |
| METALS                         | Cobalt                       | 7.29 1                        | J                  | 21 < 0                   | 21 < 0                   | 21 < 0                   | 3.3 7                     | 3.9 1                    | 21 < U                    | 21 < 0                    | 2./9 1                       | 4.5 1                      |
| METALS                         | lon                          | 5.2 I<br>14900 1              |                    | 3 I<br>17800 1 D         | 3.4 L<br>18900 1 D       | 2:0 1<br>12000 1 D       | 020 i<br>22900 t c l1     | 4.3 i<br>21000 1 < ii    | 3.0 1<br>8410 1 D         | 3.3 I<br>12700 1 D        | 21100 1                      | 21706 1                    |
| METALS                         | Lead                         | 5.17 1                        | J                  | 8 1 D                    | 7.3 1 0                  | 6.4 1 D                  | 1.5 1                     | 6.1 1                    | 8.1 1 D                   | 6.4 1 D                   | 9.75 1                       | 9.09 1                     |
| METALS                         | Magnesium                    | 1770 1                        |                    | 598 1                    | 674 1                    | 570 1                    | 538 1                     | 1190 1                   | 431 1                     | 364 1                     | 981 1 JH                     | 1610 1 JH                  |
| METALS                         | Manganese                    | 21.7 1                        |                    | 152 1                    | 65.4 1                   | 15.1 1                   | 154 1                     | 127 1                    | 58 1                      | 58.6 1                    | 134 1 J                      | 21.9 1 J                   |
| METALS                         | Mercury                      | 0.0184 1 J                    | 3                  | 0.1 1 < U                 | 0.1 1 < 0                | 0.1 1 < U                 | 0.1 1 < U                 | 0.0294 1 J J                 | 0.0843 1 J J               |
| METALS                         | Nickel                       | 19.1 I<br>766 1               |                    | 221 1                    | 288 1                    | 147 1                    | <b>135 1</b>              | 1070 1                   | 200 1                     | 187 1                     | 0.02 F<br>346 1              | 11-0 I<br>772 1            |
| METALS                         | Selenium                     | 0.218 1 U                     |                    | 0.5 1 < U                | 0.5 1 < 0                | 0.5 1 < U                | 1 1 < U                   | 11 < U                   | 0.5 1 < U                 | 0.5 1 < U                 | 0.142 f J JL                 | 0.128 1 J JL               |
| METALS                         | Silver                       | 1.7 1 U                       |                    | 11 < U                   | 11 < 0                   | 11 < U                   | 1 1 < U                   | 1 1 < U                  | 11 < U                    | 11 < U                    | 1.68 1 U U                   | 1.87 1 U U                 |
| METALS                         | Sodium                       | 322 1                         |                    |                          |                          |                          |                           |                          |                           |                           | 54.3 1                       | 218 1                      |
| METALS                         | Strentium                    |                               |                    | 9.2 1                    | 12.7 1                   | 11.6 1                   | 12.8 1                    | 16.2 1                   | 10.1 1                    | 12.4 1                    |                              |                            |
| METALS                         | i halium<br>Venedium         | 0.0906 1                      |                    |                          |                          |                          |                           |                          |                           |                           | 0.0446 1                     | 0.108 1                    |
| METALS                         | Zinc                         | 414 1                         |                    | 156 1                    | 22.3 1                   | 161 1                    | 18 1                      | 26.9 1                   | 221 1                     | 178 1                     | 31.5 1                       | 32.9 1                     |
| RANGE_ORGANICS                 | Carbon Range C12-C28         | 54.6 1 U                      |                    |                          |                          |                          |                           |                          |                           |                           |                              |                            |
| RANGE_ORGANICS                 | Carbon Range C28-C35         | 54.6 1 U                      |                    |                          |                          |                          |                           |                          |                           |                           |                              |                            |
| RANGE_ORGANICS                 | Carbon Range C6-C12          | 54.6 1 U                      |                    |                          |                          |                          |                           |                          |                           |                           |                              |                            |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene       |                               |                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 t < U                | 1.87 10 U U                  | 0.201 1 U U                |
| SEMIVOLATILES                  | 1.3-Dichlorobenzene          |                               |                    | 0.33 1 < 0               | 0.33 1 < 11              | 0.33 1 < 11              | 0.33 1 < 0                | 0.33 1 < 11              | 0.33 1 < 1                | 0.33 1 < 1                | 187 10 11 11                 | 0.201 1 0 0                |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene          |                               |                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.87 10 U U                  | 0.201 1 U U                |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenol        |                               |                    | 1.65 t < U               | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U                | 1.87 10 U U                  | 0.201 1 U U                |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol        |                               |                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.87 10 U U                  | 0.201 1 U U                |
| SEMIVOLATILES                  | 2,4-Dichlorophenol           |                               |                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.87 10 U U                  | 0.201 1 U U                |
| SEMIVOLATILES<br>SEMIVOLATILES | 2,4-Dimenyiphenol            |                               |                    | 0.33 1 < 0               | 165 1 < 1                | 165 1 < 1                | 165 1 < U                 | 0.33 1 < 0<br>165 1 < 16 | 165 1 < 1                 | 165 1 < 1                 | 9.33 10 U U                  | 1 1 1 1 1                  |
| SEMIVOLATILES                  | 2.4-Dinitrotoluene           |                               |                    | 1.05 1 < 0               | 1.00 7 4 0               | 1.00 1 1 0               |                           | 1.00 1 2 0               | 1.00 1 1 0                | 1.00 1 4 0                | 1.87 10 U U                  | 0.201 1 U U                |
| SEMIVOLATILES                  | 2,6-Dinitrotoluene           |                               |                    |                          |                          |                          |                           |                          |                           |                           | 1.87 10 U U                  | 0.201 1 U U                |
| SEMIVOLATILES                  | 2-Chloronaphthalene          |                               |                    | 0.33 1 < U               | 0.33 \$ < U              | 0.33 t < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 t < U                | 0.33 1 < U                | 1.87 10 U U                  | 0.201 1 U U                |
| SEMIVOLATILES                  | 2-Chlorophenai               |                               |                    | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U               | 0.33 t < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.87 10 U U                  | 0.201 1 U U                |
| SEMIVULABLES<br>SEMIVULABLES   | 2-Methylnaphthalene          |                               |                    | £0.333 1 < U             | 0.33 1 < 0               | 0.33 1 < 0               | 0.33 7 < U                | 0.33 1 < 0               | 0.33 1 < 0                | 0.33 1 < 0                | 1.87 10 0 0                  | 0.201 1 0 0                |
| SEMIVOLATILES                  | 2-Metryprend<br>2-Nitmanihne |                               |                    | 165 1 < 9                | 165 1 < 0                | 165 1 < U                | 165 1 < 1                 | 185 1 < 1                | 165 1 < 1                 | 165 1 < 1                 | 9.33 10 0 0                  | 1 1 1 1                    |
| SEMIVOLATILES                  | 2-Nitrophenol                |                               |                    | 0.33 1 < U                | 0.33 t < U               | 0.33 1 < 1                | 0.33 t < U                | 1.87 10 U U                  | 0.201 1 U U                |
| SEMIVOLATILES                  | 3,3-Dichlorobenzidine        |                               |                    | 0.65 1 < U                | 0.65 t < U               | 0.65 1 < U                | 0.65 1 < U                | 3.73 10 U U                  | 0.401 I U U                |
| SEMIVOLATILES                  | 3-Nitroaniline               |                               |                    | 1.65 1 < U                | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U                | 9.33 10 U U                  | 1 1 U U                    |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol   |                               |                    | 1.65 1 < U               | 1.65 1 < 0               | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U                | 9.33 10 U U                  | 1 1 U U                    |
| SEMIVULATILES<br>SEMIVOLATILES | 4-bromophenyi phenyi ether   |                               |                    | 0.33 T < U               | 0.33 1 < U               | 9.33 3 < U               | ย.33 1 < ป<br>∩.65 1 - יי | U.33 T < U               | 0.33 1 < 0                | 0.33 7 < 0                | 1.87 10 U U<br>1.87 10 17 17 | 0.201 1 U U<br>6.201 1 U U |
| SEMIVOLATILES                  | 4-Chloroaniline              |                               |                    | 0.65 1 < H               | 0.65 1 < 15              | 0.65 1 < II              | 0.65 1 < 1J               | 0.65 1 < U               | 0.65 1 < l1               | 0.65 1 < 17               | 1.87 10 U U                  | 0.201 1 U U                |
| SEMIVOLATILES                  | 4-Chlorophenyl phenyl ether  |                               |                    | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U                | 1.87 10 U U                  | 0.201 t U U                |
| SEMIVOLATILES                  | 4-Methylphenol               |                               |                    | -0.33 t < U              | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < U                | 0.33 1 < U               | 0.33 1 < U                | 0.33 t < U                | 1.87 10 U U                  | 0.201 1 U U                |
| SEMIVOLATILES                  | 4-Nitoaniline                |                               |                    | 1.65 1 < U                | 1.65 1 < U               | 1.65 1 < U                | 1.65 1 < U                | 9.33 10 U U                  | 1 1 U U                    |
| SEMIVOLATILES                  | 4-Nitrophenol                |                               |                    | 1.65 ) < U               | 1.65 1 < U               | 1.65 1 < U               | 1.65 1 < 0                | 1.65 1 < U               | 1.65 1 < U                | 1.65 t < U                | 9.33 10 U U                  | 1 1 U U                    |
| SEMIVOLATILES                  | Acenaphthene                 |                               |                    | 0.33 1 < U               | 0.33 1 < U               | 0.33 1 < 0               | 0.33 1 < U                | 0.33 1 < 0               | 0.33 1 < 0                | 0.33 1 < U                | 1.87 10 U U                  | 0.201 1 U U                |



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

### Table 3-116 Concentrations of Chemicals in Soil Samples Associated with WR Sump 010

| (SUMP) = WRSUMP010              |   |                  |                  | AICEILLAUOUS OF | mennicats in Son | Samples Associ                  | aled with AAV On   | 11p 0 10     |               |                       |               |                                 |
|---------------------------------|---|------------------|------------------|-----------------|------------------|---------------------------------|--------------------|--------------|---------------|-----------------------|---------------|---------------------------------|
| LOCATION _CODE                  |   | 35SUMP018-SB02   | 35SUMP037-SB01   | LH-S018-01      | LH-S018-01       | LH-S018-01                      | LH-537-01          | LH-S37-01    | LH-WRSt0-01   | LH-WBS10-01           | WRS10-SB02    | WRS10-SB02                      |
| SAMPLE_NO                       |   | 35-SMP18-SB02-02 | 35-SMP37-SB01-02 | LH-S018-01_1    | LH-S018-01_2     | LH-\$018-01_3                   | LH-\$37-01_1       | LH-S37-01_2  | LH-WRS10-01_1 | LH-WRS10-01_2         | WRS10-SB02-01 | WRS10-SB02-02                   |
| SAMPLE_DATE                     |   | 9/11/2006        | 9/9/2006         | 8/8/1993        | 8/8/1993         | 8/8/1993                        | 7/25/1993          | 7/25/1993    | 8/8/1993      | 8/8/1993              | 9/25/2005     | 9/25/2006                       |
| DEPTH                           |   | 6-6Ft            | 4 - 4 Ft         | 0.5 - 1,1 Ft    | 1.1 - 1.6 Ft     | 5 - 6 Ft                        | 0.5 - 1 Ft         | 3 - 4.5 FL   | 0.5 - 1 Ft    | 3.5 - 4 Ft            | _55Ft         | 4_5 - 4_5 Ft                    |
| SAMPLE_PURPOSE                  | D   | REG              | HEG              | REG             | HEG              | HEG                             | HEG                | REG          | REG           | REG                   | HEG           | REG<br>Decile Dill LO MO        |
| SEMIVOLATILES                   | Arenanhthylene                              | Hesak Dil LO VO  | Hestin Dil Lu Vu | 633 1 < 1       | 0.33 1 < 11      | Alson Dil LCI VQ<br>0.33 1 < 15 | 133 1 C II         | A33 1 < 1    | 133 1 C II    | 0.33 1 c 1            | 1.87 10 D E   | 0.201 1 H U                     |
| SEMIVOLATILES                   | Anthracene                                  |                  |                  | 0.33 1 < U      | 0.33 1 < 1       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Benzo(a)anthracene                          |                  |                  | 0.33 1 < U      | 0.33 t < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 t < U    | 0.33 1 < 1            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Senzo(a)pyrene                              |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 t0 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Senzo(b)fluoranthene                        |                  |                  | 0.33 1 < U      | 0.33 t < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Benzo(ghi)perylene                          |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 t < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 to U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Benzo(k)fluoranthene                        |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0,33 <del>1</del> < U | 1.87 10 U U   | 0.201 1 V U                     |
| SEMIVOLATILES                   | Benzoic Acid                                |                  |                  | 1.65 1 < U      | 1.65 1 < U       | 1.65 1 < U                      | 1.65 1 < U         | 1.65 1 < U   | 1.65 1 < U    | 1.65 1 < U            | 9.33 10 U UJ  | 1 1 0 00                        |
| SEMIVOLATILES                   | Benzyl Alcohol                              |                  |                  | 0.65 1 < 0      | 0.65 1 < 0       | 0.65 1 < 0                      | 0.65 1 < U         | 0.65 1 < 0   | 9.65 1 < U    | 0.65 1 < U            | 1.87 10 0 0   |                                 |
| SEMIVOLATILES<br>SCHIVOLATILES  | bis(2-Chloroethoxy)methane                  | -                |                  | 0.33   < 0      | 0.33 1 < 0       | 0.33 1 < 0                      | 10.33 1 < U        | 0.33   < 0   | 0.33 1 < 0    | 0.33 F < U            | 1,57 10 10 10 | 0.201 1 0 0                     |
| SEMIVOLATILES<br>SEMIVOLATILES  | bis/2-Chloroisonronul\ather                 |                  |                  | 0.33 1 < 0      | 0.33 1 < 1       | 0.33 1 < 0                      |                    | 0.33 1 < 11  | 0.33 1 4 1    | 0.33 1 < 0            | 1.07 10 10 0  | 0201 1 1 1                      |
| SEMIVOLATICES                   | his(2-Ethytheryl)nhthalate                  |                  |                  | 0.382 1         | 0.33 1 2 1       |                                 | 0.33 1 < 1         | 0.33 1 < 1   | 033 1 < 8     | 0.33 1 < 1            | 1.67 10 10 10 | 0.201 1 U U                     |
| SEMIVOLATILES                   | Butyl benzyl phthalate                      |                  |                  | 0.33 t < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Chrysene                                    |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 i < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Dibenzo(a,h)anthracene                      |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Dibenzoturan                                |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 t < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Diethyl phthalate                           | 1                |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.187 10 U U  | 0.201 1 U U                     |
| SEMIVOLATILES                   | Dimethyl phthalate                          |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | di-n-Butyi phthalate                        |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | di-n-Octyi phthatate                        |                  |                  | 0.33 1 < 0      | 0.33 1 < 0       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 t < U    | 0.33 1 < U            | 1.87 10 10 0  | 0.201 1 U U                     |
| SEMIVULATILES<br>CELINOLATILES  | Fuoranmene                                  |                  |                  | U > I 88.U      | 0.33 1 < 0       | 0.33 1 < 0                      | 0.33 1 < 0         | 0.33 1 < U   | 0.33 F < 0    | 0.22 1 < 11           | 1.27 10 0 0   | 0.201 1 0 0                     |
| SEMIVOLATICES                   | Hevachtorobenzene                           |                  |                  | 0.33 1 < 0      |                  |                                 | 0.33 1 < 0         |              | 0.33 1 < 1    | 0.33 1 < 1            | 1.87 10 11 11 | 0.201 1 U U                     |
| SEMIVOLATILES                   | Hexachlorobutadiene                         |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < - U | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Hexachlorocyclopentadiene                   |                  |                  | 0.33 t < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Hexachioroethane                            |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Indeno(1,2,3-cd)pyrene                      |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | isophorone                                  |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 t U U                     |
| SEMIVOLATILES                   | Naphthalene                                 | ]                |                  | 0.33 1 < 0      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Nitrobenzene                                |                  |                  | 0.33 1 < 0      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < 0   | 0.33 1 < U    | 0.33 1 < 0            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES<br>COMPUSE ATILES | n-Neroso-di-n-propytamine                   |                  |                  | 0.33 1 < 0      | 0.33 1 < 0       | 9.33 1 < 0                      | 0.33 1 < 0         | 0.33 1 < 0   | 0.33 1 < 0    | 0.33 1 < 0            | 1.87 10 0 0   | 0.201 1 0 0                     |
| SEMIVOLATILES                   | Pantachlomohanol                            |                  |                  | 165 1 2 1       | 165 1 < 1        | 1.65 1 < 1                      | 165 1 < 1          | 165 1 < 1    | 165 1 4 18    | 165 1 < 11            | 033 10 11 11  | 1 1 1 1                         |
| SEMIVOLATILES                   | Phenanthrene                                |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < 1                      | 033 1 < U          | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 t U U                     |
| SEMIVOLATILES                   | Phenol                                      |                  |                  | 0.33 t < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| SEMIVOLATILES                   | Pyrene                                      |                  |                  | 0.33 1 < U      | 0.33 1 < U       | 0.33 1 < U                      | 0.33 1 < U         | 0.33 1 < U   | 0.33 1 < U    | 0.33 1 < U            | 1.87 10 U U   | 0.201 1 U U                     |
| VOLATILES                       | 1,1,1,2-Tetrachkoroethane                   | 0.00501 1 U      |                  |                 |                  |                                 |                    |              |               |                       |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,1,1-Trichloroethane                       | 0.00501 1 U      |                  | 0.005 t < U     | 0.005 1 < U      | 0.005 1 < U                     | 0.005 1 < U        | 0.005 1 < U  | 0.005 1 < U   | 0.005 1 < U           |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,1,2,2-Tetrachloroethane                   | 0.00501 1 0      |                  | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U                     | 0.005 1 < U        | 0.005 1 < U  | 0.005 t < U   | 0.005 1 < V           |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,1,2-Trichloroethane                       | 0.00501 1 U      |                  | 0.005 1 < 0     | 0.005 1 < 0      | 0.005 1 < U                     | 0.005 1 < U        | 0.005 1 < 0  | 0.005 1 < U   | 0.005 1 < 0           |               | 0.00614 1 U U                   |
| VOLATILES                       | 1.1-Dichiomethane                           | 0.00501 1 0      |                  | 0.005 1 < 0     | 0.005 1 < 11     | 0.005 1 < U                     | 0.005 1 < 0        | 0.005 1 < 0  | 0.005 1 < 1   | 0.005 1 < 0           |               | 0.00614 3 0 0                   |
| VOLATILES                       | 1 1-Dichloronomene                          | 0.00501 1 11     |                  | 0.000 1 < 0     | 0.000 1 1 0      | 0.000 1 < 0                     | 0.000 1 < 0        | 0.000 / 1 0  | 0.002 1 2 0   | 0.000 1 4 0           |               | 0.00634 1 U U                   |
| VOLATILES                       | 1,2,3-Trichlorobenzene                      | 0.00501 1 U      |                  |                 |                  |                                 |                    |              |               |                       |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,2,3-Trichloropropane                      | 0.00501 1 U      |                  |                 |                  |                                 |                    |              |               |                       |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,2,4-Trichlorobenzene                      | 0.00501 1 U      |                  |                 |                  |                                 |                    |              |               |                       |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,2,4-Trimethylbenzene                      | 0.00501 1 U      |                  |                 |                  |                                 |                    |              |               |                       |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,2-Dibromo-3-chloropropane                 | 0.00501 1 U      |                  |                 |                  |                                 |                    |              |               |                       |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,2-Dibromoethane                           | 0.00501 1 U      |                  |                 |                  |                                 |                    |              |               |                       |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,2-Dichlorobenzene                         | 0.00507 1 0      |                  | 0.005 t - 11    | 0.005 t - 21     | 0.005 1                         | 0.006 1            | A 105 t . 11 | 0.005 1 - 18  | 0.005 1 - ti          |               | 0.00614 1 U U                   |
| VOLATILES<br>WOLATILES          | 1.2-Dichlomethene                           | 0.00001 1 9      |                  | 0.005 1 < 0     | 0.005 1 < 0      | 0.005 1 < 1                     | 0.005 1 < 0        | 0.005 1 < 0  | 0.005 1 < 0   | 0.005 1 < 0           |               | 0.00014 1 0 0                   |
| VOLATILES                       | t 2-Dichlomompane                           | 0.00501 1 1      |                  | 0.005 1 < U     | 0.005 t < U      | 0.005 1 < 1/                    | 0.005 1 < ti       | 0.005 1 < 11 | 0.005 1 < U   | 0.005 1 < 0           |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,2-Dimethylaenzene (a-Xylene)              | 0.00501 1 U      |                  |                 |                  |                                 |                    |              |               |                       |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,3,5-Trimethylbenzene                      | 0.06501 1 U      |                  |                 |                  |                                 |                    |              |               |                       |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,3-Dichlorobenzene                         | 0.00501 1 U      |                  |                 |                  |                                 |                    |              |               |                       |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,3-Dichloropropane                         | 0.00501 1 U      |                  |                 |                  |                                 |                    |              |               |                       |               | 0.00614 1 U U                   |
| VOLATILES                       | 1,4-Dichlorobenzene                         | 0.00501 1 U      |                  |                 |                  |                                 |                    |              |               |                       |               | 0.00614 1 U U                   |
| VOLATILES                       | 2,2-Dichloropropane                         | 0.00501 1 U      |                  |                 |                  |                                 |                    | 00F 1        |               |                       |               | 0.00614 1 U U                   |
| VOLAHLES                        | 2-Butanone                                  | 0.01 1 0 0.0     | J                | U.U5 1 < U      | 0.05 1 < 0       | 0.05 1 < U                      | 0.05 1 < U         | 0.05 1 < J   | 0.05 1 < U    | 0.05 1 < U            |               | 0.0123 1 U U                    |
| VOLATILES<br>VOLATILES          | ∠-0.moroeony: vinyi emer<br>2.Chiozotoluoco | 0.00501 1 1      |                  | u.ui i < U      | 0.01 1 < 0       | 0.01 } < 0                      | 0.01 1 < U         | U.U? 1 < U   | U.VI I < U    | 0.01 I < U            |               | 0.0123 I U U<br>0.00614 1 II II |
| VOLATIEES                       | 2-Hexanone                                  | 0.0001 1 12 12   | I                | 0.05 1 < 11     | 0.05 t ∠ 11      | 0.05 1 2 11                     | 0.05 1 <i>e</i> 11 | 0.05 1 < 1   | 0.05 1 < II   | 0.05 1 < t3           |               | 0.0123 1 U U                    |
| VOLATILES                       | 4-Chlorotoluene                             | 0.00501 t U      | •                |                 |                  |                                 |                    |              |               |                       |               | 0.00614 1 U U                   |
| VOLATILES                       | Acetone                                     | 0.01 1 U         |                  | 0.1 1 < U       | 0.1 1 < ₹        | .0.1 1 < U                      | 0.1 1 < U          | 0.1 1 < U    | 0.1 1 < U     | 0.1 1 < U             |               | 0.0123 1 U U                    |
| VOLATILES                       | Benzene                                     | 0.00501 1 U      |                  | 0.005 1 < U     | 0.005 1 < U      | 0.005 1 < U                     | 0.005 1 < U        | 0.005 1 < U  | 0.005 1 < U   | 0.005 t < U           |               | 0.00614 1 U U                   |
| VOLATILES                       | Bromobenzene                                | 0.00501 1 U      |                  |                 |                  |                                 |                    |              |               |                       |               | 0.06614 1 U U                   |
| VOLATILES                       | Bromochloromethane                          | 0.00501 1 U      |                  |                 |                  |                                 |                    | -            |               |                       |               | 0.00614 1 U U                   |



N AN

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-116 Concentrations of Chemicals in Soil Samples Associated with WR Sump 010

| [SUMP] = WRSUMP010 |                           |                  |                  |                  |                   | •                |                  |                  |                  |                  |                  | UD040 CD00       |
|--------------------|---------------------------|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE     |                           | 35SUMP018-SB02   | 35SUMP037-S801   | LH-S018-01       | LH-S018-01        | LH-S018-01       | LH-S37-01        | LH-S37-01        | LH-WRS10-01      | LH-WRS10-01      | WRS10-SB02       | WHSTU-SBU2       |
| SAMPLE_NO          |                           | 35-SMP18-S802-02 | 35-SMP37-SB01-02 | LH-S018-01_1     | LH-S018-01_2      | LH-\$018-01_3    | LH-S37-01_1      | LH-S37-01_2      | LH-WRS10-01_1    | LH-WRS10-01_2    | WHS10-\$802-01   | WHS10-SB02-02    |
| SAMPLE_DATE        |                           | 9/11/2006        | 9/9/2006         | 8/8/1993         | 8/6/1993          | 8/8/1993         | 7/25/1993        | 7/25/1993        | 8/8/1993         | 8/8/1993         | 9/25/2006        | 9/25/2006        |
| DEPTH              |                           | 6-6Ft            | 4 - 4 Ft         | 0.5 - 1.1 Ft     | 11-16Ft           | 5 - 6 Ft         | 0.5 - 1 Ft       | 3 - 4.5 Ft       | 0.5 - 1 Ft       | 3.5 - 4 Ht       | _55+t            | 4_5-4_521        |
| SAMPLE_PURPOSE     |                           | REG              | REG              | REG              | REG               | REG              | REG              | REG              | REG              | REG              | HEG              | HEG              |
| Test Group         | Parameter (Units = mg/kg) | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result Dil, LQ VQ | Result Dil LQ VQ | Result DIL LO VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO | Result DIE LO VO | Result DIL LU VO |
| VOLATILES          | Bromodichloromethane      | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < 0      | 0.905 1 < U      | 0.005 1 < 0      | 0.005 1 < 0      |                  | 0.00614 1 0 0    |
| VOLATILES          | Bromoform                 | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00634 1 U U    |
| VOLATILES          | Bromomethane              | 0.01 1 U         |                  | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < 0       | 0.01 1 < U       | 0.01 1 < 1       | 0.01 1 < 0       | 0.01 1 < 0       |                  | 0.0123 1 0 0     |
| VOLATILES          | Carbon disulfide          | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      | 0.005 t < U      | 0.005 1 < 0      |                  | 0.00514 1 0 0    |
| VOLATILES          | Carbon tetrachloride      | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < 0      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005.1 < U      |                  | 0.00614 1 U U    |
| VOLATILES          | Chlorobenzene             | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < 0      |                  | 0.00614 1 0 0    |
| VOLATILES          | Chłoroethane              | 0.01 1 U         |                  | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       |                  | 0.0123 1 0 0     |
| VOLATILES          | Chloroferm                | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00514 1 0 0    |
| VOLATILES          | Chioromethane             | 0.01 1 U         |                  | 0.01 ł < U       | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | Q.01 1 < U       | 0.01 1 < 0       | 0.01 1 < U       |                  | 0.0123 1 0 0     |
| VOLATILES          | cis-1,2-Dichloroethene    | 0.00501 1 U      |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.00614 1 U U    |
| VOLATILES          | cis-1,3-Dichloropropene   | 0.00501 1 U      |                  | 0.005 t < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00614 1 U U    |
| VOLATILES          | Dibromochloromethane      | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00614 1 U U    |
| VOLATILES          | Dibromomethane            | 0.00501 1 U      |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.00614 1 U U    |
| VOLATILES          | Dichlorodifluoromethane   | 0.01 1 U         |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.0123 1 U U     |
| VOLATILES          | Ethylbenzene              | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U.     | 0.005 1 < U      |                  | 0.00614 1 U U    |
| VOLATILES          | Hexachlorobutadiene       | 0.00501 1 U      |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.00614 1 U U    |
| VOLATILES          | isopropylbenzene          | 0.00501 1 U      |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.00614 1 U U    |
| VOLATILES          | m,p-Xylenes               | 0.00501 1 U      |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.00614 1 U U    |
| VOLATILES          | Methyl isobutyl ketone    | 0.01 t U         |                  | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |                  | 0.0123 1 0 0     |
| VOLATILES          | Methylene chloride        | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 ł < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00614 1 U U    |
| VOLATILES          | Naphthalene               | 0.01 รัป         |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.0123 1 U U     |
| VOLATILES          | n-BUTYLBENZENE            | 0.00501 1 U      |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.00614 1 U U    |
| VOLATILES          | n-PROPYLBENZENE           | 0.00501 1 U      |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.00614 1 U U    |
| VOLATILES          | p-ISOPROPYLTOLUENE        | 0.00501 1 U      |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.00614 1 U U    |
| VOLATILES          | sec-BUTYLBENZENÉ          | 0.00501 1 U      |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.00614 1 U U    |
| VOLATILES          | Styrene                   | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 t < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00614 1 U U    |
| VOLATILES          | tert-BUTYLBENZENE         | 0.00501 1 U      |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.00614 1 U U    |
| VOLATILES          | Tetrachloroethene         | 0.00501 1 U      |                  | 0.005 t < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      | 0.0307 1         | 0.0272 1         |                  | 0.00514 1 U U    |
| VOLATILES          | Toluene                   | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U       | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00614 1 U U    |
| VOLATHES           | trans-1,2-Dichloroethene  | 0.00501 1 U      |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0_00614 1 U U    |
| VOLATILES          | trans-1,3-Dichloropropene | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00614 1 U U    |
| VOLATILES          | Trichloroethene           | 0.00501 1 U      |                  | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00614 1 U U    |
| VOLATILES          | Trichtorofluoromethane    | 0.01 1 U         |                  |                  |                   |                  |                  |                  |                  |                  |                  | 0.0123 1 U U     |
| VOLATILES          | Vinyt acetate             | 0.01 1 U         |                  | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U       |                  | 0.0123 1 U U     |
| VOLATILES          | Vinyi chloride            | 0.01 t U         |                  | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U       | Q.01. 1 < U      |                  | 0.0123 1 U U     |
| VOLATILES          | Xylenes, Total            |                  |                  | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U      | 0.005 1 < U      |                  |                  |

Footnotes are shown on cover page to Tables Section.


. . . . . . . . .



# Table 3-117 Concentrations of Chemicals in Soil Samples Associated with WR Sump 011

| [SUMP] = WRSUMP011<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                             | և։։<br>Լ։։։<br>0 | -WRS1<br>/RS11-<br>8/8/199 | 11-01<br>-01 QC<br>-03<br>2 FL |      | LH-<br>LH-V<br>8<br>0. | WRS11<br>/RS11-<br>//8/199/<br>5 - 1.2 | 1-01<br>01_1<br>3<br>Ft |         | LH-W<br>LH-Wi<br>8/<br>1.2 | /RS11-0<br>RS11-01<br>8/1993<br>- 1.7 Ft | 1<br>_2    |         | LH-V<br>LH-W<br>8/<br>3, | /RS1<br>RS11-<br>8/199<br>5 • 4 f | 1-01<br>-01_3<br>3<br>Ft |                   | WRS<br>WRS0<br>9/0 | 011-5<br>11-58<br>26/200<br>+ 0.5 | 1801<br>101-01<br>26<br>Fl |        | WRS01<br>WRS011<br>9/26<br>3.5 - | 1-SB01<br>-SB01-0<br>2006<br>4.5 Fl | 2       | W       | VRS01<br>RS011<br>9/26<br>0.0 | 11-SB0<br>1-SB02-<br>1/2006<br>- 0.5 Ft | 2<br>01 | WR     | 75011-5<br>5011-5B<br>9/26/200<br>3.5 - 4.5 | 802<br>02-02<br>6<br>F1 |      |
|---|-----------------------------|------------------|----------------------------|--------------------------------|------|------------------------|--|-------------------------|---------|----------------------------|--|------------|---------|--------------------------|-----------------------------------|--------------------------|-------------------|--------------------|-----------------------------------|----------------------------|--------|----------------------------------|-------------------------------------|---------|---------|-------------------------------|---|---------|--------|---|-------------------------|------|
| SAMPLE_PURPOSE  | Pressuates #1sts are 0.st   | Danuk            | FD                         |                                |      | Desult                 | REG                                    |                         | vo      | Basuit                     | REG<br>DH 1                              | ~          | vo      | Basula                   | HEG<br>Dii                        | 10                       | vo                | Secul              | 서로드<br>고비                         | 10                         | VO     | Result [                         | :G<br>38 17                         | o vr    | i Besul | . r                           | ar r                                    | o vo    | Result | DIL   | ιa                      | · va |
| EXPLOSIVES  | 2 4-Diplicatelyane          | Hesua            | 1                          |                                | 11   | 0.33                   | 1                                      |                         | <u></u> | 0.33                       | 1  | - <u>M</u> | <u></u> | 0.33                     | 1                                 |                          | - <del>ĩĩ</del> - | Ticour             |                                   |                            |        | 10.301                           |                                     |         |         |                               |   |         |        |   |                         |      |
| EVELOSIVES  | 2.4-Dinitrotobotis          | 0.00             | ÷                          | Ì                              |      | 0.00                   | ÷                                      | 2                       | н       | 0.33                       | ÷  | 2          | ň       | 0.33                     | 1                                 | Ż                        | ū                 |                    |                                   |                            |        |                                  |                                     |         |         |                               |   |         |        |   |                         |      |
| LETALS  | Aluminum                    | 8540             |                            | •                              | ň    | 2020                   | 4                                      |                         | Ē.      | 1560                       | i  | -          | ñ       | 6340                     | 4                                 | -                        | -                 | 7310               | 1 ·                               |                            |        | 15400                            | 1                                   |         | . 78    | 90                            | 1                                       |         | 184    | 00 1  |                         |      |
| METALC  | Actional                    | 0,40             | ,                          |                                | , ii | 50000                  | i                                      |                         | 66      | 5                          |  |            | Ξ.      | 5                        | 1                                 | ~                        | П                 | 0.112              | 1                                 | U                          | U      | 0.0593                           | 1 J                                 | j       | 0.1     | 53                            | 1                                       |         | 0      | 12 1  | U                       | υ    |
| METALO  | Arconia                     |                  | ÷                          | ``                             | v    | 34                     | ÷                                      | •                       | v       | 0.6                        | 1  |            | Ŭ.      | 11                       | i.                                | •                        | -                 | 2.04               | 1                                 | -                          | -      | 1.99                             | 1                                   |         | 2.      | 71                            | 1                                       |         | 0.7    | 83 1  |                         |      |
| METALO  | Bazium                      | 272              | 1                          |                                |      | 20.3                   | 1                                      |                         |         | 47                         | 1  |            |         | 19.3                     | ÷                                 |                          |                   | 60.1               | 1                                 |                            |        | 32.4                             | 1                                   |         | 70      | 3.1                           | 1                                       |         | 4      | 3.7 1                                       |                         |      |
| NETALO  | Sandhum                     | 61.6             | '                          |                                |      | 20,0                   | •                                      |                         |         |                            | •  |            |         | 10.0                     | •                                 |                          |                   | 0.314              | 1                                 | J                          | J      | 0.296                            | 1 J                                 | J       | 0.3     | 66                            | 1.                                      | j j     | 0.4    | 63 1  |                         |      |
| METALS  | Cadmium                     | } ·              | 1                          | ,                              |      | 1                      | 1                                      |                         | П       | ł                          | 1  |            | 11      | t                        | 1                                 |                          | н                 | 0.201              | 1                                 | J                          | J      | 0.437                            | 1 L                                 | i u     | 0.4     | 18                            | 1                                       | JJ      | 0.4    | 62 1  | U                       | U    |
| METALS  | Calainan                    | 1 202            | •                          |                                | U    | 169                    | à                                      |                         | U       | \$27                       | ŕ  |            | ů       | 111                      | 1                                 | •                        | Ū                 | 1120               | 1                                 | •                          | •      | 399                              | 1                                   | -       | 17      | 90                            | 1                                       |         | ę      | 31 1  |                         |      |
| METALS<br>NETALE  | Cacium                      | 232              | ÷                          |                                |      | 103                    | 1                                      |                         |         |                            | ŝ  |            | ш       | 1                        | ÷                                 |                          | D                 | 15.9               | ì                                 |                            |        | 15.6                             | 1                                   |         | 1       | 1.7                           | 1                                       |         | 1      | 5.2 1                                       |                         |      |
| METALS  | Cehali                      |                  |                            |                                | 11   | ,<br>0                 | ,                                      | 2                       | ü       | 2                          | ,<br>,                                   | 2          | н       | 2                        | ì                                 | 2                        | ŭ                 | 4.26               | 1                                 |                            |        | 2.08                             | 1                                   |         | 4       | 31                            | 1                                       |         | 4      | 72 1  |                         |      |
| NETALO  | Copart                      | 1 16             | ÷                          | •                              | U    | 17                     | 1                                      |                         | v       | 1                          | 4  | 2          | й       | 1 9                      | i                                 |                          | Ū                 | 5.95               |                                   |                            |        | 4.05                             | 1                                   |         | 1       | 3.9                           | 1                                       |         | 5      | 76 1  |                         |      |
| METALO  | Capper                      | 11200            |                            |                                | n    | 2440                   | 4                                      |                         |         | 2620                       | 4  | `          | n n     | 7570                     |                                   |                          |                   | 16200              | 1                                 |                            |        | 19900                            | i                                   |         | 163     | 00                            | 1                                       |         | 212    | .00 1                                       |                         |      |
| METALS  | Ran                         | 11300            |                            |                                | U    | 3440                   | -                                      |                         |         | 3000                       |  |            | U       | 2010                     | -                                 |                          |                   | 102,00             | ÷                                 |                            |        | 8.34                             | í                                   |         | 1       | 8.8                           | 1                                       |         | 7      | 84 1  |                         |      |
| METALS  | Lead                        | 1                |                            |                                |      | 4.3                    | 1                                      |                         |         | 40.0                       |  |            |         | 3.0                      |                                   |                          |                   | 497                | ÷                                 |                            |        | 603                              | ÷                                   |         |         | 45                            | 1                                       |         |        | 97 1  |                         |      |
| METALS  | Magnesium                   | 303              |                            |                                |      | 101                    |  |                         |         | 43.6                       | -  |            |         | 10.2                     | 4                                 |                          |                   | 120                | ÷                                 |                            |        | 26.9                             | 1                                   |         |         | 55                            | 1                                       |         |        | 41 1  |                         |      |
| METALS  | Manganese                   | 15.7             |                            |                                |      | 9.6                    | ,                                      |                         |         | 4.7                        |  |            | 11      | 10.0                     | •                                 |                          |                   | 0.02               | ÷                                 | 1                          |        | 0.0655                           | i.                                  | 1       | 0.03    | 170                           |   | L L     | 0.0    | 21 1  | t.                      | J    |
| METALS  | Mercury                     | 0.1              | 1                          | <                              | U    | 0.1                    | ,                                      | <                       | 0       | 0.1                        | ,  | ۲          | 0       | 0,1                      | ,                                 | ۲.                       | Ģ                 | 0.02               | 1                                 | U                          | •      | 5.02                             | ì                                   |         | v.v.    | 6                             | ÷                                       | • •     | 9.0    | 62 1  | •                       | -    |
| METALS  | Nickel                      |                  |                            |                                |      |                        |  |                         |         |                            |  |            | ы       |                          |                                   |                          |                   | 0,00               | 1                                 |                            |        | 307                              | -                                   |         |         | 174                           | 4                                       |         |        | .777 1                                      |                         |      |
| METALS  | Polassium                   | 200              |                            |                                |      | 143                    | 1                                      |                         |         | 100                        | 1  | <          | U.      | 344                      | 2                                 |                          |                   | 200                | ł                                 | ,                          |        | 0.171                            |                                     |         | ÷<br>م  | 22                            | 4<br>•                                  |         |        | 24 1  | 11                      | п    |
| METALS  | Selenium                    | 0.5              |                            | <                              | 0    | 0.5                    |  | <                       | U       | 0.5                        | -  | <          | 0       | 0.5                      | 2                                 | ٢                        |                   | 4.70               | 1                                 | 11                         | 4      | 5.75                             |                                     |         | 1       | 76                            |   | u II    | 1      | 85 1  | . ŭ                     | , ň  |
| METALS  | Silver                      | 1                | 1                          | ۲                              | U    | 1                      | 1                                      | <                       | U       | 1                          | 1  | <          | U       | 1                        | 1                                 | <                        | U                 | 1./3               |                                   | 0                          | U<br>I | 1,/0                             |                                     | , ,     | ,<br>,  | 70                            |   | 0 0     | ,<br>2 | 24 1  | U                       | Ŷ    |
| METALS  | Sodium                      |                  |                            |                                |      |                        |  |                         |         |                            |  |            |         |                          |                                   |                          |                   | 12.3               | 1                                 | J                          | J      | 35.9                             | 1                                   |         | ه       | /.0                           | E.                                      |         |        |   |                         |      |
| METALS  | Strontium                   | 6                | 1                          |                                |      | 3,1                    | 1                                      |                         |         | 2.4                        | 1  |            |         | 3.7                      | 1                                 |                          |                   |                    |                                   |                            |        |                                  |                                     |         |         |                               |   |         | 0.0    | 100   |                         |      |
| METALS  | Thallium                    | ļ                |                            |                                |      |                        |  |                         |         |                            |  |            |         |                          |                                   |                          |                   | 0,128              | 1                                 |                            |        | 0.0704                           | 1                                   |         | 0.03    | 12                            | 1                                       |         | 0.0    | 09 1  |                         |      |
| METALS  | Vanadium                    |                  |                            |                                |      |                        |  |                         |         |                            |  |            |         |                          |                                   |                          |                   | 23.3               | 1                                 |                            |        | 29.2                             | 1                                   |         | 2       | 2.1                           | 1                                       |         | 4      | 3.8 1                                       |                         |      |
| METALS  | Zinc                        | 12.9             | 1                          |                                |      | 6.7                    | 1                                      |                         |         | 3                          | 1  | ۲          | Ų       | 12.3                     | 1                                 |                          |                   | 236                | 1                                 |                            |        | 27.6                             | 1                                   |         |         | 31                            | 1.                                      |         |        | 23  |                         |      |
| SEMIVOLATILES   | 1,2,4 Trichlarobenzene      | 0.33             | 1                          | . <                            | U    | 0.33                   | 1                                      | ۲                       | U       | 0.33                       | 1  | <          | U       | 0.33                     | 1                                 | <                        | 0                 | 1.84               | 10                                | U                          | U      | 0.19                             | 1 1                                 |         | 1       | .99                           | 10                                      |         | 0.     | 94 1  |                         |      |
| SEMIVOLATILES   | 1.2-Dichlorobenzene         | 0.33             | • 1                        | <                              | U    | 0.33                   | 1                                      | <                       | U       | 0.33                       | 1  | <          | U       | 0.33                     | 1                                 | <                        | U                 | 1.84               | 10                                | U                          | U      | 0.19                             | 1 1                                 | ) (<br> | 1       | .99                           | 10                                      | 0 0     | Ű.     | 94 1<br>1                                   |                         | U (I |
| SEMIVOLATILES   | 1.3-Dichlorobenzene         | 0.33             | 1                          | <                              | U    | 0.33                   | 1                                      | <                       | U       | 0.33                       | 1  | <          | U       | 0.33                     | 1                                 | <                        | U                 | 1.84               | 10                                | U                          | U      | 0.19                             | 1 1                                 | ) (<br> | 1       | .99                           | 10                                      | u u     | U.     | 94 1  | 0                       | U U  |
| SEMIVOLATILES   | 1,4-Dichlorobenzene         | 0.33             | 1                          | ۲                              | U    | 0.33                   | 1                                      | ۲                       | Ų       | 0.33                       | 1  | <          | U       | 0.33                     | 1                                 | <                        | U.                | 1.84               | 10                                | U                          | U      | 0.19                             | 1 (                                 | ) (<br> | 1       | .99                           | 10                                      | 0 0     | Q.     | 94 1  |                         | U    |
| SEMIVOLATILES   | 2,4,5-Trichterophenol       | 1.65             | 1                          | ۲                              | Ų    | 1.65                   | 1                                      | ٢                       | U       | 1.65                       | 1  | <          | U       | 1.65                     | 1                                 | <                        | U                 | 1.84               | 10                                | U                          | U      | 0.19                             | 1 1                                 | 1 L     | 1       | .99                           | 10                                      | U U     | U.     | 94 1  | 0                       |      |
| SEMIVOLATILES   | 2,4,5-Trichlorophenol       | 0.33             | 1                          | <                              | Ų    | 0.33                   | 1                                      | <                       | Ų       | 0.33                       | 1  | <          | u       | 0.33                     | 1                                 | <                        | U                 | 1,84               | 10                                | U                          | U      | 0,19                             | 1 1                                 |         |         | .99                           | 10                                      | 0 0     | U.     | 94 1  | 0                       |      |
| SEMIVOLATILES   | 2,4-Dichlarophenol          | 0.33             | 1                          | ۲                              | U    | 0.33                   | ſ                                      | ¢                       | U       | 0.33                       | 1  | <          | U       | 0.33                     | 1                                 | <                        | U                 | 1.84               | 10                                | U                          | 1      | 0.19                             | 1 1                                 | ι<br>   |         | .99                           | 10                                      | 0 U     | U,     | 94 1  |                         |      |
| SEMIVOLATILES   | 2.4-Dimelhylphanol          | 0.33             | 1                          | <                              | U    | 0.33                   | ŧ                                      | <                       | U       | 0.33                       | 1  | <          | U       | 0.33                     | 1                                 | <                        | U                 | 1.84               | 10                                | U                          | U      | 0.19                             | 1 (                                 | Ji      | 1       | .99                           | 10                                      | 0 0     | U.     | 94 1  | 0                       |      |
| SEMIVOLATILES   | 2,4-Dinitrophenol           | 1.65             | i 1                        | <                              | U    | 1.65                   | t                                      | <                       | U       | 1.65                       | 1  | <          | U       | 1.65                     | 1                                 | <                        | U                 | 9.21               | 10                                | U                          | U      | 0.952                            | 1 1                                 |         | 9       | .96                           | 10                                      | 0 0     | 0,     | 155 1                                       | 0                       |      |
| SEMIVOLATILES   | 2.4-Dinitrotoluene          |                  |                            |                                |      |                        |  |                         |         |                            |  |            |         |                          |                                   |                          |                   | 1.84               | 10                                | U                          | U      | 0.19                             | 1 1                                 | ) i     | 1       | .99                           | 10                                      | 0 0     | 0.     | 94 1  |                         |      |
| SEMIVOLATILES   | 2.6-Dinitrotoluene          |                  |                            |                                |      |                        |  |                         |         |                            |  |            |         |                          |                                   |                          |                   | 1.84               | 10                                | U                          | U      | 0.19                             | 1 1                                 | J       | 1       | .99                           | 10                                      | 0 0     | 0.     | 94 1  | 0                       |      |
| SEMIVOLATILES   | 2-Chloronaphihalene         | 0.33             | 3 1                        | ۲.                             | Ų    | 0,33                   | 1                                      | <                       | U       | 0.33                       | 1  | <          | Ų       | 0.33                     | 1                                 | <                        | U                 | 1.84               | 10                                | U                          | U      | 0.19                             | 1 1                                 | J       | 1       | .99                           | 10                                      | U U     | 0.     | .94 1                                       | U                       | U    |
| SEMIVOLATILES   | 2-Chiorophenol              | 0.33             | 1                          | <                              | Ų    | 0.33                   | 1                                      | <                       | U       | 0.33                       | 1  | <          | U       | 0.33                     | 1                                 | <                        | U                 | 1.84               | 10                                | U                          | IJ     | 0.19                             | 1 1                                 | J       | 1       | ,99                           | 10                                      | U U     | 0.     | 94 1  | U                       | . U  |
| SEMIVOLATILES   | 2-Methylnaphthalene         | 0.33             | 1 8                        | <                              | U    | 0.33                   | 1                                      | <                       | Ų       | 0.33                       | 1  | ۲          | U       | 0.33                     | ١                                 | <                        | U                 | 1,84               | 10                                | Ų                          | U      | 0,19                             | 1 (                                 | ) (     | 1       | .99                           | 10                                      | U U     | 0.     | 94 1  | U                       | Ų    |
| SEMIVOLATILES   | 2-Methylphanol              | 0.33             | 3 1                        | <                              | Ŭ    | 0.33                   | 1                                      | <                       | U       | 0.33                       | 1  | <          | U       | Q.33                     | 1                                 | <                        | U                 | 1.84               | 10                                | U                          | ប      | Q.19                             | 1 1                                 | J (     | 1       | .99                           | 10                                      | 0 0     | 0.     | 94 1  | U                       | U    |
| SEMIVOLATILES   | 2-Nitroaniline              | 1,65             | 5 1                        | <                              | U    | 1.65                   | 1                                      | ۲                       | U       | 1.65                       | 1  | <          | U       | 1.65                     | 1                                 | <                        | Ų                 | 9.21               | 10                                | U                          | Ų      | 0,952                            | 1 1                                 | 1       | 1 S     | .96                           | 10                                      | υU      | 0.     | 368 1                                       | U                       | U    |
| SEMIVOLATILES   | 2-Nitrophenal               | 0.33             | 3 1                        | <                              | U    | 0.33                   | 1                                      | <                       | U       | 0.33                       | 1  | ۲          | U       | 0.33                     | 1                                 | <                        | U                 | 1.84               | 10                                | U                          | U      | 0.19                             | 1 1                                 | J       | 1 1     | .99                           | 10                                      | υU      | i 0.   | 94 1  | U                       | U    |
| SEMIVOLATILES   | 3.3' Dichlorøbenzidina      | 0.65             | 51                         | <                              | U    | 0.65                   | 1                                      | <                       | U       | 0.65                       | 1  | <          | U       | 0.65                     | 1                                 | <                        | U                 | 3.68               | 10                                | υ                          | Ų      | 0.381                            | 1                                   | l I     | ) 3     | .98                           | 10                                      | υŲ      | 0.     | 1 587                                       | U                       | U    |
| SEMIVOLATILES   | 3-Nitroaniline              | 1.65             | 5 1                        | <                              | U    | 1.65                   | 1                                      | ۲                       | U       | 1.65                       | 1  | <          | U       | 1.65                     | 1                                 | <                        | U                 | 9.21               | 10                                | U                          | U      | 0.952                            | 1                                   | a I     | ) 9     | .96                           | 10                                      | UU      | 0.     | 368 1                                       | U                       | U U  |
| SEMIVOLATILES   | 4,6-Dinitro-2-methylphenol  | 1,65             | 5 1                        | <                              | U    | 1.65                   | 1                                      | <                       | U       | 1.65                       | 1  | <          | ប       | 1.65                     | ١                                 | <                        | U                 | 9.21               | 10                                | U                          | ប      | 0.952                            | 1                                   | J I     | ) 5     | .96                           | 10                                      | υų      | ) O.   | <i>3</i> 68 1                               | U                       | U U  |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether  | 0.33             | 31                         | <                              | U    | 0.33                   | 1                                      | <                       | υ       | 0,33                       | 1  | <          | U       | 0,33                     | 1                                 | <                        | U                 | 1.84               | 10                                | U                          | ប      | 0.19                             | 1                                   | ų i     | 1 1     | .99                           | 10                                      | U U     | J 0.   | 194 1                                       | ប                       | υ    |
| SEMIVOLATILES   | 4-Chloro-3-methylphenol     | 0.65             | 51                         | ć                              | υ    | 0.65                   | 1                                      | <                       | υ       | 0.65                       | 1  | <          | U       | 0.65                     | 1                                 | <                        | U                 | 1.84               | 10                                | U                          | U      | 0.19                             | 1                                   | J I     | } 1     | .99                           | 10                                      | U L     | J 0.   | 194 1                                       | U                       | i U  |
| SEMIVOLATILES   | 4-Chloroaniline             | 0.65             | 51                         | ۲                              | Ų    | 0.65                   | 1                                      | <                       | U       | 0.65                       | 1  | <          | U       | 0.65                     | 1                                 | ۲                        | U                 | 1.84               | 10                                | ប                          | U      | 0.19                             | 1                                   | u I     | } 1     | .99                           | 10                                      | υL      | J 0.   | 194 1                                       | ų                       | i U  |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl elher | 0.33             | 3 1                        | <                              | U    | 0.33                   | 1                                      | <                       | U       | 0,33                       | 1  | ۲          | U       | 0.33                     | 1                                 | <                        | Ų                 | 1.84               | 10                                | U                          | U      | 0.19                             | 1                                   | u I     | J 1     | .99                           | 10                                      | ն լ     | ) 0.   | 94 1  | u                       | / U  |
| SEMIVOLATILES   | 4-Mathylphenol              | 0.33             | 31                         | <                              | U    | 0.33                   | 1                                      | <                       | U       | 0.33                       | 1  | ٠          | U       | 0.33                     | 1                                 | <                        | U                 | 1.84               | 10                                | U                          | U      | 0,19                             | 1                                   | ו ט     | J 1     | .99                           | 10                                      | υ ι     | J 0.   | 194 1                                       | u                       | i U  |



## Table 3-117

## Concentrations of Chemicals in Soil Samples Associated with WR Sump 011

| (SUMP) = WRSUMP011<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                             | էH-Կ<br>ԼH-W<br>8<br>0. | LH-WRS11-01<br>LH-WRS11-01 OC<br>8/8/1993<br>0.5 - 1.2 Fl<br>FD<br>Result DL LQ VQ |     | ԼH-Կ<br>ԼH-W<br>8<br>0.1 | WRS11-01<br>/RS11-01<br>/8/1993<br>5 - 1.2 Fl | 1<br>_1 |            | LH-W<br>LH-WF<br>8/8<br>1.2 | RS11-01<br>IS11-01_<br>8/1993<br>- 1,7 FL | _2            | LH-W<br>LH-WI<br>8/<br>3.1 | /R\$11-0<br>3511-0<br>8/1993<br>5 - 4 Fl | 01<br>1_3 |     | WRS01<br>WRS01<br>9/2<br>0.0 | 011-SE<br>1-SEC<br>6/2006<br>- 0.5 1<br>REG | 301<br>91-01<br>5<br>Ft | WRS<br>WRS0<br>9/2<br>3.5 | 011-SB<br>11-SB0<br>26/2006<br>- 4.5 F<br>REG | 101<br>1-02<br>1 |     | WRS0<br>WRS01<br>9/2<br>0.0 | 011-SB0<br>1-SB02<br>6/2006<br>- 0.5 Ft<br>REG | 02<br>2-01 |      | WRS011-SB0<br>WRS011-SB02<br>9/26/2006<br>3.5 - 4.5 FI<br>REG | )2<br>(+02 |    |    |
|---|-----------------------------|-------------------------|--|-----|--------------------------|---|---------|------------|-----------------------------|---|---------------|----------------------------|--|-----------|-----|------------------------------|---|-------------------------|---------------------------|---|------------------|-----|-----------------------------|--|------------|------|---|------------|----|----|
| SAMPLE_PURPOSE  |                             | Decult                  |  | 10  | vo                       | Decul   |         | - v        | 0 Pa                        |   | neo<br>111 17 | ο να                       | Result                                   |           | o v | io e                         | Suaas                                       | DIL                     | LO VO                     | ) Result                                      | DIL              | LQ  | vo                          | Result   | Dil I      | LO N | VQ  | Result DIL | LQ | ٧Q |
| Tesi Group  | Parameter (Units = mg/kg)   | Hesuit                  |  | LQ  |                          | Hesuii  |         |            |                             | 1.65                                      |               | <u>a vu</u>                | 1.65                                     | 1         |     |                              | 9.21  | 10                      | <u>u</u> 1                | 0.952   | 1                | Ü   | U                           | 9.96   | 10         | Ū    | U   | 0.968 1    | υ  | U  |
| SEMIVOLATILES   | 4-Nitroanitine              | 1.65                    | 1  | <   | 0                        | 1.05  |         |            | ,                           | 1.00                                      |               | . u                        | 1.00                                     | ÷         | 2   | ň                            | 0.21  | 10                      | й D                       | 0.952   | 1                | Ŭ   | ū                           | 9.96   | 10         | U    | υ   | 0.968 1    | U  | Ų  |
| SEMIVOLATILES   | 4-Nitrophenol               | 1.65                    | 1  | <   | 0                        | 1,05  |         |            | ,                           | 1.00                                      |               | ιυ<br>. Π                  | 0.00                                     | ÷         | 2   | u<br>U                       | 1 24  | 10                      | n n                       | 0.19  | i                | ŭ   | Ū.                          | 1.99   | 10         | U    | U   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Acenaphthene                | 0.33                    | 1  | <   |                          | 0,33  |         |            | ,<br>,                      | 0.33                                      |               |                            | 0.00                                     |           | 2   | й.                           | 194   | 10                      | <u>в</u> 1                | 0.19  | 1                | ย่  | Ū                           | 1.99   | 10         | U    | U   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Acenaphihylene              | 0.33                    | 1  | ۲   | 0                        | 0.33  |         | : L        | 1                           | 0.00                                      |               |                            | 0.00                                     | ۰<br>۲    | 2   | 11                           | 1.84  | 10                      | 0 0                       | 0.19  | ŝ                | ŭ   | ū                           | 1.99   | 10         | U    | U   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Anthracene                  | 0.33                    | 1  | <   | 0                        | 0.33  |         | : L        | 1                           | 0.33                                      |               | . U                        | 0.00                                     | 1         | -   | U<br>H                       | 1 84  | 10                      | ц р                       | 0.19  | 1                | Ŭ   | Ű                           | 1,99   | 10         | U    | υ   | 0.194 1    | υ  | U  |
| SEMIVOLATILES   | Benzo(a)anthracene          | 0.33                    | 1  | ۲   |                          | 0.33  |         |            |                             | 0.00                                      | ;             |                            | 0.00                                     |           |     |                              | 1.64  | 10                      | <b>й</b> п                | 0.19  | 1                | Ū   | Ū                           | 1.99   | 10         | Ű    | υ   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Benzo(a)pyrene              | 0.33                    | 1  | <   | 0                        | 0.33  |         |            | ,                           | 0.33                                      |               | . 11                       | 0,03                                     |           | 2   | u .                          | 1 84  | 10                      | u u                       | 0.19  | 1                | Ũ   | Ū                           | 1,99   | 10         | Ū    | U   | 0,194 1    | U  | U  |
| SEMIVOLATILES   | Benzo(b)lluoranthene        | 0,33                    | 1  | <   | 0                        | 0.33  |         |            |                             | 0.00                                      |               |                            | 0.00                                     |           |     | u .                          | 1 94  | 10                      | 0 0                       | 0.19  | 1                | ū   | Ū.                          | 1.99   | 10         | U    | U   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Benzo(ghi)perylene          | 0.33                    | 1  | ۲   |                          | 0.33  |         |            | ,                           | 0.00                                      |               |                            | 0.00                                     | ÷         | 2   |                              | 1 84  | 10                      | ы и                       | 0.19  | i                | ū   | Ū                           | 1.99   | 10         | U    | Ų   | 0,194 1    | U  | U  |
| SEMIVOLATILES   | Benzo(k)fluoranthene        | 0.33                    | 1  | ~   | U                        | 0.33  |         |            | 1                           | 1.00                                      |               | u                          | 1.65                                     | 1         | 2   |                              | 9.21  | 10                      | ΰ n                       | 0.952   | 1                | ū   | ม                           | 9.96   | 10         | υI   | IJ  | 0.968 1    | Ų  | W  |
| SEMIVOLATILES   | Benzaic Acid                | 1.65                    | 3  | <   |                          | 1.65  | 1       |            |                             | 1,00                                      |               | ε U<br>2 Π                 | 0.65                                     | 1         | 2   | 0<br>11                      | 1 84  | 10                      | ů ŭ                       | 0.19  | 1                | Ū.  | U                           | 1.99   | 10         | Ú.   | ບ່  | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Benzyl Alcohol              | 0.65                    | 1  | <   | 0                        | 0.65  | 1 .     |            | J<br>.,                     | 0.00                                      | + •           | с U<br>, H                 | 0.00                                     | ,<br>,    | 2   | u<br>u                       | 1.64  | 10                      | <u>й</u> й                | 0.19  | i                | Ū   | Ū                           | 1.99   | 10         | Ū    | Ú   | 0,194 1    | U  | U  |
| SEMIVOLATILES   | bis(2-Chloroethoxy)methane  | 0.33                    | 1  | <   |                          | 0.33  | 2       | сц<br>,    | .,                          | 0.00                                      |               |                            | 0.00                                     | ÷         | 2   | ň                            | 1.84  | 10                      | и п                       | 0.19  | 1                | Ū   | ย่                          | 1.99   | 10         | U    | U   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | bis(2-Chloroathyl)ethar     | 0.33                    | 1  | ۲   |                          | 0.33  |         | · ·        | U)                          | 0.00                                      |               | ευ<br>. π                  | 0.00                                     | ÷         | 2   | u v                          | 1.94  | 10                      |                           | 0.19  | ì                | Ŭ   | 11                          | 1.99   | 10         | U    | U   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | bis(2-Chlorolsopropyi)ether | 0,33                    | 1  | <   | υ                        | 6.0   |         | <i>ε</i> ι | U                           | 0.33                                      |               | ς υ<br>- Π                 | 0.33                                     |           | 2   | ů.                           | 1.84  | 10                      | u u                       | 0.19  | i                | ŭ   | Ū.                          | 1.99   | 10         | ນ    | U   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | bis(2-Ethylhexyl)phihalale  | 1,01                    | 1  |     |                          | 1.21  |         |            |                             | 0.33                                      |               | ε υ<br>. Π                 | 0.00                                     | 1         | 2   | 11                           | 1 94  | 10                      | 8 0                       | 0.19  | 1                | ย   | Ū                           | 1.99   | 10         | Ū    | Ŭ   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Butyl benzyl phthalate      | 0.33                    | 1  | <   | 0                        | 0.33  | 1       | < 1<br>,   |                             | 0.00                                      |               | ε υ<br>. μ                 | 0.00                                     | 4         | 2   | u<br>u                       | 1.94  | 10                      | u u                       | 0.19  | i                | Ū.  | Ū                           | 1.99   | 10         | Ū    | υ   | 0.194 1    | U  | Ų  |
| SEMIVOLATILES   | Chrysene                    | 0.33                    | F.   | <   | U                        | 0.33  | 1       | < 1        |                             | 0.33                                      |               | к и<br>. н                 | 0.33                                     |           | 5   |                              | 1 04  | 10                      | u e                       | 0.19  | ÷.               | Ū.  | ŭ                           | 1.99   | 10         | Ū    | Ū   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Dibanzo(a.h)anthracene      | 0.33                    | 1  | ٠   |                          | 0.33  | 2       | < 1        |                             | 0.33                                      |               | < υ<br>- Π                 | 0.00                                     | 1         | 2   | и<br>и                       | 1.04  | 10                      | - 11 E                    | 0.19  | ì                | Ŭ   | ŭ                           | 1.99   | 10         | Ű    | Ŭ   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Dibenzoluran                | 0.33                    | 1  | <   | U                        | 0.33  | 1       | < (        |                             | 0,33                                      |               | < V<br>. 11                | 0.00                                     | -         | 2   | ň                            | 1 9/  | 10                      | йі                        | 0.19  | ì                | Ű.  | υ                           | 1.99   | 10         | ŭ    | Ū.  | 0.194 1    | Ų  | U  |
| SEMIVOLATILES   | Diethyl phthalale           | 0.33                    | 1  | ~   | Ų                        | 0.33  | 1       | < 1        | 0                           | 0.33                                      |               | < 0<br>. 11                | 0,00                                     | ÷         |     | ñ                            | 1.04  | 10                      | i i                       | . ຄ.າຍ<br>ເ                                   | ,                | ŭ   | Ū.                          | 1,99   | 10         | Ū    | Ū.  | 0.194 1    | U  | υ  |
| SEMIVOLATILES   | Dimethyl phthalate          | 0.33                    | 1  | ~   | u                        | 0.33  | 1       | < 1        | U<br>U                      | 0.33                                      |               | с U<br>. н                 | 0.00                                     | 4         | 2   | 11                           | 1.04  | 10                      | ů i                       | 0 19  | 1                | - E | ů                           | 1.99   | 10         | U    | υ   | 0.194 1    | U  | ម  |
| SEMIVOLATILES   | di-n-Butyl phthalate        | 0,33                    | 1  | <   | 0                        | 0.33  | 1       | < I        | U                           | 0.33                                      |               | < U<br>. II                | 0.00                                     | +         | 5   | о<br>11                      | 1.04  | 10                      |                           | 0.19  | i                | ъ.  | ŭ                           | 1.99   | 10         | Ū    | Ū   | 0.194 1    | U  | υ  |
| SEMIVOLATILES   | di-n-Octyl phthalale        | 0.33                    | 1  | <   | 0                        | 0.33  | 1       | < 1        | u<br>                       | 0.00                                      |               | < U                        | 0.33                                     | -         | 5   | U U                          | 1.04  | 10                      | u i                       | , 0,10<br>I 0,19                              |                  | Ŭ   | ū                           | 1.99   | 10         | Ū    | ŭ   | 0,194 1    | U  | U  |
| SEMIVOLATILES   | Fluoranihené                | 0.33                    | 1  | <   | 0                        | 0.33  | 1       | < '        | V<br>                       | 0,33                                      | -             | < u                        | 0.33                                     |           | 5   | U U                          | 1.04  | 10                      | <u>н</u> і                | 0.19  | ì                | ŭ   | Ū.                          | 1.99   | 10         | บ    | Ū   | 0,194 1    | U  | U  |
| SEMIVOLATILES   | Fluorene                    | 0.33                    | 1  | <   | U<br>                    | 0.33  | 1       | <          | 0                           | 0.33                                      | 4             | < u                        | 0.35                                     | 1         | 2   | 11                           | 1,04  | 10                      |                           | 1 0.19  | 1                | ย   | ŭ                           | 1.99   | 10         | Ŭ    | Ū   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Hexachlorobenzene           | 0.33                    | 1  | <   |                          | 0.33  | 1       | < !        | 0<br>11                     | 0.33                                      | 1             | < 0<br>- 11                | 0.33                                     |           | 2   | 8                            | 1.84  | 10                      | υ i                       | 0.19  | 1                | ŭ   | Ű                           | 1.99   | 10         | Ū    | Ű   | 0.194 1    | U  | ប  |
| SEMIVOLATILES   | Hexachlorobuladiene         | 0.33                    | 1  | <   |                          | 0.33  | 1       | < .        |                             | 0.33                                      | •<br>•        | < 0<br>- 11                | 0.00                                     | ,<br>,    | 2   | ň                            | 1.84  | 10                      | u i                       | , 0.19<br>I 0.19                              | 1                | Ŭ   | Ū                           | 1.99   | 10         | ū.   | Ū.  | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Hexachiprocyclopeniadiene   | 0.33                    | )  | <   | 0                        | 0.33  | 2       | <          |                             | 0,00                                      | 4             | ε υ<br>- Π                 | 0.00                                     | 4         | 2   | л.                           | 1.84  | 10                      | त ।                       | 1 0.19  | i                | ŭ   | Ū.                          | 1.99   | 10         | U    | U   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Hexachioroelhane            | 0.33                    |  | <   |                          | 0.33  | -       |            |                             | 0.00                                      | ÷             | - 1                        | 0.00                                     | i         | 2   | ň                            | 1 84  | 10                      | й I                       | I 0.19  | 1                | ů   | Ŭ                           | 1.99   | 10         | U    | U   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Indeno(1.2.3-co)pyrene      | 0.03                    |  | <   |                          | 0.00  |         |            | 11                          | 0.22                                      | ÷             | - 1                        | 0.33                                     | 1         | 2   | ũ.                           | 1.84  | 10                      | Ū i                       | J 0.19  | 1                | U   | U                           | 1.99   | 10         | U    | U   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Isophorone                  | 0.33                    |  | *   |                          | 0.33  |         | <u> </u>   | 0<br>11                     | 0.33                                      | +             | - 1                        | 1 0.33                                   | ÷         | 2   | ň                            | 1.84  | 10                      | Ū ł                       | . 0.19  | 1                | Ū   | Ū                           | 1,99   | 10         | U    | U   | 0.194 1    | υ  | U  |
| SEMIVOLATILES   | Naprinalene                 | 0.33                    |  | < . |                          | 0.00  |         |            |                             | 0.00                                      | ÷             | - 1                        |  | í         | 2   | ň                            | 1.84  | 10                      | ū i                       | 3 0.19  | 1                | .υ  | U                           | 1.99   | 10         | U    | ป   | 0.194 1    | υ  | υ  |
| SEMIVOLATILES   | Nirobenzene                 | 0.33                    |  | <   |                          | 0.00  |         | ۰.         | 0<br>11                     | 0.00                                      | ÷             | 2 1                        | . 0.11                                   |           | 2   | й<br>П                       | 1.84  | 10                      | - 1 I                     | 1 0.19  | 1                | U   | Ŭ                           | 1,99   | 10         | U    | U   | 0,194 1    | Ų  | U  |
| SEMIVOLATILES   | n-Nitroso-oi-n-propylamine  | 0.33                    | 1  | <   |                          | 0.33  | -       | < .        | u U                         | 0.00                                      | 1             | - 1                        | 1 0.33<br>1 0.33                         | ÷         | 2   | ŭ                            | 184   | 10                      | ย่า                       | J 0.19  | 1                | บ   | Ū                           | 1.99   | 10         | Ū.   | U   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | n-Nerosodiphenylamine       | 0.33                    | · 1  | <   |                          | 0.33  | 4       | 5          | U<br>11                     | 1.65                                      | +             |                            | 165                                      | ÷         | 2   | ŭ                            | 9.21  | 10                      | Ū I                       | J 0.952                                       | 1                | Ū   | Ū                           | 9.96   | 10         | Ų    | U   | 0.968 1    | U  | U  |
| SEMIVOLATILES   | Pentachiorophenol           | 1.05                    |  | <   |                          | 1.05  | 4       | ۲<br>۲     | 1                           | 0.22                                      | •             | 2 1                        | 1.03                                     | ì         | 2   | ñ                            | 1 64  | 10                      | Ū 1                       | 3 0.19  | 1                | Ū   | Ű                           | 1.99   | 10         | Ú    | U   | 0.194 1    | U  | U  |
| SEMIVOLATILES   | Phenantryana                | 0.33                    |  | <   | 0                        | 0.33  |         |            |                             | 0.00                                      |               | 2                          | 1 0.00                                   | ÷         | 2   | ň                            | 1 84  | 10                      | ũ i                       | 1 0.19  | 1                | Ū   | Ű                           | 1.99   | 10         | U    | ป   | 0.194 1    | U  | υ  |
| SEMIVOLATILES   | Pheno                       | 0.33                    |  | ٩.  |                          | 0.00  |         |            |                             | 0.00                                      | 1             | 2 1                        | i 0.00                                   | ÷         | 2   | Ŭ.                           | 1 84  | 10                      |                           | J 0.19  | + +              | Ū   | Ŭ                           | 1.99   | 10         | U    | V   | 0.194 1    | U  | Ų  |
| SEMIVOLATILES   | Pyrene                      | 0.00                    | 1 1  | ۲   | U                        | 0.00  |         | 5          | 0                           | 0.44                                      |               | · ·                        | / V-/V                                   | •         | •   | Ŷ                            | 1.01  |                         | 4                         | 0.00666                                       | 1                | Ū   | Ū                           |  |            |      |   | 0.00623    | U  | U  |
| VOLATILES   | 1,1,1,2-l etrachidroethane  | 0.000                   |  |     |                          |   | 1       |            | i In                        | 0.005                                     | 1             | . 1                        | 1 0.005                                  | 1         | ,   | ы                            |   |                         |                           | 0.00666                                       | 1                | - Ū | Ū                           |  |            |      |   | 0.00623 1  | ບ  | U  |
| VOLATILES   | 1,1,1 Frichlordeinane       | 0.025                   |  | ~   | 00                       | 0.05  |         |            | un.                         | 0.000                                     | +             |                            | 0.005                                    | +         | 2   | ň                            |   |                         |                           | 0.00666                                       | 1                | Ū   | Ū                           |  |            |      |   | 0.00623 1  | U  | υ  |
| VOLATILES   | 1.1,2,2-Tetrachloroethane   | 0.025                   |  | e . | 00                       | 0.03  |         | < 1        | 00<br>00                    | 0.005                                     | ,             | - 1                        | 1 0.005                                  | 4         | 2   | ii ii                        |   |                         |                           | 0.00666                                       | 1                | Ū   | ů                           |  |            |      |   | 0.00523 1  | U  | υ  |
| VOLATILES   | 1,1.2-Trichloroethane       | 0.023                   |  | <   | UU                       | 0.05  | -       |            | un                          | 0.000                                     | 4             |                            | 1 0.005                                  | ÷         | 2   | ň                            |   |                         |                           | 0.00566                                       | 1                | Ū   | U                           |  |            |      |   | 0.00623 1  | U  | Ų  |
| VOLATILES   | 1.1-Dichlorosihane          | 0.025                   | 1  | <   | 00                       | 0.05  | ,       | < 1        | υD                          | 0.000                                     | 4             | 5 L                        | 1 0.000                                  | 1         | 2   | ii ii                        |   |                         |                           | 0.00666                                       | 1                |     | Ū                           |  |            |      |   | 0.00623    | U  | Ų  |
| VOLATILES   | 1.1-Dichlozoelhene          | 0.025                   | • 1  | <   | υü                       | 0.05  | 4       | < 1        | uU                          | 0.003                                     | 1             | < (                        | 0.005                                    | '         | •   | •                            |   |                         |                           | 0.00666                                       | 1                | ម   | Ŭ                           |  |            |      |   | 0.00623 1  | Ū  | Ú  |
| VOLATILES   | 1.1-Dichioropropene         | 1                       |  |     |                          |   |         |            |                             |   |               |                            |  |           |     |                              |   |                         |                           | 0.00666                                       |                  | ັບ  | Ŭ                           |  |            |      |   | 0.00623 1  | Ű  | U  |
| VOLATILES   | 1.2.3-Trichlorobenzene      | 1                       |  |     |                          |   |         |            |                             |   |               |                            |  |           |     |                              |   |                         |                           | 0.00666                                       | 5 1              | Ŭ   | Ū                           |  |            |      |   | 0.00623 1  | Ų  | U  |
| VOLATILES   | 1,2,3- Frichloropropane     |                         |  |     |                          |   |         |            |                             |   |               |                            |  |           |     |                              |   |                         |                           | 0.00666                                       | 5 1              | Ū   | Ū                           |  |            |      |   | 0.00623 1  | U  | U  |
| VOLATILES   | 1.2.4- Irichlorobenzene     |                         |  |     |                          |   |         |            |                             |   |               |                            |  |           |     |                              |   |                         |                           | 0.00664                                       |                  | ū   | ម                           |  |            |      |   | 0.00523 1  | U  | U  |
| VOLATILES   | 1.2.4-1/imethylbenzene      | 1                       |  |     |                          |   |         |            |                             |   |               |                            |  |           |     |                              |   |                         |                           | 2,20400                                       |                  | -   | -                           |  |            |      |   |            |    |    |



## Table 3-117

Concentrations of Chemicals in Soil Samples Associated with WR Sump 011

| (SUMP) = WRSUMP011     |   |        |                |       |            |          |         |      |     |        |           |      |    |        | umerr    |      |    | 14/          | 00011.0   | 801   | MIC        | 21110      | 201      |         | WF     | 85011-SP   | 02   | WA     | S011-SB/    | 02     |             |
|------------------------|---|--------|----------------|-------|------------|----------|---------|------|-----|--------|-----------|------|----|--------|----------|------|----|--------------|-----------|-------|------------|------------|----------|---------|--------|------------|------|--------|-------------|--------|-------------|
| LOCATION _CODE         |   | LH     | WRSI           | 1-01  |            | LH       | WHS1    | -01  |     | LH-1   | NH511     | -01  |    | LH-N   | WRS11    | -01  |    | 994<br>14470 | 0001100   | 001   | 14/00/     | 111.08     | 01.02    |         | we     | S011-SR0   | 2-01 | WBS    | 011-5802    | 2-02   |             |
| SAMPLE_NO              |   | LH-M   | VRS11          | 01 QC |            | LH-V     | NRS11   | 01_1 |     | LH-W   | RS11-0    | 01_2 |    | LH-M   | RSD-     | 01_3 |    | YYH          | 5011-50   | 01-01 | ninal<br>o | nente      | NU1102   |         | ***16  | 0/26/20/06 | L-V1 | ,ç     | /26/2006    |        |             |
| SAMPLE_DATE            |   |        | 8/8/199        | 3     |            | :        | 8/8/199 | 3    |     | 8      | /8/1993   | }    |    | 8      | /8/1990  | 3    |    |              | 9/26/200  | ю<br> |            | - COVZUL   | /0<br>*) |         |        | 00.055     | ,    | ž      | 5.45 Ft     |        |             |
| DEPTH                  |   | 0      | 0.5 - 1.2      | Ft    |            | 0        | 5 1.2   | Ft   |     | 1.     | 2 - 1.7 6 | F1   |    | 3      | .5 • 4 F | 1    |    | ţ            | 0.0 - 0.5 | FI    | ა,         | 0 • 4,5    | ri.      |         |        | 0.0 10.0 1 |      | v      | DEG         |        |             |
| SAMPLE_PURPOSE         |   |        | FD             |       |            |          | REG     |      |     |        | REG       |      |    |        | REG      |      |    |              | REG       |       | <b>D</b>   | REG        |          | vo      | Deault | nea<br>bi  |      | Deput  | 01          | 10     | VO          |
| Test Group             | Parameter (Units = mg/kg)               | Result | DIL            | LO    | VQ .       | Result   | DIL     | LQ   | VQ  | Result | DIL       | LQ   | VQ | Result | DIL      | 10   | VQ | Result       | DIL       | LQ VQ | Hesun      | Dit        |          | <u></u> | Hesuk  |            |      | 0.0002 | 2 1         |        | <del></del> |
| VOLATILES              | 1,2-Dibromo-3-chloropropane             |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.00666    | 1          |          |         |        |            |      | 0.0002 | 2 1         | ų<br>u | ii ii       |
| VOLATILES              | 1,2-Dibromoethane                       |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.00666    | 1          | ų<br>    |         |        |            |      | 0.0053 | , .<br>     | ň      |             |
| VOLATILES              | 1.2-Dichlorobenzene                     |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.00666    | 1          | U<br>    |         |        |            |      | 0.0002 |             | , i    | 11          |
| VOLATILES              | 1.2-Dichloroethane                      | 0.025  | i 1            | <     | UD         | 0.05     | 1       | <    | UÐ  | 0.005  | 1         | <    | U  | 0.005  | 1        | <    | U  |              |           |       | 0.00665    | 1          | U        | U       |        |            |      | 0.0002 | <b>,</b>    | v      | U           |
| VOLATILES              | 1.2-Dichloroelhene                      | 0.025  | 5 1            | <     | UD         | Q.05     | 1       | <    | UD  | 0.005  | 1         | <    | U  | 0.005  | 1        | ۲    | υ  |              |           |       |            |            |          |         |        |            |      | 0.0062 |             | 11     |             |
| VOLATILES              | 1,2-Dichloropropane                     | 0.025  | 5 1            | ۲     | UD         | 0.05     | 1       | <    | UD  | 0,005  | i         | <    | U  | 0.005  | 1        | ۲    | U  |              |           |       | 0.00666    |            | 0        |         |        |            |      | 0.0002 | 2 1         | ň      | ň           |
| VOLATILES              | 1,2-Dimethylbenzene (o-Xylene)          |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.00666    | 1          | U        |         |        |            |      | 0.0002 |             | ů      |             |
| VOLATILES              | 1,3,5-Trimethylbenzene                  |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.00666    | 1          | U        |         |        |            |      | 0.0002 | J (         | 11     |             |
| VOLATILES              | 1,3-Dichlarobenzene                     | 1      |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0,00666    | 1          | 0        | U       |        |            |      | 0.0002 | 3 I<br>12 I |        | ů.          |
| VOLATILES              | 1,3-Dichloropropane                     |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.00666    | 1          | U        | U       |        |            |      | 0.0002 | 31          |        |             |
| VOLATILES              | 1,4-Dichlorobenzene                     |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.00666    | 1          | Ų        | U       |        |            |      | 0.0062 | 31          |        | - U         |
| VOLATILES              | 2.2-Dichloropropane                     |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0,00666    |            | U        | U       |        |            |      | 0.0002 | 3 !<br>     |        |             |
| VOLATILES              | 2-Butanone                              | 0.25   | 5 1            | ۲     | UD         | 0.5      | 1       | <    | UD  | 0,05   | 1         | ۲    | U  | 0.05   | 1        | <    | U  |              |           |       | 0.0133     | 1          | U        | U       |        |            |      | 0,012  | 5 1         |        |             |
| VOLATILES              | 2-Chloroethyl vinyl ether               | 0.05   | 51             | ۲     | UD         | 0.1      | ſ       | ۲    | UD  | 0,01   | 1         | ۲    | U  | 0.01   | 1        | <    | U  |              |           |       | 0.0133     | 1          | Ų        | υ       |        |            |      | 0.012  | 5 1         | 0      | 0           |
| VOLATILES              | 2-Chlorololuene                         |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.00668    | 6 1        | U        | υ       |        |            |      | 0.0062 | 3 1         | U      | 0           |
| VOLATILES              | 2-Hexanone                              | 0.25   | 51             | <     | UD         | 0.5      | 1       | <    | UD  | 0.05   | 1         | <    | U  | 0.05   | 1        | <    | U  |              |           |       | 0.0133     | 1          | บ        | U       |        |            |      | 0.012  | 51          | 0      |             |
| VOLATILES              | 4 Chlorotowane                          |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.00666    | 51         | υ        | U       |        |            |      | 0.0062 | 3 1         | U      | U           |
| VOLATILES              | Acelone                                 | 0.8    | 51             | <     | UD         | 1        | 1       | ~    | UD  | 0.1    | i         | <    | U  | Q.1    | 1        | <    | U  |              |           |       | 0.0129     | ) 1        | J        | Ĵ       |        |            |      | 0.006  | 8 1         | J      | J           |
| VOLATILES              | Benzene                                 | 0.025  | 5 1            | *     | UD         | 0.05     | 1       | <    | UD  | 0.005  | 1         | <    | U  | 0.005  | 1        | <    | U  |              |           |       | 0.00666    | 5 1        | U        | U       |        |            |      | 0.0062 | .3 1        | U      | U           |
| VOLATILES              | Bromobenzene                            | }      |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.00666    | 51         | Ų        | U       |        |            |      | 0.0062 | 3 1         | U      | U           |
| VOLATILES              | Bromochloromethane                      | 1      |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.00666    | 31         | U        | U       |        |            |      | 0.0062 | 43 1        | U      | Ų           |
| VOLATILES              | Bromodichiotomelhane                    | 0.025  | 5 1            | ح     | UD         | 0.05     | 1       | <    | UD  | 0.005  | 1         | <    | Ų  | 0.005  | 1        | ٢    | U  |              |           |       | 0,00658    | 51         | U        | U       |        |            |      | 0.0062 | 13 1        | U      | U           |
| VOLATILES              | Bromotorm                               | 0.02   | 5 1            | <     | υD         | 0.05     | 1       | <    | UD  | 0.005  | 1         | <    | U  | 0.005  | 1        | ۲    | U  |              |           |       | 0.00656    | 51         | U        | U       |        |            |      | 0,006  | 23 1        | Ų      | U           |
| VOLATILES              | Bremomalhane                            | 0.00   | 5 1            | Ż     | UD         | 0.1      | i       | <    | UD  | 0.01   | 1         | <    | U  | 0.01   | 1        | <    | U  |              |           |       | 0.013      | 31         | U        | U       |        |            |      | 0.013  | 25 1        | U      | ų           |
|                        | Cadoo disulfide                         | 0.02   | 5 1            | ż     | บอ่        | 0.05     | 1       |      | UD  | 0.005  | 1         | <    | υ  | 0.005  | 1        | <    | υ  |              |           |       | 0.0056     | 31         | U        | Ų       |        |            |      | 0.006  | 23 1        | υ      | U           |
| VOLATIES               | Carbon latrachieride                    | 0.02   | 5 1            | ż     | บก         | 0.05     | 1       | <    | UD  | 0.005  | i         | *    | U  | 0.005  | 1        | <    | υ  |              |           |       | 0.0066     | 51         | U        | U       |        |            |      | 0,006  | 23 1        | U      | Ų           |
| VOLATILES              | Chipphenzena                            | 0.02   | 51             | Ż     | UD         | 0.05     | 1       | ٩    | UD  | 0.005  | 1         | <    | U  | 0.005  | 1        | <    | Ų  |              |           |       | 0,0066     | 51         | U        | υ       |        |            |      | 0.006  | 23 1        | U      | U           |
| VOLATILES              | Chlorosthana                            | 0.00   | 5 1            | Ż     | μD         | 0.1      | 1       | é    | UD  | 0.01   | 1         | <    | Ű  | 0.01   | 1        | <    | U  |              |           |       | 0.013      | 31         | U        | U       |        |            |      | 0.01   | 25 1        | U      | U           |
| VOLATILES              | Chieroform                              | 0.02   | 5 1            | è     | υn         | 0.05     | 1       | <    | UD  | 0.005  | 1         | <    | U  | 0.005  | 1        | <    | U  |              |           |       | 0.0066     | 61         | U        | U       |        |            |      | 0.006  | 23 1        | U      | U           |
| VOLATILES              | Chipromeihane                           | 00     | 5 1            | 2     | UD         | 0.1      | 1       | è    | UD  | 0.01   | 1         | <    | υ  | 0.01   | 1        | <    | U  |              |           |       | 0.013      | 31         | U        | U       |        |            |      | 0.01   | 25 1        | υ      | Ų           |
| VOURTILES<br>VOURTILES | cir. 1 2-Dicbloroothana                 |        | · ·            |       | ŶŪ         | •••      |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.0066     | 61         | Ų        | U       |        |            |      | 0.006  | 23 1        | υ      | υ           |
|                        | cis.1.3-Dichloropropene                 | 0.02   | 5 1            | ~     | uр         | 0.05     | 1       | <    | UD  | 0.005  | 1         | <    | U  | 0.005  | t        | <    | Ų  |              |           |       | 0,0066     | 61         | U        | U       |        |            |      | 0.006  | 23 1        | U      | U           |
| VOLATILES              | Dibromorbioromethane                    | 0.02   | 5 1            | Ż     | UD         | 0.05     | i t     | è    | UD  | 0.005  | 1         | ۲    | Ū  | 0.005  | 1        | <    | U  |              |           |       | 0.0066     | 6 1        | U        | Ų       |        |            |      | 0.006  | 23 1        | U      | U           |
| VOLATILES              | Disconomolitano                         | 0.02   | ~ .            | -     | <b>~</b> - |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.0066     | 61         | U        | U       |        |            |      | 0.006  | 23 1        | U      | U           |
| VOLATILES              | Dichlerediflueremolbage                 |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.013      | 31         | υ        | υ       |        |            |      | 0.01   | 25 1        | Ų      | U           |
| VOLATILES<br>MOLATILES | Elevenance                              | 0.02   | 5 1            |       | υD         | 0.05     | ; 1     |      | ЫD  | 0.005  | 1         | ÷    | U  | 0.005  | 1        | ۷    | υ  |              |           |       | 0.0066     | 61         | ម        | U       |        |            |      | 0.006  | 23 i        | U      | Ų           |
| VOLATILES              | EnnyiDenizerie<br>Hausseklarahi dadiana | } 0,04 |                | `     | 00         | 0.00     |         | -    | 0.  |        |           |      | -  |        |          |      |    |              |           |       | 0.0066     | 61         | U        | U       |        |            |      | 0.006  | 23 1        | U      | U           |
| VOLATILES              |   | 1      |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.0066     | 61         | U        | υ       |        |            |      | 0,006  | 23 1        | U      | U           |
| VOLANLES               |   |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.0066     | 61         | U        | U       |        |            |      | 0.005  | 23 1        | U      | U           |
| VOLATILES              | m,p-xylenes                             |        |                |       | un         |          |         |      | un  | 0.05   | 1         | ,    | н  | 0.05   | 1        | ~    | U  |              |           |       | 0.013      | 3 1        | U        | ម       |        |            |      | 0.01   | 25 1        | U      | U           |
| VOLATILES              | Methyl Isodutyl ketone                  | 0.2    | ()<br>()<br>() |       | 00         | 0.0      |         | Ĵ    | 100 | 0.00   | ÷         | 2    | ŭ  | 0.005  | i        | 2    | Ű  |              |           |       | 0.0066     | 6 1        | U        | U       |        |            |      | 0.006  | 23 1        | U      | U           |
| VOLATILES              | Meinylehe chiariae                      | 0.02   | 5 1            | <     | 00         | 0.00     |         | •    | Q.D | 0.000  |           | `    | Ŭ  | 0.000  | ,        | •    | ÷  |              |           |       | 0.013      | 3 1        | Ű        | U       |        |            |      | 0.01   | 25 1        | U      | U           |
| VOLATILES              | Naphthalene                             | ļ      |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.0066     | 6 1        | U        | Ū       |        |            |      | 0.006  | 23 1        | υ      | U           |
| VOLATILES              | N-BUTYLBENZENE                          | 1      |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.0066     | 6 1        | Ū.       | Ú       |        |            |      | 0,006  | 23 1        | U      | U           |
| VOLATILES              | n-PROPYLBENZENE                         |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.0066     | 6 1        | ů        | บี      |        |            |      | 0.0009 | 17 1        | J      | J           |
| VOLATILES              | p-ISOPROPYLTOLUENE                      |        |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.0066     |            | ม        | บ       |        |            |      | 0.006  | 23 1        | υ      | Ų           |
| VOLATILES              | SEC-BUTYLBENZENE                        |        |                |       |            |          |         |      |     |        |           |      |    | A 665  |          |      | 11 |              |           |       | 0.0000     | а і<br>а   | 11       | Ŭ       |        |            |      | 0.006  | 23 1        | Ű      | Ú           |
| VOLATILES              | Styrene                                 | 0.02   | 25 1           | <     | Ųΰ         | 0.05     | 5 1     | <    | 00  | 0.005  | ) 1       | <    | U  | 0.005  | 1        | ۲    | Ų  |              |           |       | 0.0000     | к и<br>к а | U        | - U     |        |            |      | 0.006  | 23 1        | บ      | Ū           |
| VOLATILES              | Iert-BUTYLBENZENE                       | 1      | _              |       | _          | <b>.</b> |         |      | -   |        |           |      |    | 0.005  | 4        |      |    |              |           |       | 0.0000     |            | , i      | ŭ       |        |            |      | 0.008  | 23 1        | Ŭ      | Ū           |
| VOLATILES              | Teirachloroelhana                       | 0.037  | 78 1           |       | D          | 0.05     | 4 1     |      | 0   | 0.0421 |           |      |    | 0.005  |          | ۲    |    |              |           |       | 0,0000     | 5 1<br>5 1 |          | 1       |        |            |      | 0.006  | 23 1        | Ū      | Ū           |
| VOLATILES              | Toluene                                 | 0.02   | 25 1           | *     | UD         | 0.0      | 5 1     | <    | ψD  | 0.005  | > 1       | ۲    | Ų  | 0.005  |          | <    | v  |              |           |       | 0.0000     |            | и        | ň       |        |            |      | 0.006  | 323 1       | Ú      | U           |
| VOLATILES              | trans-1,2-Dichloroethene                | 1      |                |       |            |          |         |      |     |        |           |      |    |        |          |      |    |              |           |       | 0.0000     | ιφ (       | 0        | Ŷ       |        |            |      | 0.000  | '           | 2      | 2           |



| Table 3-117  |        |
|--|--------|
| Concentrations of Chemicals in Soil Samples Associated with WR Sun | ip 011 |

| (SUMP) = WRSUMP011<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>FAMPLE_DUEPOSE |                              |   | LH-V<br>LH-W<br>8<br>0. | NRS1<br>RS11-<br>/8/199<br>5 - 1.2<br>FD | 1-01<br>01 QC<br>13<br>151 |   | LH<br>LH- | WRS1<br>WRS11<br>8/8/19<br>0.5 - 1.2<br>REG | 11-01<br>1-01_1<br>93<br>2 Ft |    | LH-<br>LH-V<br>(<br>1, | WRS11<br>/RS11-<br>/8/1990<br>2 • 1.7<br>REG | -01<br>01_2<br>3<br>Fl |    | LH-<br>LH-V<br>1 | WRS1<br>VRS11<br>8/8/19<br>3.5 • 4<br>REG | 11-01<br>1-01_3<br>93<br>F1 |      | W      | WRSC<br>RS01<br>9/21<br>0.0 | 011-SE<br>1-SE0<br>6/2006<br>+ 0.5 I<br>REG | 101<br>1-01<br>1 |     | WRS<br>WRS0<br>9/<br>3.5 | 011-S<br>11-SB<br>26/200<br>- 4.5  <br>REG | 301<br>01-02<br>5<br><sup>5</sup> 1 |    | WR     | RS011-S<br>S011-SE<br>9/26/200<br>0.0 • 0.5<br>REG | 802<br>02-01<br>8<br>Fl | WR<br>WR | S011-5<br>011-SE<br>9/26/200<br>5 - 4.5<br>REG | 5802<br>302-02<br>06<br>Ft | 2          |           |
|--|------------------------------|---|-------------------------|--|----------------------------|---|-----------|---|-------------------------------|----|------------------------|--|------------------------|----|------------------|---|-----------------------------|------|--------|-----------------------------|---|------------------|-----|--------------------------|--|-------------------------------------|----|--------|--|-------------------------|----------|--|----------------------------|------------|-----------|
|  | Bernmeter (1 Inite - meller) |   | Decuit                  | DI                                       | 10                         | vo                                      | Result    | DI  | 10                            | vo | Result                 | DIL  | ίQ                     | VQ | Result           | DIL                                       | ια                          | VQ   | Result | E                           | DIL   | LQ VI            | Q I | Result                   | DIL  | LQ                                  | VQ | Result | DIL  | LQ VC                   | Result   | Dil.   | <u> </u>                   | <u>0 \</u> | <u>/Q</u> |
| Test Group   | Parameter (Umis # nigrkg)    |   | 1,000                   |  |                            | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |           |   |                               |    | 0.005                  |  |                        |    | 0.005            | 4   |                             | 11   |        |                             |   |                  |     | 0.00666                  | 1  | U                                   | Ü  |        |  |                         | 0,006    | 3 1  | ι                          | J          | U         |
| VOLATILES  | Irans-1,3-Dichloropropene    |   | 0.025                   | 1  | <                          | 00                                      | 0.05      | 1   | <                             | 00 | 0.005                  | 1  | <                      | U  | 0.005            | 1   | ۲                           |      |        |                             |   |                  |     |                          | ÷  | ň                                   |    |        |  |                         | 0.006    | 1 1  | i                          | t.         | n –       |
| VOLATILES  | Trichloroethene              |   | 0.025                   | 1  | <                          | UD                                      | 0.05      | 1   | <                             | UÐ | 0.005                  | 1  | <                      | U  | 0.005            | 1   | <                           | U    |        |                             |   |                  |     | 0.00666                  | 1  | U                                   | U. |        |  |                         | 0.000    |  |                            |            | ž         |
| VOLATILES  | Trickless Bursemethone       |   |                         |  |                            |   |           |   |                               |    |                        |  |                        |    |                  |   |                             |      |        |                             |   |                  |     | 0.0133                   | 1  | U                                   | υ  |        |  |                         | 0.01     | 5 1  | ι                          | U          | U         |
| VOLATILES  | Incherphoprometriarie        |   |                         |  |                            |   |           |   |                               |    | 2.05                   |  |                        |    | 0.05             |   |                             | - 11 |        |                             |   |                  |     | 0.0133                   | 1  | 11                                  | U  |        |  |                         | 0.01     | 5 1  |                            | U          | U         |
| VOLATILES  | Vinyl acetale                | 1 | 0.25                    | 1  | <                          | 00                                      | 0.5       | 1   | <                             | ŲD | 0.05                   | 1  | <                      | U  | 0.00             | 1   | ٢.                          | v    |        |                             |   |                  |     | 0.0100                   | ÷  |                                     |    |        |  |                         | 0.01     | 5 1  | 1                          | 11         | 11        |
| VOLATILES  | Vinyl chloride               |   | 0.05                    | 1  | <                          | UD                                      | 0.1       | 1   | <                             | UD | 0.01                   | 1  | <                      | Ų  | 0.01             | 1   | <                           | U    |        |                             |   |                  |     | 0.0133                   | 1  | U                                   | Ų  |        |  |                         | 0.01     |  |                            | •          | •         |
| VOLATILES  | Xvlenes, Total               |   | 0.025                   | 1  | <                          | UD                                      | 0.05      | 1   | <                             | UD | 0,005                  | 1  | <                      | U  | 0.005            | 1   | <                           | U    |        |                             |   |                  |     |                          |  |                                     |    |        |  |                         |          |  |                            |            |           |

Footnotes are shown on cover page to Tables Section.





## Table 3-118

## Concentrations of Chemicals in Soil Samples Associated with WR Sump 012

| [SUMP] = WR\$UMP012<br>LOCATION CODE<br>SAMPLE NO<br>SAMPLE DATE |                                       | ՆН-W<br>ԼН-Wi<br>8/ | (RS)<br>RS1:<br>8/19 | 12-0<br>2-01<br>93 | 1<br>_1 | LH-V<br>LH-W<br>8/ | VRS<br>RS1<br>8/19 | 12-0<br>2-01<br>93 | 1<br>_2 | ۲.H-۷<br>۲.H-W<br>8/ | VRS<br>RS1.<br>8/19 | 12-0<br>2-01_<br>93 | 1<br>_3 | WRS <sup>-</sup><br>WRS12<br>9/25 | 12-SI<br>-SB(<br>5/200 | B01<br>01-02<br>06 | 2   | WR8<br>WR\$1<br>9/2 | 312-S<br>2-SB<br>25/20( | B02<br>02-0<br>06 | 2        |
|--|---------------------------------------|---------------------|----------------------|--------------------|---------|--------------------|--------------------|--------------------|---------|----------------------|---------------------|---------------------|---------|-----------------------------------|------------------------|--------------------|-----|---------------------|-------------------------|-------------------|----------|
| DEPTH<br>SAMPLE PURPOSE  |                                       | 0.:                 | 5 - 1<br>REC         | Ft                 |         | 3                  | - 3.5<br>REC       | i Ft<br>G          |         | 3.                   | 5 - 4<br>REC        | Ft                  |         | 4.5<br>F                          | - 5 F<br>EG            | ŧ                  |     | 4.                  | 5 • 5 F<br>REG          | Ŧt                |          |
| Test Group   | Parameter (Units = mg/kg)             | Result              | DIL                  | LQ                 | VQ      | Result             | DIL                | LQ                 | VQ      | Result               | DIL                 | LQ                  | VQ.     | Result                            | DIL                    | LQ                 | VQ  | Result              | DIL                     | 0                 | VQ       |
| EXPLOSIVES   | 1.3.5-Trinitrobenzene                 |                     |                      |                    |         |                    |                    |                    |         |                      |                     |                     |         | 0.249                             | 1                      | U                  | U   | 0.245               | 1                       | U.                | U        |
| EXPLOSIVES   | 1,3-Dinitrobenzene                    |                     |                      |                    |         |                    |                    |                    |         |                      |                     |                     |         | 0.249                             | 1                      | U.                 | U   | 0.245               | ]                       | 0                 | 0        |
| EXPLOSIVES   | 2,4,6-Trinitrotoluene                 |                     |                      |                    |         |                    |                    |                    |         |                      |                     |                     | .,      | 0.249                             | 1                      | 0                  | U.  | 0.245               | 1                       | 0                 | 0        |
| EXPLOSIVES   | 2.4-Dinitrotoluene                    | 0.33                | 1                    | <                  | 0       | 0.33               | 1                  | <                  | 0       | 0.33                 | 1                   | <                   | U D     | 0.249                             | 1                      | - 0                |     | 0.245               | 4                       | й                 | й<br>П   |
| EXPLOSIVES   | 2.6-Dinitrotoluene                    | 0.33                | 1                    | <                  | U       | 0.33               | 7                  | <                  | U       | 0.33                 | •                   | ×                   | Ų       | 0.209                             | 4                      | 1                  | ň   | 0.255               | ł                       | ŭ                 | ŭ        |
| EXPLOSIVES   | 2-Amino-4,6-dinitrotoluene            |                     |                      |                    |         |                    |                    |                    |         |                      |                     |                     |         | 0.259                             | i                      | й                  | ŭ   | 0.255               | i                       | ŭ                 | ŭ        |
| EXPLOSIVES   | HMX                                   |                     |                      |                    |         |                    |                    |                    |         |                      |                     |                     |         | 2,19                              | 1                      | Ũ                  | Ū   | 2,16                | 1                       | Ú                 | υ        |
| EXPLOSIVES   | m-Nitrotoluene                        |                     |                      |                    |         |                    |                    |                    |         |                      |                     |                     |         | 0.249                             | 1                      | υ                  | U   | 0.245               | 1                       | U                 | U        |
| EXPLOSIVES   | Nitrobenzene                          |                     |                      |                    |         |                    |                    |                    |         |                      |                     |                     |         | 0,259                             | 1                      | U                  | Ð   | 0.255               | 1                       | Ų                 | U        |
| EXPLOSIVES   | o-Nitrotoluene                        |                     |                      |                    |         |                    |                    |                    |         |                      |                     |                     |         | 0.249                             | 1                      | U                  | ·UJ | 0.245               | 1                       | U                 | ປປ       |
| EXPLOSIVES   | p-Nitrotoluene                        |                     |                      |                    |         |                    |                    |                    |         |                      |                     |                     |         | 0,249                             | 1                      | U                  | U   | 0.245               | 1                       | U                 | U        |
| EXPLOSIVES   | RDX                                   |                     |                      |                    |         |                    |                    |                    |         |                      |                     |                     |         | 0.995                             | 1                      | ų                  | U.  | 0.98                | 1                       | 0                 |          |
| EXPLOSIVES   | Tetryl                                |                     |                      |                    |         |                    |                    |                    | _       |                      |                     |                     | _       | 0.647                             | 1                      | Ų                  | Ų   | 0.637               | 3                       | U                 | U        |
| METALS   | Aluminum                              | 5550                | 1                    |                    | D       | 2010               | 1                  |                    | D       | 1710                 | 1                   |                     | D       | 25900                             | 1                      |                    |     | 12200               | 1                       | 11                |          |
| METALS   | Antimony                              | 5                   | 1                    | <                  | U       | 5                  | 1                  | <                  | U       | 5                    | 1                   | <                   | U       | 0.125                             | 1                      | U                  |     | 1 60                | -                       | U                 | UJL<br>H |
| METALS   | Arsenic                               | 2.1                 | 1                    |                    |         | 0,5                | 1                  |                    |         | 1.4                  | 1                   |                     |         | 0.017                             | 1                      |                    | 26  | 38.3                | 1                       |                   | 16       |
| METALS   | Banum                                 | 95.8                | 1                    |                    |         | 1                  | 1                  |                    |         | 4,4                  | 1                   |                     |         | 00.7                              | 4                      |                    |     | 0.767               | í                       |                   |          |
| METALS   | Beryilium                             |                     | 4                    |                    | 11      | 1                  | 1                  | e                  | н       | 1                    | 1                   | <                   | 11      | 0.0564                            | ÷                      | Ŀ                  | L.  | 0.413               | i                       | U                 | U        |
|  | Calcium                               | 547                 | ł                    |                    | Ģ       | 270                | i                  |                    | 4       | 196                  | 1                   |                     | Ŭ       | 688                               | -i                     | •                  | -   | 622                 | 1                       |                   |          |
| METALS   | Chromium                              | 11.8                | 1                    |                    |         | 1                  | 1                  | <                  | U       | 1                    | 1                   | <                   | U       | 22                                | 1                      |                    |     | 14.9                | 1                       |                   |          |
| METALS   | Cobalt                                | 14.3                | 1                    |                    |         | 2                  | 1.                 | <                  | Ū       | 2                    | 1                   | <                   | U       | 9.94                              | 1                      |                    |     | 6                   | 1                       |                   |          |
| METALS   | Copper                                | 2.1                 | 1                    |                    |         | 1                  | 1                  | <                  | υ       | 1                    | 1                   | <                   | Ų       | 6.57                              | 1                      |                    |     | 4,78                | 1                       |                   |          |
| METALS   | Iron                                  | 10200               | 1                    |                    | D       | 5600               | 1                  |                    | D       | 3410                 | 1                   |                     | Ð       | 23000                             | 1                      |                    |     | 19400               | 1                       |                   |          |
| METALS   | Lead                                  | 6,8                 | 1                    |                    | D       | 2                  | 1                  |                    |         | 1.8                  | 1                   |                     |         | 8.81                              | 1                      |                    |     | 20                  | 1                       |                   |          |
| METALS   | Magnesium                             | 288                 | 1                    |                    |         | 49                 | 1                  |                    |         | 50.4                 | 7                   |                     |         | 1610                              | 1                      |                    | 314 | 500                 | 4                       |                   | 1        |
| METALS   | Manganese                             | 532                 | 1                    |                    | 11      | 50.8               | 1                  |                    | - n     | 20                   | 1                   |                     | п       | 0.0952                            | 4                      | н                  | ŭ   | 0 285               | í                       | U.                | ŭ        |
|  | Mercury                               | 0.1                 | 1                    |                    | ú       | 0.1                | •                  |                    | U       | 0.1                  | '                   |                     | 0       | 12.6                              | i                      | Ũ                  | v   | 8.64                | 1                       | •                 | -        |
| METALS   | Polassium                             | 266                 | t                    |                    |         | 164                | 1                  |                    |         | 100                  | 1                   | <                   | U       | 638                               | 1                      |                    |     | 350                 | 1                       |                   |          |
| METALS   | Selenium                              | 0.5                 | 1                    | <                  | U       | 0.5                | 1                  | <                  | ย       | 0.5                  | 1                   | <                   | U       | 0,207                             | 1                      | J                  | JL  | 0.218               | 1                       | J                 | JL       |
| METALS   | Silver                                | 1                   | 1                    | <                  | υ       | 1                  | 1                  | <                  | U       | 1                    | 1                   | <                   | บ       | 1.93                              | 1                      | U                  | U   | 1.65                | 1                       | U                 | U        |
| METALS   | Sodium                                |                     |                      |                    |         |                    |                    |                    |         |                      |                     |                     |         | 183                               | 1                      |                    |     | 140                 | 1                       |                   |          |
| METALS   | Strontium                             | 7,4                 | 1                    |                    |         | 5                  | 1                  |                    |         | 3.8                  | 1                   |                     | •       |                                   |                        |                    |     |                     |                         |                   |          |
| METALS   | Thallium                              |                     |                      |                    |         |                    |                    |                    |         |                      |                     |                     |         | 0.0789                            | 1                      |                    |     | 0.0718              | 1                       |                   |          |
| METALS   | Vanadium                              |                     |                      |                    |         | -                  | 4                  |                    |         | •                    |                     |                     |         | 41,4                              | 4                      |                    |     | 22.2                | 1                       |                   |          |
| METALS   |                                       | 0.22                | 1                    |                    |         | 033                | 1                  | 2                  | - ŭ     | 0.33                 | -                   | è                   | Ц       | 32.0                              |                        |                    |     | 42.0                |                         |                   |          |
| SEMIVOLATILES  | 1.2.Dichlorobenzene                   | 0.33                | i                    | Ş                  | ň       | 0.33               | 1                  |                    | ŭ       | 0.33                 | 1                   | <                   | ŭ       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 1.3-Dichlorobenzene                   | 0.33                | 1                    | <                  | ŭ       | 0.33               | 1                  | <                  | ŭ       | 0.33                 | 1                   | <                   | Ū       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 1.4-Dichlorobenzene                   | 0.33                | 1                    | <                  | Ū       | 0.33               | 1                  | <                  | Ū       | 0.33                 | 1                   | <                   | U       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 2.4.5-Trichlorophenol                 | 1.65                | 1                    | <                  | Ű       | 1,65               | 1                  | <                  | U       | 1.65                 | 1                   | <                   | U       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 2,4,6-Trichlorophenol                 | 0.33                | 1                    | <                  | U       | 0.33               | 1                  | <                  | υ       | 0.33                 | 1                   | <                   | U       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 2,4-Dichlorophenol                    | 0.33                | 1                    | <                  | U       | 0.33               | 1                  | <                  | U.      | 0.33                 | 1                   | <                   | U       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 2,4-Dimethylphenol                    | 0.33                | 1                    | <                  | U.      | 0.33               | 1                  | <                  | U.      | 0.33                 | 1                   | <                   | 0       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 2,4-Dinitrophenol                     | 1.65                | 1                    | <                  |         | 1.65               | 1                  | <                  | 6       | 1.65                 | 1                   | S                   | U       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 2-Chloronaphthalene                   | 0.33                | 1                    | ~                  | - 11    | 0.33               | 4                  | ÷                  |         | 0.33                 | 1                   | È                   | ц<br>Ц  |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 2-Unidrophenol                        | 0.33                | ť                    | è                  | - н     | 0.33               | 4                  | è                  | ŭ       | 0.33                 | 1                   | Ż                   | ŭ       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 2-Methyinapinnarene<br>2-Methyinbenol | 0.33                | 1                    | <                  | ŭ       | 0.33               | 1                  | <                  | ŭ       | 0.33                 | 1                   | <                   | ŭ       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 2-Nitroaniline                        | 1.65                | 1                    | <                  | ิบี     | 1.65               | 1                  | <                  | ū       | 1.65                 | 1                   | <                   | Ű       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 2-Nitrophenol                         | 0.33                | 1                    | <                  | Ũ       | 0.33               | 1                  | <                  | Ű       | 0.33                 | 1                   | <                   | U       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine                | 0.65                | 1                    | <                  | Ú       | 0.65               | 1                  | <                  | Ú       | 0.65                 | 1                   | <                   | Ų       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 3-Nitroaniline                        | 1.65                | 1                    | <                  | ប       | 1,65               | 1                  | <                  | U       | 1,65                 | 1                   | <                   | U       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol            | 1,65                | 1                    | <                  | υ       | 1.65               | 1                  | <                  | U       | 1,65                 | 1                   | <                   | U       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether            | 0.33                | 1                    | <                  | U       | 0,33               | 1                  | <                  | - 9     | 0.33                 | 1                   | <                   | 0       |                                   |                        |                    |     |                     |                         |                   |          |
| SEMIVOLATILËS  | 4-Chioro-3-methylphenol               | 1 0.65              | 1                    | <                  | U       | 0.65               | 1                  | <                  | ป       | 0.65                 | 1                   | <                   | υ<br>υ  |                                   |                        |                    |     |                     |                         |                   |          |

# Shaw Environmental, Inc.

## Table 3-118

## Concentrations of Chemicals in Soil Samples Associated with WR Sump 012

| [SUMP] = WRSUMP012<br>LOCATION CODE<br>SAMPLE NO<br>SAMPLE DATE |                             | LH-WRS12-01<br>LH-WRS12-01_1<br>8/8/1993 | LH-WRS12-01<br>LH-WRS12-01_2<br>8/8/1993 | LH-WRS12-01<br>LH-WRS12-01_3<br>8/8/1993 | WRS12-S801<br>WRS12-S801-02<br>9/25/2006 | WRS12-SB02<br>WRS12-SB02-02<br>9/25/2006 |
|---|-----------------------------|--|--|--|--|--|
|   |                             | 0.5 - 1 Ft<br>REG                        | 3 - 3.5 Ft<br>REG                        | 3.5 - 4 Fl<br>REG                        | 4.5 - 5 Ft<br>REG                        | 4.5 - 5 Ft<br>REG                        |
| Test Carus  | Becometer (Lipite = ma/ka)  | Result DIL LO VO                         | Result DII LO VO                         | Result DIL LQ VQ                         | Result DIL LQ VQ                         | Result DIL LQ VQ                         |
| SEMIVOLATILES   | 4-Chioroaniline             | 0.65 1 < U                               | 0.65 1 < U                               | 0.65 1 < U                               |  |  |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | 4-Methviohenal              | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < じ                               |  |  |
| SEMIVOLATILES   | 4-Nitroaniline              | 1.65 1 < U                               | 1.65 1 < U                               | 1.65 1 < U                               |  |  |
| SEMIVOLATILES   | 4-Nitrophenol               | 1.65 1 < U                               | 1.65 1 < U                               | 1.65 1 < U                               |  |  |
| SEMIVOLATILES   | Acenaphthene                | 0.33 1 < U                               | 0.33 1 < U                               | 0,33 1 < U                               |  |  |
| SEMIVOLATILES   | Acenaphthylene              | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < 0                               |  |  |
| SEMIVOLATILES   | Anthracene                  | 0.33 1 < U                               | 0,33 1 < U                               | 0.33 1 < 0                               |  |  |
| SEMIVOLATILES   | Benzo(a)anthracene          | 0.33 1 < 0                               | 0.33 1 < 0                               |  |  |  |
| SEMIVOLATILES   | Benzo(a)pyrene              | 0.33 1 < 0                               |  | 0,33 1 < 0                               |  |  |
| SEMIVOLATILES   | Benzo(b)fluoranthene        | 0.33   < 0                               | 0.33 1 4 1                               | 0.33 1 < 1                               |  |  |
| SEMIVOLATILES   | Benzo(gni)perviene          |  | 0.33 + 0                                 | 0.33 1 < 11                              |  |  |
| SEMIVOLATILES   | Benzo(K)illuoraninene       | 165 1 < 1                                | 165 1 < U                                | 165 1 < U                                |  |  |
| SEMIVOLATILES   | Benzyl Alcohol              | 0.65 1 < U                               | 0.65 1 < U                               | 0.65 1 < U                               |  |  |
| SEMIVOLATILES   | bls/2-Chloroethoxy)methane  | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | his(2-Chloroethyl)ether     | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | bis(2-Chloroisopropyi)ether | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | bis(2-Ethylhexyl)phthalate  | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | Butyl benzyl phthalate      | 0.33 1 < U                               | 0.33 1 < U                               | 0,33 1 < U                               |  |  |
| SEMIVOLATILES   | Chrysene                    | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < 0                               |  |  |
| SEMIVOLATILES   | Dibenzo(a,h)anthracene      | 0.33 1 < U                               | 0,33 1 < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | Dibenzofuran                | 0.33 1 < 0                               | 0.33 1 < U                               | 0,33 1 < 0                               |  |  |
| SEMIVOLATILES   | Diethyl phthalate           | 0.33 1 < 0                               | 0.33 1 < 0                               | 0.33 1 4 0                               |  |  |
| SEMIVOLATILES   | Dimethyl phthalate          | 0.33 + < 0                               |  | 0.33 1 < 13                              |  |  |
| SEMIVOLATILES   | di-n-Butyi phinalate        |  | 0.33 1 < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | di-n-Octyl philialate       | 0.33 1 < 1                               | 0.33 1 < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | Fluorene                    | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | Hexachlorobenzene           | 0.33 1 < U                               | 0.33 t < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | Hexachlorobutadiene         | 0.33 1 < U                               | 0.33 1. < U                              | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | Hexachlorocyclopentadiene   | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | Hexachloroethane            | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | Indeno(1,2,3-cd)pyrene      | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < 0                               |  |  |
| SEMIVOLATILES   | sophorone                   | 0.33 1 < 0                               | 0.33 1 < 0                               |  |  |  |
| SEMIVOLATILES   | Naphthalene                 | 0.33 1 < 0                               | 0,33 1 < 0                               | 0.33 1 < 1                               |  |  |
| SEMIVOLATILES   | Nitrobenzene                | 0.33 1 < 0                               | 0.33 1 < 1                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | n-Nitroso-di-h-propylamine  | 0.33 + < 0                               | 0.33 1 < 1                               | 0.33 1 < 0                               |  |  |
| SEMMOLATILES  | Pentachloronhenol           | 1.65 1 < U                               | 1.65 1 < U                               | 1.65 1 < U                               |  |  |
| SEMIVOLATILES   | Phenanthrene                | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | Phenol                      | 0.33 1 < U                               | 0,33 1 < U                               | 0.33 1 < U                               |  |  |
| SEMIVOLATILES   | Pyrene                      | 0.33 1 < U                               | 0.33 1 < U                               | 0.33 1 < U                               |  |  |
| VOLATILES   | 1,1,1-Trichloroethane       | 0.005 1 < U                              | 0.005 1 < U                              | 0.005 1 < U                              |  |  |
| VOLATILES   | 1,1,2,2-Tetrachloroethane   | 0.005 1 < U                              | 0.005 1 < U                              | 0,005 1 < U                              |  |  |
| VQLATILES   | 1,1,2-Trichloroethane       | 0.005 1 < U                              | 0.005 1 < U                              | 0.005 1 < U                              |  |  |
| VOLATILES   | 1,1-Dichloroethane          | 0.005 1 < 0                              | 0.005 1 < 0                              |  |  |  |
| VOLATILES   | 1,1-Dichloroethene          | 0.005 1 < 0                              |  | 0.005 1 < 0                              |  |  |
| VOLATILES   | 1,2-Dichioroethane          | 0.005 1 < 0                              | 0.000 1 - 0<br>0.005 1 1                 | 0.005 1 < 1                              |  |  |
| VOLATILES   |                             | 0.005 1 < 0                              | 0.005 1 < 1                              | 0.005 1 < 1                              |  |  |
| VOLATILES   | 2-Butacone                  | 0.05 1 < 0                               | 0.05 1 < 13                              | 0.05 1 < U                               |  |  |
| VOLATILES   | 2-Chloroethyl vinyl ether   | 0.01 1 < 1                               | 0.01 1 < U                               | 0.01 1 < U                               |  |  |
| VOLATILES   | 2-Hexanone                  | 0.05 1 < U                               | 0.05 1 < U                               | 0.05 1 < U                               |  |  |
| VOLATILES   | Acetone                     | 0.1 1 < U                                | 0.1 1 < U                                | 0.1 1 < U                                |  |  |
| VOLATILES   | Benzene                     | 0.005 1 < U                              | 0.005 1 < U                              | 0.005 1 < U                              |  |  |
| VOLATILES   | Bromodichloromethane        | 0.005 1 < U                              | 0.005 1 < U                              | 0.005 1 < U                              |  |  |
| VOLATILES   | Bromoform                   | 0.005 1 < U                              | 0.005 1 < 0                              | 0.005 1 < 0                              |  |  |

### Data Evaluation Report





## Table 3-118

## Concentrations of Chemicals in Soil Samples Associated with WR Sump 012

| [SUMP] = WRSUMP012<br>LOCATION CODE<br>SAMPLE NO<br>SAMPLE DATE |                           | ۲.۲۰۷<br>۲.۲۰۷<br>8/ | VRS<br>RS1:<br>8/19 | 12-0<br>2-01<br>93 | 1<br>_1 | LH-¥<br>LH-W<br>8, | VRS<br>RS1<br>/8/19 | 12-0<br>2-01<br>93 | 2  | LH-۷<br>۲-۱۷<br>8/ | VRS<br>RS1<br>8/19 | 12-0<br>2-01<br>93 | 1<br>_3 | WRS<br>WRS1<br>9/2 | 12-S<br>2-SB<br>25/200 | B01<br>01-02<br>06 |            | WRS<br>WRS<br>9/3 | S12-S<br>12-SE<br>25/20 | 3802<br>302-0<br>006 | 2  |
|---|---------------------------|----------------------|---------------------|--------------------|---------|--------------------|---------------------|--------------------|----|--------------------|--------------------|--------------------|---------|--------------------|------------------------|--------------------|------------|-------------------|-------------------------|----------------------|----|
| DEPTH<br>SAMPLE PURPOSE   |                           | 0.                   | 5 - 1<br>REG        | Ft<br>S            |         | 3                  | - 3.5<br>REC        | 5 Fl<br>3          |    | 3.                 | 5 - 4<br>REG       | Ft                 |         | 4,5                | 5 - 5 F<br>REG         | -1                 |            | 4.                | .5 - 5<br>REG           | Fi<br>;              |    |
| Test Group  | Parameter (Units = mg/kg) | Result               | DIL                 | LQ                 | VQ      | Result             | DIL,                | LQ                 | VQ | Result             | DIL                | LQ                 | VQ      | Result             | DIL                    | LQ VO              | <u>a</u> F | Result            | DIL                     | LO                   | VQ |
| VOLATILES   | Bromomethane              | 0.01                 | 1                   | <                  | U       | 0.01               | 1                   | <                  | Ū. | 0.01               | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Carbon disulfide          | 0.005                | 1                   | <                  | U       | 0.005              | 1                   | <                  | U  | 0.005              | 1                  | <                  | Ų       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Carbon tetrachloride      | 0.005                | 1                   | <                  | U       | 0.005              | 1                   | <                  | U  | 0.005              | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Chlorobenzene             | 0.005                | 1                   | <                  | U       | 0.005              | 1                   | <                  | Ų  | 0.005              | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Chloroethane              | 0.01                 | 1                   | <                  | υ       | 0.01               | 1                   | <                  | U  | 0.01               | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Chloroform                | 0.005                | 1                   | <                  | υ       | 0.005              | 1                   | <                  | U  | 0.005              | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Chloromethane             | 0.01                 | 1                   | <                  | U       | 0.01               | 1                   | <                  | U  | 0.01               | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | cis-1,3-Dichloropropene   | 0.005                | 1                   | <                  | U       | 0,005              | 1                   | <                  | U  | 0.005              | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Dibromochloromethane      | 0.005                | 1                   | <                  | U       | 0.005              | 1                   | <                  | U  | 0.005              | 1                  | <                  | υ       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Ethylbenzene              | 0.005                | 1                   | <                  | U       | 0,005              | 1                   | <                  | U  | 0.005              | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Methyl isobutyl ketone    | 0.05                 | 1                   | <                  | U       | 0.05               | 1                   | <                  | U  | 0,05               | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Methylene chloride        | 0.005                | 1                   | <                  | U       | 0.005              | 1                   | <                  | Ų  | 0.005              | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Styrene                   | 0.005                | 1                   | <                  | υ       | 0.005              | 1                   | <                  | υ  | 0.005              | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Tetrachloroethene         | 0.005                | 1                   | <                  | U       | 0.005              | 1                   | <                  | Ų  | 0.005              | 1                  | <                  | V       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Toluene                   | 0.005                | 1                   | <                  | U       | 0.005              | 1                   | <                  | U  | 0.005              | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | trans-1.3-Dichloropropene | 0.005                | 1                   | <                  | U       | 0.005              | 1                   | <                  | υ  | 0.005              | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Trichloroethene           | 0.005                | 1                   | <                  | Ų       | 0.005              | 1                   | <                  | ບ  | 0.005              | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Vinvi acetate             | 0.05                 | 1                   | <                  | U       | 0.05               | 1                   | <                  | U  | 0.05               | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Vinvi chloride            | 0.01                 | 1                   | <                  | υ       | 0.01               | 1                   | <                  | U  | 0.01               | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |
| VOLATILES   | Xvlenes, Total            | 0.005                | 1                   | <                  | Ð       | 0.005              | 1                   | <                  | υ  | 0.005              | 1                  | <                  | U       |                    |                        |                    |            |                   |                         |                      |    |

Footnotes are shown on cover page to Tables Section.

### Table 3-119

Concentration of Chemicals Concentrations in Soil Samples Associated with WRSump 013

| [SUMP] = WRSUMP013                        | •   |                             |              |                        |                 |             |
|---|---|-----------------------------|--------------|------------------------|-----------------|-------------|
| LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE |   | WRSUMP13-SE<br>WRSUMP13-SB0 | 301<br>)1-01 | WRSUMP13<br>WRSUMP13-5 | -SB01<br>SB01-0 | 2           |
| DEPTH                                     |   | 11/15/2006                  |              | 11/15/20               | 06<br>+         |             |
| SAMPLE_PURPOSE                            | Deservetor (Lipite = molke)                           | U-DFI<br>Result Dil         |              | Result DI              | LLQ             | VQ          |
| Test Group                                | 1.3.5 Tripitrobenzene                                 | 0.244 1                     | UU           | 0.249 1                | U               | U           |
| EXPLOSIVES                                | 1 3-Dinitrobenzene                                    | 0.244 1                     | υυ           | 0.249 1                | U               | υ           |
| EXPLOSIVES                                | 2.4.6-Trinitrotoluene                                 | 0.244 1                     | υU           | 0.249 1                | U               | U           |
| EXPLOSIVES                                | 2,4-Dinitrotoluene                                    | 0.244 1                     | ບບ           | 0.249 1                | U               | U           |
| EXPLOSIVES                                | 2,6-Dinitrotoluene                                    | 0.254 1                     | UU           | 0.259 1                | U               | 0           |
| EXPLOSIVES                                | 2-Amino-4,6-dinitrotoluene                            | 0.254 1                     | 0 0          | 0.259 1                | U 1             | и<br>П      |
| EXPLOSIVES                                | 4-Amino-2,6-dinitrotoluene                            | 0.254 1                     | 0 0          | 2 100 1                | . U             | ŭ           |
| EXPLOSIVES                                | HMX   | 0.244 1                     | н            | 0.249 1                | Ŭ               | Ŭ           |
| EXPLOSIVES                                | Mitrobenzene  | 0.254 1                     | υŪ           | 0.259                  | U               | υ           |
| EXPLOSIVES                                | o-Nitrotoluene  | 0.244 1                     | υυ           | 0.249                  | U U             | U           |
| EXPLOSIVES                                | p-Nitrotoluene  | 0.244 1                     | υυ           | 0.249                  | ប               | U           |
| EXPLOSIVES                                | RDX   | 0.976 1                     | υU           | 0.995                  | U               | U           |
| EXPLOSIVES                                | Tetryl  | 0.634 1                     | υu           | 0.647                  |                 | υ           |
| METALS                                    | Aluminum  | 12700 1                     |              | 12000                  | 1<br>1   1      | H           |
| METALS                                    | Antimony  | 0.094 1                     | 1 1          | 0.877                  |                 | Ũ           |
| METALS                                    | Arsenic   | 60,800 1                    |              | 118.000                |                 |             |
| METALS                                    | Bondium   | 0.482 1                     |              | 0.434                  | I J             | J           |
| METALS                                    | Cadmium   | 0.439 1                     | υU           | 0.458                  | 1 U             | υ           |
| METALS                                    | Calcium   | 2880 1                      |              | 797                    | 1               |             |
| METALS                                    | Chromium  | 11.600 1                    |              | 11.400                 | 1               |             |
| METALS                                    | Cobalt  | 2.810 1                     |              | 5.920                  | 1               |             |
| METALS                                    | Copper  | 2.830 1                     |              | 2.900                  | 1               |             |
| METALS                                    | lron  | 24 600 1                    |              | 6.640                  | 1               |             |
| METALS                                    | Leao<br>Magnosium                                     | 829 1                       |              | 1010                   | 1               |             |
| METALS                                    | Magnesidin<br>Manganese                               | 49.900 1                    |              | 88.500                 | 1               |             |
| METALS                                    | Mercury   | 0.039 1                     | յյ           | 0.288                  | 1 U             | U           |
| METALS                                    | Nickel  | 4.410 1                     |              | 5.720                  | 1               |             |
| METALS                                    | Potassium   | 491 1                       |              | 0.242                  | 1 11            | н           |
| METALS                                    | Selenium  | 1760 1                      | <b>H</b> H   | 1.830                  | i Ŭ             | Ŭ           |
| METALS                                    | Silver  | 39.300 1                    | •••          | 239.000                | 1               |             |
| METALS                                    | Thalling  | 0.083 1                     |              | 0.246                  | 1               |             |
| METALS                                    | Vanadium  | 25.200 1                    |              | 23.900                 | 1               |             |
| METALS                                    | Zinc  | 25.500 1                    |              | 18.500                 | 1               |             |
| SOLIDS                                    | Percent Solids  | 81.300 1                    |              | 02.000                 | 1 11            | 11          |
| VOLATILES                                 | 1,1,1,2-Tetrachloroethane                             |                             |              | 0.005                  | 1 Ŭ             | ŭ           |
| VOLATILES                                 | 1,1,1~Inchioroethane                                  |                             |              | 0.005                  | 1 U             | U           |
| VOLATILES                                 | 1 1 2-Trichloroethane                                 |                             |              | 0.005                  | 1 U             | U           |
| VOLATILES                                 | 1,1-Dichloroethane                                    |                             |              | 0.005                  | 1 U             | U           |
| VOLATILES                                 | 1,1-Dichloroethene                                    |                             |              | 0.005                  | 1 U             | 0           |
| VOLATILES                                 | 1,1-Dichloropropene                                   |                             |              | 0.005                  | 1 11            | ŭ           |
| VOLATILES                                 | 1,2,3- Lichlorobenzene                                |                             |              | 0.005                  | i Ŭ             | Ŭ           |
| VOLATILES                                 | 1.2.4-Trichlorobenzene                                |                             |              | 0.005                  | 1 U             | υ           |
| VOLATILES                                 | 1 2 4-Trimethylbenzene                                |                             |              | 0.005                  | 1 U             | U           |
| VOLATILES                                 | 1,2-Dibromo-3-chloropropane                           |                             |              | 0.005                  | 1 U             | U           |
| VOLATILES                                 | 1.2-Dibromoethane                                     |                             |              | 0.005                  | 1 U             |             |
| VOLATILES                                 | 1,2-Dichlorobenzene                                   |                             |              | 0.005                  | 1 1             | i ii        |
| VOLATILES                                 | 1,2-Dichloroethane                                    |                             |              | 0.005                  | 1 0             | Ŭ           |
| VOLATILES                                 | 1.2-Dichloropropane<br>1.2 Dimothylhoppone (o-Xylene) | 1                           |              | 0.005                  | 1 Ū             | Ū           |
| VOLATILES                                 | 1 3 5-Trimethylbenzene                                | í l                         |              | 0.005                  | 1 L             | U           |
| VOLATILES                                 | 1.3-Dichlorobenzene                                   |                             |              | 0.005                  | 1 L             | U           |
| VOLATILES                                 | 1,3-Dichloropropane                                   |                             |              | 0.005                  | 1 1             | U U         |
| VOLATILES                                 | 1,4-Dichlorobenzene                                   | 1 · · · ·                   |              | 0.005                  | 1 L             | 1 U<br>1 II |
| VOLATILES                                 | 2,2-Dichloropropane                                   | ļ.                          |              | 0.005                  | 1 1             | . U         |
| VOLATILES                                 | 2-Butanone  | 1                           |              | 0.010                  | 1 1             | ιŭ          |
| VOLATILES                                 | ∠-Chlorotoluege                                       |                             |              | 0.005                  | 1 1             | ) Ū         |
| VOLATIES                                  | 2-Hexanone  |                             |              | 0.010                  | 1 ι             | 0 0         |
| VOLATILES                                 | 4-Chlorotoluene                                       | 1                           |              | 0.005                  | 1 L             | υ           |
| VOLATILES                                 | Acetone   | 1                           |              | 0.010                  | 1 1             | F U         |
| VOLATILES                                 | Benzene   |                             |              | 0,005<br>0,005         | 3 I             | , U<br>1 H  |
| VOLATILES                                 | Bromobenzene  |                             |              | 0.005                  | iι              | ์ บั        |
| VOLATILES                                 | Bromodichloromethane                                  |                             |              | 0.005                  | 1 (             | υ           |
| VOLATILLO                                 |   | •                           |              |                        |                 |             |

:0) |

## Table 3-119

Concentration of Chemicals Concentrations in Soil Samples Associated with WRSump 013

| LOCATION CODE  |                           |        |             |         |      |       |            |
|----------------|---------------------------|--------|-------------|---------|------|-------|------------|
| SAMPLE NO      |                           | WRSH   | P13-SB01    | WRSUME  | 13-  | SR01  |            |
| SAMPLE DATE    |                           | WRSHME | 213-S801-01 | WRSUMP1 | 3-51 | 301-0 | 12         |
| DEDTH          |                           | 4 4 14 | 50000C      | 44.145  | 000  | ~     |            |
| DEPTH          |                           | 11/1   | 5/2006      | 11/15   | 200  | 0     |            |
| SAMPLE_PURPOSE | 5 . 41 c B X              | 0.     | - 5 FL      | 1-2     |      |       |            |
| Test Group     | Parameter (Units = mg/kg) | Result | DIL LO VO   | Result  | 브    |       | <u>.vu</u> |
| VOLATILES      | Bromotorm                 |        |             | 0.005   | 1    |       |            |
| VOLATILES      | Bromomethane              |        |             | 0.010   | 3    |       |            |
| VOLATILES      | Carbon disulfide          |        |             | 0.005   | 1    |       |            |
| VOLATILES      | Carbon tetrachloride      |        |             | 0.005   | 1    | U     | U          |
| VOLATILES      | Chlorobenzene             |        |             | 0.005   | 1    | U     | U          |
| VOLATILES      | Chloroethane              |        |             | 0.010   | 1    | U     | U          |
| VOLATILES      | Chloroform                |        |             | 0.005   | 1    | U     | U          |
| VOLATILES      | Chloromethane             |        |             | 0.010   | 1    | U     | U          |
| VOLATILES      | cis-1,2-Dichloroethene    |        |             | 0.005   | 1    | U     | U          |
| VOLATILES      | cis-1,3-Dichloropropene   |        |             | 0.005   | 1    | U     | U          |
| VOLATILES      | Dibromochloromethane      |        |             | 0.005   | 1    | υ     | U          |
| VOLATILES      | Dibromomethane            |        |             | 0.005   | 1    | υ     | υ          |
| VOLATILES      | Dichlorodifluoromethane   |        |             | 0.010   | 1    | U     | U          |
| VOLATILES      | Ethylbenzene              |        |             | 0.005   | 1    | U     | U          |
| VOLATILES      | Hexachlorobutadiene       |        |             | 0.005   | 1    | U     | U          |
| VOLATILES      | Isopropylbenzene          |        |             | 0.005   | 1    | υ     | U          |
| VOLATILES      | m.p-Xylenes               |        |             | 0.005   | 1    | υ     | U          |
| VOLATILES      | Methyl isobutyl ketone    |        |             | 0.010   | 1    | υ     | υ          |
| VOLATILES      | Methylene chloride        |        |             | 0.005   | 1    | υ     | U          |
| VOLATILES      | Naphthalene               |        |             | 0.010   | 1    | U     | U          |
| VOLATILES      | n-BUTYLBENZENE            |        |             | 0.005   | 1    | υ     | U          |
| VOLATILES      | n-PROPYLBENZENE           |        |             | 0.005   | 1    | υ     | U          |
| VOLATILES      | p-ISOPROPYLTOLUENE        |        |             | 0.005   | 1    | U     | U          |
| VOLATILES      | sec-BUTYLBENZENE          |        |             | 0.005   | 1    | U     | υ          |
| VOLATILES      | Styrene                   |        |             | 0.005   | 1    | υ     | U          |
| VOLATILES      | tert-BUTYLBENZENE         |        |             | 0.005   | 1    | U     | U          |
| VOLATILES      | Tetrachloroethene         |        |             | 0.005   | 1    | υ     | U          |
| VOLATILES      | Toluene                   |        |             | 0.005   | 1    | ម     | U          |
| VOLATILES      | trans-1.2-Dichloroethene  |        |             | 0.005   | 1    | υ     | υ          |
| VOLATILES      | trans-1.3-Dichloropropene |        |             | 0.005   | 1    | υ     | U          |
| VOLATILES      | Trichloroethene           |        |             | 0.005   | 1    | υ     | U          |
| VOLATILES      | Trichlorofluoromethane    |        |             | 0.010   | 1    | U     | U.         |
| VOLATILES      | Vinvl acetate             |        |             | 0.010   | 1    | Ð     | Ū          |
| VOLATILES      | Vinvl chloride            | ţ.     |             | 0.010   | 1    | บ     | Ū          |
|                |                           |        |             |         |      | ستس   |            |

Footnotes are shown on cover page to Tables Section.



Table 3-120 Concentrations of Chemicals In Soil Samples Associated with WR Sump 014

| [SUMP] = WRSUMP014 |  |                  |                   |                  | A-20204          |                    |   | LHANDS14-01     | WRS014-5801     | WRS014-SB01       | WRS014-S801     |
|--------------------|--|------------------|-------------------|------------------|------------------|--------------------|---|-----------------|-----------------|-------------------|-----------------|
| LOCATION _CODE     |  | 3585801          | 35BSB01           | 3585801          | 3585801          | LID 6 60           |   |                 | WR\$014-SR01-01 | WRS014-SR01-01-0C | WRS014-SB01-01  |
| SAMPLE_NO          |  | 358\$801(0-0_5)  | 35B\$B01{0-0_5}OC | 358\$801(1-3)    | 3585801(3-5)     | 185-3-30           | LH-WHS (4-01_)                          | LUNNUD14-01_Z   | 0/14/2006       | 9/14/2006         | 9/14/2006       |
| SAMPLE_DATE        |  | 7/27/1998        | 7/27/1998         | 7/27/1998        | 7/27/1998        | 1/11/1995          | 6/26/1993                               | 0/20/1993       | 0.5 1 5 54      | 05.155            | 05,155          |
| DEPTH              |  | 05 FI            | 0 . 5 Fi          | 1 - 3 Ft         | 3 - 5 Fl         | 05 Ft              | .3 - 1,3 Fi                             | 3 - 3.5 FL      | DEC             | ED                | AFG             |
| SAMPLE_PURPOSE     |  | REG              | FD                | REG              | REG              | REG                | HEG                                     |                 | Real Dill 10 VO | Result IN VO      | Result DILLO VO |
| Test Group         | Parameter (Units = mg/kg)              | Result DIL LO VO | Result DIL LO VO  | Result DIL LO VO | Result DIL LO VQ | Result DIL LO VO   | Hesuit DIL LO VO                        | Heson oil Lo vo |                 |                   |                 |
| DIOXINS_FURANS     | 1.2,3.4.6,7.8-Heptachlorodibenzoluran  | 5.765E-06 1      | 0.000005102 1     | 5.25E-07         | 2.36E-07         |                    |   |                 |                 |                   |                 |
| DIDXINS_FURANS     | 1,2,3,4,6,7,8-HpCOD                    | 3.3263E-05 1     | 0.000033915 1     | 4.192E-06        | 2.06E-06 1       |                    |   |                 |                 |                   |                 |
| DIDXINS_FURANS     | 1,2,3,4,7,8,9-Heptachlorodibenzofuran  | 1.496E-06 1 < U  | 0.000000261 1     | 7.9E-08 1 < U    | 8.3E-08 1 < U    |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | 1.2.3.4.7.8-Hexachlorodibenzofuran     | 3.241E-06 1 < U  | 0.00000252 1      | 3.73E-07 1 < UJ  | 2.19E-07 f < UJ  |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | 1,2.3,4,7,8-Hexachlorodibenzo-p-dioxin | 1.601E-06 1 < U  | 0.00000518 1      | 1.08E-07 1 < U   | 7.6E-08 1 < U    |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | 1,2.3.6,7.8-Hexachlordibenzo-p-dioxin  | 9.32E-07 1 < U   | 0,000001339 1     | 0.0000001 f < U  | 7E-08 1 < V      |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | 1.2.3.6.7.8-Hexachlorodibenzofuran     | 2,198E-06 1 < U  | 0.000000146 1 < U | 5.7E-08 1 < U    | 5.6E-08 1 < U    |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | 1.2.3.7.8.9-Hexachlordibenzo-p-dioxin  | 1.073E-06 1 < U  | 0.000001181 1     | 9.6E-08 1 CU     | 6.7E-08 1 < U    |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | 1.2,3.7,8.9-Hexachlorodibenzoluran     | 3.791E-06 1 < U  | 0.000000183 1 < U | 7.1€-08 1 < U    | 7E-08 1 < U      |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | 1,2,3,7,8-Pentachlordibenzo-p-dioxin   | 8.69E-07 1 < U   | 0.000000191 1 < U | 1.06E-07 t < U   | 8.6E-08 1 < U    |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | 1.2.3.7.8-Pentachlorodibenzoluran      | 2.008E-06 1 < U  | 0.000004373 1     | 2.598-07         | 7.2E-08 1 < U    |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | 2,3.4.6.7.8-Hexachlorodibenzoluran     | 2.976E-05 1 < U  | 0.000000538 1     | 6.4E-08 1 < U    | 6.2E-08 1 < U    |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | 2.3.4.7.8-Peniachiorodibenzoliuran     | 9.59E-07 1 < U   | 0.000000569 1     | 9.8E-08 1 < U    | 7.3E-08 f < U    |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | 2.3,7.8-TCDD                           | 9.13E-07 1 < U   | 0.00000011 1 < U  | 1.05E-07 1 < U   | 8.5E-08 1 < U    |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | 2,3,7,8-TCDF                           | 1.392E-06 1 < U  | 0.000000404 1     | 2.73E-07 1       | 2.56E-07 1 < U   |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | Heplachlorodibenzoluran                | 5.765E-06 1      | 0.000005102 1     | 5.84E-07 1       | 6.02E-07 1       |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | Heptachiorodibenzo-p-dioxin            | 0.00006933 1     | 0.000069755 1     | 8.984E-06 1      | 4.49E-06 1       |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | Hexachloridibenzo-p-dloxin             | 1.1141E-05 1     | 0.000013968 1     | 1.343E-06 1      | 5.74E-07 t       |                    |   |                 |                 |                   |                 |
| DIQXINS_FURANS     | Hexachlorodibenzoluran                 | 5.2996-06 1      | 0.000009539 1     | 1.066E-06 1      | 2.348-07 1       |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | Octachlorodibenzofuran                 | 1.5485E-05 1     | 0.000013585 1     | 1.57E-06 1       | 6.26E-07 1       |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | Octachlorodibenzo-p-dioxin             | 0.00066929 1 B   | 0.000591248       | 0.000134 1 B     | 0.000241 1 8     |                    |   |                 |                 |                   |                 |
| D'OXINS_FURANS     | Pentachlorodibenzofuran                | 6.501E-06 1      | 0.00001803 1      | 1.017E-06 1      | 7.3E-08 1 < U    |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | Pentachlomdibenzo-p-dioxin             | 8.69E-07 1 < U   | 0.000000191 1 < U | 1.06E-07 1 < U   | 8.6E-08 / < U    |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | Tetrachlorodibenzoluran, Total         | 0.00000256 1 J   | 0.000008277 1 J   | 5.06E+07 1       | 9.59E-07 \$      |                    |   |                 |                 |                   |                 |
| DIOXINS_FURANS     | Tetrachlorodibenzo-p-dioxin            | 9.13E-07 1 < U   | 0.00000011 1 < U  | 1.05E-07 1 < U   | 8.5E-08 I < U    |                    |   |                 | 0.040 1 11      | 0.9/6 ( 11        | 0.24 1 11       |
| EXPLOSIVES         | 1.3.5-Trinifrobenzene                  | 0.15 1 < U       | 0.15 1 < U        | 0.15 1 < U       | 0.15 1 < U       | 0.24 1 < U         |   |                 | 0.249 1 0       | 0.246 1 1         | 0.24 1 11       |
| EXPLOSIVES         | 1.3-Dinitrobenzene                     | 0.05 1 < U       | 0,05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.24 1 < 0         |   |                 | 0.249 1 0       | 0.240 1 0         | 0.24 1 11       |
| EXPLOSIVES         | 2,4.6-Trinitrotoluene                  | 0.1 1 < U        | 0.1 1 < U         | 0.1 1 < U        | 0.1 1 < 1        | 0.24 1 < U         |   |                 | 0.249 1 0       | 0.240 1 0         | 0.24 1 1        |
| EXPLOSIVES         | 2.4-Dinitrotoluena                     | 0.1 1 < U        | 0.1 1 < U         | 0.1 1 < U        | 0.1 f < U        | 0.24 1 < U         | 1,136 1 < U                             | 1,149 1 < U     | 0.249 0         | 0.246 1 1         | 0.25 1 11       |
| EXPLOSIVES         | 2,6-Dintrotaluena                      | 0.1 1 < U        | 0.1 1 < U         | 0.1 1 < U        | 0,1 ° < U        | 0.26 1 < U         | 1,136 1 < 0                             | 1,149   < U     | 0,235 1 0       | 0.256 1 11        | 0.25 1 1        |
| EXPLOSIVES         | 2-Amino-4.5-dinitrololuene             | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < 0       |                    |   |                 | 0.238 1 0       | 0.256 1 1         | 0.25 1 1        |
| EXPLOSIVES         | 4-Amino-2,6-dinitrololuene             | 0,05 1 < U       | 0.05 i < U        | 0.05 1 < U       | 0.05 1 < U       | 0,49 1 < U         |   |                 | 0,633 1 0       | 217 1 1           | 212 1 1         |
| EXPLOSIVES         | них                                    | 0.1 1 < U        | 0.1 1 < U         | 0.1 1 < U        | 0.1 1 < U        | 2.2 1 < 0          |   |                 | 2,13 1 0        | 0.246 1 1         | 0.24 f U        |
| EXPLOSIVES         | m-Nitrotoluene                         | 0.1 1 < U        | 0,1 1 < U         | 0.1 1 < U        | 0.1 1 < 0        | 0.99 1 < U         |   |                 | 0.249 1 0       | 0.256 1 11        | 0.25 1 1/       |
| EXPLOSIVES         | Nitrobenzene                           | 0.1 1 < U        | 0.1 1 < 0         | 0.1 1 < U        | 0,1 1 < 0        | 0.26 1 < 0         |   |                 | 0.249 1 1       | 0.246 1 1         | 0.24 1 U        |
| EXPLOSIVES         | o-Nitrotoluene                         | 0.1 1 < U        | 0,t 1 < U         | 0.1 1 < U        | 0.1 1 < 0        | 0.99 1 2 0         |   |                 | 0.243 1 0       | 0.246 1 11        | 0.24 1 1        |
| EXPLOSIVE\$        | p-Nitrotoluene                         | 0.1 1 < U        | 0.1 1 < U         | 0.1 i < U        | 0,1 1 < 0        | 31 < 9             |   |                 | 0.995 1 11      | 0.985 1 U         | 0.962 1 U       |
| EXPLOSIVES         | ADX .                                  | 0.1 i č U        | 0.1 1 < U         | 0.1 1 < U        | 0.1 1 < U        | 1.1 1 < 0          |   |                 | 0.949 1         | 0.64 1 U UJ       | 0.625 1 U UJ    |
| EXPLOSIVES         | Tetryl                                 | 0.1 1 < R        | 0.1 i < A         | 0.1 1 < H        | 0.1 1 < H        | 0,73 1 < 0         | 0240 1                                  | 2250 1          | 7110 1          | 6600 1            | 11800 1         |
| METALS             | Aluminum                               | 5900 1 J         | 7100 1 3          | 8100 1 J         | 13000 1 J        | 5110 1             | 5340 1                                  | 595 1 - 11      | 0.0859 1 .1 .1  | 0.106 1 11        | 0.0601 1 J J    |
| METALS             | Antimony                               | 6.74 1 < R       | 6.83 1 < H        | 6.65 1 < H       | 5.54 1 < H       | 10,1 1 < 00        | 9.46 I C U                              | 105 1 5         | 115 1           | 766 1             | 1.33 1 J        |
| METALS             | Arsenic                                | 6.57 1           | 7.04 1            | 3.63 1           | 4,4/ 1           | 7,3 1 J            | 4.23                                    | 636 L - H       | 374 1 .54       | 44.8 1 JH         | 57.8 1 JH       |
| METALS             | Sarium                                 | 55 I J           | 64 1 J            | 77 1 3           | 78 t J           | 111 1              | 86.7 C U                                | 0.30 1 4 0      | 0.607 1         | 0499 1            | 0.72 1          |
| METALS             | Beryllium                              | 0.63 I J         | 0.569 1 < U       | 0.603 1 J        | 0,593 1 J        | •• •               | 459 K J I                               | 19 1 2 11       | 0.0832 1        | 0.061 1 J J       | 0.108 1 J J     |
| METALS             | Cadmium                                | 0.562 1 < 0      | 0.569 1 < 0       | 0.554 1 < 0      | U,553 1 < U      | 7.0 1              | 4,58 1 1 0                              | 444 1           | 854 1           | 1010 1            | 1550            |
| METAUS             | Calcium                                | 3500 1 J         | 4900 1 0          | 2200 1 J         | 1/00 1 0         | 2130               | 1020 1                                  | 375 1           | 36.8 1 .1       | 20.7 t JL         | 31 1 JL         |
| METALS             | Chromium                               | 35 1 J           | 64 1 J            | 22 I J           | 15 1 3           | 42.5 1 4           | 20.0 1                                  | 0.352 1 / 11    | 185 1           | 2.99 1 JH         | 3.2 1 JH        |
| METALS             | Cobalt                                 | 5.6 1 < U        | 5,7 1 < 0         | 6.2 1 J          | 5.B L J          | 1 1                | 1 I I I I I I I I I I I I I I I I I I I | 284 1 4 1       | 213 1           | 2.21 1            | 4.32 1          |
| METALS             | Copper                                 | 2.81 1 < U       | 3.98 1 J          | 3.57 1 J         | 5,13 T J         | 10.0 1             | 14500 1                                 | 4550 1          | 61100 10 .1     | 33800 10 J        | 51900 10        |
| METALS             | Iron                                   | 39000 i J        | 32000 t J         | 15000 1 J        | 19000 1 3        | 40.0               | 60 A 5                                  | 879 1 / 1       | 71 1            | 9.1 1             | 14.2 1 J        |
| METALS             | Lead                                   | 31.1 1           | 23 1              | 8.03 1           | 8.26 1           | 4U.J 1             | 574 4                                   | 513 1 C         | 313 1           | ( 302 ) .IH       | 489 1 JH        |
| METALS             | Magnesium                              | 560 1 < U        | 1000 1 J          | 630 1 J          | 1100 1 3         | ()    <br>1966   1 | 102 (                                   | 234 1 F         | 90.6 1          | 159 1 J           | 108-1 J         |
| METALS             | Manganese                              | 303 I J          | 788 1             | 228 1 J          | 64 1 J           | 400 1              | 0.049 1 - 11                            | 0.05 1 2 13     | 0.0437          | 0.0257 1 J J      | 0.0664 1 J J    |
| METALS             | Marcury                                | 0.11 1 < U       | 0.11 1 < U        | 0.11 1 < U       | 0.11 P < U       | 0.0 1              |   | 0.00 1 2 0      | 3.5 1 #         | 4.83 1 JH         | 5.81 1 JH       |
| METALS             | Nickel                                 | 6.9 1 J          | 7.6 1             | 3.3 I J          | 1) 1 J           | 241 1              | 514 1                                   | 123 1           | 159 1           | 187 1             | 290 1           |
| METALS             | Polassium                              | 550 1 < U        | 570 1 < U         | 810 1            | 500 1            | 491 F              | 0.526 1 - 11                            | 0.585 1 2 11    | 0.131 1 J .#    | 0.456 1           | 0.164 t J J     |
| METALS             | Selenium                               | 4.12 1           | 3.03 1            | 1.3 1            | 1.00             | 0.01 1 1           |   |                 |                 |                   |                 |

Data Evaluation Report Chemical Concentrations in Soli Associated with LHAAP-35/36 Sumps



Table 3-120 Concentrations of Chemicals in Soil Samples Associated with WR Sump 014

| [SUMP] = WRSUMP014 |                            | -                |                  |                  |                  |                  | • • •            |                  |                      |                   |                       |
|--------------------|----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|-------------------|-----------------------|
| LOCATION _CODE     |                            | 35BSB01          | 3585801          | 35B\$801         | 358S801          | LHS-3-30         | LH-WRS14-01      | LH-WR\$14-01     | WRS014-S801          | WRS014-SB01       | WRS014-SB01           |
| SAMPLE_NO          |                            | 35B\$B01(0-0_5)  | 3585801(0-0_5)OC | 358SB01(1-3)     | 35BSB01(3-5)     | LHS-3-30         | LH-WRS14-01_1    | LH/WRS14-01_2    | WRS014-SB01-01       | WRS014-SB01-01-OC | WRS014-SB01-01        |
| SAMPLE_DATE        |                            | 7/27/1998        | 7/27/1998        | 7/27/1998        | 7/27/1998        | 1/11/1995        | 6/26/1993        | 6/26/1993        | 9/14/2005            | 9/14/2006         | 9/14/2006             |
| DEPTH              |                            | 05 Ft            | 05 Ft            | 1 - 3 FI         | 3 • 5 Ft         | 05 FI            | .5 - 1.5 Ft      | 3 - 3.5 FI       | 0.5 - 1.5 FI         | 0.5 - 1.5 Pt      | 0.5 - 1.5 Ft          |
| SAMPLE_PURPOSE     |                            | REG              | FD               | REG              | REG              | REG              | REG              | REG              | REG                  | FD                | REG                   |
| Test Group         | Parameter {Units = mg/kg}  | Result DIE LO VO | Result DIE LO VO | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LO VQ | Result Dil LO VO | Result DIL LO VO     | Result DIL LO VO  | Hesult DIL LO VO      |
| METALS             | Silver                     | 1.1 1 < U        | 1.1 1 < U        | 1.1 1 × U        | 1.1 1 K U        | 11 < U           | 0.026 1 < U      | 0.029 1 < U      | 1.63 1 U             | 1.54 1 U          | 1,47 1 U              |
| METALS             | Sodium                     | 560 1 < U        | 570 1 < U        | 550 1 < U        | 550 1 < U        |                  |                  |                  | 14,1 i J J           | 15,7 1 J J        | 17.9 1 J J            |
| METALS             | Strontium                  | 6,3 1            | 7,6 1            | 10 1             | 18 1             | 31.9 1           | 12.2 1 < U       | 3.75 1 < 0       |                      |                   |                       |
| METALS             | Thakium                    | 0.562 1 < U      | 0.569 1 < U      | 0.554 1 < U      | 0.553 1 < U      | 50.4 1 < U       |                  |                  | 0.0382 1             | 0.0607 1          | 0.204 )               |
| METALS             | Vanadium                   | 48 1 J           | 47 1 J           | 25 1             | 31 1 J           |                  |                  | <del>.</del> .   | 74-1 1<br>177 P 1 IV | 43 F UN           | 12.2 1                |
| METALS             | Zinc                       | 58 1 J           | 67 1 J           | 19 t J           | 20 1 J           | 1100 1           | 65./             | <i>F</i> 1       | 27.6 1 JF            | 20.5 '            | 40.1 I UN             |
| PUBS               | Aroclor 1016               | 0.037 1 2 0      | 0.038 I < U      | 0.037 1 < 0      | 0.037 1 < 0      |                  |                  |                  |                      |                   |                       |
| PG85               | Aroclor (22)               | 0,075 1 < 0      | 0.076 I < U      | 0.074 1 < 0      | 0.074 1 < 0      |                  |                  |                  |                      |                   |                       |
| PUBS               | Aroclor 1232               | 0.037 1 < 0      | 0.038 1 < 0      | 0.037 1 < 0      | 0.037 1 < 0      |                  |                  |                  |                      |                   |                       |
| PCB3               | Arocior 1242               | 0.037 1 4 0      | 0.030 2 2 0      | 0.037 1 4 0      | 0.037 1 < 0      |                  |                  |                  |                      |                   |                       |
| PUDD               | Aroclar 1254               | 0.037 1 < 1      | 0.000 0 0 0      | 0.037 1 < 0      | 0.037 1 4 1      |                  |                  |                  |                      |                   |                       |
| PLOS               | Aroclar 1254               | 0.037 1 4 1      | 0.008 1 < 0      | 0.037 1 < 0      | 0.037 1 4 1      |                  |                  |                  |                      |                   |                       |
| DESTICINES         | 44-000                     | 0.037 1 4 11     | 0.030 1 4 0      | 0.007 1 2 11     | 0.0037 1 4 11    |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | 4.4-005                    | 0.13 5 1         |                  | 0.0037 1 0       | 0.0011 1         |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | 4 4'-RDT                   | 1 0 037 5        | 0.072 1 .1       | 0.0137 1 4 1     | 0.0061 1 .1      |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | Aldén                      | 0.17 1           | 0.0019 1 - 11    | 0.0018 1 4 1     | 0.0018 1 - 11    |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | aloha-BHC                  | 0.0019 1 e U     | 0.0019 1 2 U     | 0.0018 1 < U     | 0.0018 1 < U     |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | bela-BBC                   | 0.0019 1 2 1     | 0.0019 1 Z U     | 0.0018 1 < U     | 0.0018 1 < U     |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | Chlordane                  | 0.037 1 - 11     | 11038 1 c U      | 0.037 1 < 11     | 0.037 1 4 1      |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | delta-BHC                  | 0.0019 t < U     | 0.0019 1 < U     | 0.0018 1 < U     | 0.0018 1 U       |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | Dieldnn                    | 0.0037 t < U     | 0.0038 t < U     | 0.0037 1 < U     | 0.0037 1 < U     |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | Endosulfan í               | 0.0019 t < U     | 0.0019 i < U     | 0.0018 1 < U     | 0.0018 1 < U     |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | Endosullan N               | 0.0037 1 < U     | 0.0038 1 < U     | 0.0037 1 < U     | 0.0037 1 < U     |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | Endosullan Sulfate         | 0.0037 1 < U     | 0.0038 1 < U     | 0.0037 1 < U     | 0,0037 1 < U     |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | Endrin                     | 0.0037 1 < U     | 0.0038 1 < U     | 0.0037 1 < U     | 0.0037 1 < U     |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | Endrin aldehyda            | 0,0037 1 < U     | 0.0038 1 < U     | 0.0037 1 < U     | 0.0037 1 < U     |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | Endrin ketone              | 0.0037 1 < U     | 0.0038 1 < U     | 0.0037 1 < U     | 0.0037 f < U     |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | gamma-BHC (Lindane)        | 0.0019 1 < U     | 0.0019 1 < U     | 0.0018 1 < U     | 0.0018 1 < U     |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | Heptachlor                 | 0.0019 1 < U     | 0.0019 1 < U     | 0.0018 1 < U     | 0.001B t < U     |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | Heptachlor epoxide         | 0,0019 1 < U     | 0.0019 1 < U     | 0.0018 1 < U     | 0.001B 1 < U     |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | METHOXYCHLOR               | 0.019 1 < U      | 0,019 1 < U      | 0.018 1 < U      | 0,018 1 < U      |                  |                  |                  |                      |                   |                       |
| PESTICIDES         | Тохарћела                  | 0.037 1 < U      | 0,038 1 < U      | 0.037 1 < U      | 0.037 1 < U      |                  |                  |                  |                      |                   |                       |
| RANGE_ORGANICS     | Carbon Range C12-C28       |                  |                  |                  |                  |                  |                  |                  | 35.7 1 J J           | 52.8 1 0          | 36,1 1 J J            |
| RANGE_ORGANICS     | Carbon Range C28-C-35      |                  |                  |                  |                  |                  |                  |                  | ل ل 4 4ل             | 30.6 1 J          | 50.0 1 J J<br>200 1 U |
| RANGE_ORGANICS     | Carbon Range C6-C12        |                  |                  |                  |                  |                  |                  |                  | 52.9 1 U             | 5¥.8 1 U          | 53.5 I U              |
| SEMIVOLATILES      | 1,2.4-Frichlorobenzene     | 0.37 1 2 0       | 0.38 1 < U       | 10.317 1 < U     | 0.37 1 2 0       | 4 1 < U          | 1.136 < U        | 1,149 1 4 0      | 0.653 5 0            | 0.005 3 0         |                       |
| SEMIVOLATILES      | 1.2-Dichlorabenzene        | 0.37 1 < 0       | 0.38 F < U       |                  | 0.37 1 < 0       | 4 1 < 0          | 1,130 1 4 0      | 1.149 1 4 0      | 0.003 5 0            | 0.000 5 0         | 0.865 5 11            |
| SEMMOLATILES       | 1,3-Dichlorobenzene        | 0.37 1 2 0       | 0,38 1 2 1       | 0.37 1 2 0       | 0.37 1 < U       | 4 1 2 0          | 1.136 1 < 1      | 1149 1 2 1       | 0.653 5 0            | 0.868 5 11        | 0.865 5 11            |
| SEMINOLATILES      | 2.4.5-Trichlerenbanel      |                  | 0.38 1 4 0       | 0.07 1 < 0       | 0.07 1 2 1       | 20 1 4 1         | 1136 1 < 1       | 1149 1 2 1       | 0.053 5 0            | 0.868 5 11        | 0.865 5 11            |
| SEMIVOLATILES      | 2.4.6.Trichleronbanel      | 0.34 1 6 0       | 0.33 ( < 0       | 0.32 1 4 0       | 0.32 1 4 0       | 4 1 4 1          | 1,136 1 < 11     | 1149 1 2 1       | 0.853 5 11           | 0.868 5 11        | 0.865 5 11            |
| SEMIVOLATILES      | 2.4.Dichlorophenol         |                  | 0,35 7 4 0       |                  | 0.37 1 2 1       | 4 5 - 11         | 1.136 1 < U      | 1149 1 2 16      | 0.853 5 11           | 0.868 5 U         | 0.865 5 1             |
| SEMIVOLATILES      | 2 4 Dimethylohenol         | 0.37 1 4 1       | 0.38 1 < 11      | 0.37 1 4 1       | 0.37 1 4 1       | 4 5 - 11         | 0.568 1 4 1      | 0.575 1 < 0      | 0.853 5 U            | 0.868 5 U         | 0.865 5 1/            |
| SEMIVOLATILES      | 2 4 Dinitrophenol          | 0.94 1 4 1       | 0.95 1 < 1       | 0.92 1 4 1       | 0.92 1 2 1       | 20 1 2 1         | 11.364 1 4 1     | 11494 1 4 11     | 4.26 5 U             | 4.34 5 0          | 4.32 5 U              |
| SEMIVOLATILES      | 2.4-Dinitrataluene         | 0.37 1 < U       | 0.38 1 < 1       | 0.37 1 < U       | 0.37 1 < 0       | 4 1 < U          |                  |                  | 0.653 5 U            | 0.868 5 0         | 0.865 5 U             |
| SEMIVOLATILES      | 2.6 Dinitrotoluene         | 0.37 I < U       | 0.38 1 < 1       | 0.37 1 < U       | 0.37 1 < U       | 4 1 < U          |                  |                  | 0.653 5 U            | 0.868 5 U         | 0.865 5 U             |
| SEMIVOLATILES      | 2-Chloronaphthalene        | 0.37 1 < U       | 0.38 1 < U       | 0.37 1 < U       | 0.37 1 < U       | 4 1 < U          | 0.341 1 < U      | 0.345 1 < U      | 0.853 5 U            | 0.868 5 U         | 0.865 5 U             |
| SEMIVOLATILES      | 2-Chlorophenol             | 0.37 1 < U       | 0.38 1 < U       | 0.37 1 < U       | 0.37 1 < U       | 4 1 < U          | 0.568 1 < U      | 0.575 1 < U      | 0,853 5 U            | 0.868 5 U         | 0.865 5 U             |
| SEMIVOLATILES      | 2-Methylnaphthalene        | 0.37 1 < U       | 0.3B 1 < U       | 0.37 1 < U       | 0.37 i < U       | 4 1 < U          | 0.341 1 < U      | 0.345 t < U      | 0.853 5 U            | 0.868 5 U         | 0.865 5 U             |
| SEMIVOLATILES      | 2-Methylohanol             | 0.37 1 < U       | 0.38 1 < U       | 0.37 1 < U       | 0.37 1 < U       | 4 1 < U          | 0.568 1 < U      | 0.575 i < U      | 0.853 5 U            | 0.868 5 U         | 0.865 5 U             |
| SEMIVOLATILES      | 2-Nitroaniline             | 0.94 f < U       | 0.95 1 < U       | 0.92 f < U       | 0.92 1 < U       | 20 1 < U         | 3.409 1 < U      | 3.448 1 < U      | 4.26 5 U             | 4,34 5 U          | 4.32 5 U              |
| SEMIVOLATILES      | 2-Nitrophenol              | 0.37 1 < U       | 0.38 1 < U       | 0.37 1 < U       | 0.37 1 < U       | 4 1 e U          | 1.136 1 < U      | 1.149 f 🗸 U      | 0.853 5 U            | 0.868 5 U         | 0.865 5 U             |
| SEMIVOLATILES      | 3,3'-Dichlorobenzidine     | 0.37 1 < U       | 0.38 1 < U       | 0.37 f < U       | 0.37 t < U       | 8.1 1 < U        | 0.568 1 < U      | 0,575 î < U      | 1.71 5 U             | 1,74 5 U          | 1.73 5 LI             |
| SEMIVOLATILES      | 3-Nitroaniline             | 0.94 1 < U       | 0,95 1 < U       | 0.92 1 < U       | 0.92 1 < U       | 20 1 < U         | 3.409 t < U      | 3.448 1 c U      | 4.26 5 U             | 4.34 5 U          | 4.32 5 U              |
| SEMIVOLATILES      | 4,5-Dinitro-2-methylphenol | 0.94 1 < U       | 0.95 1 < U       | 0,92 1 < U       | 0.92 1 < U       | 20 1 < U         | 5.682 1 < U      | 5.747 1 < U      | 4.26 5 U             | 4.34 5 U          | 4.32 5 U              |
| SEMIVOLATILES      | 4-Bromophenyl phenyl ether | 0.37 i < U       | 0.38 t < U       | 0.37 i < U       | 0.37 1 < U       | 4 1 < U          | 1.136 f < U      | 1.149 1 < U      | 0.853 5 U            | 0.868 5 U         | 0.865 5 U             |

### Data Evaluation Report

### Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



 Table 3-120

 Concentrations of Chemicals in Soil Samples Associated with WR Sump 014

.

| SUMP1 = WRSUMP014 |                             |                  |                   |                  | •                |                    | •                |                  |                  |                   |                  |
|-------------------|-----------------------------|------------------|-------------------|------------------|------------------|--------------------|------------------|------------------|------------------|-------------------|------------------|
| LOCATION_CODE     |                             | 3585801          | 3585801           | 358\$801         | 358\$801         | LHS-3-30           | LH-WRS14-01      | LH-WRS14-01      | WR\$014-\$801    | WRS014-SB01       | WRS014-SB01      |
| SAMPLE_NO         |                             | 35BSB01(0-0_5)   | 358\$801(0-0_5)QC | 358SB01(1-3)     | 35BSB01(3-5)     | LHS-3-30           | LH-WRS14-01_1    | LH-WR\$14-01_2   | WRS014-SB01-01   | WRS014-S801-01-QC | WR5014-S801-01   |
| SAMPLE_DATE       |                             | 7/27/1998        | 7/27/1998         | 7/27/1998        | 7/27/1998        | 1/11/1995          | 6/26/1993        | 6/26/1993        | 9/14/2005        | 9/14/2006         | 9/14/2006        |
| DEPTH             |                             | 05 F1            | 05 Ft             | 1 - 3 FI         | 3 5 Ft           | 0 - ,5 FI          | .5 - 1.5 Ft      | 3 - 3.5 FI       | 0.5 - 1.5 FI     | 0.5 - 1.5 F1      | 0.5 • 1.5 Ft     |
| SAMPLE_PURPOSE    |                             | REG              | FO                | 9EG              | REG              | REG                | REG              | REG              | REG              | FD                | REG              |
| Test Group        | Parameter (Units = mg/kg)   | Result DIL LO VO | Result DIL LO VO  | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO   | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO  | Result DIL LO VO |
| SEMIVOLATILES     | 4-Chloro-3-methylphenol     | 0.37 1 < U       | 0.3B 1 < U        | 0.37 1 < U       | 0.37 1 < U       | 41 < U             | 0.568 1 < U      | 0.575 1 < U      | 0.853 S U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | 4-Chloroanlline             | } 0.37 1 < U     | 0.38 1 < U        | 0.37 1 < U       | 0.37 1 < U       | 4 1 < U            | 9.409 1 < U      | 3.448 1 < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | 4-Chlorophenyl phenyl elher | 0.37 i < U       | 0.38 1 < U        | 0,37 1 < U       | 0.37 1 < V       | 41 < Ü             | 1.136 1 < U      | 1.149 1 < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | 4-Methylphenol              | 0.37 1 < U       | 0.38 1 < U        | 0.37 1 < U       | 0.37 1 < U       | 41 < U             | 0.568 1 < U      | 0.575 1 < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | 4-Nitroanillne              | 0.94 1 < U       | 0.95 ) < U        | 0.92 1 < U       | 0.92 1 < U       | 20 1 < U           | 5.682 1 < U      | 5.747 1 < U      | 4.26 5 U         | 4.34 5 U          | 4.32 5 U         |
| SEMIVOLATILES     | 4-Nitrophenol               | 0.94 1 < R       | Q.95 1 < 위        | 0,92 1 < R       | . 0.92 1 < R     | 20 1 < U           | 5.682 1 < U      | 5.747 1 < U      | 4.26 5 U         | 4.34 5 0          | 4.32 5 U         |
| SEMIVOLATILES     | Acenaphihene                | 0.37 1 < U       | 0.38 1 < U        | 0.37 1 < U       | 0.37 1 < U       | 4 1 < U            | 0.341 t < U      | 0.345 1 < U      | 0.853 5 U        | 0.868 5 0         | 0.865 5 0        |
| SEMIVOLATILES     | Acenaphihylene              | 0.37 1 < U       | 0.38 1 < U        | 0.37 f < U       | 0.37 1 < U       | 4 1 < U            | 0.568 ( < U      | 0.575 1 < U      | 0.853 5 0        | 0.868 5 U         | 0.802 5 0        |
| SEMIVOLATILES     | Anthracene                  | 0.37 1 < U       | 0.38 1 < U        | 0.37 1 < U       | 0.37 1 < U       | 41 < 0             | 0.568 1 < U      | 0.575 1 < 0      | 0,853 5 0        | 0.858 5 0         | 0.863 5 0        |
| SEMIVOLATILES     | Benzo(a)anihracene          | 0.42 1           | 0.44 1            | 0.37 I < U       | 0.37 1 < U       | 4 1 < U            | 0.341 1 < U      | 0,345 1 < 0      | 0.853 5 0        | 0.865 5 0         | 0.000 0 0        |
| SEMIVOLATILES     | Senzo(a)pyrens              | 0.39 1           | 0.41 1            | 0,18 1 < U       | 0.18 1 < U       | 41 < U             | 0.568 1 < U      | 0.575 1 < 0      | 0.853 5 U        | 0.665 5 0         | 0.003 0 0        |
| SEMIVOLATILES     | Benzo(b)#uoranthene         | 0.53 1           | 0.58 1            | 0.37 1 < 0       | 0.37 1 < U       | 4 1 < U            | 1.136 1 2 0      | 1.149 1 < U      | 0.853 5 0        | 0,000 5 0         | 0.000 5 0        |
| SEMIVOLATILES     | Benza(ghl)perylena          | 0.25 I J         | Q.28 1 J          | 0,37 1 < U       | 0.37 1 < U       | 41 < U             | 2.273 1 4 0      | 2.259 1 < U      | 0.633 5 0        |                   | 0.00.0           |
| SEMIVOLATILES     | Benzo(k)íluoranthene        | 0.37 1 < 0       | 0.38 f < U        | 0.37 1 < U       | 0.37 1 < U       | 41 < 0             | 1.135 1 < 0      | 1,149 1 < U      | 436 6 11         | 424 5 1           | 432 5 1          |
| SEMIVOLATILES     | Benzoic Acid                | 0.94 1 < U       | 0.95 \$ < 1       | 0.92 1 < 0       | 9.92 1 ¢ U       | 201 < 0            |                  |                  | 4.60 3 U         | 4.34 5 U          | 0.855 5 11       |
| SEMIVOLATILES     | Benzyl Alcohol              | 0.94 1 < U       | 0.95 1 < U        | 0.92 1 < 0       | 0.92 1 < 0       | 4 3 < 0            | A                | 0.575 ( , 1)     | 0.000 5 0        | 0,008 5 U         | 0.000 5 0        |
| SEMIVOLATILES     | bis(2-Chloroethoxy)methane  | 0.37 1 < U       | 0.38 1 < U        | 0.37 t < U       | 0.37 1 < 0       | 41 < U             | 0.568 1 < 0      | 0.575 1 4 0      | 0.853 5 0        | 0.868 5 U         | 0.865 5 11       |
| SEMIVOLATILES     | bis(2-Chloroethyl)ether     | 0.37 1 < 0       | 0.36 1 < 0        | 0.37 ( < 0       | 0,37 I < U       | 4 1 < U            | 0.306 1 4 0      | 1140 1 4 11      | 0.050 5 0        | 0.868 5 N         | 0.865 5 11       |
| SEMIVOLATILES     | bis(2-Chloroisopropyi)elher | 0.37 1 < 0       | 0.38 1 < 0        | 0.37 1 < 0       | 0.37 1 < 1/      | 046 1 1            | 0.125 1 1        | 0.126 1          | 0,853 5 11       | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | bis(2-Ethylnexyl)phthalate  | 0.37 1 < U       | 0.38 1 < 0        | 0.37 1 < U       | 0.37 1 < 0       | 0.00 0 0           | 0.125 1 2        | 0,720 1 0        | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | Butyi benzyi prinalare      | 0.37 1 < U       | 0.38 1 < 0        | 0.37 FC U        | 0.37 1 4 0       | 4 4 6 0            | (136 1 4 1       | 1149 1 2 1       | 0.050 0 0        |                   |                  |
| SEMIVOLATILES     | Carbazole                   | 0.37 ) < 0       | 0.38 1 2 0        | 0.37 1 2 0       | 0.37 1 4 10      | 4 1 A IL           | 56B2 1 × 11      | 5747 1 c U       | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVULATILES     | Citrysene                   | 0.45 1           | 0.90              | 0.27 1 4 11      | 0.37 1 < 0       | 4 1 4 1            | 2 273 1 < 1      | 2299 i z U       | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | Dibenzo(a,n)ammacene        | 0,37 1 4 11      | 0.36 1 4 0        | 0,37 1 4 19      | 0.37 1 4 1       | 4 1 2 1            | 1 196 t < 11     | 1149 1 4         | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | Diothyl obthalate           |                  | 0.30 ( ( )        |                  | 0.37 1 < 1       | 41 2 1             | 0.568 1 < U      | 0.575 1 < U      | 0.853 5 U        | 0.668 5 U         | 0.865 5 U        |
| CEMINOLATILES     | Dimethul obtholoto          |                  | 0,38 1 < 1        | 0.37 1 - 1       | 0.37 1 4 1       | 4 1 2 1            | 0.568 1 < U      | 0.575 1 < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | di-o-Bubi oblaziate         | 0.37 1 4 11      | 0.35 1 < 0        | 0.37 1 4 11      | 0.37 1 4 1       | 6164               | 2.148 1          | 5.782 1          | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | din-Octyl phihalate         | 0.37 1 4 1       | 0.38 1 < 11       | 0.37 1 < U       | 0.37 1 < U       | 4 1 < U            | 0.568 1 < U      | 0.575 1 < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | Fluoranthene                | 0.76 1           | 0.8 1             | 0.37 1 < U       | 0.37 1 < U       | 4 1 <del>-</del> U | 0.568 1 < U      | 0.575 1 < U      | 0,853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | Fluotene                    | 0.37 1 < U       | 0.38 1 < U        | 0.37 1 < U       | 0.37 1 < U       | 4 1 < U            | 0.568 1 < U      | 0.57\$ 1 < U     | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | Hexachlorobenzene           | 0.19 1 K U       | 0.19 1 < U        | 0.18 1 < U       | 0.18 1 < U       | 41 < U             | 1.136 1 < U      | 1.149 1 < U      | 0,853 5 U        | 0,869 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | Hexachlorobuladiene         | 0.37 1 < U       | 0.38 1 < U        | 0.37 1 < U       | 0.37 1 < U       | 41 < U             | 3.409 1 < U      | 3,448 1 < U      | 0.853 5 U        | 0.868 5 U         | 0.665 5 U        |
| SEMIVOLATILES     | Hexachlorocyclopentadiene   | 0.37 1 < U       | 0.38 1 < U        | 0.37 1 < U       | 0.37 1 < U       | 41 < U             | 3.409 1 < U      | 3.448 1 < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | Hexachloroethane            | 0.37 1 < U       | 0.38 I < U        | 0.37 1 < U       | 0.37 i < U       | 4 1 < U            | 1,136 1 < U      | f,149 1 < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | Indeno(1.2.3-cd)oyrene      | 0.35 1 J         | 0.37 1 J          | 0.37 1 < U       | 0.37 i < U       | 41 < U             | 1.136 1 < U      | 1,149 t < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | isophorone                  | 0.37 1 e U       | 0.38 1 < U        | 0.37 1 < U       | 0.37 1 < U       | 41 < U             | 0.568 1 < U      | 0.575 t < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | Naphihalene                 | 0.37 f < U       | 0.38 1 < U        | 0.37 1 < U       | 0.37 1 < U       | 4 1 < U            | 0,341 1 < U      | 0.345 1 < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | Nitrobenzene                | 0.37 1 < U       | 0.38 f < U        | 0.37 1 < U       | 0.37 1 < U       | 4 1 < U            | 0.568 1 < U      | 0.575 1 < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | n-Nitrosodimethylamine      | 0.37 1 < U       | 0.38 t < 신        | 0.37 t < U       | 0.37 1 < U       |                    |                  |                  |                  |                   |                  |
| SEMIVOLATILES     | n-Nitroso-di-n-propylamine  | 0.37 I < U       | 0.38 t < U        | 0.37 t < U       | 0.37 1 < U       | 4 1 < U            | 1,136 t < U      | 1.149 1 < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | n-Nitrosodiphenylamine      | 0.37 1 < U       | 0.38 t < U        | 0.37 1 < U       | 0.37 1 < U       | 4 i < U            | 0,568 1 < Ų      | 0.575 1 < U      | 0.853 5 U        | 0.866 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | Pentachlorophenol           | 0.19 1 < U       | 0.19 1 < U        | 0.18 1 < U       | 0.18 1 < U       | 20 1 < U           | 5,682 1 < U      | 5.747 1 < U      | 4.26 5 U         | 4.34 5 U          | 4.32 5 U         |
| SEMIVOLATILES     | Phenanthrene                | 0.37 1 J         | 0.45 1            | 0.37 1 < U       | 0.37 1 < U       | 41 < U             | 0.568 1 < U      | 0.575 1 < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 U        |
| SEMIVOLATILES     | Phenol                      | 0.37 1 < U       | 0.38 1 × U        | 0.37 1 < U       | 0.37 1 < U       | 4 1 < U            | 0.568 1 < U      | 0.575 f < U      | 0.853 5 U        | 0.868 5 U         | 0.865 S U        |
| SEMIVOLATILES     | Pyrene                      | 0.56 1           | 0.62 1            | 0.37 I < U       | 0.37 i < U       | 41 < U             | 0.568 1 < U      | 0,575 1 < U      | 0.853 5 U        | 0.868 5 U         | 0.865 5 0        |
| VOLATILES         | 1.1.1.2-Tetrachloroethane   | 0.0056 1 < U     | 0.0057 f < U      | 0.0056 1 < U     | 0.0056 1 < U     | 0.012 1 < U        |                  |                  | 0.00443 1 U      | 0,00532 1 0       | 0.00606 1 0      |
| VOLATILES         | 1,1,1-Trichloroethane       | 0.0056 1 < U     | 0,017 I J         | 0.0056 I < U     | 0.0056 1 < U     | 0.005 1 < U        | 0.006 1 < U      | 0.006 1 < U      | 0.00443 1 U      | 0.00532 1 U       | 0.00505 1 0      |
| VOLATILES         | 1.1.2.2-Tetrachloroethane   | 0.0056 1 < U     | 0.0057 1 < U      | 0.0056 t < U     | 0.0056 1 < U     | 0.006 1 < U        | U.006 1 < U      | 0,006 1 < U      | 0.00443 1 U      | 0.00532 1 0       | 0.00505 1 0      |
| VOLATILES         | 1,1,2-Trichloroethane       | 0.0056 I < U     | 0.0057 I < U      | 0.0056 t < U     | 0.0056 1 < U     | 0.006 t < U        | 0.005 1 < 0      | U.005 1 < U      | 0,00443 1 U      | 0.00002 1 U       | 0.00000 1 0      |
| VOLATILES         | 1,1-Dichloroethane          | 0.0056 1 < U     | 0.0057 1 < U      | 0.0056 i < U     | 0.0056 1 < U     | 0.006 1 < U        | 0.006 1 < U      | 0.005 1 < U      | 0,00443 1 0      | 0.00532 1 0       | 0.00000 V U      |
| VOLATILES         | 1,1-Dichloroelhene          | 0.0056 1 < U     | 0.0057 1 < U      | 0.0056 1 < U     | U.0055 1 < U     | 0.006 1 < U        | 0.006 1 < U      | 0.005 1 < U      | 0.00443 1 U      | 0.00032 1 0       |                  |
| VOLATILES         | 1,1 Dichloropropene         | 0.0056 1 < U     | 0.0057 1 < U      | 0.0056 1 < 0     | 0.0056 Y < U     |                    |                  |                  | 0.00443 1 U      | 0.0032 1 0        | 0.00000 1 0      |
| VOLATILES         | 1.2.3-Trichlorobenzene      | 0.0056 1 < U     | 0.0057 1 < U      | 0.0056 1 < U     | 0.0056 1 < U     | A 714 A            |                  |                  | 0.00443 1 U      | 0.00032 1 0       | 0.00000 1 0      |
| VOLATILES         | 1,2,3-Trichloropropane      | 0.017 \$ < U     | 0.017 f < U       | 0.017 1 < U      | 0.057 5 4 U      | 0.012 1 ≤ 0        |                  |                  | 0.00443 1 0      | 0.00004 1 0       | 0.00000 1 0      |
| VOLATILES         | 1,2,4-1 nchlorobenzene      | 0.0056 1 4 U     | 0.0057 F < U      | 0.0056 1 < U     | 0.0056 1 < 0     |                    |                  |                  | 0.00443 1 0      | 0,00332 1 0       | 0.00000 1 0      |
| VULATILES         | 1,2,4-1 nmainyibeozena      | 0.0000 T < U     | 0.0057 T < Q      | 0.0000 1 < 0     | 0.0058 1 < Q     |                    |                  |                  | 0.00440 / 0      | 910000B           |                  |



Table 3-120 Concentrations of Chemicals in Soli Samples Associated with WR Sump 014

| [SUMP] = WRSUMP014 |   |                |                  |                     | 200.000            | 1 89-2-20        | LHWRS14-01       | LH-WRS14-01       | WRS014-SB01      | WRS014-SB01       | WR\$014-S801     |
|--------------------|---|----------------|------------------|---------------------|--------------------|------------------|------------------|-------------------|------------------|-------------------|------------------|
| LOCATION _CODE     |   | 3585801        | 3585801          | 3553507             | 3605001(3.5)       | 1 HS-3-30        | LH-WBS14-01_1    | LH-WRS14-01_2     | WRS014-S501-01   | WRS014-SB01-01-QC | WRS014-SB01-01   |
| SAMPLE_NO          |   | 3585801(0-0_5) | 3585801(0-0_5)00 | 3585801(1-3)        | 7/07/1 000         | 1/11/1995        | 6/26/1993        | 6/26/1993         | 9/14/2006        | 9/14/2006         | 9/14/2006        |
| SAMPLE_DATE        |   | 7/27/1998      | 112111988        | 1/2//1990           | 3.5 Ft             | 0 . 5 Ft         | .5 - 1.5 FI      | 3 - 3.5 Ft        | 0.5 • 1.5 Ft     | 0.5 - 1.5 FI      | 0.5 - 1.5 Ft     |
| DEPTH              |   | 0 · .5 FI      | U5 F1            | PEG                 | REG                | REG              | REG              | REG               | REG              | FD                | REG              |
| SAMPLE_PURPOSE     |   | HEG            |                  |                     | Result Dill 10 VO  | Result DIL LO VQ | Result DIL LO VO | Result Dil. LO VO | Result DIL LO VO | Result DIL LQ VO  | Result DIL LO VO |
| Test Group         | Parameter (Units = mg/kg)                             | RESULTIE LO VO |                  | DOLL 1 C H          | 0.011 1 < 0        | 0.025 1 < U      |                  |                   | 0.00443 1 U      | 0.00532 1 U       | 0.00606 t U      |
| VOLATILES          | 1.2-Dibromo-3-chloropropane                           | 0.011 1 < 0    |                  | 0.011 1 4 0         | 0.055 1 <b>∠</b> U | 0.025 1 < U      |                  |                   | 0.00443 1 U      | 0.00532 t U       | 0.00506 1 U      |
| VOLATILES          | 1,2-Dibromosthane                                     | 0.0056 1 2 0   |                  | 0.0056 1 < 1        | 0.0056 1 < U       |                  |                  |                   | 0.00443 1 U      | 0,00532 1 U       | 0,00806 1 0      |
| VOLATILES          | 1.2-Dichlorobenzene                                   |                | 0.0057 1 < 1     | 0.0056 1 < U        | 0.0056 1 < V       | 0.006 1 < U      | 0.006 1 < V      | 0.006 1 < U       | 0.00443 1 U      | 0.00532 1 U       | 0.00605 1 U      |
| VOLATILES          | 1,2-Dichloroeinane                                    | 0.0000 1 2 0   | 0.0001           |                     |                    | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U       |                  |                   |                  |
| VOLATILES          | 1.2-Dichiordanene                                     | 0.0056 1 4 11  | 0.0057 1 < U     | 0.0056 1 < U        | 0.0056 1 < U       | 0,006 1 < U      | 0.006 1 < U      | 0.006 f < U       | 0.00443 1 U      | 0.00532 1 U       | 0.00505 1 U      |
| VOLATILES          | 1,2-Dignioropropane<br>1,2 Dignibultenange (n.Yulono) | 0.0030 1 2 0   | 0.000            |                     |                    |                  |                  |                   | 0.00443 1 U      | 0.00532 1 U       | 0.00506 1 0      |
| VOLATILES          | 1.2-Dimetryiberzena (orkylena)                        | 0.0056 1 < U   | 0.0057 1 < U     | 0.0056 1 < V        | 0.0056 1 < U       |                  |                  |                   | 0.00443 1 U      | 0.00532 1 U       | 0.00006 1 0      |
| VOLATILES          | 1.3.5-TrimearyiDenzene                                | 0.0056 1 c U   | 0.0057 1 < U     | 0.0056 i < U        | 0.0056 1 < U       |                  |                  |                   | 0,00443 1 U      | 0.00532 1 0       | 0,00000 1 0      |
| VULATILES          | 1.3 Ochlaroppano                                      | 0.0055 1 c U   | 0.0057 t < U     | 0.0056 1 < U        | 0.0056 1 < U       |                  |                  |                   | 0.00443 1 U      | 0,00632 1 0       | 0.00000 0        |
| VOLATILES          | 1 A.Dichloro-2-huten                                  | 0.0056 1 < U   | 0.0057 1 < U     | 0.0056 1 < U        | 0.0056 1 < U       |                  |                  |                   |                  |                   | 0.000000 1 I I   |
| VOLANLES           | 1 4-Dichlorobenzene                                   | 0.0056 1 < U   | 0.0057 1 < U     | 0.0056 1 < U        | 0.0056 1 < U       |                  |                  |                   | 0,00088 1 J JF   | 0.00103 1 3       | 0.000000 0 0 0   |
| VOLATILES          | 1.4-Diovage   | 1.1 1 < U      | 1,1 1 < U        | 1.1 1 < U           | 1,1 1 < U          |                  |                  |                   |                  | A 000000 1 11     | 0.00606 1 11     |
| VOLATILES          | 2.2-Dichloronropane                                   | 0.017 1 < U    | 0.017 1 < U      | 0.017 1 < U         | 0.017 1 < U        |                  |                  |                   | 0.00443 1 0      | 0.00552 1 0       | 0.0121 1 11      |
| VOLATILES          | 2-Bulanne   | 0.022 1 < U    | 0.023 1 < U      | 0.022 1 < U         | 0.022 1 < U        | 0.012 1 < U      | 0.11 1 < 0       | 0,057 1 < 0       | 0.00886 1 0      |                   | 0.0121 1 1       |
| VOLATILES          | 2-Chlomethyl vinyl ether                              |                |                  |                     |                    | 0.012 1 < U      |                  |                   | 0.00886 1 0      | 0.0100 0 0        | 0.0021 1 0       |
| VOLATILES          | 2-Chlorotoluena                                       | 0.0056 1 < U   | 0.0057 t < U     | 0.0056 1 < U        | 0.0055 t < U       |                  |                  |                   | 0.00443 1 U      | 0.00002 1 0       | 0.0121 1 1       |
| VOLATILES          | 2-Hexanone  | 0.022 1 < U    | 0.023 1 < U      | 0.022 t < U         | 0.022 1 < U        | 0.012 1 < U      | 0.056 1 < U      | 0.057 1 < 0       | 0.00698 1 0      |                   | 0,0101           |
| VOLATILES          | 2-Propenal  | 0.11 1 < U     | 0.11 1 < U       | 0.11 1 < U          | 0.11 1 < U         | 0,62 1 < U       |                  |                   | 0.00449 1 11     | 0.00592 3 1       | 0.00605 1 U      |
| VOLATILES          | 4-Chlorololuene                                       | 0.0056 t < U   | 0.0057 1 < U     | 0.0056 1 < U        | 0.0056 1 < U       |                  |                  | 0.001             | 10,00445 I U     | 1 0.0506 1 15 UE  | 0.0121 1 U U     |
| VOLATILES          | Acelone   | 0.022 1 < U    | 0.023 1 < U      | 0.022 1 < U         | 0.022 i < U        | 0.012 1 < U      | 0.11 1 < 0       | 0.021             | 1.06 50 0 0      | 0.0100 1 0 00     |                  |
| VOLATILES          | Acetonitrile  |                |                  |                     |                    | 0.12 1 < U       |                  |                   |                  |                   |                  |
| VOLATILES          | Acrylonitrile   | 0.11 1 < U     | 0.11 1 < U       | 0.11 1 < U          | 0.11 1 < U         | 0.12 1 < U       |                  |                   |                  |                   |                  |
| VOLATILES          | Allyl chloride  |                |                  |                     |                    | 0.012 1 < 0      | 0.000 / 11       | 0.005 1 - 11      | 0.00443 1 1      | 0.00532 1 U       | 0.00605 1 U      |
| VOLATILES          | Benzene   | 0.0056 1 < U   | 0.0057 1 < U     | 0.0056 1 < U        | 0.0056 1 < U       | $0.005 \ 1 < 0$  | 0.006 < 0        | 0.000 1 4 0       | 0.00443 1 U      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES          | Bromobenzene  | 0.0056 1 < U   | 0.0057 1 < U     | 0.0056 I < U        | 0.0056 1 < U       |                  |                  |                   | 0.00443 1 U      | 0.00532 1 U       | 0.00606 t U      |
| VOLATILES          | Bromochloromelhane                                    | 0.0056 1 < U   | 0.0057 1 < U     | 0.0056 1 < U        | 0.0056 1 < U       | 0.000 1          | 0.006 1 4 11     | 0.006 1 × U       | 0.00443 1 U      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES          | 8:omodichioromethane                                  | 0.0056 i < U   | 0.0057 1 < U     | 0.0056 1 < U        | 0.0055 1 < U       | 0.005 1 < 0      | 0,006 1 4 1      | 0.006 1 < U       | 0.00443 1 U      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES          | Bromolarm   | 0,0056 i < U   | 0.0057 1 < 0     | 0,0056 1 < 0        | 0.0056 1 < 0       |                  | 0.005 1 2 11     | 0.029 1 4 U       | 0.00886 1 U      | 0,0106 1 U        | 0.0121 1 U       |
| VOLATILES          | Bromomethane  | 0.011 1 < U    | 0.011 I < U      | 0.011 1 4 U         | 0.013 1 < 0        | 0.002 1 2 0      | 0.006 1 < U      | 0.006 1 < U       | 0.00443 1 U      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES          | Carbon disullide                                      | 0.0056 1 < U   | 0.0057 1 < U     | 0.0056 1 < 0        |                    |                  | 0.005 1 c U      | 0.006 1 < U       | 0,00443 1 U      | 0.00532 1 U       | 0,00606 1 U      |
| VOLATILES          | Carbon tetrachloride                                  | 0.011 1 < U    | 0,011 1 < U      | 0,011 1 < 0         | 0.0555 1 - 11      | 0.006 1 4 1      | 0.006 1 < U      | 0.006 i < U       | 0.00443 1 U      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES          | Chlorobanzena   | 0.0056 i < U   | 0.0057 1 < U     |                     | 0.0036 1 < 0       | 0.012 1 < 1      | 0.006 1 < U      | 0.029 1 < U       | 0.00886 1 U      | 0.0106 1 U        | 0.0121 1 U       |
| VOLATILES          | Chloroethane  | 0.011 1 4 0    |                  | 0.011 4 4 0         | 0.0056 1 < 1       | 0.006 í < U      | 0.006 1 < U      | 0.006 1 < U       | 0.00443 1 U      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES          | Chloroform  | 0.0056 1 < U   |                  | 0.0036 1 < 0        | 0.011 1 4 U        | 0.012 1 < U      | 0.006 1 < U      | 0.029 1 < U       | 0.00886 1 U      | 0.0106 t U        | 0.0121 1 U       |
| VOLATILES          | Chloromethane   | 0.041 1 2 0    | 0.011 1 4 0      | 0.011               |                    | 0.12 1 < U       |                  |                   |                  |                   |                  |
| VOLATILES          | Chloroprens   | 0.0055 1 - 11  | 0.0057 ( 2 1     | 0.0056 1 <b>∠</b> U | 0.0056 1 < U       |                  |                  |                   | 0.00443 \$ U     | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES          | cis+3.2-Ulcrioroeinene                                | 0.0035 1 4 1   | 0.0057 1 < U     | 0.0056 1 < U        | 0.0056 1 < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < V       | 0.00443 1 U      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES          | cis-1,3-picrio/oproperie                              | 0.0056 1 < 1   | 0.0057 1 < U     | 0.0056 1 < U        | 0.0056 i < U       | 0.006 1 < U      | 0,006 1 < U      | 0.006 1 < U       | 0.00443 1 U      | 0.00532 1 U       | 0.00505 1 U      |
| VOLATILES          | Dipromochiorometrane                                  | 0.011 1 < 1    | 0.011 1 < U      | 0.011 t < U         | 0.011 1 < U        | 0.025 1 < U      |                  |                   | 0.00443 1 U      | 0.00532 1 U       | 0,00606 1 U      |
| VOLATILES          | Dipromomentaria                                       | 0.017 1 < 1    | 0.017 t < U      | 0.017 1 < U         | 0.017 1 < U        | 0.025 1 < U      |                  |                   | 0.00886 1 U      | 0.0106 1 U        | 0.0121 1 0       |
| VOLATILES          | Ethyl mathanailaio                                    | 0.0056 1 < 1   | 0.0057 1 < U     | 0.0056 1 < U        | 0.0056 1 < U       | 0.025 1 < U      |                  |                   |                  |                   |                  |
| VOLATUES           | Ethyl Displaciyisia<br>Ethylbanzoso                   | 0.0056 1 < U   | 0.0057 1 < U     | 0.0056 1 c U        | 0.0056 i < U       | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U       | 0.00443 1 U      | 0.00532 1         | 0.00606 1 U      |
| VOLANLES           | Hexachiemburgdiene                                    | 0.0056 1 × U   | 0.0057 1 < U     | 0.0056 1 < U        | 0.0056 i < U       |                  |                  |                   | 0.00443 1 U      | 0.00532 1 0       | 0.00606 1 0      |
| VOLATILES          | IODOMETHANE   | 0.0056 1 < U   | 0.0057 4 < U     | 0.0056 1 < U        | 0.0056 1 < U       | 0.012 t < U      |                  |                   |                  |                   |                  |
| VOLATIES           |   | 1.1 1 < U      | 1.1 1 < U        | 1,5 1 € U           | 1.1 1 < U          | 2,5 1 < U        |                  |                   |                  |                   | 0.00505 1 11     |
| VOLATILES          | Isonrovibenzene                                       | 0.0056 f < U   | 0.0057 1 < U     | 0.0056 1 < U        | 0.0056 t < U       |                  |                  |                   | 0.00443 1 U      | 0.00532 1 0       | 0.00000 1 0      |
| VOLATILES          | m.p.Xvienes   |                |                  |                     |                    |                  |                  |                   | 0.00443 t U      | 0.00044 1 0       | 0.00000 1 0      |
| VOLATILES          | Methacrylonitrile                                     | 0,11 1 < U     | 0.11 1 < U       | 0.11 1 < U          | 0,11 1 < V         | 0.025 1 < U      |                  |                   |                  | 0.0105 1 11       | 0.0121 1 11      |
| VOLATILES          | Melhyl isobutyl kelone                                | 0.022 1 < U    | 0.023 1 < U      | 0.022 1 < U         | 0.022 1 < U        | 0.012 1 < U      | 0,055 1 < U      | 0.057 1 < U       | 0.00686 1 0      | 0.0100 1 0        |                  |
| VOLATILES          | METHYL METHACRYLATE                                   | 0.056 i < U    | 0.057 1 < U      | 0.055 i< U          | 0.055 i < U        | 0.025 1 < U      |                  |                   | 0.00445 5 17     | 0.00532 1         | 0.00606 1 U      |
| VOLATILES          | Mathylens chloride                                    | 0.0056 i < U   | 0.0057 I < U     | 0,0056 1 < U        | 0.0056 1 < U       | 0.006 1 < V      | 0.006 i < U      | 0.005 1           | 0.00943 1 0      | IH 0.0106 1 (I    | 0.0121 1 1       |
| VOLATILES          | Naphthalene   | 0.0056 1 < U   | 0.0057 1 < U     | 0.0056 1 < U        | 0.0056 1 < U       |                  |                  |                   | 0.00043 1 1      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES          | n-BUTYLBENZENE  | 0.0056 1 < U   | 0.0057 1 < U     | 0.0056 1 < U        | 0.0056 1 < U       |                  |                  |                   | 0.00443 ( 1)     | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES          | n-PROPYLBENZENE                                       | 0.0056 t < U   | 0.0037 1 < U     | 0.0055 1 < U        | 0,0056 t < U       |                  |                  |                   | 0.00000          |                   |                  |
| VOLATILES          | Pentachloroelhane                                     | 0.011 1 < U    | 0,011 î < U      | 0.011 1 < U         | 0.011 1 < 0        | 0.025 1 < 0      |                  |                   |                  |                   |                  |

Data Evaluation Report Chemical Concentrations in Soli Associated with LHAAP-35/38 Sumps



Table 3-120 Concentrations of Chemicals in Soil Samples Associated with WR Sump 014

| LOCATION, CODE         3585801         3585801         3585801         LH-WR514-01         LH-WR514-01         WR5014-S801         WR5014-S801         WR5014-S801           SAMPLE_NO         3585801(0-0_1)         3585801(0-0_1)         3585801(0-0_1)         3585801(0-0_1)         LH-WR514-01_1         LH-WR514-01_2         WR5014-S801 <t< th=""><th>(SUMP) = WRSUMPO14</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<> | (SUMP) = WRSUMPO14 |                             |                  |                  |                  |                  |                  |                  |                  |                  |                   |                  |
|--|--------------------|-----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|
| SAMPLE_DATE         3585801/0_6_15         3585801/0_6_15         3585801/0_6_15         UH3-340         UH3-340         UH4751401_1         UH4751401_2         WH5014-5801-01-0         WH5014-5801-01-0C         WH5014                             | LOCATION _CODE     |                             | 358\$801         | 35BSB01          | 35BSB01          | 35BSB01          | LHS-3-30         | LH-WR\$14-01     | LH-WRS14-01      | WRS014-S801      | WAS014-SE01       | WRS014-SB01      |
| SAMPLE_DATE       T2711988       T2711988       T2711988       T2711988       T2711988       T111195       62211933       62211933       62211933       9142005       91   | SAMPLE_NO          |                             | 35B\$B01(0-0_5)  | 35BSB01(0-0_5)OC | 35B\$B01(1-3)    | 35BSB01(3-5)     | LHS-3-30         | LH-WRS14-01_1    | LH-W9514-01_2    | WRS014-SB01-01   | WRS014-SB01-01-OC | WRS014-SB01-01   |
| DEPTH       0.5ft       1.9fl       3.5fl       0.5fl       5.15fl       3.35fl       0.5.15fl  | SAMPLE_DATE        |                             | 7/27/1998        | 7/27/1998        | 7/27/1998        | 7/27/1998        | 1/11/1995        | 6/26/1993        | 6/26/1993        | 9/14/2006        | 9/14/2006         | 9/14/2005        |
| SAMPLE       FBG       FD       REG <th< td=""><td>DEPTH</td><td></td><td>05 Ft</td><td>05 Ft</td><td>1 - 3 FL</td><td>3 - 5 Ft</td><td>0 + .5 FI</td><td>.5 - 1.5 Ft</td><td>3 - 3.5 FI</td><td>0.5 - 1.5 FI</td><td>0.5 - 1.5 Ft</td><td>0.5 - 1.5 Ft</td></th<>   | DEPTH              |                             | 05 Ft            | 05 Ft            | 1 - 3 FL         | 3 - 5 Ft         | 0 + .5 FI        | .5 - 1.5 Ft      | 3 - 3.5 FI       | 0.5 - 1.5 FI     | 0.5 - 1.5 Ft      | 0.5 - 1.5 Ft     |
| Test Group         Parameter (Units = mg/kg)         Result DIL         LO         VO         Result DIL         VO         Result DIL         LO         VO         Result DIL         LO         VO         Result DIL         LO         VO   | SAMPLE_PURPOSE     |                             | REG              | FD               | REG              | REG              | REG              | REG              | REG              | REG              | FD                | REG              |
| VOLATILES       piSOPAOPVTOLUENE       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1   | Test Group         | Parameter (Units = mg/kg)   | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LO VQ  | Result DIL LQ VQ |
| Propendifie       0.11       1       V       0.11       1       V       0.011       1       V       0.062       1       V       0.066       1       V       0.0066  | VOLATILES          | p-ISOPROPYLTOLUENE          | 0.0056 1 < U     | 0.0057 1 < U     | 0.0056 1 < U     | 0.0056 1 < U     |                  |                  |                  | 0.00785 1 JH     | 0.00532 1 U UJ    | 0.00606 1 U UJ   |
| VOLATILES       sec-BUTYLBENZENE       0.0056       1       V       0.0057       1       V       0.0056       1       V <t< td=""><td>VOLATILES.</td><td>Propionitale</td><td>0.11 1 &lt; U</td><td>0.11 1 &lt; U</td><td>0,11 1 &lt; U</td><td>0.11 1 &lt; U</td><td>0.062 1 &lt; U</td><td></td><td></td><td></td><td></td><td></td></t<>  | VOLATILES.         | Propionitale                | 0.11 1 < U       | 0.11 1 < U       | 0,11 1 < U       | 0.11 1 < U       | 0.062 1 < U      |                  |                  |                  |                   |                  |
| VOLATILES       Styrene       0.0056       1       V       0.0057       1       V       0.0056<   | VOLATILES          | SEC-BUTYLBENZENE            | 0.0056 1 < U     | 0,0057 1 < U     | 0.0056 1 < U     | 0.0056 1 < U     |                  |                  |                  | 0.00443 1 U      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES       Inf-BUTYLENZENE       0.0056       1       U <th< td=""><td>VOLATILES</td><td>Styrene</td><td>0.0056 1 &lt; U</td><td>0.0057 1 &lt; U</td><td>0.0056 1 &lt; U</td><td>0.0056 t &lt; U</td><td>0.005 1 &lt; U</td><td>0.006 1 &lt; U</td><td>0.006 1 &lt; U</td><td>0.00443 1 U</td><td>0.00532 1 U</td><td>0.00606 1 U</td></th<>  | VOLATILES          | Styrene                     | 0.0056 1 < U     | 0.0057 1 < U     | 0.0056 1 < U     | 0.0056 t < U     | 0.005 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.00443 1 U      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES       Tetrachlorosethene       0.0056       1       U  | VOLATILES          | Ind BUTYLBENZENE            | 0.0056 t < U     | 0.0057 1 < U     | 0.0056 1 < U     | 0.0056 1 < U     |                  |                  |                  | 0,00443 1 U      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES       Toluene       0.0056       1       V       0.0057       1       V       0.0056       1       V       0.005       1       V       0.0056       1       V       0.0056       1       V       0.0056       1       V       0.0056       1       V       0.0056       1       V       0.0056       1       V       0.0056       1       V       0.0056 </td <td>VOLATILES</td> <td>Tetrachloroethene</td> <td>0.0056 1 &lt; U</td> <td>0.0057 1 &lt; U</td> <td>0.0055 1 &lt; U</td> <td>0.0056 1 &lt; U</td> <td>0.006 1 &lt; U</td> <td>0.006 1 &lt; U</td> <td>0.006 1 &lt; U</td> <td>0.00443 1 U</td> <td>0.00532 1 U</td> <td>0.00605 1 U</td>   | VOLATILES          | Tetrachloroethene           | 0.0056 1 < U     | 0.0057 1 < U     | 0.0055 1 < U     | 0.0056 1 < U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.00443 1 U      | 0.00532 1 U       | 0.00605 1 U      |
| VOLATILES       Itans-1,2-Dichloroethene       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.0066       1 < U       0.0  | VOLATILES          | Toluene                     | 0.0056 1 < U     | 0.0057 + < U     | 0.0056 1 < U     | 0.0056 1 < U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.00443 1 U      | 0.00532 1 U       | 0.00605 1 U      |
| VOLATILES       trans-1.3-Dickloropropene       0.0056       1 < U       0.0055       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.0056       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.006       1 < U       0.0066       1 < U       0.006 </td <td>VOLATILES</td> <td>trans-1,2-Dichloroethene</td> <td>0.0056 1 &lt; U</td> <td>0.0057 i &lt; U</td> <td>0.0056 1 &lt; U</td> <td>0.0056 1 &lt; U</td> <td></td> <td></td> <td></td> <td>0.00443 1 U</td> <td>0.00532 1 U</td> <td>0.00606 1 U</td>   | VOLATILES          | trans-1,2-Dichloroethene    | 0.0056 1 < U     | 0.0057 i < U     | 0.0056 1 < U     | 0.0056 1 < U     |                  |                  |                  | 0.00443 1 U      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES       trans-1.4-Dichloro-2-butene       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.012       1 < U       0.006       1 < U       0.016       1 U       0.0161       1 U       0.0111       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011       1 < U       0.011  | VOLATILES          | trans-1,3-Dichloropropane   | 0.0056 1 < U     | 0.0057 1 < U     | 0.0056 1 < U     | 0.0056 1 < U     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0,00443 t U      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES       Trichiorogenene       0.011       1       U       0.012       1       U       0.012       1       U       0.012       1       U       0.012       1       U       0.012       1       U       0.012       1       U       0.012       1       U       0.012       1       U       0.012       1       U       0.012       1       U       0.012       1       U       0.012       1  | VOLATILES          | trans-1,4-Dichloro-2-butene |                  |                  |                  |                  | 0.025 1 < U      |                  |                  |                  |                   |                  |
| VOLATILES         Trichlorofluoromethane         0.011         1         U         0.011         1         U         0.011         1         U         0.011         1         U         0.011         1         U         0.011         1         U         0.011         1         U         0.011         1         U         0.011         1         U         0.012         1         U         0.01  | VOLATILES          | Trichloroethene             | 0.011 1 < U      | 0.011 1 < U      | 0.011 1 < U      | 0.011 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.00443 1 U      | 0.00532 1 U       | 0.00606 1 U      |
| VOLATILES         Vinylacetate         0.022 f < U         0.023 f < U         0.022 f < U         0.022 f < U         0.012 f < U         0.012 f < U         0.018 f U         0.012 f U<  | VOLATILES          | Trichlorofluozomethane      | 0.011 1 < U      | 0.011 1 < U      | 0.011 1 < U      | 0.011 1 < U      | 0.012 1 < U      |                  |                  | 0.00886 1 U      | 0,0106 1 U        | 0.0121 1 U       |
| VOLATILES         Vinyle/Mondel         0.011         1         U         0.011         1         U         0.011         1         U         0.012         1         U         0.023         1         U         0.0121         U         0.010   | VOLATILES          | Vinvi acetate               | 0.022 f < U      | 0.023 1 < U      | 0,022 t < U      | 0.022 1 < U      | 0.012 1 < U      |                  |                  | 0.00886 1 U      | 0.0106 I U        | 0.0121 1 U       |
| VOLAYILES Xylenes, Total 0.0056 1 < U 0.0057 1 < U 0.0056 1 < U 0.0056 1 < U 0.006 1 < U 0.006 1 < U   | VOLATILES          | Vinyl chloride              | 0,011 1 < U      | 0.011 1 < U      | 0.011 1 < U      | 0.011 t < U      | 0.012 1 < U      | 0.005 1 < U      | 0.029 i < U      | 0.00886 1 U      | 0.0106 t U        | 0.0121 1 U       |
|  | VOLATILES          | Xylenes, Total              | 0.0056 t < U     | 0.0057 1 < U     | 0.0056 1 < U     | 0.0056 1 < U     | 0.005 1 < U      | 0.006 1 < U      | 0.006 1 < U      |                  |                   |                  |

Footnotes are shown on cover page to Tables Section.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

## Table 3-121 Concentrations of Chemicals in Soil Samples Associated with WR Sump 015

|  | [SUMP] = WRSUMP015 |  |                                    |                                    |                                     |                                    | 00010400010004                     | ACOUNTRACT ODAS                     |                                    | WOED IN          | 110,5000            | HO6803           | 14 633 01        | 1 4 692.01        | 111 634 03               | 18-534-01                  |
|--|--------------------|--|------------------------------------|------------------------------------|-------------------------------------|------------------------------------|------------------------------------|-------------------------------------|------------------------------------|------------------|---------------------|------------------|------------------|-------------------|--------------------------|----------------------------|
| District          | LOCATION _CODE     |  | 35SUMP033-SB01<br>35-SMP33-SB01-01 | 35SUMP033-SB01<br>35-SMP33-SB01-02 | 35SUMP034-S801<br>35-SMP034-S801-02 | 35SUMP034-SB01<br>35-SMP34-SB01-01 | 35SUMP034-SB07<br>35-SMP34-SB01-0C | 35SUMP034-SB02<br>35-SMP034-SB02-02 | 35SUMP034-SB02<br>35-SMP34-SB02-01 | HOSB03(0-0 5)    | HOSB03(3-5)         | HOSB03(8-10)     | LH-S33-01 1      | LH-S33-01_2       | LH-S34-01_1              | LH-S34-01_2                |
| Image: state | SAMPLE DATE        |  | 9/11/2006                          | 9/11/2006                          | 9/20/2006                           | 9/11/2006                          | 9/11/2006                          | 9/20/2006                           | 9/11/2006                          | 12/4/2000        | 12/4/2000           | 12/4/2000        | 7/21/1993        | 7/21/1993         | 6/25/1993                | 7/10/1993                  |
| box   | DEPTH              |  | 0 -0.5 Ft                          | 4.5 - 5 Ft                         | 4 - 4 Ft                            | 0 - 0.5 Ft                         | 0 - 0.5 Ft                         | 4 - 4 Ft                            | 0 - 0.5 Ft                         | 0 - 0.5 Ft       | 3-5Ft               | 8 - 10 Ft        | 0.5 - 1 Ft       | 3 - 3.4 FI        | 3.5 - 4.5 Ft             | 0.5 - 1.5 Ft               |
| Norm         Problem         Norm         orm        Norm </th <th>SAMPLE_PURPOSE</th> <th></th> <th>REG</th> <th>REG</th> <th>REG</th> <th>AEG</th> <th>FD</th> <th>REG</th> <th>REG</th> <th>REG</th> <th>REG</th> <th>REG</th> <th>REG</th> <th>REG</th> <th>REG</th> <th>REG</th>   | SAMPLE_PURPOSE     |  | REG                                | REG                                | REG                                 | AEG                                | FD                                 | REG                                 | REG                                | REG              | REG                 | REG              | REG              | REG               | REG                      | REG                        |
| Distribution       Distribution <th< th=""><th>Test Group</th><th>Parameter (Units = mg/kg)</th><th>Result DIL LO VO</th><th>Result DIL LO VQ</th><th>Result DIL LQ VO</th><th>2 Result DIL LO VO</th><th>Result DiL LQ VQ</th><th>Result DIL LQ VQ</th><th>Result DfL LQ VQ</th><th>Hesult DIL LO VO</th><th>Hestell DIL LO VQ F</th><th>Result Dil LQ VQ</th><th>Hesult DIL LU VQ</th><th>Hesuit dil Lu Vu</th><th>Hesun DIL LQ VQ</th><th>RESUL DIL LO VO</th></th<>  | Test Group         | Parameter (Units = mg/kg)                    | Result DIL LO VO                   | Result DIL LO VQ                   | Result DIL LQ VO                    | 2 Result DIL LO VO                 | Result DiL LQ VQ                   | Result DIL LQ VQ                    | Result DfL LQ VQ                   | Hesult DIL LO VO | Hestell DIL LO VQ F | Result Dil LQ VQ | Hesult DIL LU VQ | Hesuit dil Lu Vu  | Hesun DIL LQ VQ          | RESUL DIL LO VO            |
|  | EXPLOSIVES         | 1,3,5-1 matrobenzene<br>1 3-Dimitrobenzene   |                                    |                                    | 0.249 1 0                           | 0.238 1 1                          | 0239 1 0                           | 0.248 1 U                           | 0.243 1 U                          |                  |                     |                  |                  |                   |                          |                            |
|  | EXPLOSIVES         | 2.4.6-Trinitrotoluene                        |                                    |                                    | 0.249 1 U                           | 0.238 1 U                          | 0.239 1 U                          | 0.248 1 U                           | 0.243 1 U                          |                  |                     |                  |                  |                   |                          |                            |
| Biology (a)         Biology (b)  | EXPLOSIVES         | 2,4-Dinitrotoluene                           |                                    |                                    | 0.249 1 U                           | 0.238 i U                          | 0.239 1 U                          | 0.248 1 U                           | 0.243 1 U                          |                  |                     |                  | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 |
|  | EXPLOSIVES         | 2,6-Dinitrotoluene                           |                                    |                                    | 0.259 1 U                           | 0.248 1 U                          | 0.249 1 U                          | 0.257 1 U                           | 0.252 1 U                          |                  |                     |                  | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 |
| Bit Condition         Bit Cond   | EXPLOSIVES         | 2-Amino-4,6-dinitrotoluene                   |                                    |                                    | 0.259 1 U                           | 0.248 1 U                          | 0.249 1 U                          | 0.257 1 U                           | 0.252 1 U                          |                  |                     |                  |                  |                   |                          |                            |
| Diverse      | EXPLOSIVES         | 4-Amino-2,6-diratrotoluene                   |                                    |                                    | 0.259 I U<br>219 1 U                | 0.246 I U<br>21 1 Ii               | 2.11 1 1                           | 218 1 11                            | 2.14 1 U                           |                  |                     |                  |                  |                   |                          |                            |
| Below  | EXPLOSIVES         | m-Nitrotolvene                               |                                    |                                    | 0.249 1 U                           | 0.238 1 U                          | 0.239 1 U                          | 0.248 1 U                           | 0.243 1 U                          |                  |                     |                  |                  |                   |                          |                            |
| Bit Disk       Bit Disk <th< th=""><th>EXPLOSIVES</th><th>Nitrobenzene</th><th></th><th></th><th>0.259 1 U</th><th>0.248 1 U</th><th>0.249 1 U</th><th>0.257 1 U</th><th>0.252 1 U</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>   | EXPLOSIVES         | Nitrobenzene                                 |                                    |                                    | 0.259 1 U                           | 0.248 1 U                          | 0.249 1 U                          | 0.257 1 U                           | 0.252 1 U                          |                  |                     |                  |                  |                   |                          |                            |
| Bitter Bit   | EXPLOSIVES         | o-Nitrotoluene                               |                                    |                                    | 0.249 1 U                           | 0.238 1 U                          | 0.239 1 U                          | 0.248 1 U                           | 0.243 1 U                          |                  |                     |                  |                  |                   |                          |                            |
| Biolog         Biolog<  | EXPLOSIVES         | p-Nitrotoluene                               |                                    |                                    | 0.249 1 U                           | 0.238 1 U                          | 0.239 1 U                          | 0.248 1 U                           | 0.243 1 U                          |                  |                     |                  |                  |                   |                          |                            |
| Name         Partial         Na  | EXPLOSIVES         | HDX<br>Tetrul                                |                                    |                                    | 0.995 1 0                           | 0.619 1 1                          | 0.622 1 U                          | 0.644 1 U                           | 0.631 1 U                          |                  |                     |                  |                  |                   |                          |                            |
| Make     Mak     Make     Make     Make    <   | METALS             | Akminum                                      | 6020 1                             | 12100 1                            | 16800 1                             | 11500 1                            | 9410 1                             | 10700 1                             | 10600 1                            |                  |                     |                  | 12600 1          | 11300 1           | 19900 1                  | 9620 1                     |
| Marke       Marke <th< th=""><th>METALS</th><th>Antimony</th><th>0.104 1 U</th><th>0.115 1 U</th><th>0.122 1 U</th><th>0.105 1 U</th><th>0.105 1 U</th><th>0.118 1 U</th><th>0.105 1 U</th><th></th><th></th><th></th><th>3 1 &lt; U</th><th>3 1 &lt; U</th><th>3 1 &lt; U</th><th>31 &lt; U</th></th<>  | METALS             | Antimony                                     | 0.104 1 U                          | 0.115 1 U                          | 0.122 1 U                           | 0.105 1 U                          | 0.105 1 U                          | 0.118 1 U                           | 0.105 1 U                          |                  |                     |                  | 3 1 < U          | 3 1 < U           | 3 1 < U                  | 31 < U                     |
| with a band        | METALS             | Arsenic                                      | 1.54 1 J                           | 2.13 1 J                           | 1.54 1                              | 8.23 1 J                           | 4.31 1 J                           | 5 1                                 | 6.4 1 J                            |                  |                     |                  | 4.4 1            | 2.6 1             | 3.7 1                    | 2.9 1                      |
| BUIL       Opena       Constant       Consta  | METALS             | Bariem                                       | 63.3 1                             | 67.4 1                             | 88.8 1                              | 226 1                              | 201 1                              | 716 1                               | 1170 10                            |                  |                     |                  | 71.2 1 < 0       | 65.1 1 < U        | 95.6 1                   | 778 1                      |
| Bit I       Constrain  | METALS             | Beryllium                                    | 0.314 1 J J                        | 0.97 1                             | 0.826 1                             | 0.468 1                            | 0.421 1                            | 0.512 1                             | 0.599                              |                  |                     |                  | 1101             | 11 < 1            | 11 < U                   | 1 \$ < U                   |
| Normal        | METALS             | Cadmium                                      | 620 1                              | 915 1                              | 1890 1                              | 5140 1                             | 8500 1                             | 3420 1                              | 4100 1                             |                  |                     |                  | 1690 1           | 1900 1            | 669 1                    | 1620 1                     |
| BATLAC       Code, <t< th=""><th>METALS</th><th>Chromium</th><th>11.8 1</th><th>13 1</th><th>24.2 1</th><th>20.2 1</th><th>19.7 1</th><th>19.9 1</th><th>34.5 1</th><th></th><th></th><th></th><th>16.5 1 &lt; U</th><th>15.9 1 &lt; U</th><th>18.4 1</th><th>13.8 1</th></t<>   | METALS             | Chromium                                     | 11.8 1                             | 13 1                               | 24.2 1                              | 20.2 1                             | 19.7 1                             | 19.9 1                              | 34.5 1                             |                  |                     |                  | 16.5 1 < U       | 15.9 1 < U        | 18.4 1                   | 13.8 1                     |
| Mile       One   | METALS             | Cobalt                                       | 3.16 1                             | 8.43 1                             | 5.42 1                              | 3.31 1                             | 3.38 1                             | 4.05 1                              | 3.61 1                             |                  |                     |                  | 3.6 t            | 4.2 1             | 3.29 1                   | 4.3 1                      |
| Barrial       Barria       Barrial       Barrial   | METALS             | Copper                                       | 2.5 1                              | 9.06 1                             | 10.7 1                              | 16.7 1                             | 20 <u>.</u> 2 t                    | 11.9 1                              | 8 <u>.</u> 4t 1                    |                  |                     |                  | 8.7 1            | 8 1               | 5.46 1                   | 4.7 1                      |
| Introde       Mage  | METALS             | tron   | 8570 1                             | 20600 1                            | 33100 5                             | 22100 1                            | 17900 1                            | 21500 1                             | 50000 10                           |                  |                     |                  | 23/00 1          | 83 1              | 20300 I<br>936 1         | 26 1                       |
| Number       No  | METALS             | Lead<br>Magnesium                            | 8.63 1 J                           | 7.37 I J<br>1890 1                 | 923 1                               | 295 100 J                          | 1340 1                             | 1160 1                              | 23.7 t J                           |                  |                     |                  | 898 1            | 704 1             | 1020 1                   | 1300 1                     |
| Image       Marce <th< th=""><th>METALS</th><th>Manganese</th><th>170 1</th><th>20.5 1</th><th>101 1</th><th>131 1</th><th>144 1</th><th>135 1</th><th>196 1</th><th></th><th></th><th></th><th>142 1</th><th>189 1</th><th>37.3 1</th><th>203 1</th></th<>  | METALS             | Manganese                                    | 170 1                              | 20.5 1                             | 101 1                               | 131 1                              | 144 1                              | 135 1                               | 196 1                              |                  |                     |                  | 142 1            | 189 1             | 37.3 1                   | 203 1                      |
| Method       10/1       1       10/1       1       10/2       1       70/2       1       70/2       1       70/2       1       70/2       1       70/2       1       70/2       1       70/2       1       70/2       1       70/2       1       0<  | METALS             | Mercury                                      | 0.0265 1 J J                       | 0.0198 1 J J                       | 0.0319 1 J J                        | 0.0797 1 J                         | 0.0778 1 J J                       | 0.231 1 J J                         | 0.0765 1 J J                       |                  |                     |                  | 0.1 1 < U        | 0.1 t < U         | 0.1 1 < U                | 0.1 1 < U                  |
| Marine       Marin       Marine       Marine   | METALS             | Nickel                                       | 2.71 1                             | 16.1 1                             | 12.1 1                              | 7.92 1                             | 6.36 1                             | 7.01 1                              | 7.24 1                             |                  |                     |                  |                  |                   | 778.4 <i>(</i>           | 100 1                      |
| Jach 1       O <th>METALS</th> <th>Potassium</th> <th>196 1</th> <th>360 1</th> <th>694 1</th> <th>461 1</th> <th>434 1</th> <th>453 1</th> <th>402 1</th> <th></th> <th></th> <th></th> <th>722 1</th> <th>618 1<br/>1 1 4 11</th> <th>764 1</th> <th>438 1<br/>t 1 &lt; 15</th>  | METALS             | Potassium                                    | 196 1                              | 360 1                              | 694 1                               | 461 1                              | 434 1                              | 453 1                               | 402 1                              |                  |                     |                  | 722 1            | 618 1<br>1 1 4 11 | 764 1                    | 438 1<br>t 1 < 15          |
| International problem       Internatin problem       Internation problem<  | METALS             | Selenium                                     | 0.35 1                             | 0.268 1                            | 0.307 1                             | 166 1                              | 0.353 1                            | 1.65 1 1                            | U.449 1<br>161 1 11                |                  |                     |                  | 1 1 < U          | 11<               | 11 < 0                   | 1 1 < U                    |
| Initial       Solution   | METALS             | Sodium                                       | 19.9 1                             | 478 1                              | 29 1                                | 48.2 1                             | 42 1                               | 45.9 1                              | 38 1                               |                  |                     |                  |                  |                   |                          |                            |
| IMPRAS       Wanken       Bubble       I       Bubble   | METALS             | Strontium                                    |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 12.3 1           | 14.8 1            | 8.5 t                    | 10.3 1                     |
| Method       Vision  | METALS             | Thallium                                     | 0.0596 1                           | 0.133 1                            | 0.0987 1                            | 0.0844 1                           | 0.0753 1                           | 0.0603 1                            | 0.0704 1                           |                  |                     |                  |                  |                   |                          |                            |
| March       Xio       No. 1       Zo       Zo       Xio <thxio< th="">       Xio</thxio<>  | METALS             | Vanadium                                     | 19.3 t                             | 22.7 1                             | 41.1 1                              | 31.2 1                             | 27.7 1                             | 35.9 1                              | 63.6 1                             |                  |                     |                  | 405 5            | 20.0 1            | 99 E 1                   | 52 G 1                     |
| MANUEL CALANDA       Also       U       U       Also       U       U       Also       U   | METALS             | Zinc   | 10.3 1                             | 31 1                               | 45.8 1                              | 226 1                              | 268 1                              | 200 1                               | 54.2 1                             |                  |                     |                  | 42.5             | 28.9 1            | 22.3                     | 52.9                       |
| Bindle Roup (G-G/C)       91.5       1       0       97.3       1       0       97.3       1       0       97.3       1       0       97.3       1       0       97.3       1       0       97.3       1       0       97.3       1       0       97.3       1       0       97.3       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0       33.1       0       0       0       33.1       0       0       0.33       1       0       0       33.1       0       0       0       33.1       0       0       0       33.1       0       0       0       33.1       0       0       0       33.1       0       0       0.33       1       0       0       33.1       0       0       0       33.1       0       0       0.33       1       0       0       0       1       0       0       1       1       0       0       1       1       0       0       1       0       0       1       1       0  | HANGE_UHGANICS     | Carbon Hange C12-C28                         | 51.5 1 0                           | 30.8 I J 5<br>573 I LI             |                                     |                                    |                                    |                                     |                                    |                  |                     |                  |                  |                   |                          |                            |
| BENAVALTIES       14 - trianscruberterin       0.3       1       0       0.3       1       0       0.3       1       0       0.3       1       0       0.3       1       0       0.3       1       0       0.3       1       0       0       0.3       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0       0       0       1       0   | RANGE ORGANICS     | Carbon Range C6-C12                          | 51.5 t U                           | 57.3 1 U                           |                                     |                                    |                                    |                                     |                                    |                  |                     |                  |                  |                   |                          |                            |
| Below (LATLES       1. Sochiwobarene       0.31       1       0       0.31       1       0       0.33  | SEMIVOLATILES      | t,2,4-Trichlorobenzene                       |                                    |                                    |                                     |                                    |                                    |                                     |                                    | · .              |                     |                  | 0.33 1 < U       | 0.33 1 < U        | 0.33 t < U               | 0.33 1 < U                 |
| SBMPCIATURE 3       1,4 Jointhonemene       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0       0       0.03       1       0       0.03       1       0       0.03       1       0       0       0.03       1       0       0       0.03       1       0       0       0.03       1       0       0       0.03       1       0       0       0.03       1       0       0       0.03       1       0       0       0.03       1       0       0       0.03       1       0       0.03       1       0       0.03       1       0       0.03       1       0   | SEMIVOLATILES      | 1,2-Dichlorobenzene                          |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < 0                 |
| SEMPACATURES       2.4.5 Tridhrophend       1.6.1       1.6  | SEMIVOLATILES      | 1,3-Dichlorobenzene                          |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < 0               | 0.33 1 < 0                 |
| Balmand (Dallacies)       2, 40 (Dallacies)       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0.33       1       0       0       33       1 <td< th=""><th>SEMIVOLATILES</th><th>1,4-Dichlorobenzene<br/>2,4,5 Trichlorophonol</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>1.65 1 &lt; U</th><th>1.65 t &lt; U</th><th>1.65 1 &lt; U</th><th>1.65 1 &lt; U</th></td<>  | SEMIVOLATILES      | 1,4-Dichlorobenzene<br>2,4,5 Trichlorophonol |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 1.65 1 < U       | 1.65 t < U        | 1.65 1 < U               | 1.65 1 < U                 |
| SAMPOLATILES       24.000000TATILES       24.000000TATILES       24.0000000TATILES       24.000000000000000000000000000000000000   | SEMIVOLATILES      | 2.4.6-Trichlorophenol                        |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 |
| Shi Volurites       2.4.Dimetrylemant       1       -       0       0.33       1       -       0<  | SEMIVOLATILES      | 2,4-Dichlorophenol                           |                                    |                                    |                                     |                                    | -                                  |                                     |                                    |                  |                     |                  | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 t < U                 |
| SemVOLATILES       2.4-Dinitroducane         SEMVOLATILES <th>SEMIVOLATILES</th> <th>2,4-Dimethylphenol</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>0.33 1 &lt; U</th> <th>0.33 t &lt; U</th> <th>0.33 1 &lt; U</th> <th>0.33 t &lt; U</th>   | SEMIVOLATILES      | 2,4-Dimethylphenol                           |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 0.33 1 < U       | 0.33 t < U        | 0.33 1 < U               | 0.33 t < U                 |
| SEMMOLATILES       2.4 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       2.6 Unitroductane         SEMMOLATILES       3.7 C Unitroductane         SEMMOLATILES       3.6 Unitroductane         SEMMOLATILES       3.6 Unitroductane         SEMMOLATILES       3.6 Unitroductane         SEMMOLATILES       4.6 Unitroductane         SEMMOLATILES       4.6 Unitroductane         SEMMOLATILES<   | SEMIVOLATILES      | 2,4-Dinitrophenol                            |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 1.65 1 < 0       | 1.65 1 < U        | 1.65 1 < 0               | 1.65 1 < U                 |
| SEMUCIANES       2-braining       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <  | SEMIVOLATILES      | 2,4-Dinitrotoluene                           |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  |                  |                   |                          |                            |
| SEMIVOLATILES       2-Chlorophaniants         SEMIVOLATILES       2-Chlorophaniants         SEMIVOLATILES       2-Methylnaphthalene         G.33       1       <       U       0.33       1       <       U   | SEMIVOLATILES      | 2,6-Distroiotene<br>2.Chlorooanhthalene      |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 t < U                 |
| SEMIVOLATILES       2-Methylnaphthalene       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0       0.3       1       <       0  | SEMIVOLATILES      | 2-Chlorophenoi                               |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 0.33 t < U       | 0.33 i < U        | 0.33 1 < U               | 0.33 1 < U                 |
| SEMIVOLATILES       2-Methylphenol       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <       0       0.33       1       <<  | SEMIVOLATILES      | 2-Methylnaphthalene                          |                                    |                                    |                                     |                                    |                                    |                                     |                                    | · .              |                     |                  | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 |
| SEMIVOLATRES       2-Mitroaniline       1       -       0       1.65       1       -       0       1.65       1       -       0       1.65       1       -       0       1.65       1       -       0       1.65       1       -       0       1.65       1       -       0       1.65       1       -       0       1.65       1       -       0       1.65       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0       0.33       1       -       0   | SEMIVOLATILES      | 2-Methylphenol                               |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 1 < U                 |
| SEMUVOLATILES       2-Mitrophenol       0.55       4       0       0.55       1       4       0       0.55       1       4       0       0.65       1       4       0 </th <th>SEMIVOLATILES</th> <th>2-Nitroaniline</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>1.05 1 &lt; U</th> <th>1 × 1 co.i</th> <th>1.00 L &lt; U<br/>0.33 L ∠ 1</th> <th>1.00 / &lt; 1J<br/>0∤33 1 &lt; 11</th>  | SEMIVOLATILES      | 2-Nitroaniline                               |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 1.05 1 < U       | 1 × 1 co.i        | 1.00 L < U<br>0.33 L ∠ 1 | 1.00 / < 1J<br>0∤33 1 < 11 |
| SEMIVOLATILES       3-Nitroaniline         1.65       1       U       0.65       1       U   | SEMIVOLATILES      | 2-Mitrophenol<br>2-3'-Dichlorobenziding      |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 0.65 1 < 1       | 0.65 1 < 0        | 0.65 1 < U               | 0.65 t < U                 |
| SEMIVOLATILES       4,6 Dinitro-2-methylphenol         SEMIVOLATILES       4,6 Dinitro-2-methylphenol         SEMIVOLATILES       4-Bromophenyl phenyl ether         0.65       1       V       0.65       <  | SEMIVOLATILES      | 3-Nitroaniline                               |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < U               | 1.65 1 < U                 |
| SEMIVOLATILES       4-Bromophenyl phenyl ether         0.33       1       U       0.33       1       U       0.33       1       U       0.33       1       V         SEMIVOLATILES       4-Chloro-3-methylphenol       0.65       1       V       0.  | SEMIVOLATILES      | 4,6-Dinitro-2-methylphenol                   |                                    |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | 1.65 1 < U       | 1.65 1 < U        | 1.65 1 < U               | 1.65 t < U                 |
| SEMIVOLATILES       4-Chloro-3-methylphenol         0.65       1       U       0.65       1       1       U         SEMIVOLATILES       4-Chloro-aniline       0.65       1       U       0.65       1       1       0.65       1       1       0.65       1   | SEMIVOLATILES      | 4-Bromophenyl phenyl ether                   |                                    |                                    | -                                   |                                    |                                    | -                                   |                                    |                  |                     |                  | 0.33 1 < U       | 0.33 1 < U        | 0.33 1 < U               | 0.33 t < U                 |
| SEMIVOLATILES 4-Chloroaniline  | SEMIVOLATILES      | 4-Chloro-3-methylphenol                      |                                    |                                    |                                     |                                    |                                    |                                     | -                                  |                  |                     |                  | 0.65 1 < U       | 0.65 1 < U        | 0.65 1 < U               | 0.65 1 < U                 |
|  | SEMIVOLATILES      | 4-Chloroaniline                              | ł                                  |                                    |                                     |                                    |                                    |                                     |                                    |                  |                     |                  | U > i.co.u       | . U COLU < U      | U.SJ F < U               | 9.00 ÷ < U                 |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas

Shaw Environmental, Inc.

 $(\cdot, \cdot)$ 

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-121 Concentrations of Chemicals in Soil Samples Associated with WR Sump 015

----

| [SUMP] = WRSUMP015 |                                |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  |   |                                 |                  |                   |
|--------------------|--------------------------------|------------------|------------------|-------------------|------------------|---------------------|-------------------|------------------|------------------|--------------------|------------------|---|---------------------------------|------------------|-------------------|
| LOCATION _CODE     |                                | 35SUMP033-SB01   | 35SUMP033-SB01   | 35SUMP034-SB01    | 35SUMP034-SB01   | 35SUMP034-SB01      | 35SUMP034-SB02    | 35SUMP034-SB02   | HOSB03           | HOSB03             | HOSB03           | LH-S33-01                               | LH-S33-01                       | LH-S34-01        | LH-S34-01         |
| SAMPLE_NO          |                                | 35-SMP33-SB01-01 | 35-SMP33-SB01-02 | 35-SMP034-SB01-02 | 35-SMP34-SB01-01 | 35-SMP34-SB01-01-QC | 35-SMP034-SB02-02 | 35-SMP34-SB02-01 | HOSB03(0-0_5)    | HOSB03(3-5)        | HOSB03(8-10)     | LH-S33-01_1                             | LH-533-01_2                     | LH-S34-01_1      | LH-S34-01_2       |
| SAMPLE_DATE        |                                | 9/11/2006        | 9/11/2006        | 9/20/2006         | 9/11/2006        | 9/11/2006           | 9/20/2006         | 9/11/2006        | 12/4/2000        | 12/4/2009          | 12/4/2000        | 7/21/1993                               | 7/21/1993                       | 6/25/1993        | 7/10/1993         |
| DEPTH              |                                | 0-0.5 Ft         | 4.5 - 5 Fi       | 4 - 4 Ft          | 0-0.5 Ft         | 0-0.5 Ft            | 4 - 4 Ft          | 0 - 0.5 Ft       | 0-0.5 Ft         | 3-5Ft              | 8 - 10 Ft        | 0.5 - 1 Ft                              | 3 - 3.4 Ft                      | 3.5 - 4.5 Ft     | 0.5 - 1.5 Ft      |
| SAMPLE_PURPOSE     |                                | REG              | REG              | REG               | REG              | FD                  | REG               | REG              | REG              | REG                | REG              | REG                                     | REG                             | REG              | REG               |
| Test Group         | Parameter (Units = mg/kg)      | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ    | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ F | Result DIL LQ VQ | Hesult DiL LQ V                         | Q Hesult DTL LQ VQ              | Hesult DIL LO VO | Hesult Dil. LU VQ |
| SEMIVOLATILES      | 4-Chlorophenyl phenyl ether    |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 < 1                              | J 0.33 1 < 0                    | 0.33 1 < 0       | 0.33 1 < U        |
| SEMIVOLATILES      | 4-Methylphenol                 |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 < 1                              | J 0.33 1 < U                    | 0.33 t < 0       | 0.33 1 < 0        |
| SEMIVOLATILES      | 4-Nitroaniline                 |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 1.65 1 < 1                              | J 1.65 1 < U                    | 1.65 1 < U       | 1.65 1 < U        |
| SEMIVOLATILES      | 4-Nitrophenol                  |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 1.05 1 < 1                              | ) 1.65 1 < U                    | 1.65 1 < U       | 1.00 1 < 0        |
| SEMIVOLATILES      | Acenaphthene                   |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 < 1                              | J 0.33 I < U                    | 0.33 1 < 0       | 0.33 1 < 0        |
| SEMIVOLATILES      | Acenaphthylene                 |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 < 1                              | ) 0.33 I < 0                    |                  | 0.33 1 < 0        |
| SEMIVOLATILES      | Anthracene                     |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.03 1 < 1                              |                                 | 0.33 1 < 0       | 0.33 1 < 0        |
| SEMIVOLATILES      | Benzo(a)anthracene             |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.00 1 4 4                              |                                 | 0.23 1 < 0       | 0.00 1 < 0        |
| SEMIVOLATILES      | Benzo(a)pyrene                 |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 2 1                              |                                 | 0.33 1 < 1       | 0.33 1 4 1        |
| SEMIVULATILES      | Benzo(b)nuorannene             |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.30 1 < 0                              | 023 1 < 1                       | 0.33 1 < 10      | 0.33 1 < 11       |
| SEMIVOLATILES      | Benzolgni)perviene             |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.30 / < 0                              | 0331 < 0                        | 0.33 1 < 1       | 0.33 1 < 1        |
| SEMIVOLATILES      | Benzo(K)nooranmene             |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 1.65 1 2 1                              | i 165.1 c li                    | 165 1 < 1        | 165 1 < 0         |
| SEMIVOLATILES      | Benzoic Acid                   |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.65.1 < 1                              |                                 | 0.65 1 < U       | 0.65 1 < 0        |
| SEMIVOLATILES      | benzyi Alconor                 |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | 1 033 1 < 1                     | 0.33 1 < 1       | 0.33 1 < U        |
| SEMINULATILES      | bis(2-Chloroethul)ether        |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | 0.33 1 < U                      | 0.33 1 < U       | 0.33 t < U        |
| CENIVOLATRES       | bis(2 Chlorosonrond)athor      |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMINOLATHES       | bis(2-Ethulboxd)obthalata      |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 t < U        |
| SEMINOLATILES      | Butta bonzal nbihalate         |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | J 0.33 1 < U                    | 0.33 1 < U       | 0.33 t < U        |
| SEMIVOLATILES      | Christene                      |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | J 0.33 1 < U                    | 0.33 1 < U       | 0.33 t < U        |
| SEMINOLATILES      | Dihenzo/a h\anthracene         |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Diberzofuran                   |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Diethyl ohthalate              |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Dimethyl phthalate             |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | J 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | di-n-Butvi ohthatate           |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 < 1                              | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | di-n-Octyl phthalate           |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | ⊍ 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Fluoranthene                   |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Fluorene                       |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 < 1                              | U 0.33 1 < U                    | 0.33 t < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Hexachtorobenzene              |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 t < U        |
| SEMIVOLATILES      | Hexachlorobutadiene            |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Hexachlorocyclopentadiene      |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Hexachloroethane               |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Indeno(1,2,3-cd)pyrene         | :                |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 t < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Isophorone                     |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 t <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Naphthalene                    |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Nitrobenzene                   | :                |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | n-Nitroso-di-n-propylamine     |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < 0       | 0.33 1 < 0        |
| SEMIVOLATILES      | n-Nitrosodiphenytamine         |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Pentachlorophenol              |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 1.65 1 <                                | U 1.65 1 < U                    | 1.65 1 < 0       | 1.65 1 < U        |
| SEMIVOLATILES      | Phenanthrene                   |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 t < U                    | 0.33 1 < U       | 0.33 1 < U        |
| SEMIVOLATILES      | Phenol                         |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | U 0.33 1 < U                    | 0.33 1 < 0       | 0.33 1 < 0        |
| SEMIVOLATILES      | Pyrene                         |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  | 0.33 1 <                                | 0 0.33 1 < 0                    | 0.33 1 < 0       | 0.33 1 < 0        |
| ТРН                | Hydrocarbons as Diesel Fuel    |                  |                  |                   |                  |                     |                   |                  | 60 1 < 10        | 57.6 1 < 0         | 64 1 < U         |   |                                 |                  |                   |
| ТРН                | Hydrocarbons as Gasoline       |                  |                  |                   |                  |                     |                   |                  | 60 1 < U         | 5/.6 1 < U         | 64 1 < U         |   |                                 |                  |                   |
| TPH                | TOTAL HYDROCARBONS             |                  |                  |                   |                  |                     | 0.00777 4 11      |                  | 10U I < U        | 57.0 I < U         | 64 I < U         |   |                                 |                  |                   |
| VOLATILES          | 1,1,1,2-Letrachloroethane      |                  | 0.00529 1 0      | 0.00689 1 0       |                  |                     |                   |                  |                  |                    |                  | 0.005 1 <                               | 1 0.005 1 - 11                  | 0.006 1 - 11     | 0.005 1 4 11      |
| VOLATILES          | 1,1,1-I richloroethane         |                  | 0.00529 1 0      | 0.00689 1 0       |                  |                     | 0.00577 1 12      |                  |                  |                    |                  | 0.005 1 <                               | 0 0.005 t < 0<br>⊡ 0.005 t < 11 | 0.005 1 < 0      | 0.005 1 < 0       |
| VULATILES          | 1,1,2,2-1 etrachioroethane     |                  | 0.00529 7 0      | 0.00009 1 0       |                  |                     | 0.00077 1 0       |                  |                  |                    |                  | 8.005 1 < 1                             | 0 0.005 t < U                   | 0.005 1 < 0      | 0.005 1 < 1       |
| VOLATILES          | 1,1,2-11ICHROIOEUTARE          |                  | 0.00529 1 0      | 0.00089 1 0       |                  |                     | 0.00577 1 13      |                  |                  |                    |                  | 0.005 1 <                               | 0.0005 1 < 0<br>0.005 1 < 0     | 0.005 1 < 1      | 0.005 1 < U       |
| VOLATILES          | 1,1-Dichloroethane             |                  | 0.00529 1 11     | 0.00089 1 0       |                  |                     | 0.00577 1 17      |                  |                  |                    |                  | 0.005 1 <                               | U 0.005 1 < U                   | 0.005 1 < U      | 0.005 1 < U       |
| VOLATILES          | 1 1-Dichioropronene            |                  | 0.00529 1 11     | 0.00689 1 E       |                  |                     | 0.00577 1 12      |                  |                  |                    |                  |   |                                 |                  |                   |
| VOLATILES          | 1.2.3-Trichlorobenzene         |                  | 0.00529 1 11     | 0.00689 1 0       |                  |                     | 0.00577 1 U       |                  |                  |                    |                  |   |                                 |                  |                   |
| VOLATILES          | 123-Trichloropropage           |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                  |                    |                  |   |                                 |                  |                   |
| VOLATILES          | 124-Trichlorobenzene           |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                  |                    |                  |   |                                 |                  |                   |
| VOLATILES          | 1 2 4-Trimethybenzene          |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                  |                    | . •              |   |                                 |                  |                   |
| VOLATILES          | 1.2-Dibromo-3-chloroptopane    |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 t U       |                  |                  |                    |                  |   |                                 |                  |                   |
| VOLATILES          | 1.2-Dibromoetbane              |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                  |                    |                  |   |                                 |                  |                   |
| VOLATILES          | 1.2-Dichlorobenzene            |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                  |                    |                  |   |                                 |                  |                   |
| VOLATILES          | 1.2-Dichloroethane             |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                  |                    |                  | 0.005 1 <                               | U 0.005 1 < U                   | 0.005 1 < U      | 0.005 1 < U       |
| VOLATILES          | t,2-Dichloroethene             |                  | -                |                   |                  |                     |                   |                  |                  |                    |                  | 0.005 1 <                               | U 0.005 1 < U                   | 0.005 1 < U      | 0.005 1 < U       |
| VOLATILES          | 1,2-Dichloropropane            |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                  |                    |                  | 0.005 1 <                               | J 0.005 1 < U                   | 0.005 1 < U      | 0.005 1 < U       |
| VOLATILES          | 1,2-Dimethylbenzene (o-Xviene) |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                  |                    |                  | - · · · · · · · · · · · · · · · · · · · |                                 |                  |                   |
| VOLATILES          | 1,3,5-Trimethylbenzene         |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                  |                    |                  |   |                                 |                  |                   |
|                    | •                              |                  |                  |                   |                  |                     |                   |                  |                  |                    |                  |   |                                 |                  |                   |

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-121 Concentrations of Chemicals in Soil Samples Associated with WR Sump 015

| [SUMP] = WRSUMP015 |                           |                  |                  |                   |                  |                     |                   |                  |                    |                  |                  |                  |                                       |                    |                  |          |
|--------------------|---------------------------|------------------|------------------|-------------------|------------------|---------------------|-------------------|------------------|--------------------|------------------|------------------|------------------|---------------------------------------|--------------------|------------------|----------|
| LOCATION _CODE     |                           | 35SUMP033-SB01   | 35SUMP033-SB01   | 35SUMP034-SB01    | 35SUMP034-SB01   | 35SUMP034-SB01      | 35SUMP034-SB02    | 35SUMP034-SB02   | HOSB03             | HQ\$B03          | HOSB03           | LH-533-01        | LH-S33-01                             | LH-S34-01          | LH-S34-01        |          |
| SAMPLE_NO          |                           | 35-SMP33-SB01-01 | 35-SMP33-SB01-02 | 35-SMP034-SB01-02 | 35-SMP34-SB01-01 | 35-SMP34-SB01-01-QC | 35-SMP034-SB02-02 | 35-SMP34-SB02-01 | HOSB03(0-0_5)      | HOSB03(3-5)      | HOSB03(8-10)     | LH-S33-01_1      | LH-S33-01_2                           | LH-S34-01_1        | LH-S34-01_2      |          |
| SAMPLE_DATE        |                           | 9/11/2006        | 9/11/2006        | 9/20/2006         | 9/11/2006        | 9/11/2006           | 9/20/2006         | 9/11/2006        | 12/4/2000          | 12/4/2000        | 12/4/2000        | 7/21/1993        | 7/21/1993                             | 6/25/1993          | 7/10/1993        |          |
| Depth              |                           | 0 -0.5 Ft        | 4.5 - 5 Ft       | 4 - 4 Ft          | 0 - 0.5 Ft       | 0-0.5 Ft            | 4 - 4 Ft          | 0 - 0.5 Ft       | 0 - 0.5 Ft         | 3-5Ft            | 8 - 10 Ft        | 0.5 ~ 1 Ft       | 3 - 3.4 Ft                            | 3.5 - 4.5 Ft       | 0.5 - 1.5 H      |          |
| SAMPLE_PURPOSE     |                           | REG              | REG              | REG               | REG              | FD                  | REG               | REG              | REG                | REG              | REG              | REG              | REG                                   | REG                | REG              |          |
| Test Group         | Parameter (Units = mg/kg) | Result DIL LO VQ | Result DiL LQ VQ | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ    | Result DIL LQ VQ  | Result DiL LQ V  | Q Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO                      | Result DIL LQ VQ   | Result DIL LQ VO | <u>a</u> |
| VOLATILES          | 1,3-Dichlorobenzene       |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 ł U       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | 1.3-Dichloropropane       | 1                | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | 1,4-Dichlorobenzene       | 1                | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | 2,2-Dichloropropane       |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | 2-Butanone                |                  | 0.0106 1 U       | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  |                    |                  |                  | 0.05 t < U       | 0.05 t < U                            | 0.05 1 < U         | 0.05 1 < 0       | 1        |
| VOLATILES          | 2-Chtoroethyl vinyl ether |                  | 0.0106 1 U       | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  |                    |                  |                  | 0.01 1 < U       | 0.01 1 < U                            | 0.01 1 < 0         | 0.01 1 < 0       | J        |
| VOLATILES          | 2-Chlorotoluene           |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | 2-Hexanone                |                  | 0.0106 1 U       | 0.0138 1 U UJ     |                  |                     | 0.0115 1 U UJ     |                  |                    |                  |                  | 0.05 i < U       | 0.05 t < U                            | 0.05 1 < 0         | 0.05 1 < U       | J        |
| VOLATILES          | 4-Chlorotoluene           |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | Acetone                   | 1                | 0.0106 t U       | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  |                    |                  |                  | 0.1 1 < U        | 0.1 1 < 0                             | 0.1 1 < 0          | 0.1 1 < U        |          |
| VOLATILES          | Benzene                   |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.005 1 < U      | 0.005 1 < U                           | 9.005 1 < U        | 0.005 1 < 0      | ł        |
| VOLATILES          | Bromobenzene              | ]                | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | Bromochloromethane        |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | Bromodichloromethane      |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 ·1 U      |                  |                    |                  |                  | 0.005 1 < U      | 0.005 1 < U                           | 0.005 1 < U        | 0.005 1 < 0      | )<br>    |
| VOLATILES          | Bromoform                 |                  | 0.00529 1 U      | 0.00689 t U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.005 1 < U      | 0.005 1 < U                           | 0.005 1 < 0        | 0.005 1 < 0      | 1        |
| VOLATILES          | Bromomethane              | 1                | 0.0106 t U       | 0.0138 1 U        |                  |                     | 0.0115 t U        |                  |                    |                  |                  | 0.01 1 < U       | 0.01 1 < U                            | 0.01 t < U         | 0.01 1 < 0       | <i>.</i> |
| VOLATILES          | Carbon disulfide          |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.005 1 < U      | 0.005 1 < U                           | 0.005 1 < U        | 0.005 1 < 0      | 1        |
| VOLATILES          | Carbon tetrachloride      |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.005 1 < U      | 0.005 1 < U                           | 0.005 1 < U        | 0.005 1 < U      |          |
| VOLATILES          | Chiorobenzene             |                  | 0.00529 t U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.005 1 < U      | 0.005 1 < U                           | 0.005 1 < 0        | 0.005 1 < 0      | ,        |
| VOLATILES          | Chloroethane              |                  | 0.0106 t U       | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  |                    |                  |                  | 0.01 1 < U       | 0.01 1 < U                            | 0.01 t < U         | 0.01 1 < 0       | )        |
| VOLATILES          | Chioroform                |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.005 1 < U      | 0.005 1 < U                           | 0.005 1 < U        | 0.005 t < U      |          |
| VOLATILES          | Chloromethane             |                  | 0.0106 1 U       | 0.0138 1 U        |                  |                     | 0.0115 t U        |                  |                    |                  |                  | 0.01 1 < U       | 0.01 1 < 0                            | $0.01 \ 1 \ < \ 0$ | 0.01 1 < 0       | J        |
| VOLATILES          | cis-1,2-Dichloroethene    |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  |                  | · · · · · · · · · · · · · · · · · · · |                    |                  |          |
| VOLATILES          | cis-1,3-Dichloropropene   |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.005 1 < U      | 0.005 1 < U                           | 0.005 1 < U        | 0.005 t < U      |          |
| VOLATILES          | Dibromochloromethane      |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.005 1 < U      | 0.005 1 < 0                           | 0.005 1 < U        | $0.005 \ 1 < 0$  | ļ        |
| VOLATILES          | Dibromomethane            |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | Dichlorodiffuoromethane   |                  | 0.0106 1 U       | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  |                    |                  |                  |                  |                                       |                    | 0.005 ( U        |          |
| VOLATILES          | Ethylbenzene              |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.005 1 < 0      | 0.005 1 < 0                           | U.005 1 < U        | 0.003 1 < 0      | J        |
| VOLATILES          | Hexachlorobutadiene       | •                | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | isopropylbenzene          |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | m,p-Xylenes               |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  |                  | 0.05 4 11                             | 0.05 1             | 0.05 1           | 41       |
| VOLATILES          | Methyl isobutyl kelone    |                  | 0.0106 1 U       | 0.0138 1 0        |                  |                     | 0.0115 1 U        |                  |                    |                  |                  | 0.05 1 < 0       | 0.05 1 < 0                            | 0 > 1 60.0         | 0.005 1 < 0      | )<br>11  |
| VOLATILES          | Methylene chlonde         | 1                | 0.00529 1 U      | 0.0036 1 J B      |                  |                     | 0.0015 1 J B      |                  |                    |                  |                  | 0.005 / < 0      | 0.005 1 < 0                           | 0.005 1 < 0        | 0.003 i K 0      | ,        |
| VOLATILES          | Naphthalene               |                  | 0.0106 1 0       | 0.0138 1 0        |                  |                     | 0.0115 1 0        |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | n-BUTYLBENZENE            |                  | 0.00529 1 U      | 0.00689 1 0       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | n-PROPYLBENZENE           |                  | 0.00529 1 0      | 0.00689 1 0       |                  |                     | 0.00577 1 0       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | p-ISOPHOPYLIOLUENE        |                  | 0.00529 1 U      | 0.00689 1 0       |                  |                     | 0.005/7 1 0       |                  |                    |                  |                  |                  |                                       |                    |                  |          |
| VOLATILES          | sec-BUTYLBENZENE          |                  | 0.00529 1 0      | 0.00689 1 0       |                  |                     | 0.00577 1 0       |                  |                    |                  |                  | 0.000 1 . 11     | 0.005 + - 11                          | 0.005 1 4 1        | 0.005 1 < 1      | 11       |
| VOLATILES          | Styrene                   | -                | 0.00529 1 0      | 0.00689 1 0       |                  |                     | 0.00577 1 0       |                  |                    |                  |                  | 0.005 1 < 0      | 0.005 1 < 0                           | 0.003 1 K 0        | 0.005 1 1 0      | <i>'</i> |
| VOLATILES          | tert-BUTYLBENZENE         |                  | 0.00529 1 U      | 0.00689 1 1)      |                  |                     | 0.00577 1 0       |                  |                    |                  |                  | 0.005 1          | 0.005 1                               | 0.005 1 4 11       | 0.005 1 - 1      | л        |
| VOLATILES          | Tetrachloroethene         |                  | 0.00529 1 U      | 0.00689 1 0       |                  |                     | 0.00577 1 0       |                  |                    |                  |                  | 0.005 1 < 0      |                                       | 0.005 1 < 0        | 0.005 1 < 0      | ,<br>11  |
| VOLATILES          | I OlUERE                  |                  | 0.00529 1 0      | 0.00689 1 0       |                  |                     | 0.00577 1 U       |                  |                    |                  |                  | 0.005 i < 0      | 0.0037 < 0                            |                    | 0.000 1 < 0      | ,        |
| VOLATILES          | trans-1,2-Dichloroethene  |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.00577 1 0       |                  |                    |                  |                  | 0.000 4 - 12     | 0.005 + - ()                          | 0.005 1 - 11       | 0.005 1 - 1      | 11       |
| VOLATILES          | trans-1,3-Dichloropropene |                  | 0.00529 1 U      | 0.00689 1 U       |                  |                     | 0.005/7 1 U       |                  |                    |                  |                  | 0.005 1 < 0      | 0.005 t < U                           | 0.005 1 < 10       |                  | ú.       |
| VOLATILES          | Inchloroethene            | 1                | 0.00529 1 0      | U.00689 1 U       |                  |                     | 0.005// 1 U       |                  |                    |                  |                  | 0.005 I < U      | 0.000 i < U                           | 9.000 I < U        | 0.000 1 < 0      | <i>′</i> |
| VOLATILES          | Inchlorofluoromethane     | 1                | 0.0106 1 U       | 0.0138 1 U        |                  |                     | 0.0115 1 U        |                  |                    |                  |                  | 0.0E 4 - 11      | 0.05 1                                | 0.05 1 4 1         | 0.05 1 4 1       |          |
| VOLATILES          | Vinyl acetate             | 1                | U.0106 1 U       | 0.0138 1 U UJ     |                  |                     | 0.0115 1 0 03     |                  |                    |                  |                  | 0.01 < U         | 0.01 ( < 0                            |                    | 0.00 1 < U       | ,<br>11  |
| VOLATILES          | Vinyl chloride            |                  | 0.0106 1 U       | 0.0138 1 U        |                  |                     | ULU115 1 U        |                  |                    |                  |                  | 0.001 < U        | 0.01 i < U                            | u.⊎i i < U         | 0.01 1 < 0       | ,<br>    |
| VOLATILES          | Xvienes, Total            | 1                |                  |                   |                  |                     |                   |                  |                    |                  |                  | 0.005 i < U      | 0.005 i < U                           | V.UUD I < ປ        | V.V/3 I < 0      | ٠.       |

Shaw Environmental, Inc.

 Table 3-121

 Concentrations of Chemicals in Soil Samples Associated with WR Sump 015

| [SUMP] = WRSUMP015<br>LOCATION_CODE<br>SAMPLE_NO |                            | LH-V   | VRS1:<br>RS15 | 5-01<br>-01_1 |          | LH-V   | WRS1<br>/RS15 | 5-01<br>1-01 2 |         | WRS-   | S015-S    | SB01<br>801-0 | )1      | WRS-0          | 015-SI | 801<br>01-02 | 2       | WRS-   | 015-3<br>15-SE | SB02<br>302-01 |         | WRS-   | 015-S<br>15-SB | 802<br>02-02 | 2         |
|--|----------------------------|--------|---------------|---------------|----------|--------|---------------|----------------|---------|--------|-----------|---------------|---------|----------------|--------|--------------|---------|--------|----------------|----------------|---------|--------|----------------|--------------|-----------|
| SAMPLE_DATE                                      |                            | B      | 3/199         | 3             |          | 8      | /3/199        | 93             | -       | 9/     | 15/20     | 06            |         | 9/1            | 15/200 | 6            |         | 9/     | 15/20          | 06             |         | 9/     | 15/200         | <i>i</i> 6   |           |
| DEPTH<br>SAMPLE PURPOSE                          |                            | 0.     | 5-1F<br>050   | -t            |          | 4      | - 4.5         | Ft             |         | 1      | 55<br>DCC | Ft.           |         | 4              | -4Ft   |              |         |        | -1F            | ł              |         | 4      | -4 Ft          | :            |           |
| Test Group                                       | Parameter (Units = mg/kg)  | Result | DIL           | LQ            | VQ       | Result | DIL           | LQ             | VQ      | Result | DiL       | LQ            | ٧Q      | Result         | DIL    | LQ           | VQ      | Result | DIL            | LQ             | VQ      | Result | DIL            | LQ           | V         |
| EXPLOSIVES                                       | 1,3,5-Trinitrobenzene      |        |               |               |          |        |               |                |         |        |           |               |         |                |        |              |         |        | -              |                |         |        |                |              |           |
| EXPLOSIVES                                       | 1,3-Dinitrobenzene         |        |               |               |          |        |               |                |         |        |           |               |         |                |        |              |         |        |                |                |         |        |                |              |           |
| EXPLOSIVES                                       | 2,4,6-Trinitrotoluene      |        |               |               |          |        |               |                |         |        |           |               |         |                |        |              |         |        |                |                |         |        |                |              |           |
| EXPLOSIVES                                       | 2,4-Dinitrotoluene         |        |               |               |          |        |               |                |         |        |           |               |         |                |        |              |         |        |                |                |         |        |                |              |           |
| EXPLOSIVES                                       | 2,6-Dinitrololuene         |        |               |               |          |        |               |                |         |        |           |               |         |                |        |              |         |        |                |                |         |        |                |              |           |
| EXPLOSIVES                                       | 2-Amino-4,6-dinitrotoluene |        |               |               |          |        |               |                |         |        |           |               |         |                |        |              |         |        |                |                |         |        |                |              |           |
| EXPLUSIVES                                       | 4-Amino-2,6-onistroitowene |        |               |               |          |        |               |                |         |        |           |               |         |                |        |              |         |        |                |                |         |        |                |              |           |
| EXPLOSIVES                                       | ra-Nitrotolisese           |        |               |               |          |        |               |                |         |        |           |               |         |                |        |              |         |        |                |                |         |        |                |              |           |
| EXPLOSIVES                                       | Nitrobenzene               |        |               |               |          |        |               |                |         |        |           |               |         |                |        |              |         |        |                |                |         |        |                |              |           |
| EXPLOSIVES                                       | o-Nitrotoluene             |        |               |               |          |        |               |                |         |        |           |               |         |                |        |              |         |        |                |                |         |        |                |              |           |
| EXPLOSIVES                                       | p-Nitrotoluene             |        |               |               |          |        |               |                |         |        |           |               |         |                |        |              |         |        |                |                |         |        |                |              |           |
| EXPLOSIVES                                       | RDX                        |        |               |               |          |        |               |                |         |        |           |               |         |                |        |              |         |        |                |                |         |        |                |              |           |
| EXPLOSIVES                                       | Tetryl                     |        |               |               |          |        |               |                |         |        |           |               |         |                |        |              |         |        |                |                |         |        |                |              |           |
| METALS   | Aluminum                   | 14300  | 1             |               |          | 2900   | 1             |                |         | 6240   | 1         |               |         | 22200          | 1      |              |         | 6340   | 1              |                |         | 13500  | 1              |              |           |
| METALS   | Antimony                   | 3      | 1             | <             | 8        | 3      | 1             | <              | U       | 0.105  | 1         | U             | U       | 0.116          | 1      | U            | U       | 0.099  | 1              | ł              | J       | 0.11   | 1              | U            | ι         |
| METALS   | Arsenic                    | 7.4    | 1             |               |          | 1.2    | 1             |                |         | 5.94   | 1         |               |         | 4.36           | 1      |              |         | 5.51   | 1              |                |         | 2.31   | 1              |              |           |
| METALS   | Banan                      | 62.3   | 1             |               |          | 9.8    | 1             |                |         | 61     | 1         |               |         | 64.6           | 1      |              |         | 48     | 1              |                |         | 42.2   | 1              |              |           |
| METALS   | Cadmium                    |        | ł             |               | 11       | 1      |               |                | 16      | 0.466  | 1         |               |         | 0.0901         | 1      |              |         | 0.417  | 1              |                |         | 0.412  | 1              |              |           |
| METALS   | Calcium                    | 2030   | ;             | <             | 0        | 345    | ہ<br>۲        | ¢              | U       | 44100  | 10        | J             | 3       | 0.0804         | 1      | J            | J       | 7090   | 1              |                |         | 0.047  | 1              | J            | J         |
| METALS   | Chromium                   | 24.5   | 1             |               |          | 6.1    | 1             |                |         | 15.9   | 1         |               |         | 28.7           | i      |              |         | 18.1   | 1              |                |         | 14.4   | 1              |              |           |
| METALS   | Cobalt                     | 5.2    | 1             |               |          | 1      | 1             | <              | U       | 3,42   | 1         |               |         | 4.27           | 1      |              |         | 3.01   | 1              |                |         | 1.73   | 1              |              |           |
| METALS   | Copper                     | 2.9    | 1             |               |          | 1      | 1             | <              | U       | 5.11   | 1         |               |         | 6.56           | 1      |              |         | 5.74   | 1              |                |         | 3.35   | 1              |              |           |
| METALS   | Iron                       | 26000  | 1             |               |          | 7830   | 1             |                |         | 29900  | 1         |               |         | 27700          | 1      |              |         | 27400  | 1              |                |         | 14600  | 1              |              |           |
| METALS   | Lead                       | 11.7   | 1             |               |          | 2.6    | t             |                |         | 20.3   | 1         |               |         | 16.4           | 1      |              |         | 19.2   | 1              |                |         | 7.59   | 1              |              |           |
| METALS   | Magnesium                  | 813    | 1             |               |          | 140    | 1             |                |         | 897    | 1         |               |         | 1130           | 1      |              |         | 504    | 1              |                |         | 546    | 1              |              |           |
| METALS   | Manganese                  | 135    | 1             |               |          | 7.2    | 1             |                |         | 251    | 1         |               |         | 57.1           | t      |              |         | 153    | ١              |                |         | 30.5   | 1              |              |           |
| METALS   | Mercury                    | 0.1    | 1             | <             | U        | 0.1    | 1             | <              | U       | 0.0462 | 1         | J             | J       | 0.0465         | 1      | J            | 5       | 0.0298 | 1              | J              | J       | 0.0194 | 1              | 3            | J         |
| METALS   | Nickel                     | 700    |               |               |          | 100    |               |                |         | 5.39   | 1         |               |         | 8.54           | 1      |              |         | 5.66   | 1              |                |         | 4.45   | 1              |              |           |
| METALS   | Selenium                   | 128    | 1             |               |          | 188    | 1             |                | 11      | 222    | 1         |               |         | 0.652          | 1      |              |         | 335    | 1              |                |         | 380    | 1              |              |           |
| METALS   | Silver                     | •      | 1             | Ì             | 11       | 1      | 1             | è              | U       | 15     | t         | ŧ             | Ð       | 1.57           | 1      | II.          | 15      | 0.209  | i              | 1              | л       | 1 50   | 1              | 11           | I.        |
| METALS   | Sodium                     |        |               | •             | ·        |        | •             |                | č       | 40.4   | i         | Ũ             | č       | 64.2           | 1      | U            | Ũ       | 21.7   | 1              | č              | v       | 24     | 1              | Ŭ            |           |
| METALS   | Strontium                  | 9.7    | 1             |               |          | 3.3    | 1             |                |         |        |           |               |         |                |        |              |         |        |                |                |         |        |                |              |           |
| METALS   | Thation                    |        |               |               |          |        |               |                |         | 0.058  | 1         |               |         | 0.17           | 1      |              |         | 0.0426 | 1              |                |         | 0.281  | 1              |              |           |
| METALS   | Vanadium .                 |        |               |               |          |        |               |                |         | 32.9   | 1         |               |         | 49.1           | 1      |              |         | 41.5   | 1              |                |         | 30.5   | 1              |              |           |
| METALS   | Zinc                       | 32.5   | t             |               |          | 3.5    | 1             |                |         | 43.4   | 1         |               |         | 24.3           | 1      |              |         | 102    | 1              |                |         | 12.8   | 1              |              |           |
| RANGE_OHGANICS                                   | Carbon Range C12-C28       |        |               |               |          |        |               |                |         | 31.3   | 1         | J             | Ŀ       | 34.9           | 1      | 1            | J       | 66     | 1              |                |         | 55     | 1              | U            | u         |
| RANGE_UNGANICS                                   | Carbon Parga C6.C12        |        |               |               |          |        |               |                |         | 33.5   | 1         | ال<br>دا      | J       | 33.9           | 1      | J<br>LI      | J       | 56     | 1              |                |         | 55     | 1              | U            | <br>      |
| SEMIVOLATILES                                    | 1 2 4-Trichlornhenzene     | 0.33   | 1             | ,             | н        | 0.33   | 1             |                | 51      | 17     | 1<br>10   | 11            | U<br>N  | -37.6<br>0.187 | 1      | ы            | ы       | 3.46   | 1<br>20        | U<br>U         | U<br>LL | 019    | 1              | U<br>H       | - U<br>41 |
| SEMIVOLATILES                                    | 1.2-Dichlorobeazene        | 0.33   | 1             | è             | ü        | 0.33   | 1             | è              | ย       | 17     | 10        | 11            | 1       | 0.107          | 1      | ы            | u u     | 3.46   | 20             | ы              | ы       | 0.10   | 1              | ы<br>Н       | 1         |
| SEMIVOLATILES                                    | 1,3-Dichlorobenzene        | 0.33   | 1             | <             | U        | 0.33   | 1             | <              | U       | 1.7    | 10        | Ū             | Ŭ       | 0.187          | 1      | ũ            | Ŭ       | 3.46   | 20             | U              | U       | 0.18   | 1              | Ŭ            | บ         |
| SEMIVOLATILES                                    | 1,4-Dichlorobenzene        | 0.33   | 1             | <             | U        | 0.33   | 1             | <              | IJ      | 1.7    | 10        | U             | U       | 0.187          | 1      | U            | U       | 3.46   | 20             | U              | U       | 0.18   | 1              | U            | Ð         |
| SEMIVOLATILES                                    | 2,4,5-Trichlorophenoi      | 1.65   | 1             | <             | U        | 1.65   | 1             | <              | U       | 1.7    | 10        | U             | U       | 0.187          | 1      | U            | U       | 3.46   | 20             | U              | U       | 0.18   | 1              | U            | Ű         |
| SEMIVOLATILES                                    | 2,4,6-Trichlorophenol      | 0.33   | 1             | <             | U        | 0.33   | 1             | <              | U       | 1.7    | 10        | U             | U       | 0.187          | 1      | U            | U       | 3.46   | 20             | U              | U       | 0.18   | 1              | U            | U         |
| SEMIVOLATILES                                    | 2,4-Dichlorophenol         | 0.33   | t             | <             | U        | 0.33   | 1             | <              | U       | 1.7    | 10        | U             | υ       | 0.187          | 1      | υ            | U       | 3.46   | 20             | U              | U       | 0.18   | 1              | U            | U         |
| SEMIVOLATILES                                    | 2,4-Dimethylphesol         | 0.33   | 1             | <             | U        | 0.33   | 1             | <              | U       | 1.7    | 10        | U             | U       | 0.187          | 1      | U            | U       | 3.46   | 20             | U              | U       | 0.18   | 1              | U            | ป         |
| SEMIVOLATILES                                    | 2,4-Dinitrophenol          | 1.65   | 1             | <             | ຢ<br>ບ   | 1.65   | 1             | <              | U       | 8.5    | 10        | U             | U       | 0.937          | 1      | U            | U       | 17.3   | 20             | U              | U       | 0.899  | 1              | U            | U         |
| SEMINULATILES                                    | 2,4-Dinitrotoiuene         | 0.33   | 1             | <             | 0        | 0.33   | 1             | <              | U       | 1./    | 10        | 0             | 0       | 0.187          | 1      | Ű            | U       | 3.46   | 20             | U              | 8       | 0.18   | 1              | U            | 0         |
| SEMIVULATILES                                    | 2,0-Dilauologuene          | 0.33   | 1             | <             | 0        | 0.33   | 1             | <              | 11      | 1.7    | 10        | 0             | U<br>11 | 0.187          | 3      | 0            | U<br>JI | 3.40   | 20             | U              | ย       | 0.18   | 1              | U<br>U       | 1         |
| SEMIVOLATILES                                    | 2-Chlorophenol             | 0.33   | 1             | Ż             | 11<br>11 | 0.33   | 1             | 2              | 0<br>31 | 1.7    | 10        | 17            | 11      | 0.107          | 1      | 0            | U<br>FI | 3.40   | 20             | 0              | U<br>U  | 0.10   | 1              | บ<br>ส       | - 0       |
| SEMIVOLATILES                                    | 2-Metinvinaphthalene       | 0.33   | 1             | ,             | U        | 0.33   | 1             | ~              | ย่      | 1.7    | 10        | U<br>U        | ŭ       | 0.187          | 1      | U U          | U U     | 3.46   | 20             | 11             | U U     | 0.10   | 1              | U<br>U       | 11        |
| SEMIVOLATILES                                    | 2-Methylphenol             | 0.33   | t             | <             | Ŭ        | 0.33   | 1             | <              | ย       | 1.7    | 10        | บั            | Ũ       | 0.187          | 1      | Ũ            | ŭ       | 3.46   | 20             | U              | Ŭ       | 0.18   | 1              | U            | U         |
| SEMIVOLATILES                                    | 2-Nitroaniline             | 1.65   | 1             | <             | U        | 1.65   | t             | <              | U       | 8.5    | 10        | U             | IJ      | 0.937          | 1      | U            | ย       | 17.3   | 20             | U              | U       | 0.899  | 1              | U            | U         |
| SEMIVOLATILES                                    | 2-Nitrophenoi              | 0.33   | 1             | <             | U        | 0.33   | 1             | <              | U       | 1.7    | 10        | U             | U       | 0.187          | 1      | U            | U       | 3.46   | 20             | U              | U       | 0.18   | 1              | U            | U         |
| SEMIVOLATILES                                    | 3,3'-Dichlorobenzidine     | 0.65   | 1             | <             | U        | 0.65   | 1             | <              | U       | 3.4    | 10        | U             | U       | 0.375          | 1      | U            | ß       | 6.92   | 20             | U              | U       | 0.359  | 1              | U            | U         |
| SEMIVOLATILES                                    | 3-Nitroaniline             | 1.65   | 1             | <             | U        | 1.65   | 1             | <              | U       | 8.5    | 10        | U             | U       | 0.937          | 1      | U            | U       | 17.3   | 20             | U              | U       | 0.899  | 1              | U            | IJ        |
| SEMIVOLATILES                                    | 4,6-Dinitro-2-methylphenol | 1.65   | 1             | <             | IJ       | 1.65   | 1             | <              | U       | 8.5    | 10        | U             | U       | 0.937          | 1      | U            | U       | 17.3   | 20             | U              | U       | 0.899  | 1              | U            | ប         |
| SEMIVOLATILES                                    | 4-Bromophenyl phenyl ether | 0.33   | 1             | <             | ป        | 0.33   | 1             | <              | U       | 1.7    | 10        | U             | U       | 0.187          | 1      | U            | U       | 3.46   | 20             | U              | U       | 0.18   | 1              | U            | บ         |
| SEMIVULATILES                                    | 4-Chlomanition             | 0.65   | 1             | <             | U        | 0.65   | 1             | <              | U       | 1.7    | 10        | 0             | U.      | 0.187          | 1      | U            | U       | 3.46   | 20             | V              | U       | 0.18   | 1              | U            | U         |
| JEMIYULAHLEƏ                                     | A-OLING OSTITISTIC         | 0.65   | •             | <             | U        | 0.65   | ŧ.            | <              | υ       | 1.7    | 10        | U             | ų       | 0.187          | Ĩ      | ป            | U       | 3.46   | 20             | U              | U       | 0.18   | 1              | U            | U         |







1.2

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-121 Concentrations of Chemicals in Soil Samples Associated with WR Sump 015

| {SUMP] = WRSUMP015<br>LOCATION _CODE<br>SAMPLE_NO |                                    | LH-V<br>LH-W | VRS1:<br>RS15 | 5-01<br>-01_1 |         | LH-1<br>LH-W | NRS1<br>RS15 | 5-01<br>-01_2 |         | WRS<br>WRS-0 | 015-S  | 3801<br>301-0 | 1   | WRS0<br>WRS-01 | )15-S<br>15-SB | B01<br>01-02 | ł       | WRS<br>WRS-1 | 015-SB | 5802<br>102-01 |         | WRS-    | 015-S<br>15-SB | SB02     | 2       |
|---|------------------------------------|--------------|---------------|---------------|---------|--------------|--------------|---------------|---------|--------------|--------|---------------|-----|----------------|----------------|--------------|---------|--------------|--------|----------------|---------|---------|----------------|----------|---------|
| SAMPLE_DATE                                       |                                    | 8/           | 3/199         | 3             |         | 8            | 3/199        | 93            |         | 9/           | 15/200 | 6             |     | 9/1            | 5/200          | 6            |         | 9/1          | 15/200 | 06             |         | 9/      | 15/200         | 06       |         |
| DEPTH   |                                    | 0.           | 5-1F          | -t            |         | 4            | - 4.5        | Ft            |         | _5           | 551    | Ft            |     | 4              | - 4 Ft         |              |         | 1            | - 1 F  | t              |         | 4       | - 4 F          | t        |         |
| SAMPLE_PURPOSE                                    |                                    |              | reg           |               |         |              | REG          |               |         |              | reg    |               |     | ţ              | ìEG            |              |         |              | reg    |                |         |         | reg            |          |         |
| Test Group  | Parameter (Units = mg/kg)          | Result       | DIL           | LQ            | VQ      | Result       | DIL          | LQ            | VQ      | Result       | DIL    | LQ            | VQ  | Result         | Dil            | LQ           | VQ      | Result       | DIL    | ŁQ             | VQ      | Result  | DIL            | LQ       | VQ      |
| SEMIVOLATILES                                     | 4-Chlorophenyl phenyl ether        | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | υ       | 3.46         | 20     | U              | U       | 0.18    | 1              | U        | U       |
| SEMIVOLATILES                                     | 4-Methylphenol                     | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | 0       | 3.46         | 20     | U.             | 0       | 0.18    | 1              | 0        | U       |
| SEMIVOLATILES                                     | 4-Nitroanline                      | 1.65         | 1             | <             | U       | 1.65         | 1            | <             | 0       | 8.5          | 10     | U             | 0   | 0.937          | 1              | U<br>11      | 0       | 17.3         | 20     | 0              |         | 0.899   | 1              | 0        | 0       |
| SEMIVOLATILES                                     |                                    | 1.00         | 1             | ~             | U<br>II | 1.05         | ;            | <             | 0       | 6.0<br>1 7   | 10     | U<br>H        | บ   | 0.937          | 1              | 0<br>11      | n       | 17.3         | 20     | ម              | u<br>u  | 0.699   | 1              | 10<br>11 | 11      |
| SEMBYOL ATTLES                                    | Acononistavione                    | 0.33         | 1             | 2             | 11      | 0.00         | 1            | Ì             |         | 17           | 10     | 11            | 11  | 0.107          | 1              | U)           | ы       | 3.46         | 20     | 1              | u       | 0.10    | ,              |          | 11      |
| SEMIVOLATILES                                     | Anthracene                         | 0.33         | 1             | ç             | 11      | 0.33         | ,<br>1       | Ì             | U)      | 1.7          | 10     | U             | U U | 0.187          | 1              | Ŭ            | ย       | 3.46         | 20     | Ű              | Ũ       | 0.18    | 1              | ย        | Ŭ       |
| SEMIVOLATILES                                     | Benzo(a)anthracene                 | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | Ū       | 1.7          | 10     | U             | υ   | 0.187          | 1              | U            | ป       | 3.46         | 20     | U              | U       | 0.18    | 1              | IJ       | υ       |
| SEMIVOLATILES                                     | Benzo(a)pyrene                     | 0.33         | t             | <             | U       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | U       | 3.46         | 20     | U              | U       | 0.18    | 1              | U        | υ       |
| SEMIVOLATILES                                     | Benzo(b)fluoranthene               | 0.33         | 1             | <             | ប       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | U       | 3.46         | 20     | IJ             | U       | 0.18    | 1              | U        | U       |
| SEMIVOLATILES                                     | Benzo(ghi)perylene                 | 0.33         | 1             | <             | IJ      | 0.33         | 1            | <             | ប       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | ย       | 3.46         | 20     | ប              | Ð       | 0.18    | 1              | U        | V       |
| SEMIVOLATILES                                     | Benzo(k)/iluoranthene              | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | U       | 3.46         | 20     | U              | U       | 0.18    | 1              | U        | U       |
| SEMIVOLATILES                                     | Benzoic Acid                       | 1.65         | 1             | <             | U       | 1.65         | 1            | <             | U       | 8.5          | 10     | Ų             | U   | 0.937          | 1              | U            | ย       | 17.3         | 20     | U              | U       | 0.899   | 1              | U        | U       |
| SEMIVOLATILES                                     | Benzyl Alcohol                     | 0.65         | 1             | <             | U       | 0.65         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | U       | 3.46         | 20     | ប              | U       | 0.18    | 1              | U        | U       |
| SEMIVOLATILES                                     | bis(2-Chloroethoxy)methane         | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | υ   | 0.187          | 1              | U            | IJ      | 3.46         | 20     | U              | บ       | 0.18    | 1              | U        | U       |
| SEMIVOLATILES                                     | bis(2-Chloroethyl)ether            | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | U       | 3.46         | 20     | U              | U       | 0.18    | 1              | U        | U       |
| SEMIVOLATILES                                     | bis(2-Chloroisopropyi)ether        | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | U       | 3.46         | 20     | U              | U       | 0.18    | 1              | U        | U       |
| SEMIVOLATILES                                     | bis(2-Ethylhexyl)phthalate         | 0.572        | 1             |               |         | 0.33         | 1            | <             | 0       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | U       | 3.46         | 20     | 0              | U       | 0.18    | 1              | U        | 0       |
| SEMIVOLATILES                                     | Butyl benzyl phthalate             | 0.33         | 1             | <             | υ<br>   | 0.33         | 1            | <             | U<br>   | 1.7          | 10     | U             | 8   | 0.187          | 1              | 0            | U       | 3.46         | 20     | U<br>          | 0       | 0.18    | 1              | บ        | 0       |
| SEMIVOLATILES                                     | Chrysene<br>Discourse blootheseene | 0.33         | 1             | <             | บ       | 0.33         | 1            | <             |         | 1.7          | 10     | 0             |     | 0.187          | 1              | 0            | 0       | 3.40         | 20     | U<br>U         |         | 0.18    | -1             | 0        | 0       |
| SEMIWOLATILES                                     | Dibenzo(a,ti)anuracene             | 0.33         | 1             | \$            | 0<br>11 | 0.33         | *            | <             | 13      | 1.7          | 10     |               | н   | 0.107          | 1              | 0            | 0       | 3.40         | 20     | 11             | 1       | 0.10    | 1              | U<br>U   | 11      |
| SEMINOLATILES<br>SEMINOLATILES                    | Diettyd obtholate                  | 0.33         | 1             | Ś             | U<br>H  | 0.33         | 1            | 2             | u U     | 1.7          | 10     | 0             | 11  | 0.107          | i<br>t         | ю<br>н       | 11      | 3.40         | 20     | 11             | ม<br>เ  | 0.10    | 1              | 11       | 11      |
| SEMIVOLATILES                                     | Dimethyl obthalate                 | 0.33         | 1             | 2             | -11     | 0.33         | ;            | 2             | 11      | 17           | 10     | u             | 11  | 0.187          | 1              | ы            | ii.     | 3.46         | 20     | ŭ              | ü       | 0.10    | ;              | 11       | ũ       |
| SEMIVOLATILES                                     | di-n-Butyi philipalate             | 0.33         | 1             | è.            | บ       | 0.33         | 1            | <             | Ŭ       | 1.7          | 10     | Ŭ             | Ŭ   | 0.187          | 1              | Ŭ            | Ŭ       | 3.46         | 20     | Ű              | U       | 0.18    | 1              | U        | U       |
| SEMIVOLATILES                                     | di-n-Octvi phihalate               | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | υ       | 1.7          | 10     | U             | υ   | 0.187          | 1              | U            | Ū       | 3.46         | 20     | v              | U       | 0.18    | 1              | U        | U       |
| SEMIVOLATILES                                     | Fluoranthene                       | 0.33         | 1             | <             | U       | 0.33         | t            | <             | U       | 1.7          | 10     | U             | υ   | 0.187          | 1              | U            | U       | 3.46         | 20     | U              | ប       | 0.18    | 1              | ប        | U       |
| SEMIVOLATILES                                     | Fluorene                           | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | υ   | 0.187          | 1              | U            | U       | 3.46         | 20     | U              | U       | 0.18    | 1              | IJ       | U       |
| SEMIVOLATILES                                     | Hexachlorobenzene                  | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | U       | 3.46         | 20     | ម              | U       | 0.18    | 1              | U        | U       |
| SEMIVOLATILES                                     | Hexachlorobutadiene                | 0.33         | 1             | <             | U       | 0.33         | t            | <             | ប       | 1.7          | 10     | U             | U   | 0.187          | t              | U            | IJ      | 3.46         | 20     | U              | U       | 0.18    | 1              | บ        | U       |
| SEMIVOLATILES                                     | Hexachlorocyclopentadiene          | 0.33         | 1             | <             | U       | 0.33         | ţ            | <             | U       | 1.7          | 10     | IJ            | U   | 0.187          | 1              | U            | U       | 3.46         | 20     | U              | U       | 0.18    | 1              | រ        | U       |
| SEMIVOLATILES                                     | Hexachloroethane                   | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | Ð            | U       | 3.46         | 20     | U              | U       | 0.18    | 1              | U        | U       |
| SEMIVOLATILES                                     | Indeno(1,2,3-cd)pyrene             | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | U       | 3.46         | 20     | U              | U       | 0.18    | 1              | U        | U       |
| SEMIVOLATILES                                     | Isophorone                         | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | 0            | U       | 3.46         | 20     | U              | 9       | 0.18    | 1              | 0        | U       |
| SEMIVOLATILES                                     | Naphthalene                        | 0.33         | 1             | <             | U       | 0.33         | 1            | <             | υ       | 1.7          | 10     | 0             | 0   | 0.187          | 1              | 0            | U       | 3.46         | 20     | 0              | U<br>11 | 0.18    | 1              | ป        | 0       |
| SEMIVOLATILES                                     | Nitobenzene                        | 0.33         | 4             | <             | 0       | 0.33         | 1            | <             | 21      | 1.7          | 10     | U             | 17  | 0.187          | 1              | 0            | U<br>11 | 3.40         | 20     | 0              |         | 0.18    | 1              | 0        | 11      |
| SEMINOLATILES<br>SEMINOLATILES                    | n Nitrosodiobomiamino              | 0.33         | ,             | ~             | н       | 0.33         | 1            |               | U<br>11 | 1.7          | 10     | н             | 0   | 0.107          | 1              | п            | 0       | 3.40         | 20     | 11             | 1       | 0.10    | 1              | н        | 11      |
| SEMIVOLATILES                                     | Pentachioronizegol                 | 1.65         | 1             | 2             | 11      | 1.65         | 1            | è             | ŭ       | 85           | 10     | ม             | 13  | 0.101          | 1              | н            | 17      | 17.3         | 20     | 11             | n       | 0.10    | 1              | ÷.       | ŭ       |
| SEMIVOLATILES                                     | Phenanthrene                       | 0.33         | 3             | <br><         | U       | 0.33         | 1            | <             | ບັ      | 1.7          | 10     | Ű             | Ŭ   | 0.187          | 1              | Ũ            | U       | 3.46         | 20     | U              | U       | 0.18    | 1              | U        | U       |
| SEMIVOLATILES                                     | Phenol                             | 0.33         | 1             | <             | Ū       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | U       | 3.46         | 20     | U              | U       | 0.18    | 1              | U        | υ       |
| SEMIVOLATILES                                     | Pyrene                             | 0.33         | 1             | <             | υ       | 0.33         | 1            | <             | U       | 1.7          | 10     | U             | U   | 0.187          | 1              | U            | U       | 3.46         | 20     | U              | U       | 0.18    | t              | U        | U       |
| TPH   | Hydrocarbons as Diesel Fuel        |              |               |               |         |              |              |               |         |              |        |               |     |                |                |              |         |              |        |                |         |         |                |          |         |
| трн   | Hydrocarbons as Gasoline           |              |               |               |         |              |              |               |         |              |        |               |     |                |                |              |         |              |        |                |         |         |                |          |         |
| трн   | TOTAL HYDROCARBONS                 |              |               |               |         |              |              |               |         |              |        |               |     |                |                |              |         |              |        |                |         |         |                |          |         |
| VOLATILES   | 1,1,1,2-Tetrachloroethane          |              |               |               |         |              |              |               |         |              |        |               |     | 0.00655        | 1              | U            | U       |              |        |                |         | 0.00502 | 1              | U        | U       |
| VOLATILES   | 1,1,1-Trichloroethane              | 0.005        | t             | <             | ß       | 0.005        | 1            | <             | U       |              |        |               |     | 0.00655        | 1              | U            | U       |              |        |                |         | 0.00502 | 1              | U        | U       |
| VOLATILES   | 1,1,2,2-Tetrachloroethane          | 0.005        | 1             | <             | U       | 0.005        | 1            | <             | U       |              |        |               |     | 0.00655        | 1              | U            | U       |              |        |                |         | 0.00502 | 1              | U        | U       |
| VOLATILES   | 1,1,2-Trichloroethane              | 0.005        | 1             | <             | U       | 0.005        | 1            | <             | 0       |              |        |               |     | 0.00655        | 1              | U            | U       |              |        |                |         | 0.00502 | 1              | U        | U       |
| VOLATILES   | 1,1-Dichloroethane                 | 0.005        | 1             | <             | U       | 0.005        | 1            | <             | 0       |              |        |               |     | 0.00655        | 1              | 0            | U       |              |        |                |         | 0.00502 | 1              | 0        | U       |
| VOLATILES   | 1,1-Uichloroethene                 | 0.005        | ļ             | <             | U       | 0.005        | 1            | <             | U       |              |        |               |     | 0.00655        | 1              | 0            | U       |              |        |                |         | 0.00502 | 1              | 0        | U<br>11 |
| VOLATILES   | I, I-Dichloropropene               |              |               |               |         |              |              |               |         |              |        |               |     | 0.00000        | 1              | 0            | U<br>H  |              |        |                |         | 0.00002 | 1              | и<br>н   | 1       |
| VOLATILES   |                                    |              |               |               |         |              |              |               |         |              |        |               |     | 0.000000       | 1              | 11           | 11      |              |        |                |         | 0.00502 | 1              | Ð        | 1       |
| VOLATILES   | 1.2.4-Trichlombenzene              |              |               |               |         |              |              |               |         |              |        |               |     | 0.00655        | 1              | ŭ            | U<br>U  |              |        |                |         | 0.00502 | 1              | U        | ນ       |
| VOLATILES   | 1 2 4-Trimethylbenzene             |              |               |               |         |              |              |               |         |              |        |               |     | 0.00655        | 1              | U            | บั      |              |        |                |         | 0.00502 | 1              | บ        | บ       |
| VOLATILES   | 1,2-Dibromo-3-chioropropane        |              |               |               |         |              |              |               |         |              |        |               |     | 0.00655        | 1              | υ            | บ้      |              |        |                |         | 0.00502 | 1              | U        | ย       |
| VOLATILES   | 1,2-Dibromoethane                  |              |               |               |         |              |              |               |         |              |        |               |     | 0.00655        | 1              | U            | บ       |              |        |                |         | 0.00502 | 1              | U        | U       |
| VOLATILES   | 1,2-Dichloroberzene                |              |               |               |         |              |              |               |         |              |        |               |     | 0.00655        | 1              | U            | U       |              |        |                |         | 0.00502 | 1              | ប        | ປ       |
| VOLATILES   | 1,2-Dichloroethane                 | 0.005        | 1             | <             | U       | 0.005        | 1            | <             | ប       |              |        |               |     | 0.00655        | 1              | U            | U       |              |        |                |         | 0.00502 | 1              | U        | U       |
| VOLATILES   | 1,2-Dichloroethene                 | 0.005        | 1             | <             | U       | 0.005        | 1            | <             | U       |              |        |               |     |                |                |              |         |              |        |                |         |         |                |          |         |
| VOLATILES   | 1,2-Dichloropropane                | 0.005        | 1             | <             | U       | 0.005        | 1            | <             | U       |              |        |               |     | 0.00655        | 1              | U            | U       |              |        |                |         | 0.00502 | 1              | U        | U       |
| VOLATILES   | 1,2-Dimethylbenzene (o-Xylene)     |              |               |               |         |              |              |               |         |              |        |               |     | 0.00655        | 1              | U            | ป       |              |        |                |         | 0.00502 | i              | IJ       | U       |
| VOLATILES   | 1,3,5-Trimethylbenzene             |              |               |               |         |              |              |               |         |              |        |               |     | 0.00655        | 1              | Ų            | IJ      |              |        |                |         | 0.00502 | 1              | U        | υ       |



Shaw Project No. 117591 7/11/2007

# Table 3-121 Concentrations of Chemicals in Soil Samples Associated with WR Sump 015

|                                      | LH-V   | VRS15.0  |  | THA  | VESTS.   | <b>M</b> 1  | 18/17   | CALC CDAL  | 140000  | 10 000  |   | 58  | C) C) D 4 F | 0000   |   |   |   | 20.00   |  |
|--------------------------------------|--|--|--|--|--|---|---|--|---|---|---|---|-------------|--|---|---|---|---|--|
|                                      |  |  | ſ  | u.,  | 11010  |   | 481   | 13013-3001   | WHSU  | 13-580  | 21  | *1  | IK2012      | r5802  |   | WHS   | 015-3   | 5602  |  |
|                                      | LH-W   | RS15-01  | 1  | LH-W   | HS15-0   | 1_2   | WRS   | -015-SB01-01   | WRS-01  | 5-SB01  | -02   | WF  | IS-15-5     | SB02-01  |   | WRS-  | 15-SE   | 302-02  | 2  |
|                                      | 8  | 3/1993   |  | 8  | 3/1993   |   | 5   | 9/15/2006  | 9/15  | /2006   |   |   | 9/15/2      | 006  |   | 9/1   | 15/20   | 06  |  |
|                                      | 0.   | 5 - 1 Ft   |  | 4  | - 4.5 F1   |   |   | _55 Ft   | 4 -   | 4 Ft  |   |   | 1-1         | Ft   |   | 4   | 1 - 4 F   | 1   |  |
|                                      |  | reg  |  |  | REG  |   |   | REG  | R   | EG  |   |   | RE          | G  |   |   | REG   |   |  |
| Parameter (Units = mg/kg)            | Result   | DIL LO   | VQ   | Result   | DIL  | LQ VQ   | Result  | DIL LO VO  | Result  | DIL L   | Q VC  | Resul   | t DH        | LQV  | /Q R  | esut  | DIL.  | ιQ  | VQ   |
| 1,3-Dichlorobenzene                  |  |  |  |  |  |   |   |  | 0.00655   | 1   | υU  |   |             |  | 0.  | 00502   | 1   | U   | U  |
| 1,3-Dichloropropane                  |  |  |  |  |  |   |   |  | 0.00655   | 1   | υU  |   |             |  | 0   | 00502   | 1   | U   | IJ   |
| 1,4-Dichlorobenzene                  |  |  |  |  |  |   |   |  | 0.00655   | 1   | ប ប   |   |             |  | 0.  | 00502   | 1   | U   | IJ   |
| 2,2-Dichloropropane                  |  |  |  |  |  |   |   |  | 0.00655   | 1   | u u   |   |             |  | 0   | 00502   | 1   | U   | U  |
| 2-Butarione                          | 0.05   | 1 <  | U  | 0.05   | 1  | < U   |   |  | 0.0131  | 1   | υU  |   |             |  |   | 0.01  | 1   | U   | IJ   |
| 2-Chloroethyl vinyl ether            | 0.01   | 1 <  | U  | 0.01   | 1  | < U   |   |  | 0.0131  | 1   | บ เ   |   |             |  |   | 0.01  | 1   | U   | U  |
| 2-Chlorotoluene                      |  |  |  |  |  |   |   |  | 0.00655   | 1   | U U   |   |             |  | 0   | .00502  | 1   | U   | υ  |
| 2-Hexanone                           | 0.05   | 1 <  | Ð  | 0.05   | 1  | < U   |   |  | 0.0131  | 1   | บ บ   |   |             |  |   | 0.01  | t   | IJ  | ប  |
| 4-Chlorotoluene                      |  |  |  |  |  |   |   |  | 0.00655   | 1   | U U   |   |             |  | 0.  | .00502  | 1   | U   | U  |
| Acetone                              | 0.1  | 1 <  | U  | 0.1  | t  | < U   |   |  | 0.0131  | 1   | บบ  |   |             |  |   | 0.01  | 1   | U   | U  |
| Benzene                              | 0.005  | 1 <  | U  | 0.005  | 1  | < 1   |   |  | 0.00655   | 1   | υŪ  |   |             |  | 0   | .00502  | 1   | U   | U  |
| Bromobenzene                         |  |  | *  |  |  | . 🗸   |   |  | 0.00655   | 1   | บบ  |   |             |  | 0   | .00502  | Ŧ   | Ū   | Ű  |
| Bromochioromethane                   | 1  |  |  |  |  |   |   |  | 0.00655   | 1   | ម្រ   |   |             |  | n   | .00502  | 1   | н<br>Ш  | Ū  |
| Bromodichloromethage                 | 0.005  | 1 -  | TI   | 200.0  | 1  | ۲ ا   |   |  | 0.00655   | •   | 0 U   |   |             |  | 0.<br>A   | 00502   | 1   | ŭ   | ŭ  |
| Bromotorm                            | 0.000  |  | 11   | 0.000  | 1  | ~ 11  |   |  | A DARGE   | ,   | 1 D   |   |             |  | 0.<br>A   | 00502   | 1   | п   |  |
| Bromomethane                         | 0.003  | 1 2  | н  | 0.003  | ,  | ~ 11  |   |  | 0.00000   |   | 0<br>11 11  |   |             |  | 0.  | 0.01  | 1   | n   | 0  |
| Comon dicultido                      | 0.01   | • •  |  | 0.01   | 1  | ~ 0   |   |  | 0.0131  | 1   | 0 0<br>11 11  |   |             |  | ~   | 00502   | 4   | 11  |  |
| Carbon tetrashlorida                 | 0.005  |  |  | 0.005  | •  |   |   |  | 0.000000  | 1   |   |   |             |  | 0.  | 00002   | +   | 0   | 0  |
| Calbon tetractionide                 | 0.005  | • •  | 0  | 0.005  | •  | < 0   |   |  | 0.000000  |   | υ υ<br>11 ι   |   |             |  | 0.  | 00302   | 1   | 0   | U<br>  |
| Chlorenthere                         | 0.005  | ι <  |  | 0.005  | 1  | < U   |   |  | 0.00655   | 1   | υ υ<br>   |   |             |  | 0.  | 00002   | *   | 0   | 0  |
| Chloroeinane                         | 0.01   | 1 <  | 0  | 0.01   | 1  | < 0   |   |  | 0.0131  | 1   | 0 0   |   |             |  |   | 0.01  | 1   | 0   | 0  |
| Chlorotorm                           | 0.005  | 1 <  | U  | 0.005  | 1  | < U   |   |  | 0.00655   | 1   | 0 0   |   |             |  | 0.  | 00502   | 1   | 0   | 0  |
| Chloromethane                        | 0.01   | 1 <  | U  | 0.01   | 1  | < U   |   |  | 0.0131  | 1   | 0 0   |   |             |  | -   | 0.01  | 1   | U   | U  |
| cis-1,2-Dichloroethene               |  |  |  |  |  |   |   |  | 0.00655   | 1   | υu  |   |             |  | 0.  | .00502  | 1   | U   | U  |
| cis-1,3-Dichloropropene              | 0.005  | 1 <  | U  | 0.005  | 1  | < U   |   |  | 0.00655   | 1   | υU  |   |             |  | 0.  | 00502   | 1   | U   | U  |
| Dibromochloromethane                 | 0.005  | 1 <  | U  | 0.005  | 1  | < U   |   |  | 0.00655   | 1   | υU  |   |             |  | 0.  | 00502   | 1   | U   | U  |
| Dibromomethane                       |  |  |  |  |  |   |   |  | 0.00655   | 1   | U U   |   |             |  | 0.  | 00502   | t   | U   | U  |
| Dichlorodifluoromethane              |  |  |  |  |  |   |   |  | 0.0131  | 1   | U U   |   |             |  |   | 0.01  | 1   | Ų   | U  |
| Ethylbenzene                         | 0.005  | 1 <  | U  | 0.005  | 1  | < U   |   |  | 0.00655   | 1   | บ บ   |   |             |  | 0.  | 00502   | 1   | U   | U  |
| Hexachlorobutadiene                  |  |  |  |  |  |   |   |  | 0.00655   | 1   | υu  |   |             |  | 0.  | 00502   | 1   | U   | U  |
| Isopropylbenzene                     |  |  |  |  |  |   |   |  | 0.00655   | 1   | υu  |   |             |  | 0.  | 00502   | 1   | U   | U  |
| m,p-Xylenes                          |  |  |  |  |  |   |   |  | 0.00655   | 1   | U U   |   |             |  | 0.  | 00502   | 1   | U   | U  |
| Methyl isobutyl ketone               | 0.05   | 1 <  | U  | 0.05   | 1  | < U   |   |  | 0.0131  | 1   | n n   |   |             |  |   | 0.01  | t   | U   | U  |
| Methylene chloride                   | 0.005  | 1 <  | U  | 0.005  | 1  | < U   |   |  | 0.00655   | 1   | υυ  |   |             |  | 0.  | 00502   | 1   | U   | U  |
| Naphthalene                          |  |  |  |  |  |   |   |  | 0.0131  | 1   | υυ  |   |             |  |   | 0.01  | 1   | U   | U  |
| n-8UTYLBENZENE                       |  |  |  |  |  |   |   |  | 0.00655   | 1   | υ U   |   |             |  | 0.  | 00502   | 1   | U   | U  |
| n-PROPYLBENZENE                      |  |  |  |  |  |   |   |  | 0.00655   | 1   | υu  |   |             |  | 0.  | 00502   | 1   | U   | ឋ  |
| p-ISOPROPYLTOLUENE                   |  |  |  |  |  |   |   |  | 0.00655   | 1   | υυ  |   |             |  | 0.  | .00502  | 1   | U   | ប  |
| sec-BUTYLBENZENE                     | l  |  |  |  |  |   |   |  | 0.00655   | 1   | υυ  |   |             |  | 0.  | 00502   | 1   | υ   | U  |
| Styrene                              | 0.005  | 1 <  | U  | 0.005  | 1  | < U   |   |  | 0.00655   | 1   | υU  |   |             |  | 0.  | 00502   | 1   | U   | υ  |
| tert-BUTYLBENZENE                    | •  |  |  |  |  |   |   |  | 0.00655   | 1   | บป  |   |             |  | 0   | .00502  | 1   | U   | U  |
| Tetrachloroethene                    | 0.005  | 1 <  | U  | 0.005  | 1  | < U   |   |  | 0.00655   | 1   | មប  |   |             |  | 0   | .00502  | 1   | U   | U  |
| Toluene                              | 0.005  | 1 2  | ň  | 0.005  | 1  | < 11  |   |  | 0.00655   | 1   | មព  |   |             |  | n   | 00502   | 1   | u   | 11   |
| trans-1.2-Dichloroethene             |  | . `  | ~  | 0.000  |  |   |   |  | 0.00655   | 1   | 0 H   |   |             |  | n.  | 00502   | 1   | H   | 11   |
| trans_1_3_Dichloropropene            | 0.005  | 1 -  | н  | 0.005  | 1  | ~ 11  |   |  | 0.00655   | •   | с 0<br>н н  |   |             |  | 0.<br>G   | 00502   | 1   | ы   | ม  |
| Tichlonathona                        | 0.000  | 1 -  |  | 0.003  | 1  | ~ 11  |   |  | 0.00000   | •   | о о<br>и и  |   |             |  | 0.<br>A   | 00502   | 4   | 11  | 11   |
| Tricklorofluoromathana               | 0.000  | · <  | U  | 0.003  | •  | 、 U   |   |  | 0.00000   |   | о о<br>н п  |   |             |  | U.  | 6.01  | 4   | 0   | 51   |
| rashiyiyiyikanganang<br>Mavi sectoto | 0.05   | 1  |  | 0.07   |  | , 1I  |   |  | 0.0131  |   | <del>у</del> 0<br>н н   |   |             |  |   | 0.01  | 4   | 0   | 0<br>11  |
| Visy autile                          | 0.05   |  |  | 0.05   | Ŧ  | < U   |   |  | 0.0131  | 1   |   |   |             |  |   | 0.01  | 4   | 0   | 0  |
| Videose Tabl                         | 0.01   | + <  |  | 10.01  | 1  | < U   |   |  | 0.0131  |   | U U   |   |             |  |   | 0.01  | 1   | Ų   | 0  |
| AMPRES LODA                          | 0.005  | 1 <  | 0  | 0.005  | ł  | < U   |   |  |   |   |   |   |             |  |   |   |   |   |  |
|                                      | Parameter (Units = mg/kg)  1,3-Dichloropropane 1,3-Dichloropropane 1,4-Dichloropropane 2,2-Dichloropropane 3,2-Dichloropropane 3,3-Dichloropropane | LH-Wi<br>8<br>0.<br>Parameter (Units = mg/kg) Result<br>1,3-Dichloropropane<br>1,3-Dichloropropane<br>1,4-Dichloropropane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>2,2-Dichloroptopane<br>4,2-Dicotoluene<br>3,2-Dichloroptinane<br>8,0005<br>8,0005<br>8,0005<br>8,0005<br>1,2-Dichloroptene<br>0,005<br>Chloroptinane<br>0,005<br>Chloroptinane<br>0,005<br>Chloroptinane<br>0,005<br>Chloroptinane<br>0,005<br>Chloroptinane<br>0,005<br>Chloroptinane<br>0,005<br>Dibromochloromethane<br>0,005<br>Dibromochloropene<br>0,005<br>Dibromochloropene<br>0,005<br>Dibromochloropene<br>0,005<br>Dibromochloropene<br>0,005<br>Methyliene chloride<br>0,005<br>Methyliene chloride<br>0,005<br>Methyliene chloride<br>0,005<br>tert-BUTYLBENZENE<br>n-PROPYLBENZENE<br>n-PROPYLBENZENE<br>n-PROPYLBENZENE<br>1,2-Dichloroptopene<br>0,005<br>tert-BUTYLBENZENE<br>1,2-Dichloroptopene<br>0,005<br>tert-BUTYLBENZENE<br>1,2-Dichloroptopene<br>0,005<br>trans-1,2-Dichloroptopene<br>0,005<br>Trichloroftuoromethane<br>0,005<br>Trichloroftuoromethane<br>0,005<br>Trichloroftuoromethane<br>0,005<br>Trichloroftuoromethane<br>0,005<br>Trichloroptuoromethane<br>0,005<br>Trichloroptuoromethane<br>0,005<br>Trichloroptuoromethane<br>0,005<br>Trichloroptuoromethane<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dichloroptopene<br>0,005<br>1,2-Dich | $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | $\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$ | $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | LH-WRS15-01_1         LH-WRS15-01_1         LH-WRS15-01_1           8/3/1993         8/3/1993         8/3/1993           0.5 · I PI         4 - 4.5 PI           NEG         Result         DIL         LO         VO         Result         DIL         1           1,3-Dichlorobenzene         1.3-Dichlorobenzene         1.3-Dichloropopene         < | LH-WRS1S-01_1         LH-WRS1S-01_2         B/3/1993         0.5         1         2           B/3/1993         0.5         1          4         4.5         1           REG         Rest         DIL         LO         VO         Rest         DL         VO         Rest         DL         VO         Rest         DL         VO         NO         T         C         U         DL         LO         VO         Rest         DL | LL+MRS15-01_1 L+MRS15-01_2 WIS<br>8/3/1993 8/3/199 | $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ | LHWR515-01,1         UHWR5155-02,2         WR501550-12,3         WR5015500-12,3         WR501550-12,3         WR501550-12,3         WR501550-12,3         WR501550-12,3         WR5015500,3         WR5015500,3         WR5015500,3         WR5015500,3         WR5015500,3         WR5015500,3         WR5015500,3         WR501500,3         W | LH WR515-01,1         UH WR515-01,2         WR5105-2006         PH32006         PH32006           801993         801903         9115201         9115201         9115201           0.5 - 1P         4 - 4.5 P.         5 - 5 P.         4 - 4.5 P.           13-Dichtorphorpane         1.0         VO         Read         DL         LO         VO         Read         DL         LO         VO         Read         DL         LO         VO         Read         DL         U         0.0055         1           13-Dichtorphorpane         1-4-Dichtorphorpane         0.011         1         U         0.011         1         U         0.0055         1         0.0065         1           2-Dichtorphorpane         0.05         1< | $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$ |             | HMRS150-1         UHMRS150.2         WIRS1550.2         WIRS1550.2         WIRS1550.9         915206 | LH-WRG1501_1         LH-WRG1501_2         WRG15800-01         WRG15800-01         WRG15800-02 | Humblishel         Humblishel         Miss descende         Miss descend         Miss descende         Miss descende </td <td>Li+Will Sto1_1         UHWISTS0_1_2         Will Sto206         WISTS0206         WISTS0206         WISTS0206         WISTS0207</td> <td>Li-MRISTOT,         Li-MRISTOT,         MRS (16.50) / 2         MRS (16.50) / 4         MRS (16.50) / 4         MRS (16.50) / 4         MRS (16.50) / 7</td> | Li+Will Sto1_1         UHWISTS0_1_2         Will Sto206         WISTS0206         WISTS0206         WISTS0206         WISTS0207 | Li-MRISTOT,         Li-MRISTOT,         MRS (16.50) / 2         MRS (16.50) / 4         MRS (16.50) / 4         MRS (16.50) / 4         MRS (16.50) / 7 | Humistishof, 2         Wischessendo         Wischessendo         Wischessendo         Wischessendo         Wischessendo           Barname (Unit) = mg/mg)         Real         Di. Lo         Vo         Read         Di. Lo         Vo         Di. Lo         Di. Lo         Di. Lo |



Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

\_

Table 3-122 Concentrations of Chemicals in Soil Samples Associated with WR Sump 016

| (SUMP) = WRSUMPO               | 16   |                   |                   |                   |                   |                      |                      |                         |                            |                            |                             |                             |                   |
|--------------------------------|--|-------------------|-------------------|-------------------|-------------------|----------------------|----------------------|-------------------------|----------------------------|----------------------------|-----------------------------|-----------------------------|-------------------|
| LOCATION_CODE                  |  | 35SUMP107-SB01    | 35SUMP107-SB01    | 35SUMP107-SB02    | 35SUMP107-SB02    | 35SUMP107-SB02       | LH-S107-01           | LH-S107-01              | LH-S107-01                 | LH-S107-01                 | LH-S108-01                  | LH-S108-01                  | LH-S108-01        |
| SAMPLE_NO                      |  | 35-SMP107-S803-01 | 35-SMP107-SB07-02 | 35-SMP107-SB02-01 | 35-SMP107-SB02-02 | 35-SMP107-SB02-02-QC | LH-S107-01 QC        | EH-ST07-01_1            | LH-S107-01_2               | LH-S107-01_3               | LH-S108-01_1                | LH-S108-01_2                | EH-S108-01_3      |
| SAMPLE_DATE                    |  | 9/14/2005         | 9/14/2006         | 9/14/2006         | 9/14/2006         | 9/14/2006            | 6/26/1993            | 0/20/1993               | 6/26/1993                  | 0/26/1993                  | 6/26/1993                   | 0/20/1993                   | 0/20/1993         |
|                                |  | _3*_3FL           | DEC               | _33rt             | 3-3FL<br>DEC      | 3*371                | 0,5-1,5FL<br>ED      | 0.5-1.571               | I - Lart<br>DEC            | 2-2.3 FL                   | 0.3-1.3 m                   | 2 - 2.3 FL                  | 4-4.3 FL          |
| SAMPLE_PUNPUSE                 | Parameter // Inite ~ malval                | Recult DN 10 VO   | Reput Dit LO VO   | Result Dil LO VO  | Result DI LO VO   | FD<br>Recult มีมาที  | רע<br>היישר אר אר אר | nco<br>Result înt lû V/ | neo<br>0 Result Dil IO VO  | neu<br>Result Dit IO VA    | Result 736 LO VO            | Regult DN IO VO             | Result Dill (O VO |
| EXPLOSIVES                     | 1.3.5-Trinitrobenzene                      | 0.243 1 11        | 0.245 1 1         | 0239 1 11         | 0.242 1 11        | 0.245 1 1            |                      |                         |                            |                            |                             |                             | FROM ONC LAR FAR  |
| EXPLOSIVES                     | 1.3-Dinitrobenzene                         | 0.243 1 U         | 0.245 1 U         | 0.239 1 U         | 0.242 1 U         | 0.245 1 1            |                      |                         |                            |                            |                             |                             |                   |
| EXPLOSIVES                     | 2,4,6-Trinitrotoluene                      | 0.243 1 U         | 0.245 t U         | 0.239 t U         | 0.242 1 U         | 0.245 1 U            |                      |                         |                            |                            |                             |                             |                   |
| EXPLOSIVES                     | 2,4-Dinitrotoluene                         | 0.243 1 U         | 0.245 1 U         | 0.239 1 U         | 0.242 1 U         | 0.245 1 U            | 1.25 1 < U           |                         | 1.266 1 < U                | 1.149 1 < U                | 1.099 t < U                 | 1.149 1 < U                 | 1.205 1 < ⊍       |
| EXPLOSIVES                     | 2,6-Dinitrotoluene                         | 0.252 1 U         | 0.255 1 U         | 0.249 1 U         | 0.251 1 U         | 0.255 1 U            | 1.25 1 < U           |                         | 1.266 1 < U                | 1.149 î < U                | 1.099 t < U                 | 1.149 1 < U                 | 1.205 I < U       |
| EXPLOSIVES                     | 2-Amino-4,6-cinitrotoluene                 | 0.252 1 U         | 0.255 1 U         | 0.249 1 U         | 0.251 1 U         | 0.255 t U            |                      |                         |                            |                            |                             |                             |                   |
| EXPLOSIVES                     | 4-Amino-2,6-cinitrotoluene                 | 0.252 1 U         | 0.255 1 U         | 0.249 1 U         | 0.251 1 U         | 0.255 1 U            |                      |                         |                            |                            |                             |                             |                   |
| EXPLOSIVES                     | HMX  | 2.14 1 U          | 2.16 1 U          | 2.11 1 U          | 2.13 1 U          | 2.16 1 U             |                      |                         |                            |                            |                             |                             |                   |
| EXPLOSIVES                     | m-Nitrotoluene                             | 0.243 1 U         | 0.245 1 U         | 0.239 1 U         | 0.242 1 U         | 0.245 1 U            |                      |                         |                            |                            |                             |                             |                   |
| EXPLOSIVES                     | Nitrobenzene                               | 0.252 1 0         | 0.255 1 U         | 0.249 1 0         | 0.251 1 U         | 0.255 1 0            |                      |                         |                            |                            |                             |                             |                   |
| EXPLOSIVES                     | o-Mitoloiuene                              | 0.243 1 0         | 0245 1 0          | 0.239 1 0         | 0.242 1 0         | 0.245 1 0            |                      |                         |                            |                            |                             |                             |                   |
| EXPLOSIVES                     | p-witelexene                               | 0.243 1 0         | 0.245 1 0         | 0.239 1 0         | 2.92              | U243 I U             |                      |                         |                            |                            |                             |                             |                   |
| EXPLOSIVES                     | Totod                                      | 0.91 1 0          | 0.50 1 0          | 0.927 1 0         | 0.508 1 11        | 0.56 1 0             |                      |                         |                            |                            |                             |                             |                   |
| METARS                         | Aluminum                                   | 5690 1            | 4900 1            | 7690 1            | 10100 1           | 8460 1               | 17100 1              | 15000 1                 | 11100 1                    | 47(0) 1                    | 4030 1                      | 5540 1                      | 16800 t           |
| METALS                         | Antireony                                  | 0.108 1 U         | 0.106 1 U         | 0.0739 1 J J      | 0.108 t U         | 0.112 1 U            | 4.56 1 < U           | 3.2 1 < U               | J 5.56 1 < U               | 3.62 1 < U                 | 5.26 1 < U                  | 3.8 1 < U                   | 4.56 1 < U        |
| METALS                         | Arsenic                                    | 0,917 1           | 0.376 1           | 1.04 1            | 0.948 1           | 0.532 1              | 3.53 t               | 1.3 1                   | 2.42 1                     | 1.43 1                     | 2.45 1                      | 1.75 1                      | 4.26 1            |
| METALS                         | Barium                                     | 59.6 1 J          | 37 1 J            | 111 1 J           | 86.1 1 J          | 216 1 J              | 98.9 t < U           | 91.6 1 < U              | J 62.5 t < U               | 34.2 1 < U                 | 29.7 1 < U                  | 28.9 1 < U                  | 52.2 1 < U        |
| METALS                         | Beryllium                                  | 0.306 1 J J       | 0.324 1 J J       | 0.349 1 J J       | 0.809 1           | 1.23 1               |                      |                         |                            |                            |                             |                             |                   |
| METALS                         | Cadmium                                    | 0.197 1 J J       | 0.0625 1 J J      | 0.451 1           | 0.0898 1 J J      | 0.163 1 J J          | 6.06 1 < U           | 5.06 1 < U              | J 4.84 1 < U               | 2.64 1 < U                 | 3.73 1 < U                  | 2.7 1 < U                   | 6.22 t < b⊁       |
| METALS                         | Calcium                                    | 964 1             | 425 1             | 1890 1            | 1080 1            | 1140 1               | 2360 1               | 2250 1                  | 1690 1                     | 650 1                      | 478 1                       | 522 1                       | 678 1             |
| METALS                         | Chromium                                   | t0.5 1            | 13.2 1            | 14,1 1            | 13 1              | 13.1 1               | 23 t                 | 17.5 1                  | 16.7 1                     | 10.8 1                     | 11.6 1                      | 13.8 1                      | 15.2 1            |
| METALS                         | Cobalt                                     | 3.49 1            | 1.94 1            | 3.09 t            | 4.84 1            | 6.04 1               | 5.13 t               | 3.82 1                  | 3.61 1                     | 1.54 1                     | 1.87 1                      | 1.9 1                       | 4.4               |
| METALS                         | Copper                                     | 3.66 1            | 1,22 1            | 7.59 1            | 2.13 1            | 1.44 1               | 4.38 1 < U           | 4.75 1 < U              | J 3.53 1 < U               | 3.26 1 < U                 | 3.92 1 < U                  | 2.17 1 < U                  | 3.35 1 < ⊍        |
| METALS                         | fron                                       | 10500 1 J         | 10800 f J         | 11200 1           | 11300 1 J         | 21900 1              | 22500 1              | 17000 1                 | 17200 1                    | 7670 1                     | 11000 1                     | 8780 1                      | 22000             |
| METALS                         | Lead                                       | 23.3 1            | 34.3 1            | 2/.4 1 J          | 8.22 1            | 6.79 1 J             | 26.5                 | 25.6 1                  | 21.4 1                     | 11.6 1                     | 10.2 1 E                    | 11.5 1                      | 20.4 1            |
| METALS                         | Magnesium                                  | 412 1             | 41Z I             | 126 1             | 936 1             | 829 I<br>490 1 I     | 1200 1               | 1200 1                  | 1011 I<br>77.9 1           | 26/ 1                      | 344U i<br>7201 1            | 343 1<br>160 1              | 12 1              |
| METALS                         | Marcime                                    |                   | 0.0217 1 1        | 0.0342 1 I I      | 0.0145 1 1 1      | 400 I J              | 0.050 1 2 1          |                         | 17.5 I<br>I 0.059 1 - H    | 0.049 1 2 1                | 0.049 1 c LL                | 0.017 1 < 11                | 0.054 1 < 11      |
| METALS                         | Nickel                                     | 381 1             | 352 1             | 59 1              | 615 1             | 579 1                | 0.038 1 < 0          | 0.054 3 1 0             |                            | 0.043 1 < 0                | 0.045 1 < 0                 | 0.047 1 < 0                 | 0.004 1 1 1 0     |
| METALS                         | Potassium                                  | 188 1             | 147 1             | 258 1             | 251 1             | 184 1                | 334 1                | 318 1                   | 326 1                      | 224 1                      | 251 1                       | 276 1                       | 515 1             |
| METALS                         | Selenium                                   | 0.224 1           | 0.213 1 U         | 0.319 1           | 0.342 1           | 0.198 1 J J          | 0.456 t < U          | 0.32 1 < U              | J 0.556 1 < U              | 0.724 1                    | 0.526 1 < U                 | 0.38 1 < U                  | 0.456 1 < U       |
| METALS                         | Silver                                     | 1.52 1 U          | 1.61 1 U          | 1.63 I U          | 1.56 1 U          | 1.66 1 U             | 0.023 t < U          | 0.021 1 < U             | J 0.028 1 < U              | 0.02 1 < U                 | 0.026 1 < U                 | 0.027 1 < U                 | 0.023 1 < U       |
| METALS                         | Sodium                                     | 51.9 1            | 76.1 1            | 35.8 1            | 66.8 1            | 59.5 1               |                      |                         |                            |                            |                             |                             |                   |
| METALS                         | Strontium                                  |                   |                   |                   |                   |                      | 18.1 1 < U           | 17.8 1 < U              | 10.6 1 < U                 | 4.83 1 < U                 | 5.73 1 < U                  | 7.33 1 < U                  | 13.7 1 < U        |
| METALS                         | Thallium                                   | 0.0347 1          | 0.0273 1          | 0.0345 1          | 0.0406 1          | 0.0431 1             |                      |                         |                            |                            |                             |                             |                   |
| MÉTALS                         | Vanadium                                   | 18.7 1            | 19.9 1            | 20.4 1            | 22.6 1            | 30.3 1               |                      |                         |                            |                            |                             |                             |                   |
| METALS                         | Zinc                                       | 29.8 1            | 11.6 1            | 132 1             | 13.5 1            | 14.2 1               | 82 1                 | 21.9 1                  | 17.3 1                     | 23.4 1                     | 13.3 1                      | 10 1                        | 21 1              |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene                     |                   |                   |                   |                   |                      | 1.25 1 < U           |                         | 1.266 1 < U                | 1.149 1 < U                | 1.099 1 < U                 | 1.149 1 < U                 | 1.205 1 < U       |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene                        |                   |                   |                   |                   |                      | 1.25 1 < 9           |                         | 1266 1 < U                 | 1.149 1 < U                | 1.099 1 < U                 | 1.149 1 < U                 | 1.205 1 < U       |
| SEMIVOLATILES<br>SEMIVOLATILES | 1,3-Dichlorobenzene                        |                   |                   |                   |                   |                      | 125   < 1            |                         | 1200 I < U                 | 1.149 1 < 0                | 1.099 1 < U                 | 1.149 1 < 0                 | 1.205 1 < 0       |
| SEMIVOLATILES                  | 1,4-Diukulovakene<br>2.4 S.Trichloronhonol |                   |                   |                   |                   |                      | 125 1 2 1            |                         | 1266 1 < 11                | 1.349 1 < 0                | 1,099 1 < 0                 | 1149 1 < 1                  | 1205 1 4 1        |
| SEMIVOLATILES                  | 2.4.6-Techlorophenol                       |                   |                   |                   |                   |                      | 1.25 1 < U           |                         | 1.266 1 < U                | 1.149 1 < U                | 1.099 1 < U                 | 1.149 1 < U                 | 1.205 1 < U       |
| SEMIVOLATILES                  | 2.4-Dichlorophenol                         |                   |                   |                   |                   |                      | 1.25 1 < U           |                         | 1.266 1 < U                | 1.149 1 < U                | 1.099 1 < U                 | 1.149 1 < U                 | 1.205 t < U       |
| SEMIVOLATILES                  | 2,4-Dimethylphenol                         |                   |                   |                   |                   |                      | 0.625 1 < U          |                         | 0.633 1 < U                | 0.575 1 < U                | 0.549 1 < U                 | 0.575 1 < U                 | 0.602 t < U       |
| SEMIVOLATILES                  | 2,4-Dintrophenol                           |                   |                   |                   |                   |                      | 12.5 1 < U           |                         | 12.658 ! < U               | 11,494 1 < U               | 10.989 1 < U                | 11.494 1 < U                | 12.048 t < U      |
| SEMIVOLATILES                  | 2,4-Dinitrotoluene                         |                   |                   |                   |                   |                      |                      |                         |                            |                            |                             |                             |                   |
| SEMIVOLATILES                  | 2,6-Dinitrotoluene                         |                   |                   |                   |                   |                      |                      |                         |                            |                            |                             |                             |                   |
| SEMIVOLATILES                  | 2-Chloronaphthalene                        |                   |                   |                   |                   |                      | 0.375 1 < U          |                         | 0.38 1 < U                 | 0.345 1 < U                | 0.33 1 < U                  | 0.345 1 < U                 | 0.361 1 < U       |
| SEMIVOLATILES                  | 2-Chlorophenoi                             |                   |                   |                   |                   |                      | 0.625 t < U          |                         | 0.633 1 < U                | 0.575 t < U                | 0.549 1 < U                 | 0.575 1 < U                 | 0.602 t < U       |
| SEMIVOLATILES                  | 2-Methylnaphthalene                        |                   |                   |                   | · · · · ·         |                      | 0.375 t < U          |                         | 0.38 1 < U                 | 0.345 1 < U                | 0.33 t < U                  | 0.345 1 < U                 | 0.361 1 < U       |
| SEMIVULATILES                  | 2-Meinyiphenol                             |                   |                   |                   |                   |                      | 0.625 1 < U          |                         | 0.633 T < U                | 0.5/5 1 < 0                | 0.549 1 < U                 | 0.575 1 < 0                 | 0.002 T < U       |
| SEMIVOLATILES                  | 2-INBIORINALINE                            |                   |                   |                   |                   |                      | 3./3 T < U           |                         | 3./9/ 1 < U                | 3.448 1 < U                | 3.29/ 1 < U                 | 3.448 I < U                 | J.D14 I < U       |
| SEMIVOLATILES                  | 2-14800000000                              |                   |                   |                   |                   |                      | 1.20 1 < U           |                         | 1.∠00 i < U<br>0.622 i - 1 | 1.149 1 < U<br>0.575 1 ∠ U | 1.033 / < U<br>0.540 1 - II | i,i477 i < U<br>∩575 1 - ≧i | 1.200 1 < U       |
| SEMINOLATILES                  | 3,3 "ULUUUUUUUUUUUUUUUUU                   |                   |                   |                   |                   |                      | 375 1 - 13           |                         | 3,707 1 - 15               | 3.448 1 ∞ II               | 3297 1 - 11                 | 3448 1 - 11                 | 3.614 1 - 11      |
| SEMIVOLATILES                  | 4 6-Dipitro-2-methylohead                  |                   |                   |                   |                   |                      | 6.25 1 < 1           |                         | 6329 1 2 11                | 5747 1 < 1                 | 5.495 1 < 11                | 5.747 1 c ()                | 6.024 1 < I       |
| SEMIVOLATILES                  | 4-Brosnophenyl ohenvil ether               |                   |                   |                   |                   |                      | 1.25 1 < 17          |                         | 1.266 1 < 13               | 1,149 1 < U                | 1.099 1 < U                 | 1.149 1 < U                 | 1.205 1 < U       |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol                    |                   |                   |                   |                   |                      | 0.625 1 < U          |                         | 0.633 1 < U                | 0.575 t < U                | 0.549 t < U                 | 0.575 1 < U                 | 0.602 1 < U       |
| SEMIVOLATILES                  | 4-Chloroaniline                            |                   |                   |                   |                   |                      | 3.75 1 < U           |                         | 3.797 1 < U                | 3.448 1 < U                | 3.297 t < U                 | 3,448 1 < U                 | 3.614 1 < U       |
| SEMIVOLATILES                  | 4-Chlorophenyl phenyl ether                |                   |                   |                   |                   |                      | 1.25 1 < U           |                         | 1.266 t < U                | 1.149 1 < U                | . 1.099 1 < U               | 1.149 1 < U                 | 1.205 1 < U       |
| SEMIVOLATILES                  | 4-Methylphenol                             |                   | •                 |                   |                   |                      | 0.625 1 < U          |                         | 0.633 1 < U                | 0.575 1 < U                | 0.549 t < U                 | 0.575 1 < U                 | 0.602 1 < U       |

Table 3-122

## Concentrations of Chemicals in Soil Samples Associated with WR Sump 016

| [SUMP] = WRSUMPO | 16                          |                         |                   |                       |                   |                        |                      |                 |                          |                       |                             |                         |                         |
|------------------|-----------------------------|-------------------------|-------------------|-----------------------|-------------------|------------------------|----------------------|-----------------|--------------------------|-----------------------|-----------------------------|-------------------------|-------------------------|
| LOCATION_CODE    |                             | 35SUMP107-S801          | 35SUMP107-SB01    | 35SUMP107-SB02        | 35SUMP107-SB02    | 35SUMP107-SB02         | LH-S107-01           | LH-S107-01      | LH-S107-01               | LH-S107-01            | LH-S108-01                  | LH-S108-01              | LH-S108-01              |
| SAMPLE_NO        |                             | 35-SMP107-SB01-01       | 35-SMP107-SB01-02 | 35-SMP107-SB02-01     | 35-SMP107-SB02-02 | 35-SMP 107-SB02-02-QC  | LH-S107-01 QC        | LH-S107-01_1    | LH-S107-01_2             | LH-St07-01_3          | LH-S108-01_1                | LH-S108-01_2            | LH-S108-01_3            |
| SAMPLE_DATE      |                             | 9/14/2006               | 9/14/2006         | 9/14/2006             | 9/14/2006         | 9/14/2006              | 6/26/1993            | 6/26/1993       | 6/26/1993                | 6/26/1993             | 6/26/1993                   | 6/26/1993               | 6/26/1993               |
| DEPTH            |                             | _55Ft                   | 3-3Ff             | _55Ft                 | 3-3 H             | 3-3H                   | 0.5 - 1.5 H          | 0.5 - 1.5 -1    | 1-1.5H                   | 2-2.5 H               | 0.5 - 1.5 H                 | 2-2.5Ft                 | 4-4.5+1                 |
| SAMPLE_PURPOSE   | Devenueter (Utalia - maßer) | Reg<br>Result Off LO MO | HEG               | HEG<br>Denut DH LO VO | HEG               | FU<br>Depute DVI LO VO | FU<br>Desu# TH IO VO | Fields          | HELE<br>Denuit Dit IO VO | NEU<br>Doubt Dit 10 W | 11203<br>Descute Dil 10 110 | HEG Downith Dill 1.0 VO | REU<br>Result Dit IO VO |
| CENNICOLATH ES   | A Nitropolitica             | nesua da La Va          | RESUL DE LO VO    | RESUR DIE LO VO       |                   | nesus Dil LQ VQ        | 625 1 × 11           | nesul pit tu vy | 6 990 1 2 11             | 5747 1 2 U            | 5.405 1 / II                | 5747 1 C II             | 60% 1 < 11              |
| SEMIVOLATILES    | 4-Nitronhonol               |                         |                   |                       |                   |                        | 625 1 < 0            |                 | 6320 1 4 11              | 5747 1 < 0            | 5495 1 2 1                  | 5747 1 4                | 6.024 1 < 0             |
| SEMIVOLATILES    | Aceranbihene                |                         |                   |                       |                   |                        | 0.375 1 < 1          |                 | 0.38 1 < 1               | 0.345 1 < 0           | 0.33 1 < 1                  | 0.345 1 < 13            | 0.361 t < U             |
| SEMIVOLATILES    | Acenaphthviene              |                         |                   |                       |                   |                        | 0.625 1 < U          |                 | 0.633 1 < U              | 0.575 1 < U           | 0.549 1 < U                 | 0.575 1 < U             | 0.602 1 < U             |
| SEMIVOLATILES    | Anthracene                  |                         |                   |                       |                   |                        | 0.625 1 < U          |                 | 0.633 1 < U              | 0.575 1 < U           | 0.549 1 < U                 | 0.575 1 < U             | 0.602 t < U             |
| SEMIVOLATILES    | Benzo(a)antivacene          |                         |                   |                       |                   |                        | 0.375 1 < U          |                 | 0.38 1 < U               | 0.345 1 < U           | 0.33 T < U                  | 0.345 1 < U             | 0.361 1 < U             |
| SEMIVOLATILES    | Benzo(a)pyrene              |                         |                   |                       |                   |                        | 0.625 1 < U          |                 | 0.633 1 < U              | 0.575 1 < U           | 0.549 t < U                 | 0.575 1 < U             | 0.602 t < U             |
| SEMIVOLATILES    | Benzo(b)fluoranthene        |                         |                   |                       |                   |                        | 1.25 1 < U           |                 | 1.266 1 < U              | 1.149 1 < U           | 1.099 1 < U                 | 1.149 1 < U             | 1.205 1 < U             |
| SEMIVOLATILES    | Benzo(ghi)perylene          |                         |                   |                       |                   |                        | 2.5 1 < U            |                 | 2.532 1 < U              | 2.299 1 < U           | 2,198 1 < U                 | 2.299 1 < U             | 2.41 1 < U              |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                         |                   |                       |                   |                        | 1.25 1 < U           |                 | 1.266 1 < U              | 1.149 1 < U           | 1.099 1 < U                 | 1.149 1 < U             | 1.205 1 < U             |
| SEMIVOLATILES    | Benzoic Acid                |                         |                   |                       |                   |                        |                      |                 |                          |                       |                             |                         |                         |
| SEMIVOLATILES    | Benzyl Alcohoł              |                         |                   |                       |                   |                        |                      |                 |                          |                       |                             |                         |                         |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  |                         |                   |                       |                   |                        | 0.625 1 < U          |                 | 0.633 t < U              | 0.575 1 < U           | 0.549 1 < U                 | 0.575 1 < U             | 0.602 i < U             |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |                         |                   |                       |                   |                        | 0.625 1 < U          |                 | 0.633 1 < U              | 0.575 1 < U           | 0.549 1 < U                 | 0.575 1 < U             | 0.602 t < U             |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether |                         |                   |                       |                   |                        | 1.25 1 < U           |                 | 1.266 1 < U              | 1.149 1 < U           | 1.099 1 < U                 | 1.149 t < U             | 1.205 1 < U             |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  |                         |                   |                       |                   |                        | 0.625 1 < U          |                 | 0.127 1 J                | 0.575 1 < U           | 0.176 1 J                   | 0.126 1 J               | 2.349                   |
| SEMIVOLATILES    | Bulyl benzyl phthalate      |                         |                   |                       |                   |                        | 0.625 1 < U          |                 | 0.633 1 < U              | 0.575 1 < U           | 0.549 1 < U                 | 0.575 t < U             | 0.602 1 < U             |
| SEMIVOLATILES    | Carbazole                   |                         |                   |                       |                   |                        | 1.25 1 < U           |                 | 1.266 1 < U              | 1.149 1 < U           | 1.099 1 < U                 | 1.149 1 < U             | 1.205 1 < U             |
| SEMIVOLATILES    | Chrysene                    |                         |                   |                       |                   |                        | 6.25 1 < U           |                 | 6.329 1 < U              | 5.747 1 < U           | 5.495 1 < U                 | 5.747 1 < U             | 6.024 1 < U             |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      |                         |                   |                       |                   |                        | 2.5 1 < U            |                 | 2.532 1 < ⊍              | 2299 1 < U            | 2.198 1 < U                 | 2.299 1 < U             | 2.41 1 < U              |
| SEMIVOLATILES    | Dibenzoturan                |                         |                   |                       |                   |                        | 1.25 1 < U           |                 | 1.266 1 < U              | 1,149 1 < U           | 1.099 1 < U                 | 1.149 1 < U             | 1.205 1 < U             |
| SEMIVULATILES    | Dietnyl primalate           |                         |                   |                       |                   |                        | 0.625 1 < 0          |                 | 0.633 1 < 0              | 0.575 I < 0           | 0.549 1 < 0                 | 0.5/5 1 < 0             | 0.602 1 < 0             |
| SEMIVOLATILES    | omenyi prenarate            |                         |                   |                       |                   |                        | 0.020 1 < 0          |                 | 9.033 1 < 0              | 0.5/5 1 < 0           | U.249 I < U                 | 0.3/5 1 < 0             | 0.002 ( < 0             |
| SEMIVOLATILES    | di-a Ochi obtalate          |                         |                   |                       |                   |                        | 0.625 1 4 10         |                 | 0.633 1 - II             | 0.575 1 < 11          | 0.540 1 2 1                 | 0.575 1 2 1             | 0.602 5 - 11            |
| SEMIVOLATILES    | Choranthane                 |                         |                   |                       |                   |                        | 0.023 1 4 0          |                 | 0.633 1 4 13             | 0.575 1 < 0           | 0.549 1 C U                 | 0.575 1 < U             | 8.602 1 < 11            |
| SEMIVOLATILES    | Fluorens                    |                         |                   |                       |                   |                        | 0.625 1 < 3          |                 | 0.633 1 < 13             | 0.575 1 < 1           | 0.549 1 < 14                | 0.575 1 4 1             | 0.602 1 < U             |
| SEMIVOLATILES    | Hexachtorobenzene           |                         |                   |                       |                   |                        | 125 1 < 1            |                 | 1265 1 < 1               | 1149 1 < 0            | 1099 1 < 11                 | 1 149 1 < 1             | 1.205 1 < U             |
| SEMIVOLATILES    | Hexachlorobutadiene         |                         |                   |                       |                   |                        | 3.75 1 < 1/          |                 | 3797 1 < U               | 3.448 1 < U           | 3297 1 < 1                  | 3.448 1 < U             | 3.614 1 < U             |
| SEMIVOLATILES    | Hexachiorocyclopentadiene   |                         |                   |                       |                   |                        | 3.75 1 < U           |                 | 3.797 1 < U              | 3.448 1 < U           | 3.297 1 < U                 | 3.448 1 < U             | 3.614 1 < U             |
| SEMIVOLATILES    | Hexachloroethane            |                         |                   |                       |                   |                        | 1.25 1 < U           |                 | 1.266 1 < U              | 1.149 1 < U           | 1.099 1 < U                 | 1.149 1 < U             | 1.205 t < U             |
| SEMIVOLATILES    | Indeno(1.2.3-cd)pyrene      |                         |                   |                       |                   |                        | 1.25 1 < U           |                 | 1.266 1 < U              | 1.149 1 < U           | 1.099 1 < U                 | 1.149 1 < U             | 1.205 1 < U             |
| SEMIVOLATILES    | Isophorone                  |                         |                   |                       |                   |                        | 0.625 1 < U          |                 | 0.633 1 < U              | 0.575 1 < U           | 0.549 1 < U                 | 0.575 1 < U             | 0.602 t < U             |
| SEMIVOLATILES    | Naphthalene                 |                         |                   |                       |                   |                        | 0.375 1 < U          |                 | 0.38 t < U               | 0.345 1 < U           | 0.33 1 < U                  | 0.345 1 < U             | 0.361 1 < U             |
| SEMIVOLATILES    | Nitrobenzene                |                         |                   |                       |                   |                        | 0.625 1 < U          |                 | 0.633 1 < U              | 0.575 1 < U           | 0.549 1 < U                 | 0.575 1 < U             | 0.602 i < U             |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  |                         |                   |                       |                   |                        | 1.25 1 < U           |                 | 1.266 1 < U              | 1.149 1 < U           | 1.099 1 < U                 | 1.149 1 < V             | 1.205 t < U             |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      |                         |                   |                       |                   |                        | 0.625 1 < U          |                 | 0.633 1 < U              | 0.575 1 < U           | 0.549 1 < U                 | 0.575 1 < U             | 0.602 i < U             |
| SEMIVOLATILES    | Pentachlorophenol           |                         |                   |                       |                   |                        | 6.25 1 < U           |                 | 6.329 1 < U              | 5.747 1 < U           | 5.495 1 < U                 | 5.747 1 < U             | 6.024 1 < U             |
| SEMIVOLATILES    | Phenanthrene                |                         |                   |                       |                   |                        | 0.625 1 < U          |                 | 0.633 1 < U              | 0.575 1 < U           | 0.549 1 < U                 | 0.575 1 < U             | 0.602 1 < U             |
| SEMIVOLATILES    | Phenol                      |                         |                   |                       |                   |                        | 0.625 t < U          |                 | 0.633 1 < U              | 0.575 1 < U           | 0.549 1 < U                 | 0.575 1 < U             | 0.602 1 < U             |
| SEMIVOLATILES    | Pyrene                      |                         |                   |                       |                   |                        | 0.625 1 < U          |                 | 0.633 1 < U              | 0.575 1 < U           | 0.549 1 < U                 | 0.575 1 < U             | 0.602 i < U             |
| VOLATILES        | 1,1,1,2-Tetrachloroethane   | •                       |                   |                       |                   |                        |                      |                 |                          |                       |                             |                         |                         |
| VOLATILES        | 1,1,1-Trichloroethane       |                         |                   |                       |                   |                        | 0.006 .1 < U         | 0.006 1 < U     | 0.006 1 < U              | 0.006 1 < U           | 0.006 1 < U                 | 0.006 1 < U             | 0.006 1 < U             |
| VOLATILES        | 1,1,2,2-Tetrachloroethane   | · ·                     |                   |                       |                   |                        | 0.006 t < U          | 0.006 1 < U     | 0.006 1 < U              | 0.006 1 < U           | U > 1 ∂00.0                 | 0.006 1 < U             | 0.006 t < U             |
| VOLATILES        | 1,1,2-Trichloroethane       |                         |                   |                       |                   |                        | 0.006 1 < U          | 0.006 1 < U     | 0.006 1 < U              | 0.006 1 < U           | 0.006 1 < U                 | 0.006 1 < U             | 0.006 1 < U             |
| VOLATILES        | 1,1-Dichloroethane          |                         |                   |                       |                   |                        | 0.006 1 < U          | 0.006 1 < U     | 0.006 1 < U              | 0.006 1 < U           | 0.006 t < U                 | 0.006 1 < U             | 0.006 t < U             |
| VOLATILES        | 1,1-Dichloroethene          |                         |                   |                       |                   |                        | 0.006 1 < 0          | 0.006 1 < U     | 0.006 1 < ଧ              | 0.006 1 < 1           | 0.006 1 < U                 | 0.006 1 < U             | 0.006 1 < 0             |
| VOLATILES        | 1,2,3-Inchloropropage       |                         |                   |                       |                   |                        |                      |                 |                          |                       |                             |                         |                         |
| VOLATILES        | 1,2-Dibromo-3-chloropropane |                         |                   |                       |                   |                        |                      |                 |                          |                       |                             |                         |                         |
| VOLATILES        | 1,2-Dibromoethane           |                         |                   |                       |                   |                        | 0.000 4              | 0.000           | 0.000 4                  | 0.000 t               | 0.000 1                     | 0.000 1                 | 0.000 t                 |
| VOLATILES        | 1,2-Dichloroethane          |                         |                   |                       |                   |                        | 0.006 1 < 13         |                 | 0.006 1 < 0              | 0.006 1 < 1           | 0.006 1 < U                 | 0.006 1 < 0             | 0.000 1 < 0             |
| VULATILES        | 1,2-Dishloroeviene          |                         |                   |                       |                   |                        | 0.006 1 < 1          | 0.000 1 < U     | 0.006 1 < 11             | 0.006 1 < 0           | 0.006 1 < 1                 | .0.006 1 < U            | 0.006 1 < 0             |
| VOLATILES        | 2.8utanone                  |                         |                   |                       |                   |                        | 1 12 1 - 11          | 0.000 1 < U     | 0.000 t < U<br>∩12 1 → U | 0.000 r < 0           |                             | 0.000 I < U             | 0.000 1 < 0             |
| VOLATILES        | 2-Dutomethyl visul ether    | 1                       |                   |                       |                   |                        | 0.12 I S U           | 0.12 1 < U      | 0.12 1 4 0               |                       | V.()   X U                  |                         | 0.12 1 1 1              |
| VOLATILES        | 2 Havanana                  |                         |                   |                       |                   |                        | 0.062 1 4 11         | 11 - 1 130.0    | 0.061 1 / 11             | 0.062 1 - H           | 0.056 1 / !!                | 0.063 1 4 1             | 0.058 1 / 11            |
|                  | 2-Propenal                  |                         |                   |                       |                   |                        | V-002 1 4 U          | 0.001 1 < U     | 0.001 r < U              | 0.00Z I K U           | 0.000 1 4 0                 | V-2003 1 K U            | 0.000   < 0             |
| VOLATILES        | Acelone                     |                         |                   |                       |                   |                        | 0.12 1 - 11          | 0.12 1 - 14     | 0.12 1 - 11              | 0.12 1 < II           | 0.11 1 2 11                 | 0.032 1 - 11            | 0.12 1 2 11             |
| VOLATHES         | Acetonitrile                |                         |                   |                       |                   |                        |                      | 9.12 I X U      |                          | v                     |                             |                         |                         |
| VOLATILES        | Acrylonitrile               |                         |                   |                       |                   |                        |                      |                 |                          |                       |                             |                         |                         |
| VOLATILES        | Allyl chloride              | [                       |                   |                       |                   |                        |                      |                 |                          |                       |                             |                         |                         |
| VOLATILES        | Benzene                     |                         |                   |                       |                   |                        | 0.006 t < U          | 0.006 1 < U     | 0.006 t < U              | 0.006 1 < U           | 0.006 t < 1J                | 0.006 1 < U             | 0.006 1 < U             |
| VOLATILES        | Bromodichtoromethane        | -                       |                   |                       |                   |                        | 0.006 1 < U          | 0.006 1 < 1     | 0.006 1 < U              | 0.006 1 < U           | 0.006 1 < U                 | 0.006 t < U             | 0.006 1 < U             |
|                  |                             | ,                       |                   |                       |                   |                        | _                    | _               | -                        | -                     |                             |                         |                         |

(1, 1)

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-122

Concentrations of Chemicals in Soil Samples Associated with WR Sump 016

| (SUMP) = WASUMPO | 16                          |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
|------------------|-----------------------------|-------------------|---------------------------------|----------------------|----------------------|--------------------|------------------|--------------------|------------------|------------------|------------------|------------------------|
| LOCATION_CODE    |                             | 35SUMP107-S801    | 35SUMP107-SB01 35SUMP107-SB     | 2 35SUMP107-SB02     | 35SUMP107-SB02       | LH-S107-01         | LH-S107-01       | LH-S107-01         | LH-S107-01       | LH-S108-01       | LH-S108-01       | LH-S108-01             |
| SAMPLE_NO        |                             | 35-SMP107-SB01-01 | 35-SMP107-SB01-02 35-SMP107-SB0 | 01 35-SMP107-SB02-02 | 35-SMP107-SB02-02-QC | LH-S107-01 QC      | LH-S107-01_1     | LH-S107-01_2       | LH-S107-01_3     | LH-S108-01_1     | LH-S108-01_2     | LH-S108-01_3           |
| SAMPLE_DATE      |                             | 9/14/2006         | 9/14/2006 9/14/2006             | 9/14/2006            | 9/14/2006            | 6/26/1993          | 6/26/1993        | 6/26/1993          | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993              |
| DEPTH            |                             | _55Ft             | 3-3Ft _55Fi                     | 3 - 3 Ft             | 3 - 3 Ft             | 0.5 - 1.5 Ft       | 0.5 - 1.5 Ft     | 1 - 1.5 Ft         | 2 - 2.5 Ft       | 0.5 - 1.5 Ft     | 2 - 2.5 F1       | 4 - 4.5 Ft             |
| SAMPLE_PURPOSE   |                             | REG               | REG REG                         | REG                  | FD                   | FD                 | REG              | REG                | REG              | REG              | REG              | REG                    |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ  | Result DIL LQ VQ Result DIL L   | VQ Result DIL LQ V   | Result DIL LQ V      | ) Result DIL LQ VC | Result DIL LQ VC | Q Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VO | Result DIL LQ VQ       |
| VOLATILES        | Bramoform                   |                   |                                 |                      |                      | 0.006 1 < U        | 0.006 i < U      | l 0⊥005 1 < U      | 0.006 1 < V      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            |
| VOLATILES        | Bromomethane                |                   |                                 |                      |                      | 0.006 1 < U        | 0.006 t < U      | ) 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.032 1 < U      | 0.006 1 < U            |
| VOLATILES        | Carbon disulfide            |                   |                                 |                      |                      | 0.006 1 < U        | 0.006 1 < U      | / 0.006 1 < U      | 0.006 t < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            |
| VOLATILES        | Carbon tetrachloride        |                   |                                 |                      |                      | 0.006 t < U        | 0.006 f < U      | ! 0.006 1 < U      | 0.006 1 < U      | 8.006 t < U      | 0.006 1 < U      | 0.006 1 < U            |
| VOLATILES        | Chlorobenzene               |                   |                                 |                      |                      | 0.006 t < U        | 0.006 1 < U      | U 0.006 1 < U      | 0.006 1 < U      | 0.006 f < U      | 0.006 1 < U      | 0.006 1 < U            |
| VOLATILES        | Chloroethane                | 1                 |                                 |                      |                      | 0.006 1 < U        | 0.006 1 < U      | 0.006 1 < U        | 0.006 1 < U      | 0.006 t < U      | 0.032 1 < U      | 0.006 1 < U            |
| VOLATILES        | Chloroform                  |                   |                                 |                      | -                    | 0.006 1 < U        | 0.006 1 < U      | J 0.006 1 < U      | 0.006 1 < Li     | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            |
| VOLATILES        | Chloromethane               |                   |                                 |                      |                      | 0.006 1 < U        | 9.006 1 < U      | Ú 0.006 1 < U      | 0.006 t < ⊍      | 0.006 1 < U      | 0.008 1 < U      | 0.006 1 < U            |
| VOLATILES        | Chloroprene                 |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
| VOLATILES        | cis-1,3-Dichloropropene     |                   |                                 |                      |                      | 0.006 1 < U        | 0.006 t < U      | J 0.006 1 < U      | 0.006 1 < U      | 0.006 t < ₹J     | 0.006 t < U      | 0.006 <del>1</del> < U |
| VOLATILES        | Dibromochioromethane        |                   |                                 |                      |                      | 0.006 1 < U        | 0.006 t < U      | 0.006 1 < U        | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            |
| VOLATILES        | Dibromomethane              |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
| VOLATILES        | Dichlorodifluoromethane     |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
| VOLATILES        | Ethyl methacrylate          |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
| VOLATILES        | Ethylbenzene                |                   |                                 |                      |                      | 0.006 t < U        | 0.006 t < U      | 0.006 1 < U        | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            |
| VOLATILES        | IODOMETHANE                 |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
| VOLATILES        | ISOBUTYL ALCOHOL            |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
| VOLATILES        | Methacrylonitrile           |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
| VOLATILES        | Methyl isobutyl ketone      |                   |                                 |                      |                      | 0.062 1 < U        | 0.061 1 < U      | I 0.061 1 < U      | 0.062 1 < U      | 0.056 1 < U      | 0.063 1 < U      | 0.058 1 < ⊎            |
| VOLATILES        | METHYL METHACRYLATE         |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
| VOLATILES        | Methylene chloride          |                   |                                 |                      |                      | 0.006 t < U        | 0.006 1 < U      | / 0.006 1 < 1∕     | 0.906 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            |
| VOLATILES        | Pentachloroethane           |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
| VOLATILES        | Propionitrile               |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
| VOLATILES        | Styrene                     |                   |                                 |                      |                      | 0.006 1 < U        | 0.006 1 < U      | J 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 t < U      | 0.006 t < ⊎            |
| VOLATILES        | Tetrachloroethene           |                   |                                 |                      |                      | 0.006 1 < U        | 0.006 1 < U      | I 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            |
| VOLATILES        | Toluene                     |                   |                                 |                      |                      | 0.006 1 < U        | 0.006 1 < U      | J 0.006 1 < 比      | 0.006 1 < V      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            |
| VOLATILES        | trans-1,3-Dichloropropene   |                   |                                 |                      |                      | 0.006 1 < Ü        | 0.006 1 < U      | ) 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            |
| VOLATILES        | trans-1,4-Dichloro-2-butene |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
| VOLATILES        | Trichloroethene             | [                 |                                 |                      |                      | 0.006 1 < U        | 0.006 1 < U      | } 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U      | 0.006 1 < U            |
| VOLATILES        | Trichlorofluoromethane      |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
| VOLATILES        | Vinyl acetate               |                   |                                 |                      |                      |                    |                  |                    |                  |                  |                  |                        |
| VOLATILES        | Vinyl chloride              |                   |                                 |                      |                      | 0.006 1 < 10       | 0.006 1 < U      | ) 0.006 1 < 13     | 0.006 1 < U      | 0.006 1 < 1      | 0.032 1 < U      | 0.006 1 < U            |
| VOLATILES        | Xvlenes, Total              |                   |                                 |                      |                      | 0.006 1 < U        | 0.006 1 < 1      | 0.006 1 < 1        | 0.006 1 < U      | 0.006 1 < 1      | 0.006 t < U      | 0.006 1 < U            |
|                  |                             | .1                |                                 |                      |                      | 0.000 1 0 0        |                  |                    |                  |                  |                  |                        |

 Table 3-122

 Concentrations of Chemicals in Soil Samples Associated with WR Sump 016

| [SUMP] = WRSUMPO1 | 6   |        |         |      |         |        |         |        |        |                 |               |      |         |             |           |      |         |        |        |        |             |        |         |        |
|-------------------|---|--------|---------|------|---------|--------|---------|--------|--------|-----------------|---------------|------|---------|-------------|-----------|------|---------|--------|--------|--------|-------------|--------|---------|--------|
| LOCATION _CODE    |   | Ł      | HS-2    | 14   |         | Ł      | HS-2-   | -14    |        | LH-             | WRS1          | 6-01 |         | LH          | WRS1      | 6-01 |         | WR     | S016-S | SB01   |             | WF     | RS016-  | SB02   |
| SAMPLE_NO         |   | LH     | S-2-14  | 1 QC |         | Ł      | HS-2-   | 14     |        | LH-A            | <b>R</b> \$16 | 01_1 |         | LH-N        | VRS16     | 01_2 |         | WRS    | 016-SE | 301-01 |             | WRS    | 016-S   | 302-01 |
| SAMPLE_DATE       |   | 1      | /11/19  | 95   |         | 1      | /11/19  | 995    |        | 6               | 26/19         | 93   |         | 6           | /26/19    | 33   |         | 9      | /14/20 | 06     |             | 5      | 9/14/20 | 06     |
| DEPTH             |   | I      | 0 - 0.5 | Ft   |         | (      | ) - 0.5 | Ft     |        | 0.              | 5 - 1.5       | Ft   |         | :           | 3.5 - 4 1 | ŧ    |         | -      | 55     | Fl     |             |        | _55     | Ft     |
| SAMPLE_PURPOSE    |   |        | FD      |      |         |        | REG     | i      |        |                 | REG           |      |         |             | REG       |      |         |        | REG    |        |             |        | REG     |        |
| Test Group        | Parameter (Units = mg/kg)   | Result | DIL     | lQ   | VQ      | Result | Dil.    | LQ     | VQ     | Result          | DIL           | LQ   | VQ      | Result      | DIL       | LO   | VQ      | Result | DIL    | ιQ     | VQ          | Result | DIL     | LQ     |
| EXPLOSIVES        | 1,3,5-Trinitrobenzene   | 0.23   | 1       | <    | U       | 0.24   | 1       | <      | U      |                 |               |      |         |             |           |      |         |        |        |        |             |        |         |        |
| EXPLOSIVES        | 1,3-Unitrobenzene   | 0.23   | 1       | <    | 0       | 0.24   | 1       | <      | 0      |                 |               |      |         |             |           |      |         |        |        |        |             |        |         |        |
| EXPLUSIVES        | 2,4,5-1 IINITOLOIUENE   | 0.23   | 1       | <    | 0       | 0.24   | 1       | <      | 0      | 4 004           |               |      |         | 4 000       |           |      |         |        |        |        |             |        |         |        |
| EXPLOSIVES        | 2,4-Distablication  | 0.23   |         | <    |         | 0.24   | 1       | <      | 0      | 1.004           | 1             | <    | U<br>1F | 1.282       | 1         | <    | 0       |        |        |        |             |        |         |        |
| EXPLOSIVES        | 2.0-Dissi Oloseene  | 0.23   | 1       |      | U       | 0.23   | •       | ٠<br>٢ | U      | 1.004           | •             | •    | U       | 1.202       | ·         | ۲    | U       |        |        |        |             |        |         |        |
| EXPLOSIVES        | 4-Amino-2.6-dinitrataluene  | 0.49   | 1       | ć    | 11      | 0 49   | 1       | <      | tt     |                 |               |      |         |             |           |      |         |        |        |        |             |        |         |        |
| EXPLOSIVES        | HMX   | 2.1    | ;       | è    | Ŭ       | 3      | 1       |        | Ŭ      |                 |               |      |         |             |           |      |         |        |        |        |             |        |         |        |
| EXPLOSIVES        | m-Nitrotoluene  | 0.98   | 1       | <    | U       | 0.98   | 1       | <      | U      |                 |               |      |         |             |           |      |         |        |        |        |             |        |         |        |
| EXPLOSIVES        | Nitrobenzene  | 0.25   | 1       | <    | ម       | 0.25   | 1       | <      | U      |                 |               |      |         |             |           |      |         |        |        |        |             |        |         |        |
| EXPLOSIVES        | o-Nitrotoluene  | 0.98   | 1       | <    | U       | 0.98   | 1       | <      | U      |                 |               |      |         |             |           |      |         |        |        |        |             |        |         |        |
| EXPLOSIVES        | p-Nitrotoluene  | 2.9    | 1       | <    | U       | 2.9    | 1       | <      | U      |                 |               |      |         |             |           |      |         |        |        |        |             |        |         |        |
| EXPLOSIVES        | RDX   | 1.1    | 1       | <    | U       | 1.1    | 1       | <      | U      |                 |               |      |         |             |           |      |         |        |        |        |             |        |         |        |
| EXPLOSIVES        | Tetryl  | 0.72   | 1       | <    | U       | 0.73   | 1       | <      | U      |                 |               |      |         |             |           |      |         |        |        |        |             |        |         |        |
| METALS            | Aluminum  | 5360   | 1       |      |         | 3620   | 1       |        |        | 2200            | 1             |      |         | 1830        | 1         |      |         | 7340   | 1      |        |             | 8830   | ŧ       |        |
| METALS            | Antimony  | 9.7    | 1       | <    | IJ      | 12.6   | 1       | <      | UJ     | 4.74            | 1             | <    | U       | 5.56        | 1         | <    | ປ       | 0.0591 | 1      | J      | JL          | 0.105  | 1       | U      |
| METALS            | Arsenic   | 1.9    | 1       |      | J       | 2.5    | t       |        | J      | 0.901           | 1             |      | £       | 0.778       | 1         |      | E       | 0.888  | 1      |        | JŁ          | 0.954  | ŧ       |        |
| METALS            | Barium  | 37.1   | 1       |      |         | 37.3   | 1       |        |        | 6.61            | 1             | <    | IJ      | 8.65        | 1         | <    | U       | 39.1   | 1      |        | JH          | 75.9   | 1       |        |
| METALS            | Beryllium   |        |         |      |         |        |         |        |        |                 |               |      |         |             |           |      |         | 0.468  | 1      |        |             | 0.643  | 1       |        |
| METALS            | Cadmium   | 0.97   | 1       | <    | U       | 1.3    | 1       | <      | U      | 2.11            | 1             | <    | U       | 2.28        | 1         | <    | ป       | 0.0601 | 1      | J      | J           | 0.12   | 1       | J      |
| METALS            | Calcium   | 365    | 1       |      |         | 445    | 1       |        |        | 483             | 1             |      |         | 396         | 1         |      |         | 429    | ŧ      |        |             | 610    | 1       |        |
| METALS            | Chromium  | 8.7    | 1       |      | 3       | 8      | 1       |        |        | 5.78            | 1             |      | -       | 5.03        | 1         |      | -       | 93.6   | 1      |        | JŁ          | 43.3   | 1       |        |
| METALS            | Cobait  | 1.9    | 1       | <    | υ       | 2.5    | 1       | <      | U      | 0.356           | 1             |      | £       | 0.361       | 1         |      | E       | 0.742  | 1      | ·IJ    |             | 0.841  | 1       |        |
|                   | kon   | 0100   | 1       |      |         | 0010   | 1       |        |        | 3.Z             | 1             | <    | U       | £13<br>6010 | 1         | <    | 0       | 70000  | 1      |        |             | 2.23   | 1       |        |
| METALS            | head  | 73     | 1       |      |         | 9010   | 1       |        |        | 7 11            | 1             |      | 11      | 9 24        | 1         |      | п       | /9000  | э<br>1 |        |             | 61000  | 10      |        |
| METALS            | Mannesum  | 500    | 1       |      |         | 449    | 1       |        |        | 134             | 1             | `    | U       | 123         | 1         |      | 0       | 202    | 1      |        | <b>1</b> 14 | 4.07   | 1       |        |
| METALS            | Manganese   | 51.1   | 1       |      |         | 60.6   | 1       |        |        | 597             | 1             |      |         | 4 14        |           |      |         | 48.6   | 1      |        | 3           | 72.6   | 1       |        |
| METALS            | Mercury   | 0.1    | 1       | <    | ប       | 0.086  | 1       | <      | U      | 0.045           | 1             | <    | U       | 0.061       | 1         | <    | U       | 0.0222 | 1      | 3      | J           | 0.0281 | 1       | 3      |
| METALS            | Nickel  |        |         |      | _       |        |         |        | _      |                 |               |      |         |             |           |      | -       | 1.95   | 1      | -      | JH          | 3.07   | 1       | -      |
| METALS            | Potassium   | 236    | 1       |      |         | 252    | 1       | <      | U      | 138             | 1             |      |         | 128         | 1         |      |         | 101    | 1      |        |             | 182    | 1       |        |
| METALS            | Selenium  | 0.51   | 1       |      | J       | 0.56   | 1       |        |        | 0.474           | t             | <    | U       | 0.556       | 1         | <    | U       | 0.175  | 1      | 3      | JL          | 0.125  | 1       | J      |
| METALS            | Silver  | 0.97   | f       | <    | U       | 1.3    | 1       | <      | υ      | 0.024           | 1             | <    | U       | 0.028       | 1         | <    | U       | 1.48   | 1      | υ      |             | 1.44   | 1       | U      |
| METALS            | Sodium  |        |         |      |         |        |         |        |        |                 |               |      |         |             |           |      |         | 23.3   | 1      |        |             | 28.6   | 1       |        |
| METALS            | Strontium   | 9.7    | 1       | <    | U       | 12.6   | 1       | <      | U      | 3.6             | t             | <    | U       | 2.77        | 1         | <    | U       |        |        |        |             |        |         |        |
| METALS            | Thallium  | 48.4   | 1       | <    | U       | 63     | 1       | <      | U      |                 |               |      |         |             |           |      |         | 0.0394 | 1      |        |             | 0.0438 | t       |        |
| METALS            | Vanadium  |        |         |      |         |        |         |        |        |                 |               |      |         |             |           |      |         | 105    | 1      |        |             | 83.7   | 1       |        |
| METALS            | Zinc  | 12.4   | 1       |      |         | 11.6   | 1       |        |        | 7.87            | 1             |      |         | 9.84        | 1         |      |         | 9.78   | 1      |        | JH          | 34.8   | 1       |        |
| SEMIVOLATILES     | 1,2,4-Trichlorobenzene  | 0.41   | 1       | <    | U       | 0.43   | 1       | <      | U      | 1.064           | t             | <    | U       | 1.282       | 1         | <    | U       |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 1,2-Dichlorobenzene   | 0.41   | 1       | <    | U       | 0.43   | 1       | <      | U      | 1.064           | 1             | <    | U       | 1.282       | 1         | <    | U       |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 1,3-Dichlorobenzene   | 0.41   | 1       | <    | U       | 0.43   | I       | <      | U      | 1.064           | 1             | <    | U       | 1.282       | 1         | <    | 0       |        |        |        |             |        |         |        |
| SEMIVOLAHLES      | 1,4-UIChiotopenzene   | 0.41   | 1       | <    | U<br>17 | 0.43   | 1       | <      | 0      | 1,064           | 1             | <    | U.      | 1.282       | 1         | <    | 0       |        |        |        |             |        |         |        |
| SEMINOLATILES     | 2,4,3-11a18030pile10i   |        | 1       | <    | U<br>24 | 2.1    | 1       | ۰<br>۲ | U<br>H | 1.004           | ۱<br>۲        | <    | 0       | 1.282       | 4         | <    | 0       |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 2 4 Dichloronhend   | 0.41   | 1       | Ì    | ٥<br>١  | 0.43   | ;       | Ì      | 4      | 1.064           |               | 2    | 11      | 1.202       | •         |      | 1       |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 2 4-Dimethylnheool  | 0.41   | 1       | Ì    | й<br>Ю  | 0.43   | •       | Ì      |        | 0.532           | ;             | Ì    | n n     | J 641       | ,<br>1    | Ì    |         |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 2.4-Dinitrophenol   | 2.1    | 1       | č    | υ       | 2.1    | 1       | è      | Ũ      | 10.638          | t             | Ì    | Ð       | 12 821      | ;         | è    | 11      |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 2,4-Dinitrotoluene  | 0.41   | 1       | <    | U       | 0.43   | 1       | <      | U      |                 |               |      |         |             |           |      | -       |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 2,6-Dinitratoluene  | 0.41   | 1       | <    | U       | 0.43   | 1       | <      | ប      |                 |               |      |         |             |           |      |         |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 2-Chloronaphthalene   | 0.41   | 1       | <    | U       | 0.43   | 1       | <      | ប      | 0.319           | 1             | <    | υ       | 0.385       | 1         | <    | ប       |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 2-Chlorophenol  | 0.41   | 1       | <    | U       | 0.43   | 1       | <      | U      | 0.532           | 1             | <    | U       | 0.641       | 1         | <    | U       |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 2-Methylnaphthalene   | 0.41   | 1       | <    | υ       | 0.43   | 1       | <      | U      | 0.319           | 1             | <    | U       | 0.385       | 1         | <    | U       |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 2-Methylphenol  | 0.41   | 1       | <    | υ       | 0.43   | 1       | <      | U      | 0.532           | 1             | <    | ប       | 0.641       | 1         | <    | U       |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 2-Nitroanifine  | 2.1    | 1       | <    | ß       | 2.1    | 1       | <      | U      | 3.191           | 1             | <    | บ       | 3.846       | 1         | <    | U       |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 2-Nitrophenol   | 0.41   | 1       | <    | υ       | 0.43   | 1       | <      | U      | 1.064           | 1             | <    | U       | 1.282       | 1         | <    | IJ      |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 3,3'-Dichlorobenzidine  | 0.82   | 1       | <    | ប       | 0.85   | 1       | <      | U      | 0.532           | 1             | <    | U       | 0.641       | ;         | <    | U       |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 3-Nitroaniline  | 2.1    | 3       | <    | IJ      | 2.1    | 1       | <      | U      | 3.191           | 1             | <    | U       | 3.846       | 1         | <    | U       |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 4,6-Dinitro-2-methylphenol  | 2.1    | 1       | <    | U<br>U  | 2.1    | 1       | <      | U      | 5.319           | 1             | <    | U       | 6.41        | 1         | <    | U       |        |        |        |             |        |         |        |
| SEMINULAHLES      | 4-promopnenys pnenys ether  | 0.41   | 1.<br>1 | <    | 0       | 0.43   | 1       | <      | U      | ₹.054           | 1             | <    | U       | 1.282       | 1         | <    | U       |        |        |        |             |        |         |        |
| SEMINOLATILES     | 4-CHORD PRINCIPAL AND A CHORD PRINCIPAL AND | 0.41   | 1       | <    | U       | 0.43   | 1       | <      | 0      | 0.532           | 1             | <    | v       | 0.641       | 1         | <    | 0       |        |        |        |             |        |         |        |
|                   | 4-Chinnoberry about abor  | 0.41   | i<br>t  | <    | 0       | 0.43   | 1       | <      | ป<br>ย | 3.191<br>± 0.04 | 1             | <    | 12      | 3.846       | 1         | <    | U<br>JI |        |        |        |             |        |         |        |
| SEMIVOLATILES     | 4-Methyloheool  | 0.41   | t       | 2    | 11      | 0.43   | 1       | ~      | ม<br>ม | 6.004<br>6.529  | 1             | Ì    | 11      | 1.202       | 1         | 2    | ы       |        |        |        |             |        |         |        |
|                   |   | 0.47   | •       | -    | 0       | 0.40   | '       |        | 5      | 0.302           | •             |      | 0       | 0.041       | ,         |      | 0       |        |        |        |             |        |         |        |



VQ

UJŁ JŁ JH

JL JH

HL L

ц Ц

۶L

JH

Shaw Project No. 117591 7/11/2007

## Table 3-122 Concentrations of Chemicals in Soil Samples Associated with WR Sump 016

| (SUMP) = WRSUMP01 | 6  |        |         |        |         |        |         |        |          |        |         |        |         |        |         |        |         |        |              |        |    |        |         |        |
|-------------------|--|--------|---------|--------|---------|--------|---------|--------|----------|--------|---------|--------|---------|--------|---------|--------|---------|--------|--------------|--------|----|--------|---------|--------|
| LOCATION CODE     |  | L      | HS-2-   | 14     |         | L      | HS-2-   | 14     |          | LH-    | WRSI    | 6-01   |         | LH-    | WRS1    | 6-01   |         | W      | <b>RS016</b> | SB01   |    | W      | RS016-  | SB02   |
| SAMPLE_NO         |  | LH     | S-2-14  | t QC   |         | L      | HS-2-   | 14     |          | £H-M   | RS16    | -01_1  |         | LH-V   | VRS16   | -01_2  |         | WR     | S016-S       | B01-01 |    | WH     | S016-S  | 802-01 |
| SAMPLE_DATE       |  | 1      | /11/19  | 95     |         | 1,     | /11/19  | 95     |          | 6      | 26/19   | 93     |         | 6      | /26/19  | 93     |         |        | 9/14/2       | 006    |    |        | 9/14/20 | /06    |
| DEPTH             |  | (      | 0 - 0.5 | Ft     |         | 0      | ) - 0.5 | Ft     |          | 0.     | 5 - 1.5 | Ft     |         | 1      | 3.5 - 4 | Ft     |         |        | _59          | 5 Ft   |    |        | _55     | Ft     |
| SAMPLE_PURPOSE    |  |        | FD      |        |         |        | REG     |        |          |        | REG     |        |         |        | REG     |        |         |        | REG          | à<br>  |    |        | REG     | ,      |
| Test Group        | Parameter (Units = mg/kg)                | Result | DIL     | 10     | VQ      | Result | DIL.    | LQ     | VQ       | Result | DIL     | LQ     | VQ      | Result | DIL     | LQ     | VQ      | Result | D#.          | LQ     | VQ | Result | DIL     | LQ     |
| SEMIVOLATILES     | 4-Nitroansline                           | 2.1    | 1       | <      | 8       | 2.1    | 1       | <      | 0        | 5.319  | 1       | <      | 0       | 6.41   | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVULATILES     | 4-Nitrophenol                            | 2.1    | 1       | <      |         | 2.1    | 1       | <      | U<br>11  | 5.319  | 3       | <      | บ<br>ม  | 0.905  | 1       | <      | U<br>U  |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Acesaphilicite                           | 0.41   | ;       | <      | U<br>11 | 0.43   | 1       | ۲<br>۲ | 0        | 0.319  | •       | <      | 11      | 0.300  | -       | Ś      | U<br>41 |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Anthracene                               | 14.0   |         | 2      | 11      | 0.43   | 1       | Ì      | U<br>U   | 0.002  | ,       | Ì      | 1       | 0.041  | 1       | Ì      | U<br>Li |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Benzo(a)anitvacene                       | 0.41   | \$      | Ì      | i)      | 0.43   | 1       | Ì      | н        | 0.319  | ;       | Ì      | ม้      | 0.385  | 1       | Ì      | 11      |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Benzo(a)ovrene                           | 0.41   | 1       | è.     | Ū       | 0.2    | 1       |        | J        | 0.532  | 1       | ٠<br>۲ | ย       | 0.641  | 1       | ,<br>, | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Benzo(b)fluoranthene                     | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | U        | 1.064  | 1       | <      | U       | 1.282  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Benzo(ghi)perylene                       | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | U        | 2.128  | 1       | <      | U       | 2.564  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Benzo(k)/fluoranthene                    | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | U        | 1.064  | 1       | <      | U       | 1.282  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Benzoic Acid                             | 2.1    | 1       | <      | U       | 2.1    | 1       | <      | U        |        |         |        |         |        |         |        |         |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Benzyl Alcohol                           | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | U        |        |         |        |         |        |         |        |         |        |              |        |    |        |         |        |
| SEMIVOLATILES     | bis(2-Chloroethoxy)methane               | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | U        | 0.532  | 1       | <      | ປ       | 0.641  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | bis(2-Chloroethyl)ether                  | 0.41   | 1       | <      | IJ      | 0.43   | 1       | <      | U        | 0.532  | 1       | <      | U       | 0.641  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | bis(2-Chloroisopropyl)ether              | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | U        | 1.064  | 1       | <      | บ       | 1.282  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | bis(2-Ethylhexyl)phthalate               | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | U        | 0.809  | 1       |        | 1       | 0.179  | 1       |        |         |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Butyl benzyl phthalate                   | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | U        | 0.117  | 1       |        | 3       | 0.641  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Carbazole                                |        |         |        |         |        |         |        |          | 1.064  | 1       | <      | U<br>   | 1.282  | 1       | <      | 0       |        |              |        |    |        |         |        |
| SEMIVULATILES     | Chrysene<br>Siboara/a blaattaraaana      | 0.41   | 1       | <      | 0       | 0.43   | 1       | <      | 0        | 5.319  | 1       | <      | U<br>   | 5.41   | 1       | <      | v       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Dibenzo(a,n)ankiracene                   | 0.41   | 1       | <      | U<br>II | 0.43   | 1       | <      | U<br>It  | 2.128  | 1       | <      | U<br>U  | 2.564  | 1       | <      | 0       |        |              |        |    |        |         |        |
|                   | Diothal obtain                           | 0.41   | 1<br>1  | ~      | 0<br>11 | 0.43   | 1       | ~      | U<br>14  | 0.520  | 1       |        |         | 6.641  | 1       |        |         |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Directly provate<br>Dimethyl obticalate  | 0.41   | 1       | Ż      | 11      | 0.43   | 1       | Ì      | 11       | 0.532  | 1       | Ż      | 11      | 0.641  | 1       | Ì      | 11      |        |              |        |    |        |         |        |
| SEMIVOLATILES     | di-n-Butvl ohthalate                     | 0.41   | 1       | è      | 11      | 0.43   | i       | è      | 11       | 2 362  | 1       |        | U       | 7 423  | 1       |        | Ū       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | di-n-Octyl phthalate                     | 0.41   | 1       | ,<br>, | Ű       | 0.43   | 1       | <      | U        | 0.532  | 1       | <      | U       | 0.641  | 1       | <      | υ       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Fluoranthene                             | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | U        | 0.532  | 1       | <      | U       | 0.641  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Fluorene                                 | 0.41   | 1       | <      | IJ      | 0.43   | 1       | <      | IJ       | 0.532  | 1       | <      | U       | 0.641  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Hexachlorobenzene                        | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | U        | 1.064  | 1       | <      | U       | 1.282  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Hexachlorobutadiene                      | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | U        | 3.191  | 1       | <      | U       | 3.846  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Hexachlorocyclopentadiene                | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | Û        | 3.191  | 1       | <      | U       | 3.846  | 1       | <      | υ       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Hexachloroethane                         | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | ម        | 1.064  | 1       | <      | ប       | 1.282  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Indeno(1,2,3-cd)pyrene                   | 0.41   | 1       | <      | U       | 0.3    | 1       |        | J        | 1.064  | 1       | <      | ប       | 1.282  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Isophorone                               | 0.41   | 1       | <      | U       | 0.43   | 1       | <      | U        | 0.532  | 1       | <      | U       | 0.641  | 1       | <      | U       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Naphthalene                              | 0.41   | 1       | ` <    | 0       | 0.43   | 1       | <      | U        | 0.319  | 1       | <      | U<br>   | 0.385  | 1       | <      | U<br>   |        |              |        |    |        |         |        |
| SEMIVULATILES     | Nutropenzene                             | 0.41   | 1       | <      | 0       | 0.43   | 3       | <      | U<br>JI  | 0.532  | 1       | <      | u       | 0.641  | 1       | <      | 0       |        |              |        |    |        |         |        |
| SEMINOLATILES     | n-Niroso-or-repropyralisine              | 0.47   | 1       | Ś      | 0       | 0.43   | +       | <      | U<br>U   | 1.004  | 1       | <      | บ       | 0.641  | 1       | <      | U<br>11 |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Pentachloronhean!                        | 21     | 1       | Ì      | н       | 0.43   | 1       | 2      | บ<br>- ม | 5 310  | 1       | 2      | U<br>11 | 6.41   | 1       | Ì      | U<br>1F |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Phenasibrene                             | 641    | 1       | Ì      | 11      | 043    | 1       | Ì      | 9<br>11  | 0.532  | 1       | Ì      | 11      | 0.41   | 1       | Ì      | 11      |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Phenol                                   | 0.41   | 1       | ,<br>, | ŭ       | 0.43   | 1       | ,<br>, | Ŭ        | 0.532  | ţ       | č      | ŭ       | 0.641  | 1       | č      | Ŭ       |        |              |        |    |        |         |        |
| SEMIVOLATILES     | Pyrene                                   | 0.41   | 1       | <      | Ū       | 0.43   | 1       | <      | U        | 0.532  | 1       | ĸ      | U       | 0.641  | 1       | <      | U       |        |              |        |    |        |         |        |
| VOLATILES         | 1,1,1,2-Tetrachloroethane                | 0.012  | 1       | <      | U       | 0.013  | 1       | <      | U        |        |         |        |         |        |         |        |         |        |              |        |    |        |         |        |
| VOLATILES         | 1,1,1-Trichloroethane                    | 0.006  | 1       | <      | U       | 0.006  | 1       | <      | U        | 0.005  | 1       | <      | U       | 0.006  | 1       | <      | U       |        |              |        |    |        |         |        |
| VOLATILES         | 1,1,2,2-Tetrachloroethane                | 0.006  | 1       | <      | U       | 0.006  | 1       | <      | U        | 0.005  | 1       | <      | U       | 0.006  | 1       | <      | U       |        |              |        |    |        |         |        |
| VOLATILES         | 1,1,2-Trichloroethane                    | 0.006  | 1       | <      | U       | 0.006  | 1       | <      | U        | 0.005  | 1       | <      | IJ      | 0.006  | 1       | <      | υ       |        |              |        |    |        |         |        |
| VOLATILES         | 1,1-Dicinforcethane                      | 0.006  | 1       | <      | U       | 0.006  | 1       | <      | U        | 0.005  | 1       | <      | U       | 0.006  | 1       | <      | Ų       |        |              |        |    |        |         |        |
| VOLATILES         | 1,1-Dichloroethene                       | 0.006  | 1       | <      | U       | 0.006  | 1       | <      | U        | 0.005  | 1       | <      | ប       | 0.006  | 1       | <      | ບ       |        |              |        |    |        |         |        |
| VOLATILES         | 1,2,3-Trichloropropane                   | 0.012  | 1       | <      | U       | 0.013  | 1       | <      | υ        |        |         |        |         |        |         |        |         |        |              |        |    |        |         |        |
| VOLATILES         | 1,2-Dibromo-3-chloropropane              | 0.025  | 1       | <      | U       | 0.026  | 1       | <      | U        |        |         |        |         |        |         |        |         |        |              |        |    |        |         |        |
| VOLATILES         | 1,2-Dibromoethane                        | 0.025  | 1       | <      | ប       | 0.026  | 1       | <      | 0        |        |         |        |         |        |         |        |         |        |              |        |    |        |         |        |
| VOLATILES         | 1,2-Uichloroethane                       | 0.006  | 1       | <      | 0       | 0.006  | 1       | <      | U        | 0.005  | 1       | <      | 0       | 0.006  | 1       | <      | 0       |        |              |        |    |        |         |        |
| VOLATILES         | 1,2-Dichloroeinene                       | 0.006  | 1       | Ś      | 0       | 0.006  | 1       | <      | U<br>13  | 0.005  | 1       | <      | 0       | 0.006  | 1       | <      |         |        |              |        |    |        |         |        |
| VOLATILES         | 1,2-Dichloropropane                      | 0.000  | 1       | ~      | U       | 0.000  | 1       | \$     | 0<br>13  | 0.005  | 1       | <      | 0       | 0.000  | 1<br>†  | <      | 0       |        |              |        |    | -      |         |        |
| VOLATILES         | 2-Dotations<br>2-Chloroethyl vigut ether | 0.012  | 1       | Ì      | U U     | 0.013  | 1       | Ì      | 12       | 0.11   |         | ì      | 0       | 0.15   | ,       |        | U.      |        |              |        |    |        |         |        |
| VOLATILES         | 2-Hexanone                               | 0.012  | 1       | <      | Ŭ       | 0.013  | 1       | k      | Ŭ        | 0.053  | 1       | <      | U       | 0.063  | 1       | <      | н       |        |              |        |    |        |         |        |
| VOLATILES         | 2-Propenal                               | 0.62   | 1       | ,      | U       | 0.64   | 1       | <<br>< | ບັ       | 0.000  |         | `      | 2       | 0.000  |         | `      | 5       |        |              |        |    |        |         |        |
| VOLATILES         | Acetone                                  | 0.012  | 1       | <      | U       | 0.013  | 1       | <      | U        | 0.11   | 1       | <      | U       | 0.13   | 1       | <      | U       |        |              |        |    |        |         |        |
| VOLATILES         | Acetonitrile                             | 0.12   | 1       | <      | U       | 0.13   | 1       | <      | IJ       | -      |         |        |         |        |         |        |         |        |              |        |    |        |         |        |
| VOLATILES         | Acrylonibile                             | 0.12   | 1       | <      | U       | 0.13   | 1       | <      | ប        |        |         |        |         |        |         |        |         |        |              |        |    |        |         |        |
| VOLATILES         | Allyl chloride                           | 0.012  | 1       | <      | U       | 0.013  | 1       | <      | ນ        |        |         |        |         |        |         |        |         |        |              |        |    |        |         |        |
| VOLATILES         | Benzene                                  | 0.006  | 1       | <      | U       | 0.006  | t       | <      | U        | 0.005  | 1       | <      | U       | 0.006  | 1       | <      | U       |        |              |        |    |        |         |        |
| VOLATILES         | Bromodichloromethane                     | 0.006  | 1       | <      | U       | 0.006  | 1       | <      | U        | 0.005  | 1       | <      | U       | 0.006  | 1       | <      | U       |        |              |        |    |        |         |        |





VQ

 Table 3-122

 Concentrations of Chemicals in Soil Samples Associated with WR Sump 016

| [SUMP] = WRSUMP016 |                             |        |        |    |    |        |        |    |    |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
|--------------------|-----------------------------|--------|--------|----|----|--------|--------|----|----|--------|---------|-------|----|--------|----------|-------|----|--------|---------|--------|----|--------|----------|-------|----|
| LOCATION CODE      |                             | L      | HS-2-  | 14 |    | t      | HS-2-1 | 14 |    | LH-1   | NRS1    | 6-01  |    | LH-I   | NRSH     | 6-01  |    | WE     | S016-S  | 801    |    | W      | IS016-S  | 802   |    |
| SAMPLE_NO          |                             | LH     | S-2-14 | QC |    | L      | HS-2-1 | 14 |    | LH-W   | RS16    | -01_1 |    | LH-W   | AS16     | -01_2 |    | WRS    | 016-SB  | 101-01 |    | WB     | 016-SE   | 02-01 |    |
| SAMPLE_DATE        |                             | 1      | /11/19 | 95 |    | 1,     | /11/19 | 95 |    | 6/     | 26/199  | 33    |    | 6/     | 26/199   | 33    |    | 9      | /14/200 | ю      |    |        | 3/14/200 | )6    |    |
| DEPTH              |                             | (      | 0-0.5  | Ft |    | 0      | - 0.51 | Ft |    | 0.5    | 5 - 1.5 | Ft    |    | 3      | .5 - 4 I | Ft    |    |        | 551     | Ft     |    |        | 55       | Ft    |    |
| SAMPLE_PURPOSE     |                             |        | FD     |    |    |        | REG    |    |    |        | REG     |       |    |        | REG      |       |    |        | REG     |        |    |        | REG      |       |    |
| Test Group         | Parameter (Units = mg/kg)   | Result | ÐIL    | ٤Q | VQ | Result | DIL    | LQ | ٧Q | Result | DIL     | LQ    | VQ | Result | DIL      | ŁQ    | VQ | Result | DIL     | LQ     | VQ | Result | DIL      | ιQ    | VQ |
| VOLATILES          | Bromolorm                   | 0.006  | 1      | <  | IJ | 0.006  | 1      | <  | U  | 0.005  | 1       | <     | U  | 0.006  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | Bromomethane                | 0.012  | 1      | <  | ป  | 0.013  | 1      | <  | IJ | 0.005  | 1       | <     | U  | 0.006  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | Carbon disulfide            | 0.006  | 1      | <  | IJ | 0.006  | 1      | <  | IJ | 0.006  | 1       | <     | U  | 0.006  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | Carbon tetrachloride        | 0.006  | 1      | <  | U  | 0.006  | 1      | <  | U  | 0.005  | 1       | <     | ប  | 0.006  | 1        | <     | ឋ  |        |         |        |    |        |          |       |    |
| VOLATILES          | Chlorobenzene               | 0.006  | 1      | <  | U  | 0.005  | 1      | <  | υ  | 0.005  | 1       | <     | U  | 0.006  | 1        | <     | ប  |        |         |        |    |        |          |       |    |
| VOLATILES          | Chloroethane                | 0.012  | 1      | <  | U  | 0.013  | 1      | <  | U  | 0.005  | 1       | <     | U  | 0.006  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | Chloroform                  | 0.006  | 1      | <  | U  | 0.006  | 1      | <  | U  | 0.005  | 1       | <     | U  | 0.006  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | Chloromethane               | 0.012  | 1      | <  | บ  | 0.013  | 1      | <  | U  | 0.005  | t       | <     | บ  | 0.006  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | Chloroprene                 | 0.12   | 1      | <  | U  | 0.13   | 1      | <  | £  |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
| VOLATILES          | cis-1,3-Dichloropropene     | 0.006  | 1      | <  | υ  | 0.006  | 1      | <  | U  | 0.005  | ŧ       | <     | U  | 0.006  | 1        | <     | IJ |        |         |        |    |        |          |       |    |
| VOLATILES          | Dibromochloromethane        | 0.006  | 1      | ۲  | U  | 0.006  | 1      | <  | U  | 0.005  | 1       | <     | U  | 0.006  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | Dibromomethane              | 0.025  | 1      | <  | U  | 0.026  | i      | <  | U  |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
| VOLATILES          | Dichlorodifluoromethane     | 0.025  | 1      | <  | υ  | 0.026  | 1      | <  | U  |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
| VOLATILES          | Ethyl methacrylate          | 0.025  | 1      | <  | U  | 0.026  | 1      | <  | U  |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
| VOLATILES          | Ethylbenzene                | 0.006  | 1      | <  | U  | 0.006  | 1      | <  | U  | 0.005  | 1       | <     | U  | 0.006  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | IODOMETHANE                 | 0.012  | t      | <  | U  | 0.013  | 1      | <  | U  |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
| VOLATILES          | ISOBUTYL ALCOHOL            | 2.5    | t      | <  | U  | 2.6    | 1      | <  | U  |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
| VOLATILES          | Methacrytonitrile           | 0.025  | 1      | <  | U  | 0.026  | 1      | <  | U  |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
| VOLATILES          | Methyl isobutyl ketone      | 0.012  | 1      | <  | U  | 0.013  | 1      | <  | U  | 0.053  | t       | <     | U  | 0.063  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | METHYL METHACRYLATE         | 0.025  | 1      | ۲  | ម  | 0.026  | 1      | <  | U  |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
| VOLATILES          | Methylene chloride          | 0.006  | 1      | <  | U  | 0.006  | 1      | <  | U  | 0.005  | 1       | <     | U  | 0.006  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | Pentachloroethane           | 0.025  | t      | <  | U  | 0.026  | 1      | <  | U  |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
| VOLATILES          | Propionitrile               | 0.062  | 1      | <  | U  | 0.064  | 1      | <  | U  |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
| VOLATILES          | Styrene                     | 0.006  | 1      | <  | U  | 0.006  | 1      | <  | U  | 0.005  | 1       | <     | U  | 0.006  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | Tetrachloroethene           | 0.006  | 1      | <  | U  | 0.006  | 1      | <  | U  | 0.005  | 1       | <     | U  | 0.005  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | Totuene                     | 0.006  | 1      | <  | ย  | 0.006  | 1      | <  | υ  | 0.005  | 1       | <     | U  | 0.006  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | trans-1,3-Dichloropropene   | 0.006  | 1      | <  | U  | 0.006  | 1      | <  | U  | 0.005  | 1       | <     | U  | 0.005  | 1        | <     | υ  |        |         |        |    |        |          |       |    |
| VOLATILES          | trans-1,4-Dichloro-2-butene | 0.025  | ĩ      | <  | U  | 0.026  | ŧ      | <  | U  |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
| VOLATILES          | Trichleroethene             | 0.006  | 1      | <  | U  | 0.006  | 1      | <  | υ  | 0.005  | 1       | <     | U  | 0.006  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | Trichlorofluoromethane      | 0.012  | ĩ      | <  | U  | 0.013  | 1      | <  | U  |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
| VOLATILES          | Vinyl acetate               | 0.012  | 1      | <  | U  | 0.013  | 1      | <  | U  |        |         |       |    |        |          |       |    |        |         |        |    |        |          |       |    |
| VOLATILES          | Vinyl chloride              | 0.012  | 1      | <  | U  | 0.013  | 1      | <  | U  | 0.005  | 1       | <     | U  | 0.006  | 1        | <     | U  |        |         |        |    |        |          |       |    |
| VOLATILES          | Xylenes, Total              | 0.006  | 1      | <  | U  | 0.006  | 1      | <  | ប  | 0.005  | 1       | <     | ប  | 0.006  | 1        | <     | ប  |        |         |        |    |        |          |       |    |

Footnotes are shown on cover page to Tables Section.



Table 3-123 Concentrations of Chemicals in Soil Samples Associated with WR Sump 017

| [SUMP] = WRSUMPO | 917                         |                  |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                       |                  |
|------------------|-----------------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|-----------------------|------------------|
| LOCATION_CODE    |                             | 35SUMP001-SB01   | 35SUMP001-SB01   | 35SUMP001-SB02    | 35SUMP001-SB02   | LH-S01-01        | LH-S01-01        | LH-S01-01        | LH-S01-02        | LH-S01-02        | LH-S01-02        | LHS-2-09         | 1H-WR\$4-01      | LH-WRS4-01         | WRS04-SB01            | WRS04-SB01       |
| SAMPLE_NO        |                             | 35-SMP01-SB01-01 | 35-SMP01-SB01-02 | 35-SMP01-SB02-01  | 35-SMP01-S802-02 | LH-S01-01_1      | LH-S01-01_2      | LH-S01-01_3      | LH-S01-02_1      | LH-\$01-02_2     | UH-S01-02_3      | LHS-2-09         | LH-WR54-01_1     | LH-WRS4-01_2       | WRS04-SB01-01         | WH504-5801-02    |
| SAMPLE_DATE      |                             | 9/7/2006         | 9/7/2006         | 9/7/2006          | 9/7/2006         | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        | 1/10/1995        | 7/10/1993        | 7/10/1993          | 9/25/2006             | 9/25/2006        |
| DEPTH            |                             | 0.5 - 1 Ft       | 6 - 6 Ft         | 0 - 0.5 Ft        | 6 - 6 Ft         | 0.5 - 10.5 Ft    | 5.7 - 6.5 Ft     | 7.9 - 8.9 Ft     | 0.5 - 1.5 Ft     | 5 - 50.8 Ft      | 14.4 - 15.3 Ft   | 0-05Ft           | 0.5 - 1.5 Ft     | 3.5 - 4.3 H        | _55+(                 | 4_5-4_5+1        |
| SAMPLE_PURPOSE   |                             | REG              | REG              | REG               | REG              | REG              | REG              | REG              | REG              | REG              | REG              | REG              | REG              | REG                | REG                   | REG IO VO        |
| Test Group       | Parameter (Units = mg/kg)   | Result DIL LQ VQ | Result DIL LO VO | Result Dil. LQ VQ | Result DiL LO VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result Dil LQ VQ | Result DIL LO VQ | Result DIL LQ VQ | Result DIL LO VO | Hesult Dil LQ VQ   | RESULT DIE LO VO      | Result DIL LQ VQ |
| EXPLOSIVES       | 2,4-Dinitrotoluene          |                  |                  | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       |                  | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < U       | 0.33 1 < 0       |                  |                  |                    |                       |                  |
| EXPLOSIVES       | 2,6-Dinitrotoluene          |                  |                  | 9.33 1 < 0        | 0.33 1 < U       | 0.33 1 < 0       |                  | 0.33 1 < 0       | 0.33 T < U       | 0.33 1 < 0       | 0.33 1 < 0       | C100 4           | 01100            | 0000 1             | 17400 1               |                  |
| METALS           | Aluminian                   | 5300 1           | 4580 1           | 4800 1            | 6490 1           | 5150 1           | 6420 1           | 10800 1          | 5650 1           | 10400 1          | 36209 1          | 5430 1           | 24100            | 0.110 1 1 10       | 0.415 1 11 111        |                  |
| METALS           | Antimony                    | 0.114 1 U U      | 0.117 1 0 0      | 31 < U            | 31 < 0           | 31<0             | 31 < 0           | 31 < 0           | 31 < 0           | 6.3 1            | 31< 0            | 0.115 1 U UJL    | 0.415 FU UJL     |                    | 0.113 1 0 03L         |                  |
| METALS           | Arsenic                     | 3.42 1           | 0.9 1            | 15.4 1            | 4 1              | 23 1             | 4 1              | 3.1 1            | 29 1             | 26.4 1           | 2.8 1            | 9.07 1 JL        | 1.69 i JL        | 1.22 1 JL          | 154 1                 |                  |
| METALS           | Barium                      | 43 1             | 71.7 1           | 76.3 1            | 109 1            | 117 1            | 137 1            | 481 1            | 89.5 1           | 42.6 1           | 1/1 1            | 48.3 1           | 101 2            | 0/.0 1             | 104 3                 |                  |
| METALS           | Beryllium                   | 0.517 1          | 0.487 1          |                   |                  |                  |                  |                  |                  |                  |                  | 0.294 J J        | 0.002 1          | 0.512 1            |                       |                  |
| METALS           | Cadmium                     | 0.0983 1 J J     | 0.0619 1 J J     | 11< 8             | 11< 0            | 11< U            | 11<0             | T 1 < V          | 11 < 0           | 11< 0            | 1 3 < 0          | 1.38             | 030711 2 J J     | 1.3/4 1            | U.IU3 I J J<br>J00 1  |                  |
| METALS           | Calcium                     | 901 1            | 254 1            | 2100 1            | 1420 1           | 758 1            | 1600 1           | 2040 1           | 947 1            | /85 1            | 419 1            | 22/0 1 -         | 2/0 1            | 1390 1             | 429 1                 |                  |
| METALS           | Chromium                    | 17.7 1           | 4.86 1           | 23.9 1            | 19.5 1           | 1 6.8            | 27.5             | 14.5 1           | 8.7 1            | 41.5 1           | 30.1 1           | 18.0             | 23.3 1           | 19.0 1             | 10.1 1                |                  |
| METALS           | Cobalt                      | 3.6 1            | 4.38 1           | 5 1               | 11<0             | 14.6 1           | 7.6              | 31.7 1           | 9.3              | 9.0 1            | 11.4 1           | 2.33             | 0.79 1           | 4.0 1<br>E 03 1    | 5.21 J<br>E AE 1      |                  |
| METALS           | Copper                      | 3.09 1           | 2.16 1           | 5.5 1             | 4.3 1            | 4.4 1            | 3.9 1            | /.4 1            | 3,4 1            | 1 I < U          | 1.0 1            | 4.01 1           | 0.09 1           | 1000 1             | 17200 1               |                  |
| METALS           | liten                       | 11400 1          | 5540 1           | 29400 1           | 21000 1          | 11400 1          | 21300 1          | 18000 1          | 12300 1          | 32400 1          | 30500 1          | 1/000 1          | 2000 1           | 10000 1            | 1200 1                |                  |
| METALS           | Lead                        | 10.5 1           | 3,19 1           | 46.1 1            | 2/ 1             | 4.3 1            | 1/ 1             | 13.8 1           | B 1              | 128.1            | 13.7             | 18.9 1           | 1470 1 11        | 3,34 1<br>AEA 3 14 | 1650 1 14             |                  |
| METALS           | Magnesium                   | 187 1            | 603 1            | 216 1             | 3/3 1            | 421 1            | 283 1            | b26 F            | 440 1            | 265 1            | 2030 1           | 100 1 1          | 14/1/1 JF        | 1 041 1 U          | 1000 I 011<br>620 I I |                  |
| METALS           | Manganese                   | 143 1            | 21 1             | 182 1             | 17.5 1           | 83.6 1           | 597 1            | 225 1            | 102 1            | 234 1            | 00.0 1           | 109 I J          |                  | 241 I J            |                       |                  |
| METALS           | Mercury                     | 0.0191 1 J J     | 0.294 1 0 0      | 0.1 1 < 0         | 0.1 1 < 0        | 0.1 1 < 0        | UI I < U         | 0.1 1 < 0        | 0.1 I < U        | 9.1 I < U        | 0.II < U         | 0.0390 1 J J     | 13.0 1           | 600 1              | 14.2 1                |                  |
| METALS           | Nickel                      | 4.37 1           | 7.24 1           | ·                 |                  |                  |                  |                  |                  | 000 1            | 1000 1           | 0.67 1           | i3∠ I<br>601 1   | 201 1              | EP1 1                 |                  |
| METALS           | Potassium                   | 207 1            | 272 1            | 216 1             | 390 1            | 43/ 1            | 295 1            | 062 1            | 45/ 1            | 208 1            | 1000             | 243 1            | 021 1            | 0.016 1 1 16       | 001 I<br>0.262 1 B    |                  |
| METALS           | Selenium                    | 0.233 1          | 0.235 1 U U      | 11< 0             | 11<0             | 11<0             | 11<0             | 11<0             | 11<0             | 11 < 0           | 11< 0            | 17 1 U U         | 179 1 2 2        | 160 1 1 1          | 57 1 11 11            |                  |
| METALS           | Silver                      | 1.72 1 U U       | 1.83 1 U U       | 1 1 < 0           | 11<0             | 11<0             | 11<0             | 1 I < U          | 11<0             | 11<0             | 1 1 < 0          | 105 1 1 1        | 199 1            | 1.00 1 0 0         | 1.7 1 0 0             |                  |
| METALS           | Sodium                      | 13.9 1 J J       | 105 1            |                   | 400 4            |                  |                  | 15.1 1           | <b>2017</b>      | 70 1             | 20.2 1           | 10.0 1 3 3       | 100              | 13.3 1 3 3         | 210 1                 |                  |
| METALS           | Strontium                   |                  |                  | 13.1 3            | 182 1            | 18.5 1           | 12.0 1           | 40.1             | 20.5             | 1.9 1            | 29.3 1           | 0.0405 1         | A 107 1          | 0.0506 1           | 0.0904 t              |                  |
| METALS           | Thabum                      | 0.264 1          | 0.036/ 1         |                   |                  |                  |                  |                  |                  |                  |                  | 22.1 1           | 40.5 1           | 201 3              | 29.2 1                |                  |
| METALS           | Vanadium                    | 22.7 1           | 7.55 1           | 400 /             |                  |                  |                  | 20.4             | 10 C 1           | 50.1 1           | 514 1            | 20.1 1           | 43.0 1           | 20.1               | 33 4 1                |                  |
| METALS           | Zinc                        | 16.5 1           | 20 1             | 122 1             | 9.5 1            | 43.3 1           | 10.1             | 36.4 1           | 43.0 1           | 52.1 1           | 51.4 1           | 0.0501 5 11 11   | 00100 2 11 II    | 02 20 11 11        | 0.0499 5 11 11        |                  |
| PERG             | Perchiorate                 | 0.0501 5 0 0     | 0.199 20 0 0     | 0.22 1 1          | 0.00 1 . 11      | A 12 T . 11      | 0.97 1 4 11      | A22 1 . K        | 0.22 1 - 11      | 0.22 t < 14      | 0.22 1 . 11      | 0.0007 5 6 6     | 0.0133 2 0 0     | 0.2 20 0 0         | 0.0430 0 0 0          |                  |
| SEMIVULAHLES     | 1,2,4- ( nchlorobenzene     |                  |                  | 10.33 1 < U       | 0.33 1 < 0       | 0.00 1 . 11      | 0.03 1 < 0       | 0.331 < 0        |                  | 0.33 1 < 0       |                  |                  |                  |                    | 1                     |                  |
| SEMIVOLATILES    | 1,2-Dichlorobenzene         |                  |                  | 0.33 1 < 0        | 12,33 1 < ⊍      | 0.33 1 < U       | 0.33 1 < 0       |                  | 0.33 1 < 1       |                  | 0.33 1 < 11      |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 1,3-Dictilorobenzene        |                  |                  | 0.33 1 < 0        | 0.33 1 < 0       | 0.33 ( < 0       | 0.33 1 < 0       | 0.33 1 < 0       | 0.33 1 < 0       |                  | 633 1 < 1        |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 1.4-Dichloropenzene         |                  |                  | 165 1 4 11        | 10.33 I K U      | 165 1 < 1        |                  | 165 1 < 1        |                  | 165 1 < 11       | 165 1 < 11       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 2,4,5- inchigrophenol       |                  |                  | 1.02 1 < U        | 1.00 1 < U       | 1.00 F < U       | 1.03 1 < 0       | 1.00 1 < 0       |                  |                  |                  |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 2,4,0-Thompson              |                  |                  | 0.20 1 4 0        | 0.03 1 < 1       | 0.30 1 < 0       |                  |                  | 0.33 1 < 11      | 033 1 < 11       | 033 1 4 1        |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 2,4-Diceletere              |                  |                  | 0.33 / < 0        |                  | 0.33 1 < 1       |                  |                  |                  | 0.33 1 < 1       | 0.33 1 < 11      |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 2,4-Dimensypheno:           |                  |                  | 1.65 t < U        | 165 1 < 11       | 1.65 1 < 1       | 165 1 < 1        | 165 1 < 1        | 155 1 < 1        | 1.65 t < U       | 165 1 < 11       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 2.4-Dataoprietak            |                  |                  | 1.05 7 2 0        | 1.05 1 4 0       |                  | 0.33 1 < 11      | 1,00 1 4 0       | 1.00 1 4 0       |                  |                  |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 2.6 Dinitratelyano          |                  |                  |                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 2.Chiomaantthalene          |                  |                  | 0.33 1 < 11       | 033 1 < U        | £133 t < ∐       | 0.33 1 < U       | 0.33 1 < 9       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 2-Chiomatenal               |                  |                  | 0.33 1 < U        | 0.33 t < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < 1       | 0.33 1 < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 2-Methylinanhimatene        |                  |                  | 0.33 1 < U        | 0.33 1 < U       | £0.33 t < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATIEES    | 2-Methyloheaol              |                  |                  | 0.33 1 < U        | 0.33 1 < U       | 0.33 î < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 2-Nitroantine               |                  |                  | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < 13      | 1.65 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 2-Nitrophenol               |                  |                  | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < łJ      | 0.33 1 < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 3.3-Dichlorobenzidine       |                  |                  | 0.65 1 < U        | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < ⊎       | 0.65 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 3-Nitroanline               |                  |                  | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < łJ      | 1.65 1 < U       | 1.65 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenoi  |                  |                  | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < ∛J      | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 4-Bromophenyl phenyl ether  |                  |                  | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol     |                  |                  | 0.65 1 < U        | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < ป       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 4-Chloroaniline             |                  |                  | 0.65 1 < U        | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether |                  |                  | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 4-Methylphenol              |                  |                  | 0.33 1 < U        | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 4-Nitroantline              |                  |                  | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < ⊍       | 1.65 1 < 반       | 1.65 1 < U       | 1.65 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | 4-Nitrophenol               |                  |                  | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < ∜       | 1.65 1 < U       | 1.65 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | Acenaphthene                | 1                |                  | 0.33 1 < U        | -0.33 t < U      | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | Acenaphthylene              |                  |                  | 0.33 1 < U        | €.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |                  | •                |                    |                       |                  |
| SEMIVOLATILES    | Anthracene                  | 1                |                  | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | Benzo(a)anthracene          | 1                |                  | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < Ü       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | Benzo(a)pyrene              |                  |                  | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 t < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | Benzo(b)fluoranthene        |                  |                  | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | Benzo(ghi)perylene          | 1                |                  | 0.33 1 < U        | 0.33 1 < ∜       | 0.33 † < U       | 0.33 t < U       | 0.33 1 < 원       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | Benzo(k)fluoranthene        |                  |                  | 0.33 t < U        | 0.33 1 < U       | €.33 1 < U       | 0.33 f < U       | 0.33 1 < V       | 0.33 t < U       | 0.33 t < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | Benzoic Acid                | 1                |                  | 1.65 1 < U        | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < U       | 1.65 1 < ♥       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | Benzyl Alcohol              |                  |                  | 0.65 1 < U        | 9.65 1 < U       | 0.65 1 < U       | 0.65 t < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < U       | 0.65 1 < 0       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane  | }                |                  | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33° 1 < U      | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     |                  |                  | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < 8       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether |                  |                  | 0.33 t < U        | 9.33 t < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | bis(2-Ethylnexyl)phthalate  |                  |                  | 0.33 1 < U        | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | · 0.33 1 < U     | 0.33 1 < U       | 0.33 t < U       | 0.33 1 < U       |                  |                  |                    |                       |                  |
| SEMIVOLATILES    | Butyl benzyl phthalate      |                  |                  | 0.33 1 < U        | 9.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 1 < U       | 0.33 t < U       |                  |                  |                    |                       |                  |

Shaw Environmental, Inc.

÷.

 Table 3-123

 Concentrations of Chemicals in Soil Samples Associated with WR Sump 017

| [SUMP] = WRSUMP01 | 7                              |                  | 0000000000000000                 |                  | ACOULIDADA (1044           | 111.004.04                 | 111 004 04               | 111 004 04          | 111 004 00               | 122 004 00             | 211 Cos 02       | 11/2 2 00        |
|-------------------|--------------------------------|------------------|----------------------------------|------------------|----------------------------|----------------------------|--------------------------|---------------------|--------------------------|------------------------|------------------|------------------|
| LOCATION_CODE     |                                | 355UMP001-5801   | 355UMP001-5801                   | 3550MP001-5802   | 3550MP001-5802             | LH-S01-01                  | 114-501-01 2             | LH-S01-01           | 14-501-02                | 11-501-02              | 1 H-S01-02 3     | 145-2-09         |
| SAMPLE_NO         |                                | 9/7/2006         | 9/7/2006                         | 9/7/2006         | 9/7/2006                   | 6/26/1993                  | 6/26/1993                | 6/26/1993           | 6/26/1993                | 6/26/1993              | 6/26/1993        | 1/10/1995        |
| SAMPLE_DATE       |                                | 0.5 - 1 Ft       | 6-6Ft                            | 0 - 0.5 Ft       | 6-6Ft                      | 0.5 - 10.5 FI              | 5.7 - 6.5 Ft             | 7.9 - 8.9 Ft        | 0.5 - 1.5 Ft             | 5 - 50.8 Ft            | 14.4 - 15.3 Ft   | 0 - 0.5 Ft       |
| SAMPLE PURPOSE    |                                | REG              | REG                              | REG              | REG                        | REG                        | REG                      | REG                 | REG                      | REG                    | REG              | REG              |
| Test Group        | Parameter (Units = mg/kg)      | Result DIL LQ VQ | Result DIL LO VO                 | Result DIL LQ VQ | Result DiL LQ VQ           | Result DIL LO VO           | Result Dil LQ VQ         | Result DiL LQ VQ    | Result DIL LQ VQ         | Result DIL LQ VQ       | Result DIL LQ VQ | Result DIL LQ VQ |
| SEMIVOLATILES     | Chrysene                       |                  |                                  | 0.33 1 < U       | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U          | 0.33 1 < U               | 0.33 1 < U             | 0.33 1 < U       |                  |
| SEMIVOLATILES     | Dibenzo(a,h)anthracene         |                  |                                  | 0.33 1 < U       | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U          | 0.33 1 < U               | 0.33 t < U             | 0.33 1 < 0       |                  |
| SEMIVOLATILES     | Dibenzofuran                   |                  |                                  | 0.33 1 < U       | 0.33 1 < U                 | 0.33 1 < 0                 | 0.33 1 < 0               | 0.33 1 < U          | 0.33 1 < U               | 0.33 1 < 0             | 0.33 1 < 0       |                  |
| SEMIVOLATILES     | Diethyl phthalate              |                  |                                  | 0.33 f < 0       | 10.33 I < U                | 0.33 1 < U                 | 0.33 1 < 0               | 0.33 1 < 0          | 0.33 1 < U               | 033 1 < 0              | 0.33 1 < 0       |                  |
| SEMIVOLATILES     | di-n-Buttel obthatate          |                  |                                  | 0.33 1 < U       | 0.33 1 < 10                | 0.33 1 < 0                 | 0.33 1 < 1               | 0.33 1 < 0          | 0.33 1 < 0               | 0.33 t < U             | 0.33 1 < U       |                  |
| SEMIVOLATILES     | di-n-Octvi phihalate           |                  |                                  | 0.33 1 < U       | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U          | 0.33 1 < U               | 0.33 1 < U             | 0.33 1 < U       |                  |
| SEMIVOLATILES     | Fluoranthene                   |                  |                                  | 0.33 1 < U       | 0.33 1 < U                 | 0.33 1 < U                 | 8.33 1 < U               | 0.33 1 < U          | 0.33 1 < U               | 0.33 1 < U             | 0.33 1 < U       |                  |
| SEMIVOLATILES     | Fluorene                       |                  |                                  | 0.33 1 < U       | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 t < U               | 0.33 1 < U          | 0.33 1 < U               | 0.33 1 < U             | 0.33 t < U       |                  |
| SEMIVOLATILES     | Hexachlorobenzene              |                  |                                  | 0.33 t < U       | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U          | 0.33 1 < U               | 0.33 1 < U             | 0.33 1 < U       |                  |
| SEMIVOLATILES     | Hexachlorobutadiene            |                  |                                  | 0.33 1 < U       | 0.33 t < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U          | 0.33 1 < U               | 0.33 1 < U             | 0.33 1 < U       |                  |
| SEMIVOLATILES     | Hexachlorocyclopentadiene      |                  |                                  | 0.33 1 < U       | 0.33 1 < U                 | 0.33 1 < ⊍                 | 0.33 1 < U               | 0.33 1 < U          | 0.33 1 < U               | 0.33 1 < U             | 0.33 1 < U       |                  |
| SEMIVOLAITLES     | Hexachioroenane                |                  |                                  | 0.33 1 < 0       | 0.33 1 < 0                 | 0.33 1 < U                 | 9.33 1 < U               | 0.33 1 < 0          | 9.33 I < U               | 9.33 1 < U             | 0.33 1 < 1       |                  |
| SEMIVOLATILES     | Indeno(1,2,3-co)pyrene         |                  |                                  | 0.33 1 < 11      | 0.33 1 < 1                 | 0.33 1 < 11                |                          | 0.33 1 < 0          | 0.33 1 < 1               | 0.33 1 C IF            | 0.33 1 < 0       |                  |
| SEMIVOLATILES     | Nauhthalene                    |                  |                                  | 0.33 1 < U       | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 t < U               | 0.33 1 < U          | 0.33 1 < U               | 0.33 1 < U             | 0.33 1 < 0       |                  |
| SEMIVOLATILES     | Nitrobenzene                   |                  |                                  | 0.33 1 < U       | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.33 t < U          | 0.33 1 < U               | 0.33 t < t/            | 9.33 1 < U       |                  |
| SEMIVOLATILES     | n-Nitroso-di-n-propylamine     |                  |                                  | 0.33 1 < U       | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < U          | 0.33 1 < U               | 0.33 1 < U             | 0.33 1 < U       |                  |
| SEMIVOLATILES     | n-Nitrosodiphenylamine         |                  |                                  | 0.33 1 < U       | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.33 t < U          | 0.33 1 < U               | 0.33 1 < U             | 0.33 1 < U       |                  |
| SEMIVOLATILES     | Pentachlorophenoi              |                  |                                  | 1.65 1 < U       | 1.65 1 < U                 | 1.65 1 < ∜U                | 1.65 1 < U               | 1.65 1 < U          | 1.65 1 < U               | 1.65 1 < ⊍             | 1.65 1 < U       |                  |
| SEMIVOLATILES     | Phenanthrene                   |                  |                                  | 0.33 1 < U       | 0.33 1 < U                 | 0.33 1 < U                 | 0.33 1 < U               | 0.33 t < U          | 0.33 1 < U               | 0.33 1 < 0             | 0.33 t < U       |                  |
| SEMIVOLATILES     | Phenol                         |                  |                                  | 0.33 1 < U       | 0.33 1 < 10                | 0.33 1 < U                 | 0.33 1 < U               | 0.33 1 < 0          | 0.33 1 < U               | 0.33 1 < 0             | 0.33 1 < U       |                  |
| SEMIVOLATILES     | ryrene                         |                  | 0.00499 1 11 11                  | 0.33 1 < 0       | 0.33 1 < 0                 | 12.33 1 < 0                | 0 > 1 660                | 0.33 I < U          | 16.33 1 < 0              | 0.33 1 < 0             | 17.33 I < 17     |                  |
| VOLATILES         | 1 1 1-Trichlomethane           |                  | 0.00489 1 13 14                  | 0.005 1 < U      | 0.005 t < <sup>`</sup> U   | 0,005 t < 1i               | 01005 t < 11             | 0.005 1 < 11        | 0.005 1 c H              | 9005 1 < ⊎             | 0.005 1 < U      |                  |
| VOLATILES         | 1.1.2.2-Tetrachloroethane      |                  | 0.00489 1 U U                    | 0.005 1 < €      | 0.005 1 < U                | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U              | 9.005 1 < U            | 0.005 1 < U      |                  |
| VOLATILES         | 1,1,2-Trichloroethane          |                  | 0.00489 1 U U                    | 0.005 1 < U      | 0.005 1 < U                | 0.005 1 < U                | 0.005 1 < U              | 0 <u>.005</u> 1 < U | 0.005 1 < U              | 0.005 1 < U            | 0.005 1 < U      |                  |
| VOLATILES         | 1,1-Dichloroethane             |                  | 0.00489 1 U U                    | 0.005 1 < U      | 0.005 1 < U                | 0.005 1 < U                | 0.005 t < U              | 0.005 1 < U         | 0.005 1 < U              | 0.005 1 < U            | 0.005 1 < U      |                  |
| VOLATILES         | 1,1-Dichloroethene             |                  | 0.00489 1 U U                    | 0.005 t < U      | 0.005 1 < U                | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U              | 0.005 1 < U            | 0.005 1 < U      |                  |
| VOLATILES         | 1,1-Dichloropropene            |                  | 0.00489 1 U U                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATILES         | 1,2,3-Trichlorobenzene         |                  | 0.00489 1 U U                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATILES         | 1,2,3-Trichloropropane         |                  | 0.00489 1 U U                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATILES         | 1,2,4-Inchorobenzene           |                  | 0.00489 1 0 0                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATHES          | 12,4-11menyberzere             |                  | 0.00489 1 1 1                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATILES         | 1.2-Dibromoethane              |                  | 0.00489 1 U U                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATILES         | 1.2-Dichlorobenzene            |                  | 0.00489 1 U U                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATILES         | 1,2-Dichloroethane             |                  | 0.00489 1 U U                    | 0.005 1 < U      | 0.005 1 < U                | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U              | 0.005 1 < U            | 0.005 1 < U      |                  |
| VOLATILES         | 1.2-Dichtoroethene             |                  |                                  | 0.005 1 < U      | 0.005 1 < U                | 0.005 1 < U                | 0.005 1 < U              | 0.905 1 < U         | 0.005 1 < U              | 0.005 1 < U            | 0.005 1 < U      |                  |
| VOLATILES         | 1,2-Dichloropropane            |                  | 0.00489 1 U U                    | 0.005 1 < U      | 0.005 t < U                | 0.005 1 < U                | 0.005 1 < U              | 0.605 1 < U         | 0.005 1 < U              | 0.005 t < U            | 0.005 1 < U      |                  |
| VOLATILES         | 1.2-Dimethylbenzene (o-Xylene) |                  | 0.00489 1 0 0                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VULAILES          | 1.3,5- Himeinywenzene          |                  | 0.00469 1 0 0<br>0.00489 1 1 U   |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATILES         | 1 3-Dichlorogrogane            |                  | 0.00489 1 1/ 1/                  |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATILES         | 1,4-Dichlorobenzene            |                  | 0.00489 1 U U                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATILES         | 2.2-Dichloropropane            |                  | 0.00489 1 U U                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATILES         | 2-Butanone                     |                  | 0.00978 1 U U                    | 0.05 1 < U       | 0.05 t < U                 | 0.05 1 < U                 | 0.05 1 < U               | 0.05 1 < U          | 0.05 1 < U               | 0.05 1 < U             | 0.05 1 < U       |                  |
| VOLATILES         | 2-Chloroethyl vînyl ether      |                  | 0.00978 1 U U                    | 0.61 1 < U       | 0.01 1 < U                 | 0.01 1 < U                 | 0.01 1 < U               | 0.01 t < U          | 0.01 1 < U               | 0.01 1 < U             | 0.01 1 < U       |                  |
| VOLATILES         | 2-Chlorotoiuene                |                  | 0.00489 1 U U                    |                  |                            |                            |                          |                     |                          | · · · · · · · · ·      |                  |                  |
| VOLATILES         | 2-Hexanone                     |                  | 0.00978 1 U U                    | 0.05 1 < U       | 0.05 1 < U                 | 0.05 1 < U                 | 0.05 1 < U               | 0.05 1 < U          | 0.05 1 < U               | 0.05 1 < 0             | 0.05 1 < 0       |                  |
| VOLATILES         | 4-Chlorololuene                |                  | 0.00489 1 U U                    | A1 1 - N         | 01 1 - 11                  |                            | 01 1 4 11                | 01 1 × K            | 01 1 - 1                 | 01 1 4 18              | 01 1 2 11        |                  |
| VOLATILES         | Renzene                        |                  | 0.00978 1 0 0                    | 0.005 1 2 1      | 0.05 1 < 11                | 0.01 4 4 0                 | 0.05 1 < 11              | 0.075 1 c II        | 0.1 I < 0<br>0.005 1 < 8 | 0.095 1 < 13           | 0.01 < 0         |                  |
| VOLATILES         | Bromobenzene                   |                  | 0.00489 1 1/ 1/                  | 0.000 1 4 0      | 0.000                      | 0.000 7 4 0                | 0.000 1 4 0              | 0.000               | 0.000 1, 4 1             | 0.000 7 4 0            |                  |                  |
| VOLATILES         | Bromochloromethane             |                  | 0.00489 1 U U                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATILES         | Bromodichloromethane           |                  | 0.00489 1 U U                    | 0.005 1 < U      | 0.005 1 < U                | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U              | 0.005 1 < U            | 0.005 1 < U      |                  |
| VOLATILES         | Bromotorm                      |                  | 0.00489 1 U U                    | 0.005 1 < U      | 0.005 1 < U                | 10.005 t < U               | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < U              | 0.005 1 < U            | 0.005 t < U      |                  |
| VOLATILES         | Bromomethane                   |                  | 0.00978 1 U U                    | 0.01 1 < U       | 0.01 1 < U                 | 0.01 1 < U                 | 0.01 1 < U               | 0.01 1 < 0          | 0.01 1 < U               | 0.01 1 < U             | 0.01 1 < U       |                  |
| VOLATILES         | Carbon disulfide               |                  | 0.004489 1 U U                   | 0.005 1 < U      | -0.005 1 < U               | 0.005 1 < U                | 0.005 1 < U              | 0.005 T.< U         | 0.005 1 < U              | 0.005 1 < U            | 0.005 1 < U      |                  |
| VOLATILES         | Carbon tetrachloride           |                  | 0.00489 1 U U                    | 0.005 1 < U      | 0.005 t < U                | 0.005 1 < U                | 0.005 1 < U              | .0.005 1 < U        | 0.005 t < U              | 0.005 1 < 0            | 0.005 1 < U      |                  |
| VOLATILES         | Chlorobenzene                  |                  | 0.00489 1 U U                    | U.005 1 < U      | 0.005 1 < U                | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < 0         | 0.005 1 < U              | 0.005 1 < 0            | 0.005 T < U      |                  |
| VOLANLES          | Chloroform                     |                  | 0.00976 I U U<br>0.00489 1 21 13 | 12.07 I < U      | บ.ง⊦ เ< ป<br>ถ.ณาร. 1 ∠ ะเ | 0.01 1 < 0<br>0.065 1 - 12 | 0.01 1 < U<br>8005 1 - H | 0.005 1 2 15        | 0.01 เ< ป<br>0.005 1 ≁ ∺ | עטוי < ט<br>חמס 1 - יו | 0.01 1 < 0       |                  |
| VOLATILES         | Chloromethane                  |                  | 0.00978 1 11 11                  | 0.00 I C U       | 0.001 1 < 1                | 0.000 1 4 0                | 0.01 1 < 1               | 0.01 1 < 1          | 0.01 1 < 1               | 0.01 1 < 11            | 0.01 t < t       |                  |
| VOLATILES         | cis-1,2-Dichloroethene         |                  | 0.00489 1 U U                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATILES         | cis-1,3-Dichloropropene        |                  | 0.00489 1 U U                    | 0.805 1 < U      | 0.005 1 < U                | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U         | 0.005 1 < 10             | 0.005 1 < U            | 0.005 1 < U      |                  |
| VOLATILES         | Dibromochloromethane           |                  | 0.00489 1 U U                    | 0.005 1 < U      | 0.005 t < U                | 0.005 1 < U                | 0.005 1 < U              | 0.005 1 < U         | 0.005 t < U              | 0.905 t < U            | 0.005 1 < U      |                  |
| VOLATILES         | Dibromomethane                 |                  | 0.00489 1 U U                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |
| VOLATILES         | Dichlorodifluoromethane        |                  | 0.00978 1 U U                    |                  |                            |                            |                          |                     |                          |                        |                  |                  |

Shaw Environmental, Inc.

# 00066384

| UH-WRS4-01       | LH-WRS4-01       | WRS04-SB01       | WRS04-5801       |
|------------------|------------------|------------------|------------------|
| LH-WRS4-01_1     | LH-WRS4-01_2     | WRS04-SB01-01    | WRS04-SB01-02    |
| 7/10/1993        | 7/10/1993        | 9/25/2006        | 9/25/2006        |
| 0.5 - 1.5 Ft     | 3.5-4.3 Ft       | _55 Ft           | 4_5 - 4_5 Ft     |
| REG              | REG              | REG              | REG              |
| Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |

| 0.00559               | 1  | U  | U        |
|-----------------------|----|----|----------|
| 0.00559               | 1  | U  | U        |
| 0.00559               | 1  | U  | U        |
| 0.00559               | 1  | IJ | U        |
| 0.00559               | 1  | U  | U        |
| 0.00559               | 1  | U  | U        |
| 0.00559               | 1  | U  | U        |
| 0.00559               | 1  | υ  | υ        |
| 0.00559               | 1  | υ  | U        |
| 0.00559               | t  | U  | υ        |
| 0.00559               | 1  | U  | U        |
| 0.00559               | 1  | U  | U        |
| 0.00559               | 1  | υ  | U        |
| 0.00559               | 1  | IJ | U        |
|                       |    |    |          |
| 0.00559               | 1  | U  | U        |
| 0.00559               | 1  | U  | U        |
| 0.00559               | t  | U  | U        |
| 0.00559               | 1  | IJ | υ        |
| 0.00559               | 1  | U  | U        |
| 0.00559               | 1  | U  | U        |
| 0.00559               | 1  | U  | U        |
| 0.0112                | 1  | U  | U        |
| 0.0112                | 1  | U  | U        |
| 0.00559               | ·t | U  | U        |
| 0.0112                | 1  | U  | U        |
| 0.00559               | 1  | υ  | U        |
| 0.0112                | 1  | U  | U        |
| 0.00559               | 1  | U  | Ű        |
| 0.00559               | 1  | υ  | Ų        |
| 0.00559               | 1  | Ū  | U        |
| 0.00559               | 1  | U  | Ű        |
| 0.00559               | 1  | υ  | U        |
| 0.0112                | 1  | U  | Ū        |
| 0.00559               | 1  | U  | U        |
| 0.00559               | 1  | U  | U        |
| 0.00559               | 1  | U  | U        |
| 0.0112                | 1  | Ũ  | υ        |
| 0.01550               | 1  | H  |          |
| 0.0112                | ;  | U  | . 19     |
| 0.00650               |    | й  | П        |
| 0.00059               | -  | ы  | 31       |
| 0.00000               | ;  | 11 | - 11     |
| 0.000005.<br>0.000550 | 1  | ы  | 1        |
| 0.000.55              | 1  | н  | 10<br>11 |
| 0.0112                | 1  | v  | - U      |

0.00559 1 U U

| 0.00494 | 1 | ប  | U  |
|---------|---|----|----|
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | ŧ | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | บ  |
| 0.00494 | t | υ  | υ  |
| 0.00494 | 1 | υ  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | ų, |
| 0.00494 | 1 | U  | U  |
|         |   |    |    |
| 0.00494 | 1 | U  | U  |
| 0.00494 | t | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00987 | 1 | U  | U  |
| 0.00987 | 1 | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00987 | 1 | บ  | U  |
| 0.00494 | 1 | U  | υ  |
| 0.00987 | 1 | U  | U  |
| 0.00494 | 1 | U  | υ  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | υ  |
| 0.00494 | 1 | υ  | U  |
| 0.00987 | 1 | U  | U  |
| 0.00494 | 1 | IJ | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00987 | 1 | U  | 8  |
| 0.00494 | 1 | U  | U  |
| 0.00987 | 1 | U  | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | IJ | U  |
| 0.00494 | 1 | U  | U  |
| 0.00494 | 1 | IJ | U  |
| 0.00987 | 1 | υ  | U  |

Table 3-123 Concentrations of Chemicals in Soil Samples Associated with WR Sump 017

| [SUMP] = WRSUMPO1  | 17                             |                  |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  |                  |                  |                  |                  |
|--------------------|--------------------------------|------------------|------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE     |                                | 35SUMP001-SB01   | 35SUMP001-SB01   | 355UMP001-SB02   | 35SUMP001-SB02   | LH-S01-01         | LH-S01-01        | LH-S01-01        | LH-S01-02         | LH-S01-02        | LH-S01-02        | LHS-2-09         | LH-WRS4-01       | LH-WRS4-01       | WRS04-SB01       | WRS04-S801       |
| SAMPLE_NO          |                                | 35-SMP01-SB01-01 | 35-SMP01-SB01-02 | 35-SMP01-SB02-01 | 35-SMP01-SB02-02 | LH-S01-01_1       | LH-S01-01_2      | LH-\$01-01_3     | LH-S01-02_1       | LH-S01-02_2      | LH-S01-02_3      | LHS-2-09         | LH-WRS4-01_1     | LH-WRS4-01_2     | WRS04-SB01-01    | WRS04-S801-02    |
| SAMPLE_DATE        |                                | 9/7/2006         | 9/7/2006         | 9/7/2006         | 9/7/2006         | 6/26/1993         | 6/26/1993        | 6/26/1993        | 6/26/1993         | 6/26/1993        | 6/26/1993        | 1/10/1995        | 7/10/1993        | 7/10/1993        | 9/25/2006        | 9/25/2006        |
| Depth              |                                | 0.5 - 1 Ft       | 6 - 6 Ft         | 0 - 0.5 Ft       | 6 - 6 Ft         | 0.5 - 10.5 Ft     | 5.7 - 6.5 Ft     | 7.9 - 8.9 Ft     | 05-15Ft           | 5 - 50.8 Ft      | 14.4 - 15.3 Ft   | 0 - 0.5 Ft       | 0.5 - 1.5 Ft     | 3.5 - 4.3 Ft     | _55 Ft           | 4_5 - 4_5 Ft     |
| SAMPLE_PURPOSE     |                                | REG              | REG              | REG              | REG              | REG               | REG              | REG              | REG               | REG              | REG              | REG              | REG              | REG              | REG              | REG              |
| Test Group         | Parameter (Units = mg/kg)      | Result DIL LO VO | Result DIL LQ VQ | Result DtL LQ VQ | Result DIL LO VQ | Result DilL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result Dil. LO VQ | Result DIL LQ VQ | Result DIL LQ VO | Result DIL LQ VQ | Result DIL LQ VO | Result DIL LQ VQ | Result DIL LO VQ | Result DIL LQ VQ |
| VOLATILES          | Ethylbenzene                   |                  | 0.00489 1 U U    | 0.005 i < U      | 0.005 1 < U      | .0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00559 1 U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | Hexachlorobutadiene            |                  | 0.00489 1 U U    |                  |                  |                   |                  |                  |                   |                  |                  | •                | 0.00559 1 U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | Isopropythenzene               |                  | 0.00489 1 U U    |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00559 1 U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | m.p-Xylenes                    |                  | 0.00489 1 U U    |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00559 1 U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | Methyl isobutyl ketone         |                  | 0.00978 1 U U    | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       |                  | 0.0112 1 U U     |                  | 0.00987 1 U U    |                  |
| VOLATILES          | Methylene chloride             |                  | 0.00208 1 J J    | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 \$ < U     | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00559 1 U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | Naphthalene .                  |                  | 0.00978 1 U U    |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.0#12 1 U U     |                  | 0.00987 1 U U    |                  |
| VOLATILES          | n-BUTYLBENZENE                 |                  | 0.00489 1 U U    |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00559 1 U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | n-PROPYLBENZENE                |                  | 0.00489 1 U U    |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00559 t U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | p-ISOPROPYLTOLUENE             |                  | 0.00489 1 U U    |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00559 1 U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | sec-BUTYLBENZENE               |                  | 0.00489 1 U U    |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00559 1 U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | Styrene                        |                  | 0.00489 1 U U    | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00559 1 U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | text-BUTYLBENZENE              |                  | 0.00489 1 U U    |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00559 1 U. U   |                  | 0.00494 1 U U    |                  |
| VOLATILES          | Tetrachloroethene              |                  | 0.00489 1 U U    | 0.005 1 < U      | 0.005 1 < U      | 0.005 t < U       | 0.005 t < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00559 t U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | Toluene                        | . ·              | 0.00489 1 U U    | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00559 1 U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | trans-1,2-Dichloroethene       |                  | 0.00489 1 U U    |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.00559 1 U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | trans-1,3-Dichloropropene      |                  | 0.00489 1 U U    | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00559 1 U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | Trichloroethene                |                  | 0.00489 1 U U    | 0.005 t < U      | 0.005 1 < U      | 0.005 t < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      |                  | 0.00559 1 U U    |                  | 0.00494 1 U U    |                  |
| VOLATILES          | Trichlorofluoromethane         |                  | 0.00978 t U U    |                  |                  |                   |                  |                  |                   |                  |                  |                  | 0.0112 1 U U     |                  | 0.00987 1 U U    |                  |
| VOLATILES          | Vinyl acetate                  |                  | 0.00978 1 U UJ   | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       | 0.05 1 < U        | 0.05 1 < U       | 0.05 1 < U       |                  | 0.0112 t U U     |                  | 0.00987 1 U U    |                  |
| VOLATILES          | Vinyi chloride                 |                  | 0.00978 1 U U    | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       | 0.01 1 < U        | 0.01 1 < U       | 0.01 1 < U       |                  | 0.0112 1 U U     |                  | 0.00987 1 U U    |                  |
| VOLATILES          | Xylenes, Total                 |                  |                  | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0.005 1 < U      | 0.005 1 < U       | 0.005 1 < U      | 0:005 1 < U      |                  |                  |                  |                  |                  |
| Contrates as about | up on enumerance to Tables Pa- |                  |                  |                  |                  |                   |                  |                  |                   |                  |                  |                  |                  |                  |                  |                  |

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-124 Concentrations of Chemicals in Soil Samples Associated with WR Sump 018

| [SUMP] = WRSUMP018 |                              |                   |                   |                  |                  |                  |                  |                  |                  |                  |                   |                  |
|--------------------|------------------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|
| LOCATION _CODE     |                              | 35SUMP076-SB01    | 35SUMP076-SB01    | 47SB30           | 47SB30           | 47SB30           | 1H-DL76-01       | LHS-3-04         | LH-S76-01        | LH-S76-01        | LH-S76-01         | LH-S76-02        |
| SAMPLE_NO          |                              | 35-SMP076-S801-01 | 35-SMP076-SB01-02 | 47SB30(0-0, 5)   | 47SB30(0-0 5)QC  | 47SB30(1-2)      | 1.H-DL76-01      | LHS-3-04         | LH-S76-01 1      | LH-S76-01 2      | LH-S76-01 3       | 1H-S76-02 1      |
| SAMPLE DATE        |                              | 9/14/2006         | 9/14/2006         | 6/5/2000         | 6/5/2000         | 6/5/2000         | 6/26/1993        | 1/9/1995         | 6/26/1993        | 6/26/1993        | 6/26/1993         | 6/26/1993        |
| OCOTU              |                              | 5. 5 51           | 7.75+             | 0.05.04          | 0-05 5           | 1.25             | 2,255            | D AC 51          | 05.155           | 2.25 5           |                   | A6 16 D          |
|                    |                              | _0*_011           | P50               | 0-0.3 Ft         | 0-0.3FT          | 1-211            | 2-2511           | 0-0.3 Fi         | 0.0 * 1.0 Ft     | 2-23 1           | 55-771            | 0.3-1.511        |
| SAMPLE_PURPUSE     |                              | REG               | HEG               | HEG              | FU               | REG              | REG              | REG              | HEG              | REG              | REG               | REG              |
| 1est Group         | Parameter (Units = mg/kg)    | Result DIL LO VO  | Hesult Dit LQ VQ  | Hesult DIL LQ VQ | Result DHL LQ VQ | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL LO VO | Result DIL LQ VQ | Result DIL 1.0 VO | Result DR. LQ VQ |
| EXPLOSIVES         | 1,3,5-Trinitrobenzene        |                   |                   |                  |                  |                  |                  | 0.21 1 < U       |                  |                  |                   |                  |
| EXPLOSIVES         | 1,3-Dinitrobenzene           |                   |                   |                  |                  |                  |                  | 0.21 1 < U       |                  |                  |                   |                  |
| EXPLOSIVES         | 2.4.6-Trinitrotoluene        |                   |                   |                  |                  |                  |                  | 0.21 1 < U       |                  |                  |                   |                  |
| EXPLOSIVES         | 2 4-Dinitratokiene           |                   |                   |                  |                  |                  | 119 1 - 1        | 0.21 1 / 11      | 1 149 1 - 11     | 1205 1 - 11      | 125 1 4 1         | 1 19 1 11        |
|                    | 2, - Dalitotelacite          |                   |                   |                  |                  |                  |                  |                  | 1.140 1 0        | 1,200 1 1 0      |                   |                  |
| EXPLOSIVES         | 2,6-1,7mg otxuene            |                   |                   |                  |                  |                  | 1.19 1 < U       | 0.23 1 < 0       | 3.149 I < U      | 1.205 1 < 0      | 1.25 1 < 0        | 1.19 1 < U       |
| EXPLOSIVES         | 4-Amino-2,6-onitrotoluene    |                   |                   |                  |                  |                  |                  | 0.44 1 < U       |                  |                  |                   |                  |
| EXPLOSIVES         | HMX                          |                   |                   |                  |                  |                  |                  | 1.9-1 < U        |                  |                  |                   |                  |
| EXPLOSIVES         | m-Nitratoluene               |                   |                   |                  |                  |                  |                  | 0.88 1 < U       |                  |                  |                   |                  |
| EXPLOSIVES         | Nitrobenzene                 |                   |                   |                  |                  |                  |                  | 023 1 < 1        |                  |                  |                   |                  |
| EXPLOSIVES         | o Nitrololuego               |                   |                   |                  |                  |                  |                  | 0.98 1 - 11      |                  |                  |                   |                  |
|                    |                              | 1                 |                   |                  |                  |                  |                  |                  |                  |                  |                   |                  |
| EXPLUSIVES         | p-windowene                  | 1                 |                   |                  |                  |                  |                  | 2.16 i < U       |                  |                  |                   |                  |
| EXPLOSIVES         | RDX                          | 1                 |                   |                  |                  |                  |                  | 0.95 1 < U       | -                |                  |                   |                  |
| EXPLOSIVES         | Tetryl                       |                   |                   |                  |                  |                  |                  | 0.65 1 < U       |                  |                  |                   |                  |
| METALS             | Aluminum                     | 12300 1           | 13000 1           |                  |                  |                  | 7610 1           | 7890 1           | 7770 1           | 11800 1          | 12700 1           | 13700 1          |
| METALS             | Antimony                     | 0.11 1 1 1        | 0116 1 U U        |                  |                  |                  | 406 t < U        | 156 1 < 111      | 57 1 < 1         | 788 1 < U        | 602 1 < 11        | 698 1 < U        |
| METALS             | Arconic                      | 10.6 1            | 1.81 1            |                  |                  |                  | 0.812 1          | 12 1 1           | 2.11 1           | 250 1            | 144 1             | 5 55 1           |
| METHES             |                              | 100               | 1.01 F            |                  |                  |                  | 0.012 1          | 7.2 1 3          | 3.11 1           | 3.35 1           | 1.44 I            | 3.33             |
| METALS             | banuait                      | 132 1             | 54.0 1            |                  |                  |                  | 63.4 3 < U       | 101 1            | 278 1 < 0        | 190 1 < 0        | 104.4 i < U       | 1430 1 < 0       |
| METALS             | Beryllium                    | 0.641 1           | 0.786 1           |                  |                  |                  |                  |                  |                  |                  |                   |                  |
| METALS             | Cadmium                      | 0.104 1 J J       | 0.0456 1 J J      |                  |                  |                  | 1.54 ì E         | 1.6 1 < U        | 5.87 1           | 5.87 1           | 3.97 1            | 5.2 1            |
| METALS             | Calcium                      | 746 1             | 563 t             |                  |                  |                  | 1080 3           | 1600 1           | 2580 1           | 1860 1           | 9900 1            | 1530 1           |
| METALS             | Chromium                     | 13.9 1            | 14.7 1            |                  |                  |                  | 9.89 1           | 14.7 1 J         | 9.92 1           | 15.4 1           | 9.87 1            | 14.7 1           |
| METALS             | Cobalt                       | 701 1             | 7.26 1            |                  |                  |                  | 3.02 1           | 12 1             | 6 22 1           | 282 1            | 6 28 1            | 38 1             |
| MCTALO             | Conner                       | 410               | F 95 1            |                  |                  |                  | 0.02 1           | 1.5 7            |                  | 2.00 1           | 0.00              | 0.0 1            |
| MEIALS             | Copper                       | 4,12              | 5.05 1            |                  |                  |                  | 6.23 1 < 0       | 49.1 1           | 8.58   < 0       | 9.81 1 < 0       | 9.39 1 < 0        | 8.2 1 < 0        |
| METALS             | tron                         | 13200 1           | 14300 1           |                  |                  |                  | 6940 1           | 9660 1           | 21800 1          | 19500 1          | 12360 1           | 17800 1          |
| METALS             | Lead                         | 10.1 1            | 7.77 1            |                  |                  |                  | 15.7 1           | 81.1 1           | 15.5 1 E         | 19.6 1 E         | 22.5 1            | 23.2 1           |
| METALS             | Magnesium                    | 947 1             | 1020 t            |                  |                  |                  | 360 1            | 499 1            | 731 1            | 725 1            | 911 t             | 825 1            |
| METALS             | Manganese                    | 181 1             | 48.4 1            |                  |                  |                  | 261 1            | 198 1 J          | 117 1            | 122 1            | 18.2 1            | 70.7 1           |
| METALS             | Mercury                      | 00265 1 3 1       | 0.275 1 () ()     |                  |                  |                  | 0.055 1 < U      | 018 1 < ∐        | 005 1 < 1        | 0.053 1 < 1      | 0.072 1 F         | 0.053 1 < 11     |
| METALS             | Nickel                       | 79 1              | 9.58 1            |                  |                  |                  |                  |                  |                  | 0.000 / 0        |                   |                  |
| MCTALD             | Determine                    | 1.0               | 5.00 1            |                  |                  |                  |                  |                  |                  |                  | <b>DO 1</b>       | 105 4            |
| METALS             | Potassium                    | 660               | 530 I             |                  |                  |                  | 337 1            | 459 1            | 304 1            | 437 1            | 304 1             | 485 1            |
| METALS             | Selenium                     | 0.362 1           | 0.226 1 J J       |                  |                  |                  | 0.406 1 < U      | 0.53 1 J         | 0.57 1 < U       | 0.788 1 < U      | 0.602 1           | 0.698 1 < U      |
| METALS             | Silver                       | 1.64 1 U U        | 1.71 1 U U        |                  |                  |                  | 0.057 1          | 1.6 1 < U        | 0.028 1 < U      | 0.039 1 < U      | 1.77 1            | 0.045 1 E        |
| METALS             | Sodium                       | 34.4 1            | 319 1             |                  |                  |                  |                  |                  |                  |                  |                   |                  |
| METALS             | Strontium                    |                   |                   |                  |                  |                  | 143 1 < 11       | 34.3 1           | 236 1 < 1        | 257 1 × 11       | 235 t < U         | 890 t < IF       |
| METALS             | Thatfaum                     | 0.0759 1          | 0.126 1           |                  |                  |                  |                  | 77.9 1 / 11      |                  |                  |                   |                  |
| METALO             |                              | 0.0133 1          | 0.120 1           |                  |                  |                  |                  | 71.0 1 C C       |                  |                  |                   |                  |
| METALS             | vanadiciti                   | 24.0 1            | 23.9              |                  |                  |                  |                  |                  |                  |                  |                   |                  |
| METALS             | ZINC                         | 30.4 1            | 31.8 1            |                  |                  |                  | 14.6 1           | 128 1            | 27.2 1           | 27.3 1           | 25.9 1            | 32.4 1           |
| PERC               | Perchlorate                  |                   |                   | 0.0309 1 J       | 0.00635 1 < UJ   | 0.00598 1 < U    |                  |                  |                  |                  |                   |                  |
| RANGE_ORGANICS     | Carbon Range C12-C28         | 34 t J J          | 32.7 1 J J        |                  |                  |                  |                  |                  |                  |                  |                   |                  |
| RANGE_ORGANICS     | Carbon Range C28-C35         | 35.3 1 J J        | 35 1 J J          |                  |                  |                  |                  |                  |                  |                  |                   |                  |
| RANGE ORGANICS     | Carbon Banne C6-C12          | 555 1 0 0         | 573 1 11 11       |                  |                  |                  |                  |                  |                  |                  |                   |                  |
| SEMIVORATE ES      | 1.2.4.Trichlambanzona        |                   |                   |                  |                  |                  | 110 1 41         | ACA 1 . 13       | 1149 1           | 1905 1 . 11      | 125 1 4 11        | 1 10 1 . 11      |
|                    |                              | 1                 |                   |                  |                  |                  | 1.13             | 0.04 1 < 0       | 1.149 7 C U      | 1.203 1 < 0      | 1.25 1 C 0        | 1.13 1 < 0       |
| SEMIVOLATILES      | 1,2-Dichkrobenzene           | 1                 |                   |                  |                  |                  | 1.19 1 < 0       | 0.64 1 < 0       | 1.149 1 < U      | 1.205 i < 0      | 1.25 1 < 0        | 1.19 1 < U       |
| SEMIVOLATILES      | 1,3-Dichlorobenzene          | 1                 |                   |                  |                  |                  | 1.19 1 < U       | 0.64 1 ≺ じ       | 1.149 1 < U      | 1.205 1 < U      | 1.25 1 < U        | 1.19 1 < U       |
| SEMIVOLATILES      | 1,4-Dichlorobenzene          | 1                 |                   |                  |                  |                  | 1.19 1 < U       | 0.64 1 < U       | 1.149 1 < U      | 1.205 1 < U      | 1.25 t < U        | 1.19 1 < U       |
| SEMIVOLATILES      | 2,4,5-Trichlorophenol        |                   |                   |                  |                  |                  | 1.19 1 < U       | 3.2 1 < U        | 1.149 1 < U      | 1.205 t < U      | 1.25 1 < 1/       | 1.19 1 < U       |
| SEMIVOLATILES      | 2.4.6-Trichlorophenol        | 1                 |                   |                  |                  |                  | 1.19 1 < U       | 0.64 1 < 13      | 1.149 1 < 1/     | 1.205 1 < U      | 1.25 1 < U        | 1.19 1 < U       |
| SEMINOLATILES      | 2.4 Dichiorophorol           |                   |                   |                  |                  |                  | 110 1 11         | 0.64 1 2 11      | 1 1 49 1 4 11    | 1205 1 - 1       | 1.25 1 - 11       | 1 19 1 / 1       |
|                    |                              |                   |                   |                  |                  |                  |                  | 0.04 1 1 0       | 0.143 1 1        |                  |                   |                  |
| SEMIVOLATILES      | 2,4-Dimetry prieritor        | 1                 |                   |                  |                  |                  | 0.595 1 < 0      | 0.64 1 < U       | 0.5/5 1 < 0      | 0.602 1 < 0      | 0.625 1 < 0       | 0.595 i < U      |
| SEMIVOLATILES      | 2,4-Dinarophenol             | 1                 |                   |                  |                  |                  | 11.905 1 < U     | 3.2 1 < U        | 11.494 1 < U     | 12.048 1 < U     | 12.5 1 < U        | 11.905 1 < U     |
| SEMIVOLATILES      | 2,4-Dinitrotoluene           |                   |                   |                  |                  |                  |                  | 0.64 1 < U       |                  |                  |                   |                  |
| SEMIVOLATILES      | 2,6-Dinitrotokuene           | 1                 |                   |                  |                  |                  |                  | 0.64 1 < U       |                  |                  |                   |                  |
| SEMIVOLATILES      | 2-Chioronaphthalene          |                   |                   |                  |                  |                  | 0.357 1 < 1      | 0.64 1 < 1       | 0.345 1 < U      | 0.361 t < U      | 0.375 t < ti      | 0.357 1 < ()     |
| SEMINOLATE ES      | 2. Chiamphonal               |                   |                   |                  |                  |                  | 0.595 1 4 1      | 0.64 1 2 31      | 0.576 1 4 13     | 0.602 1 - H      | 0.625 1 < 18      | 0.505 1 / 11     |
| OCHINOLATICES      |                              |                   |                   |                  |                  |                  | 0.353 1 < 0      | 0.04 1 < 0       | 0.5/5 1 < 0      | 0.002 1 0 0      | 0.025 1 < 0       | 0.050 1 < 0      |
| SEMIVULATILES      | z-meonymaphotalene           | 1                 |                   |                  |                  |                  | 0.357 1 < 0      | 0.64 1 < 0       | 0.345 I < U      | 0.361 1 < 0      | 0.3/5 1 < 0       | V.35/ I < U      |
| SEMIVOLATILES      | 2-Methylphenol               | 1                 |                   |                  |                  |                  | 0.595 1 < U      | 0.64 1 < U       | 0.575 1 < U      | 0.602 1 < U      | 0.625 1 < U       | 0.595 1 < U      |
| SEMIVOLATILES      | 2-Nitroaniline               | 1                 |                   |                  |                  |                  | 3.571 1 < U      | 3.2 î < U        | 3.448 t < U      | 3.614 1 < U      | 3.75 1 < U        | 3.571 1 < U      |
| SEMIVOLATILES      | 2-Nitrophenol                | 1                 |                   |                  |                  |                  | 1.19 1 < U       | 0.64 1 < U       | 1.149 1 < U      | 1.205 t < U      | 1.25 1 < U        | 1.19 1 < U       |
| SEMIVOLATILES      | 3.3'-Dichlocobenzidine       | 1                 |                   |                  |                  |                  | 0.595 1 4 1      | 13 1 2 0         | 0.575 1          | 0.602 1 - 11     | 0.625 1 - 11      | 0595 1 - 1       |
| SEMBIOL ATH CO     | 2 Blitrapolios               |                   |                   |                  |                  |                  | 2,000 1 1 0      | 1.0 1 × U        | 0.010 1 1        | 2014 1 1         | 275 4 1           | 0.000 i N U      |
| JCINITYOLATILES    | J-1441Od10008                | 1                 |                   |                  |                  |                  | 3.3/1 I < U      | J.∠ i < U        | J.440 I < U      | J.014 I < U      | a.ra i < 1)       | 3.3/1 F < U      |
| SEMIVOLATILES      | 4,6-Dinitro-2-methylphenol   | 1                 |                   |                  |                  |                  | 5.952 1 < U      | 3.2 1 < U        | 5.747 1 < U      | 6.024 1 < U      | 6.25 1 < U        | 5.952 1 < U      |
| SEMIVOLATILES      | 4-Bromophenyl phenyl ether   | 1                 |                   |                  |                  |                  | 1.19 1 < U       | 0.64 1 < U       | 1.149 1 < U      | 1.205 1 < U      | 1.25 1 < U        | 1.19 1 < U       |
| SEMIVOLATILES      | 4-Chloro-3-methylphenol      | ł                 |                   |                  |                  |                  | 0.595 1 < U      | 0.64 1 < U       | 0.575 1 < U      | 0.602 1 < U      | 0.625 1 < U       | 0.595 1 < U      |
| SEMIVOLATILES      | 4-Chloroaniline              |                   |                   |                  |                  |                  | 3.571 1 < U      | 0.64 1 < U       | 3.448 1 < 11     | 3.614 1 < B      | 3.75 1 < ti       | 3.571 1 < U      |
| SEMIVOLATINES      | 4-Chlorophenyl chervit ether |                   |                   |                  |                  |                  | 1.19 1 2 11      | 0.64 1 - 11      | 1149 1 - 14      | 1205 1 - 12      | 1.25 1 - 11       | 119 1 - 0        |
| SEMUCI ATHES       | A Mothylohood                |                   |                   |                  |                  |                  | 0.505 1          | 0.64 1           | 0.570 1          | ACR2 1 - 11      | A625 1            | 0 COC 1          |
| OCMINOLATIES       | ч-тиче штупрахся кой         |                   |                   |                  |                  |                  | U.330 I < U      | 0.04 F < U       | 1.5/5 I < U      | v.ov∠ I < U      | 0.0∠D I < U       | 0.585 F < U      |
| SEMIVOLAFILES      | 4-Nitroaniine                | I                 |                   |                  |                  |                  | 5.952 1 < U      | 3.2 1 < U        | 5./4/ 1 < U      | 6.024 1 < U      | 6.25 1 < 1        | 5.952 1 < U      |

Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-124 Concentrations of Chemicals in Soil Samples Associated with WR Sump 018

| (SUMP) = WRSUMP018             |                                |                   |                    |                  |                  |                  |                   |                   |                   |                        |                   |                          |
|--------------------------------|--------------------------------|-------------------|--------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|------------------------|-------------------|--------------------------|
| LOCATION _CODE                 |                                | 35SUMP076-SB01    | 35SUMP076-SB01     | 47SB30           | 47SB30           | 47SB30           | LH-DL76-01        | LHS-3-04          | LH-S76-01         | LH-S76-01              | LH-S76-01         | LH-S76-02                |
| SAMPLE_NO                      |                                | 35-SMP076-SB01-01 | 35-SMP076-SB01-02  | 47SB30(0-0_5)    | 47SB30(0-0_5)QC  | 47SB30(1-2)      | LH-DL76-01        | LHS-3-04          | LH-S76-01_1       | LH-S76-01_2            | LH-S76-01_3       | LH-\$76-02_1             |
| SAMPLE_UATE                    | 1                              | 9/14/2006         | 9/14/2006          | 6/5/2000         | 6/5/2000         | 6/5/2000         | 6/26/1993         | 1/9/1995          | 6/26/1993         | 6/26/1993              | 6/26/1993         | 6/26/1993                |
| SAMPLE PURPOSE                 |                                | _0*_0 FI<br>BEG   | PEG                | U-U.5 FL         | 9-0.5 FT         | I-ZH<br>DEC      | 2-25 Ft           | 0-0.5 Ht          | 0.5 - 1.5 H       | 2 - 2.5 Ft             | 5.5 - / H         | 0.5 + 1.5 Ft             |
| Test Group                     | Parameter (Units = mg/kg)      | Result DiL LQ VQ  | Result DIL LQ VQ F | Result DIL LQ VQ | Result DIL LO VO | Result DIL LO VO | Result Dii, LO VO | Result Dill 10 VO | Result Dati 10 VO | Besist Dil FO VO       | Result Dit I O VO | Result Dif IO VO         |
| SEMIVOLATILES                  | 4-Nitropheno!                  |                   |                    |                  |                  |                  | 5.952 1 < U       | 3.2 1 < U         | 5.747 1 < U       | 6.024 1 < U            | 6.25 1 < U        | 5.952 1 < U              |
| SEMIVOLATILES                  | Acenaphthene                   |                   |                    |                  |                  |                  | 0.357 1 < U       | 0.64 1 < U        | 0.345 1 < U       | 0.361 1 < U            | 0.375 1 < U       | 0.357 1 < U              |
| SEMIVOLATILES                  | Acenaphthylene                 |                   |                    |                  |                  |                  | 0.595 1 < U       | 0.64 1 < U        | 0.575 1 < U       | 0.602 1 < U            | 0.625 1 < U       | 0.595 t < U              |
| SEMIVOLATILES                  | Anthracene                     |                   |                    |                  |                  |                  | 0.595 1 < U       | 0.64 1 < U        | 0.575 1 < U       | 0.602 1 < U            | 0.625 1 < U       | 0.595 1 < U              |
| SEMIVOLATILES                  | Benzo(a)anthracene             |                   |                    |                  |                  |                  | 0.357 1 < U       | 0.64 1 < U        | 0.345 1 < U       | 0.361 1 < U            | 0.375 1 < U       | 0.357 1 < U              |
| SEMIVOLATILES<br>SEMIVOLATILES | Berzo(b)filioranthane          |                   |                    |                  |                  |                  | 0.595 1 < U       | 0.64 1 < U        | 0.575 1 < 0       | 0.602 1 < U            | 0.625 1 < 0       | 0.595 1 < 0              |
| SEMIVOLATILES                  | Benzo(chi)perviene             |                   |                    |                  |                  |                  | 2.381 1 2 1       | 0.64 1 < 1        | 2299 1 < 1        | 241 3 < 1              | 1.25 J < U        | 2381 1 4 11              |
| SEMIVOLATILES                  | Benzo(k)fluoranthene           |                   |                    |                  |                  |                  | 1.19 1 < U        | 0.64 1 < U        | 1,149 1 < 1       | 1.205 1 < 1            | 1.25 1 < U        | 1.19 3 < 0               |
| SEMIVOLATILES                  | Benzoic Acid                   |                   |                    |                  |                  |                  |                   | 3.2 t < U         |                   |                        |                   |                          |
| SEMIVOLATILES                  | Benzył Alcohol                 |                   |                    |                  |                  |                  |                   | 0.64 1 < U        |                   |                        |                   |                          |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane     |                   |                    |                  |                  |                  | 0.595 1 < U       | 0.64 1 < U        | 0.575 1 < U       | 0.602 1 < U            | 0.625 1 < U       | 0.595 t < U              |
| SEMIVOLATILES                  | bis(2-Chkroelhyf)ether         |                   |                    |                  |                  |                  | 0.595 1 < U       | 0.64 1 < U        | 0.575 1 < U       | 0.602 1 < U            | 0.625 1 < U       | 0.595 1 < U              |
| SEMIVOLATILES<br>SEMIVOLATILES | bis(2-Chioroisopropyt)ether    |                   |                    |                  |                  |                  | 1.19 1 < U        | 0.64 1 < U        | 1.149 1 < U       | 1.205 1 < U            | 1.25 1 < U        | 1.19 1 < U               |
| SEMIVOLATILES                  | Butvi benzvi obthalate         |                   |                    |                  |                  |                  | 0.202 I J         | U.15 1 J          | 0.276 1 J         | 0.373 1                |                   | 0.119 1 J                |
| SEMIVOLATILES                  | Carbazole                      |                   |                    |                  |                  |                  | 1.19 1 < U        | 0.04 1 4 0        | 1149 1 < U        | 1205 1 < 1             | 125 1 < 1         | 0.395 I < 0<br>119 1 < 1 |
| SEMIVOLATILES                  | Chrysene                       |                   |                    |                  |                  |                  | 5.952 1 < U       | 0.64 1 < U        | 5,747 1 < U       | 6.024 1 < U            | 6.25 1 < U        | 5.952 1 < U              |
| SEMIVOLATILES                  | Dibenzo(a,h)anthracene         |                   |                    |                  |                  |                  | 2.381 1 < U       | 0.64 1 < U        | 2.299 1 < U       | 2.41 1 < U             | 2.5 1 < U         | 2.381 T < U              |
| SEMIVOLATILES                  | Dibenzofuran                   |                   |                    |                  |                  |                  | 1.19 1 < U        | 0.64 1 < U        | 1.149 1 < U       | 1.205 1 < U            | 1.25 1 < U        | 1.19 1 < U               |
| SEMIVOLATILES                  | Diethyl phthalate              |                   |                    |                  |                  |                  | 0.155 1 J         | 0.64 1 < U        | 0.218 1 J         | 0.602 1 < U            | 0.125 1 J         | 0.595 1 < U              |
| SEMIVOLATILES                  | Dimethyl phthalate             |                   |                    |                  |                  |                  | 0.595 1 < U       | 0.28 1 J          | 0.575 1 < U       | 0.602 1 < U            | 0.625 1 < U       | 0.595 1 < U              |
| SEMIVOLATILES<br>SEMIVOLATILES | GHI-BUIYI prinalale            |                   |                    |                  |                  |                  | 4.369 1           | 0.64 1 < 0        | 3.563 1           | 2.747 1                | 2.45              | 2.929 1                  |
| SEMIVOLATILES                  | Buoranthene                    |                   |                    |                  |                  |                  | 0.595 1 < 0       | 0.04 1 < U        | 0.575 1 < 0       | 0.602 1 < 0            | 0.625 1 < 0       | 0.595 1 < 0              |
| SEMIVOLATILES                  | Fluorene                       |                   |                    |                  |                  |                  | 0.595 1 < U       | 0.64 1 < U        | 0.575 1 < U       | 0.602 1 < U            | 0.625 1 < 17      | 0.595 1 < U              |
| SEMIVOLATILES                  | Hexachlorobenzene              |                   |                    |                  |                  |                  | 1.19 1 < U        | 0.64 1 < U        | 1.149 t < U       | 1.205 1 < U            | 1.25 t < U        | 1.19 1 < U               |
| SEMIVOLATILES                  | Hexachlorobutadiene            |                   |                    |                  |                  |                  | 3.571 1 < U       | 0.64 1 < U        | 3.448 1 < U       | 3.614 1 < U            | 3.75 1 < U        | 3.571 1 < U              |
| SEMIVOLATILES                  | Hexachiorocyclopentadiene      |                   |                    |                  |                  |                  | 3.571 1 < U       | 0.64 1 < U        | 3…448 1 < U       | 3.614 1 < U            | 3.75 1 < U        | 3.571 1 < U              |
| SEMIVOLATILES                  | Hexachloroethane               |                   |                    |                  |                  |                  | 1.19 t < U        | 0.64 1 < U        | 1.149 1 < U       | 1.205 1 < U            | 1.25 1 < U        | 1.19 1 < U               |
| SEMIVULATILES                  | Indeno(1,2,3-co)pyrene         |                   |                    |                  |                  |                  | 1.19 1 < U        | 0.64 1 < U        | 1.149 1 < U       | 1.205 1 < U            | 1.25 1 < U        | 1.19 1 < U               |
| SEMIVOLATILES                  | Naphthalene                    |                   |                    |                  |                  |                  | 0.395 1 < 0       | 0.64 1 < 11       | 0.345 1 < 1       | 0.002 1 < U<br>3.600 1 | 0.525 / < //      | 0.595 { < 10             |
| SEMIVOLATILES                  | Nitrobenzene                   |                   |                    |                  |                  |                  | 0.595 1 < U       | 0.64 1 < U        | 0.575 1 < U       | 0.602 1 < U            | 0.625 1 < 1       | 0.595 1 < U              |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine     |                   |                    |                  |                  |                  | 1.19 1 < U        | 0.64 1 < U        | 1.149 1 < U       | 1.205 1 < U            | 1.25 1 < U        | 1.19 1 < U               |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine         |                   |                    |                  |                  |                  | 0.595 1 < U       | 0.64 1 < U        | 0.575 1 < U       | 0.602 1 < U            | 0.625 1 < U       | 0.595 1 < U              |
| SEMIVOLATILES                  | Pentachlorophenol              |                   |                    |                  |                  |                  | 5.952 1 < U       | 32 1 < U          | 5.747 1 < U       | 6.024 1 < U            | 6.25 1 < U        | 5.952 1 < U              |
| SEMINOLATILES                  | Phenanthrene                   |                   |                    |                  |                  |                  | 0.595 1 < U       | 0.64 1 < U        | 0.575 1 < U       | 0.602 1 < U            | 0.625 1 < U       | 0.595 1 < U              |
| SEMIVOLATILES<br>SEMIVOLATILES | Pyrene                         |                   |                    |                  |                  |                  | 0.595 1 < U       | 0.64 T < U        | 0.575 1 < U       | 0.602 1 < U            | 0.625 1 < U       | 0.595 1 < U              |
| VOLATILES                      | 1.1.1.2-Tetrachioroethane      |                   | 0.00482 1 U U      |                  |                  |                  | 9.380 I < 0       | 0.007 1 5         | 0.5/5 1 < 0       | V.002 I < U            | 0.625 7 < 0       | 0.090 1 < 0              |
| VOLATILES                      | 1,1,1-Trichloroethane          |                   | 0.000851 1 J J     |                  |                  |                  | 0.006 1 < U       | 0.01 1 < U        |                   |                        |                   | 0.006 1 < U              |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane      |                   | 0.00482 1 U U      |                  |                  |                  | 0.006 1 < U       | 0.01 1 < U        |                   |                        |                   | 0.006 1 < U              |
| VOLATILES                      | 1,1,2-Trichloroethane          |                   | 0.00482 1 U U      |                  |                  |                  | 0.006 t < U       | 0.01 1 < U        |                   |                        |                   | 0.006 1 < U              |
| VOLATILES                      | 1,1-Dichloroethane             |                   | 0.00415 1 J J      |                  |                  |                  | 0.006 t < U       | 0.01 1 < U        |                   |                        | •                 | 0.006 1 < U              |
| VOLATILES                      | 1,1-Dichloroethene             |                   | 0.00327 1 J J      |                  |                  |                  | 0.006 1 < U       | 0.01 1 < U        |                   |                        |                   | . 0.006 1 < U            |
| VOLATILES                      | 1,1-Dichloropene               |                   | 0.00482 1 U U      |                  |                  |                  |                   |                   |                   |                        |                   |                          |
| VOLATILES                      | 1.2.3-Trichlomoronane          |                   | 0.00482 1 1 1      |                  |                  |                  |                   | 0.010 1 / 11      |                   |                        |                   |                          |
| VOLATILES                      | 1,2,4-Trichlorobenzene         |                   | 0.00482 1 U U      |                  |                  |                  |                   | 0.013 1 1 1 0     |                   |                        |                   |                          |
| VOLATILES                      | 1,2,4-Trimethylbenzene         |                   | 0.00482 1 U U      |                  |                  |                  |                   |                   |                   |                        |                   |                          |
| VOLATILES                      | 1,2-Dibromo-3-chloropropane    |                   | 0.00482 1 U U      |                  |                  |                  |                   | 0.039 1 < U       |                   |                        |                   |                          |
| VOLATILES                      | 1,2-Dibromoethane              |                   | 0.00482 1 U U      |                  |                  |                  |                   | 0.039 1 < U       |                   |                        |                   |                          |
| VOLATILES                      | 1,2-Dichlorobenzene            |                   | 0.00482 1 U U      |                  |                  |                  |                   |                   |                   |                        |                   |                          |
| VULATILES                      | 1,2-Dictionociticane           |                   | 0.00482 1 U U      |                  |                  |                  | -0.006 1 < U      | 0.01 1 < U        |                   |                        |                   | 0.006 1 < U              |
| VOLATILES<br>VOLATILES         | 1.2-Dichloropropage            |                   | 0.00482 1 11 17    |                  |                  |                  | 10.000 1 < 1      |                   |                   |                        |                   | 0.006 1 < U              |
| VOLATILES                      | 1.2-Dimethylbenzene (o-Xylene) |                   | 0.00482 1 1 1      |                  |                  |                  |                   | 0.01 1 < 0        |                   |                        |                   | 0.006 1 < 0              |
| VOLATILES                      | 1,3,5-Trimethylbenzene         |                   | 0.00482 1 U U      |                  |                  |                  |                   |                   |                   |                        |                   |                          |
| VOLATILES                      | 1,3-Dichlorobenzene            |                   | 0.00482 1 U U      |                  |                  |                  |                   |                   |                   |                        |                   |                          |
| VOLATILES                      | 1,3-Dichloropropane            |                   | 0.00482 1 U U      |                  |                  |                  |                   |                   |                   |                        |                   |                          |
| VOLATILES                      | 1,4-Dichlorobenzene            |                   | 0.00482 1 U U      |                  |                  |                  |                   |                   |                   |                        |                   |                          |
| VULATRES                       | 2,2-Dichloropropane            |                   | 0.00482 1 U U      |                  |                  |                  |                   | A 740 A           |                   |                        |                   |                          |
| VOLATILES<br>VOLATILES         | 2-Chicepetind view atter       |                   | U U F caeuu.u      |                  |                  |                  | 0.13 1 < U        | 0.019 1 < U       |                   |                        |                   | 0.12 1 < U               |
| VOLATILES                      | 2-Chlorolokuene                |                   | 0.00303 1 0 0      |                  |                  |                  |                   |                   |                   |                        |                   |                          |
| VOLATILES                      | 2-Hexanone                     |                   | 0.00965 1 U U      |                  |                  |                  | 0.053 1 < li      | 0.019 1 < H       |                   |                        |                   | 0.058 1 < 1              |
|                                | ł                              |                   |                    |                  |                  |                  | · ·               |                   |                   |                        |                   |                          |



| 0.12  | 1 | ۲ | U |
|-------|---|---|---|
| 0.058 | 1 | < | บ |

Table 3-124 Concentrations of Chemicals in Soil Samples Associated with WR Sump 018

| [SUMP] = WRSUMPO18 |                                |                   |                   |  |                  |                  |                |                          |                  |                  |                  |                  |
|--------------------|--------------------------------|-------------------|-------------------|--|------------------|------------------|----------------|--------------------------|------------------|------------------|------------------|------------------|
| LOCATION _CODE     |                                | 35SUMP076-SB01    | 35SUMP076-SB01    | 47SB30   | 47\$B30          | 47SB30           | LH-DL76-01     | LHS-3-04                 | LH-S76-01        | LH-S76-01        | LH-S76-01        | LH-S76-02        |
| SAMPLE_NO          |                                | 35-SMP076-SB01-01 | 35-SMP076-SB01-02 | 47SB30(0-0_5)  | 47SB30(0-0_5)QC  | 47\$830(1-2)     | LH-DL76-01     | LHS-3-04                 | LH-S76-01_1      | LH-\$76-01_2     | LH-\$76-01_3     | LH-S76-02_1      |
| SAMPLE_DATE        |                                | 9/14/2006         | 9/14/2006         | 6/5/2000   | 6/5/2000         | 6/5/2000         | 6/26/1993      | 1/9/1995                 | 6/26/1993        | 6/26/1993        | 6/26/1993        | 6/26/1993        |
| DEPTH              |                                | _55Ft             | 7-7FI             | 0 - 0.5 Ft   | 0-0.5 Ft         | 1-2Ft            | 2-25日          | 0 - 0.5 Ft               | 0.5 - 1.5 Ft     | 2 - 2.5 Ft       | 5.5 - 7 Ft       | 0.5 - 1.5 Ft     |
| SAMPLE_PURPOSE     |                                | REG               | REG               | REG  | FÐ               | REG              | REG            | REG                      | REG              | REG              | REG              | REG              |
| Test Group         | Parameter (Units = mg/kg)      | Result Dil, LQ VQ | Result DIL LO VQ  | Result DIL LQ VQ   | Result DIL LQ VQ | Result Dit LQ VQ | Result Dil. LQ | VQ Result DIL LQ VQ      | Result DIL LQ VQ | Result Dil LQ VQ | Result DIL LQ VQ | Result DiL LQ VQ |
| VOLATILES          | 2-Propenal                     |                   |                   |  |                  |                  |                | 0.96 1 < U               |                  |                  |                  |                  |
| VOLATILES          | 4-Chlorotoluene                | ·                 | 0.00482 1 U U     |  |                  |                  |                |                          |                  |                  |                  |                  |
| VOLATILES          | Acetone                        |                   | 0.00965 1 U U     |  |                  |                  | 0.11 1 <       | U 0.019 1 < U            |                  |                  |                  | 0.12 1 < U       |
| VOLATILES          | Acetonitrile                   |                   |                   |  |                  |                  |                | 0.19 1 < U               |                  |                  |                  |                  |
| VOLATILES          | Acrylonitrile                  |                   |                   |  |                  |                  |                | 0.19 1 < U               |                  |                  |                  |                  |
| VOLATILES          | Ally! chloride                 |                   |                   |  |                  |                  |                | 0.039 1 < Ü              |                  |                  |                  |                  |
| VOLATILES          | Benzene                        |                   | 0.00482 1 U U     |  |                  |                  | 0.006 1 <      | ປ <del>0</del> .01 1 < ປ |                  |                  |                  | 0.006 1 < U      |
| VOLATILES          | Bromobenzene                   |                   | 0.00482 1 U U     |  |                  |                  |                |                          |                  |                  |                  |                  |
| VOLATILES          | Bromochioromethane             |                   | 0.00482 1 U U     |  |                  |                  |                |                          |                  |                  |                  |                  |
| VOLATILES          | Bromodichioromethane           |                   | 0.00482 1 U U     |  |                  |                  | 0.006 1 <      | U 0.01 1 < U             |                  |                  |                  | 0.006 1 < U      |
| VOLATILES          | Bromotorm                      |                   | 0.06482 1 U U     |  |                  |                  | 0.006 1 <      | U 0.01 1 < U             |                  |                  |                  | 0.006 1 < U      |
| VOI ATILES         | Bromomethane                   |                   | 0.00965 1 U U     |  |                  |                  | 0.006 1 <      | U 0019 1 < U             |                  |                  |                  | 0.005 1 < 11     |
| VOI ATILES         | Carbon disublide               |                   | 0.00482 1 11 11   |  |                  |                  | 0.006 1 <      |                          |                  |                  |                  | 0.006 1 < 11     |
| VOLATILES          | Carbon tetrachiniste           |                   | 0.00482 1 11 11   |  |                  |                  | 0.006 1 <      |                          |                  |                  |                  | 0.006 1 < 1      |
| VOLATILES          | Chinchenzene                   |                   | 0.00482 1 11 11   |  |                  |                  | 0.006 1 <      |                          |                  |                  |                  | 0,006 1 < U      |
| VOLATILES          | Chiomethane                    |                   | 0.00965 1 11 11   |  |                  |                  | 0.006 1 4      |                          |                  |                  |                  | 0.006 1 < 1      |
| VOLATILES          | Chioroform                     |                   | 0.00482 1 11 11   |  |                  |                  | 0.006 1 -      |                          |                  |                  |                  | 0.006 1 < 14     |
| VOLATHES           | Chloromethane                  |                   | 0.00465 1 11 13   |  |                  |                  | 0.006 1 <      | U 0.019 1 C U            |                  |                  |                  | 0.006 1 < 1      |
| VOLATILES          | Chicronrene                    |                   | 0.00303 1 0 0     |  |                  |                  | 0.000 1 1      | 0 0.013 1 C 0            |                  |                  |                  | 0.000 7 4 0      |
| VOLATILES          | ois-1 2-Dichlopathona          |                   | 0.00091 1         |  |                  |                  |                | 0.13                     |                  |                  |                  |                  |
| VOLATILES          | cis-1,2-Dichlororonone         |                   | 0.00307 1 13 11   |  |                  |                  | 0.006 t <      | H 0.01 1 2 H             |                  |                  |                  | 0.006 t < ti     |
| VOLATILES          | Disconcelleramethana           |                   | 0.00402 1 0 0     |  |                  |                  | 0.000 1 <      |                          |                  |                  |                  | 0.006 1 < 1      |
| VOLATILES          | Disconochicomethane            |                   | 0.00402 1 0 0     |  |                  |                  | 0.000 1 <      | 0 0.01 1 < 0             |                  |                  |                  | 0.000 1 1 1 0    |
| VOLATILES          | Dichorodifuormethane           |                   | 0.00462 1 0 0     |  |                  |                  |                | 0.019 1 < 0              |                  |                  |                  |                  |
| VOLATILES          | Ethid mathaendalo              |                   | 0.00903 1 0 0     |  |                  |                  |                | 0.039 1 < 0              |                  |                  |                  |                  |
| VOLATILED          | Edity ineditacity are          |                   | 0.00400 4 17 (1   |  |                  |                  | 0.000 1        | 0.035 1 < 0              |                  |                  |                  | 0.006 1          |
| VOLATILES          | Lorgeblarabilitationa          |                   | 0.00402 1 0 0     |  |                  |                  | 0.000 1 <      |                          |                  |                  |                  | 0.000 / 0        |
| VOLATILES          |                                |                   | 0.00402 7 0 0     |  |                  |                  |                | A010 1 - II              |                  |                  |                  |                  |
| VOLATILES          |                                |                   |                   |  |                  |                  |                | 2019 1 < 0               |                  |                  |                  |                  |
| VOLATILES          | Isoson fe Acconoc              |                   | 0.00490 1 1 1     |  |                  |                  |                | 3.5 1 < 0                |                  |                  |                  |                  |
| VOLATILES          | nsopropyberzene<br>mit Videooc |                   | 0.00462 1 0 0     |  |                  |                  |                |                          |                  |                  |                  |                  |
| VOLATILES          | Mathana Jacitria               |                   | 0.00462 0 0 0     |  |                  |                  |                | 11 . 1 . 200.0           |                  |                  |                  |                  |
| VOLANILES          | Method included                |                   | 0.00005 1 11 11   |  |                  |                  | 0.051 1        | U.U39 I < U              |                  |                  |                  | 0.058 1 / 11     |
| VOLATILES          |                                |                   | 0.00900 1 0 0     |  |                  |                  | 0.053 1 <      | .0.020 1 < 1             |                  |                  |                  | 0.000 1 4 0      |
| VOLATILEO          | Metric Metricate               |                   | 0.00400 1 11 15   |  |                  |                  | 0.005 1        |                          |                  |                  |                  | 8 005 1 - 11     |
| VOLATILES          | Neutylene Gradice              |                   | 0.00402 1 0 0     |  |                  |                  | 0.000 1 <      | 0 0.01 < 0               |                  |                  |                  | 0.000 1 < 0      |
| VOLATILES          |                                |                   | 0.000000 1 0 00   |  |                  |                  |                |                          |                  |                  |                  |                  |
| VOLATILES          |                                |                   | 9.00452 I U U     |  |                  |                  |                |                          |                  |                  |                  |                  |
| VOLATECO           | Destabless these               |                   | 0.00402 1 0 0     |  |                  |                  |                | 0.020 1                  |                  |                  |                  |                  |
| VOLANECO           |                                |                   | 0.00400 1 12 17   |  |                  |                  |                | 0.039 1 < 0              |                  |                  |                  |                  |
| VOLATILES          | PISOPHOP TETOLOENE             |                   | 0.00482 1 0 0     |  |                  |                  |                | 0.000 1 11               |                  |                  |                  |                  |
| VOLAHLES           | Proponitive                    |                   |                   |  |                  |                  |                | 0.096 1 < 0              |                  |                  |                  |                  |
| VOLABLES           | SEC-BUT YLBENZENE              |                   | 0.00482 1 U U     |  |                  |                  |                |                          |                  |                  |                  | 0.000            |
| VOLATILES          | Styrene                        |                   | 0.00482 1 U U     |  |                  |                  | 0.006 1 <      | 0 0.01 1 < 0             |                  |                  |                  | 0.006 1 < 0      |
| VOLABLES           | Tert-BUTYLBENZENE              |                   | 0.00482 1 U U     |  |                  |                  |                |                          |                  |                  |                  |                  |
| VOLABLES           | l etrachloroethene             |                   | 0.00409 1 J J     |  |                  |                  | 0.006 1 <      | 0 0.01 1 < 0             |                  |                  |                  | 0.006 T < U      |
| VOLATILES          | rowene                         |                   | 0.00482 1 U U     |  |                  |                  | 0.006 1 <      | U 0.01 1 < U             |                  |                  |                  | 0.006 1 < 0      |
| VOLATILES          | trans-1,2-Dichloroethene       |                   | 0.00482 1 U U     |  |                  |                  |                |                          |                  |                  |                  | n ann            |
| VOLATILES          | trans-1,3-Dichloropropene      |                   | 0.06482 1 U U     |  |                  |                  | 0.006 1 <      | U 0.01 1 < U             |                  |                  |                  | 0.906 1 < U      |
| VOLATILES          | trans-1,4-Dichloro-2-butene    |                   |                   |  |                  |                  |                | 0.039 1 < U              |                  |                  |                  |                  |
| VOLATILES          | i achioroethene                |                   | 0.0282 1          |  |                  |                  | 0.006 1 <      | U 0.01 1 < U             |                  |                  |                  | 9.906 1 < 0      |
| VOLATILES          | Inchierofiuoromethane          |                   | 0.00965 1 U U     |  |                  |                  |                | 0.019 1 < U              |                  |                  |                  |                  |
| VOLATILES          | Vinyl acetate                  |                   | 0.00965 1 U U     |  |                  |                  |                | 0.019 1 < U              |                  |                  |                  |                  |
| VOLATILES          | Vinyl chloride                 |                   | 0.00277 1 J J     |  |                  |                  | 0.006 1 <      | U 0.019 t < U            |                  |                  |                  | 0.006 1 < U      |
| VOLATILES          | Xylenes, Total                 | <u> </u>          |                   |  |                  |                  | 0.006 1 <      | U 0.01 1 < U             |                  |                  |                  | 0.006 1 < U      |
|                    |                                |                   |                   | and the second second second second second second second second second second second second second second second |                  |                  |                |                          |                  |                  |                  |                  |



**N**.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 3-124 Concentrations of Chemicals in Soil Samples Associated with WR Sump 018

| (SUMP) = WRSUMP018             |   | ,        | U \$76 (      | no  |         |        | 1976.07         | 1            |       | 11.140           | C18.03       |         | FLI    | MDC1             | 2.01   |         | VALD4  | C018 C      | D01   |    | WDG    | 018.980         | 1   |     | WDG    | A10 C      | B02   |    | WD            | CU18-C       | 12/12 |    |
|--------------------------------|---|----------|---------------|-----|---------|--------|-----------------|--------------|-------|------------------|--------------|---------|--------|------------------|--------|---------|--------|-------------|-------|----|--------|-----------------|-----|-----|--------|------------|-------|----|---------------|--------------|-------|----|
| SAMPLE_NO                      |   | Li<br>Li | 1-S76-0       | 2_2 |         | ម      | S76-02_         | 3            |       | LH-WRS           | 518-01_      | 1       | 01     | NRS18            | 01_2   |         | WRS    | 018-SB      | 01-01 |    | WRS0   | 18-SB01         | -02 |     | WRSC   | 18-SB      | 02-01 |    | WRS           | 018-SB       | 02-02 |    |
| SAMPLE_DATE                    |   | 6        | 6/26/199      | 33  |         | 6/     | 26/1993         |              |       | 6/26             | /1993        |         | 6      | /26/199          | 13     |         | 9      | /26/200     | 6     |    | 9/2    | 6/2006          |     |     | 9/     | 26/200     | 6     |    | 9             | /26/200      | 6     |    |
| DEPTH<br>SAMPLE PUBPOSE        |   | -        | 5.5-61<br>REG | ł   |         | 7      | - 7.5 Ft<br>BEG |              |       | 0.5 -<br>RI      | 1.5 Ft<br>FG |         | ;      | 3 - 3.5 F<br>REG | ł      |         | j.     | 55 F<br>BFG | ł     |    | 4_5    | - 4_5 Ft<br>REG |     |     | 1      | 5 F<br>REG | -1    |    | 4_            | 5-4_5<br>REG | Ħ     |    |
| Test Group                     | Parameter (Units = mg/kg)                             | Result   | DiL           | LQ  | VQ      | Result | DIL             | LQ VO        | ) Res | ult D            | n. LO        | va      | Result | DIL              | LQ     | ٧Q      | Result | DIL         | LQ    | VQ | Result | DIL             | Q   | VQ. | Result | DIL        | LQ    | νQ | Result        | DIL          | LQ    | VQ |
| EXPLOSIVES                     | 1,3,5-Trinitrobenzene                                 |          |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| EXPLOSIVES                     | 1,3-Dinitrobenzene                                    | 1        |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| EXPLOSIVES                     | 2,4,6-Trinitrotoluene                                 | 1 100    |               |     |         | 1 725  |                 | . 11         |       | 100              |              |         | 1.00   |                  |        |         |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| EXPLOSIVES<br>EXPLOSIVES       | 2,4-Distributionalise                                 | 1.22     | 1             | ~   | 11      | 1.230  | 1               | < U          | 1     | 163 1            |              | 0       | 1.22   | 1                | ç      | о<br>н  |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| EXPLOSIVES                     | 4-Amino-2,6-dinitrotoluene                            |          |               | •   | Ũ       | 1.200  | •               | - 0          | •     |                  | , .          | Ŭ       | 112    | •                |        | 0       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| EXPLOSIVES                     | нмх   | 1        |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| EXPLOSIVES                     | m-Nitrotolvene  |          |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| EXPLOSIVES                     | Nitrobenzene  |          |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| EXPLOSIVES                     | o-Nitrotoluene  | 1        |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| EXPLOSIVES                     | ROX   |          |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| EXPLOSIVES                     | Tetryi  |          |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| METALS                         | Atumicum  | 12700    | 1             |     |         | 11100  | 1               |              | 5     | 7580 1           | 1            |         | 12500  | 1                |        |         | 3030   | ۱           |       |    | 18400  | 1               |     |     | 10200  | 1          |       |    | 20000         | 1            |       |    |
| METALS                         | Antimony  | 5.5      | 1             | < ۲ | U       | 6.5    | 1               | < U          |       | 4.94 1           | 1 <          | U       | 4.5    | 1                | <      | U       | 0.11   | 1           | U     | U  | 0.12   | 1               | υ   | ប   | 0.114  | 1          | ບ     | U  | 0.121         | 1            | U     | U  |
| METALS                         | Arsenic   | 1.16     | 1             |     |         | 1.76   | 1               |              |       | 5.53             | 1            |         | 2.52   | 1                |        |         | 3.67   | 1           |       |    | 8.83   | 1               |     |     | 3.1    | 1          |       |    | 2.99          | 1            |       |    |
| METALS                         | Sanum<br>Beadlism                                     | 102      | 1             | <   | υ       | 79.8   | 1               | < U          |       | /6./             | 1 <          | U       | 70.3   | 1                | <      | U       | 35.7   | 1           |       |    | C.66   | • 1             |     |     | 0.808  | 1          |       |    | 78.4<br>0.654 | 1            |       |    |
| METALS                         | Cadmium   | 3.24     | 1             |     |         | 4.06   | 1               |              |       | 6.74             | 5            |         | 3.82   | 1                |        |         | 1.17   | 1           |       |    | 0.145  | 1               | J   | J   | 0.323  | 1          | J     | 3  | 0.0824        | 1            | J     | J  |
| METALS                         | Calcium   | 860      | 1             |     |         | 1030   | 1               |              | 1     | 1550             | 1            |         | 756    | 1                |        |         | 129000 | 100         |       | J  | 955    | 1               |     | j   | 1770   | 1          |       | j  | 4150          | 1            |       | J  |
| METALS                         | Chromium  | 11       | 1             |     |         | 10.4   | 1               |              |       | 18.4             | 1            |         | 16.9   | 1                |        |         | 14.7   | 1           |       | J. | 23.1   | 1               |     | ł   | 29     | 1          |       | J  | 21            | 1            |       | 3  |
| METALS                         | Cobalt  | 6.44     | 1             |     |         | 6.99   | 1               |              |       | 18.5             | 1            |         | 13     | 1                |        |         | 1.14   | 1           |       | J  | 15.2   | 1               |     | ł   | 7.2    | 1          |       | J  | 3.57          | 1            |       | J  |
| METALS                         | Copper  | 10       | 1             | <   | U       | 7.15   | 1               | < U          |       | 4.96             | 1 <          | U       | 7.2    | 1                | <      | U       | 7.75   | 1           |       | ,  | 5.38   | 1               |     |     | 7.05   | 1          |       |    | 5.42          | 21           |       |    |
| METALS                         | irOn<br>tead  | 9520     | 1             |     |         | 17.0   | 1               | F            | 24    | 1100 i<br>20.1 1 | 1            |         | 16800  | 1                |        |         | 11500  | 1           |       | J  | 32000  | ۱<br>۱          |     | J   | 31900  | 1          |       | J  | 19700         | , r<br>1 1   |       | 3  |
| METALS                         | Magnesium   | 967      | 1             |     |         | 1100   | 1               |              |       | 640 1            | 1            |         | 671    | 1                |        |         | 996    | 1           |       | J  | 971    | 1               |     | ł   | 621    | 1          |       | J  | 1090          | 1            |       | J  |
| METALS                         | Manganèse   | 23.8     | 1             |     |         | 33.8   | 1               |              |       | 493 1            | 1            |         | 261    | 1                |        |         | 117    | 1           |       | J  | 455    | 1               |     | ł   | 209    | 1          |       | J  | 101           | 1            |       | J  |
| METALS                         | Mercury   | 0.057    | 1             | <   | U       | 0.107  | 1               | 8            | 0     | .051 1           | i <          | U       | 0.055  | 1                | <      | U       | 0.0163 | 1           | 1     | J  | 0.0381 | 1               | J   | 1   | 0.0286 | 1          | J     | 3  | 0.0276        | ; 1          | J     | J  |
| METALS                         | Nickel  |          |               |     |         |        |                 |              |       |                  |              |         | 10.7   |                  |        |         | 3.27   | 1           |       | Ĵ  | 8.79   | 1               |     | 3   | 8.03   | 1          |       | J  | 8.26          | 1            |       | 3  |
| METALS                         | Potassium<br>Salentium                                | 349      | 1             | ,   | 11      | 364    | 1               | - 13         |       | 2/9 1            |              | н       | 432    | 1                |        |         | 192    | 1           |       |    | 552    | 1               |     |     | 322    | }<br>1     |       |    | 615<br>0.464  | , 1<br>⊢ 1   |       |    |
| METALS                         | Silver  | 0.03     | 1             | •   | E       | 0.032  | 1               | < U          | U     | 3.88             |              | 0       | 0.025  | 1                |        | E       | 1.51   | 1           | U     | U  | 1.86   | 1               | U   | U   | 1.77   | 1          | U     | U  | 1.74          | 1            | U     | U  |
| METALS                         | Sodium  |          |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         | 20.7   | 1           |       |    | 76.7   | 1               |     |     | 18.7   | 1          | J     | J  | 46.4          | 1            |       |    |
| METALS                         | Strontium   | 23.2     | 1             | <   | U       | 30.9   | 1               | < U          |       | 16 1             | < ا          | U       | 12.4   | 1                | <      | U       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| METALS                         | Thallium  | 1        |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         | 0.0182 | 1           | Ĵ     | J  | 0.189  | 1               |     |     | 0.0694 | 1          |       |    | 0.18          | 1            |       |    |
| METALS                         | Vanadium  | 200      |               |     |         | 10.1   |                 |              |       | 00.0             |              |         | 21.4   | 1                |        |         | 19.8   | 1           |       |    | 52.2   | 1               |     |     | 56.2   | 1          |       |    | 40.9          | 1            |       |    |
| PERC                           | Perchiorate   | 201      | ,             |     |         | 20.1   | '               |              |       | 20.3             | •            |         | 21.4   | •                |        |         | 00.1   | •           |       |    | 11.4   |                 |     |     | 50.7   | '          |       |    | 23.9          |              |       |    |
| RANGE_ORGANICS                 | Carbon Range C12-C28                                  |          |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         | 44.2   | 3           | J     | 8  | 42.3   | t               | J   | в   | 57.3   | 1          | U     | υ  | 60.3          | 1            | U     | U  |
| RANGE_ORGANICS                 | Carbon Range C28-C35                                  |          |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         | 37.1   | 1           | J     | в  | 59.5   | 1               | U   | υ   | 57.3   | 1          | U     | U  | 60.3          | 1            | υ     | U  |
| RANGE_ORGANICS                 | Carbon Range C6-C12                                   |          |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         | 54.7   | 1           | U     | U  | 59.5   | 1               | IJ  | U   | 57.3   | 1          | U     | U  | 60.3          | : 1          | U     | ឋ  |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene                                | 1.22     | 1             | <   | U       | 1.235  | 1               | < U          | 1     | .163 1           | <            | U       | 1.22   | 1                | <      | U       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES<br>SEMIVOLATILES | 1,2-Dictionobenzene                                   | 1.22     | 1             | Ś   | ы       | 1.235  | 1               | < U          | 1     | 163 1            | <<br>  <     | 9<br>11 | 1.22   | 1                | ź      | 11      |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene                                   | 1.22     | 1             | <   | Ŭ       | 1.235  | 'n              | < U          | 1     | .163 1           | <br>         | Ű       | 1.22   | 1                | <      | Ŭ       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 2,4,5-Trichtorophenol                                 | 1.22     | 1             | <   | U       | 1.235  | 1               | < ປ          | 1     | .163 1           | < ا          | U       | 1.22   | 1                | <      | U       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 2,4,6-Trichtorophenol                                 | 1.22     | 1             | <   | U       | 1.235  | 1.              | < U          | 1     | .163 1           | <            | ປ       | 1.22   | 1                | <      | U       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 2,4-Dichtorophenol                                    | 1.22     | 1             | <   | U       | 1.235  | 1               | < 1          | 1     | .163 1           | <            | 0       | 1.22   | 1                | <      | U       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVULATILES<br>SEMIVORATILES | 2,4-Danitrophenol                                     | 12 105   | 1             | <   | U<br>U  | 12 3/6 | 1               | < U          | 11    | 628 1            | 1 <<br>1 /   | U<br>11 | 12 105 | 1                | <      | U<br>11 |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 2.4-Dinitrotoluene                                    | 12132    | ,             | `   | v       | 12.010 | •               |              |       | .020             |              | Ŭ       | 12.100 |                  | `      | U.      |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 2,6-Dinitrotoluene                                    |          |               |     |         |        |                 |              |       |                  |              |         |        |                  |        |         |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 2-Chloronaphthalene                                   | 0.366    | 1             | <   | U       | 0.37   | 1               | < U          | 0     | .349 1           | × ا          | U       | 0.366  | 1                | <      | U       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 2-Chiorophenol  | 0.61     | 1             | <   | U       | 0.617  | 1               | < 10         | 0     | .581 1           | l <          | 0       | 0.61   | 1                | <      | U       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES<br>SCHINOLATILES | 2-Methylnaphthalene<br>2 Methylaphonol                | 0.366    | 1             | <   | U       | 0.37   | 1               | < 0          | 0     | .349 1<br>.591 1 |              | 0       | 0.366  | 1                | <      | री<br>स |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 2-Nitroaniline  | 3.659    | 1             | Ì   | U<br>U  | 3,704  | 1               | < U          | 3     | .488 1           |              | ΰ       | 3,659  | 1                | ~      | บ       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 2-Nitrophenol   | 1.22     | 1             | <   | U       | 1.235  | 1               | < U          | 1     | .163 1           | <            | U       | 1.22   | 1                | <      | U       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzidine                                | 0.61     | 1             | <   | U       | 0.617  | ;               | < U          | 0     | .581 1           | ۲ ا          | υ       | 0.61   | 1                | <      | ย       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 3-Nitroaniline  | 3.659    | 1             | <   | U       | 3.704  | 1               | < U          | 3     | .488 1           | < د          | U       | 3.659  | 1                | <      | រ       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 4,6-Dinitro-2-methylphenol                            | 6.098    | 1             | <   | U       | 6.173  | 1               | < U          | 5     | .814 1           | <            | U<br>,, | 6.098  | 1                | <      | U       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLABLES<br>SEMIVOLABLES   | 4-ciumoprenyi pnenyi ether<br>4-Chinco-3-methyinbergi | 1.22     | 1             | <   | U<br>EF | 1.235  | 1               | < 13<br>2 11 | 1     | 581 1            | · <          | 11<br>U | 1.22   | 1                | <      | U<br>U  |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 4-Chioroaniline                                       | 3.659    | 1             | ,   | บ       | 3.704  | 1               | - U<br>U     | 3     | .488 1           | <br>  .      | U       | 3.659  | 1                | `<br>< | U       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 4-Chlorophenyl phenyl ether                           | 1.22     | 1             | <   | U       | 1.235  | 1               | < Ŭ          | 1     | .163 1           | i <          | U       | 1.22   | 1                | <      | U       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 4-Methylphenol  | 0.61     | 1             | <   | U       | 0.617  | 1               | < U          | 0     | .581 1           | <            | U       | 0.61   | 1                | <      | U       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |
| SEMIVOLATILES                  | 4-Nitroaniline  | 6.098    | 1             | <   | U       | 6.173  | t               | < U          | 5     | .814 1           | <            | IJ      | 6.098  | 1                | <      | U       |        |             |       |    |        |                 |     |     |        |            |       |    |               |              |       |    |



Table 3-124 Concentrations of Chemicals in Soil Samples Associated with WR Sump 018

| SUMPT = WRSUMP018 |                                |        |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       |           |            |      |          |       |            |    |         |          |             |
|-------------------|--------------------------------|--------|----------|------|-------------------|------------|------|---------|--------------|----------|------|--------|---------|-------|----------|-----------|-------|-----------|------------|------|----------|-------|------------|----|---------|----------|-------------|
| OCATION CODE      |                                | 114    | -\$76-02 |      |                   | 111-576    | -02  |         | EH-W         | RS18-01  |      | UHP    | WRS18   | -01   | W        | /RS018-SB | 01    | WR        | S018-SB    | 101  |          | WRS   | 018-SB02   |    | WRS0    | 18-SB02  |             |
| COCATION_CODE     |                                | 10.0   | 276.02   | ,    |                   | H.S76J     | 02.2 |         | 111.005      | 19.18-01 | t    | 1H-W   | /RS18-0 | 11 2  | WR       | 2S018-SB0 | 1-01  | WRS       | 018-SB0    | 1-02 |          | WRS01 | 18-SB02-01 |    | WRS01   | 3-SB02-0 | 12          |
| AMPLE_NU          |                                | LT11   | 510-02_0 | -    |                   | electer    | 02_3 |         | 6/1          | CHAD2    | •    |        | 0011002 | ,,    |          | 0/26/2006 |       | 0.        | /26/2006   |      |          | 9/5   | 26/2006    |    | 9/26    | /2006    |             |
| SAMPLE_DATE       |                                | 6/2    | 6/1993   |      |                   | 6/26/19    | 93   |         | 6/2          | 0/1993   |      | 0      | 20/1993 |       |          | 3/20/2000 |       | 37        |            | ,    |          | 5,12  | . C+       |    | * 5     | A 6 64   |             |
| JEPTH             |                                | 5.     | 5 - 6 Ft |      |                   | 7-75       | Ft   |         | 0.5          | - 1.5 M  |      | 3      | - 3.5 H | t     |          | _55H      |       | 4_:       | 5-4_5      | -1   |          | _၁    | pri        |    | -4_5    | 4_311    |             |
| SAMPLE_PURPOSE    |                                | -      | reg      |      |                   | REG        | i    |         | I            | REG      |      |        | REG     |       |          | REG       |       |           | HEG        |      |          |       | HEG        |    | н<br>   | EG       |             |
| est Group         | Parameter (Units = mg/kg)      | Result | DIL (    | Q VO | Q Result          | DIL        | LQ   | VQ      | Result       | dil lo   | ) VQ | Result | DIL     | LQ VC | ) Result | DIL       | LQ VQ | Result    | DIL        | LQ V | /Q Re    | esult | DIL LO     | VQ | Result  | DIL EC   | <u>3 VQ</u> |
| EMIVOLATILES      | 4-Nitrophenol                  | 6.098  | 1        | < 1  | i 6.1             | 3 1        | <    | U       | 5.814        | 1 <      | U    | 6.098  | 1       | < U   |          |           |       |           |            |      |          |       |            |    |         |          |             |
| EMIVOLATILES      | Acenaphthene                   | 0.366  | 1        | < 1  | 0.3               | 37 1       | <    | U       | 0.349        | 1 <      | U    | 0.366  | 1       | < 10  |          |           |       |           |            |      |          |       |            |    |         |          |             |
|                   | Aconsolitiviane                | 0.61   | 1        | - 1  | 0.6               | 7 1        | 6    | 11      | 0.581        | 1 <      | D    | 0.61   | 1       | < 14  |          |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Acenaphiniyene                 | 0.01   | 1        |      | . 0.0             |            |      |         | 0.001        |          | ŭ    | 0.01   | ,       |       |          |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Astracene                      | 0.01   |          | < 0  | 0.0               |            | <    | U       | 0.301        | 1 4      |      | 0.01.  |         |       |          |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Benzo(a)anthracene             | 0.366  | 1        | < 1  | 0.3               | 1/ 1       | <    | U       | 0.349        | 1 <      | 0    | 0.366  | 1       | < 0   |          |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Benzo(a)pyrene                 | 0.61   | 1        | < 0  | 0.6               | 17 1       | <    | Ð       | 0.581        | 1 <      | U    | 0.67   | 1       | < 0   |          |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Benzo(b)fluoranthene           | 1.22   | 1        | < ຢ  | 1.2               | 35 1       | <    | U       | 1.163        | 1 <      | บ    | 1.22   | 1       | < U   |          |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Benzo(ghi)perylene             | 2.439  | 1        | < 1  | 2.40              | S9 1       | <    | U       | 2.326        | 1 <      | ប    | 2.439  | 1       | < U   | ļ        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Benzo(k)fluoranthene           | 1.22   | 1        | < 1  | 12                | 85 t       | <    | U       | 1.163        | 1 <      | U    | 1.22   | t       | < 0   | ļ.       |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMINOLATILES     | Renzoic Acid                   | -      |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATIKES     | Benzi Alcohol                  |        |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       |           |            |      |          |       |            |    |         |          |             |
|                   | bia(0 Chlorestheudmethau)      | 0.61   | 1        | . 1  | 1 06              | 17 1       |      | 11      | <u>ስ 581</u> | 1 2      | . 11 | 0.61   | 1       | < 1j  | i        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVULATILES     | oisiz-chikiloeukoxyintemane    | 0.01   |          |      | , 0.0             | 17 1       |      |         | 0.001        |          | ы    | 0.01   | •       | - 11  |          |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | DIS(2-CINOrOethyljether        | 0.01   | 1        | < (  |                   |            | <    |         | 1 100        |          |      | 1.00   | :       |       | ,        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | bis(2-Chloroisopropyl)ether    | 1.22   | 1        | < 0  | 1.2               | 51         | <    | U       | 1.163        |          | U    | 1.22   |         | < 0   |          |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | bis(2-Ethylhexyl)phthalate     | 0.146  | 1        | 1    | 0.6               | 17 1       | <    | U       | 0.14         | 1        | J    | 0.61   | 1       | < 0   |          |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Butyl benzyl phthalate         | 0.61   | 1        | < l  | J 0.6             | 17 1       | <    | U       | 0.581        | 1 <      | U    | 0.61   | 1       | < U   | I        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Carbazole                      | 1.22   | 1        | < L  | J 1.2             | 15 1       | <    | U       | 1.163        | 1 <      | U    | 1.22   | 1       | < U   | I        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Chrysene                       | 6.098  | i        | < t  | J 0.14            | 18 1       |      | J       | 5.814        | 1 <      | U    | 6.098  | 1       | < U   | ł        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Dibenzo(a h)anitoracene        | 2 439  | 1        | < 1  | 1 24              | 59 1       | <    | U       | 2.326        | 1 <      | U    | 2.439  | 1       | < U   | 1        |           |       |           |            |      |          |       |            |    |         |          |             |
|                   | Odoonaohiran                   | 1 22   | 1        |      | 1 10              | 35 1       |      | ы.<br>Н | 1 163        | 1        | 11   | 1 22   | 1       | < 11  | •        |           |       |           |            |      |          |       |            |    |         |          |             |
|                   | District a shift along         | 1.22   | :        |      | 1 00              | 17 1       | 2    | 0       | 0.501        | 1 .      |      | 0.61   | 1       | - 1   | 1        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLAHILES     | usenyi prinalate               | U.61   | 1        | < L  | J 0.6             | 1/ I       | <    | 0       | 0.381        | . <      |      | 0.01   | 1       | ~ 0   | ,        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Dimethyl phthalate             | 0.61   | 1        | < (  | 0.6               | 17 1       | <    | 0       | 0.581        | 1 <      | U    | 0.61   | 1       | < 0   | ,        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | di-n-Butyl phthalate           | 7.951  | 1        |      | 4.2               | 35 1       |      |         | 3.895        | 1        |      | 2.463  | 1       |       |          |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | di-n-Octyl phthalale           | 0.61   | 1        | < 1  | J 0.6             | 17 1       | <    | ម       | 0.581        | 1 <      | U I  | 0.61   | 1       | < U   | J        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Fivoranthene                   | 0.61   | 1        | < ł  | 0.6               | 17 1       | `<   | U       | 0.581        | 1 <      | ម    | 0.61   | 1       | < U   | l i      |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATH ES     | Fluorene                       | 0.61   | 1        | < 1  | J 0.6             | 17 1       | <    | U       | 0.581        | 1 <      | ម    | 0.61   | 1       | < U   | J        |           |       |           |            |      |          |       |            |    |         |          |             |
|                   | Hevenhonzene                   | 1 22   | 1        | e t  | 1 12              | 35 1       | <    | 17      | 1,163        | 1        | . U  | 1.22   | 1       | < 1   | ţ        |           |       |           |            |      |          |       |            |    |         |          |             |
|                   | Investorelydediana             | 3 650  |          |      | 1 37              | n4 1       |      | Ŭ.      | 3 488        | 1 .      | . 11 | 3 659  | 1       | < 1   | 1        |           |       |           |            | -    |          |       |            |    |         |          |             |
| SEMIVULATILES     | Hexaconoroputadiene            | 3.009  |          | < (  | 1 0.7             | 04 I       |      | 14      | 0.400        | 1        |      | 9 650  |         | ~ 0   | ,<br>1   |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Hexachlorocyclopentadiene      | 3.659  | 1        | < 1  | J 3./             | 14         | <    | 0       | 3.468        | 1 <      | . 0  | 3.039  | -       | < u   | ,        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Hexachloroethane               | 1.22   | 1        | < 1  | J 1.2             | 35 1       | <    | U       | 1.163        | 1 <      | U    | 1.22   | 1       | < 0   | )        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Indeno(1,2,3-cd)pyrene         | 1.22   | 1        | < 1  | } 1.2             | 35 1       | <    | U       | 1.163        | 1 <      | : 0  | 1.22   | 1       | < L   | ļ        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Isophorone                     | 0.61   | 1        | < {  | ) 0.6             | 17 1       | <    | U       | 0.581        | 1 <      | : U  | 0.61   | 1       | < U   | J        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVORATE ES     | Naphthalene                    | 0.366  | 1        | < 1  | ) 0.              | 37 1       | <    | ម       | 0.349        | 1 <      | . U  | 0.366  | 1       | < U   | )        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Nitrobenzete                   | 0.61   | 1        | < 1  | 3 0.6             | 17 1       | <    | U       | 0.581        | 1 <      | U    | 0.61   | 1       | < 0   | J        |           |       |           |            |      |          |       |            |    |         |          |             |
|                   | n Nitros di a providentito     | 1.92   | 1        |      | 1 19              | 35 1       | -    |         | 1 163        | 1 4      | 1    | 1 22   | 1       | < 1   | 1        |           |       |           |            |      |          |       |            |    |         |          |             |
|                   | Hindoso-op-in-propylatilitize  | 1.22   | :        |      | , , <u>,</u>      | 17 1       |      | 11      | 0.591        |          | . 1  | 0.61   |         |       | ,<br>    |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | n-Nitrosodiphenylamine         | 0.61   | 1        | < 1  | J U <u>1</u> 0    | 57 5       | <    | 0       | 0.301        |          |      | 0.01   |         | < u   | ,        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Pentachlorophenol              | 6.098  | 1        | < {  | J 6.1             | /3 1       | <    | U       | 5.814        | 1 <      | ្រប  | 0.098  | 1       | < 0   |          |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Phenanthrene                   | 0.61   | 1        | < l  | J 0.6             | 17 1       | <    | U       | 0.581        | 1 <      | e u  | 0.61   | 1       | < L   | ł        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Phenol                         | 0.61   | 1        | < 1  | J 0.6             | 17 1       | <    | U       | 0.581        | 1 <      | : U  | 0.61   | 1       | < 1   | J        |           |       |           |            |      |          |       |            |    |         |          |             |
| SEMIVOLATILES     | Pyrene                         | 0.61   | 1        | < 1  | J 0.6             | 17 1       | <    | 1J      | 0.581        | 1 <      | : 18 | 0.61   | 1       | < L   | 3        |           |       |           |            |      |          |       |            |    |         |          |             |
| VOI ATILES        | 1 1 2-Tetrachlomethane         |        |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.00463   | 31         | U    | U        |       |            |    | 0.00492 | 1 1      | 3 8         |
| OFATILES          | 1 1 1. Trichlamathana          | 0.006  | 1        | ~ 1  | 1 00              | 06 1       |      | н       | 0.006        | 1        | : L# | 0.006  | 1       | < U   | )        |           |       | 0.00463   | 31         | U    | U        |       |            |    | 0.00492 | 1 1      | ម ប         |
| VOLATILES         |                                | 0.000  |          |      | 1 0.0             | 00 i       | 2    | ц<br>Ц  | 0.000        |          |      | 0.006  | 1       |       |          |           |       | 0.00463   | 3 1        | EL   | 11       |       |            |    | 0.00492 | 1 6      | a u         |
| VOLATILES         | 1,1,2,2-160 activoroemane      | 0.000  | 1        | < i  | J 0.0             | 00 1       |      |         | 0.000        |          |      | 0.000  |         |       | ,        |           |       | 0.00465   | 2 1        | 11   | -<br>31  |       |            |    | 0.00492 | 1 4      | п н         |
| VOLATILES         | 1,1,2-Trichloroethane          | 0.006  | 1        | < (  | 0.0               | 06 1       | <    | U       | 0.006        | + •      |      | 0.000  |         | < 1   | ,        |           |       | 0.00400   |            |      |          |       |            |    | 0.00402 | · ·      | i n         |
| VOLATILES         | 1,1-Dichloroethane             | 0.027  | 1        |      | 0.0               | 09 1       |      |         | 0.006        | 1        | : 0  | 0.006  | 1       | < L   | J        |           |       | 0.00463   | 5 1        | 0    | U        |       |            |    | 0.00482 |          |             |
| VOLATILES         | 1,1-Dichloroetheae             | 0.006  | 1        | < 1  | J 0.              | 01 1       |      |         | 0.006        | 1 -      | : U  | 0.006  | 1       | < 1   | 1        |           |       | 0.00463   | 5 1        | U    | U        |       |            |    | 0.00492 | 1 1      |             |
| VOLATILES         | 1,1-Dichkoropropené            |        |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.00463   | 31         | U    | U        |       |            |    | 0.00492 | 1 1      | Jυ          |
| VOLATILES         | 1.2.3-Trichkorobenzene         |        |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.00463   | 31         | U    | U        |       |            |    | 0.00492 | 1 1      | រ រ         |
|                   | 1.2.3.Trichiorononane          |        |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.00463   | 31         | U    | U        |       |            |    | 0.00492 | 1 1      | U U         |
|                   | 194 Techlorohonzons            | [      |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.00463   | 3 1        | U    | U        |       |            |    | 0.00492 | 1 1      | ប ប         |
| VOLAHILES         | 1,2,4- LINCISOROGENZERE        |        |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.00465   | 2 I        | 11   |          |       |            |    | 0.00492 | 5 1      | 11 11       |
| VOLATILES         | 1,2,4-1 nmethylbenzene         |        |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.0046    |            | ы    | ы<br>11  |       |            |    | 0.00402 | 1 1      |             |
| VOLATILES         | 1,2-Dibromo-3-chloropropane    | j .    |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | • 0.00403 | 3 I        |      |          |       |            |    | 0.00402 |          |             |
| VOLATILES         | 1,2-Dibromoethane              |        |          |      |                   |            |      |         |              |          | -    |        |         |       |          |           |       | 0.00463   | 31         | U    | 0        |       |            |    | 0.00492 | 1 1      | J U         |
| VOLATILES         | 1,2-Dichlorobenzene            |        |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.00463   | 3 t        | U    | U        |       |            |    | 0.00492 | 1 (      | J U         |
| VOLATILES         | 1.2-Dichloroethane             | 0.006  | 1        | < 1  | U 0.0             | 06 1       | <    | U       | 0.006        | 1 .      | : U  | 0.006  | 1       | < L   | )        |           |       | 0.00463   | 31         | U    | ប        |       |            |    | 0.00492 | 1 4      | JU          |
| VOLATIES          | t 2-Dichioznathana             | 0.005  | 1        | ~ 1  | B 06              | 06 1       | <    | в       | 0.006        | 1 -      | : 1) | 0.006  | 1       | < 1   | J        |           |       | -         |            |      |          |       |            |    |         |          |             |
|                   | A Diablemeroneas               | 0.000  | 1        |      | 12 0.0            | 06 1       | 2    | n -     | 0.006        | 1        | . 11 | 0.006  | 1       | - د   | J        |           |       | 0 00463   | 3 1        | U    | U        |       |            |    | 0.00492 | 1 1      | υU          |
| VULANCES          | 1,2-испюторгорале              | 0.006  | '        | < 1  | υ <del>υ</del> .υ | 1 UU       | ٢    | U       | 0.000        |          | . 0  | 0.000  |         | - 6   | ,        |           |       | 0.00 KG   | - ·<br>2 1 | ň    | ii<br>ii |       |            |    | 0.00492 | 1 1      | n ñ         |
| VOLATILES         | 1,2-Dimethyloenzene (o-Xylene) | 1      |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.0046    | . i<br>. i | ,,   | 11       |       |            |    | 0.00400 | 1 1      | <br>1       |
| VOLATILES         | 1,3,5-Trimethylbenzene         | ł      |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.00463   | 31         | U    | 0        |       |            |    | 0.00492 |          | . U         |
| VOLATILES         | 1,3-Dichlorobenzene            | ł      |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.0046    | 3 1        | U    | U        |       |            |    | 0.00492 | 1        | u U<br>     |
| VOLATILES         | 1,3-Dichloropropane            |        |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.00463   | 31         | U    | U        |       |            |    | 0.00492 | 1        | 9 U         |
| VOLATILES         | 1.4-Dichlorobenzene            | ł      |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.0046    | 31         | U    | U        |       |            |    | 0.00492 | 1        | រ ប         |
| VOI ATH ES        | 2 2-Dichloroprogane            | ł      |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.0046    | 31         | U    | U        |       |            |    | 0.00492 | 1        | υ υ         |
| VOLATILEO         | 2 Butanono                     | 0.001  | ,        |      | 1 00              | 62 1       |      | 11      | 0.058        | 1        | 11   | 0.061  | 1       | < 1   | 1        |           |       | 0.0092    | 5 1        | U    | U        |       |            |    | 0.00984 | 1        | ប ប         |
| VULATILES         |                                | 0.001  | ٤        | ~ '  | J U.L             | - 1<br>- 1 | <    | v       | 0.000        | • •      |      | 0.001  | •       |       | -        |           |       | - p.0000  | 5 1        |      | ii ii    |       |            |    | 0 00994 | 1        |             |
| VOLATILES         | 2-Unioroethyl vanyl ether      | }      |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.00323   | ~ I        |      | ŭ        |       |            |    | 0.00400 |          | 11 14       |
| VOLATILES         | 2-Chlorotoluene                |        |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       | 0.00463   | 5 I        |      | 0        |       |            |    | 0.00452 |          |             |
| VOLATILES         | 2-Hexanone                     | 0.061  | 1        | < 1  | U 0.0             | 62 1       | · <  | U       | 0.058        | 1.       | < 1) | 0.061  | 1       | < l   | J        |           |       | 0.0092    | 5 1        | U    | U        |       |            |    | 0.00984 | 1        | θU          |
|                   |                                |        |          |      |                   |            |      |         |              |          |      |        |         |       |          |           |       |           |            |      |          |       |            |    |         |          |             |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas



スワ

Data Evaluation Report Chemical Concentrations in Soit Associated with 114AAP-35/36 Sumps

### Table 3-124 Concentrations of Chemicals in Soil Samples Associated with WR Sump 018

| (SUMP) = WRSUMP018      |                             |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    |         |         |       |         |        |             |
|-------------------------|-----------------------------|--------|---------|----------|----|--------|-----------|--------------|----|--------|---------|----------|----|--------|-----------|-------|--------|--------|---------|--------|----|---------|---------|-------|---------|--------|-------------|
| LOCATION_CODE           |                             | Ľ      | H-\$76- | 02       |    | L      | H-\$76-1  | 22           |    | LH     | WRSt    | 8-01     |    | LH     | WRS18     | 8-01  |        | W      | RS018-S | SBOT   |    | WR      | S018-Si | 801   |         | W      | RS018-SB02  |
| SAMPLE_NO               |                             | LH     | I-S76-0 | 2_2      |    | U:     | -S76-02   | 2_3          |    | LH-A   | VRS18   | ·01_1    |    | LH-V   | NRS18     | -01_2 |        | WR     | S018-SE | 301-01 |    | WRS     | 018-584 | 01-02 |         | WR     | S018-SB02-0 |
| SAMPLE_DATE             |                             | e      | /26/19  | 33       |    | •      | /26/199   | 3            |    | 6      | /26/19  | 93       |    | 6      | /26/199   | 93    |        |        | 9/26/20 | 06     |    | 9       | 26/200  | 6     |         |        | 9/26/2006   |
| DEPTH                   |                             | 1      | 5.5 - 6 | -t       |    |        | 7 - 7.5 F | ł            |    | 0.     | 5 - 1.5 | Ft       |    | :      | 3 - 3.5 F | Ft    |        |        | _55     | Ft     |    | 4_      | 5-4_5   | Ft    |         |        | _55 Ft      |
| SAMPLE_PURPOSE          |                             |        | REG     |          |    |        | REG       |              |    |        | REG     |          |    |        | REG       |       |        |        | REG     |        |    |         | REG     |       |         |        | REG         |
| Test Group              | Parameter (Units = mg/kg)   | Result | DHL.    | LQ       | VQ | Result | ÐIL       | LQ           | VQ | Result | DIL     | 1.Q      | VQ | Result | DIL       | LQ    | VQ     | Result | DIL.    | LQ     | VQ | Result  | DiL     | LQ    | ٧Q      | Result | DIL LQ      |
| VOLATILES               | 2-Propenal                  |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    |         |         |       |         |        |             |
| VOLATILES               | 4-Chiorotoluene             |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00463 | 1       | บ     | ម       |        |             |
| VOLATILES               | Acetone                     | 0.061  | 1       | <        | ប  | 0.039  | 1         | <            | U  | 0.016  | 1       | <        | U  | 0.027  | 1         | ¢     | U      |        |         |        |    | 0.00925 | 1       | υ     | U       |        |             |
| VOLATILES               | Acetonitrile                |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    |         |         |       |         |        |             |
| VOLATILES               | Acrylonitrile               |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    |         |         |       |         |        |             |
| VOLATILES               | Allyt chloride              |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    |         |         |       |         |        |             |
| VOLATILES               | Benzene                     | 0.006  | 1       | <        | U  | 0.006  | 1         | <            | U  | 0.006  | 1       | <        | U  | 0.006  | 1         | <     | U      |        |         |        |    | 0.00463 | 1       | U     | U       |        |             |
| VOLATILES               | Bromobenzene                |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00463 | 1       | U     | ບ       |        |             |
| VOLATILES               | Bromochloromethane          |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00463 | 1       | U     | U       |        |             |
| VOLATILES               | Bromodichloromethane        | 0.006  | 1       | <        | U  | 0.006  | 1         | <            | U  | 0.006  | 1       | <        | U  | 0.006  | 1         | <     | U      |        |         |        |    | 0.00463 | 1       | U     | U       |        |             |
| VOLATILES               | Bromotorm                   | 0.006  | 1       | <        | U  | 0.006  | 1         | <            | U  | 0.006  | 1       | <        | U  | 0.006  | 1         | ٢     | ບ      |        |         |        |    | 0.00463 | 1       | U     | U       |        |             |
| VOLATILES               | Bromomethane                | 0.03   | 1       | <        | υ  | 0.031  | 1         | <            | υ  | 0.029  | 2       | <        | U  | 0.03   | 1         | <     | บ      |        |         |        |    | 0.00925 | 1       | U     | U       |        |             |
| VOLATILES               | Carbon disulfide            | 0.006  | 1       | <        | U  | 0.006  | 1         | <            | U  | 0.006  | 1       | <        | υ  | 0.006  | 1         | <     | U      |        |         |        |    | 0.00463 | 1       | U     | U       |        |             |
| VOLATILES               | Carbon tetrachioride        | 0.006  | 1       | <        | U  | 0.006  | 1         | <            | U  | 0.006  | 1       | <        | U  | 0.006  | 1         | <     | U      |        |         |        |    | 0.00463 | 1       | U     | U       |        |             |
| VOLATILES               | Chlorobenzene               | 0.006  | 1       | <        | U  | 0.006  | 1         | <            | U  | 0.006  | 1       | <        | U  | 0.006  | 1         | <     | U      |        |         |        |    | 0.00463 | t       | Ū     | U       |        |             |
| VOLATILES               | Chloroethane                | 0.03   | 1       | <        | υ  | 0.031  | 1         | <            | υ  | 0.029  | 1       | <        | U  | 0.03   | 1         | <     | ū      |        |         |        |    | 0.00925 | 1       | Ū     | D       |        |             |
| VOLATILES               | Chloroform                  | 0.006  | 1       | <        | U  | 0.006  | 1         | <            | U  | 0.006  | 1       | <        | Ū. | 0.006  | 1         | <     | U I    |        |         |        |    | 0 00463 | t       | Ū     | Ū       |        |             |
| VOLATILES               | Chloromethane               | 0.03   | 1       | <        | U  | 0.031  | 1         | <            | U  | 0.029  | 1       | <        | U  | 0.03   | 1         | <     | Ū      |        |         |        |    | 0.00925 | 1       | Ū     | Ŭ       |        |             |
| VOLATILES               | Chloroprene                 |        |         |          | •  |        |           |              | •  |        |         |          | •  |        | •         |       | -      |        |         |        |    |         |         | 5     | 5       |        |             |
| VOLATILES               | cis-1.2-Dichtorpethene      |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 8 00463 | 1       | 11    | IJ      |        |             |
| VOLATILES               | cis-1.3-Dichlomorpoene      | 0.006  | 1       | <        | 11 | 0.006  | 1         | ٤            | 11 | 0.005  | 1       |          | 1E | 800.6  | 1         | ç     | EI .   |        |         |        |    | 0.00463 | 1       | 11    | ŭ       |        |             |
| VOLATILES               | Dibromochkoromethane        | 0.006  | 1       | ~        |    | 0.006  | 1         | <            | ι. | 0.006  | 1       | è        | Ū. | 0.006  | 1         | ž     | U U    |        |         |        |    | D 00463 | 1       | ŭ     | ы.<br>П |        |             |
| VOLATILES               | Dihmmomethane               |        | •       | -        | •  | 0.000  | •         |              | 5  | 0.200  |         |          | Ť  | 0.000  | •         |       | ÷      |        |         |        |    | 0.00463 | 1       | ii.   | ŭ       |        |             |
| VOLATILES               | Dichlorodifluoromethane     |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00425 | 1       | 11    | ų.      |        |             |
| VOLATILES               | Fibvi methacrviate          |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00323 |         | v     | 0       |        |             |
| VOLATILES               | Ethybenzene                 | 0.006  | 1       |          | 18 | 0.006  | t         | 2            | tł | 0.006  | 1       |          | 11 | 300.0  | 1         | ,     | 11     |        |         |        |    | 0.00463 | 1       | 11    |         |        |             |
| VOLATILES               | Hexacblosobutacliene        | 0.000  | •       |          | v  | 0.050  | •         |              | v  | 0.000  | •       | `        | v  | 0.000  | •         | `     | U I    |        |         |        |    | 0.00463 | 1       | 11    |         |        |             |
| VOLATILES               | IDDOMETHANE                 |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00100 | •       | v     | v       |        |             |
| VOLATILES               | ISOBUTYL ALCOHOL            |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    |         |         |       |         |        |             |
| VOLATILES               | Isoproviherzene             |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0 00463 | 1       | н     | 15      |        |             |
| VOLATILES               | m n-Xvienes                 |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00463 | ÷       | 11    | 11      |        |             |
| VOI ATHES               | Methacrytonitrile           |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00100 | '       | Û     | U       |        |             |
| VOI ATHES               | Methyl isohutyl ketone      | 0.061  | 1       |          | 11 | 0.662  | 1         |              | 11 | 0.058  | 1       | ,        | п  | 0.061  | 1         | ,     | 15     |        |         |        |    | 0 00025 | 1       | ŧr    | 31      |        |             |
| VOLATILES               |                             | Q.001  | •       | `        | v  | v.004. | •         | `            | č  | 0.000  |         | `        | v  | 0.001  | ·         | •     | 0      |        |         |        |    | 0.00020 | •       | 0     | 0       |        |             |
| VOI ATH ES              | Methylene religivia         | 6.002  | 1       |          | н  | 0.005  | 1         | ~            | 17 | 0.003  | 1       |          | п  | 0.002  | 1         |       | 15     |        |         |        |    | 0.00462 | 1       | п     | 11      |        |             |
| VOLATILES               | Nanhthatene                 | 0.004  | •       | `        | v  | 0.000  |           | `            | v  | 0.000  | •       | `        | 0  | 0.002  | ,         | `     | 0      |        |         |        |    | 0.00403 |         | u.    | 1       |        |             |
| VOLATILES               | 0-BI ITVI SENZENE           |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00462 | ;       | и     |         |        |             |
| VOLATILES               | n-PBOPYI BENZENE            |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00462 | ;       |       | 2       |        |             |
| VOLATUES                | Pentarhlorgethang           |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00403 | ı       | U     | U       |        |             |
| VOLATILES               | n-ISOPBOPYI TO LIENE        |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00462 |         |       | ы       |        |             |
| VOLATHES                | Provincitation              |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00405 | ŀ       | v     | U       |        |             |
| VOLATIES                | con-RITTVI RENIZENE         |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00460 |         |       |         |        |             |
| VOLATILES               | Shroon                      | 0.000  |         | _        |    | 0.000  |           |              |    | 0.000  |         |          |    | 0.000  |           |       |        |        |         |        |    | 0.00403 |         |       |         |        |             |
| VOLATIES                | tort-BHTYL BENZENE          | 0.000  | ı       | `        | U  | 0.000  | '         | `            | U  | 0.000  | '       | ٠        | U  | 0.000  |           | <     | 0      |        |         |        |    | 0.00463 |         |       |         |        |             |
| VALATILES               | Tetrachlorenthone           | 0.059  | 1       |          |    | 0.000  | 1         |              |    | 0.002  |         | _        |    | 0.000  |           |       | r.     |        |         |        |    | 0.00403 | •       | 0     | U       |        |             |
| VOLATILES               | Telucer                     | 0.030  | 1       |          |    | 0.009  |           |              | 14 | 0.000  | -       | <b>`</b> |    | 0.000  |           | <     | о<br>н |        |         |        |    | 0.00403 | 1       | 0     | 0       |        |             |
| VOI ATHES               | trap.12-Birblarathan        | 0.005  | (       | <        | U  | 0.006  | ŀ         | <            | U  | 0.006  | ı       | <        | U  | 0.006  | 1         | <     | 0      |        |         |        |    | 0.00463 | 1       | U     | 10      |        |             |
| VOLATILES               | trans 1.2 Dishlaran convers | 0.000  | 1       |          |    | 0.000  |           |              | 11 | 0.000  |         |          | 61 | 0.000  |           |       |        |        |         |        |    | 0.00463 | 1       | υ<br> | U<br>U  |        |             |
| NOLATILEO               | trans 1.4 Dishlam 2 hutras  | 0.006  | 1       | <        | v  | 0.006  | 1         | <            | U  | 0.006  | 1       | <        | U  | 0.005  | ŧ         | <     | U      |        |         |        |    | 0.00463 | 1       | U     | U       |        |             |
| VOLATILEO<br>VOLATILEO  | uans-1,4-DIGROG-2-DUIERe    |        |         |          |    | 0.400  |           |              |    | 0.000  |         |          |    | 0.000  |           |       |        |        |         |        |    |         |         |       |         |        |             |
|                         | Trisblorghuggemeitheog      | 0.24   | 1       |          |    | 0.182  | 1         |              |    | 0.006  | 1       | <        | U  | 0.005  | 1         | <     | U      |        |         |        |    | 0.00463 | 1       | U     | U       |        |             |
| VOLATILES<br>VOLATILES  | A ACTA A CONTROLLARIA       |        |         |          |    |        |           |              |    |        |         |          |    |        |           |       |        |        |         |        |    | 0.00925 | 1       | ປ     | U       |        |             |
| VOLATILEO<br>VIOLATILEO | vinyi accetate              | 0.05   |         |          |    | 0.00-  |           |              |    |        |         |          | ы  |        |           |       |        |        |         |        |    | 0.00925 | 1       | U     | 0       |        |             |
| VOLATILES               |                             | 0.03   | 1       | <        | v  | 0.031  | 1         | <            | U  | 0.029  | 1       | <        | U  | 0.03   | 1         | <     | U<br>  |        |         |        |    | 0.00925 | 1       | U     | U       |        |             |
| VULANLES                | AYRENES, FOTAL              | 0.006  | 1       | <u> </u> |    | 0.006  | 1         | <u> &lt;</u> | U  | 0.006  | Ĩ       | <        | U  | 0.006  | 1         | <     | U      |        |         |        |    |         |         |       |         |        | -           |

Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas



| 2<br>91 | WR:<br>WRS(<br>9/<br>4_! | S018-S<br>918-SB<br>26/200<br>5 - 4_5 | B02<br>02-02<br>6<br>Ft |        |
|---------|--------------------------|---------------------------------------|-------------------------|--------|
| ) VQ    | Result                   | DIL                                   | LO                      | VQ     |
|         | 6 00492                  | 1                                     | 11                      | н      |
|         | 0.00984                  | 1                                     | U                       | Ŭ      |
|         |                          |                                       |                         |        |
|         |                          |                                       |                         |        |
|         | 0.00492                  | 1                                     | ម                       | U      |
|         | 0.00492                  | 1                                     | U                       | U      |
|         | 0.00492                  | 1                                     | U                       | U      |
|         | 0.00492                  | 1                                     | U                       | U      |
|         | 0.00492                  | 1                                     | U                       | U      |
|         | 0.00984                  | 1                                     | U                       | U      |
|         | 0.00492                  | 1                                     | U                       | U      |
|         | 0.00492                  | 1                                     | IJ                      | U      |
|         | 0.00492                  | 1                                     | 0                       | 0      |
|         | 0.00984                  | 1                                     | U<br>H                  | 0      |
|         | 0.00492                  |                                       |                         | U<br>U |
|         | 0.00304                  | •                                     | U                       | 0      |
|         | 0.00492                  | 1                                     | U                       | U      |
|         | 0.00492                  | 1                                     | Ū                       | U      |
|         | 0.00492                  | 1                                     | U                       | U      |
|         | 0.00492                  | 1                                     | U                       | U      |
|         | 0.00984                  | 1                                     | U                       | U      |
|         |                          |                                       |                         |        |
|         | 0.00492                  | 1                                     | U                       | ប      |
|         | 0.00492                  | 1                                     | U                       | U      |
|         |                          |                                       |                         |        |
|         | 0.00492                  | 1                                     | IJ                      | 11     |
|         | 0.00492                  | 1                                     | ŭ                       | ŭ      |
|         |                          |                                       | •                       | 5      |
|         | 0.00984                  | 1                                     | U                       | U      |
|         |                          |                                       |                         |        |
|         | 0.00492                  | 1                                     | U                       | U      |
|         | 0.00984                  | 1                                     | U                       | U      |
|         | 0.00492                  | 1                                     | U                       | U      |
|         | 0.00492                  | 1                                     | υ                       | U      |
|         | 0.00492                  | 1                                     | U                       | U      |
|         | 0.00400                  | ,                                     | ji                      | 12     |
|         | 0.00452                  | 1<br>1                                | 0                       | 11     |
|         | 0.00492                  | •                                     | 11                      | 11     |
|         | 0.00492                  | 3                                     | 11                      | U<br>U |
|         | 0,00492                  | 1                                     | U U                     | บ      |
|         | 0.00492                  | 1                                     | Ũ                       | Ű      |
|         | 0.00492                  | 1                                     | U                       | U      |
|         |                          |                                       |                         |        |
|         | 0.00492                  | 1                                     | ម                       | U      |
|         | 0.00984                  | 1                                     | ម                       | ប      |
|         | 0.00984                  | 1                                     | U                       | U      |
|         | 0.00984                  | 1                                     | U                       | U      |
|         |                          |                                       |                         |        |





| Concentrations of Chemicals in Soil Samp | ples Associated with WR Sump 019 |
|--|----------------------------------|
|--|----------------------------------|

| (SUMP) = WRSUMP019 | i H-Wi                       | 3519-    | -01   |        | 1.H-W  | VBS1     | 9-01  |       | WB     | 319-5         | 5B01  |         | WRS19-SB01 |          |        |       |         |  |
|--------------------|------------------------------|----------|-------|--------|--------|----------|-------|-------|--------|---------------|-------|---------|------------|----------|--------|-------|---------|--|
| SAMPLE NO          |                              | I H-WR   | 519.0 | N 1    |        | I H-WI   | RS 19 | -01 2 |        | WRS1          | 9-SE  | 302-0   | 1          | WRS      | 19-8   | B02-0 | 2       |  |
|                    |                              | B/2(     | 1003  | 1      |        | 6/2      | 06/10 | 93    |        | 9/3           | 25/20 | 006     |            | 9        | /25/2  | 006   |         |  |
|                    |                              | 05       | 15 6  | ,<br>1 |        | 3        | 4.5   | Ft    |        | 0             | .5    | 51      |            | 4        | .5 -   | 5 F1  |         |  |
|                    |                              | 0.0<br>F | FG    | •      |        | ~        | REG   |       |        | •             | REG   | 1       |            |          | RE     | G     |         |  |
| Test Group         | Parameter (Linite - ma/ka)   | Result   | חות   | 10     | vo     | Besult   | DI    | 10    | VQ     | Result [      | )  .  | LQ      | vo         | Result D | IL     | LQ    | VQ      |  |
| EVELOGIVES         | 1 3 5-Trioitrohenzene        | - Ticdan |       |        | ,,,    | 1100 dil |       |       |        | 0.25          | 1     | U       | U.         | 0.25     | 1      | U     | - U     |  |
| EXPLOSIVES         | 1 3-Dinitrohenzene           |          |       |        |        |          |       |       |        | 0.25          | 1     | U       | U          | 0.25     | 1      | υ     | U       |  |
| EXPLOSIVES         | 2 4 6 Tripitrotolyene        |          |       |        |        |          |       |       |        | 0.25          | 1     | U       | Ů          | 0.25     | 1      | U     | U       |  |
| EXPLOSIVES         | 2 4-Dinitrotoluene           | 1 176    | 1     | ۲      | U.     | 1.19     | 1     | ۷     | U      | 0.25          | 1     | U       | Ū          | 0.25     | 1      | U     | U       |  |
|                    | 2 A.Dinitrotoluona           | 1 176    | 1     | 2      | ŭ      | 1 19     | 1     | è     | ŭ      | 0.26          | 1     | Ū       | Ū          | 0.28     | 1      | Ū     | Ū       |  |
|                    | 2.6 mino.4 6. dinitratoluana |          |       |        | Ŭ      |          | •     | •     | Ū      | 0.26          | 1     | -<br>11 | Ū          | 0.26     | 1      | Ū     | Ū       |  |
|                    | 4- âmino-2 6-dinitrotoluene  |          |       |        |        |          |       |       |        | 0.26          | 1     | Ū       | Ū          | 0.26     | 1      | Ū     | Ú       |  |
| EXPLOSIVES         | PMY                          |          |       |        |        |          |       |       |        | 2.2           | 1     | U       | Ū          | 2.2      | 1      | Ū     | Ū       |  |
| EXPLOSIVES         | m. Nitratoluana              | · [      |       |        |        |          |       |       |        | 0.25          | 1     | ŭ       | Ŭ          | 0.25     | 1      | Ū.    | Ū       |  |
| EXPLOSIVES         | Nitebassono                  | 1        |       |        |        |          |       |       |        | 0.26          | t     | ŭ       | ŭ          | 0.26     | 1      | Ū.    | Ū       |  |
|                    | e Mitobelizerie              |          |       |        |        |          |       |       |        | 0.25          | í     | U       | ŧ.         | 0.25     | 1      | Ū     | ů.      |  |
| EXPLOSIVES         | - Nitrotaluona               |          |       |        |        |          |       |       |        | 0.25          | 1     | Ŭ       | 00         | 0.25     | ŧ      | 0     | U U     |  |
| EXPLUSIVES         | p-Nikolologne                |          |       |        |        |          |       |       |        | 1             | ÷     | и<br>П  | Е          | 1        | í      | u.    | Ū       |  |
| EXPLOSIVES         | RDX<br>Total                 |          |       |        |        |          |       |       |        | 0.65          | ł     | ň       | й          | 0.65     | 1      | й     | ň       |  |
| EXPLOSIVES         | i euvi                       | 10600    |       |        |        | 0910     |       |       |        | 0.00          | ł     | 0       | v          | 11600    | 1      | Ŷ     | v       |  |
| METALS             | Aummum                       | 10000    | 1     |        |        | 104      | ÷     |       | ш      | 0 109         | 4     | н       | 11.8       | 0.117    | 4      | -     | 13.11   |  |
| METALS             | Antimony                     | 11.3     | 1     | <      | U      | 0.61     |       | <     | v      | 1.00          |       | U       | n n        | 0.000    | 1      | U     | 8       |  |
| METALS             | Arsenic                      | 3.15     |       |        |        | 3.27     | 1     |       |        | 1.00          | -     |         | UL.        | 150      |        |       | υL      |  |
| METALS             | Barium                       | 44.5     | t     |        |        | 30.9     | 1     |       |        | 00.2<br>0.600 | -     |         |            | 0.046    | 4      |       |         |  |
| METALS             | Beryllium                    |          | ,     |        | -      | <b>.</b> |       |       | -      | 0.093         | -     |         |            | 0.040    |        | ł     | 1       |  |
| METALS             | Cadmium                      | 4.50     |       |        | E      | 3.01     | 1     |       | E      | 0,172         | -     | U       | v          | 0.110    | -      | ų     | 0       |  |
| METALS             | Calcium                      | 1370     | 1     |        |        | 550      | 1     |       |        | 51000         | 3     |         |            | 148      | -      |       |         |  |
| METALS             | Chromium                     | 15       | 1     |        |        | 11.7     | 1     |       |        | 30.0          | +     |         |            | 10.4     | 4      |       |         |  |
| METALS             | Cobalt                       | 2.96     | 1     |        |        | 2.46     | 1     |       | -      | 2.00          | 2     |         |            | 0.07     | 1      |       |         |  |
| METALS             | Copper                       | 7.99     | 1     |        |        | 6,/5     | 1     |       | F      | 2,39          | 1     |         |            | 10,4     | -      |       |         |  |
| METALS             | Iron                         | 17500    | 1     |        | _      | 10300    | 1     |       |        | 73100         | 2     |         |            | 28800    | 1      |       |         |  |
| METALS             | Lead                         | 29.4     | 1     |        | Ę      | 20.5     | 1     | <     | Ų      | 12.4          |       |         |            | 17.0     | -      |       | 14      |  |
| METALS             | Magnesium                    | /04      | 1     |        |        | 542      | 1     |       |        | 340           |       |         | JM         | 1940     | 4      |       | 1       |  |
| METALS             | Manganèse                    | 21.5     | 1     |        |        | 7,77     | 1     |       |        | 163           | 1     | ,       | J<br>,     | 300      | •      | ,     | 3       |  |
| METALS             | Mercury                      | 0.027    | 1     | <      | U      | 0.027    | )     | <     | U      | 0.0448        |       | J       | 3          | 0.0100   | ÷      | 5     | 0       |  |
| METALS             | Nickel                       |          |       |        |        |          |       |       |        | 5.62          |       |         |            | 10.2     | 1      |       |         |  |
| METALS             | Potassium                    | 637      | 1     |        |        | 587      | 1     |       |        | 115           | 1     |         |            | 400      | 4      |       | n       |  |
| METALS             | Selenium                     | 1,13     | 1     | <      | U<br>7 | 1.35     | 1     | <     |        | 0.215         | -     |         |            | 474      | -      | 5     | 11      |  |
| METALS             | Silver                       | 0.09     | 1     |        | ÷      | 0.068    | 1     | <     | Ų      | 8.03          | 5     | 0       | , v        | 1,79     | <br>   | U     | U       |  |
| METALS             | Sodium                       |          |       |        |        |          |       |       |        | 15./          |       | J       | J          | 120      | ţ      |       |         |  |
| METALS             | Strontlum                    | 11.3     | 1     |        |        | 9.62     | 1     |       |        | 0.0007        |       |         |            | 0.0000   |        |       |         |  |
| METALS             | Thallium                     |          |       |        |        |          |       |       |        | 0.0205        |       |         |            | 0.0020   | 4      |       |         |  |
| METALS             | Vanadium                     |          |       |        |        |          |       |       |        | 02.5          | 1     |         |            | 40.)     |        |       |         |  |
| METALS             | Zinc                         | 28.5     | 1     |        |        | 19.6     | 1     |       |        | /9.6          | 1     |         |            | 09.3     | 1      |       |         |  |
| RANGE_ORGANICS     | Carbon Range C12-C28         |          |       |        |        |          |       |       |        |               |       |         |            |          |        |       |         |  |
| RANGE_ORGANICS     | CARBON RANGE C28-C35         |          |       |        |        |          |       |       |        |               |       |         |            |          |        |       |         |  |
| RANGE_ORGANICS     | Carbon Range C6-C12          |          |       |        |        |          |       |       |        |               |       |         |            | A 101    |        | ы     |         |  |
| SEMIVOLATILES      | 1,2,4-Trichlorobenzene       | 1.176    | 1     | <      | U      | 1,19     | 1     | <     |        | 1.76          | 10    | 0       | U<br>11    | 0.191    | -      |       | U       |  |
| SEMIVOLATILES      | 1,2-Uichlorobenzene          | 1.176    | 1     | <      | 0      | 1.19     | 1     | <     | 0      | 1,76          | 10    | 0       | U<br>IT    | 0.191    | 1<br>• | 0     | U<br>IL |  |
| SEMIVOLATILES      | 1,3-Dichlorobenzene          | 1.176    | 1     | <      | U U    | 1,19     | 1     | ۲.    | U<br>U | 1.76          | 10    | Ų<br>D  | 11         | 0.101    | •      |       | 11      |  |
| SEMIVOLATILES      | 1,4-Dichlorobenzene          | 1,176    | 1     | <      | Ų<br>D | 1.19     | }     | <     | 0      | 1.75          | 10    | 0<br>11 | Н          | 0.181    |        |       | 0       |  |
| SEMIVOLATILES      | 2,4,5-Trichlerophenol        | 1.176    | 1     | <      | U      | 1,19     |       | <     | 0      | 1.70          | 10    | U<br>U  | U<br>U     | 0.104    | 4      |       | 11      |  |
| SEMIVOLATILES      | 2,4,6-Trichlorophenol        | 1,176    | 1     | <      | U      | 1,19     | 1     | <     | U      | 1,76          | 10    | Ų       | U          | 0.191    | 1      | ų     | Ų       |  |


|       | Concentrations of Chemicals           | Table 3-125<br>in Soil Sample | s Associated wit | h WR Sumn 019 |            |
|-------|---------------------------------------|-------------------------------|------------------|---------------|------------|
| 4P019 | · · · · · · · · · · · · · · · · · · · |                               |                  |               |            |
| E     |                                       | LH-WRS19-01                   | LH-WRS19-01      | WRS19-SB01    | WRS19-SB01 |

| (SUMP) = WRSUMP019 |                             |        |              |             |    |        |             |       |    | .,     |       |         |        |        |       |          |        |
|--------------------|-----------------------------|--------|--------------|-------------|----|--------|-------------|-------|----|--------|-------|---------|--------|--------|-------|----------|--------|
| LOCATION _CODE     | DN_CODE                     |        |              | LH-WRS19-01 |    |        |             | 9-01  |    | WF     | 819-  | SB01    |        | w      | 851   | 3-SB01   |        |
| SAMPLE_NO          |                             | LH-WF  | 1519-0       | 11          |    | LH-W   | <b>RS19</b> | -01 2 |    | WBS    | 19-5  | B02-0   | 1      | WB     | S19   | SB02-0   | 2      |
| SAMPLE_DATE        |                             | 6/2    | 6/1993       | -           |    | 6/     | 26/199      | 33    |    | 9      | /25/2 | 006     |        |        | 9/25/ | 2006     | -      |
| DEPTH              |                             | 0.5    | - 1.5 F      | t           |    | 3      | - 4.5 )     | Ft    |    |        | 0.5   | Ft      |        |        | 4.5 - | 5 Ft     |        |
| SAMPLE_PURPOSE     |                             |        | REG          |             |    | -      | REG         |       |    |        | REC   | 3       |        |        | RF    | G        |        |
| Test Group         | Parameter (Units = mg/kg)   | Result | DIL          | LQ          | VQ | Result | DIL         | LQ    | VQ | Result | DIL   | LQ      | vq     | Result | DIL   | LQ       | va     |
| SEMIVOLATILES      | 2.4-Dichlorophenol          | 1.176  | 1            | <           | U  | 1,19   | 1           | <     | U  | 1.76   | 10    | U       | U      | 0.191  | 1     | <u> </u> | U      |
| SEMIVOLATILES      | 2,4-Dimethylphenol          | 0.588  | 1            | <           | U  | 0.595  | 1           | <     | υ  | 1.76   | 10    | Ū       | Ū      | 0.191  | 1     | Ŭ        | บ      |
| SEMIVOLATILES      | 2,4-Dinitrophenol           | 11.765 | 1            | <           | U  | 11,905 | 1           | <     | U  | 8.79   | 10    | U       | Ū      | 0.956  | 1     | Ū        | Ŭ      |
| SEMIVOLATILES      | 2,4-Dinitrotoluene          |        |              |             |    |        |             |       |    | 1.76   | 10    | Ŭ       | Ŭ      | 0.191  | 1     | Ū        | ย      |
| SEMIVOLATILES      | 2,6-Dinitrotoluene          |        |              |             |    |        |             |       |    | 1.76   | 10    | U       | U      | 0.191  | 1     | U        | Ŭ      |
| SEMIVOLATILES      | 2-Chloronaphthalene         | 0.353  | 1            | <           | Ų  | 0.357  | 1           | <     | Ð  | 1.76   | 10    | U       | Ü      | 0.191  | 1     | U        | Ū      |
| SEMIVOLATILES      | 2-Chlorophenol              | 0.588  | 1            | <           | U  | 0.595  | 1           | <     | U  | 1.76   | 10    | U       | U      | 0.191  | 1     | Ŭ        | Ū      |
| SEMIVOLATILES      | 2-Methylnaphthalene         | 0.353  | 1            | <           | Ų  | 0.357  | 1           | <     | IJ | 1.76   | 10    | U       | U      | 0.191  | 1     | Ū        | Ū      |
| SEMIVOLATILES      | 2-Methytphenol              | 0.588  | 1            | ۲           | U  | 0.595  | 1           | <     | Ú  | 1.76   | 10    | U       | U      | 0.191  | 1     | Ū        | Ū      |
| SEMIVOLATILES      | 2-Nitroaniline              | 3.529  | 1            | <           | U  | 3.571  | 1           | <     | Ú  | 8.79   | 10    | U       | Ū      | 0.956  | 1     | บ        | Ū      |
| SEMIVOLATILES      | 2-Nitrophenol               | 1,176  | 1            | <           | Ū  | 1.19   | 1           | <     | ŭ  | 1.76   | 10    | ū       | -<br>U | 0.191  | 1     | Ū.       | ů      |
| SEMIVOLATILES      | 3,3'-Dichlorobenzidine      | 0.588  | 1            | <           | Ŭ  | 0.595  | 1           | <     | Ū  | 3.52   | 10    | ŭ       | Ū      | 0.382  | 1     | Ũ        | ŭ      |
| SEMIVOLATILES      | 3-Nitroaniline              | 3.529  | 1            | <           | Ű  | 3.571  | 1           | ż     | Ũ  | 8.79   | 10    | ŭ       | Ū.     | 0.956  | 1     | ũ        | ň      |
| SEMIVOLATILES      | 4.6-Dinitro-2-methylphenol  | 5.882  | 1            | <           | Ū  | 5.952  | 1           | è     | Ū  | 8.79   | 10    | ũ       | Ŭ.     | 0.956  | 1     | Ū        | ň      |
| SEMIVOLATILES      | 4-Bromophenyl phenyl ether  | 1,176  | 1            | <           | Ū  | 1.19   | 1           | Ś     | Ð  | 1.76   | 10    | U U     | ũ      | 0.191  | ÷     | ы.<br>В  | Ŭ.     |
| SEMIVOLATILES      | 4-Chloro-3-methylohenol     | 0.588  | 1            | <           | ŭ  | 0.595  | i           | ż     | Ū  | 1.76   | 10    | ŭ       | ม้     | 0 191  | 1     | ŭ        | ы<br>н |
| SEMIVOLATILES      | 4-Chloroaniline             | 3,529  | 1            | <           | ŭ  | 3.571  | ÷           | è     | Ű  | 1.76   | 10    | Ð       | Ū.     | 0 191  | i     | ŭ        | ы<br>П |
| SEMIVOLATILES      | 4-Chlorophenyl phenyl ether | 1,176  | 1            | <           | ū  | 1.19   | 1           | ż     | ŭ  | 1 76   | 10    | U U     | Ŭ.     | 0.191  | ÷     | ň        | й      |
| SEMIVOLATILES      | 4-Methylphenol              | 0.588  | í            | <           | ŭ  | 0.595  | i           | è     | Ŭ. | 1.76   | 10    | ы.<br>Н | ŭ      | 0.101  |       | ň        | ŭ      |
| SEMIVOLATILES      | 4-Nitroaniline              | 5.882  | 1            | ć           | ū  | 5 952  | 1           | è     | ŭ  | 8 79   | 10    | Ū.      | ũ      | 0.956  | ÷     | ŭ        | ŭ      |
| SEMIVOLATILES      | 4-Nitrophenol               | 5 682  | 1            | ٠           | ū  | 5 952  | ÷.          | è     | Ű  | 8.79   | 10    | 11      | Ŭ.     | 0.956  | ŕ     | н.       | ii ii  |
| SEMIVOLATILES      | Acenaphthene                | 0.353  | 1            | ć           | ů. | 0.357  | +           | Ż     | ŭ  | 1.76   | 10    | 1       | Ŭ.     | 0.101  | 1     | ŭ        | 11     |
| SEMIVOLATILES      | Acenaphthylene              | 0.588  | 1            | <           | ŭ  | 0.595  | i.          | ć     | ū  | 1 76   | 10    | Ű       | ŭ      | 0 191  | 1     | ы.<br>Н  | 11     |
| SEMIVOLATILES      | Anthracene                  | 0.588  | <sup>1</sup> | <           | Ū  | 0.595  | 1           | ç     | Ū  | 1.76   | 10    | Ű       | ŭ      | 0 191  | Í     | ñ        | U U    |
| SEMIVOLATILES      | Benzo(a)anthracene          | 0.353  | 1            | ۲           | U  | 0.357  | 1           | <     | U  | 1.76   | 10    | ū       | Ū.     | 0.191  | 1     | Ũ        | Ū      |
| SEMIVOLATILES      | Benzo(a)pyrene              | 0.588  | 1            | <           | Ū  | 0.595  | 1           | 2     | ū  | 1.76   | 10    | ŭ       | ŭ      | 0 191  | i     | ų.       | ŭ      |
| SEMIVOLATILES      | Benzo(b)fluoranthene        | 1.176  | 1            | <           | U  | 1.19   | 1           | <     | Ū  | 1.76   | 10    | Ū       | Ū      | 0.191  | 1     | Ű        | Ū      |
| SEMIVOLATILES      | Benzo(ghi)perylene          | 2.353  | 1            | <           | ປ  | 2.381  | 1           |       | Ŭ  | 1.76   | 10    | Ū       | Ū      | 0.191  | 1     | ŭ        | Ū      |
| SEMIVOLATILES      | Benzo(k)fluoranthene        | 1,178  | 1            | ۲           | U  | 1.19   | 1           | <     | Ŭ  | 1.76   | 10    | ŭ       | Ū      | 0.191  | 1     | Ŭ        | ŭ      |
| SEMIVOLATILES      | Benzoic Acid                |        |              |             |    |        |             |       |    | 8,79   | 10    | U       | ŪJ     | 0,956  | 1     | Ŭ        | ŪJ     |
| SEMIVOLATILES      | Benzyl Alcohol              |        |              |             |    |        |             |       |    | 1.76   | 10    | U       | U      | 0.191  | 1     | ŭ        | U      |
| SEMIVOLATILES      | bis(2-Chloroethoxy)methane  | 0.588  | 1            | <           | U  | 0.595  | 1           | <     | U  | 1.76   | 10    | U       | Ů      | 0.191  | 1     | Ū        | Ű      |
| SEMIVOLATILES      | bis(2-Chloroethyl)ether     | 0.588  | 1            | <           | U  | 0.595  | 1           | <     | U  | 1.76   | 10    | U       | U      | 0,191  | 1     | ŭ        | Ű      |
| SEMIVOLATILES      | bis(2-Chloroisopropyl)ether | 1,176  | 1            | <           | Ų  | 1.19   | 1           | <     | U  | 1.76   | 10    | U       | U      | 0,191  | 1     | U        | Ū      |
| SEMIVOLATILES      | bis(2-Ethylhexyl)phthalate  | 0.212  | 1            | <           | U  | 0.167  | 1           | <     | U  | 1.76   | 10    | U       | Ű      | 0,191  | 1     | Ū        | Ű      |
| SEMIVOLATILES      | Butyl benzyl phthalate      | 0.588  | 1            | <           | U  | 0.595  | 1           | <     | U  | 1.76   | 10    | U       | ป      | 0.191  | 1     | Ŭ        | Ú      |
| SEMIVOLATILES      | Carbazole                   | 1,176  | 1            | <           | U  | 1.19   | 1           | <     | U  |        |       |         |        |        |       | -        | -      |
| SEMIVOLATILES      | Chrysene                    | 5.882  | 1            | <           | U. | 5.952  | 1           | <     | U  | 1.76   | 10    | U       | IJ     | 0.191  | 1     | U        | υ      |
| SEMIVOLATILES      | Dibenzo(a,h)anthracene      | 2.353  | 1            | <           | U  | 2,381  | 1           | <     | V  | 1.76   | 10    | U       | U      | 0.191  | 1     | Ű        | Ű      |
| SEMIVOLATILES      | Dibenzofuran                | 1.176  | 1            | <           | υ  | 1.19   | 1           | <     | U  | 1.76   | 10    | U       | ΰ      | 0,191  | 1     | Ú        | ΰ      |
| SEMIVOLATILES      | Diethyl phthalate           | 0.588  | 1            | <           | U  | 0.595  | 1           | <     | U  | 1.76   | 10    | U       | U      | 0.191  | 1     | Ū        | Ū      |
| SEMIVOLATILES      | Dimethyl phthalate          | 0.588  | 1            | <           | U  | 0.595  | 1           | ۲     | U  | 1,76   | 10    | U       | U      | 0.191  | 1     | υ        | U      |
| SEMIVOLATILES      | di-n-Butyl phthalate        | 0.353  | 1            | <           | U  | 1.881  | 1           | <     | U  | 1.76   | 10    | U       | U      | 0,191  | 1     | U        | U      |
| SEMIVOLATILES      | di-n-Octyl phthalate        | 0.588  | 1            | <           | U  | 0.595  | 1           | <     | Ų  | 1.76   | 10    | Ų       | U      | 0.191  | 1     | U        | U      |
| SEMIVOLATILES      | Fluoranthene                | 0.588  | 1            | <           | Ų  | 0.595  | 1           | <     | U  | 1.76   | 10    | U       | U      | 0.191  | 1     | U        | U      |
| SEMIVOLATILES      | Fluorene                    | 0.588  | 1            | <           | U  | 0.595  | 1           | <     | U  | 1,76   | 10    | U       | U      | 0.191  | 1     | U        | U      |
| SEMIVOLATILES      | Hexachlorobenzene           | 1,176  | 1            | <           | Ų  | 1.19   | 1           | <     | Ų  | 1.76   | 10    | Ð       | Ų      | 0.191  | 1     | U        | Ų      |

## 00066394

|        |                 | Table 3-125              |                            |
|--------|-----------------|--------------------------|----------------------------|
| Concer | trations of Che | micals in Soll Samples A | ssociated with WR Sump 019 |

| (SUMP) = WRSUMP019 |                                |        |        |      |    |        |       |       |    |        | ÷      |       |    |         |       |        |     |
|--------------------|--------------------------------|--------|--------|------|----|--------|-------|-------|----|--------|--------|-------|----|---------|-------|--------|-----|
| LOCATION _CODE     |                                | LH-W   | R\$19  | -01  |    | LH-\   | WRSt  | 9-01  |    | WR     | 519-   | SB01  |    | W       | RS1   | -SB01  |     |
| SAMPLE_NO          |                                | LH-WR  | S19-0  | 01_1 |    | LH-W   | /RS19 | -01_2 | 2  | WRS    | 19-S   | B02-( | 01 | WR      | S19-  | SB02-0 | 2   |
| SAMPLE_DATE        |                                | 6/21   | 5/1993 | 3    |    | 6/     | 26/19 | 93    |    | 9      | 25/2   | 006   |    |         | 9/25/ | 2006   | -   |
| DEPTH              |                                | 0.5    | 1.5 8  | Ŧ    |    | 3      | - 4.5 | Ft    |    |        | 0 • .5 | Ft    |    |         | 4.5 - | 5 Ft   |     |
| SAMPLE_PURPOSE     |                                | F      | EG     |      |    |        | REG   |       |    |        | REC    | 3     |    |         | RE    | G      |     |
| Test Group         | Parameter (Units = mg/kg)      | Result | DIL    | LQ   | VQ | Result | DIL   | LQ    | VQ | Result | DIL    | ιQ    | và | Result  | DIL   | LQ     | VQ  |
| SEMIVOLATILES      | Hexachlorobutadiene            | 3.529  | 1      | ~    | U  | 3.571  | 1     | <     | Ü  | 1.76   | 10     | U     | U  | 0.191   | 1     | U      | U   |
| SEMIVOLATILES      | Hexachlorocyclopentadiene      | 3.529  | 1      | <    | U  | 3.571  | 1     | <     | U  | 1.76   | 10     | U     | U  | 0.191   | 1     | U      | U   |
| SEMIVOLATILES      | Hexachloroethane               | 1.176  | 1      | <    | U  | 1.19   | 1     | <     | U  | 1,76   | 10     | Ų     | U  | 0.191   | 1     | U      | U   |
| SEMIVOLATILES      | Indeno(1,2,3-cd)pyrene         | 1.176  | 1      | <    | U  | 1.19   | 1     | <     | U  | 1.76   | 10     | Ų     | U  | 0.191   | 1     | U      | Ų   |
| SEMIVOLATILES      | Isophorone                     | 0.588  | 1      | <    | U  | 0.595  | 1     | <     | U  | 1.76   | 10     | U     | U  | 0.191   | 1     | V      | U   |
| SEMIVOLATILES      | Naphthalene                    | 0.353  | 1      | <    | U  | 0.357  | 1     | <     | U  | 1,76   | 10     | U     | U  | 0.191   | 1     | U      | U   |
| SEMIVOLATILES      | Nitrobenzene                   | 0.588  | 1      | <    | U  | 0.595  | 1     | <     | υ  | 1.76   | 10     | U     | U  | 0.191   | 1     | U      | U   |
| SEMIVOLATILES      | n-Nitrosodimethylamine         |        |        |      |    |        |       |       |    |        |        |       |    |         |       |        |     |
| SEMIVOLATILES      | n-Nitroso-di-n-propylamine     | 1.176  | 1      | <    | U  | 1,19   | 1     | <     | U  | 1,76   | 10     | U     | U  | 0.191   | 1     | U      | U   |
| SEMIVOLATILES      | n-Nitrosodiphenylamine         | 0.588  | 1      | <    | U  | 0.595  | 1     | <     | U  | 1.76   | 10     | U     | U  | 0.191   | 1     | U      | U . |
| SEMIVOLATILES      | Pentachlorophenol              | 5.882  | 1      | <    | U  | 5.952  | 1     | <     | U  | 8.79   | 10     | U     | U  | 0.956   | 1     | U      | U   |
| SEMIVOLATILES      | Phenanthrene                   | 0.588  | 1      | <    | U  | 0.595  | 1     | <     | U  | 1.76   | 10     | Ų     | U  | 0.191   | 1     | U      | U   |
| SEMIVOLATILES      | Phenol                         | 0.588  | 1      | <    | U  | 0.595  | 1     | <     | U  | 1.76   | 10     | U     | U  | 0.191   | 1     | U      | Ű   |
| SEMIVOLATILES      | Pyrene                         | 0.588  | 1      | <    | U  | 0.595  | 1     | <     | U  | 1.76   | 10     | U     | U  | 0.191   | 1     | U      | Ú   |
| VOLATILES          | 1.1.1.2-Tetrachloroethane      |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | Ŭ      | U   |
| VOLATILES          | 1,1,1-Trichloroethane          | 0.006  | 1      | <    | Ų  | 0.006  | i     | <     | U  |        |        |       |    | 0.00552 | 1     | ú      | Ú   |
| VOLATILES          | 1,1.2,2-Tetrachloroethane      | 0.006  | 1      | <    | ย  | 0.006  | 1     | <     | Ű  |        |        |       |    | 0.00552 | 1     | ü      | Ŭ   |
| VOLATILES          | 1.1.2-Trichloroethane          | 0.006  | 1      | <    | Û  | 0.006  | Ť     | <     | Ū  |        |        |       |    | 0.00552 | 1     | น้     | Ŭ   |
| VOLATILES          | 1.1-Dichloroethane             | 0.006  | 1      | <    | Ū  | 0.006  | 1     | ۲     | ย่ |        |        |       |    | 0.00552 | 1     | Ŭ      | Ŭ   |
| VOLATILES          | 1,1-Dichlaroethene             | 0.006  | 1      | <    | U  | 0.006  | 1     | <     | Ű  |        |        |       |    | 0.00552 | 1     | ŭ      | Ū   |
| VOLATILES          | 1,1-Dichloropropane            |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | Ū      | Ű   |
| VOLATILES          | 1.2.3 Trichlorobenzene         | ł      |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | Ū      | Ű   |
| VOLATILES          | 1,2.3-Trichloropropane         | i i    |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | Ū      | Ű   |
| VOLATILES          | 1.2.4-Trichlorobenzene         |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | U      | U   |
| VOLATILES          | 1,2,4-Trimethylbenzene         | ł      |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | Ŭ      | U   |
| VOLATILES          | 1.2-Dibromo-3-chioropropane    |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | U      | U   |
| VOLATILES          | 1,2-Dibromoethane              |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | U      | IJ  |
| VOLATILES          | 1,2-Dichlorobenzene            |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | U      | U   |
| VOLATILES          | 1.2-Dichloroethane             | 0.006  | 1      | <    | IJ | 0.006  | 1     | <     | υ  |        |        |       |    | 0.00552 | 1     | U      | Ú   |
| VOLATILES          | 1.2-Dichloroethene             | 0.006  | 1      | <    | U  | 0.006  | 1     | <     | U  |        |        |       |    |         |       |        |     |
| VOLATILES          | 1.2-Dichloropropane            | 0.006  | 1      | <    | U  | 0.006  | 1     | <     | Ų  |        |        |       |    | 0.00552 | 1     | U      | U   |
| VOLATILES          | 1,2-Dimethylbenzene (o-Xylene) |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | Ð      | Ū.  |
| VOLATILES          | 1.3.5-Trimethylbenzene         |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | Ŭ      | U   |
| VOLATILES          | 1,3-Dichlorobenzene            |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | Ű      | U   |
| VOLATILES          | 1,3-Dichloropropane            |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | Ŭ      | Ū   |
| VOLATILES          | 1,4-Dichloro-2-butene          |        |        |      |    |        |       |       |    |        |        |       |    |         |       | -      | -   |
| VOLATILES          | 1,4-Dichlorobenzene            |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | u      | U   |
| VOLATILES          | 1.4-Dioxane                    |        |        |      |    |        |       |       |    |        |        |       |    |         |       |        | -   |
| VOLATILES          | 2,2-Dichloropropane            |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | U      | Ð   |
| VOLATILES          | 2-Butanone                     | 0.059  | i      | <    | U  | 0.06   | i     | <     | U  |        |        |       |    | 0.011   | 1     | ŭ      | U   |
| VOLATILES          | 2-Chloroethyl vinyl ether      |        |        |      | -  |        |       |       | •  |        |        |       |    | 0.011   | 1     | ŭ      | ñ   |
| VOLATILES          | 2-Chlorotoluene                |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | ŭ      | Ŭ   |
| VOLATILES          | 2-Hexanone                     | 0.059  | 1      | <    | U  | 0.06   | 1     | ۲     | U  |        |        |       |    | 0.011   | 1     | มั     | ŭ   |
| VOLATILES          | 2-Propenal                     |        |        |      | -  |        |       | -     | -  |        |        |       |    |         | •     | ٣      | -   |
| VOLATILES          | 4-Chlorotoluene                |        |        |      |    |        |       |       |    |        |        |       |    | 0.00552 | 1     | U      | υ   |
| VOLATILES          | Aceione                        | 0.207  | 1      | <    | U  | 0.152  | 1     | <     | U  |        |        |       |    | 0.011   | 1     | Ŭ      | Ũ   |
| VOLATILES          | Acetonitrile                   |        |        |      |    |        |       |       |    |        |        |       |    |         |       | -      | -   |
|                    |                                | ,      |        |      |    |        |       |       |    |        |        |       |    |         |       |        |     |

## <sup>s</sup>00066395

| Table 3-125   |
|---|
| Concentrations of Chemicals in Soil Samples Associated with WR Sump 019 |

| (SUMP) = WRSUMP019 |                             |        |        |     |    |        |       |       |    |                  |          |       |        |    |
|--------------------|-----------------------------|--------|--------|-----|----|--------|-------|-------|----|------------------|----------|-------|--------|----|
| LOCATION _CODE     |                             | LH-WI  | RS19-  | -01 |    | LH-V   | VRS1  | 9-01  |    | WRS19-SB01       | WF       | RS19  | -SB01  |    |
| SAMPLE_NO          |                             | LH-WR  | S19-0  | 1_1 |    | LH-W   | A\$19 | -01_2 |    | WRS19-SB02-01    | WRS      | 519-8 | SB02-( | 12 |
| SAMPLE_DATE        |                             | 6/26   | 5/1993 | 3   |    | 6/2    | 26/19 | 93    |    | 9/25/2006        | 9        | /25/2 | 2006   |    |
| DEPTH              |                             | 0.5    | 1.5 P  | ŧ   |    | 3      | - 4.5 | Ft    |    | 05 Ft            |          | 4.5 - | 5 Ft   |    |
| SAMPLE_PURPOSE     |                             | F      | IEG    |     |    |        | REG   |       |    | REG              |          | RE    | G      |    |
| Test Group         | Parameter (Units ≈ mg/kg)   | Result | DIL    | ĻQ  | ٧Q | Result | DIL   | LQ    | VQ | Result DIL LQ VQ | Result D | ) L   | LQ     | VQ |
| VOLATILES          | Acrylonitrile               |        |        |     |    |        |       |       |    |                  |          |       |        |    |
| VOLATILES          | Allyi chloride              |        |        |     |    |        |       |       |    |                  |          |       |        |    |
| VOLATILES          | Benzene                     | 0.006  | 1      | ۲   | U  | 0.006  | 1     | <     | U  |                  | 0.00552  | 1     | U      | Ų  |
| VOLATILES          | Bromobenzens                |        |        |     |    |        |       |       |    |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Bromochloromethane          |        |        |     |    |        |       |       |    |                  | 0,00552  | 1     | U      | U  |
| VOLATILES          | Bromodichloromethane        | 0.006  | 1      | <   | U  | 0.006  | 1     | <     | U  |                  | 0,00552  | 1     | υ      | U  |
| VOLATILES          | Bromoform                   | 0.006  | 1      | <   | U  | 0.006  | 1     | <     | U  |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Bromomethane                | 0.029  | 1      | <   | U  | 0.03   | 1     | <     | U  |                  | 0.011    | 1     | U      | Ų  |
| VOLATILES          | Carbon disulfide            | 0.324  | 1      |     |    | 0.066  | 1     |       |    |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Carbon tetrachloride        | 0.006  | 1      | <   | U  | 0.006  | 1     | <     | U  |                  | 0.00552  | 1     | Ų      | υ  |
| VOLATILES          | Chlorobenzene               | 0.006  | 1      | <   | U  | 0,006  | 1     | <     | U  |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Chloroethane                | 0.029  | 1      | <   | U  | 0.03   | 1     | <     | U  |                  | 0.011    | 1     | U      | U  |
| VOLATILES          | Chloroform                  | 0.008  | 1      | <   | U  | 0,006  | 1     | <     | U  |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Chloromethane               | 0.029  | 1      | <   | U  | 0.03   | 1     | <     | U  |                  | 0.011    | 1     | Ų      | U  |
| VOLATILES          | Chloroprene                 |        |        |     |    |        |       |       |    |                  |          |       |        |    |
| VOLATILES          | cis-1,2-Dichloroethene      |        |        |     |    |        |       |       |    |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | cis-1.3-Dichloropropene     | 0.006  | 1      | <   | IJ | 0.006  | 1     | <     | U  |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Dibromochloromethane        | 0.006  | 1      | <   | U  | 0.006  | 1     | <     | U  |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Dibromomethane              |        |        |     |    |        |       |       |    |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Dichlorodifluoromethane     |        |        |     |    |        |       |       |    |                  | 0.011    | 1     | U      | U  |
| VOLATILES          | Ethyl methacrylate          |        |        |     |    |        |       |       |    |                  |          |       |        |    |
| VOLATILES          | Ethylbenzene                | 0.006  | 1      | <   | U  | 0.006  | 1     | <     | U  |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Hexachlorobutadiene         |        |        |     |    |        |       |       |    |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | IODOMETHANE                 |        |        |     |    |        |       |       |    |                  |          |       |        |    |
| VOLATILES          | ISOBUTYL ALCOHOL            |        |        |     |    |        |       |       |    |                  |          |       |        |    |
| VOLATILES          | Isopropylbenzene            |        |        |     |    |        |       |       |    |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | m,p-Xylenes                 |        |        |     |    |        |       |       |    |                  | 0.00552  | 1     | υ      | U  |
| VOLATILES          | Methacrylonitrile           | 1      |        |     |    |        |       |       |    |                  |          |       |        |    |
| VOLATILES          | Methyl isobutyl ketone      | 0.059  | 1      | <   | U  | 0.06   | 1     | <     | U  |                  | 0.011    | 1     | Ų      | U  |
| VOLATILES          | METHYL METHACRYLATE         |        |        |     |    |        |       |       |    |                  |          |       |        |    |
| VOLATILES          | Methylene chloride          | 0.006  | 1      | <   | U  | 0.003  | 1     | <     | U  |                  | 0.00552  | 1     | υ      | ป  |
| VOLATILES          | Naphthalene                 |        |        |     |    |        |       |       |    |                  | 0.011    | 1     | U      | Ų  |
| VOLATILES          | n-BUTYLBENZENE              |        |        |     |    |        |       |       |    |                  | 0.00552  | 1     | υ      | U  |
| VOLATILES          | n-PROPYLBENZENE             |        |        |     |    |        |       |       |    |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Pentachloroethane           |        |        |     |    |        |       |       |    |                  |          |       |        |    |
| VOLATILES          | p-ISOPROPYLTOLUENE          |        |        |     |    |        |       |       |    |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Propionitrile               |        |        |     |    |        |       |       |    |                  |          |       |        |    |
| VOLATILES          | sec-BUTYLBENZENE            |        |        |     |    |        |       |       |    |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Sivrene                     | 0.006  | 1      | <   | U  | 0.006  | 1     | <     | U  |                  | 0.00552  | 1     | υ      | U  |
| VOLATILES          | tert-BUTYLBENZENE           |        |        |     |    |        |       |       |    |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Tetrachloroethene           | 0.006  | 1      | <   | U  | 0.006  | 1     | <     | U  |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Toluene                     | 0.006  | 1      | <   | Ū  | 0.006  | 1     | <     | Ū  |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | trans-1,2-Dichloroethene    |        |        |     | -  |        |       |       | -  |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | trans-1,3-Dichloropropene   | 0.006  | 1      | ۲   | Ū  | 0.006  | 1     | <     | U  |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | trans-1,4-Dichloro-2-butene | 1      |        |     | -  |        |       |       |    |                  |          |       |        |    |
| VOLATILES          | Trichloroethene             | 0.006  | 1      | <   | U  | 0.008  | 1     |       |    |                  | 0.00552  | 1     | U      | U  |
| VOLATILES          | Trichlorofluoromethane      |        |        |     |    |        |       |       |    |                  | 0.011    | 1     | U      | U  |

# share Environmental 12396

Data Evaluation Report -Chemical Concentrations in Soli Associated with LHAAP-35/36 Sumps

Table 3-125

| Concentrations of | Chemicals in | Soil Samples / | Associated w | vith WR Sump | 019 |
|-------------------|--------------|----------------|--------------|--------------|-----|
|-------------------|--------------|----------------|--------------|--------------|-----|

| [SUMP] = WRSUMP019 |                           |        |        |     |    |        |        |      |    |            |        |     |           |       |        |    |
|--------------------|---------------------------|--------|--------|-----|----|--------|--------|------|----|------------|--------|-----|-----------|-------|--------|----|
| LOCATION _CODE     | LOCATION _CODE            |        | R\$19- | 01  |    | LH-V   | VRS1   | 9-01 |    | WRS19-     | SB01   |     | W         | RS19  | -SB01  |    |
| SAMPLE_NO          |                           | LH-WF  | \$19-0 | 1_1 |    | LH-W   | RS19   | 01_2 |    | WRS19-S    | 802-01 | l i | WR        | S19-( | SB02-0 | 2  |
| SAMPLE_DATE        |                           |        | 5/1993 |     |    | 6/     | 26/199 | 93   |    | 9/25/2     | 006    |     | 9/25/2006 |       |        |    |
| DEPTH              |                           | 0.5    | 1.5 F  | 1   |    | 3      | • 4,5  | Ft   |    | 05         | Ft     |     |           | 4.5 • | 5 Ft   |    |
| SAMPLE_PURPOSE     |                           | F      | REG    |     |    |        | REG    |      |    | RE(        | 3      |     |           | RB    | G      |    |
| Test Group         | Parameter (Units = mg/kg) | Result | DIĻ    | LQ  | VQ | Result | DIL    | LQ   | VQ | Result DIL | LQ     | VQ  | Result i  | )IL   | LQ     | VQ |
| VOLATILES          | Vinyl acetate             |        |        |     |    |        |        |      |    |            |        |     | 0.011     | 1     | Û      | U. |
| VOLATILES          | Vinyl chloride            | 0,029  | 1      | <   | U  | 0.03   | 1      | <    | υ  |            |        |     | 0.011     | 1     | U      | U  |
| VOLATILES          | Xylenes, Total            | 0.006  | 1      | <   | U  | 0.006  | 1      | <    | U  |            |        |     |           |       |        |    |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc. 00066397

Table 3-128 Concentrations of Chemicals in Soil Samples Associated with WR Sump 021

| [SUMP] = WESUMP021        |                            |                  |                  |                  |                      |                    |                          |                  |                  |                  |
|---------------------------|----------------------------|------------------|------------------|------------------|----------------------|--------------------|--------------------------|------------------|------------------|------------------|
| LOCATION _CODE            |                            | LH5-2-06         | LH-WRS21-01      | LH-WRS21-01      | STEP-465S06          | STEP-46SS06        | WRS021-S801              | W95021-5801      | WRS021-SB02      | WRS021-SB02      |
| SAMPLE_NO                 |                            | LH5-2-06         | LH-WRS21-01_1    | LH-WRS21-01_2    | 465506(0+0_5)+020312 | 46SS06(1-2)-020312 | WRS021-SB01-01           | WRS021-SB01-02   | WRS021-SB02-01   | WRS021-SB02-02   |
| SAMPLE_DATE               |                            | 1/10/1995        | 8/8/1993         | 8/8/1993         | 3/12/2002            | 3/12/2002          | 9/26/2006                | 9/26/2006        | 9/26/2005        | 9/26/2006        |
| DEPTH                     |                            | 0 - 0.5 Ft       | 0,5 - 1 FI       | 3,5 - 4 Fi       | 0 - 0.5 FI           | 1 - 2 FI           | 5 - 5 Ft                 | 45-45Ft          | .5 · 5 Ft        | 5 - 5 F1         |
| SAMPLE_PURPOSE            |                            | REG              | REG              | REG              | REG                  | REG                | REG                      | AEG              | REG              | REG              |
| Test Group                | Parameter (Units = mg/kg)  | Result DIL LO VQ | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO     | Result DIL LO VO   | Result DIL LO VO         | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO |
| EXPLOSIVES                | 1.3.5-Trinitrobenzene      | 0.23 1 < U       |                  |                  |                      |                    | 0.24 1 U U               | 0.249 1 U U      | 0.248 1 1/ 1/    | 0.243 1 U U      |
| EXPLOSIVES                | 1,3-Dinitrobenzene         | 0.23 1 < U       |                  |                  |                      |                    | 0.24 1 U U               | 0.249 1 11 11    | 0.248 1 11 11    | 0.243 1 11 11    |
| EXPLOSIVES                | 2.4.5-Trinitrololuene      | 0.23 1 < 1       |                  |                  |                      |                    | 0.24 1 15 61             | 0.269 1 11 11    | 0.248 1 1 1      | 0.243 1 1        |
| EXPLOSIVES                | 2.4-Dinitrotoluene         | 0.23 1 < U       | 0.33 1 < U       | 0.33 1 2 11      |                      |                    | 0.24 1 11 11             | 0.249 1 11 11    | 0.248 ( 1) ()    | 0.243 1 11 14    |
| EXPLOSIVES                | 2.6-Dinitrotoluene         | 0.25 1 < U       | 0.33 1 × U       | 0.33 1 < 1       |                      |                    | 0.25 1 11 11             | 0.259 1 11 11    | 0.257 1 11 11    | 0.252 ( 1) ()    |
| EXPLOSIVES                | 2-Amino-4.6-dinitrotoluene |                  | 0.00             |                  |                      |                    | 0.95 1 11 11             | 0.250 1 10 10    | 0.257 1 11 11    | 0,252 + 1 12     |
| EXPLOSIVES                | 4-Amino-2 6-dinitratoluene | 0.49 1 - 11      |                  |                  |                      |                    | 0.25 1 11 11             | 0.250 1 11 115   | 0.257 1 11 11    | 0.202 1 0 00     |
| EXPLOSIVES                | HMX                        |                  |                  |                  |                      |                    | 0.23 I U 00<br>242 I U U | 210 1 11 11      | 540 4 16 8       | 244 1 11 11      |
| EXPLOSIVES                | m.Nitrajoluene             |                  |                  |                  |                      |                    |                          |                  |                  | 2.19 1 U U       |
| EXELOSIVES                | Nimberges                  | 0.51 1 4 0       |                  |                  |                      |                    | 0.24 1 0 0               | 0.249 1 0 0      | 0.246 1 0 0      | 0.243 1 0 0      |
| EVALOSIVES                | o. Mitotoluono             | 0.25 1 2 0       |                  |                  |                      |                    | 0.25 1 0 0               | 0.259 1 0 0      | 0.25/ 1 0 0      | 0.252 1 0 0      |
| EVELOSIVES                | n Miretoluene              | 0.57 1 4 0       |                  |                  |                      |                    | 0.24 1 0 00              | 0.249 1 U UUL    | 0.248 ) U UJ.    | 0.243 1 0 0.0    |
| EVELOGINES                | privindiodanie             | 2.9 ( < 0        |                  |                  |                      |                    | 0.24 1 0 00              | 0.249 1 0 0.0    | 0.248 1 0 00     | 0.243 1 0 03     |
| EXPLOSIVES                | RUA                        |                  |                  |                  |                      |                    | 0.962 1 U U              | 0.995 1 U U      | 0.99 1 U U       | 0.971 1 U U      |
| EXPLUSIVES                | i eiryi                    | 0.72 1 2 0       |                  |                  |                      |                    | 0.625 1 0 0              | 0.647 1 U U      | 0.644 1 U U      | 0.631 1 U U      |
| METALS                    | Auminum                    | 32800            | 7300 1 D         | 8730 1 0         |                      |                    | 7780 1                   | 16200 1          | 3320 1           | 1100 1           |
| METALS                    | Animony                    | 25 i < UJ        | 51 < 0           | 51 < 0           |                      |                    | 0.118 1 U U              | 0.115 1 U U      | 0.0939 1 J J     | 0.118 1 U U      |
| METALS                    | Arsenic                    | 8.7 \$ J         | 3 1              | 2.22             |                      |                    | 3,49 1                   | 2.74 1           | 4.47 1           | 1.62 1           |
| METALS                    | Banum                      | 266 1            | 35.9 1           | 27.4 1           |                      |                    | 59.8 1                   | 43.7 1           | 176 1            | 36.7 1           |
| METALS                    | Beryllum                   |                  |                  |                  |                      |                    | 0.376 1 J J              | 0.318 1 J J      | 0.235 J J        | 0.245 1 J J      |
| METALS                    | Cadmium                    | 2.5 t < U        | 11 < U           | 11 < U           |                      |                    | 0.434 1                  | 0.0568 1 J J     | 4.7 1            | 0.0935 1 J J     |
| METALS                    | Calcium                    | 1410 1           | 534 1            | 471 1            |                      |                    | 6260 1                   | 1480 1 J         | 47000 10         | 379 1            |
| METALS                    | Chromium                   | 60.9 1           | 11.6 1           | 8 1              |                      |                    | 20.1 1                   | 15.4 1 J         | 46 t             | 12,3 1           |
| MĘTALS                    | Çobalt                     | 9.4 1            | 21 < U           | 2 1 < U          |                      |                    | 2,7 1                    | 2.05 1 J         | 1,34 1           | 1.77 1           |
| METALS                    | Copper                     | 274 1            | 2.2 1            | 3.4 1            |                      |                    | 5.44 1                   | 4.07 1           | 29.9 1           | 4.08 1           |
| METALS                    | Izen                       | 18200 1          | 16000 1 D        | 11000 1 D        |                      |                    | 24900 1                  | 15300 1 J        | 21100 1          | 12200 1          |
| METALS                    | Lead                       | 104 1            | 4.8 1            | 5.2 1            |                      |                    | 19.1 1                   | 5.72 1           | 109 10           | 7.45 1           |
| METALS                    | Magnesium                  | 673 1            | 271 1            | 437 1            |                      |                    | 519 1                    | 680 1 J          | 501 1            | 571 \$           |
| METALS                    | Manganese                  | 134 1            | 52.9 1           | 19 1             |                      |                    | 120 1                    | 18.7 1 J         | 129 1            | 36.6 1           |
| METALS                    | Mercury                    | 0.26 1 < U       | 0.1 1 < U        | 0,1 1 < U        |                      |                    | 0.0231 1 J J             | 0.0196 1 J J     | 0.0887 1 J J     | 0.0227 1 J J     |
| METALS                    | Nickel                     |                  |                  |                  |                      |                    | 6.43 1                   | 6.93 1 J         | 3.66 1           | 4,99 1           |
| METALS                    | Potassium                  | 607 1            | 340 1            | 390 1            |                      |                    | 453 1                    | 582 1            | 248 1            | 562 1            |
| METALS                    | Selenium                   | 0.5 1 < U        | 0.5 1 < U        | 0.5 1 < U        |                      |                    | 0.188 1 J J              | 0.231 1          | 0.282 1          | 0.235 1 U U      |
| METALS                    | Silver                     | 2.5 1 < ∐        | 11 < U           | 11 < 1           |                      |                    | 1.72 1 U U               | 1.72 1 U U       | 1,72 1 U U       | 1.69 1 U U       |
| METALS                    | Sodium                     |                  |                  |                  |                      |                    | 21 1 J J                 | 23.7 1           | 125 1            | 20.9 J J         |
| METALS                    | Strontium                  | 25 1 < U         | 21,5 1           | 10.5 1           |                      |                    |                          |                  |                  |                  |
| METALS                    | Thallium                   | 125 1 < U        |                  |                  |                      |                    | 0.0365 1                 | 0.051 1          | 0.018 1 J J      | 0.0394 1         |
| METALS                    | Vanadium                   |                  |                  |                  |                      |                    | 31,9 1                   | 29.5 1           | 25.3 1           | 24.3 1           |
| METALS                    | Zinc                       | 4120 1           | 14.9 1           | 9.5 1            |                      |                    | 77.1 1                   | 19.4 1           | 1140 10          | 27.2 1           |
| PERC                      | Perchlorate                |                  |                  |                  | 0.0476 1 U U         | 0.0543 1 U U       |                          |                  |                  |                  |
| RANGE_ORGANICS            | Carbon Range C12-C28       |                  |                  |                  |                      |                    | 37 1 J B                 | 60.8 1 U U       | 135 1 B          | 39.2 1 J B       |
| RANGE_ORGANICS            | CARBON RANGE C28-C35       |                  |                  |                  |                      |                    | 63.6 1                   | 60.8 1 1 1       | 852 1            | 58.6 1           |
| RANGE ORGANICS            | Carbon Range C6-C12        |                  |                  |                  |                      |                    | 581 1 1 1                | 60.8 1 11 11     | 60 1 11 11       | 58.6 1 11 11     |
| SEMIVOLATILES             | 1,2,4 Trichlorobenzene     | s s e U          | 0.33 1 < U       | 0.33 1 2 1       |                      |                    | 1.91 10 11 11            | 0.212 1 11 11    | 195 20 IL LI     |                  |
| SEMIVOLATILES             | 1.2-Dichlorobenzane        | t t e U          | 0.33 1 4 1       | 0.33 5 2 11      |                      |                    | 101 10 11 11             | 0.212 1 11 11    | 2.05 20 11 11    | 0.105 / 0 0      |
| SEMIVOLATILES             | 1.3-Dichlorohenzene        | 1 1 2 1          | 0.33 1 - 1       | 0.33 1 - 11      |                      |                    |                          | 0.212 1 0 0      | 3.33 20 0 0      | 0.195 1 0 0      |
| SEMIVOLATILES             | 1 4-Dichlorohenzene        |                  | 0.23 5 4 11      | 0.00 1 2 0       |                      |                    |                          | 0.212 1 0 0      | 3.95 20 0 0      | 0.195 1 0 0      |
| SEMIVOLATILES             | 2.4.5-Trichlorophenol      | 5 1 4 1          | 166 1 1          | 1.65 1           |                      |                    | 1.81 10 0 0              |                  | 3.95 20 0 0      |                  |
| SEMMOI ATHES              | 2.4.6.Trichiorophonal      |                  | 0.52 1 2 1       | 1.60 K C U       |                      |                    | 1,91 10 0 0              | 0.212 1 0 0      | 3.95 20 U U      | 0.195 1 0 0      |
| SEMINOLATILES             | 2 4-Dichloronhenol         | 1 F C U          | 0.23 F C U       | 0.33 1 C U       |                      |                    | 1.91 10 U U              | 0.212 1 U U      | 3.95 20 U U      | 0.195 1 U U      |
| SEMMON ATHES              | 2 d-Dimethylohanet         |                  | 0.00 i < U       | 0.33 + < 0       |                      |                    | 1.91 10 U U              | 0.212 1 0 0      | 3,95 20 U U      | 0.195 1 U U      |
| CELIAROLATILES            | 2.4 Divitesharal           |                  | 0.33 I K U       | 0.33 1 < U       |                      |                    | 1.91 10 U U              | 0.212 1 U U      | 3.95 20 U U      | 0.195 1 U U      |
| CONTRACTOR AND CONTRACTOR | 2,4-Dinkrophenol           | 51 < U           | 1.65 î < Ú       | 1.65 1 < 0       |                      |                    | 9.57 10 U U              | 1.06 I U U       | 19.7 20 U U      | 0.974 1 U U      |
| DEMIVELAHLES              |                            | 1 1 < U          |                  |                  |                      |                    | 1.91 10 U U              | 0.212 1 U U      | 3.95 20 U U      | 0.195 1 U U      |
| SEMIVOLATILES             | 2.6-Untirololuena          | 1120             |                  |                  |                      |                    | 1,91 10 U U              | 0.212 1 U U      | 3.95 20 U U      | 0.195 1 U U      |
| SEMIVOLATILES             | 2-Chloronaphthalene        | 11 < U           | 0.33 1 < U       | 0.33 1 < U       |                      |                    | 1.91 10 U U              | 0.212 1 U U      | 3.95 20 U U      | 0.195 1 U U      |
| SEMIVOLATILES             | 2-Chlorophenol             | 1 1 < U          | 0.33 1 < U       | 0.33 1 < U       |                      |                    | 1.91 10 U U              | 0.212 1 U U      | 3.95 20 U U      | 0.195 1 U U      |
| SEMIVOLATILES             | 2-Methylnaphthaiene        | 1 1 < U          | 0.33 1 < U       | 0.33 1 < U       |                      |                    | 1.91 10 U U              | 0.212 1 U U      | 3.95 20 U U      | 0.195 1 U U      |
| SEMIVOLATILES             | 2-Methylphenol             | 1 1 < U          | 0.33 1 < U       | 0,33 1 < U       |                      |                    | 1.91 10 U U              | 0.212 1 U U      | 3.95 20 U U      | 0.195 1 11 17    |



Table 3-126 Concentrations of Chemicals in Soll Samples Associated with WR Sump 021

| SUMPI = WRSUMP021            |   |                 |                  |                   |                        |                    |                  |                 |                           |                         |
|------------------------------|---|-----------------|------------------|-------------------|------------------------|--------------------|------------------|-----------------|---------------------------|-------------------------|
| LOCATION _CODE               |   | LHS-2-06        | LH-WRS21-01      | LH-WRS21-01       | STEP-46SS06            | STEP-46SS06        | WRS021-\$801     | WRS021-SB01     | WRS021-SB02               | WRS021-SB02             |
| SAMPLE_NO                    |   | LHS-2-06        | LH-WR521-01_1    | LH-WR521-01_2     | 46\$\$06(0-0_5)-020312 | 46SS06(1-2)-020312 | WR\$021-\$801-01 | WR\$021-SB01-02 | WRS021-SB02-01            | WRS021-SB02-02          |
| SAMPLE_DATE                  |   | 1/10/1995       | B/B/1993         | 8/8/1993          | 3/12/2002              | 3/12/2002          | 9/26/2006        | 9/26/2006       | 9/26/2006                 | 9/26/2006               |
| DEPTH                        |   | 0 - 0.5 Ft      | 0.5 - 1 Ft       | 3.5 - 4 Ft        | 0 • 0.5 Ft             | 1 - 2 FI           | _5 · _5 FI       | 4_5 • 4_5 Fl    | _5 · _5 FI                | 5+5 Ft                  |
| SAMPLE_PURPOSE               |   | REG             | REG              | REG               | REG                    | REG                | REG              | REG             | REG<br>David Dilla LO, NO | HEG<br>Denvil Dil LO VO |
| Test Group                   | Parameter (Units = mg/kg)               | Resul DIL LO VO | Result DIL LO VO | Result DIL LQ VQ  | Result DIL LO VO       | Result DRL LO VO   | Hesuit Dil Lu Vu |                 | 19.7 20 II II             |                         |
| SEMPOLATILES                 | 2-Mirogning                             | 5 1 < U         | 1.65 / < U       | 1.60 4 4 4        |                        |                    |                  | 0.00 1 0 0      | 19,7 20 0 0               | 0.195 1 1 1             |
| SEMIVULATILES                | 2-watoprierus<br>2-21 Dishtember sidine | 1 I K U         |                  | 0.03 1 4 0        |                        |                    | 2.92 10 11 11    | 0 0 1 212.0     | 7.89 20 11 11             | 0.39 1 14 11            |
| SEMINOLATILES                | 2-bittoppillon                          | 5 1 2 11        | 165 1 4 11       | 165 1 2 1         |                        |                    | 957 10 11 11     | 106 1 11 11     | 197 20 U U                | 0.974 1 U U             |
| SEMIVOLATILES                | 4 A-Dinitza, 2-methylphenol             | 5 5 4 11        | 165 1 4 11       | 1.65 1 4 1        |                        |                    | 9,57 10 U U      | 1.06 1 U U      | 19.7 20 U U               | 0.974 1 U U             |
| SEMIVOLATILES                | 4-Bromoohaovi ohenvi eiher              | 1 1 e U         | 0.33 1 < 0       | 0.33 1 < U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | 4-Chioro-3-methylohenoi                 | 5 5 F U         | 0.65 1 × U       | 0.65 1 < U        |                        |                    | 1.91 10 U U      | 0.212 I U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | 4-Chloroaniline                         | 11 e U          | 0.65 1 < U       | 0.65 1 < U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3,95 20 U U               | 0.195 f U U             |
| SEMIVOLATILES                | 4-Chlorophenyl phenyl ether             | 1 1 e U         | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1,91 10 U U      | 0.212 1 U U     | 3,95 20 U U               | 0.195 t U U             |
| SEMIVOLATILES                | 4-Methylphenol                          | 11 < U          | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1,91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | 4-Nitroaniline                          | 5 1 < U         | 1.65 1 < U       | 1.65 1 < U        |                        |                    | 9.57 10 U U      | 1.06 1 U U      | 19.7 20 U U               | 0.974 1 U U             |
| SEMIVOLATILES                | 4-Nitraphenol                           | 51 < U          | 1.65 1 < U       | 1,65 1 < U        |                        |                    | 9.57 10 U U      | 1.06 1 U U      | 19.7 20 U U               | 0.974 1 U U             |
| SEMIVOLATILES                | Acenaphthene                            | 11 < 0          | 0.33 i < U       | 0.33 1 < U        |                        |                    | 1.91 10 U U      | 0,212 1 U U     | 3,95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Acenaphthylene                          | 1 1 < 0         | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Anihracene                              | 1 1 e U         | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1.91 10 U U      | 0.212 I U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Benzo(a)anihracene                      | 1 1 < U         | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Benzo(a)pyrana                          | 1 1 < U         | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1,91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0,195 1 U U             |
| SEMIVOLATILES                | Benzó(b)fluoranthene                    | 1 1 e U         | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1.91 10 U U      | 0.212 I U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Benzo(ghi)perylene                      | 1 1 < V         | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Benzo(k)lluoranthene                    | 11 < U          | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3,95 20 U U               | 0,195 1 U U             |
| SEMIVOLATILES                | Benzoic Acid                            | 51 < U          | 1.65 1 < U       | 1.65 1 < U        |                        |                    | 9.57 10 U UJ     | 1.06 1 U U      | 19,7 20 U UJ              | 0.974 1 0 00            |
| SEMIVOLATILES                | Benzyi Alcohol                          | 11 < U          | 0.65 1 < U       | 0,65 1 < U        |                        |                    | 1.91 10 U U      | 0.212 1 0 0     | 3.95 20 0 0               | 0.195 1 0 0             |
| SEMIVOLATILES                | bis(2-Chloroethoxy)methane              | 1 1 < U         | 0.33 1 < U       | 0.33 1 < 0        |                        |                    | 1.91 10 0 0      | 0.212 1 0 0     | 3.95 20 U U               | 0.195 1 0 0             |
| SEMIVOLATILES                | bis(2-Chloroethyl)elher                 | 1 1 < U         | 0.33 1 < U       | 0.33 1 < 0        |                        |                    | 1.91 10 0 0      |                 | 3.95 20 0 0               | 0.195 1 0 0             |
| SEMIVOLATILES                | bis(2-Chioroisopropy)ether              | 11<             | 0,33 1 < 0       | 0.33 1 < U        |                        |                    |                  | 0.212 1 0 0     | 3,93 20 0 0               | 0.195 1 0 0             |
| SEMIVOLAHLES<br>SEMIVOLAHLES | Dist2-Envirexvijphinalate               | U.H 1 J         | 1.12 1           | 0.33 1 < 0        |                        |                    |                  | 0.212 1 0 0     | 3.95 20 11 11             | 0.195 1 11 11           |
| SEMIVOLANCES                 | Obsycene                                | 1 1 4 1         | 0.33 1 4 11      | 0.03 1 < 0        |                        |                    | 191 10 11 11     | 0.212 1 11 11   | 3.95 20 U U               | 0.195 1 1 1             |
| SEMIVOLATILES                | Dibaozo/a bianthracene                  | 1 1 2 1         | 0.33 1 2 0       | 0.33 1 4 0        |                        |                    | 191 10 0 0       | 0.212 1 1 1     | 3.95 20 U U               | 6.195 1 U U             |
| SEMIVOLATILES                | Dibenzofiiran                           | 1120            | 0.33 t < U       | 0.33 1 c U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Diethyl phihalaie                       | 11 < 0          | 0.33 t < U       | 0.33 1 < U        |                        |                    | 1.91 to U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Dimathyl phthalate                      | 11 < 1          | 0,33 1 < U       | 0.33 t < U        |                        |                    | 2.7 10           | 0.212 I U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | di-n-Butyl ohthalate                    | 11 < U          | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | di-n-Octyl phthalate                    | 1 1 < U         | 0.33 i < U       | 0.33 1 < U        |                        |                    | 1.91 FOU U       | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Fluoranthene                            | 11 < U          | 0.33 1 < U       | 0.33 f < U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Fluorena                                | 1 1 < U         | 0.33 1 < U       | 0.33 f < U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Hexachlorobenzene                       | 11 < U          | 0.33 1 < U       | 0.33 f < U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3,95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Hexachlorobuladiene                     | 11 < U          | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Hexachlorocyclopentadiene               | 11 < U          | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Hexachioroelnane                        | 11 < U          | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1,91 10 0 0      | 0.212 1 0 0     | 3.95 20 0 0               | 0.195 1 0 0             |
| SEMIVOLATILES                | indeno(1.2.3-cd)pyrene                  | 1140            | 0.33 1 < 0       | 0.33 1 < 0        |                        |                    | 1.91 10 0 0      | 0.212 1 0 0     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIYOLAHUSS                 | Nocitina States                         | 1120            | 0.33 1 4 0       | 0.33 1 < 0        |                        |                    | 1.91 10 0 0      |                 | 3.95 20 0 0               | 0.195 1 0 0             |
| SEMIVOLATILES                | Nitrobenzene                            | 1120            | 0.33 1 < U       | 0.33 F < U        |                        |                    |                  |                 | 3.95 20 0 0               | 0.195 1 0 0             |
| SEMINOLATILES                | n-Nitroso-di-o-oronylamine              | 1 1 4 1         | 0.33 1 < 0       | 0.33 ( ~ 1)       |                        |                    | 1.01 10 0 0      | 0.212 1 0 0     | 3.95 20 0 0               | 0.195 1 10 10           |
| SEMIVOLATILES                | n-Nitrosodiobenvlamine                  | 1 1 2 1         | 0.33 1 4 1       | 0.33 ( 2 1)       |                        |                    | 191 10 11 11     | 0.212 t U U     | 3.95 20 U U               | 0.195 LUU               |
| SEMIVOLATILES                | Pentachlorophenol                       | 5120            | 1.65 1 < U       | 1.65 t < U        |                        |                    | 9.57 10 10 10    | 1.06 1 U U      | 19.7 20 U U               | 0.974 1 U U             |
| SEMIVOLATILES                | Phenanthreas                            | 1120            | 0.33 1 2 U       | 0.33 1 <b>∠</b> U |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| SEMIVOLATILES                | Phenol                                  | 1 1 × U         | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1,91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0,195 1 U U             |
| SEMIVOLATILES                | Pyrene                                  | 11 e U          | 0.33 1 < U       | 0.33 1 < U        |                        |                    | 1.91 10 U U      | 0.212 1 U U     | 3.95 20 U U               | 0.195 1 U U             |
| VOLATILES                    | 1,1,1,2-Tetrachloroethane               | 0.03 1 e U      |                  |                   |                        |                    |                  | 0.00564 1 U U   |                           | 0.00484 1 U U           |
| VOLATILES                    | 1.1.1-Trichloroethane                   | 0.015 î < U     | 0.005 1 < U      | 0.005 1 < U       |                        |                    |                  | 0.00564 1 U U   |                           | 0.00484 1 U U           |
| VOLATILES                    | 1.1.2.2-Tetrachioroethane               | 0.015 1 < U     | 0.005 1 < U      | 0.005 1 < U       |                        |                    |                  | 0.00564 1 U U   |                           | 0.00484 1 Ų Ų           |
| VOLATILES                    | 1,1,2-Trichloroelhane                   | 0.015 1 < U     | 0.005 1 < U      | 0.005 1 < U       |                        |                    |                  | 0.00564 1 U U   |                           | 0.00484 1 U U           |
| VOLATILES                    | 1.1-Dichloroethane                      | 0.015 1 < U     | 0,005 t < U      | 0.005 1 < U       |                        |                    |                  | 0.00564 1 U U   |                           | 0.00484 1 U U           |
| VOLATILES                    | 1.1-Dichloroethane                      | 0.015 1 < U     | 0.005 1 < U      | 0.005 1 < U       |                        |                    |                  | 0.00564 1 U U   |                           | 0.00484 1 U U           |
| VOLATILES                    | 1.1-Dichloropropene                     |                 |                  |                   |                        |                    |                  | 0.00564 1 U U   |                           | 0.00484 1 U U           |





Table 3-126 Concentrations of Chemicals in Soil Samples Associated with WR Sump 021

| (SUMP) = WRSUMP021 |                                |                  |                  |                  |                      |                    |                  | MERCANI CRAI      | MD2021_5202    | WBS021-SB02     |
|--------------------|--------------------------------|------------------|------------------|------------------|----------------------|--------------------|------------------|-------------------|----------------|-----------------|
| LOCATION _CODE     |                                | LHS-2-06         | LH-WRS21-01      | LH-WHS21-01      | STEP-46SSD6          | STEP-46S506        | WRS021-SB01      | WH5021-5001       | WPG021-SB02-01 | WBS021-SB02-02  |
| SAMPLE_NO          |                                | LHS-2-06         | LH-WBS21-01_1    | LH-WRS21-01_2    | 46SS06(0-0_5)-020312 | 465506(1-2)-020312 | WHS021-SB01-01   | WHQU21-0DU1-02    | 0/26/2006      | 9/26/2008       |
| SAMPLE_DATE        |                                | 1/10/1995        | 8/8/1993         | 8/8/1993         | 3/12/2002            | 3/12/2002          | 9/26/2006        | 9/20/2000         | 5/20/2000      | 5.55)           |
| DEPTH              |                                | 0 - 0.5 Ft       | 0.5 - 1 Ft       | 3.5 - 4 Ft       | 0 - 0.5 Ft           | 1 - 2 Ft           | _5 · _5 FI       | 4_5-4_5-1         | _3*_3F1        | PEG             |
| SAMPLE_PURPOSE     |                                | REG              | REG              | REG              | REG                  | REG                | REG              | HEG NO. NO.       |                |                 |
| Test Group         | Parameter (Units = mg/kg)      | Result DIL LO VO | Result DIL LO VO | Result DIL LO VO | Result DIL LQ VQ     | Result DIL LO VO   | Result DIL LQ VQ | Hestit Dit, La Va |                | 0.00494 1 10 11 |
| VOLATILES          | 1.2,3-Trichlorobenzene         |                  |                  |                  |                      |                    |                  | 0.00564 1 0 0     |                | 0.00484 5 11 13 |
| VOLATILES          | 1.2.3-Trichloropropane         | 0.03 1 < U       |                  |                  |                      |                    |                  | 0.00564 1 0 0     |                | 0.00494 1 H H   |
| VOLATILES          | 1.2.4 Trichlorobenzene         |                  |                  |                  |                      |                    |                  | 0.00564 1 0 0     |                | 0.00484 1 11 11 |
| VOLATILES          | 1,2,4-Trimethylbenzene         |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 0 0   |
| VOLATILES          | 1,2-Dibremo-3-chloroprepane    | 0.06 1 < U       |                  |                  |                      |                    |                  | 0.00564 1 0 0     |                | 0.00484 1 1 1   |
| VOLATILES          | 1.2-Dibromoethane              | 0.06 1 < U       |                  |                  |                      |                    |                  | 0.00564 1 0 0     |                | 0.00484 1 0 0   |
| VOLATILES          | 1,2-Dichlorobenzene            |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 0 0   |
| VOLATILES          | 1.2-Dichloroethane             | 0.015 1 < U      | 0.005 1 < U      | 0.005 1 < 간      |                      |                    |                  | 0.00564 1 U U     |                | 0.004d4 1 0 0   |
| VOLATILES          | 1,2-Dichloroethane             | 0.015 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      | •                  |                  |                   |                | 0.00404 4 11 11 |
| VOLATILES          | 1,2-Dichloropropane            | 0.015 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 0 0   |
| VOLATILES          | 1,2-Dimethylbenzene (o-Xylana) |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 0 0   |
| VOLATILES          | 1.3.5 Trimethylbenzene         |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 0 0   |
| VOLATILES          | 1.3-Dichlorobenzene            |                  |                  |                  |                      |                    |                  | 0,00564 1 U U     |                | 0.00484 1 0 0   |
| VOLATILES          | 1.3-Dichloropropane            |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0,00484 1 0 0   |
| VOLATILES          | 1.4-Dichlorobenzene            |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 0 0   |
| VOLATILES          | 2.2-Dichloropropane            |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATUES           | 2-Butanone                     | 0.03 1 < U       | 0.05 1 < U       | 0.05 1 < U       |                      |                    |                  | 0.0113 1 U U      |                | 0,00968 1 0 0   |
| VOLATILES          | 2. Chloroetovi virtvl ether    | 0.03 1 < U       | 0.01 1 < U       | 0.01 1 < U       |                      |                    |                  | 0.0113 1 U U      |                | 0.00968 1 0 0   |
| VOLATILES          | 2-Chlorotoluene                |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATILES          | 2-Hexanone                     | 0.03 1 < U       | 0.05 t < U       | 0.05 t < U       |                      |                    |                  | 0.0113 1 U U      |                | 0.00968 1 U U   |
|                    | 2-Propenal                     | 1.5 1 < U        |                  |                  |                      |                    |                  |                   |                |                 |
| VOLATILES          | 4-Chiorololuana                |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATILES          | Ácelone                        | 0.3 1 < U        | 0,1 1 < U        | 0.1 1 < U        |                      |                    |                  | 0,0113 1 U U      |                | 0.019 1 Q J     |
| VOLATILES          | Acetonitrile                   | 0.3 1 < U        |                  |                  |                      |                    |                  |                   |                |                 |
| VOLATILES          | Acodonitrile                   | 0.3 1 < U        |                  |                  |                      |                    |                  |                   |                |                 |
| VOLATILES          | Allyi chioride                 | 0.03 1 < U       |                  |                  |                      |                    |                  |                   |                |                 |
|                    | Benzene                        | 0.015 1 < U      | 0.005 t < U      | 0.005 1 < U      |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
|                    | Bromobenzene                   |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATILES          | Bromochioromethape             |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATHES           | Bromodichioremethane           | 0.015 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATILES          | Bromolom                       | 0.015 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATILES          | Bromomethane                   | 0.03 1 < U       | 0.01 1 < U       | 0.01 1 c U       |                      |                    |                  | 0.0113 1 U U      |                | 0.00968 1 U U   |
| VOLATICES          | Carbon disulfide               | 0.015 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATILES          | Carbon tetrachloride           | 0.015 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATILES          | Chlorohenzene                  | 0.015 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |                  | 0.00564 I U U     |                | 0.00484 1 U U   |
| VOLATILES          | Chlomethage                    | 0.03 1 < U       | 0.01 1 < U       | 0.01 1 < U       |                      |                    |                  | 0.0113 1 U U      |                | 0.00968 1 U U   |
| VOLATILES          | Chloroform                     | 0.015 1 < U      | 0.005 t < U      | 0.005 t < U      |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATILES          | Chinromethane                  | 0.03 f < U       | 0.01 1 < U       | 0.01 1 < U       |                      |                    |                  | 0,0113 I U U      |                | 0.00968 1 U U   |
| VOLATILES          | Chloroprene                    | 0.3 t < U        |                  |                  |                      |                    |                  |                   |                |                 |
| VOLATILES          | cis-1.2-Dichloroelhene         |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 0 0   |
| VOLATILES          | cis-1.3-Dichloropropene        | 0.015 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATILES          | Dibromochloromethane           | 0.015 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATILES          | Dibromomethane                 | 0,06 1 < U       |                  |                  |                      |                    |                  | 0,00564 1 U U     |                | 0.00484 1 0 0   |
| VOLATILES          | Dichlorodifluoromethane        | 0.06 t < U       |                  |                  |                      |                    |                  | 0.0113 1 U U      |                | 0.00968 1 0 0   |
| VOLATILES          | Ethvi methacrviate             | 0.05 1 < U       |                  |                  |                      |                    |                  |                   |                |                 |
| VOLATILES          | Ethylbenzene                   | 0.015 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATILES          | Hexachlorobuladiene            |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 0 0   |
| VOLATILES          | ODOMETHANE                     | 0.03 f < U       |                  |                  |                      |                    |                  |                   |                |                 |
| VOLATILES          | ISOBUTYL ALCOHOL               | 6 1 < U          |                  |                  |                      |                    |                  |                   |                |                 |
| VOLATILES          | Isopropylbenzene               |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 0 0   |
| VOLATILES          | m,p-Xylenes                    |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |
| VOLATILES          | Methacryloniinie               | 0.06 1 < U       |                  |                  |                      |                    |                  |                   |                | B 66088 4 11 11 |
| VOLATILES          | Methyl isobutyl ketone         | 0.03 t < U       | 0.05 1 < U       | 0.05 1 < U       |                      |                    |                  | 0.0113 1 U U      |                | 0.00968 1 U U   |
| VOLATILES          | METHYL METHACRYLATE            | 0.06 1 < U       |                  |                  |                      |                    |                  |                   |                |                 |
| VOLATILES          | Melhylana chlorida             | 0.015 1 < U      | 0.005 1 < U      | 0.005 1 < U      |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 0 0   |
| VOLATILES          | Naphthalene                    |                  |                  |                  |                      |                    |                  | 0.0113 1 U U      |                | 0,00968 1 0 U   |
| VOLATILES          | n-BUTYLBENZENE                 |                  |                  |                  |                      |                    |                  | 0.00564 1 U U     |                | 0.00484 1 U U   |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



| [SUMP] = WR\$UMP021<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                             | LHS-2-06<br>LHS-2-06<br>1/10/1995<br>0 - 0,5 Pt<br>REG | LH-WRS21-01<br>LH-WRS21-01_1<br>8/8/1993<br>0.5 - 1 Fi<br>REG | LH-WRS21-01<br>LH-WRS21-01_2<br>B/8/1993<br>3.5 - 4 Ft<br>REG | STEP-465506<br>465506(0-0_5)-020312<br>3/12/2002<br>0 + 0.5 Ft<br>REG | STEP-46SS06<br>46SS06(1-2)-020312<br>3/12/2002<br>1 - 2 Pt<br>REG | WR\$021-\$801<br>WR\$021-\$801:01<br>9/26/2006<br>_55 Fl<br>REG | WRS021-SB01<br>WRS021-SB01-02<br>9/26/2006<br>4_5 - 4_5 Fl<br>REG | WRS021-SB02<br>WRS021-SB02-01<br>9/26/2006<br>_55 Ft<br>REG | WRS021-SB02<br>WRS021-SB02-02<br>9/26/2006<br>5 - 5 Ft<br>REG |
|---|-----------------------------|--|---|---|---|---|---|---|---|---|
| Tesl Group  | Parameter (Units = mg/kg)   | Result DIL LO VO                                       | Result DIL LO VO  | Result DIL LO VO  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LO VO  | Result DIL LO VO  | Result DIL : LO VO  | Hesun DIL LO VO   |
| VOLATILES   | n-PROPYLBENZENE             |  |   |   |   |   |   | 0.00564 1 U U   |   | 0.00484 1 0 0   |
| VOLATILES   | Pentachloroethane           | 0.06 t < U   |   |   |   |   |   |   |   | 0.00404 4 11 11   |
| VOLATILES   | p ISOPROPYLTOLUENE          |  |   |   |   |   |   | 0.00564 1 U U   |   | 0,00484 1 0 0   |
| VOLATILES   | Propionitrile               | 0.15 i < U   |   |   |   |   |   |   |   | 0.00404 1 11 11   |
| VOLATILES   | SEC-BUTYLBENZENE            |  |   |   |   |   |   | 0.00564 1 U U   |   | 0.00484 1 0 0   |
| VOLATILES   | Styrana                     | 0.015 1 < U  | 0.005 f < U   | 0.005 1 < U   |   |   |   | 0.00564 1 U U   |   | 0.00484 1 0 0   |
| VOLATILES   | ien-BUTYLBENZENE            |  |   |   |   |   |   | 0.00564 1 U U   |   | 0.00484 1 U U   |
| VOLATILES   | Tetrachloroethene           | 0.015 1 < U  | 0,005 1 < U   | 0.005 1 < U   |   |   |   | 0.00564 1 U U   |   | 0,00484 1 U U   |
| VOLATILES   | Toluane                     | 0.015 t < U  | 0.005 1 < V   | 0.005 1 < U   |   |   |   | 0.00564 1 U U   |   | 0.00484 1 U U   |
| VOLATILES   | Irans 1,2-Dichloroethene    |  |   |   |   |   |   | 0.00564 1 U U   |   | 0.00484 1 U U   |
| VOLATILES   | Irans-1.3-Dichloropropene   | 0.015 1 < U  | 0.005 1 < U   | 0.005 1 < U   |   |   |   | 0.00564 1 U U   |   | 0,00484 1 U U   |
| VOLATILES   | trans-1,4-Dichloro-2-butene | 0.06 1 × U   |   |   |   |   |   |   |   |   |
| VOLATILES   | Trichloroethene             | 0.015 1 < U  | 0.005 1 < U   | 0.005 t < U   |   |   |   | 0.00564 1 U U   |   | 0.00484 1 U U   |
| VOLATILES   | Trichlore#upromethane       | 0.03 t < U   |   |   |   |   |   | 0.0113 1 U U  |   | 0.00968 1 U U   |
| VOLATILES   | Vinvl acetate               | 0,03 t < U   | 0.05 1 < U  | 0.05 1 < U  |   |   |   | 0.0113 t U U  |   | 0.00968 1 U U   |
| VOLATILES   | Vinyl chloride              | 0.03 t < U   | 0.01 1 < U  | 0.01 1 < U  |   |   |   | 0.0113 1 U U  |   | 0.00968 1 U U   |
| WOL ATHER   | Videnes Total               | 0.016 1 - 11   | 0.005 1 - 11  | 0.005 1 < 1   |   |   |   |   |   |   |

Table 3-126 Concentrations of Chemicals in Soll Samples Associated with WR Sump 021

VOLATILES Xylenes, Total Footnotes are shown on cover page to Tables Section.

00066401

### FINAL DATA EVALUATION REPORT CHEMICAL CONCENTRATIONS IN SOIL SAMPLES ASSOCIATED WITH LHAAP-35/36 SUMPS LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

### **VOLUME III OF III: TABLES FOR SECTION 4.0 AND APPENDIX A**







Prepared for U.S. Army Corps of Engineers Tulsa District 1645 South 101st East Avenue Tulsa, Oklahoma

Prepared by Shaw Environmental, Inc. 3010 Briarpark, Suite 400 Houston, Texas 77042

Contract No. W12QR-04-D-0027, Task Order No. DS02 Shaw Project No. 117591

January 2008



### **Master Footnote and Abbreviation List**

- <sup>a</sup> Value provided by the Texas Commission on Environmental Quality (TCEQ) as updated through March 2006 available on the TCEQ website at <a href="http://www.tceq.state.tx.us/assets/public/remediation/rrr/msc-rbscn\_2006.xls">http://www.tceq.state.tx.us/assets/public/remediation/rrr/msc-rbscn\_2006.xls</a>.
- 1,2-Dichloroethene = Value shown is lower of the cis- or trans-1,2-dichloroethene values.

95% UPL = Upper Prediction Limit of background concentration

Background Concentrations = Lower of surface and subsurface soil background concentrations used in these comparisons.

### Boxed and bold = Concentration exceeds Applicable RBSV

Carbon Range C12-C28 = Value shown is the lowest of >12-16C, >16-21 C, and >21-35 C (aromatic) boiling fraction of total petroleum hydrocarbons RBSVs given in TCEQ March 2006 guidance.

Carbon Range C12-C28 = Value shown is the RBSV for the >8C-10C (aromatic) boiling fraction of total petroleum hydrocarbons given in TCEQ March 2006 guidance. m- or p- xylene = Value shown is the lower of m-, or p-xylene values given in TCEQ March 2006 guidance.

Shading indicates value equal to MDL modified by dilution and percent solids factors for chemicals that are undetected and have an applicable RBSV equal to the MQL. Weight of Evidence = EPA designator indicating that chemical is a known human carcinogen (A) or not a human carcinogen (D).

- D Analyte was quantified as a secondary dilution factor
- DIL dilution factor
- FD Field duplicate sample
- Ft feet
- H Estimate is high
- J Estimated value. Chemical was detected above the method detection limit but below the MQL.
- L Estimate is low
- LQ laboratory qualifier
- MDL Method Detection Limit
- MQL Method Quantitation Limit
- mg/kg milligrams per kilogram
- mg/I milligrams per liter
- NA Not applicable
- NE Value not established.
- RBSV risk based screening value
- REG Regular sample
- U Compound validated as not detected above MQL shown
- VQ data validator qualifier

Shaw Environmental, Inc.

00066403

#### Table 4-1 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 001

| [SUMP] = SUMP001<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE DATE |  | TCEQ<br>Risk-Based |                     |                | Backg<br>Concentral | rouno<br>lions in Soil  | Applicble<br>TCEQ       | 35SUMP001-SB01<br>35-SMP01-SB01-01<br>9/7/2006 | 35SUMP001-SB01<br>35-SMP01-SB01-02<br>9/7/2006 | 35SUMP001-SB02<br>35-SMP01-SB02-01<br>9/7/2006 | 35SUMP001-SB02<br>35-SMP01-SB02-02<br>9/7/2006 | WRS04-SB01<br>WRS04-SB01-01<br>9/25/2006 | WRS04-SB01<br>WRS04-SB01-02<br>9/25/2006 |
|--|--|--------------------|---------------------|----------------|---------------------|-------------------------|-------------------------|--|--|--|--|--|--|
|  | r  | Screening<br>Value | Method<br>Detection | Method         | (95% UP<br>Surface  | L, mg/kg}<br>Subsurface | Risk-Based<br>Screening | 0.5 - 1 Ft<br>REG                              | 6 - 6 Ft<br>REG                                | 0 - 0.5 Ft<br>REG                              | 6 - 6 Ft<br>REG                                | 0.5 -0.5 Ft<br>REG                       | 4.5 - 4.5 Ft<br>REG                      |
| Test Group   | •<br>Parameter (Units = mo/kg)               | (RBSV)*            | Limit (MDL)         | Limit (MQL)    | 0 - 0.5 Ft          | 1.5 - 2.5 Ft            | Value                   | Result DIL LQ VQ                               | Result DIL LQ VQ                               | Result DIL LO VO                               | Result DIL LQ VC                               | Result DILLQ VQ_                         | Result DILLO VO                          |
| METALS   | Aluminum                                     | 1.5E+04            | 10.000              | 20.00          | 16300               | 2.08E+04                | 1.6E+04                 | 4640.000 1                                     | 5460.000 1                                     | 7060.000 1                                     | 6510.000 1                                     | 7500.000 1                               | 10200.000 1                              |
| METALS   | Antimony                                     | 7.2E+00            | 0.050               | 0.10           | 0.94                | 1.6                     | 7.2E+00                 | 0.055 1 J J                                    | 0.113 1 U                                      | 0.120 1  | 0.114 1 0                                      | 0.109 1 U UJL<br>1.050 1 II              | 0.113 10 005                             |
| METALS   | Banum  | 2.6E+03            | 0.075               | 0.30           | 1.52E+02            | 8.55E+01                | 2.6E+03                 | 30.200 1                                       | 26.200 1                                       | 71.500 1                                       | 29.900 1                                       | 39.600 1                                 | 21.300 1                                 |
| METALS   | Beryllium                                    | 4.6E+00            | 0.012               | 0.50           | 6.45E-01            | 7.66E-01                | 4.6E+00                 | 0.208 1 J J                                    | 0.475 1  | 0.545 1  | 0.891 1  | 0.519 1                                  | 0,403 1 J J                              |
| METALS   | Cadmium                                      | 5.2E+00            | 0.025               | 0.10           | 1.4                 | 0.4                     | 5.2E+00                 | 0.039 1 J J                                    | 0.047 1 J J                                    | 0.496 1  | 0.095 1 J J<br>962.000 1                       | 0.094 1 J J<br>1310.000 1                | 0.413 1 U U                              |
| METALS   | Calcium                                      | 5 9E+03            | 0.100               | 0.40           | 2.66E+01            | 3.01E+01                | 5.9E+03                 | 8.410 1  | 7.160 1  | 31.600 1                                       | 20.300 1                                       | 41,500 1                                 | 10,700 1                                 |
| METALS   | Cobalt                                       | 1.5E+03            | 0.125               | 0.50           | 7.23E+00            | 5.61E+00                | 1.5E+03                 | 1.570 1  | 6.710 1  | 3.880 1  | 7.880 1  | 1.750 1                                  | 6.360 1                                  |
| METALS   | Copper                                       | 1.0E+03            | 0.150               | 0.60           | 5.55E+00            | 9.252+00                | 1.02+03                 | 1.700 1  | 3.480 1  | 31.600 1                                       | 7.140 1  | 2.120 1                                  | 2.490 1                                  |
| METALS   | Iron<br>Lead                                 | 5 0E+02            | 0.500               | NA<br>5.00     | 2 26E+01            | 1 14E+01                | 5 0E+02                 | 5 350 1  | 4 670 1  | 53.500 5                                       | 5,760 1  | 10.100 1                                 | 5.090 1                                  |
| METALS   | Magnesium                                    | NE                 | NA                  | NA             | NA                  | NA                      | -                       | 229.000 1                                      | 973.000 1                                      | 2080.000 1                                     | 1350.000 1                                     | 325.000 1 JH                             | 890.000 1 JH                             |
| METALS   | Manganese                                    | 1.7E+03            | 0.050               | 0.20           | 1.25E+03            | 2.01E+02                | 1.7E+03                 | 46.800 1                                       | 30.800 1                                       | 132.000 1                                      | 58.300 1                                       | 97.700 1 J                               | 17.100 1 J                               |
| METALS   | Mercuty                                      | 1.1E-02            | 0.010               | 0.25           | 8.19E-02            | 0.36                    | 2.5E-01                 | 0.010 1 J J<br>2.270 1                         | 0.012 1 U<br>10.100 1                          | 0.026 1 J J<br>7100 1                          | 0.011 1 U<br>16.900 1                          | 0.021 1 J J<br>3.180 1                   | 0.011 1 J J<br>9.570 1                   |
| METALS   | Potassium                                    | NE                 | NA NA               | NA             | NA NA               | NA                      | 1.85402                 | 221.000 1                                      | 274.000 1                                      | 174.000 1                                      | 307.000 1                                      | 177.000 1                                | 336.000 1                                |
| METALS   | Selenium                                     | 1.3E+02            | 0,100               | 0.20           | 3.48E+00            | 5.57E+00                | 1.3E+02                 | 0.145 1 J J                                    | 0.214 1 J J                                    | 0.289 1  | 0.117 1 J J                                    | 0.134 1 J JL                             | 0.226 1 U UJL                            |
| METALS   | Silver                                       | 4.7E+01            | 0.050               | 0.20           | 0.31                | 0.37                    | 4.7E+01                 | 1.500 1 U                                      | 1.800 1 U                                      | 1.690 1 U                                      | 1.690 1 U                                      | 1.720 1 U U                              | 1.650 10 0                               |
| METALS   | Socium                                       | 2.0E+00            | 0.010               | 0.02           | 0.47                | NE                      | 2.0E+00                 | 0.042 1  | 0.061 1  | 0.028 1  | 0.097 1  | 0.036 1                                  | 0.055 1                                  |
| METALS   | Vanadium                                     | 4.8E+01            | 0.125               | 0.50           | 3.21E+01            | 4.46E+01                | 4.8E+01                 | 15.600 1                                       | 9.210 1  | 61.100 1                                       | 19.900 1                                       | 46.700 1                                 | 13.900 1                                 |
| METALS   | Zinc   | 5.9E+03            | 0.625               | 2.50           | 61.6                | 2.02E+01                | 5.9E+03                 | 5.950 1  | 19.600 1                                       | 115.000 1                                      | 32.800 1                                       | 13.300 1                                 | 17.800 1                                 |
| SEMIVOLATILES  | 1,2,4-Trichlorobenzene<br>1,2-Dichlombenzene | 1.4E+02<br>5.6E+01 | 0.0825              | 0.165          | NE                  | NE                      | 1.4E+02<br>5.6E+01      |  |  |  |  | 1.840 10 0 0                             | 0.187 100                                |
| SEMIVOLATILES  | 1.3-Dichlorobenzene                          | 5.1E+00            | 0.0825              | 0.165          | NE                  | NE                      | 5.1E+00                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | 1,4-Dichlorobenzene                          | 2.7E+01            | 0.0825              | 0.165          | NE                  | NE                      | 2,7E+01                 |  |  |  |  | 1.840 10 U U                             | D.187 1 U U                              |
| SEMIVOLATILES  | 2,4,5-Trichlorophenol                        | 1.6E+03            | 0.0825              | 0.165          | NE                  | NE                      | 1.6±+03                 |  |  |  |  | 1.840 10 0 0                             | 0.187 1 U U                              |
| SEMIVOLATILES  | 2.4-Dichlorophenol                           | 4.7E+01            | 0.0825              | 0.165          | NE                  | NE                      | 4.7E+01                 |  |  |  |  | 1.840 10 U U                             | 0.187 IUU                                |
| SEMIVOLATILES  | 2.4-Dimethylphenol                           | 3.1E+02            | 0.0825              | 0.165          | NE                  | NE                      | 3.1E+02                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | 2,4-Dinitrophenol                            | 3.1E+01            | 0.3300              | 0.825          | NE                  | NE                      | 3.1E+01                 |  |  |  |  | 9.190 10 U U<br>1.840 10 11 U            | 0.934 1.0 0                              |
| SEMIVOLATILES  | 2,4-Dinitrototuene                           | 7.22-01            | 0.0825              | 0.165<br>D.165 | NE                  | NE                      | 7.2E-01                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | 2-Chloronaphthalene                          | 1.1E+03            | 0.0825              | 0.165          | NE                  | NE                      | 1.1E+03                 |  |  |  |  | 1.840 10 Ū Ū                             | 0.187 1 U U                              |
| SEMIVOLATILES  | 2-Chlorophenol                               | 1.1E+02            | 0.0825              | 0.165          | NE                  | NE                      | 1.1E+02                 |  |  |  |  | 1.840 10 U                               | 0.187 1 U U                              |
| SEMIVOLATILES  | 2-Methylobecol                               | 5.5E+01<br>7.7E+02 | 0.0825              | 0.165          | NE                  | NE                      | 7.7E+02                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | 2-Nitroaniline                               | 4.7E+00            | 0.3300              | 0.825          | NE                  | NE                      | 4.7€+00                 |  |  |  |  | 9,190 10 U U                             | 0.934 1 U U                              |
| SEMIVOLATILES  | 2-Nitrophenol                                | 3.1E+01            | 0.0825              | 0,165          | NE                  | NE                      | 3.1E+01                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine                       | 1.1E+00            | 0.1650              | 0.330          | NE                  | NE                      | 1.15+00                 |  |  |  |  | 3.670 10 U U<br>9.190 10 U U             | 0.373 10 0                               |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol                   | 3.1E+01            | 0.3300              | 0.825          | NE                  | NE                      | 3.1E+01                 |  |  |  |  | 9.190 10 U U                             | 0.934 1 U U                              |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether                   | 3.1E-02            | 0.0825              | 0.165          | NE                  | NE                      | 1.7E-01                 |  |  |  |  | 0.924 10 U U                             | 0.093 10 0                               |
| SEMIVOLATILES  | 4-Chioro-3-methylphenol<br>4 Chioro-celling  | 7.7E+01            | 0.0825              | 0.165          | NE                  | NE                      | 7.7E+01                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | 4-Chlorophenyl phenyl ether                  | 2.8E-02            | 0.0825              | 0.165          | NE                  | NE                      | 1.7E-01                 |  |  |  |  | 0.924 10 0 0                             | 0.093 IU U                               |
| SEMIVOLATILES  | 4-Methylphenol                               | 7.7E+01            | 0.0825              | 0.165          | NE                  | NE                      | 7.7E+01                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | 4-Nitroaniline                               | 1.3E+01            | 0.3300              | 0.825          | NE                  | NE                      | 1.3E+01                 |  |  |  |  | 9.190 10 U U                             | 0.934 10 0                               |
| SEMIVOLATILES  | Acenanbthene                                 | 8 2E+02            | 0.0825              | 0.165          | NE                  | NE                      | 8.2E+02                 | 1  |  |  |  | 1.840 10 U U                             | 0.187 100                                |
| SEMIVOLATILES  | Acenaphthylene                               | 8.2E+02            | 0.0825              | 0.165          | NE                  | NE                      | 8.2E+02                 |  |  |  |  | 1.840 10 U                               | 0.187 1 U U                              |
| SEMIVOLATILES  | Anthracene                                   | 4.1E+03            | 0.0825              | 0.165          | NE                  | NE                      | 4.1E+03                 |  |  |  |  | 1.840 10 U                               | 0.187 1 U U                              |
| SEMIVOLATILES  | Benzo(a)ovrene                               | 6.3E-02            | 0.0825              | 0.165          | 0.02                | NE                      | 0.3E-01                 |  |  |  |  | 0.924 10 U U                             | 0.093 1 U U                              |
| SEMIVOLATILES  | Benzo(b)/luoranthene                         | 6.3E-01            | 0.0825              | 0.165          | 0.02                | NE                      | 6.3E-01                 |  |  |  |  | 1.840 10 Ų Ū                             | 0.187 1 Ū Ū                              |
| SEMIVOLATILES  | Benzo(ghi)perylene                           | 4.1E+02            | 0.0825              | 0.165          | 0.01                | NE                      | 4.1E+02                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | Benzoic Acid                                 | 6.3E+00<br>6.2E+04 | 0.0625              | 0.105          | 0.01<br>NF          | NE<br>N <sup>G</sup>    | 6.3E+00<br>6.2E+04      |  |  |  |  | 9.190 10 U U.I                           | 0.934 1 1 1 1                            |
| SEMIVOLATILES  | Benzyl Alcohol                               | 4.7E+03            | 0.0825              | 0.165          | NE                  | NE                      | 4.7E+03                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane                   | 2.9E-01            | 0.0825              | 0.165          | NE                  | NE                      | 2.9E-01                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | bis(2-Chloroethyl)ether                      | 1.5E-01            | 0.0825              | 0.165          | NE                  | NE                      | 1.7E-01                 |  |  |  |  |  | 0.093 10 0                               |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate                   | 1.75+01            | 0.0825              | 0.165          | NE                  | NÊ                      | 1.7E+01                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | Sutyl benzyl phthalate                       | 3.1E+03            | 0.0825              | 0.165          | NE                  | NE                      | 3.1E+03                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | Chrysene<br>Dihenzo(a bianthracana           | 6.3E+01            | 0.0825              | 0.165          | 0.02                | NE                      | 6.3E+01                 |  |  |  |  | 1.849 10 U U                             | 0.187 1 U<br>0.093 1 U U                 |
| SEMIVOLATILES  | Dibenzoluran                                 | 6.2E+01            | 0.0025              | 0.165          | NE                  | NE                      | 6.26+01                 | 1  |  |  |  | 1.840 -10 U U                            | 0,187 1 U U                              |
| SEMIVOLATILES  | Diethyl phthalate                            | 1.2E+04            | 0.0825              | 0.165          | NE                  | NE                      | 1.2E+04                 | 1  |  |  |  | 1.840 10 U                               | 0.187 1 Ú Ű                              |
| SEMIVOLATILES  | Dimethyl phthalate                           | 1.2E+04            | 0.0825              | 0.165          | NE                  | NE                      | 1.2E+04                 | 1  |  |  |  | 1.840 10 U U                             | 0,187 1 U U                              |
| SEMIVOLATILES  | di-n-Octyl photalate                         | 3.1E+02            | 0.0825              | 0.105          | NE                  | NE                      | 3.1E+02                 | 1  |  | •  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | Fluoranthene                                 | 5.5E+02            | 0.0825              | 0.165          | 0.02                | NE                      | 5.5E+02                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | Fluorene                                     | 5.5E+02            | 0.0825              | 0.165          | NE                  | NE                      | 5.5E+02                 | 1  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | Hexachiorobenzene                            | 2.56-01            | 0.0825              | 0.165          | NE                  | NE                      | 2.5E-01<br>1.6E+00      |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | Hexachlorocyclopentadiene                    | 1.0E+00            | 0.0825              | 0.165          | NE                  | NE                      | 1.0E+00                 |  |  |  |  | 1.840 10 U U                             | 0.187 1 U U                              |
| SEMIVOLATILES  | Hexachloroethane                             | 1.6E+01            | 0.0825              | 0.165          | NE                  | NE                      | 1.6E+01                 | 1  |  |  |  | 1.840 10 U                               | 0.187 1 U U                              |

1 of 2

Shaw Environmental, Inc.

# Table 4-1 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 001

| [SUMP] = SUMP001<br>LOCATION _CODE<br>SAMPLE_NO |  | TCEQ               |             |              | Backgr     | ound<br>oos in Soil  | Applicble          | 35SUMP001-SB01<br>35-SMP01-SB01-01<br>977/2005 | 35SUMP001-SB01<br>35-SMP01-SB01-02<br>9/7/2006 | 35SUMP001-SB02<br>35-SMP01-SB02-01<br>9/7/2006 | 35SUMP0<br>35-SMP01<br>9/7/2 | 001-\$B02<br>-\$B02-02 | WRS04-SB01<br>WRS04-SB01-01<br>9/25/2006 | WRS04-SE<br>WRS04-SB0<br>9/25/200 | 301<br>31-02<br>16 |
|---|--|--------------------|-------------|--------------|------------|----------------------|--------------------|--|--|--|------------------------------|------------------------|--|-----------------------------------|--------------------|
| DEPTH   |  | Screening          | Method      | Method       | (95% UPL   | , mg/kg)             | Risk-Based         | 0.5 - 1 Ft                                     | 6-6Ft  | 0 - 0.5 Ft                                     | 6 - 6                        | 6 Ft                   | 0.5 -0.5 Ft                              | 4.5 - 4.5                         | Ft                 |
| SAMPLE_PURPOSE                                  | l .  | Value              | Detection   | Quantitation | Surface    | Subsurface           | Screening          | REG  | REG  | REG  | RE                           | G                      | REG                                      | REG                               |                    |
| Test Group                                      | Parameter (Units = mg/kg)                              | (RBSV)             | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 • 2.5 Ft         | Value<br>6 3E-01   | Result DIL LO VO                               | Result DIL LQ VQ                               | Result DIL LO VO                               | Result                       | DIL LQ VQ              | <u></u>                                  | 0.187                             | <u>tuvu</u><br>tuv |
| SEMIVOLATILES                                   | Isophorone   | 5.2E+02            | 0.0825      | 0.165        | NE         | NE                   | 5.2E+02            |  |  |  |                              |                        | 1.840 10 U U                             | 0.187                             | 100                |
| SEMIVOLATILES                                   | Naphthalene  | 1.8E+01            | 0.0825      | 0.165        | NE         | NE                   | 1.6E+01            |  |  |  |                              |                        | 1.840 10 U U<br>1.840 10 U U             | 0.187                             | 100<br>100         |
| SEMIVOLATILES                                   | n-Nitroso-di-n-propylamine                             | 4.1E-02            | 0.0825      | 0.165        | NE         | NE                   | 1.7E-01            |  |  |  |                              |                        | 0.924 10 U U                             | 0.093                             | 100                |
| SEMIVOLATILES                                   | n-Nitrosodiphenytamine                                 | 5.9E+01            | 0.0825      | 0.165        | NE         | NE                   | 5.9E+01            |  |  |  |                              |                        | 1.840 10 U U                             | 0.187                             | 100                |
| SEMIVOLATILES                                   | Pentachlorophenol<br>Rheasnthrene                      | 3.0E+00<br>4 1E+02 | 0.3300      | 0.825        | NE         | NE                   | 3.0E+00<br>4.1E+02 |  |  |  |                              |                        | 1.840 10 U U                             | 0.187                             | ຳ ບໍ່ ບໍ່          |
| SEMIVOLATILES                                   | Phenol   | 4.7E+03            | 0.0825      | 0.165        | NE         | NE                   | 4.7E+03            |  |  |  |                              |                        | 1.840 10 U U                             | 0.187                             | 100                |
| SEMIVOLATILES                                   | Pyrene<br>Sameat Calida                                | 4.1E+02            | 0.0825      | 0.165        | 0.02       | NE                   | 4.1E+02            | 95.000 1                                       | 85,600 1                                       | 99.300 1                                       | 87 500                       | 1                      | 1.840 10 0 0                             | 88.400                            | 100                |
| VOLATILES                                       | 1.1.1.2-Tetrachloroethane                              | 5.2E+00            | 0.0005      | 0.005        | NE         | NE                   | 5.2E+00            | 33.300   | 0.005 1 U                                      |  | 0.005                        | iυ                     |  | 0.004                             | 100                |
| VOLATILES                                       | 1,1,1-Trichloroethane                                  | 2.3E+02            | 0.0005      | 0.005        | NE         | NE                   | 2.3E+02            |  | 0.005 1 U                                      |  | 0.005                        | 1 0                    |  | 0.004                             | 100                |
| VOLATILES                                       | 1,1,2,2-Tetrachloroethane                              | 5.1E-01<br>9.7E-01 | 0.0005      | 0.005        | NE         | NE                   | 5.1E-01<br>9.7E-01 |  | 0.005 1 U                                      |  | 0.005                        | 1 0                    |  | 0.004                             | របីបី              |
| VOLATILES                                       | 1,1-Dichkroethane                                      | 8.9E+01            | 0.0010      | 0.005        | NE         | NE                   | 8.9E+01            |  | 0.005 1 U UJ                                   |  | 0.005                        | របួយ                   |  | 0.004                             | 1 U U              |
| VOLATILES                                       | 1,1-Dichloroethene                                     | 2.7E+01            | 0.0005      | 0.005        | NE         | NE                   | 2.7E+01            |  | 0.005 1 U                                      |  | 0.005                        | 10                     |  | 0.004                             | 100                |
| VOLATILES<br>VOLATILES                          | 1,1-Dichkropropene<br>1,2,3-Trichkropenzene            | 9.9E-01<br>4.2E+01 | 0.0005      | 0.005        | NE         | NE                   | 4.2E+01            |  | 0.005 1 U                                      |  | 0.005                        | រ៉េប័                  |  | 0.004                             | iŭŭ                |
| VOLATILES                                       | 1,2,3-Trichloropropane                                 | 9.2E-02            | 0.0010      | 0.005        | NE         | NE                   | 9.2E-02            |  | 0.005 1 U                                      |  | 0.005                        | 1 U                    |  | 0.004                             | 100                |
| VOLATILES                                       | 1,2,4-Trichlorobenzene                                 | 1.4E+02            | 0.0005      | 0.005        | NE         | NE                   | 1.4E+02            |  | 0.005 1 U                                      |  | 0.005                        | 1 U                    |  | 0.004                             | 100                |
| VOLATILES                                       | 1,2,4+1 Internyloenzene<br>1,2-Dibromo-3-chloropropane | 3.5E-01            | 0.0000      | 0.005        | NE         | NE                   | 3.5E-01            |  | 0.005 1 U                                      |  | 0.005                        | iŭ                     |  | 0.004                             | iū ū               |
| VOLATILES                                       | 1,2-Dibromoethane                                      | 5.3E-02            | 0.0605      | 0.005        | NE         | NE                   | 5.3E-02            |  | 0.005 1 U                                      |  | 0.005                        | 1 0                    |  | 0.004                             | 100                |
| VOLATILES                                       | 1,2-Dichlorobenzene                                    | 5.6E+01            | 0.0005      | 0.005        | NE         |                      | 5.6E+01 2.7E-01    |  | 0.005 1 U                                      |  | 0.005                        | 1 0                    |  | 0.004                             | របីបី              |
| VOLATILES                                       | 1,2-Dichloropropane                                    | 1.8E+00            | 0.0005      | 0.005        | NĒ         | NE                   | 1.8E+00            |  | 0.005 1 U                                      |  | 0.005                        | 1 Ū                    |  | 0.004                             | 1 U U              |
| VOLATILES                                       | 1,2-Dimethylbenzene (o-Xylene)                         | 3.3E+03            | 0.0005      | 0.005        | NE         | NE                   | 3.3E+03            |  | 0.005 1 U                                      |  | 0.005                        | 1 0                    |  | 0.004                             | 100                |
| VOLATILES                                       | 1,3,5-i rimethylbenzene                                | 8.3E+00<br>5.1E+00 | 0.0005      | 0.005        | NE         | NE                   | 5.1E+00            |  | 0.005 1 0                                      |  | 0.005                        | ίŭ                     |  | 0.004                             | រប័ប័              |
| VOLATILES                                       | 1,3-Dichloropropane                                    | 3.0E+00            | 0.0005      | 0.005        | NE         | NE                   | 3.0E+00            |  | 0.005 1 U                                      |  | 0.005                        | 1 0                    |  | 0.004                             | 100                |
| VOLATILES                                       | 1,4-Dichlorobenzens                                    | 2.7E+01            | 0.0005      | 0.005        | NE         | NE                   | 2.7E+01            |  | 0.005 1 U                                      |  | 0.005                        | . 1 U<br>. 1 U         |  | 0.004                             | 100                |
| VOLATILES                                       | 2,2-Dichloropropane<br>2-Butarione                     | 1.7E+00<br>2.6E+03 | 0.0005      | 0.005        | NE         | NE                   | 2.6E+03            |  | 0.009 1 U                                      |  | 0.009                        | ίŭ                     |  | 0.009                             | រំបំបំ             |
| VOLATILES                                       | 2-Chloroethyl vinyl ether                              | 2.1E-01            | 0.0020      | 0.010        | NE         | NE                   | 2.1E-01            |  | 0.009 1 U                                      |  | 0.009                        | 1 0                    |  | 0.009                             | 100                |
| VOLATILES                                       | 2-Chiomtoluene   | 1.5E+02            | 0.0005      | 0.005        | NE         | NE                   | 1.5E+02            |  | 0.005 1 0                                      |  | 0.005                        | 1 0                    |  | 0.004                             | 100                |
| VOLATILES                                       | 4-Chloratoluene  | 3.4E-01            | 0.0005      | 0.005        | NE         | NE                   | 3.4E-01            |  | 0.005 1 U                                      |  | 0.005                        | ίŪ                     |  | 0.004                             | 1ŪŪ                |
| VOLATILES                                       | Acetone  | 1.7E+02            | 0.0050      | 0.010        | NE         | NE                   | 1.7E+02            |  | 0.009 1 U                                      |  | 0.009                        | 1 U                    |  | 0.009                             | 100                |
| VOLATILES                                       | Benzene  | 8.8E-01<br>1.1E+01 | 0.0005      | 0.005        | NE         | NE<br>N <sup>P</sup> | 8.8E-01<br>1.1E+01 |  | 0.005 1 U                                      |  | 0.005                        | 10                     |  | 0.004                             | 10 0               |
| VOLATILES                                       | Bromochloromethane                                     | 2.4E+01            | 0.0005      | 0.005        | NE         | NE                   | 2.4E+01            |  | 0.005 1 U                                      |  | 0.005                        | 1 Ū                    |  | 0.004                             | 100                |
| VOLATILES                                       | Bromodichloromethane                                   | 1.0E+01            | 0.0005      | 0.005        | NE         | NE                   | 1.0E+01            |  | 0.005 1 U                                      |  | 0.005                        | 10.                    |  | 0.004                             | 100                |
| VOLATILES                                       | Bromonorm<br>Bromonnetbane                             | 3.4E+01<br>3.5E-01 | 0.0016      | 0.003        | NE         | NE                   | 3.5E-01            |  | 0.009 1 U UJ                                   |  | 0.009                        | ែរប័យ                  |  | 0.009                             | iũũ                |
| VOLATILES                                       | Carbon disulfide                                       | 1.0E+02            | 0.0005      | 0.005        | NE         | NE                   | 1.0E+02            |  | 0.005 1 U                                      |  | 0.005                        | 10                     |  | 0.004                             | 100                |
| VOLATILES                                       | Carbon tetrachloride                                   | 3.5E-01            | 0.0005      | 0.005        | NE         | NE                   | 3.5E-01<br>4.0E+01 |  | 0.005 1 0                                      |  | 0.005                        | 10                     |  | 0.004                             | 100                |
| VOLATILES                                       | Chioroethane   | 1.1E+03            | 0.0010      | 0.010        | NE         | NE                   | 1.1E+03            |  | 0.009 1 U                                      |  | 0.009                        | ιŭ                     |  | 0.009                             | 1 Ŭ Ū              |
| VOLATILES                                       | Chloroform   | 3.1E-01            | 0.0005      | 0.005        | NE         | NE                   | 3.1E-01            |  | 0.005 1 U                                      |  | 0.005                        | 1 4                    |  | 0.004                             | 100                |
| VOLATILES                                       | Chloromethane<br>cis-1 2-Dichlomethene                 | 2,36-01            | 0.0020      | 0.010        | NE         | NE                   | 2.3E-01<br>1.2E+02 |  | 0.009 1 U<br>0.005 1 U UJ                      |  | 0.005                        | រប័យ                   |  | 0.004                             | រប័ប័              |
| VOLATILES                                       | cis-1,3-Dichloropropene                                | 1.2E+00            | 0.0005      | 0.005        | NE         | NE                   | 1.2E+00            |  | 0.005 1 U                                      |  | 0.005                        | 1 0                    |  | 0.004                             | 100                |
| VOLATILES                                       | Dibromochloromethane                                   | 7.6E+00            | 0.0005      | 0.005        | NE         | NE                   | 7.6E+00            |  | 0.005 1 U                                      |  | 0.005                        | 1 1                    |  | 0.004                             | 100                |
| VOLATILES                                       | Dichtorodifluoromethane                                | 2.2E+02            | 0.0005      | 0.010        | NE         | NE                   | 2.2E+02            |  | 0.009 1 U                                      |  | 0.009                        | iŭ                     |  | 0.009                             | iŭŭ                |
| VOLATILES                                       | Ethylbenzene   | 4.3E+02            | 0.0005      | 0.005        | NE         | NE                   | 4.3E+02            |  | 0.005 1 U                                      |  | 0.005                        | 1 1                    |  | 0.004                             | 100                |
| VOLATILES                                       | Hexachlorobutadiene                                    | 1.6E+00<br>5.4E+02 | 0.0005      | 0.005        | NE         | NE                   | 1.6E+00<br>5.4E+02 |  | 0.005 1 0                                      |  | 0.005                        | 1 U<br>1 U             |  | 0.004                             | 100                |
| VOLATILES                                       | m.p-Xylenes  | 2.3E+02            | 0.0005      | 0.005        | NE         | NE                   | 2.3E+02            |  | 0.005 1 U                                      |  | 0.005                        | iŭ                     |  | 0.004                             | 100                |
| VOLATILES                                       | Methyl isobutyl ketone                                 | 1.3E+03            | 0.0025      | 0.01         | NE         | NE                   | 1.3E+03            |  | 0.009 1 U                                      |  | 0.009                        | 1 1                    |  | 0.009                             | 100                |
| VOLATILES                                       | Methylene Chloride<br>Nachibalene                      | 8.7E+00<br>1.8E+01 | 0.0010      | 0.005        | NE         | NE                   | 8.7E+00<br>1.8E+01 |  | 0.005 1 L                                      |  | 0.000                        | 1 1 0                  |  | 0.009                             | 1 ບໍ່ ບໍ່          |
| VOLATILES                                       | n-BUTYLBENZENE   | 2.7E+02            | 0.0005      | 0.005        | NE         | NE                   | 2.7E+02            |  | 0.005 1 U                                      |  | 0.005                        | 1 U                    |  | 0.004                             | 10 0               |
| VOLATILE\$                                      | R-PROPYLBENZENE  | 3.2E+02            | 0.0005      | 0.005        | NE         | NE                   | 3.2E+02            |  | 0.005 1 U                                      |  | 0.005                        | 10                     |  | 0.004                             | 100                |
| VOLATILES                                       | sec-BUTYLBENZENE                                       | 4.22+02<br>3.0E+02 | 0.0005      | 0.005        | NE         | NE                   | 3.0E+02            |  | 0.005 1 U                                      |  | 0.005                        | iŭ                     |  | 0.004                             | រំបីរំ             |
| VOLATILES                                       | Styrene  | 1.3E+03            | 0.0005      | 0.005        | NE         | NE                   | 1,3E+03            |  | 0.005 1 U                                      |  | 0,005                        | 1 1                    |  | 0.004                             | 100                |
| VOLATILES                                       | tert-BUTYLBENZENE                                      | 2.6E+02<br>6.0E+00 | 0.0005      | 0.005        | NE<br>N⊄   | NE<br>NE             | 2.6E+02<br>6.0E+00 |  | 0.005 1 U<br>0.005 1 U                         |  | 0.005                        | 10                     |  | 0.004                             | 100                |
| VOLATILES                                       | Toluene  | 1.1E+03            | 0,0005      | 0.005        | NE         | NE                   | 1.1E+03            |  | 0.005 1 U                                      |  | 0.005                        | 10                     |  | 0.004                             | เบ็บ               |
| VOLATILES                                       | trans-1,2-Dichloroethene                               | 1.4E+02            | 0.0005      | 0.005        | NE         | NE                   | 1.4E+02            |  | 0.005 1 U UJ                                   |  | 0.005                        |                        |  | 0.004                             | 100                |
| VOLATILES                                       | trans-1,3-Dictioropropene<br>Trichlomethene            | 1.8E+00<br>3.7E+00 | 0.0005      | 0.005        | NE         | NE                   | 3.7E+00            |  | 0.005 1 U                                      |  | 0.005                        | iŭ                     |  | 0.004                             | រប័ប័              |
| VOLATILES                                       | Trichlorofluoromethane                                 | 2.6E+02            | 0.0010      | 0.01         | NE         | NE                   | 2.6E+02            |  | 0.009 1 U                                      |  | 0.009                        | 1 0                    |  | 0.009                             | 100                |
| VOLATILES                                       | Vinyl acetate<br>Vinyl chlorido                        | 5.7E+01            | 0.0010      | 0.01         | NE         | NE                   | 5.7E+01            |  | 0.009 1 U                                      |  | 0.009                        | 1 U<br>1 U             |  | 0.009                             | 100<br>100         |

Footnotes are shown on cover page to Tables Section.

2 of 2

00066404

\_

Shaw Environmental, Inc.

## 00066405

| Table 4-2  |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump 002   |

| (SUMP) = SUI<br>LOCATION _(<br>SAMPLE_NO<br>SAMPLE_DAT<br>DEPTH<br>SAMPLE_PUI | MP002<br>CODE<br>TE<br>RPOSE | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backy<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br><u>L, mg/kg}</u><br>Subsurface | Applicble<br>TCEQ<br>Risk-Basec<br>Screening | 35SUMP00/<br>35-SMP02-S<br>9/7/20(<br>0 - 0,5<br>REG | 2-SB01<br>3801-01<br>06<br>Ft | 35\$UMP00<br>35-SMP02-\$<br>9/7/20<br>6 - 6 I<br>REG | 2-SB01<br>SB01-02<br>06<br>Ft | 35SUMP002-S<br>35-SMP02-SB0<br>9/7/2006<br>0 - 0.5 Ft<br>REG | 6802<br>02-01 | 35SUMP002-SB<br>35-SMP02-SB02<br>9/7/2006<br>6 - 6 Ft<br>REG | 02<br>-02 | 35SUMP003<br>35-SMP03-S<br>9/7/200<br>0 - 0.5 I<br>REG | I-S801<br>801-01<br>6<br>Ft | 35SUMP0<br>35-SMP03-S<br>9/7/2<br>0 • 0,<br>FD | 03-SB01<br>801-01-QC<br>906<br>5 Ft | 35SUM<br>35-SMP<br>9/7<br>6 -<br>F | 2003-SB0<br>3-SB01-0<br>/2006<br>6 Ft<br>EG | 1<br>)2 |
|---|------------------------------|--|---------------------|------------------------|--|---|--|--|-------------------------------|--|-------------------------------|--|---------------|--|-----------|--|-----------------------------|--|-------------------------------------|------------------------------------|---|---------|
| Test Group  | Parameter (I Inite = m/l     | (BBS\/)*                                 | Limit (MOL)         | Limit (MOL)            | 0.05Et                                   | 15-25 Et  | Value  | Result Dil   | L LO VO                       | Result Dil   | LO VO                         | Result DIL   | εο νο -       | Result DIL LO  | a va      | Result D   | IL LQ VQ                    | Result D                                       | L LO VO                             | Result                             | DIL LQ                                      | VQ      |
| METALS  | Aluminum                     | 1.6E+04                                  | 10.000              | 20.00                  | 16300                                    | 2.08E+04  | 1.6E+04                                      | 13600.000 1  | 1                             | 10000.000 1  |                               | 4110.000 1   |               | 9780.000 1   |           | 17400.000  | 1                           | 11500.000                                      | 1                                   | 8160.000                           | 1   |         |
| METALS  | Antimony                     | 7.3E+00                                  | 0.500               | 0.10                   | 0.94                                     | 1.6   | 7.3E+00                                      | 0.063  | ŧ J JL                        | 0.111 1  | U UJL                         | 0.109 1  | Ų UJL         | 0.115 1 U  | ບມ 🗂      | 0.110  | 1 U UJL                     | 0.102  | 1 U UJL                             | 0.115                              | 1 U   | UJL     |
| METALS  | Arsenic                      | 2.05+01                                  | 0.075               | 0.30                   | 4.81E+00                                 | 5.548+00  | 2.0E+01                                      | 1.740 1  | 1 JL                          | 2.090 1  | JL                            | 2.210 1  | JL            | 2.850 1  | JL        | 1,720  | 1 JL                        | 2.330  | 1 JL                                | 1.190                              | 1   | JL      |
| METALS  | Barium                       | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                 | 8.55E+01  | 2.6E+03                                      | 688.000  | 1                             | 146.000 1  |                               | 716.000 1  |               | 564.000 1  |           | 437.000  | 1                           | 563.000  | 1                                   | 38.600                             | 1   |         |
| METALS  | Beryllium                    | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                 | 7.66E-01  | 4.6E+00                                      | 0.505  | 1                             | 0.403 1  | L L I                         | 0.277 1  | 3 J           | 0.405 1 J  | J         | 0.499  | 1                           | 0.519  | 1                                   | 0.374                              | 1 J   | J       |
| METALS  | Cadmium                      | 5.2E+00                                  | 0.025               | 0.10                   | 1.4                                      | 0.4   | 5.2E+00                                      | 0.417  | 1                             | 0.131 1  | IJJ                           | 0.433 1  |               | 0.317 1 J  | J         | 0.355  | 1 J J                       | 0.442  | 1                                   | 0,062                              | 1 J   | J       |
| METALS  | Calcium                      | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 1360.000   | 1                             | 414.000 1  |                               | 352.000 1  |               | 477.000 1  |           | 1370.000   | 1                           | 1240.000                                       | 1                                   | 571.000                            | 1   |         |
| METALS  | Chromium                     | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                                 | 3.01E+01  | 5.9E+03                                      | 15.500   | 1 JH                          | 10.000 1   | I JH                          | 15.200 1   | JH            | 9.910 1  | JH        | 15,800   | 1 JH                        | 17.200   | 1 JH                                | 11,700                             | 1   | JΗ      |
| METALS  | Cobalt                       | 1.5E+03                                  | 0.125               | 0.50                   | 7.23E+00                                 | 5.61E+00  | 1.5E+03                                      | 4,960  | 1 JH                          | 3.850 1  | I JH                          | 1.340 1  | JH            | 3.860 1  | JH        | 4.500  | 1 JH                        | 4,920  | 1 JH                                | 3.360                              | 1   | JH      |
| METALS  | Conner                       | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                                 | 9.25E+00  | 1.0E+03                                      | 3,130  | 1                             | 3.720  |                               | 2.710 1  |               | 3.930 1  |           | 5.540  | 1                           | 7.570  | 1                                   | 4.450                              | 1   |         |
| METALS  | Imp                          | NË                                       | NA                  | NA                     | NA                                       | NA  | _  | 21200.000  | 1                             | 14100.000 1  | 1                             | 18700.000 1  |               | 12300.000 1  |           | 16400.000  | 1                           | 16300.000                                      | 1                                   | 12200.000                          | 1   |         |
| METALS  | tead                         | 5 0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                 | 1.14E+01  | 5.0E+02                                      | 10,600   | 1 JL                          | 6.570  | լ յլ                          | 10.800 1   | JL            | 5.950 1  | JL        | 12.900   | 1 JL                        | 20.500   | 1 JL                                | 5.250                              | 1   | JL      |
| METALS  | Magnesium                    | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 815.000  | 1                             | 971.000  |                               | 186.000 1  |               | 1030.000 1   |           | 1020.000   | 1                           | 786.000  | 1                                   | 991,000                            | 1   |         |
| METALS  | Manganese                    | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                 | 2.01E+02  | 1.7E+03                                      | 232.000  | 1                             | 39,900   |                               | 108.000 1  |               | 32.100 1   |           | 112.000  | 1                           | 164.000  | 1                                   | 31.300                             | 1   |         |
| METALS  | Mercury                      | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                 | 0.36  | 2.5E-01                                      | 0.013  | i J J                         | 0.011 1  | ιU                            | 0.031 1  | JJ            | 0.011 1 U  | •         | 0.035  | 1 J J                       | 0.046  | 1 J J                               | 0.024                              | 1 J   | J       |
| METALS  | Nickel                       | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                 | 1.16E+01  | 1.9E+02                                      | 8.050  | 1 .                           | 10.100   |                               | 2.950 1  |               | 8,600 1  |           | 7.550  | 1                           | 8.250  | 1                                   | 9.350                              | 1   |         |
| METALS  | Potassium                    | NE                                       | NA                  | NA                     | NA                                       | NA  | _  | 396.000  | 1 JH                          | 483.000 1  | I JH                          | 172.000 1  | JH            | 492.000 1  | JH        | 487.000  | 1 J                         | 424.000  | 1 JH                                | 447.000                            | 1   | JH      |
| METALS  | Selenium                     | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                 | 5.57E+00  | 1.3E+02                                      | 0.301  | 1                             | 0.221  | เบ                            | 0.173 1  | JJ            | 0.229 1 U  | 1         | 0.203  | tJJ                         | 0.295  | 1                                   | 0.230                              | 1 U   |         |
| METALS  | Silver                       | 4.7E+01                                  | 0.050               | 0.20                   | 0.31                                     | 0.37  | 4.7E+01                                      | 1.640  | 1 U                           | 1.670  | บ                             | 1.640 1  | Ú             | 1.760 1 U  | 1         | 1.720  | 1 U                         | 1.710  | 1 U                                 | 1.740                              | 1 U   |         |
| METALS  | Sodium                       | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 67,700   | 1                             | 126.000 1  | L                             | 12.800 1   | ΓĽ            | 157.000 1  |           | 108.000  | 1                           | 74.800   | 1                                   | 197.000                            | 1   |         |
| METALS  | Thallium                     | 2.0E+00                                  | 0.010               | 0.02                   | 0.47                                     | NE  | 2.0E+00                                      | 0.126  | 1                             | 0.617  |                               | 0.059 1  |               | 0.087 1  |           | 0.102  | 1                           | 0.092  | 1                                   | 0.077                              | 1   |         |
| METALS  | Vanadium                     | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01                                 | 4.46E+01  | 4.8E+01                                      | 32.000   | 1                             | 18.300   |                               | 24,100 1   |               | 18.700 1   |           | 28,500   | 1                           | 27.300   | 1                                   | 16.900                             | 1   |         |
| METALS  | Zinc                         | 5.9E+03                                  | 0.625               | 2.50                   | 61.6                                     | 2.02E+01  | 5.9E+03                                      | 20.100   | 1                             | 26,300   | i                             | 31.800 1   |               | 22.500 1   |           | 32.600   | 1                           | 45,700   | 1                                   | 24.400                             | 1   |         |
| PERC  | Perchlorate                  | 1.4E+01                                  | 0.005               | 0.01                   | NE                                       | NE  | 1.4E+01                                      | 0.010  | 1 U                           | 0.010  | I U                           | 0.020 1  |               | 0.010 1 U  | l i       | 0.021  | 1 J                         | 0.051  | 1 J                                 | 0.100                              | 10 U  | UJ      |
| SOLIDS  | Percent Solids               | NE                                       | NVA                 | NVA                    | NE                                       | NE  | -  | 89.500   | 1                             | 88.500   | 1                             | 91,800 1   |               | 87.200 1   |           | 86.700   | 1                           | 88.600   | 1                                   | 87.000                             | 1   |         |

Shaw Environmental, Inc.

#### Table 4-3 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 003

|   |                       |                    |             |              |                   |                          |                   |                                 |                          | ••••••                    |                               |     |   |               |                              |                            |                        |                            |           |                                |                                       |          |                              |                            |             |
|---|-----------------------|--------------------|-------------|--------------|-------------------|--------------------------|-------------------|---------------------------------|--------------------------|---------------------------|-------------------------------|-----|---|---------------|------------------------------|----------------------------|------------------------|----------------------------|-----------|--------------------------------|---------------------------------------|----------|------------------------------|----------------------------|-------------|
| [SUMP] = SU<br>LOCATION<br>SAMPLE_NO<br>SAMPLE_DA | MP003<br>CODE<br>TE   | TCEQ<br>Risk-Based |             |              | Back<br>Concentra | ground<br>ations in Soil | Applicble<br>TCEQ | 35SUMP00<br>35-SMP02-<br>9/7/20 | 2-\$801<br>5801-01<br>06 | 35SUMP<br>35-SMP0<br>9/7/ | 002-SB01<br>2-SB01-02<br>2006 | 2   | 35SUMP002-8<br>35-SMP02-SB0<br>9/7/2006 | 6802<br>02-01 | 35SUMP0<br>35-SMP02<br>9/7/2 | 02-SB02<br>-SB02-02<br>006 | 35SUM<br>35-SMP<br>9/7 | 2003-SB<br>3-SB01-<br>2006 | 01<br>-01 | 35SUMP0<br>35-SMP03-9<br>9/7/2 | 03-SB0<br>801-01<br>006               | 1<br>-QC | 35SUMP(<br>35-SMP03<br>9/7/2 | )03-SB0<br>}-SB01-<br>2006 | 01<br>-02   |
| DEPTH   |                       | Screening          | Method      | Method       | (95% UF           | PL, mg/kg) <sup>c</sup>  | Risk-Based        | 0-0.5                           | Ft                       | 6-                        | 6 Ft<br>≓G                    |     | 0 - 0.5 Ft<br>REG                       |               | 6-6<br>RE                    | iFt<br>G                   | 0-<br>F                | 0.5 Ft<br>EG               |           | 0-0<br>F                       | .5 Ft<br>D                            |          | 6-<br>RE                     | 3 Ft<br>EG                 |             |
| SAMPLE_PU   | RPOSE                 | value              | Detection   | Quantication | Sunace            | Substitlace              | Screening         | I NEC                           | ,                        |                           |                               |     |   |               |                              |                            |                        |                            | a         | Denut                          | -                                     | 10       | Beeult                       | -                          | N VO        |
| Test Group  | Parameter (Units = mg | (RBSV) *           | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft        | 1.5 - 2.5 Ft             | Value             | Result D                        | L LQ VQ                  | Result                    | DIL LQ Y                      | VQ  | Result DIL                              | LQ_VQ         | Result                       | DIL LQ VQ                  | Result                 |                            | u vu      | 44500.000                      |                                       | VQ.      | R160.000                     | 1 10                       | <u>. va</u> |
| METALS  | Aluminum              | 1.6E+04            | 10.000      | 20.00        | 16300             | 2.08E+04                 | 1.6E+04           | 13600.000 1                     |                          | 10000.000                 | 1                             |     | 4110,000 1                              |               | 9780.000                     | 1 11 11                    | 17400.000              | 11.                        |           | 11000,000                      | 1 11                                  |          | 0 115                        | 4 11                       | 111         |
| METALS  | Antimony              | 7.3E+00            | 0.050       | 0.10         | 0.94              | 1.6                      | 7.3E+00           | 0.063 1                         | JJL                      | 0.111                     | 1 01                          | UJL | 0.109 1                                 | 0 0.00        | 0.110                        | 1 0 030                    | 4 700                  |                            | 3 036     | 2 990                          | 1 0                                   | 11       | 1 100                        | 1 0                        | 1000        |
| METALS  | Arsenic               | 2.0E+01            | 0.075       | 0.30         | 4.81E+00          | 5.54E+00                 | 2.0E+01           | 1.740 1                         | JL                       | 2.090                     | 1                             | JL  | 2.210 1                                 | JĻ            | 2.000                        | 1 JL                       | 497.000                |                            |           | 563.000                        | 1                                     |          | 38,600                       | i                          |             |
| METALS  | Barium                | 2.6E+03            | 0.075       | 0.30         | 1.52E+02          | 8.55E+01                 | 2.6E+03           | 688.000                         |                          | 146.000                   | 1                             |     | /10.000 1                               |               | 0.405                        |                            | 437.000                | 1                          |           | 0.519                          | 1                                     |          | 0.374                        | 1.4                        | 1           |
| METALS  | Beryllium             | 4.6E+00            | 0.012       | 0.50         | 6.45E-01          | 7.66E-01                 | 4.65+00           | 0.505 1                         |                          | 0.403                     | 1 1                           | 1   | 0.277 1                                 | 1 1           | 0.400                        | 1 1 1                      | 0.433                  | 4                          | і I       | 0.010                          | i i                                   |          | 0.062                        | i ĭ                        | - J         |
| METALS  | Cadmium               | 5.2E+00            | 0.025       | 0.10         | 1.4               | 0.4                      | 5.2E+00           | 0.417                           |                          | 0.131                     | 1 1                           | J   | 0.400 1                                 |               | 477.000                      | 1 3 3                      | 1376.000               | 4                          |           | 1240,000                       | i i                                   |          | 571 000                      | 1                          | •           |
| METALS  | Calcium               | NE                 | NA          | NA           | NA                | NA                       |                   | 1360.000 1                      |                          | 414.000                   | 1                             |     | 352.000 1                               | 111           | 477.000                      | 1 10                       | 16 800                 | 4                          | ы         | 17 200                         | i                                     | ы        | 11 700                       | i                          | JH          |
| METALS  | Chromium              | 5.9E+03            | 0.100       | 0.40         | 2.66E+01          | 3.01E+01                 | 5.9E+03           | 15.500 1                        | JH                       | 10.000                    |                               | 10  | 10.200 1                                |               | 3.910                        | 1 11                       | 4.500                  | 4                          | IH IH     | 4 920                          | 1                                     | JH       | 3 360                        | 1                          | JH          |
| METALS  | Cobalt                | 1.5E+03            | 0.125       | 0.50         | 7.236+00          | 5.61E+00                 | 1.5E+U3           | 4,960                           | JH                       | 3.650                     | 1                             | ĴП  | 2,710 1                                 | JH            | 3.000                        | 1 01                       | 5.540                  | i i                        | 011       | 7 570                          | i                                     | 0.1      | 4.450                        | i                          | •,          |
| METALS  | Copper                | 1.0E+03            | 0.150       | 0.60         | 5.55E+00          | 9.25E+00                 | 1.06+03           | 3.130 1                         |                          | 3.720                     | 1                             | 4   | 2.710 1                                 |               | 10200.000                    | 4                          | 18400.000              |                            |           | 16300.000                      | ÷                                     |          | 12200 000                    | i                          |             |
| METALS  | tron                  | NE                 | NA          | NA           | NA                | NA                       | 5 05 (00)         | 21200.000                       |                          | 14100.000                 | 1                             |     | 10 900 1                                | ш             | 5 050                        | 1 11                       | 12 900                 | 1                          | .0        | 20.500                         | ÷                                     | .1       | 5.250                        | 1                          | JL          |
| METALS  | Lead                  | 5.0E+02            | 0.500       | 5.00         | 2.26E+01          | 1.145.+01                | 5.0E+02           | 10.600                          | JL                       | 0.070                     | 1                             | JL  | 10.000 1                                | 76            | 1020.000                     |                            | 1020.000               |                            |           | 786 000                        | -                                     |          | 991 000                      | i                          | -           |
| METALS  | Magnesium             | NE                 | NA          | NA           | NA                | NA                       |                   | 815.000                         |                          | 9/1.000                   |                               |     | 100.000 1                               |               | 32 100                       | 4                          | 112 000                | 1                          |           | 164 000                        | i                                     |          | 31 300                       | i                          |             |
| METALS  | Manganese             | 1.72+03            | 0.050       | 0.20         | 1,255+03          | 2.012+02                 | 1.7E+03           | 232,000                         |                          | 39,900                    | 4                             |     | 0.021 1                                 | 1 1           | 0.011                        | 1 11                       | 0.035                  | 1                          | 1 1       | 0.046                          | 1 .                                   | Л        | 0.024                        | i J                        | J.          |
| METALS  | Mercury               | 1.1E-02            | 0.010       | 0.25         | 8.19E-02          | 0.30                     | 2.56-01           | 0.013                           | 33                       | 40.400                    |                               |     | 2.051 1                                 | 3 3           | 8 600                        | 1 0                        | 7 550                  | 1                          |           | 8 250                          | iĭ                                    | •        | 9,350                        | i                          | -           |
| METALS  | Nickel                | 1.9E+02            | 0.200       | 0.80         | 6.98E+00          | 1.166+01                 | 1.9E+02           | 8.050                           |                          | 10.100                    | 1                             | ш   | 172.000 1                               | <b>1</b> 10   | 402.000                      | <u>і</u> н                 | 487.000                | 1                          | 1         | 424 000                        | i                                     | .IH      | 447 000                      | 1                          | .JH         |
| METALS  | Potassium             | NE                 | NA          | NA           | NA<br>0. (DE LOO  | NA<br>E EXELON           | 4.05.00           | 395.000                         | 1 14                     | 403.000                   | 4 11                          | JU  | 0.173 1                                 | + 1           | 432.000                      | 1 11                       | 0.203                  | 1.                         | J J       | 0.295                          | 1                                     | 011      | 0.230                        | iυ                         | 1           |
| METALS  | Selenium              | 1.3E+02            | 0.100       | 0.20         | 3.48E+00          | 5.5/E+00                 | 1.32:+02          | 0.301                           |                          | 1 670                     | 1 11                          |     | 1640 1                                  | й J           | 1 760                        | 1 ŭ                        | 1 720                  | i i                        | ŭ Č       | 1.710                          | τυ                                    |          | 1.740                        | ίŨ                         | i i         |
| METALS  | Silver                | 4./E+01            | 0.050       | 0.20         | 0.31              | 0.37                     | 4.72701           | 67,700                          |                          | 126,000                   | 1 0                           |     | 12 800 1                                | ĭ ı           | 157 000                      | i                          | 108.000                | 1                          | -         | 74 800                         | 1                                     |          | 197,000                      | 1                          |             |
| METALS  | Sodium                | NE                 | NA          | NA           | NA 0.47           | NA<br>NE                 | 2.05.00           | 07.700                          |                          | 120.000                   | 4                             |     | 0.059 1                                 | 3 3           | 0.087                        | 1                          | 0 102                  | 4                          |           | 0.092                          | 1                                     |          | 0.077                        | 1                          |             |
| METALS  | Thallium              | 2.0E+00            | 0.010       | 0.02         | 0.47              | INE A ARELOA             | 2.00+00           | 22,000                          |                          | 10.017                    | -                             |     | 24 100 1                                |               | 18,700                       | 4                          | 28.500                 |                            |           | 27,300                         | i                                     |          | 16,900                       | -i                         |             |
| METALS  | Vanadium              | 4.8E+01            | 0.125       | 0.50         | 3.21E+01          | 4.405+01                 | 4.02+03           | 32.000                          |                          | 26 300                    | 4                             |     | 31,800 1                                |               | 22 500                       | i                          | 32 600                 | 1                          |           | 45,700                         | 1                                     |          | 24,400                       | 1                          |             |
| METALS  | ZIAC                  | 5.92+03            | 0.625       | 2.50         | DLD<br>NE         | 2.022701                 | 0.90703           | 20.100                          |                          | 20.000                    | 1 11                          |     | 0.020 1                                 |               | 0.010                        | i u                        | 0.021                  | 1                          | .1        | 0.051                          | 1                                     | J        | 0.100                        | 10 U                       | n nn        |
| PERC  | Perchiorate           | 1.45+01            | 0.005       | 0.01         |                   | NE                       | 1.46+01           | 0,010                           | Ψ                        | 88.500                    | 1                             |     | 01.020 1                                |               | 87 200                       | ÷ĭ                         | 86 700                 | i                          | •         | 88.600                         | i                                     | -        | 87,000                       | 1                          |             |
| SOLIDS  | Percent Solids        | NE                 | NA          | NA           | NE                | NE                       | 1                 | 09.500                          |                          | 00.00                     | 1                             |     | 91.000 1                                |               | 51.200                       |                            | 00.700                 | · ·                        |           | 30,000                         | · · · · · · · · · · · · · · · · · · · |          |                              |                            |             |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

00066407

# Table 4-4 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 004

| [SUMP] = SUMP004<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% U<br>Surface | ground<br>ations in Soil<br><sup>5</sup> L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP004-SB01<br>35-SMP04-SB01-01<br>9/7/2006<br>0 - 0.5 Ft<br>REG | 35SUMP004-SB01<br>35-SMP04-SB01-02<br>977/2006<br>6 - 6 Ft<br>REG |
|--|---------------------------|--|---------------------|------------------------|--|--|--|---|---|
| Test Group   | Parameter (Units = mg/kg) | (RBSV) <sup>a</sup>                      | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                             | 1.5 - 2.5 Ft   | Value  | Result DiL LQ VQ  | Result DIL LQ VQ  |
| METALS   | Aluminum                  | 1.6E+04                                  | 10,000              | 20.00                  | 16300                                  | 2.08E+04   | 1.6E+04                                      | 15900.000 1   | 8840.000 1  |
| METALS   | Antimony                  | 7.3E+00                                  | 0.500               | 0.10                   | 0.94                                   | 1.6  | 7.3E+00                                      | 0.117 1 U   | 0.115 1 U   |
| METALS   | Arsenic                   | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                               | 5.54E+00   | 2.0E+01                                      | 3.030 1   | 1.530 1   |
| METALS   | Barium                    | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                               | 8.55E+01   | 2.6E+03                                      | 64.400 1  | 56.700 1  |
| METALS   | Beryllium                 | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                               | 7.66E-01   | 4.6E+00                                      | 0.378 1 J J   | 0.339 1 J J   |
| METALS   | Cadmium                   | 5.2E+00                                  | 0.025               | 0.10                   | 1.4                                    | 0.4  | 5.2E+00                                      | 0.053 1 J J   | 0.071 1 J J   |
| METALS   | Calcium                   | NĖ                                       | NA                  | NA                     | NA                                     | NA   | -  | 1230.000 1  | 781.000 1   |
| METALS   | Chromium                  | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                               | 3.01E+01   | 5.9E+03                                      | 33.400 1  | 9.170 1   |
| METALS   | Cobalt                    | 1.5E+03                                  | 0.125               | 0.50                   | 7.23E+00                               | 5.61E+00   | 1.5E+03                                      | 0.865 1 J J   | 3.460 1   |
| METALS   | Copper                    | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                               | 9.25E+00   | 1.0E+03                                      | 6.630 1   | 3.070 1   |
| METALS   | Iron                      | NE                                       | NA                  | NA                     | NA                                     | NA   |  | 20500.000 1   | 11300.000 1   |
| METALS   | Lead                      | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                               | 1.14E+01   | 5.0E+02                                      | 12.400 1  | 5.700 1   |
| METALS   | Magnesium                 | NE                                       | NA                  | NA                     | NA                                     | NA   |  | 549.000 1   | 774.000 1   |
| METALS   | Manganese                 | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                               | 2.01E+02   | 1.7E+03                                      | 24.300 1  | 35.500 1  |
| METALS   | Mercury                   | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                               | 0.36   | 2.5E-01                                      | 0.080 1 J J   | 0.011 1 U   |
| METALS   | Nickel                    | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                               | 1.16E+01   | 1.9E+02                                      | 3.790 1   | 7.770 1   |
| METALS   | Potassium                 | NE                                       | NA                  | NA                     | NA                                     | NA   |  | 437.000 1   | 357.000 1   |
| METALS   | Selenium                  | 1.3E+02                                  | 0,100               | 0.20                   | 3.48E+00                               | 5.57E+00   | 1.3E+02                                      | 0.279 1   | 0.230 1 U   |
| METALS   | Silver                    | 4.7E+01                                  | 0.050               | 0.20                   | 0.31                                   | 0.37   | 4.7E+01                                      | 1.790 1 U   | 1.740 1 U   |
| METALS   | Sodium                    | NE                                       | NA                  | NA                     | NA                                     | NA   | ••   | 21.000 1 J J  | 113.000 1   |
| METALS   | Thallium                  | 2.0E+00                                  | 0.010               | 0.02                   | 0.47                                   | NE   | 2.0E+00                                      | 0.045 1   | 0.073 1   |
| METALS   | Vanadium                  | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01                               | 4.46E+01   | 4.8E+01                                      | 58.500 1  | 13.400 1  |
| METALS   | Zinc                      | 5.9E+03                                  | 0.625               | 2.50                   | 61.6                                   | 2.02E+01   | 5.9E+03                                      | 13.200 1  | 20.500 1  |
| PERC   | Perchlorate               | 1.4E+01                                  | 0.005               | 0.01                   | NE                                     | NE   | 1.4E+01                                      | 0.023 1   | 0.010 1 U   |
| SOLIDS   | Percent Solids            | NE                                       | NA                  | NA                     | NE                                     | NE   | -  | 82.200 1  | 87.000 1  |

Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Kamack, Texas

#### Shaw Environmental, Inc.

## 00066408

# Table 4-5 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 005

| [SUMP] = SUMP005<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% Ui<br>Surface | ground<br>ations in Soll<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP0<br>35-SMP05<br>9/7/2<br>0 - 0<br>RE | 05-SI<br>-SB0<br>006<br>5 Ft<br>G | B01<br>1-01 |    | 35SUMP0<br>35-SMP05-<br>9/7/2<br>0.5 - :<br>RE | 05-S<br>-SB0<br>006<br>5 Ft<br>G | 801<br>1-02 |    |
|--|---------------------------|--|---------------------|------------------------|---|--|--|---|-----------------------------------|-------------|----|--|----------------------------------|-------------|----|
| Test Group   | Parameter (Units = mg/kg) | (RBSV)*                                  | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  | Result                                      | DIL                               | LQ          | VQ | Result   |                                  | LQ          | VQ |
| METALS   | Aluminum                  | 1.6E+04                                  | 10.000              | 20.00                  | 16300                                   | 2.08E+04   | 1.6E+04                                      | 11000.000                                   | 1                                 |             |    | 12400.000                                      | 1                                |             |    |
| METALS   | Antimony                  | 7.3E+00                                  | 0.500               | 0.10                   | 0.94                                    | 1.6  | 7.3E+00                                      | 0.112                                       | 1                                 | U           |    | 0.123  | 1                                | 0           |    |
| METALS   | Arsenic                   | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                | 5.54E+00   | 2.0E+01                                      | 1.710                                       | 1                                 |             |    | 2.240  |                                  |             |    |
| METALS   | Barium                    | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                | 8.55E+01   | 2.6E+03                                      | 199.000                                     | 1                                 |             |    | 52.400   | 1                                |             |    |
| METALS   | Beryllium                 | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                | 7.66E-01   | 4.6E+00                                      | 0.412                                       | 1                                 | J           | J  | 0.381  | 1                                | J           | J  |
| METALS   | Cadmium                   | 5.2E+00                                  | 0.025               | 0.10                   | 1.4                                     | 0.4  | 5.2E+00                                      | 0.150                                       | 1                                 | J           | J  | 0.048  | 1                                | J           | 3  |
| METALS   | Calcium                   | NE                                       | NA                  | NA                     | NA                                      | NA   |  | 1850.000                                    | 1                                 |             |    | 407.000  | 1                                |             |    |
| METALŞ   | Chromium                  | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                                | 3.01E+01   | 5.9E+03                                      | 13.600                                      | 1                                 |             |    | 13.100   | 1                                |             |    |
| METALS   | Cobalt                    | 1.5E+03                                  | 0.125               | 0.50                   | 7.23E+00                                | 5.61E+00   | 1.5E+03                                      | 5,270                                       | 1                                 |             |    | 2.580  | 1                                |             |    |
| METALS   | Copper                    | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                                | 9.25E+00   | 1.0E+03                                      | 3.240                                       | 1                                 |             |    | 3.440  | 1                                |             |    |
| METALS   | Iron                      | NE                                       | NA                  | NA                     | NA                                      | NA   |  | 17600.000                                   | 1                                 |             |    | 15300.000                                      | 1                                |             |    |
| METALS   | Lead                      | 5.0E+02                                  | 0.500               | 5.00                   | NA                                      | NA   | 5.0E+02                                      | 9.250                                       | 1                                 |             |    | 6.770  | 1                                |             |    |
| METALS   | Magnesium                 | NE                                       | NA                  | NA                     | NE                                      | NÉ   |  | 628.000                                     | 1                                 |             |    | 730.000  | 1                                |             |    |
| METALS   | Manganese                 | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                | 2.01E+02   | 1.7E+03                                      | 116.000                                     | 1                                 |             |    | 33,100   | 1                                |             |    |
| METALS   | Mercury                   | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                | 0.36   | 2.5E-01                                      | 0.025                                       | 1                                 | J           | J  | 0.032  | 1                                | J           | J  |
| METALS   | Nickel                    | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                | 1.16E+01   | 1.9E+02                                      | 7.310                                       | 1                                 |             |    | 5.120  | 1                                |             |    |
| METALS   | Potassium                 | NE                                       | NA                  | NA                     | NA                                      | NA   |  | 440.000                                     | 1                                 |             |    | 385.000  | 1                                |             |    |
| METALS   | Selenium                  | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                | 5.57E+00   | 1.3E+02                                      | 0.237                                       | 1                                 |             |    | 0.266  | 1                                |             |    |
| METALS   | Silver                    | 4.7E+01                                  | 0.050               | 0.20                   | 0.31                                    | 0.37   | 4.7E+01                                      | 1.690                                       | 1                                 | υ           |    | 1.840  | 1                                | U           |    |
| METALS   | Sodium                    | NE                                       | NA                  | NA                     | NA                                      | NA   | -  | 23.900                                      | 1                                 |             |    | 64.100   | 1                                |             |    |
| METALS   | Thailium                  | 2.0E+00                                  | 0.010               | 0.02                   | 0.47                                    | NE   | 2.0E+00                                      | 0.053                                       | 1                                 |             |    | 0.064  | 1                                |             |    |
| METALS   | Vanadium                  | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01                                | 4.46E+01   | 4.8E+01                                      | 26.600                                      | 1                                 |             |    | 25.300   | 1                                |             |    |
| METALS   | Zinc                      | 5.9E+03                                  | 0.625               | 2.50                   | 61.6                                    | 2.02E+01   | 5.9E+03                                      | 26.000                                      | 1                                 |             |    | 15.000   | 1                                |             |    |
| PERÇ   | Perchlorate               | 1.4E+01                                  | 0.005               | 0.01                   | NE                                      | NE   | 1.4E+01                                      | 0.082                                       | 1                                 |             |    | 0.010  | 1                                | U           |    |
| SOLIDS   | Percent Solids            | NE                                       | NA                  | NA                     | NE                                      | NE   |  | 89.100                                      | 1                                 |             |    | 80.000   | 1                                |             |    |

#### Shaw Environmental, Inc.

00066409

### Table 4-6 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 006

| [SUMP] = SUMP006<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backs<br>Concentra<br>(95% UF<br>Surface | round<br>tions in Soil<br>L. mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP007-SB01<br>35-SMP07-SB01-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG | 355UMP007-SB01<br>35-SMP07-SB01-02<br>9/11/2006<br>10 - 10 Ft<br>REG | 35SUMP007-SB02<br>35-SMP07-SB02-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG | 355UMP007-SB02<br>35-SMP07-SB02-01-QC<br>9/11/2006<br>0 - 0.5 Ft<br>FD | 35SUMP007-SB02<br>35-SMP07-SB02-02<br>9/11/2006<br>10 - 10 Ft<br>REG |
|---|---------------------------|--|---------------------|------------------------|--|---|--|--|--|--|--|--|
| Test Group  | Parameter (Units = mo/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft                                      | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   |
| METALS  | Aluminum                  | 1.6E+04                                  | 10.000              | 20.00                  | 16300                                    | 2.08E+04  | 1.6E+04                                      | 7800.000 1   | 21300.000 1  | 11300.000 1  | 12400.000 1  | 10600,000 1  |
| METALS  | Antimony                  | 7.3E+00                                  | 0,500               | 0.10                   | 0.94                                     | 1.6   | 7.3E+00                                      | 0.105 t U  | 0.114 1 U  | 0.113 1 U  | 0.112 1 U  | 0,113 1 U  |
| METALS  | Arsenic                   | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                 | 5.54E+00  | 2.0E+01                                      | 6.130 1  | 2.400 1  | 2.420 1  | 4.030 1  | 0.449 1  |
| METALS  | Barium                    | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                 | 8.55E+01  | 2.6E+03                                      | 34.200 1   | 95.100 1   | 86.900 1   | 81.500 1   | 42.200 1   |
| METALS  | Beryllium                 | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                 | 7.66E-01  | 4.6E+00                                      | 0.396 1  | 0.789 1  | 0.542 1  | 0.505 1  | 0.639 1  |
| METALS  | Cadmium                   | 5.2E+00                                  | 0.025               | 0.10                   | 1.4                                      | 0.4   | 5.2E+00                                      | 0.084 1 J J  | 0.117 1 J J  | 0.325 1 J J  | 0.357 1 J J  | 0.078 1 J J  |
| METALS  | Calcium                   | NE                                       | NA                  | NA                     | NA                                       | NA  | -  | 732.000 1 J  | 865.000 1 J  | 4300.000 1 J   | 7780.000 1 J   | 972.000 1 J  |
| METALS  | Chromium                  | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                                 | 3.01E+01  | 5.9E+03                                      | 23.800 1   | 23.500 1   | 16.100 1   | 19,000 1   | 11.900 1   |
| METALS  | Cobalt                    | 1.5E+03                                  | 0.125               | 0.50                   | 7.23E+00                                 | 5.61E+00  | 1.5E+03                                      | 1.520 1 J  | 8.630 1 J  | 10.300 1 J   | 5.460 1 J  | 9.820 1 5  |
| METALS  | Copper                    | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                                 | 9.25E+00  | 1.0E+03                                      | 1.760 1  | 7.340 1  | 5.110 1  | 5.860 1  | 3.330 1  |
| METALS  | non                       | NE                                       | NA                  | NA                     | NA                                       | NA  | -  | 40600.000 10   | 20000.000 1  | 13000.000 1  | 12700.000 1  | 7340.000 1   |
| METALS  | Lead                      | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                 | 1.14E+01  | 5.0E+02                                      | 5.280 1 J  | 8.970 1 J  | 9.650 1 J  | 25.600 1 J   | 4,900 1 J  |
| METALS  | Magnesium                 | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 429.000 1  | 1630.000 1   | 677.000 1  | 832.000 1  | 1450.000 1   |
| METALS  | Manganese                 | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                 | 2.01E+02  | 1.7E+03                                      | 123.000 1  | 125.000 1  | 491.000 1  | 345.000 1  | 72.600 1   |
| METALS  | Mercury                   | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                 | 0.36  | 2.5E-01                                      | 0.026 1 J J  | 0.012 1 U  | 0.042 1 J J  | 0.065 1 J J  | 0.012 1 U  |
| METALS  | Nickel                    | 1,9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                 | 1.16E+01  | 1.9E+02                                      | 3.130 1  | 11.800 1   | 7.150 1  | 8.360 1  | 9.540 1  |
| METALS  | Potassium                 | NE                                       | NA                  | NA                     | NA                                       | NA  | -  | 242.000 1  | 651.000 1  | 477.000 1  | 502.000 1  | 405.000 1  |
| METALS  | Selenium                  | 1,3E+02                                  | 0.100               | 0.20                   | 3,48E+00                                 | 5.57E+00  | 1.3E+02                                      | 0.445 1  | 0.224 1 J J  | 0.236 1  | 0.261 1  | U.225 1 U  |
| METALS  | Silver                    | 4.7E+01                                  | 0.050               | 0.20                   | 0.31                                     | 0.37  | 4.7E+01                                      | 1.580 1 U  | 1.590 1 U  | 1.630 1 U  | 1.730 1 U  | 1.790 1 0  |
| METALS  | Sodium                    | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 25.800 1   | 312.000 1  | 36.700 1   | 41.300 1   | 480.000 1  |
| METALS  | Thallium                  | 2.0E+00                                  | 0.010               | 0.02                   | 0.47                                     | NE  | 2.0E+00                                      | 0.046 1  | 0.112 1  | 0.072 1  | 0.075 1  | 0.072 1  |
| METALS  | Vanadium                  | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01                                 | 4.46E+01  | 4.8E+01                                      | 44.800 1   | 30.000 1   | 28.100 1   | 26.000 1   | 14.400 1   |
| METALS  | Zinc                      | 5.9E+03                                  | 0.625               | 2.50                   | 61.6                                     | 2.02E+01  | 5.9E+03                                      | 17.800 1   | 38.200 1   | 49.600 1   | 55.500 1   | 19.300 1   |
| RANGE ORGANICS  | Carbon Range C12-C28      | 4.0E+02                                  | 25                  | 50                     | NE                                       | NE  | 4.0E+02                                      | 52.900 1 U   | 57.900 1 U   | 56.600 1 U   | 56.200 1 U   | 40.600 1 J B   |
| RANGE ORGANICS  | Carbon Range C28-C35      | 4.0E+02                                  | 25                  | 50                     | NE                                       | NE  | 4.0E+02                                      | 52.900 1 U   | 57.900 1 U   | 56.600 1 U   | 56.200 1 U   | 58.300 1 U   |
| RANGE ORGANICS  | Carbon Range C6-C12       | 1.7E+02                                  | 25                  | 50                     | NE                                       | NE  | 1.7E+02                                      | 52.900 1 U   | 57.900 1 U   | 56.600 1 U   | 56.200 1 U   | 58.300 1 U   |
| SOLIDS  | Percent Solids            | NE                                       | NA                  | NA                     | NE                                       | NE  |  | 93.600 1   | 85.800 1   | 87,900 1   | 88.900 1   | 84.500 1   |

Shaw Environmental, Inc.

00066410

#### Table 4-7 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 007

| [SUMP] = SUMP007<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                               | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Quantitation | Method _<br>Quantitation | Backç<br>Concentra<br>(95% UP<br>Surface | round<br>ions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 355UMP007-SB01<br>35-SMP07-SB01-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG | 35SUMP007-SB01<br>35-SMP07-SB01-02<br>9/11/2006<br>10 - 10 Ft<br>REG | 355SUMP007-SB02<br>35-SMP07-SB02-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG | 35SUMP007-SB02<br>35-SMP07-SB02-01-QC<br>9/11/2006<br>0 -0.5 Ft<br>FD | 35SUMP007-SB02<br>35-SMP07-SB02-02<br>9/11/2006<br>10 - 10 Ft<br>REG |
|--|-------------------------------|--|------------------------|--------------------------|--|--|--|--|--|---|---|--|
| Test Group   | Parameter (Units = mg/kg)     | (RBSV) *                                 | Limit (MDL)            | Limit (MQL)              | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft                                     | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ   |
| METALS   | Aluminum                      | 1.6E+04                                  | 10.000                 | 20.00                    | 16300                                    | 2.08E+04   | 1.6E+04                                      | 7800.000 1   | 21300.000 1  | 11300.000 1   | 12400.000 1   | 10600.000 1  |
| METALS   | Antimony                      | 7.3E+00                                  | 0.500                  | 0.10                     | 0,94                                     | 1.6  | 7.3E+00                                      | 0.105 I U  | 0.114 1 U  | 0.113 1 U   | 0.112 1 0   | 0.113 1 U  |
| METALS   | Arsenic                       | 2.0E+01                                  | 0.075                  | 0.30                     | 4.81E+00                                 | 5.54E+00   | 2.0E+01                                      | 6.130 1  | 2,400 1  | 2.420 1   | 4.030 1   | 0.449 1  |
| METALS   | Barium                        | 2.6E+03                                  | 0.075                  | 0.30                     | 1.52E+02                                 | 8.55E+01   | 2.6E+03                                      | 34.200 1   | 95.100 1   | 86.900 1  | 81.500 1  | 42.200 1   |
| METALS   | Beryllium                     | 4.6E+00                                  | 0.012                  | 0.50                     | 6.45E-01                                 | 7.66E-01   | 4.6E+00                                      | 0.396 1  | 0.789 1  | 0.542 1   | 0.505 1   | 0.639 1  |
| METALS   | Cadmium                       | 5.2E+00                                  | 0.025                  | 0.10                     | 1.4                                      | 0.4  | 5.2E+00                                      | 0.084 1 J J  | 0.117 1 J J  | 0.325 1 J J   | 0.357 1 J J   | 0.078 1 J J  |
| METAL\$  | Calcium                       | NE                                       | NA                     | NA                       | NA                                       | NA   | -  | 732.000 1 J  | 865.000 1 J  | 4300.000 1 J  | 7780.000 1 J  | 972.000 1 J  |
| METALS   | Chromium                      | 5.9E+03                                  | 0.100                  | 0.40                     | 2.66E+01                                 | 3.01E+01   | 5.9E+03                                      | 23,800 1   | 23.500 1   | 16.100 1  | 19.000 1  | 11.900 1   |
| METALS   | Cobalt                        | 1.5E+03                                  | 0.125                  | 0.50                     | 7.23E+00                                 | 5.61E+00   | 1.5E+03                                      | 1.520 1 J  | 8.630 1 J  | 10.300 1 J  | 5.460 1 J   | 9.820 1 J  |
| METALS   | Copper                        | 1.0E+03                                  | 0.150                  | 0.60                     | 5.55E+00                                 | 9.25E+00   | 1.0E+03                                      | 1.760 1  | 7,340 1  | 5.110 1   | 5.860 1   | 3.330 1  |
| METALS   | Iron                          | NE                                       | NA                     | NA                       | NA                                       | NA   | -  | 40600.000 10   | 20000.000 1  | 13000.000 1   | 12/00.000 1   | 7340.000 1   |
| METALS   | Lead                          | 5.0E+02                                  | 0.500                  | 5.00                     | 2.26E+01                                 | 1.14E+01   | 5.0E+02                                      | 5.280 1 J  | 8.970 1 J  | 9.650 1 J   | 25.600 1 J  | 4.900 1 J  |
| METALS   | Magnesium                     | NE                                       | NA                     | NA                       | NA                                       | NA   |  | 429.000 1  | 1630.000 1   | 677.000 1   | 832.000 1   | 1450.000 1   |
| METALS   | Manganese                     | 1.7E+03                                  | 0.050                  | 0.20                     | 1.25E+03                                 | 2,01E+02   | 1.7E+03                                      | 123.000 1  | 125.000 1  | 491.000 1   | 345.000 1   | 72.600 1   |
| METALS   | Mercury                       | 1.1E-02                                  | 0,010                  | 0.25                     | 8.19E-02                                 | 0.36   | 2.5E-01                                      | 0.026 1 J J  | 0.012 1 U  | 0.042 1 J J   | 0.065 1 J J   | 0.012 1 U  |
| METALS   | Nickel                        | 1.9E+02                                  | 0.200                  | 0.80                     | 6.98E+00                                 | 1,16E+01   | 1.9E+02                                      | 3.130 1  | 11.800 1   | 7.150 1   | 8.360 1   | 9.540 1  |
| METALS   | Potassium                     | NE                                       | NA                     | NA                       | NA                                       | NA   | -  | 242.000 1  | 651.000 1  | 477.000 1   | 502.000 1   | 405.000 1  |
| METALS   | Setenium                      | 1.3E+02                                  | 0.100                  | 0.20                     | 3.48E+00                                 | 5.57E+00   | 1.3E+02                                      | 0.445 1  | 0.224 1 J J  | 0.235 1   | 0.261 1   | 0.225 1 U  |
| METALS   | Silver                        | 4.7E+01                                  | 0.050                  | 0.20                     | 0.31                                     | 0.37   | 4.7E+01                                      | 1.580 1 U  | 1.590 1 U  | 1.630 1 U   | 1.730 1 U   | 1.790 1 U  |
| METALS   | Sodium                        | NE                                       | NA                     | NA                       | NA                                       | NA   | -  | 25.800 1   | 312.000 1  | 36.700 1  | 41.300 1  | 480.000 1  |
| METALS   | Thallium                      | 2.0E+00                                  | 0.010                  | 0.02                     | 0.47                                     | NE   | 2.0E+00                                      | 0.046 1  | 0.112 1  | 0.072 1   | 0.075 1   | 0.072 1  |
| METALS   | Vanadium                      | 4.8E+01                                  | 0.125                  | 0.50                     | 3.21E+01                                 | 4.46E+01   | 4.8E+01                                      | 44.800 1   | 30.000 1   | 28.100 1  | 26.000 1  | 14.400 1   |
| METALS   | Zinc                          | 5.9E+03                                  | 0.625                  | 2.50                     | 61.6                                     | 2.02E+01   | 5.9E+03                                      | 17.800 1   | 38.200 1   | 49.600 1  | 55.500 1  | 19.300 1   |
| RANGE ORGANICS   | Carbon Range C12-C28          | 4.0E+02                                  | 25                     | 50                       | NE                                       | NE   | 4.0E+02                                      | 52.900 1 U   | 57.900 1 U   | 56.600 1 U  | 56.200 1 U  | 40.600 1 J B   |
| RANGE ORGANICS   | Carbon Range C28-C35          | 4.0E+02                                  | 25                     | 50                       | NE                                       | NE   | 4.0E+02                                      | 52.900 1 U   | 57.900 1 U   | 56.600 1 V  | 56.200 1 U  | 58.300 1 U   |
| RANGE ORGANICS   | Carbon Range C6-C12           | 1.7E+02                                  | 25                     | 50                       | NE                                       | NÉ   | 1.7E+02                                      | 52.900 1 U   | 57.900 1 U   | 56.600 1 U  | 56.200 1 U  | 58.300 t U   |
| SOLIDS   | Percent Solids                | NE                                       | NA                     | NÁ                       | NË                                       | NE   |  | 93.600 1   | 85.800 1   | 87.900 1  | 88.900 1  | 84.500 1   |
| Footnotes are shown on   | cover page to Tables Section. |  |                        |                          |  |  |  |  |  |   |   |  |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas

Shaw Environmental, Inc.

00066411

Data Evaluation Report Chemical Concentrations in Soit Associated with LHAAP-35/36 Sumps

Table 4-8 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 008

| SUMP] = SUMP00<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOS | 8<br>:<br>::                                | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _<br>Quantitation | Backg<br>Concentrati<br>(95% UP/<br>Surface | round<br>ions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Rişk-Based<br>Screening | 35SUMP008-SB01<br>35-SMP08-SB01-02<br>9/8/2006<br>6 - 6 Ft<br>REG | 35SUMP009-SB01<br>35-SMP09-SB01-02<br>9/11/2006 `<br>8 - 8 Ft<br>REG | WRSUMP005-SE<br>WR\$MP005-SE<br>9/22/2006<br>_55 Ft<br>REG | SB01<br>101-01 | WRSUMP005-SB<br>WRSMP005-SB01<br>9/22/2006<br>5 - 5 Ft<br>REG | 01<br>-02   | WRSUMP005-3<br>WRSMP005-SB<br>9/22/2016<br>5 - 5 Ft<br>REG | 6802<br>02-02 | WRSUMP005-<br>WRSMP005-SB0<br>9/22/2006<br>5 - 5 Ft<br>FD | SB02<br>2-02-QC |
|--|---|--|---------------------|--------------------------|---|--|--|---|--|--|----------------|---|-------------|--|---------------|---|-----------------|
| Test Group 1   | Parameter (Units = mg/kg)                   | (RBSV)*                                  | Limit (MDL)         | Limit (MQL)              | 0 - 0.5 Ft                                  | 1.5 - 2.5 Ft                                     | Value  | Result DIL LQ VQ  | Result DIL LO_VO   | Result Dil   | LO VO          | Result DILL   | <u>a va</u> | Result DIL   |               | Result DIL  | <u>. LQ VQ</u>  |
| EXPLOSIVES 1   | 1,3,5-Trinitrobenzene                       | 4.7E+02                                  | 0.1                 | 0.25                     | NE  | NE   | 4.7E+02                                      | 0.283 1 U   | 0.245 1 U  | 0.242 1  |                | 0.238 1 1   | u u         | 0.245 1  | ΰŭ            | 0.242 1   | ŭŭ              |
| EXPLOSIVES 1   | 3-Dinitrobenzene                            | 1.66+00                                  | 0.1                 | 0.25                     | NE  | NE   | 7.7E+00                                      | 0.283 1 1   | 0.245 1 U  | 0.242 1  | ŭŭ             | 0.238 1   | ũũ          | 0.245 1  | ŪŪ            | 0.242 1   | υυ              |
|  | 2,4,0-11Introtoluene                        | 7.2E-01                                  | 0.1                 | 0.25                     | NE  | NE   | 7.2E-01                                      | 0.283 1 U   | 0.245 1 U  | 0.242 1  | ΰÜ             | 0.238 1   | U U         | 0.245 1  | 0 0           | 0.242 1   | υU              |
| EXPLOSIVES 2   | 2.6-Dinitrataluene                          | 7.2E-01                                  | 0.1                 | 0.26                     | NE  | NE   | 7.2E-01                                      | 0.294 1 U   | 0.255 1 U  | 0.251 1  | υυ             | 0.248 1   | u u         | 0.255 1  | 0 0           | 0.251 1   | 0 0             |
| EXPLOSIVES 2   | 2-Amino-4,6-dinitrotoluene                  | 2.6E+00                                  | 0.1                 | 0.26                     | NE  | NE   | 2.6E+00                                      | 0.294 1 U   | 0.255 1 U  | 0.251 1  | 0 0            | 0.248 1   |             | 0.255 1  | 1 1           | 0.201 1   | йü              |
| EXPLOSIVES   | I-Amino-2,6-dinitrotoluene                  | 2.6E+00                                  | 0.1                 | 0.26                     | NE  | NE   | 2.6E+00                                      | 0.294 1 U   | 0.255 1 U<br>2.160 1 Lt  | 2 130 1  | i ii           | 2 100 1   | ŭŭ          | 2,160 1  | ນັ້ນ          | 2.130 1   | ŭŬ              |
| EXPLOSIVES E   | HMX<br>                                     | 2.2E+02                                  | 0.1                 | 2.20                     | NE  | NE   | 2.2E+02<br>4.4E+01                           | 0.283 1 U   | 0.245 1 U  | 0.242 1  | ŭŭ             | 0.238 1   | บับั        | 0.245 1  | ŬŪ            | 0.242 1   | υŲ              |
| EXPLOSIVES I   | Nitrohenzene                                | 6.5E+00                                  | 0.1                 | 0.26                     | NE  | NE   | 6.5E+00                                      | 0.294 1 U   | 0.255 1 U  | 0.251 1  | Úυ             | 0.248 1   | υυ          | 0.255 1  | U U           | 0.251 1   | υu              |
| EXPLOSIVES (   | -Nitrotoluene                               | 4.7E+01                                  | 0.1                 | 0.25                     | NE  | NE   | 4.7E+01                                      | 0.283 1 U   | 0.245 1 U  | 0.242 1  | U U            | 0.238 1   |             | 0.245 1  | 0 0           | 0.242 1   | 11 11           |
| EXPLOSIVES   | p-NitrotoIuene                              | 4.4E+01                                  | 0.1                 | 0.25                     | NE  | NE   | 4.4E+01                                      | 0.283 1 0   | 0.245 1 U  | 0.242 1  | U U            | 0.236 1   | йй          | 0.980 1  | បំ ប័         | 0.966 1   | บับั            |
| EXPLOSIVES I   | RDX   | 3.6E+00                                  | 0.1                 | 1.00                     | NE  | NE   | 1.65+02                                      | 0.735 1 U   | 0.637 1 U  | 0.628 1  | ŬŬ_            | 0.619 1   | ΰū_         | 0.637 1  | ΰŪ            | 0.628 1   | υυ              |
| METALS   | Aluminum                                    | 1.6E+04                                  | 10.000              | 20.00                    | 16300                                       | 2.08E+04   | 1.6E+04                                      | 8220.000 1  | 12300.000 1  | 9100.000 1   | E              | 18800.000 1   | E           | 20900.0001   |               | 16000.000 1   |                 |
| METALS   | Antimony                                    | 7.3E+00                                  | 0.050               | 0.10                     | 0.94  | 1.6  | 7.3E+00                                      | 0.117 1 U UJL   | 0.111 1 U  | 0.113 1  | Û ÛJL          | 0.115 1   | u ult       | 0.076 1  | JJL           | 1,730 1   | 0 000           |
| METALS   | Arsenic                                     | 2.0E+01                                  | 0.075               | 0.30                     | 4.81E+00                                    | 5.54E+00   | 2.0E+01                                      | 3.460 1 JL  | 25 300 1   | 129 000 1  | ાપ્ત           | 51,400 1  | JH          | 65.600 1   | JH            | 61.900 1  | JH              |
| METALS I   | Banum<br>Banum                              | 2.66+03                                  | 0.075               | 0.30                     | 6.455-01                                    | 7.66E-01   | 2.6E+03                                      | 0.517 1   | 0.793 1  | 0.560 1  | •••            | 0.939 1   |             | 1.090 1  |               | 0.849 1   |                 |
| METALS (   | Cadmium                                     | 5.2E+00                                  | 0.025               | 0.10                     | 1.4   | 0.4  | 5.2E+00                                      | 0.062 1 J J   | 0.079 1 J J  | 0.151 1  | JJ             | 0.076 1   | 1 J         | 0.073 1  | JJ            | 0.099 1   | 1 1             |
| METALS (   | Calcium                                     | NE                                       | NA                  | NA                       | NA  | NA   |  | 428.000 1   | 1340.000 1 J   | 1510.000 1   | ш              | 940.000 1   | 154         | 24 100 1   | JH            | 16,500 1  | JH              |
| METALS   | Chromium                                    | 5.9E+03                                  | 0.100               | 0.40                     | 2.66E+01                                    | 3.01E+01   | 5.9E+03                                      | 8.670 1 JH  | 11.400 1   | 4.220 1  | 11             | 7.330 1   |             | 9.060 1  |               | 7.540 1   | •               |
| METALS (   | Conner                                      | 1,3E+03<br>1 0E+03                       | 0.125               | 0.50                     | 5.55E+00                                    | 9.25E+00   | 1.0E+03                                      | 4.360 1   | 3.800 1  | 2.270 1  |                | 5.020 1   |             | 6.800 1  |               | 5.520 1   |                 |
| METALS   | Iron  | NE                                       | NA                  | NA                       | NA  | NA   | _  | 9850,000 1  | 12600.000 1  | 28700.000 1  | j              | 19200.000 1   | J           | 24500.000 1  | J             | 18500.000 1   | 4               |
| METALS   | Lead  | 5.0E+02                                  | 0.500               | 5.00                     | 2.26E+01                                    | 1.142+01   | 5.0E+02                                      | 5.520 1 JL  | 5.570 1 J  | 550,000 1  |                | 11,500 1  |             | 1500.000 1   |               | 1180.000 1  |                 |
| METALS   | Magnesium                                   | NE<br>4 7E+02                            | NA<br>0.050         | NA<br>0.20               | NA<br>1 355402                              | 2 015-02   | 1 75403                                      | 23 600 1  | 21,900 1   | 129.000 1  | J              | 27.700 1  | J           | 59.200 1   | J             | 63.100 1  | J               |
| METALS   | Manganese<br>Mercury                        | 1 12-02                                  | 0.010               | 0.25                     | 8.19E-02                                    | 0.36   | 2.5E-01                                      | 0.015 1 J J   | 0.011 1 U  | 0.015 1  | JĴ             | 0.012 1   | υu          | 0.063 1  | JJ            | 0.042 1   | JJ              |
| METALS   | Nickel                                      | 1.9E+02                                  | 0.200               | 0.80                     | 6.98E+00                                    | 1.16E+01   | 1.9E+02                                      | 10.400 1  | 16.700 1   | 4,760 1  | ĴН             | 10,100 1  | JH          | 11.700 1   | JH            | 8.940 1   | 1H<br>IH        |
| METALS   | Potassium                                   | NE                                       | NA                  | NA                       | NA  | NA   |  | 426.000 1 JH  | 509.000 1  | 262.000 1  | JH             | 407.000 1   | Jan Jan     | 0 247 1  |               | 0.262 1   | -               |
| METALS   | Selenium                                    | 1.3E+02                                  | 0.100               | 0.20                     | 3.48E+00                                    | 5.5/E+00   | 1.3E+02<br>4.7E+01                           | 0.104 1 J J<br>1800 1 U   | 1.710 1 U  | 1.680 1  | υυ             | 1.870 1   | ΰŭ          | 1.820 1  | ΰů            | 1.920 1   | υυ              |
| METALS   | Sodium                                      | NE                                       | NA                  | NA NA                    | NA  | NA   | 4.72.01                                      | 188.000 1   | 550,000 1  | 42.500 f   |                | 326.000 1   |             | 243.000 1  |               | 212.000 1   |                 |
| METALS   | Thallium                                    | 2.0E+00                                  | 0.010               | 0.02                     | 0.47  | NË   | 2.0E+00                                      | 0.074 1   | 0.073 1  | 0.058 1  |                | 0.114 1   | 10          | 0.107 1  | ш             | 28 603 1  | BH              |
| METALS   | Vanadium                                    | 4.85+01                                  | 0.125               | 0.50                     | 3.21E+01                                    | 4.46E+01   | 4.8E+01                                      | 18.800 1  | 16.500 1   | 18,300 1   | ᅫ              | 26.600 1  | JH          | 31.800 1   | JH            | 23.500 1  | ĴH.             |
| METALS   | Zinc<br>1.2.4.Trichlamberrana               | 5,9E+03                                  | 0.625               | 2.50                     | 61.6<br>NF                                  | 2.02E+01   | 1 4E+02                                      | 34.500  | 31,000 1   | 0.922 5  | ບີບ            | 0.201 1   | ບີບີ        | 0.207 1  | υŪ            | 0.204 1   | υŪ              |
| SEMIVOLATILES  | 1.2-Dichlorobenzene                         | 5.6E+01                                  | 0.083               | 0.17                     | NE  | NE   | 5.6E+01                                      |   |  | 30.000 5   |                | 0.247 1   |             | 0.207 1  | U U           | 0.204 1   | U U             |
| SEMIVOLATILES  | 1,3-Dichlorobenzene                         | 5.1E+00                                  | 0.083               | 0.17                     | NE  | NE   | 5.1E+00                                      |   |  | 0.922 5  | U U            | 0,201 1   | 0 0         | 0.207 1  | 00            | 0.204 1   | ŭŭ              |
| SEMIVOLATILES  | 1,4-Dichlorobenzene                         | 2.7E+01                                  | 0.083               | 0.17                     | NE  | NE   | 2.75+01                                      |   |  | 0.922 5  | មើម            | 0.201 1   | ŭŭ          | 0.207 1  | ΰŭ            | 0.204 1   | υŪ              |
| SEMIVOLATILES  | 2,4,5-1 Inchlorophenol                      | 4.5E+01                                  | 0.083               | 0.17                     | NE  | NE   | 4.5E+01                                      |   |  | 0.922 5  | ŪŪ             | 0.201 1   | υŪ          | 0.207 1  | υυ            | 0.204 1   | บบ              |
| SEMIVOLATILES  | 2,4-Dichlorophenol                          | 4.7E+01                                  | 0.083               | 0.17                     | NE  | NE   | 4.7E+01                                      |   |  | 0.922 5  | U U            | 0.201 1   | <u>u u</u>  | 0.207 1  | υu            | 0.204 1   |                 |
| SEMIVOLATILES  | 2,4-Dimethylphenol                          | 3.1E+02                                  | 0.083               | 0.17                     | NE  | NE   | 3.1E+02                                      |   |  | 0.922 5  |                | 1.050 1   | ιŭ Π        | 1.03B 1  | йй            | 1.020 1   | ŭŭ              |
| SEMIVOLATILES  | 2,4-Dinitrophenol                           | 3.16+01                                  | 0.330               | 0.83                     | NE  | NE   | 7.25-01                                      |   |  | 0.922 5  | ขับ            | 0.201 1   | ΰũ          | 0.207 1  | ŪŪ            | 0.204 1   | υu              |
| SEMIVOLATILES  | 2.6-Dialitotoluene                          | 7.2E-01                                  | 0.083               | 0.17                     | NE  | NE   | 7.2E-01                                      |   |  | 0.922 5  | บบ             | 0.201 1   | υu          | 0.207 1  | 0 0           | 0.204 1   |                 |
| SEMIVOLATILES  | 2-Chloronaphthalene                         | 1.1E+03                                  | 0.083               | 0.17                     | NE  | NE   | 1.1E+03                                      |   |  | 0.922 5  | U U            | 0.201 1   | υ υ<br>11 Π | 0.207 1  | 00            | 0.204 1   |                 |
| SEMIVOLATILES  | 2-Chlorophenol                              | 1.1E+02                                  | 0.083               | 0.17                     | NE  | NE   | 1.1E+02                                      | 1   |  | 0.922 5  | ŭŬ             | 0.201 1   | ນັບ         | 0.207 1  | បីបី          | 0.204 1   | บับั            |
| SEMIVOLATILES  | 2-Methylobenol                              | 7.7E+02                                  | 0.083               | 0.17                     | NÊ  | NE   | 7.7E+02                                      |   |  | 0,922 5  | ΰũ             | 0.201 1   | ŪŪ.         | 0.207 1  | υυ            | 0.204 1   | υυ              |
| SEMIVOLATILES  | 2-Nitroaniline                              | 4.7E+00                                  | 0.330               | 0.83                     | NE  | NE   | 4.7E+00                                      |   |  | 4.610 5  | U U            | 1.010 1   | <u>u u</u>  | 1.030 1  | 0 0           | 1.020 1   |                 |
| SEMIVOLATILES  | 2-Nitrophenol                               | 3.1E+01                                  | 0.083               | 0.17                     | NE  | NE   | 3.1E+01                                      |   |  | 0.922 5  | 11 11          | 0.402 1   | μü          | 0.414 1  | ŭŬ            | 0.407 1   | บับั            |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine                      | 1.1E+00                                  | 0.165               | 0.33                     | NE  | NE<br>NE   | 4.75+00                                      |   |  | 4.610 5  | ບັນ            | 1,010 1   | ŭŬ          | 1.030 1  | ŬŪ            | 1.020 1   | υŨ              |
| SEMIVOLATILES  | 4.6-Dinitro-2-methylphenol                  | 3.1E+01                                  | 0.330               | 0.83                     | NE  | NE   | 3.1E+01                                      |   |  | 4.610 5  | υU             | 1.010 1   | υu          | 1.030 1  | υu            | 1,020 1   |                 |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether                  | 3.1E-02                                  | 0.083               | 0.17                     | NE  | NE   | 1.7E-01                                      |   |  | 0.467 5  |                | 0.101 1   | 0 0         | 0.103 1  |               | 0.103 1   |                 |
| SEMIVOLATILES  | 4-Chloro-3-methylphenol                     | 7.7E+01                                  | 0.083               | 0.17                     | NE  | NE   | 7.7E+01                                      |   |  | 0.922 0  | i ii           | 0.201 1   | ប័ ដ័       | 0.207 1  | ΰŭ            | 0.204 1   | ើប័រ            |
| SEMIVOLATILES  | 4-Chloroshenvi phenvi ether                 | 2.2E+U1                                  | 0.063               | 0.17                     | NE  | NE   | 1 75-01                                      |   |  | 0.487 5  | ນັບັ           | 0.101 1   | ŪŪ.         | 0.103 1  | υυ            | 0.103 1   | , U U           |
| SEMIVOLATILES  | 4-Methylphenol                              | 7.7E+01                                  | 0.083               | 0,17                     | NE  | NE   | 7.7E+01                                      |   |  | 0,922 5  | υu             | 0.201 1   | บบ          | 0.207 1  | 0 0           | 0.204 1   |                 |
| SEMIVOLATILES  | 4-Nitroaniline                              | 1.3E+01                                  | 0.330               | 0.83                     | NE  | NE   | 1.3E+01                                      |   |  | 4.610 5  | 00             | 1.010 1   | 00          | 1,030 1  | 1 1           | 1.020 1   | រើមើ            |
| SEMIVOLATILES  | 4-Nitrophenol                               | 3.1E+01                                  | 0.330               | 0.83                     | NE  | NE   | 3.1E+01<br>9.2E+02                           |   |  | 0.922 5  | йй             | 0.201 1   | ŭŭ          | 0,207 1  | บับั          | 0.204 1   | υŨ              |
| SEMIVOLATILES<br>SEMIVOLATILES   | Acenaphinene                                | 8.2E+02                                  | 0.083               | 0.17                     | NE  | NE   | 8.2E+02                                      |   |  | 0.922 5  | ΰŰ             | 0.201 1   | ΰΰ          | 0.207 1  | ບບ            | 0.204 1   | υυ              |
| SEMIVOLATILES  | Anthracene                                  | 4.1E+03                                  | 0.083               | 0.17                     | NE  | NE   | 4.1E+03                                      |   |  | 0.922 5  | N N            | 0.201 1   | u u         | 0.207 1  | υU            | 0.204 1   |                 |
| SEMIVOLATILES  | Benzo(a)anthracene                          | 6.3E-01                                  | 0.083               | 0.17                     | 0.02  | NE   | 6.3E-01                                      |   |  | 0.922 5  | 0 0            | 0.201 1   | 0 0         | 0.207 1  | UП            | D.103 1   | ើបពី            |
| SEMIVOLATILES  | Benzo(a)pyrene                              | 6.3E-02                                  | 0.083               | 0,17                     | 0.02  | NE   | 7./E-01<br>6.3E-01                           |   |  | 0.922 5  | บัน            | 0.201 1   | ບັບັ        | 0.207 1  | ŭŭ            | 0.204 1   | เบีบ            |
| SEMIVOLATILES<br>SEMIVOLATILES   | Benzo(o)nooranunene<br>Benzo(ohiloerviene   | 4.1E+02                                  | 0.083               | 0.17                     | 0.01  | NE   | 4.1E+02                                      |   |  | 0.922 5  | υŰ             | 0.201 1   | υŪ          | 0.207 1  | υu            | 0.204 1   | U U             |
| SEMIVOLATILES  | Benzo(k)fluoranthene                        | 6.3E+00                                  | 0.083               | 0.17                     | 0.01  | NE   | 6.3E+00                                      |   |  | 0.922 5  | U U            | 0.201 1   | <u>.</u>    | 0.207 1  | 00            | 0.204 1   |                 |
| SEMIVOLATILES  | Benzoic Acid                                | 6.2E+04                                  | 0.330               | 0.83                     | NE  | NE   | 6.2E+04                                      |   |  | 4.610 5  | 10 00          | 1.010 1   | 0 00        | 1.030 1  | 0 01          | 0.204 1   | 1 1 1 1         |
| SEMIVOLATILES  | Benzyl Alcohol<br>bis(2,Chloropthow/methace | 4./E+03<br>2.9E-01                       | 0,083               | 0.17                     | NE  | NE   | 4.7E+03<br>2.9E-01                           | 1   |  | 0.922 5  | υŭ             | 0.201   | υŭ          | 0.207 1  | ΰŭ            | 0.204   | เบีย            |
| SEMIVOLATILES  | bis(2-Chloroethyl)ether                     | 1,5E-01                                  | 0.083               | 0.17                     | NE  | NE   | 1.7E-01                                      | 1   |  | 0.467 5  | υu             | 0.101 1   | ប ប         | 0.103 1  | U U           | 0.103 1   | U U             |
| SEMIVOLATILES  | bis(2-Chloroisopropyl)ether                 | 4.8E+00                                  | 0.083               | 0.17                     | NE  | NE   | 4.8E+00                                      |   |  | 0.922 5  | U U            | 0.201 1   | U U         | 0,207 1  | 0 0           | 0.204 1<br>0.204 1  |                 |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate                  | 1.7E+01                                  | 0.083               | 0.17                     | NE  | NE   | 1.7E+01                                      |   |  | 0.922 5  | UU             | 0.201 1   | ບັບ         | 0.207 1  | บับั          | 0.204 1   | របីបី           |
| SEMIVOLATILES  | butyi penzyi prinalate                      | 3.16+03                                  | 0.000               | 0.17                     | NC  | INC .  | 1 9.1CL03                                    | 1   |  | 01026  |                |   |             |  |               |   |                 |

Shaw Project No. 117591 7/16/2007

Shaw Environmental, Inc.

00066412

#### Table 4-8 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 008

| [SUMP] = SUMPOO<br>LOCATION_CODI<br>SAMPLE_NO | 08<br>E                                      | TCEO               |              |              | Back       | around        | Applicble          | 35SUMP<br>35-SMP0 | 008-SB01<br>8-SB01-02 | 35SUM<br>35-SMP | P009-SB01<br>09-SB01-02 | WRSUMP005-SB01<br>WRSMP005-SB01-01 | WRSUMP<br>WRSMP00 | 005-SB01<br>5-SB01-02 | WRSUMPO<br>WRSMP005- | 5-\$802<br>\$802-02 | WRSUMP00<br>WRSMP005-SB | 5-SB02<br>302-02-QC |
|---|--|--------------------|--------------|--------------|------------|---------------|--------------------|-------------------|-----------------------|-----------------|-------------------------|------------------------------------|-------------------|-----------------------|----------------------|---------------------|-------------------------|---------------------|
| SAMPLE_DATE                                   |  | Risk-Based         | Malbad       | Nanita d     | Concentra  | tions in Soil | TCEQ               | 9/8/              | 2006                  | 9/1             | 1/2006                  | 9/22/2006<br>5 - 5 5t              | 9/22/             | 2006<br>5 Et          | 9/22/20              | 06<br>9             | 9/22/200<br>5+5 F       | )6<br>1             |
| SAMPLE_PURPO                                  | SE   | Value              | Detection    | Quantitation | Surface    | Subsurface    | Screening          | R                 | ËG                    | F               | REG                     | REG                                | RE                | ĒĢ                    | REG                  | •                   | FD                      | •                   |
| Test Group                                    | Parameter (Units = mg/kg)                    | (RBSV)*            | Limit (MDL)  | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value              | Result            | DIL LO VO             | Result          | DIL LQ VQ               | Result DIL LO VO                   | Result            | DIL LO VO             | Result<br>0 207      | <u> il la va</u>    | Result D                | IL LO VO            |
| SEMIVOLATILES                                 | Chrysene<br>Dibenzo(a.h)anthracene           | 6.3E+01<br>6.3E-02 | 0.0825       | 0.165        | 0.02<br>NE | NE            | 6.3E+01<br>1.7E-01 |                   |                       |                 |                         | 0,922 5 0 0                        | 0.101             | 1 0 0                 | 0.103                | iŭŭ                 | 0.103                   | ើមើម                |
| SEMIVOLATILES                                 | Dibenzofuran                                 | 6.2E+01            | 0.0825       | 0.165        | NE         | NE            | 6.2E+01            |                   |                       |                 |                         | 0.922 5 U U                        | 0.201             | 1 U U                 | 0.207                | 1 0 0               | 0.204                   | 1 U U               |
| SEMIVOLATILES                                 | Diethyl phthalate<br>Dimethyl phthalate      | 1.2E+04<br>1.2E+04 | 0.0825       | 0.165        | NE         | NE            | 1.2E+04<br>1.2E+04 |                   |                       |                 |                         | 0.922 5 U U                        | 0.201             | 1 1 1                 | 0.207                | ίŭŭ                 | 0.204                   | រំបំរំ              |
| SEMIVOLATILES                                 | di-n-Butyl phthalate                         | 1.6E+03            | 0.0825       | 0.165        | NE         | NE            | 1.6E+03            |                   |                       |                 |                         | 0.922 5 U U                        | 0.201             | 1 0 0                 | 0.207                | 1 0 0               | 0.204                   | 1 1 1               |
| SEMIVOLATILES                                 | di-n-Octyl phthalate<br>Fluoranthene         | 3.1E+02<br>5.5E+02 | 0.0825       | 0.165        | NE<br>0.02 | NE            | 3.1E+02<br>5.5E+02 |                   |                       |                 |                         | 0.922 5 U U                        | 0.201             | 1 0 0                 | 0.207                | ែប័ប័               | 0.204                   | រំបំរំ              |
| SEMIVOLATILES                                 | Fluorene                                     | 5.5E+02            | 0.0825       | 0.165        | NE         | NE            | 5.5E+02            |                   |                       |                 |                         | 0.922 5 U U                        | 0.201             | 1 0 0                 | 0.207                | 1 1 1               | 0.204                   |                     |
| SEMIVOLATILES                                 | Hexachlorobenzene<br>Hexachlorobutadiene     | 2.5E-01<br>1.6E+00 | 0.0825       | 0,165        | NE         | NE            | 2.5E-01<br>1.6E+00 |                   |                       |                 |                         | 0.922 5 U U<br>0.922 5 U U         | 0.201             | 1 0 0                 | 0.207                | 1 0 0               | 0.204                   | 1 0 0               |
| SEMIVOLATILES                                 | Hexachlorocyclopentadiene                    | 1.0E+00            | 0.0825       | 0.165        | NE         | NE            | 1.0E+00            |                   |                       |                 |                         | 0.922 5 U U                        | 0.201             | 1 0 0                 | 0.207                | 1 0 0               | 0.204                   | 1 1 1               |
| SEMIVOLATILES<br>SEMIVOLATILES                | Hexachlomethane<br>Indepo(1,2,3-cd)ovrepe    | 1.6E+01<br>6.3E-01 | 0.0825       | 0.165        | NE<br>0.01 | NE            | 1.6E+01<br>6.3E-01 |                   |                       |                 |                         | 0.606 5 J J<br>0.922 5 U U         | 0.201             | 1 0 0                 | 0.207                | 1 0 0               | 0.204                   | 1 0 0               |
| SEMIVOLATILES                                 | Isophorone                                   | 5.2E+02            | 0.0825       | 0.165        | NE         | NE            | 5.2E+02            |                   |                       |                 |                         | 0.922 5 U U                        | 0.201             | ίŨŨ                   | 0.207                | ίŨŬ                 | 0.204                   | Î Û Û               |
| SEMIVOLATILES                                 | Naphthalene                                  | 1.8E+01<br>6.5E+00 | 0.0825       | 0.165        | NE         | NE            | 1.8E+01<br>6.5E+00 |                   |                       |                 |                         | 0.922 5 U U<br>0.922 5 U U         | 0.201             | 1 0 0                 | 0.207                | 1 0 0               | 0.204                   | 1 0 0               |
| SEMIVOLATILES                                 | n-Nitroso-di-n-propylamine                   | 4.1E-02            | 0.0825       | 0.165        | NE         | NE            | 1.7E-01            |                   |                       |                 |                         | 0.467 5 U U                        | 0.101             | ίŭŭ                   | 0.103                | iŭŭ                 | 0.103                   | ίŭΰ                 |
| SEMIVOLATILES                                 | n-Nitrosodiphenylamine                       | 5.9E+01            | 0,0825       | 0.165        | NE         | NE            | 5.9E+01            |                   |                       |                 |                         | 0.922 5 U U                        | 0.201             | 1 0 0                 | 0.207                | 1 U U               | 0.204                   | 1 11 11             |
| SEMIVOLATILES                                 | Phenanthrene                                 | 4.1E+02            | 0.0825       | 0.165        | NE         | NE            | 4.1E+02            |                   |                       |                 |                         | 0.922 5 U U                        | 0.201             | ់ បី បី               | 0.207                | ίŭŭ                 | 0.204                   | เมีบั               |
| SEMIVOLATILES                                 | Phenoi                                       | 4.7E+03            | 0.0825       | 0.165        | NE         | NE            | 4.7E+03            |                   |                       |                 |                         | 0.922 5 U U                        | 0.201             | 1 U U                 | 0.207                | 1 U U               | 0.204                   |                     |
| SOLIDS  | Pyrene<br>Percent Solids                     | 4.1E+02<br>NE      | 0.0625<br>NE | NE           | NE         | NE            | 4.10+02            | 85.000            | 2 1                   | 87.70           | 10 1                    | 88.400 1                           | 81.600            | 1 0 0                 | 79.800               | 1 0 0               | 80.000                  | 1                   |
| VOLATILES                                     | 1,1,1,2-Tetrachloroethane                    | 5.2E+00            | 0.0005       | 0.005        | NE         | NE            | 5.2E+00            |                   |                       |                 |                         |                                    | 0.006             | 1 0 0                 | 0.006                | 1 0 0               | 0.006                   |                     |
| VOLATILES                                     | 1,1,1-Trichkioethane                         | 2.3E+02<br>5.1E-01 | 0.0005       | 0.005        | NE         | NE :          | 2.3E+02            |                   |                       |                 |                         |                                    | 0.006             | 1 0 0                 | 0.006                | 1 0 0               | 0.006                   | เบ็บ                |
| VOLATILES                                     | 1,1,2-Trichloroethane                        | 9.7E-01            | 0.0005       | 0.005        | NE         | NE            | 9.7E-01            |                   |                       |                 |                         |                                    | 0.006             | 1 0 0                 | 0.006                | 1 1 1               | 0.006                   | 1 U U               |
| VOLATILES                                     | 1,1-Dichloroethane<br>1 1-Dichloroethane     | 8.9E+01<br>2 7E+01 | 0.0010       | 0.005        | NE         | NE            | 8.9E+01<br>2 7F+01 |                   |                       |                 |                         |                                    | 0.006             | 1 1 1 1               | 0.006                | 1 0 0               | 0.006                   | 1 0 0               |
| VOLATILES                                     | 1,1-Dichloropropene                          | 9.9E-01            | 0.0005       | 0.005        | NE         | NE            | 9.9E-01            |                   |                       |                 |                         |                                    | 0.006             | 1 Ŭ Ŭ                 | 0.006                | 100                 | 0.006                   | i ŭ ŭ               |
| VOLATILES                                     | 1,2,3-Trichlorobenzene                       | 4.2E+01            | 0.0005       | 0.005        | NE         | NE            | 4.2E+01            |                   |                       |                 |                         |                                    | 0.006             |                       | 0.006                | 1 0 0               | 0.006                   | 1 0 0               |
| VOLATILES                                     | 1,2,4-Trichlorobenzene                       | 1.4E+02            | 0.0005       | 0.005        | NE         | NE            | 1.4E+02            |                   |                       |                 |                         |                                    | 0.006             | iŭŭ                   | 0.006                | i Ū Ū               | 0.006                   | i ŭ ŭ               |
| VOLATILES                                     | 1,2,4-Trimethylbenzene                       | 9.6E+00            | 0.0005       | 0.005        | NE         | NE            | 9.6E+00            |                   |                       |                 |                         |                                    | 0.006             | 1 0 0                 | 0.006                | 1 0 0               | 0.006                   | 1 10 0              |
| VOLATILES                                     | 1,2-Dibromoethane                            | 5.3E-02            | 0.0005       | 0.005        | NE         | NE            | 5.3E-02            |                   |                       |                 |                         |                                    | 0.006             | ា មី មី               | 0.006                | ່ານັບັ              | 0,006                   | า บ บ               |
| VOLATILES                                     | 1,2-Dichlorobenzene                          | 5.6E+01            | 0.0005       | 0.005        | NE         | NE            | 5.6E+01            |                   |                       |                 |                         |                                    | 0.006             | 1 0 0                 | 0.006                | 1 1 1               | 0.006                   |                     |
| VOLATILES                                     | 1,2-Dichloropropane                          | 2.7E-01<br>1.8E+00 | 0.0005       | 0.005        | NE         | NE            | 2.7E+01<br>1.8E+00 |                   |                       |                 |                         |                                    | 0.006             | ែរបីបី                | 0.006                | ίυŭ                 | 0.006                   | 1 0 0               |
| VOLATILES                                     | 1,2-Dimethylbenzene (o-Xylene)               | 3.3E+03            | 0.0005       | 0.005        | NE         | NE            | 3.3E+03            |                   |                       |                 |                         |                                    | 0.006             | 1 0 0                 | 0.006                | 1 U U               | 0.006                   | 1 U U               |
| VOLATILES<br>VOLATILES                        | 1,3,5-Trimethylbenzene<br>1 3-Dichlombenzene | 8.3E+00<br>5.1E+00 | 0.0005       | 0.005        | NE         | NE            | 8.3E+00<br>5.1E+00 |                   |                       |                 |                         |                                    | 0.006             | 100                   | 0.006                | 1 0 0               | 0.006                   | 1 0 0               |
| VOLATILES                                     | t,3-Dichloropropane                          | 3.0E+00            | 0.0005       | 0.005        | NE         | NÉ            | 3.0E+00            |                   |                       |                 |                         |                                    | 0.006             | ίŪŬ                   | 0.006                | <u>i ŭ Ū</u>        | 0.006                   | 1 U U               |
| VOLATILES<br>VOLATRES                         | 1,4-Dichlorobenzene<br>2,2-Dichloropropage   | 2.7E+01            | 0.0005       | 0.005        | NE         | NE            | 2.7E+01<br>1.7E+00 |                   |                       |                 |                         |                                    | 0.006             | 1 U U                 | 0.006                | 1 U U               | 0.006                   | 1 0 0               |
| VOLATILES                                     | 2-Butanone                                   | 2.6E+03            | 0.0025       | 0.010        | NE         | NE            | 2.6E+03            |                   |                       |                 |                         |                                    | 0.011             | ίŬŬ                   | 0.012                | ίŪŪ                 | 0.012                   | i Ŭ Ŭ               |
| VOLATILES                                     | 2-Chloroethyl vinyl ether                    | 2.1E-01            | 0.0020       | 0.010        | NE         | NE            | 2.1E-01            |                   |                       |                 |                         |                                    | 0.011             |                       | 0.012                | 1 0 0               | 0.012                   | 1 0 0               |
| VOLATILES                                     | 2-Hexanone                                   | 6.2E+00            | 0.0025       | 0.010        | NE         | NE            | 6.2E+02            |                   |                       |                 |                         |                                    | 0.011             | ់រំបំបំ               | 0.012                | iŭŭ                 | 0.012                   | ίŬŬ                 |
| VOLATILES                                     | 4-Chlorotoluene                              | 3.4E-01            | 0.0005       | 0.005        | NE         | NE            | 3.4E-01            |                   |                       |                 |                         |                                    | 0.006             |                       | 0.006                | 1 0 0               | 0,006                   | 1 0 0               |
| VOLATILES                                     | Benzene                                      | 1.7E+02<br>8.8E-01 | 0.0005       | 0.005        | NE         | NE            | 8.8E-01            |                   |                       |                 |                         |                                    | 0.006             | 1 0 0                 | 0.006                | ែប័ប័               | 0.006                   | រប័រ                |
| VOLATILES                                     | Bromobenzene                                 | 1.1E+01            | 0.0005       | 0.005        | NE         | NE            | 1.1E+01            |                   |                       |                 |                         |                                    | 0.006             | 1 0 0                 | 0.006                | 1 0 0               | 0.006                   | 1 0 0               |
| VOLATILES                                     | Bromochioromemane<br>Bromodichioromethane    | 2.4E+01<br>1.0E+01 | 0.0005       | 0.005        | NE         | NE            | 2.4E+01<br>1.0E+01 |                   |                       |                 |                         |                                    | 0.006             | 1 0 0                 | 0.006                | រប័ប័               | 0.006                   | 1 0 0               |
| VOLATILES                                     | Bromoform                                    | 3.4E+01            | 0.0005       | 0.005        | NE         | NE            | 3.4E+01            |                   |                       |                 |                         |                                    | 0.006             | 1 Û Û                 | 0.006                | 1 U U               | 0.005                   | 1 U U               |
| VOLATILES                                     | Bromomethane<br>Carbon disultide             | 3.5E-01<br>1.0E+02 | 0.0010       | 0.010        | NE         | NE            | 3.5E-01<br>1.0E+02 |                   |                       |                 |                         |                                    | 0.011             | 1 0 0                 | 0.002                | 1 0 0               | 0.006                   | 1 1 1               |
| VOLATILES                                     | Carbon tetrachloride                         | 3.5E-01            | 0.0005       | 0.005        | NE         | NE            | 3.5E-01            |                   |                       |                 |                         |                                    | 0.006             | ίŪŪ                   | 0.006                | i Ū Ū               | 0.006                   | 1 U U               |
| VOLATILES                                     | Chlorobenzene                                | 4.0E+01            | 0.0005       | 0.005        | NE         | NE            | 4.0E+01            |                   |                       |                 |                         |                                    | 0.006             | 1 U U<br>1 U U        | 0.006                | 1 0 0               | 0.006                   | 1 U U               |
| VOLATILES                                     | Chloroform                                   | 3.1E-01            | 0.0005       | 0,005        | NE         | NE            | 3.1E-01            |                   |                       |                 |                         |                                    | 0.006             | ίΰŰ                   | 0.006                | i Ū Ū               | 0.006                   | 1 Ŭ Ŭ               |
| VOLATILES                                     | Chloromethane                                | 2.3E-01            | 0.0020       | 0.010        | NE         | NE            | 2.3E-01            |                   |                       |                 |                         |                                    | 0.011             |                       | 0.012                | 1 1 1               | 0.012                   | 1 1 1               |
| VOLATILES                                     | cis-1,3-Dichloropropene                      | 1.2E+00            | 0.0005       | 0.005        | NE         | NE            | 1.2E+00            |                   |                       |                 |                         |                                    | 0.006             | ា បី បី               | 0.006                | រ ប័ ប័             | 0.006                   | េប៊ូប៊              |
| VOLATILES                                     | Dibromochloromethane                         | 7.6E+00            | 0.0005       | 0.005        | NE         | NE            | 7.6E+00            |                   |                       |                 |                         |                                    | 0.006             | 1 U U                 | 0.006                | 1 U U               | 0.006                   | 1 U U               |
| VOLATILES                                     | Dichlorodifluoromethane                      | 2.22+02            | 0.0010       | 0.005        | NE         | NE            | 2.26+02            |                   |                       |                 |                         |                                    | 0.011             | ់រំបំបំ               | 0.012                | រប័រ                | 0.012                   | រ ប័ ប័             |
| VOLATILES                                     | Ethylbenzene                                 | 4.3E+02            | 0.0005       | 0.005        | NE         | NE            | 4.3E+02            |                   |                       |                 |                         |                                    | 0.006             | 1 U U                 | 0.006                | 1 U U               | 0.006                   | 1 U U               |
| VOLATILES                                     | nexachioloputadiene<br>Isopropylbenzene      | 1.6±+00<br>5.4±+02 | 0.0005       | 0.005        | NE         | NE            | 1,6E+00<br>5.4E+02 |                   |                       |                 |                         |                                    | 0.006             | 1 0 0                 | 0.006                | U<br>. U U          | 0.006                   | 1 1 1               |
| VOLATILES                                     | m,p-Xylenes                                  | 2.3E+02            | 0.0005       | 0.005        | NE         | NE            | 2.3E+02            |                   |                       |                 |                         |                                    | 0.006             | ĮŪŬ                   | 0.006                | ្រុប៉ូរ៉ូ           | 0.006                   | រប្រ                |
| VOLATILES                                     | Methyl isobutyl ketone<br>Methylene chloride | 1.3E+03<br>8.7E+00 | 0.0025       | 0.010        | NE         | NE            | 1.3E+03<br>8.7E+00 |                   |                       |                 |                         |                                    | 0.011             | 1 U U                 | 0.012                | 1 1 1               | 0.012                   | 1 U U               |
| VOLATILES                                     | Naphihalene                                  | 1.8E+01            | 0.0005       | 0.010        | NE         | NE            | 1.8E+01            |                   |                       |                 |                         |                                    | 0.011             | 1 Ŭ Ŭ                 | 0.012                | າບັບ                | 0.012                   | រប៉ុប្តិ៍           |
| VOLATILES                                     | n-BUTYLBENZENE                               | 2.7E+02            | 0.0005       | 0.005        | NE         | NE            | 2.7E+02            |                   |                       |                 |                         |                                    | 0.006             | 1 U U                 | 0.006                | 1 U U               | 0.006                   | 1 U U               |
| VOLATILES                                     | PISOPROPYLTOLUENE                            | 4.2E+02            | 0.0005       | 0.005        | NE         | NE            | 4.2E+02            |                   |                       |                 |                         |                                    | 0.006             | iŭŭ                   | 0.006                | រប័ប័               | 0.006                   | រ ប័ ប័             |

Shaw Environmental, Inc.

00066413

#### Table 4-8 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 008

| (SUMP) = SUM<br>LOCATION_CA<br>SAMPLE_NO<br>SAMPLE_DATI<br>DEPTH<br>SAMPLE_PUR | P008<br>DDE<br>E<br>POSE  | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method Quantitation | Back<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>L, mg/kg)<br>Subsurface | Appiloble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP<br>35-SMP0<br>9/8<br>6 -<br>R | 2008-SB01<br>18-SB01-02<br>12006<br>6 Ft<br>EG | 35SUM<br>35-SMP<br>9/1<br>8<br>F | P009-\$B01<br>09-SB01-02<br>1/2006<br>- 8 Ft<br>REG | WRSUM<br>WRSMPI<br>9/2<br>_5<br>F | 1P005-SB01<br>005-SB01-01<br>2/2006<br>5 Ft<br>REG | WRSU<br>WRSM<br>9 | IMP005-SB01<br>P005-SB01-02<br>/22/2006<br>5 - 5 Ft<br>REG | WRSU<br>WRSM<br>9 | IMP005-SB02<br>P005-SB02-02<br>/22/2006<br>5 - 5 Ft<br>REG | WRS<br>WRSMI | UMP005-S<br>2005-SB02<br>9/22/2006<br>5 - 5 Ft<br>FD | 3802<br>⊱02-QC |
|--|---------------------------|--|---------------------|---------------------|---|--|--|--------------------------------------|--|----------------------------------|---|-----------------------------------|--|-------------------|--|-------------------|--|--------------|--|----------------|
| Test Group   | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL)         | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft                                       | Value  | Result                               | DIL LO VO                                      | Result                           | DIL LQ VQ   | Result                            | DIL LO VO  | Result            | DIL LQ VQ  | Result            | DIL LO VO  | Resu         | t DIL  | <u>Là và</u>   |
| VOLATILES  | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005               | NE                                      | NE   | 3.0E+02                                      |                                      |  |                                  |   |                                   |  | 0.0               | 006 I U U  | 0.                | 006 1 U U  |              | 0.006 1  | U U            |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005               | NE                                      | NE   | 1.3E+03                                      |                                      |  |                                  |   |                                   |  | 0.6               | 006 1 U U  | 0.                | 006 1 U U  |              | .006 1   | U U            |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005               | NE                                      | NÉ   | 2.6E+02                                      |                                      |  |                                  |   |                                   |  | 0.0               | 006 1 U U  | 0.                | .006 1 U U   |              | 0.006 1  | u u            |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005               | NE                                      | NE   | 6.0E+00                                      |                                      |  |                                  |   |                                   |  | 0.0               | 006 1 U U  | 0.                | .006 1 U U   | (            | 0.006 1  | υu             |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005               | NE                                      | NE   | 1.1E+03                                      |                                      |  |                                  |   |                                   |  | 0.0               | 006 1 U U  | 0.                | .006 1 U U   | (            | 0.006 1  | υu             |
| VOLATILES  | trans-1.2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005               | NE                                      | NE   | 1.4E+02                                      |                                      |  |                                  |   |                                   |  | 0.0               | 006 1 U U  | 0.                | .006 1 U U   |              | 0.006 1  | υυ             |
| VOLATILES  | trans-1.3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005               | NE                                      | NE   | 1.8E+00                                      |                                      |  |                                  |   |                                   |  | 0,0               | 006 1 U U  | 0.                | .006 1 U U   | (            | 1.006  | ບບ             |
| VOLATILES  | Trichlomethene            | 376+00                                   | 0.0005              | 0.005               | NF                                      | NF   | 3.7E+00                                      |                                      |  |                                  |   |                                   |  | 0.0               | 006 1 U U  | 0.                | .006 1 U U   |              | .006 1   | υυ             |
| VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.010               | NE                                      | NE   | 2.6E+02                                      |                                      |  |                                  |   |                                   |  | 0.0               | 011 1 Ū Ū  | 0.                | 012 1 U U  | (            | 1.012 1  | υυ             |
| VOLATILES  | Vinul acetate             | 5.7E+01                                  | 0.0010              | 0.010               | NE                                      | NE   | 5.7E+01                                      |                                      |  |                                  |   |                                   |  | 0.                | 011 1 Ŭ Ŭ  | 0.                | 012 1 Ú ÚJ   | (            | 012 1  | ບບ             |
| VOLATILES  | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.010               | NE                                      | NE   | 3.6E-02                                      |                                      |  |                                  |   |                                   |  | 0.0               | 011 1 Ū Ū  | 0.                | .012 1 U U   | (            | 1.012 1  | ບບ             |

Shaw Environmental, Inc.

00066414

#### Table 4-9 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 009

| (SUMP) = SUMP009<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |  | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _<br>Quantitation | Backg<br>Concentrat<br>(95% UP<br>Surface | round<br>ions in Soil<br>L. mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 355SUMP008-5<br>35-SMP08-SB<br>9/8/2006<br>6 - 6 Ft<br>REG | 3801<br>01-02 | 35SUMP009<br>35-SMP09-Si<br>9/11/200<br>8 - 8 Fi<br>REG | 9-SB01<br>B01-02<br>D6<br>t | WRSUMP005-<br>WRSMP005-SE<br>9/22/2006<br>_55 Ft<br>REG | SB01<br>101-01 | WRSUMP005<br>WRSMP005-S<br>9/22/200<br>5 - 5 Ft<br>REG | -SB01<br>801-02<br>6 | WRSUMP005<br>WRSMP005-S<br>9/22/200<br>5 - 5 Ft<br>REG | -SB02<br>802-02<br>6 | WRSUMP005<br>WRSMP005-SB<br>9/22/200<br>5 - 5 Ft<br>FD | -SB02<br>02-02-QC<br>6 |
|--|--|--|---------------------|--------------------------|---|--|--|--|---------------|---|-----------------------------|---|----------------|--|----------------------|--|----------------------|--|------------------------|
| Test Group   | Parameter (Units = mo/kg)                  | (RB\$V) *                                | Limit (MDL)         | Limit (MQL)              | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft                                     | Value  | Result DIL   | LQ VQ         | Result D  | IL LO VO                    | Result DIL  | LO VO          | Result D   | <u>L LO VO</u>       | Result DI  | <u>LLQ VQ</u>        | Result DI  | ι ια να                |
| EXPLOSIVES   | 1,3,5-Trinitrobenzene                      | 4.7E+02                                  | 0.1                 | 0.25                     | NE  | NE   | 4.7E+02                                      | 0.283 1  | L.            | 0.245 1   | 1 U                         | 0.242 1   | U U            | 0.238 1  | 0 0                  | 0.245 1  | U U<br>11 II         | 0.242 1  | 0 0                    |
| EXPLOSIVES<br>EXPLOSIVES   | 2 4 6-Tripitrotoluene                      | 776+00                                   | 0.1                 | 0.25                     | NE  | NE   | 7.7E+00                                      | 0.263 1  | Ŭ             | 0.245   | i ŭ                         | 0.242 1   | ŭυ             | 0.238 1  | ŭŭ                   | 0.245 1  | บับ                  | 0.242 1  | บับ                    |
| EXPLOSIVES   | 2,4-Dinitrotoluene                         | 7.2E-01                                  | 0.1                 | 0.25                     | NE  | NË   | 7.2E-01                                      | 0.283 1  | Ū             | 0.245 1   | i ŭ                         | 0.242 1   | ŭŨ             | 0.238 1  | ŪŪ                   | 0.245 1  | ŨŨ                   | 0.242 1  | ŪŪ                     |
| EXPLOSIVES   | 2,6-Dinitrotoluene                         | 7.2E-01                                  | 0.1                 | 0.26                     | NE  | NE   | 7.2E-01                                      | 0.294 1  | U             | 0.255 1   | 1 U                         | 0.251 1   | υu             | 0.248 1  | U U                  | 0.255 1  | UU                   | 0.251 1  | U U                    |
| EXPLOSIVES   | 2-Amino-4,6-dinitrotoluene                 | 2.6E+00                                  | 0.1                 | 0.26                     | NE  | NE   | 2.6E+00                                      | 0.294 1  | N.            | 0.255   |                             | 0.251 1   |                | 0.248 1  |                      | 0.200 1  | ι μ                  | 0.201 1  | 1 1                    |
| EXPLOSIVES   | 4-Amino-2,6-onsautoidene                   | 2.0E+00<br>2.2E+02                       | 0.1                 | 2.20                     | NE  | NE   | 2.0E+00                                      | 2,490 1  | ŭ             | 2.160   | i ŭ                         | 2.130 1   | ŭŭ             | 2.100 1  | ΰŭ                   | 2.160 1  | บับั                 | 2.130 1  | บับ                    |
| EXPLOSIVES   | m-Nitrotoluene                             | 4.4E+01                                  | 0.1                 | 0.25                     | NE  | NE   | 4.4E+01                                      | 0.283 1  | Ū             | 0.245 1   | i Ū                         | 0.242 1   | ŨŨ             | 0.238 1  | ŪŪ                   | 0.245 1  | ΰÚ                   | 0.242 1  | ŲU                     |
| EXPLOSIVES   | Nitrobenzene                               | 6.5E+00                                  | 0.1                 | 0.26                     | NE  | NE   | 6.5E+00                                      | 0.294 1  | U             | 0.255 1   | 1 U                         | 0.251 1   | 0 0            | 0.248 1  | υu                   | 0.255 1  | U U                  | 0.251 1  | u u                    |
| EXPLOSIVES<br>EXPLOSIVES   | o-Nitrotoluene                             | 4.7E+01                                  | 0.1                 | 0.25                     | NE  | NE   | 4./E+01                                      | 0.283 1  | ů.            | 0.245 1   |                             | 0.242 1   | 0 0            | 0.238 1  | <u>ы</u> п           | 0.245 1  | 1 1                  | 0.242 1  | ŭŭ                     |
| EXPLOSIVES   | RDX  | 3.6E+00                                  | 0.1                 | 1.00                     | NE  | NE   | 3.6E+00                                      | 1,130 1  | ŭ             | 0.980 1   | ίŭ                          | 0.966 1   | บับั           | 0.952 1  | บับั                 | 0.980 1  | ΰŪ                   | 0,966 1  | ŨŨ                     |
| EXPLOSIVES   | Tetryi                                     | 1.6E+02                                  | 0.2                 | 0.65                     | NE  | NE   | 1.6E+02                                      | 0.735 1  | Ū             | 0.637 1   | I UI                        | 0.628 1   | 0 0            | 0.619 1  | ່ບບຼ                 | 0.837 1  | ψŲ                   | 0.628 1  | υu                     |
| METALS   | Aluminum                                   | 1.6E+04                                  | 10.000              | 20.00                    | 16300                                     | 2.08E+04   | 1.6E+04                                      | 8220.000 1   |               | 12300.000 1   | 1                           | 9100.000 1  |                | 18800.000 1  |                      | 20900.000 1  |                      | 16000.000 1  | 11 188                 |
| METALS   | Anemony                                    | 2.0E+01                                  | 0.500               | 0.10                     | 4.81E+00                                  | 1.0<br>5.54E+00                                  | 2.0E+00                                      | 3.460 1  | -0-03C        | 0.490 1   | 1                           | 4.260 1   | Q QJL          | 1.330 1  | 0 055                | 1.770 1  | 3 JL                 | 1.730 1  | 0 000                  |
| METALS   | Barium                                     | 2.6E+03                                  | 0.075               | 0.30                     | 1.52E+02                                  | 8.55E+01   | 2.6E+03                                      | 39.000 1   |               | 25.300 1  | i                           | 129.000 1   | JH             | 51.400 1   | JH                   | 65.600 1   | Ч                    | 61.900 1   | JH                     |
| METALS   | Beryllium                                  | 4.6E+00                                  | 0.012               | 0.50                     | 6.45E-01                                  | 7.662-01   | 4.6E+00                                      | 0.517 1  |               | 0.793 1   | 1                           | 0.560 1   |                | 0.939 1  |                      | 1.090 1  |                      | 0.849 1  |                        |
| METALS   | Cadmium                                    | 5.2E+00                                  | 0.025               | 0.10                     | 1.4                                       | 0.4  | 5.2E+00                                      | 0.062 1  | 11            | 0.079 1   | 1 J J                       | 0.351 1   | 1 1            | 0.076 1  | 1 3                  | 610,000 1  | JJ                   | 662,000 1  | 3 3                    |
| METALS   | Chemium                                    | 5.9E+03                                  | 0.100               | 0.40                     | 2.66E+01                                  | 3.01E+01   | 5.9E+03                                      | 8.670 1  | JH            | 11.400 1  | 1 3                         | 14.100 1  | JH             | 16,900 1   | JH                   | 24.100 1   | JH                   | 16.500 1   | ЯĻ                     |
| METALS   | Cobalt                                     | 1.5E+03                                  | 0.125               | 0.50                     | 7.23E+00                                  | 5.61E+00   | 1.5E+03                                      | 7.530 1  | JH            | 10.100 1  | L İ                         | 4.220 1   |                | 7.330 1  |                      | 9.060 1  |                      | 7.540 1  |                        |
| METALS   | Copper                                     | 1.0E+03                                  | 0.150               | 0.60                     | 5.55E+00                                  | 9.25E+00   | 1.0E+03                                      | 4.360 1  |               | 3.800 1   | l                           | 2.270 1   |                | 5.020 1  |                      | 6.800 1  |                      | 5.520 1  |                        |
| METALS   | lon  | NE<br>5 05+02                            | NA<br>0.500         | NA<br>5.00               | NA<br>2 265 - 01                          | NA<br>1.145+01                                   | 5 0E+02                                      | 9850.000 1   |               | 12600.000 1   | і<br>• г                    | 28700.000 1   | J              | 19200.000 1  | د                    | 24500.000 1  | J                    | 10,700 1   | J                      |
| METALS   | Magnesium                                  | NE                                       | NA                  | NA                       | NA  | NA   | -  | 912.000 1  | 04            | 2170.000 1  | , ,<br>;                    | 550,000 1   |                | 1550.000 1   |                      | 1500.000 1   |                      | 1180.000 1   |                        |
| METALS   | Manganese                                  | 1.7E+03                                  | 0.050               | 0.20                     | 1.25E+03                                  | 2.01E+02   | 1.7E+03                                      | 23.600 1   |               | 21.900  | 1                           | 129.000 1   | 3              | 27.700 1   | J                    | 59.200 1   | , J                  | 63.100 1   |                        |
| METALS   | Mercury                                    | 1.1E-02                                  | 0.010               | 0.25                     | 8.19E-02                                  | 0.36   | 2.5E-01                                      | 0.015 1  | 1 1           | 0.011 1   | 1 U                         | 0.015 1   | JJ             | 0.012 1  |                      | 0.063 1  | J J<br>111           | 0.042 1  | J J<br>J               |
| METALS   | Potassium                                  | 1.95+02<br>NF                            | 0.200<br>NA         | NA NA                    | 0.90E+00                                  | NA   | 1.95+02                                      | 426.000 1  | .18           | 509.00D 1   | 1                           | 262.000 1   | JH.            | 467.000 1  | JH                   | 522.000 1  | JH                   | 401.000 1  | ĴН                     |
| METALS   | Selenium                                   | 1.3E+02                                  | 0.100               | 0.20                     | 3.48E+00                                  | 5,57E+00   | 1.3E+02                                      | 0.164 1  | J J           | 0.221 1   | 1 ป                         | 0.293 1   |                | 0.148 1  | JJ                   | 0.247 1  | 1 J                  | 0.262 1  |                        |
| METALŞ   | Silver                                     | 4.7E+01                                  | 0.050               | 0.20                     | 0.31                                      | 0.37   | 4.7E+01                                      | 1.800 1  | u             | 1.710 1   | 1 U                         | 1.680 1   | ψŲ             | 1.870 1  | υυ                   | 1.820 1  | ŲU                   | 1.920 1  | บบ                     |
| METALS   | Sodium                                     | 2 05+00                                  | NA<br>0.010         | NA<br>0.02               | NA<br>0.47                                | NA   | 205-00                                       | 188.000 1  |               | 550.000 1   | 1                           | 42.500 1  |                | 326.000 1  |                      | 243.000 1<br>8 107 1                                   |                      | 0.105 1  |                        |
| METALS   | Vanadium                                   | 4.8E+01                                  | 0.125               | 0.50                     | 3.21E+01                                  | 4.46E+01   | 4.8E+01                                      | 18.800 1   |               | 16.500 1  | i                           | 31,700 1  | JH             | 29.700 1   | JH                   | 41.000 1   | JH                   | 28.900 1   | JH                     |
| METALS   | Zinc                                       | 5.9E+03                                  | 0.625               | 2.50                     | 61.6                                      | 2.02E+01   | 5.9E+03                                      | 34,500 1   |               | 31.600 1  | 1                           | 18.300 1  | JH             | 26.600 1   | JH                   | 31.800 1   | JH                   | 23,500 1   | JH                     |
| SEMIVOLATILES  | 1,2,4-Trichkrobenzene                      | 1.4E+02                                  | 0.083               | 0.17                     | NE  | NE   | 1.4E+02                                      |  |               |   |                             | 0.922 5   | υυ             | 0.201 1  | υυ                   | 0.207 1  | 0 0                  | 0.204 1  | U U                    |
| SEMIVOLATILES<br>SEMIVOLATILES   | 1.2-Dichlombenzene                         | 5.6E+01                                  | 0.083               | 0.17                     | NE  | NE   | 5.0E+01<br>5.1E+00                           |  |               |   |                             | 0.922 5   | u u            | 0.247 1  | มม                   | 0.207 1  | บับ                  | 0.204 1  | ŭŭ                     |
| SEMIVOLATILES  | 1,4-Dichlorobenzene                        | 2.7E+01                                  | 0.063               | 0.17                     | NE  | NE   | 2.7E+01                                      |  |               |   |                             | 0.922 5   | ŭŬ             | 0.201 1  | บับั                 | 0.207 1  | ŭΰ                   | 0.204 1  | ŪŪ                     |
| SEMIVOLATILES  | 2,4,5-Trichlorophenol                      | 1.6E+03                                  | 0.083               | 0.17                     | NE  | NE   | 1.6E+03                                      |  |               |   |                             | 0.922 5   | υu             | 0.201 1  | υυ                   | 0.207 1  | υυ                   | 0.204 1  | u u                    |
| SEMIVOLATILES  | 2,4,6-Trichlerophenol                      | 4.5E+01                                  | 0.083               | 0.17                     | NE  | NE   | 4.5E+01                                      |  |               |   |                             | 0.922 5   | 0 0            | 0.201 1  |                      | 0.207 1  | N N                  | 0.204 1  |                        |
| SEMIVOLATILES  | 2.4-Dimethylphenot                         | 3.1E+02                                  | 0.083               | 0.17                     | NE  | NE   | 3.1E+02                                      |  |               |   |                             | 0.922 5   | ម័រ            | 0.201 1  | บับั                 | 0.207 1  | υŭ                   | 0.204 1  | ŭŭ                     |
| SEMIVOLATILES  | 2,4-Dinitrophenol                          | 3.1E+01                                  | 0.330               | 0.83                     | NE  | NE   | 3.1E+01                                      |  |               |   |                             | 4.610 5   | υu             | 1.010 1  | υU                   | 1.030 1  | υu                   | 1.020 1  | υu                     |
| SEMIVOLATILES  | 2,4-Dinitrotoluene                         | 7.2E-01                                  | 0.083               | 0.17                     | NE  | NE   | 7.2E-01                                      |  |               |   |                             | 0.922 5   | U U            | 0.201 1  | U U                  | 0.207 1  | u u                  | 0.204 1  | U U                    |
| SEMIVOLATILES  | 2-Chloronanhthalene                        | 1 1E+03                                  | 0.003               | 0.17                     | NE  | NE   | 1 18+03                                      |  |               |   |                             | 0.922 5   | υü             | 0.201 1  | ŭŭ                   | 0.207 1  | ŭŭ                   | 0.204 1  | មើម                    |
| SEMIVOLATILES  | 2-Chlorophenol                             | 1.1E+02                                  | 0.083               | 0.17                     | NE  | NE   | 1.1E+02                                      |  |               |   |                             | 0.922 5   | ΰŪ             | 0.201 1  | ŪŪ                   | 0.207 1  | ŪŪ                   | 0.204 1  | υυ                     |
| SEMIVOLATILES  | 2-Methylnaphthalene                        | 5.5E+01                                  | 0.083               | 0.17                     | NE  | NE   | 5.5E+01                                      |  |               |   |                             | 0.922 5   | U U            | 0.201 1  | U U                  | 0.207 1  | υü                   | 0.204 1  | U U                    |
| SEMIVOLATILES<br>SEMIVOLATILES   | 2-Methylphenol<br>2-Nitmapiline            | 7.7E+02<br>4.7E+00                       | 0.083               | 0.17                     | NE  | NE   | 7.75+02                                      |  |               |   |                             | 0.922 5   | 0 0            | 1 0.201 1  |                      | 0.207 1  | U U                  | 1.020 1  | μü                     |
| SEMIVOLATILES  | 2-Nitrophenol                              | 3.1E+01                                  | 0.083               | 0.17                     | NE  | NE   | 3.1E+01                                      |  |               |   |                             | 0.922 5   | ŭŭ             | 0.201 1  | บับั                 | 0.207 1  | υŬ                   | 0.204 1  | ΰŨ                     |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine                     | 1.1E+00                                  | 0.165               | 0.33                     | NE  | NE   | 1.1E+00                                      |  |               |   |                             | 1.840 5   | υu             | 0.402 1  | υυ                   | 0.414 1  | υυ                   | 0.407 1  | υu                     |
| SEMIVOLATILES  | 3-Nitroaniline                             | 4.7E+00                                  | 0.330               | 0.83                     | NE  | NE   | 4.7E+00                                      |  |               |   |                             | 4.610 5   | N N            | 1.010 1  |                      | 1.030 1  | 0 0                  | 1.020 1  | 8 8                    |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether                 | 3.1E-02                                  | 0.083               | 0.63                     | NE  | NE   | 3.12+01<br>1.7E-01                           |  |               |   |                             | 4,010 5   | ŭŭ             | 0.101 1  | u u                  | 0.103 1  | ŭŭ                   | 0.103 1  | ΰŭ                     |
| SEMIVOLATILES  | 4-Chloro-3-methylphenol                    | 7.7E+01                                  | 0.083               | 0.17                     | NE  | NE   | 7.7E+01                                      |  |               |   |                             | 0.922 5   | ŪŪ             | 0.201 1  | ŪŪ                   | 0.207 1  | ŨŨ                   | 0.204  | ŪŪ                     |
| SEMIVOLATILES  | 4-Chloroaniline                            | 6.2E+01                                  | 0.083               | 0.17                     | NE  | NE   | 6.2E+01                                      |  |               |   |                             | 0.922 5   | υu             | 0.201 1  | U U                  | 0.207 1  | U U                  | 0.204 1  | U U                    |
| SEMIVOLATILES  | 4-Chlorophenyl phenyl ether                | 2.8E-02                                  | 0.083               | 0.17                     | NE  | NE   | 1.7E-01                                      |  |               |   |                             | 0.467 5   | U U            | 0.101 1  |                      | 0.103 1  | 0 0                  | 0.103 1  |                        |
| SEMIVOLATILES  | 4-Nitroaniline                             | 1.3E+01                                  | 0.330               | 0.83                     | NE  | NE   | 1.3E+01                                      |  |               |   |                             | 4.610 5   | υÜ             | 1.010 1  | ŭŭ                   | 1,030 1  | บับ                  | 1.020 1  | ŭŬ                     |
| SEMIVOLATILES  | 4-Nitrophenol                              | 3.1E+01                                  | 0.330               | 0.83                     | NE  | NE   | 3.1E+01                                      |  |               |   |                             | 4.610 5   | ŨŨ             | 1.010 1  | ŪŪ                   | 1.030 1  | ΰÚ                   | 1.020 1  | υυ                     |
| SEMIVOLATILES  | Acenaphthene                               | 8.2E+02                                  | 0.083               | 0.17                     | NE  | NE   | 8.2E+02                                      |  |               |   |                             | 0.922 5   | υu             | 0.201 1  | υu                   | 0.207 1  | υu                   | 0.204 1  | U U                    |
| SEMIVOLATILES  | Acenaphthyiene                             | 8.2E+02                                  | 0.083               | 0.17                     | NE  | NE   | 8.2E+02                                      |  |               |   |                             | 0.922 5   | 0 0            | 0.201 1  |                      | 0.207 1  |                      | 0.204 1  | 0 U                    |
| SEMIVOLATILES  | Benzo(a)anthracene                         | 6.3E-01                                  | 0.0825              | 0.165                    | 0.02                                      | NE   | 6.3E-01                                      |  |               |   |                             | 0.922 5   | ŭŭ             | 0.201 1  | ើមីមី                | 0.207 1  | ยับั                 | 0.204 1  | บับั                   |
| SEMIVOLATILES  | Benzo(a)pyrene                             | 6.3E-02                                  | 0.0825              | 0.165                    | 0.02                                      | NE   | 1.7E-01                                      |  |               |   |                             | 0.487 5   | ÚŨ             | 0.101  | ŬŰ                   | 0.103 1  | ŪŪ                   | D.103 1  | ΰŰ                     |
| SEMIVOLATILES  | Benzo(b)fluoranthene                       | 6.3E-01                                  | 0.0825              | 0.165                    | 0.02                                      | NË   | 6.3E-01                                      |  |               |   |                             | 0.922 5   | បូប            | 0.201 1  | U U                  | 0.207 1  | មប                   | 0.204 1  | 0 0                    |
| SEMIVOLATILES<br>SEMIVOLATILES   | Benzo(g/ii)perylene<br>Benzo(kVluoranthene | 4.1E+02<br>6.3E+00                       | 0.0825              | 0.165                    | 0.01                                      | NE   | 4.1E+02<br>6.3E+00                           |  |               |   |                             | 0.922 5   | U U<br>11 II   | 0.201 1  |                      | 0.207 1  | 00                   | 0.204 1  | 00                     |
| SEMIVOLATILES  | Benzoic Acid                               | 6.2E+04                                  | 0.3300              | 0.825                    | NE  | NE   | 6.2E+04                                      |  |               |   |                             | 4.610 5   | ບັບັ           | 1.010 1  | ບັບມ                 | 1.030 1  | ម័យ                  | 1.020 1  | ប័យ័                   |
| SEMIVOLATILES  | Benzył Alcohol                             | 4.7E+03                                  | 0.0825              | 0.165                    | NE  | NE   | 4.7E+03                                      |  |               |   |                             | 0.922 5   | υÜ             | 0.201 1  | υu                   | 0.207 1  | U U                  | 0.204 1  | មូប                    |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane                 | 2.9E-01                                  | 0.0825              | 0.165                    | NE  | NE   | 2.9E-01                                      |  |               |   |                             | 0.922 5   | <u> </u>       | 0.201 1  |                      | 0.207 1  | 0 0                  | 0.204 1  | 0 0                    |
| SEMIVOLATILES  | bis(2-Chloroisopropy)ether                 | 4.8E+00                                  | 0.0825              | 0.165                    | NE  | NE   | 4.8E+00                                      |  |               |   |                             | 0.922 5   | υŭ             | 0.201  | υü                   | 0.207 1  | บับ                  | 0.204 1  | ម័ម                    |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate                 | 1.7E+01                                  | 0.0825              | 0.165                    | NE  | NE   | 1.7E+01                                      | l  |               |   |                             | 0.922 5   | υŪ             | 0.201  | ÚŲ                   | 0.207 1  | ΰŪ                   | 0.204 1  | ΰŪ                     |

Shaw Environmental, Inc.

#### Table 4-9 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 009

| [SUMP] = SUMP009<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                                    | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _<br>Quantitation | Back<br>Concentra<br>(95% U<br>Surface | ground<br>ations in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP008-SB01<br>35-SMP08-SB01-02<br>9/8/2006<br>6 - 6 Ft<br>REG | 35SUMP009-SB01<br>35-SMP09-SB01-02<br>9/11/2006<br>8 - 8 Ft<br>REG | WRSUMP005-SB01<br>WRSMP005-SB01-01<br>9/22/2006<br>_55 Ft<br>REG | WRSUMP005-SB01<br>WRSMP005-SB01-02<br>9/22/2006<br>5 - 5 Ft<br>REG | WRSUMP005-SB02<br>WRSMP005-SB02-02<br>9/22/2006<br>5 - 5 Ft<br>REG | WRSUMP005-SB02<br>WRSMP005-SB02-02-QC<br>9/22/2006<br>5 - 5 Ft<br>FD |
|--|------------------------------------|--|---------------------|--------------------------|--|--|--|---|--|--|--|--|--|
| Test Group   | Parameter (Units = mg/kg)          | (RBSV)*                                  | Limit (MDL)         | Limit (MQL)              | 0 - 0.5 Ft                             | 1.5 • 2.5 Ft   | Value  | Result DIL LO VO  | Result DIL LQ VO   | Q Result DILLQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LO VO   |
| SEMIVOLATILES  | Butyl benzyl phthalate             | 3.1E+03                                  | 0.0825              | 0.165                    | NE                                     | NE   | 3.1E+03                                      |   |  | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U U  | 0.204 1 U U  |
| SEMIVOLATILES  | Chrysene<br>Dihosta (a h)asthrassa | 6.3E+01                                  | 0.0825              | 0.165                    | 0.02<br>NE                             | NE   | 6.3E+01                                      |   |  | 0.922 5 0 0  | 0.101 1 1 1 1  | 0.207 1 0 0  | 0.204 1 0 0  |
| SEMIVOLATILES  | Dibenzofuran                       | 6.2E+01                                  | 0.0825              | 0.165                    | NE                                     | NE   | 6.2E+01                                      |   |  | 0.922 5 U U  | 0.201 1 0 0  | 0.207 1 U U  | 0.204 1 U U  |
| SEMIVOLATILES  | Diethyl phthalate                  | 1.2E+04                                  | 0.0825              | 0.165                    | NE                                     | NE   | 1.2E+04                                      |   |  | 0.922 5 Ŭ Ŭ  | 0.201 1 Ū Ū  | 0.207 t U U  | 0.204 1 U U  |
| SEMIVOLATILES  | Dimethyl phthalate                 | 1.2E+04                                  | 0.0825              | 0.165                    | NE                                     | NE   | 1.2E+04                                      |   |  | 0.922 5 U U  | 0.201 1 U U  | 0.207 t U U  | 0.204 1 U U  |
| SEMIVOLATILES  | di-n-Butyl phthalate               | 1.6E+03                                  | 0.0825              | 0.165                    | NE                                     | NE   | 1.6E+03                                      |   |  | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U U  | 0.204 1 0 0  |
| SEMIVOLATILES  | den-Octyl phthalate                | 3.16+02                                  | 0.0825              | 0.165                    | NE 0.02                                | NE   | 3.16+02                                      |   |  | 0.922 5 0 0  | 0.201 1 0 0  | 0.207 1 0 0  | 0.204 1 0 0  |
| SEMIVOLATILES  | Fluoreae                           | 5.5E+02                                  | 0.0825              | 0.165                    | NE                                     | NE   | 5.5E+02                                      |   |  | 0.922 5 U U  | 0.201 1 0 0  | 0.207 1 U U  | 0.204 1 U U  |
| SEMIVOLATILES  | Hexachlorobenzene                  | 2.5E-01                                  | 0.0825              | 0.165                    | NE                                     | NE   | 2.5E-01                                      |   |  | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U U  | 0.204 1 U U  |
| SEMIVOLATILES  | Hexachlorobutadiene                | 1.6E+00                                  | 0.0825              | 0.165                    | NE                                     | NE   | 1.6E+00                                      |   |  | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U U  | 0.204 1 U U  |
| SEMIVOLATILES  | Hexachiorocyclopentadiene          | 1.0E+00                                  | 0.0825              | 0.165                    | NE                                     | NE   | 1.02+00                                      |   |  | 0.922 5 0 0  | 0.201 1 0 0  | 0.207 1 0 0  | 0.204 1 0 0  |
| SEMIVOLATILES  | Indeno(1.2.3-cd)ovrene             | 6.3E-01                                  | 0.0825              | 0.165                    | 0.01                                   | NE   | 6.3E-01                                      |   |  | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U U  | 0.204 1 U U  |
| SEMIVOLATILES  | Isophorone                         | 5.2E+02                                  | 0.0825              | 0.165                    | NE                                     | NE   | 5.2E+02                                      |   |  | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U U  | 0.204 1 U U  |
| SEMIVOLATILES  | Naphthalene                        | 1.8E+01                                  | 0.0825              | 0.165                    | NE                                     | NĘ   | 1.8E+01                                      |   |  | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U U  | 0.204 1 U U  |
| SEMIVOLATILES  | Nitrobenzene                       | 6.5E+00                                  | 0.6825              | 0.165                    | NE                                     | NE   | 6.5E+00                                      |   |  | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U U  | 0.204 1 0 0  |
| SEMIVOLATILES<br>SEMBIOLATILES   | n-Nitrosodinhenvlamine             | 5 9E±01                                  | 0.0825              | 0.165                    | NE                                     | NE   | 5.9E+01                                      |   |  | 0922 5 [1 1]   | 6 201 1 1 U  | 0.207 1 1 1  | 0.204 1 U U  |
| SEMIVOLATILES  | Pentachlorophenol                  | 3.0E+00                                  | 0.3300              | 0.825                    | NE                                     | NE   | 3.0E+00                                      |   |  | 4.610 5 U U  | 1.010 1 1 1  | 1.030 1 U U  | 1.020 1 U U  |
| SEMIVOLATILES  | Phenanthrene                       | 4.1E+02                                  | 0.0825              | 0.165                    | NE                                     | NE   | 4.1E+02                                      |   |  | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U U  | 0.204 1 U U  |
| SEMIVOLATILES  | Phenol                             | 4.7E+03                                  | 0.0825              | 0.165                    | NE                                     | NË   | 4.7E+03                                      |   |  | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U U  | 0.204 1 U U  |
| SEMIVOLATILES  | Pyrene<br>Derest Solida            | 4.1E+02                                  | 0.0825              | 0,165                    | 0.02<br>NE                             | NE   | 4.1E+02                                      | 85,000 1  | 87 700 1   | 0.922 5 U U<br>89.400 1  | 0.201 1 U U<br>81.600 1  | 79,800 1   | 0.204 1 0 0<br>80.000 1  |
| VOLATILES  | 1.1.1.2-Tetrachloroethane          | 5.2E+00                                  | 0.0005              | 0.005                    | NE                                     | NE   | 5.2E+00                                      | 60,000 1  | 07.700   | 00:400   | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES  | 1,1,1-Trichloroethane              | 2.3E+02                                  | 0.0005              | 0.005                    | NE                                     | NE   | 2.3E+02                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 t Ų Ü  |
| VOLATILES  | 1,1,2,2-Tetrachloroethane          | 5.1E-01                                  | 0.0005              | 0.005                    | NE                                     | NE   | 5.1E-01                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES  | 1,1,2-Trichloroethane              | 9.7E-01                                  | 0.0005              | 0.005                    | NE                                     | NE   | 9.7E-01                                      |   |  |  | 0.006 1 U U  |  | 0.006 1 0 0  |
| VOLATILES  | 1 1-Dichloroethene                 | 2.76+01                                  | 0.0010              | 0.005                    | NE                                     | NE   | 2.9E+01                                      |   |  |  | 0.006 1 U U  | 0.006 1 0 0  | 0.006 1 U U  |
| VOLATILES  | 1,1-Dichlaropropene                | 9.9E-01                                  | 0.0005              | 0.005                    | NE                                     | NE   | 9.9E-01                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES  | 1,2,3-Trichlorobenzene             | 4.2E+01                                  | 0.0005              | 0.005                    | NE                                     | NE   | 4.2E+01                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES  | 1,2,3-Trichkoropropane             | 9.2E-02                                  | 0.0010              | 0.005                    | NE                                     | NE   | 9.2E-02                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES  | 1,2,4-1 IICRIOTODERZENE            | 1.48+02                                  | 0.0005              | 0.005                    | NE                                     | NE   | 1.46+02                                      |   |  |  | 0.006 1 0 0  | 1006 1 0 0   | 0.006 1 1 1  |
| VOLATILES  | 1.2-Dibrome-3-chloropropane        | 3.5E-01                                  | 0.0020              | 0.005                    | NE                                     | NE   | 3.5E+00                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0,006 1 U U  |
| VOLATILES  | 1,2-Dibromoethane                  | 5.3E-02                                  | 0.0005              | 0.005                    | NE                                     | NE   | 5.3E-02                                      |   |  |  | 0.006 1 U U  | 0.006 t U U  | 0.006 1 U U  |
| VOLATILES  | 1,2-Dichlorobenzene                | 5.6E+01                                  | 0.0005              | 0.005                    | NE                                     | NE   | 5.6E+01                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES  | 1,2-Dichlomethane                  | 2.7E-01                                  | 0.0005              | 0.005                    | NE                                     | NE   | 2.7E-01                                      |   |  |  |  | 0.005 1 0 0  | 0.006 1 0 0  |
| VOLATILES  | 1.2-Dimethylbenzene (o-Xylene)     | 3.3E+03                                  | 0.0005              | 0.005                    | NE                                     | NE   | 3.3E+03                                      |   |  |  | 0.006 1 U U  | 0.006 1 Ŭ Ŭ  | 0.006 1 U U  |
| VOLATILES  | 1,3,5-Trimethylbenzene             | 8.3E+00                                  | 0.0005              | 0.005                    | NE                                     | NE   | 8.3E+00                                      |   |  |  | 0.006 1 Ū Ū  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES  | 1,3-Dichlorobenzene                | 5.1E+00                                  | 0.0005              | 0.005                    | NE                                     | NE   | 5.1E+00                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES  | 1,3-Dichloropropane                | 3.0E+00                                  | 0.0005              | 0.005                    | NE                                     | NE   | 3.05+00                                      |   |  |  | 0.005 1 U U  | 0.006 1 0 0  | 0,006 1 0 0  |
| VOLATILES  | 2.2-Dichlomoronane                 | 1.7E+00                                  | 0.0005              | 0.005                    | NE                                     | NE   | 1.75+00                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 4 4  |
| VOLATILES  | 2-Butanone                         | 2.6E+03                                  | 0.0025              | 0.010                    | NE                                     | NE   | 2.6E+03                                      |   |  |  | 0.011 1 Ū Ū  | 0.012 1 U U  | 0.012 1 U U  |
| VOLATILES  | 2-Chloroethyl vinyl ether          | 2.1E-01                                  | 0.0020              | 0.010                    | NE                                     | NE   | 2.1E-01                                      |   |  |  | 0.011 1 U U  | 0.012 1 U U  | 0.012 1 U U  |
| VOLATILES  | 2-Chlorotoluene<br>2-Hovenopp      | 1.5E+02                                  | 0.0005              | 0.005                    | NE                                     | NE   | 1.5E+02                                      |   |  |  | 0.006 1 U U  |  | 0.000 1 0 0  |
| VOLATILES  | 4-Chlorotoluene                    | 3.4E-01                                  | 0.0005              | 0.005                    | NE                                     | NE   | 3.4E-01                                      |   |  |  | 0.006 1 U U  | 0.006 1 0 0  | 0.006 1 U U  |
| VOLATILES  | Acetone                            | 1.7E+02                                  | 0.0050              | 0.010                    | NE                                     | NE   | 1.7E+02                                      |   |  |  | 0.011 1 U U  | 0.012 1 U U  | 0.012 1 U U  |
| VOLATILES  | Benzene                            | 8.8E-01                                  | 0.0005              | 0.005                    | NE                                     | NE   | 8.82-01                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES  | Bromoberzene<br>Bromochloromethane | 1.1E+01<br>2.4E+01                       | 0.0005              | 0.005                    | NE                                     | NE   | 1.1E+01<br>2.4E+01                           |   |  |  | 0.006 1 0 0  | 0.006 1 U U  | 0.006 1 0 0  |
| VOLATILES  | Bromodichloromethane               | 1.0E+01                                  | 0.0005              | 0.005                    | NE                                     | NE   | 1.0E+01                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES  | Bromoform                          | 3.4E+01                                  | 0.0005              | 0.005                    | NE                                     | NE   | 3.4E+01                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0,006 1 U U  |
| VOLATILES  | Bromomethane                       | 3.5E-01                                  | 0.0010              | 0.010                    | NE                                     | NE   | 3.5E-01                                      |   |  |  | 0.011 1 U U  | 0.012 1 U U  | 0.012 1 U U  |
| VOLATILES  | Carbon disunde                     | 1.0E+02<br>3.5E-01                       | 0.0005              | 0.005                    | NE                                     | NE   | 1.0E+02<br>3.5E-01                           |   |  |  | 0.006 1 0 0  | 0.006 1 0 0  | 0.006 1 1 1  |
| VOLATILES  | Chiorobenzene                      | 4.0E+01                                  | 0.0005              | 0.005                    | NE                                     | NË   | 4.0E+01                                      |   |  |  | 0.006 1 Ŭ Ŭ  | 0.006 1 U U  | 0.006 1 Ŭ Ū  |
| VOLATILES  | Chloroethane                       | 1.1E+03                                  | 0.0010              | 0.010                    | NE                                     | NE   | 1.1E+03                                      |   |  |  | 0.011 1 U U  | 0.012 1 U U  | 0.012 1 U U  |
| VOLATILES  | Chloroform                         | 3.1E-01                                  | 0.0005              | 0.005                    | NE                                     | NE   | 3.1E-01                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES  | cis-1 2-Dichloroethours            | 2.3E-01                                  | 0,0020              | 0.010                    | NE                                     | NE   | 2.3E-01                                      |   |  |  | 0.011 1 0 0  | 0.012 1 0 0  | 0.012 1 0 0  |
| VOLATILES  | cis-1.3-Dichloropropene            | 1.2E+00                                  | 0.0005              | 0.005                    | NE                                     | NE   | 1.2E+00                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 Ŭ Ŭ  |
| VOLATILES  | Dibromochloromethane               | 7.6E+00                                  | 0.0005              | 0.005                    | NE                                     | NE   | 7.6E+00                                      |   |  |  | 0.006 1 Ū Ū  | 0.006 1 U Ü  | 0.006 1 U U  |
| VOLATILES  | Dibromomethane                     | 1.9E+01                                  | 0.0005              | 0.005                    | NE                                     | NE   | 1.9E+01                                      |   |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES  | Dichorodificoromethane             | 2.2E+02                                  | 0.0010              | 0.010                    | NE                                     | NE   | 2.2E+02                                      |   |  |  | 0.011 1 U U  | 0.012 1 U U  | 0.012 1 0 0  |
| VOLATILES  | Hexachiorobutadiene                | 4.32+02                                  | 0.0003              | 0.005                    | NE                                     | NE   | 4.3E+02<br>1.6E+00                           |   |  |  | 0.006 1 U 1  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES  | Isopropylbenzene                   | 5.4E+02                                  | 0.0005              | 0.005                    | NE                                     | NE   | 5.4E+02                                      |   |  |  | 0.006 1 U U  | 0.006 1 Ū Ū  | 0.006 1 U U  |
| VOLATILES  | m,p-Xylenes                        | 2.3E+02                                  | 0,0005              | 0.005                    | NE                                     | NE   | 2.3E+02                                      |   |  |  | 0.006 1 U U  | 0.006 t U U  | 0.006 1 U U  |
| VOLATILES  | Methyl isobutyl ketone             | 1.3E+03                                  | 0.0025              | 0.01                     | NE                                     | NE   | 1.3E+03                                      |   |  |  | 0.011 1 U U  | 0.012 1 U U  | 0.012 1 U U  |
| VOLATILES  | Nachthalene                        | 5.7E+00<br>1.8E+01                       | 0.0010              | 0.005                    | NE                                     | NE   | 0.7E+00<br>1.8E+01                           |   |  |  | 0.002 1 J J<br>0.011 1 U II  | 6.012 1 U II   | 0.000 1 0 0  |
| VOLATILES  | n-BUTYLBENZENE                     | 2.7E+02                                  | 0.0005              | 0.005                    | NE                                     | NE   | 2.7E+02                                      |   |  |  | 0.006 1 Ŭ Ŭ  | 0.006 i U U  | 0.006 1 Ŭ Ŭ  |

Shaw Environmental, Inc.

00066416

### Table 4-9 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 009

|  |  |  |  |  |  |  |  | South one   |  |   |  |  |   |
|--|--|--|--|--|--|--|--|---|--|---|--|--|---|
| [SUMP] = SUMP009<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE   |  | TCEQ<br>Risk-Based<br>Screening<br>Value   | Method<br>Detection  | Method .   | Back<br>Concentra<br>(95% UF<br>Surface                                    | ground<br>itions in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening   | 355UMP008-SB01<br>35-SMP08-SB01-02<br>9/8/2006<br>6 - 8 Ft<br>REG | 35SUMP009-SB01<br>35-SMP09-SB01-02<br>9/11/2006<br>8 + 8 Ft<br>REG | WRSUMP005-SB01<br>WRSMP005-SB01-01<br>9/22/2006<br>55 Ft<br><br>REG | WRSUMP005-SB01<br>WRSMP005-SB01-02<br>9/22/2006<br>5 - 5 Ft<br>REG   | WRSUMP005-SB02<br>WRSMP005-SB02-02<br>9/22/2006<br>5 - 5 Ft<br>REG   | WRSUMP005-SB02<br>WRSMP005-SB02-02-QC<br>9/22/2006<br>5 - 5 Ft<br>FD  |
| Test Group   | Parameter (Units = mg/kg)  | (RBSV)*  | Limit (MDL)  | Limit (MQL)  | 0 - 0.5 Ft   | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DiL LO VO   | Result DIL LO VO  |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES | n-PROPYLBENZENE<br>p-ISOPROPYLTOLUENE<br>sec-BUTYLBENZENE<br>Styrene<br>tert-BUTYLBENZENE<br>Tetrachloroethene<br>Toluene<br>trans-1,2-Dichloroethene<br>trans-1,2-Dichloropropene<br>Trichloroethene<br>Trichloroethene | 3.2E+02<br>4.2E+02<br>3.0E+02<br>1.3E+03<br>2.6E+02<br>6.0E+00<br>1.1E+03<br>1.4E+02<br>1.8E+00<br>3.7E+00<br>2.6E+02<br>5.7E+04 | 0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005 | 0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005 | NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE |  | 3.2E+02<br>4.2E+02<br>3.0E+02<br>1.3E+03<br>2.6E+02<br>6.0E+02<br>6.0E+00<br>1.1E+03<br>1.8E+00<br>3.7E+00<br>2.6E+02<br>5.7E+00<br>2.6E+02<br>5.7E+01 |   |  |   | 0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U | 0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U | 0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.012 1 U U |
| VOLATILES  | Vinyl chloride   | 3.6E-02  | 0.0010   | 0.01   | NE   | NE   | 3.6E-02  | 1   |  |   | 0.011 1 U U  | 0.012 1 Ú Ú  | 0.012 1 U U   |

#### Table 4-10 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 010

| _        | -      | -  | -      | -      | -  |    |
|----------|--------|----|--------|--------|----|----|
| $\cap$   | n      | n  | C      | C      | 1. | 17 |
| - U      | 1      | IJ | n      | C)     | 4  | 11 |
| <u> </u> | $\sim$ | ~  | $\sim$ | $\sim$ |    |    |

| [SUMP] = SUMP010<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |   | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _    | Backy<br>Concentra<br>(95% UP<br>Surface | iround<br>iions in Soil<br><u>L, mg/kg)</u><br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP010-SB01<br>35-SMP10-SB01-01<br>9/11/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP010-SB01<br>35-SMP10-SB01-02<br>9/11/2006<br>10 - 10 Ft<br>REG | 35SUMP010-SB02<br>35-SMP10-SB02-01<br>9/11/2006<br>0.5 - 0.5 Ft<br>REG | 35\$UMP010-\$802<br>35-\$MP10-\$802-02<br>9/11/2006<br>10 - 10 Ft<br>REG | 35SUMP010-SB02<br>35-SMP10-SB02-02-QC<br>9/11/2006<br>10 - 10 Ft<br>FD | 35SUMP011-SB01<br>35-SMP11-SB01-01<br>9/11/2006<br>0.5 - 0.5 Ft<br>REG | 355UMP011-5801<br>35-SMP11-SB01-02<br>9/11/2006<br>12 - 12 Ft<br>REG |
|--|---|--|---------------------|-------------|--|---|--|--|--|--|--|--|--|--|
| Test Group   | Parameter (Units = mo/kg)                           | (RBSV)*                                  | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ   | Result DIL LO VO   | Result DiL LQ VQ   | Result DIL LO VO   | Result DIL LO VO   | Result DIL LO VO   | Result DIL LO VO   |
| RANGE_ORGANICS   | Carbon Range C12-C28                                | 4.0E+02                                  | 25                  | 50          | NE                                       | NE  | 4.0E+02                                      | 56.500 1 U   | 56.900 1 U   | 55.800 1 U   | 59.700 1 U   |  | 55.700 1 U   | 54.600 1 U   |
| RANGE_URGANICS   | Carbon Range C28-C35<br>Carbon Range C6-C12         | 4.0E+02<br>1.7E+02                       | 25                  | 50          | NE                                       | NE  | 4.0E+02                                      | 56.500 1 U   | 56.900 1 U   | 55.800 1 U   | 59.700 1 U   |  | 55.700 1 U   | 54.600 1 U   |
| SOLIDS   | Percent Solids                                      | NË                                       | NE                  | NE          | NE                                       | NE  | -  | 86.300 1   | 85.600 1   | 89.200 1   | 82.100 1   | 82.100 1   | 89.300 1   | 90.000 1   |
| VOLATILES  | 1,1,1,2-Tetrachloroethane                           | 5.17E+00                                 | 5.2E+00             | 0.0005      | NÉ                                       | NE  | 5.2E+00                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,1,1-Trichloroethane                               | 2.32E+02                                 | 2.3E+02<br>5.1E-01  | 0.0005      | NE                                       | NE  | 2.3E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1.1.2-Trichloroethane                               | 9.69E-01                                 | 9.7E-01             | 0.0005      | NE                                       | NE  | 9.7E-01                                      |  | 0.005 1 U  |  | 0.005 1 0  | 0.006 1 0  |  | 0.005 1 0  |
| VOLATILE\$   | 1.1-Dichloroethane                                  | 8.89E+01                                 | 8.9E+01             | 0.0010      | NE                                       | NE  | 8.9E+01                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 t U  |  | 0.005 1 U  |
| VOLATILES  | 1,1-Dichloroethene                                  | 2.68E+01                                 | 2.7E+01             | 0.0005      | NE                                       | NE  | 2.7E+01                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1.2.3-Trichlorobenzene                              | 4.20E+01                                 | 4.2E+01             | 0.0005      | NE                                       | NE  | 4.2E+01                                      |  | 0.005 1 0  |  | 0.005 1 U  | 0.006 1 0  |  | 0.005 1 0  |
| VOLATILES  | 1,2,3-Trichloropropane                              | 9.15E-02                                 | 9.2E-02             | 0.0010      | NE                                       | NE  | 9.2E-02                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,2,4-Trichlorobenzene                              | 1.36E+02                                 | 1.4E+02             | 0.0005      | NE                                       | NE  | 1.4E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,2,4-1 nmenyibenzene<br>1,2-Dibmmo-3-chloropropane | 9.60E+00<br>3.48E-01                     | 9.6E+00<br>3.5E-01  | 0.0005      | NE<br>N#                                 |   | 9.6E+00<br>3.5E-01                           |  | 0.005 1 U<br>0.005 1 U   |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,2-Dibromoethane                                   | 5.31E-02                                 | 5.3E-02             | 0.0005      | NE                                       | NE  | 5.3E-02                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,2-Dichlorobenzene                                 | 5.61E+01                                 | 5.6E+01             | 0.0005      | NE                                       | NE  | 5.6E+01                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 Ú  |  | 0.005 1 Ū  |
| VOLATILES  | 1,2-Dichloropropage                                 | 2.69E-01<br>1.80E+00                     | 2.7E-01<br>1.8E+00  | 0.0005      | NE                                       | NE  | 2.7E-01<br>1.8E±00                           |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylene)                      | 3.27E+03                                 | 3.3E+03             | 0.0005      | NE                                       | NE  | 3.3E+03                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 1  |  | 0.005 1 0  |
| VOLATILES  | 1,3,5-Trimethylbenzene                              | 8.28E+00                                 | 8.3E+00             | 0.0005      | NE                                       | NE  | 8.3E+00                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,3-Dichlorobenzene<br>1 3-Dichloroponane           | 5.05E+00<br>2.98E±00                     | 5.1E+00<br>3.0E+00  | 0.0005      | NE                                       | NE  | 5.1E+00                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,4-Dichlarabenzene                                 | 2.67E+01                                 | 2.7E+01             | 0.0005      | NE                                       | NE  | 2.7E+01                                      |  | 0.005 1 U  |  | 0.005 1 0  | 0.005 1 10   |  | 0.005 1 0  |
| VOLATILES  | 2,2-Dichloropropane                                 | 1.70E+00                                 | 1.7E+00             | 0.0005      | NE                                       | NE  | 1.7E+00                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | 2-Butanone<br>2 Obliggesthid viged sthes            | 2.61E+03                                 | 0.0025              | 0.010       | NE                                       | NE  | 2.6E+03                                      |  | 0.010 1 U  |  | 0.010 1 U  | 0.012 1 U  |  | 0.009 1 U  |
| VOLATILES  | 2-Chlomatuene                                       | 2.14E+01<br>1.54E+02                     | 0.0020              | 0.010       | NE                                       | NE  | 2.1E-01<br>1.5E+02                           |  | 0,010 1 0  |  | 0.010 1 U  | 0.012 1 U  |  | 0.009 1 U  |
| VOLATILES  | 2-Hexanone  | 6.20E+00                                 | 0.0025              | 0.010       | NE                                       | NE  | 6.2E+00                                      |  | 0.010 1 U UJ   |  | 0.010 1 U UJ   | 0.012 1 U UJ   |  | 0.009 1 U UJ   |
| VOLATILES  | 4-Chlorotoluene                                     | 3.44E-01                                 | 0.0005              | 0.005       | NE                                       | NE  | 3.4E-01                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | Acelone<br>Renzece                                  | 1.74E+02<br>8 82E-01                     | 0.0050              | 0.010       | NE                                       | NE  | 1.7E+02                                      |  | 0.010 1 U UJ   |  | 0.010 1 U UJ   | 0.012 1 U UJ   |  | 0.009 1 U UJ   |
| VOLATILES  | Bromobenzene  | 1.12E+01                                 | 0.0005              | 0.005       | NE                                       | NE  | 1.1E+01                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 1  |  | 0.005 1 0  |
| VOLATILES  | Bromochloromethane                                  | 2.41E+01                                 | 0.0005              | 0.005       | NE                                       | NE  | 2.4E+01                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 Ŭ  |  | 0.005 1 U  |
| VOLATILES<br>VOLATILES   | Bromodichloromethane                                | 1.03E+01                                 | 0.0005              | 0.005       | NE                                       | NE  | 1.0E+01                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | Bromomethane  | 3.49E-01                                 | 0.0003              | 0.005       | NE                                       | NE  | 3.4E+01<br>3.5E-01                           |  | 0.005 1 0  |  | 0.005 1 0  | 0.006 1 0  |  | 0.005 1 0  |
| VOLATILES  | Carbon disulfide                                    | 1.03E+02                                 | 0.0005              | 0.005       | NE                                       | NE  | 1.0E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | Carbon tetrachloride                                | 3.53E-01                                 | 0.0005              | 0.005       | NE                                       | NE  | 3.5E-01                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | Chloroethane  | 3.90E+01<br>1.13E+03                     | 0.0005              | 0.005       | NE                                       | NE  | 4.01=+01                                     |  | 0.005 1 U<br>0.010 1 11  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | Chloroform  | 3.06E-01                                 | 0.0005              | 0.005       | NE                                       | NE  | 3.1E-01                                      | 1  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | Chloromethane                                       | 2.27E-01                                 | 0.0020              | 0.010       | NE                                       | NE  | 2.3E-01                                      |  | 0.010 1 U  |  | 0.010 1 U  | 0.012 1 U  |  | 0.009 1 U  |
| VOLATILES  | cis-1 3-Dichloronmoene                              | 1.152+02                                 | 0.0005              | 0.005       | NE                                       | NE  | 1.26+02                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | Dibromochloromethane                                | 7.62E+00                                 | 0.0005              | 0.005       | NE                                       | NE  | 7.6E+00                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | Dibromomethane                                      | 1.885+01                                 | 0.0005              | 0.005       | NE                                       | NE  | 1.9E+01                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | Ethylhenzene  | 2.16E+02<br>4.31E+02                     | 0.0010              | 0.010       | NE                                       | NE  | 2.2E+02                                      |  | 0.010 1 U  |  | 0.010 1 U  | 0.012 1 U  |  | 0.009 1 U  |
| VOLATILE\$   | Hexachlorobutadiene                                 | 1.56E+00                                 | 0.0005              | 0.005       | NE                                       | NE  | 1.6E+00                                      |  | 0.005 1 U  |  | 0.005 1 1  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | tsopropylbenzene                                    | 5.38E+02                                 | 0.0005              | 0.005       | NE                                       | NE  | 5.4E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | m.p-Aylenes<br>Methyl isobutyl ketone               | 2.36+02                                  | 0.0005              | 0.005       | NE                                       | NE  | 2.3E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | Methylene chloride                                  | 8.68E+00                                 | 0.0010              | 0.005       | NE                                       | NE  | 8.7E+00                                      |  | 0.005 1 U  |  | 0.010 1 U  | 0.012 1 0  |  | 0.009 1 0  |
| VOLATILES  | Naphthalene   | 1.81E+01                                 | 0.0005              | 0.01        | NĘ                                       | NE  | 1.8E+01                                      |  | 0.010 1 U  |  | 0.010 1 U  | 0.012 1 U  |  | 0.009 1 U  |
| VOLATILES  |   | 2.70E+02                                 | 0.0005              | 0.005       | NE                                       | NE  | 2.7E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | D-ISOPROPYLTOLUENE                                  | 4.20E+02                                 | 0.0005              | 0.005       | NE                                       | NE  | 4 2E+02                                      |  | 0.005 1 0  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | SEC-BUTYLBENZENE                                    | 3.00E+02                                 | 0.0005              | 0.005       | NE                                       | NE  | 3.0E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | Styrene   | 1.31E+03                                 | 0.0005              | 0.005       | NE                                       | NE  | 1.3E+03                                      |  | 0.005 1 U  |  | 0.005 1 Ú  | 0.006 1 Ū  |  | 0.005 1 U  |
| VOLATILES  | Tetrachiomethene                                    | 2.61E+02<br>6.02E+00                     | 0.0005              | 0.005       | NE                                       | NE  | 2.6E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | Toluene   | 1.08E+03                                 | 0.0005              | 0.005       | NE                                       | NE  | 1.tE+03                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | trans-1,2-Dichloroethene                            | 1.38E+02                                 | 0.0005              | 0.005       | NE                                       | NE  | 1.4E+02                                      |  | 0.005 1 Ū  |  | 0.005 t U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | trans-1,3-Dichloropropene<br>Trichlomethene         | 1.83E+00<br>3.73E+00                     | 0.0005              | 0.005       | NE                                       | NE  | 1.8E+00                                      |  | 0.005 1 U  |  | 0.005 1 U  | 0.006 1 U  |  | 0.005 1 U  |
| VOLATILES  | Trichlorofluoromethane                              | 2.63E+02                                 | 0.0000              | 0.00        | NE                                       | NE  | 2.6E+02                                      |  | 0.005 1 U<br>0.010 1 U   |  | 0.005 1 0  | 0.006 1 U  |  | 0.005 1 U<br>0.009 1 U   |
| VOLATILES  | Vinyi acetate                                       | 5.74E+01                                 | 0.0010              | 0.01        | NĘ                                       | NE  | 5.7E+01                                      |  | 0.010 1 U  |  | 0.010 t U  | 0.012 1 U  |  | 0.009 1 U  |
| VOLATILES  | Vinyl chloride                                      | 3.64E-02                                 | 0.0010              | 0.01        | NE                                       | NE  | 3.6E-02                                      |  | 0.010 1 U  |  | 0.010 1 U  | 0.012 1 U  |  | 0.609 1 U  |

### Table 4-11

### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump 011

| (SUMP) = SUMP011 |                                |            |             |              |            |                |            |                  |                  |                  |                  | 0501040040 0000     | 360UMD044 SE04   | 2551 IMD011-5801 |
|------------------|--------------------------------|------------|-------------|--------------|------------|----------------|------------|------------------|------------------|------------------|------------------|---------------------|------------------|------------------|
| LOCATION CODE    |                                |            |             |              |            |                |            | 35SUMP010-SB01   | 35SUMP010-SB01   | 35SUMP010-SB02   | 355UMP010-SB02   | 355UMP010-5602      | 30500/PUTT-0001  | 35-SMP11-SB01-02 |
| SAMPLE NO        |                                | TCEQ       |             |              | Back       | ground         | Applicble  | 35-SMP10-SB01-01 | 35-SMP10-SB01-02 | 35-SMP10-SB02-01 | 35-SMP10-SBUZ-UZ | 30-SMP10-SB02-02-QC | 0/11/2006        | 0/11/2006        |
| SAMPLE_DATE      |                                | Risk-Based |             |              | Concentra  | itions in Soil | TCEQ       | 9/11/2006        | 9/11/2006        | 9/11/2006        | 9/11/2000        | 10, 10, 20          | 05-05 Et         | 12 - 12 Ft       |
| DEPTH            |                                | Screening  | Method      | Method       | (95% UI    | PL, mg/kg)     | Risk-Based | 0.5 - 0.5 Ft     | 10 - 10 Ft       | 0.5 - 0.5 Ft     | 10 - 10 Ft       | 50-10-1             | PEC              | REG              |
| SAMPLE_PURPOSE   |                                | Value      | Detection   | Quantitation | Surface    | Subsurface     | Screening  | REG              | REG              | REG              | REG              | FU                  | REG              |                  |
| Test Group       | Parameter (Units = mo/kn)      | (RBSV)*    | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft   | Value      | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VC | Result DIL LQ VQ    | Result DIL LQ VQ | Result DIL LQ VQ |
| RANGE ORGANICS   | Carbon Range C12-C28           | 4.0E+02    | 25          | 50           | NE         | NE             | 4.0E+02    | 56.500 1 U       | 56.900 1 U       | 55.800 1 U       | 59,700 1 U       |                     | 55.700 1 U       | 54.600 1 U       |
| PANCE ORCANICS   | Carbon Range C28-C35           | 4 0E+02    | 25          | 50           | NE         | NE             | 4.0E+02    | 56,500 1 U       | 56.900 1 U       | 55.800 1 U       | 59.700 1 U       |                     | 55.700 1 U       | 54.600 1 U       |
| RANCE ORGANICS   | Carbon Range C6-C12            | 1 7E+02    | 25          | 50           | NE         | NE             | 1.7E+02    | 56.500 1 U       | 56.900 1 U       | 55.800 1 U       | 59.700 1 U       |                     | 55.700 1 U       | 54.600 1 U       |
| SOLIDS           | Percent Solids                 | NE         | ŇĒ          | ŇĒ           | NE         | NE             |            | 86.300 1         | 85,600 1         | 89.200 1         | 82.100 1         | 82.100 1            | 89.300 1         | 90.000 1         |
| VOLATILES        | 1 1 1 2 Tetrachiomethane       | 5 2E+00    | 0,0005      | 0.005        | NE         | NE             | 5.2E+00    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1 1 1-Trichlomethane           | 2 3E+02    | 0.0005      | 0.005        | NE         | NE             | 2.3E+02    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATIBES        | 1 1 2 2-Tetrachloroethane      | 5 1E-01    | 0.0005      | 0.005        | NE         | NE             | 5.1E-01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1 1 2-Trichloroethane          | 97E-01     | 0.0005      | 0.005        | NE         | NE             | 9.7E-01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1 1-Dichloroethane             | 8 9E+01    | 0.0010      | 0.005        | NE         | NE             | 8.9E+01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1 1-Dichloroethene             | 276+01     | 0.0005      | 0.005        | NE         | NE             | 2.7E+01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1 1-Dichloropronene            | 9.9E-01    | 0.0005      | 0.005        | NE         | NE             | 9.9E-01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 i U        |
| VOLATILES        | 1 2 3 Trichlorobenzene         | 4 2E+01    | 0.0005      | 0.005        | NE         | NE             | 4.2E+01    | 1                | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1.2.3.Trichloropropage         | 9.2E-02    | 0.0010      | 0.005        | NE         | NE             | 9.2E-02    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATUES         | 1.2.4-Trichlombenzene          | 1 4E+02    | 0.0005      | 0.005        | NE         | NE             | 1.4E+02    | 1                | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1.2.4-Trime!hythenzene         | 9.65+00    | 0.0005      | 0.005        | NE         | NE             | 9.6E+00    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1 2-Dibromo-3-chioronronane    | 3.5E-01    | 0.0020      | 0.005        | NË         | NE             | 3.5E-01    |                  | 0.005 1 U        |                  | 0,005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1.2-Dibromoethane              | 5 3E-02    | 0.0005      | 0.005        | NE         | NE             | 5.3E-02    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1 2-Dichlorobenzene            | 5.65+01    | 0.0005      | 0.005        | NE         | NE             | 5.6E+01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1.2-Dichlomethane              | 2.7E-01    | 0.0005      | 0.005        | NE         | NE             | 2.7E-01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.005 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1 2-Dichloroorooana            | 1.8E+00    | 0,0005      | 0.005        | NE         | NE             | 1.8E+00    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1.2-Dimethylbeszese (o-Xylene) | 3.3E+03    | 0.0005      | 0.005        | NE         | NE             | 3.3E+03    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 135 Trimethylbenzene           | 8.3E+00    | 0.0005      | 0.005        | NE         | NE             | 8.3E+00    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1. U          |                  | 0.005 1 U        |
| VOLATILES        | 1 3 Dichlorohenzene            | 5 1E+00    | 0.0005      | 0.005        | NE         | NE             | 5.1E+00    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1 3-Dichloropronane            | 3.0E+00    | 0,0005      | 0.005        | NE         | NE             | 3.0E+00    | 1                | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 1 4-Dichlorohenzene            | 2 7E+01    | 0.0000      | 0.005        | NE         | NE             | 2.7E+01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 2 2-Bichloronmonane            | 176+00     | 0.0005      | 0.005        | NE         | NE             | 1.7E+00    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | 2.Butanone                     | 2 6E+03    | 0.0025      | 0.010        | NE         | NE             | 2.6E+03    |                  | 0.010 1 U        |                  | 0.010 1 U        | 0.012 1 U           |                  | 0.009 1 U        |
| VOLATILES        | 2-Chlomethyl vinyl ether       | 2 1E-01    | 0.0020      | 0.010        | NE         | NE             | 2.1E-01    |                  | 0.010 1 U        |                  | 0.010 1 U        | 0.012 1 U           |                  | 0.009 1 U        |
| VOLATILES        | 2-Chlombuene                   | 1.5E+02    | 0.0005      | 0.005        | NE         | NE             | 1.5E+02    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATIEES        | 2-Hexanone                     | 62E+00     | 0.0025      | 0.010        | NE         | NE             | 6.2E+00    |                  | 0.010 1 U UJ     | J                | 0.010 1 U U.     | J 0.012 1 U UJ      |                  | 0.009 1 U UJ     |
| VOLATILES        | 4-Chlorotoluene                | 3.4E-01    | 0.0005      | 0.005        | NE         | NE             | 3.4E-01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | Acetone                        | 1.7 =+ 02  | 0.0050      | 0.010        | NE         | NE             | 1.7E+02    |                  | 0.010 1 U UJ     | ļ                | 0.010 1 U U.     | I 0.012 1 U UJ      |                  | 0.009 1 0 0.0    |
| VOLATILES        | Repzene                        | 8.8E-01    | 0.0005      | 0.005        | NE         | NE             | 8.8E-01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | Bromohenzene                   | 1.1E+01    | 0.0005      | 0.005        | NE         | NE             | 1.1E+01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | Bromochioromethane             | 2.4E+01    | 0.0005      | 0.005        | NE         | NE             | 2.4E+01    | 1                | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | Bromodichlommethane            | 1.0E+01    | 0.0005      | 0.005        | NË         | NE             | 1.0E+01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | Bromoform                      | 3.4E+01    | 0.0005      | 0.005        | NE         | NE             | 3.4E+01    | 1                | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | Bromomethane                   | 3.5E-01    | 0.0010      | 0.010        | NE         | NE             | 3.5E-01    |                  | 0.010 1 U        |                  | 0.010 1 U        | 0.012 1 U           |                  | 0.009 1 U        |
| VOLATILES        | Carbon disulfide               | 1.0E+02    | 0.0005      | 0.005        | NE         | NE             | 1.0E+02    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | Carbon tetrachloride           | 3.5E-01    | 0.0005      | 0.005        | NE         | NE             | 3.5E-01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | Chlorobenzene                  | 4.0E+01    | 0.0005      | 0.005        | NE         | NÉ             | 4.0E+01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 U        |
| VOLATILES        | Chloroethane                   | 1.1E+03    | 0.0010      | 0.010        | NE         | NE             | 1.1E+03    |                  | 0.010 1 U        |                  | 0.010 1 U        | 0.012 1 U           |                  | 0.009 1 U        |
| VOLATILES        | Chloroform                     | 3.1E-01    | 0.0005      | 0.005        | NE         | NE             | 3.1E-01    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0,005 1 0        |
| VOLATILES        | Chloromethane                  | 2.3E-01    | 0.0020      | 0.010        | NE         | NE             | 2.3E-01    |                  | 0.010 1 U        |                  | 0.010 1 U        | 0.012 t U           |                  | 0.009 1 0        |
| VOLATILES        | cis-1,2-Dichloroethene         | 1.2E+02    | 0.0005      | 0.005        | NE         | NE             | 1.2E+02    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 U           |                  | 0.005 1 0        |
| VOLATILES        | cis-1,3-Dichloropropene        | 1.2E+00    | 0.0005      | 0.005        | NE         | NE             | 1.2E+00    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 0           |                  |                  |
| VOLATILES        | Dibromochloromethane           | 7.6E+00    | 0.0005      | 0.005        | NE         | NË             | 7.6E+00    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 0           |                  | 0.000 1 0        |
| VOLATILES        | Dibromomethane                 | 1.9E+01    | 0.0005      | 0.005        | NÉ         | NE             | 1.9E+01    | 1                | 0.005 1 U        |                  | 0.005 1 U        | 0.006 1 0           |                  | 0.000 1 0        |
| VOLATILES        | Dichlorodifluoromethane        | 2.2E+02    | 0.0010      | 0.010        | NE         | NE             | 2.2E+02    | 1                | 0.010 1 U        |                  | 0.010 1 0        | 0.012 1 0           |                  | 0.009 1 0        |
| VOLATILES        | Ethylbenzene                   | 4.3E+02    | 0.0005      | 0.005        | NE         | NE             | 4.3E+02    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.005 1 0           |                  | 0.005 1 0        |
| VOLATILES        | Hexachlorobutadiene            | 1.6E+00    | 0.0005      | 0.005        | NE         | NE             | 1.6E+00    |                  | 0.005 1 U        |                  | 0.005 1 0        | 0.006 1 U           |                  | 0.005 1 0        |
| VOLATILES        | Isopropylbenzene               | 5.46+02    | 0.0005      | 0.005        | NE         | NE             | 5.4E+02    |                  | 0.005 1 U        |                  | 0.005 1 0        | 0.006 1 0           |                  | 0.005 1 U        |
| VOLATILES        | m,p-Xylenes                    | 2.3E+02    | 0.0005      | 0.005        | NÉ         | NE             | 2.3E+02    |                  | 0.005 1 U        |                  | 0.005 1 U        | 0.000 1 U           |                  | 0.000 1 0        |
| VOLATILES        | Methyl isobutyl ketone         | 1.3E+03    | 0.0025      | 0.01         | NE         | NE             | 1.3E+03    |                  | 0.010 1 U        | -                | 0.010 1 0        | 0.012 1 U           |                  | 0.005 1 1        |
| VOLATILES        | Methylene chloride             | 8.7E+00    | 0.0010      | 0.005        | NE         | NE             | 8.7E+00    |                  | 0.005 1 U        |                  | 0.005 1 0        | 0.006 1 0           |                  |                  |
| VOLATILES        | Naphthalene                    | 1.8E+01    | 0.0005      | 0.01         | NE         | NE             | 1.8E+01    |                  | 0.010 1 U        |                  | 0.010 1 0        | 0.012 1 0           |                  | 0.005 1 1        |
| VOLATILES        | n-BUTYLBENZENE                 | 2.7E+02    | 0.0005      | 0.005        | NE         | NE             | 2.7E+02    |                  | 0.005 1 U        |                  | 0.005 1 0        | 0.000 1 0           |                  | 0.005 1 11       |
| VOLATILES        | n-PROPYLBENZENE                | 3.2E+02    | 0.0005      | 0.005        | NE         | NE             | 3.2E+02    |                  | 0.005 1 0        |                  | 0,005 1 0        |                     |                  | 0.005 1 1        |
| VOLATILES        | p-ISOPROPYLTOLUENE             | 4.2E+02    | 0.0005      | 0.005        | NE         | NE             | 4.2E+02    | 1                | 0.005 1 U        |                  | 0.005 1 U        | 0.000 1 0           |                  | 0.005 1 11       |
| VOLATILES        | sec-BUTYLBENZENE               | 3.0E+02    | 0.0005      | 0.005        | NE         | NE             | 3.0E+02    | 1                | 0.005 1 U        |                  | 0.005 1 U        | 0.000 1 0           |                  | 0.005 1 11       |
| VOLATILES        | Styrene                        | 1.3E+03    | 0.0005      | 0.005        | NE         | NE             | 1.3E+03    | 1                | 0.005 1 0        |                  |                  | 0.000 1 0           |                  | 0.005 1 1        |
| VOLATILES        | tert-BUTYLBENZENE              | 2.6E+02    | 0.0005      | 0.005        | NE         | NE             | 2.6E+02    | 1                | 10.005 1 U       |                  | 0.000 1 0        | 0.000 1 0           |                  | 0.005 1 11       |
| VOLATILES        | Tetrachloroethene              | 6.0E+00    | 0.0005      | 0.005        | NE         | NE             | 6.0E+00    |                  | 0.005 1 U        |                  | 0.000 1 0        | 0.000 1 U           |                  | 0.005 1 11       |
| VOLATILES        | loluene                        | 1.1E+03    | 0.0005      | 0.005        | NE         | NE             | 1.1E+03    | 1                | 0.000 1 0        |                  | 0.005 1 U        | 0,000 1 0           |                  | 0.005 1 11       |
| VOLATILES        | trans-1,2-Dichloroethene       | 1.4E+02    | 0.0005      | 0.005        | NE         | NE             | 1.46+02    | 1                | 0.000 1 U        |                  | 0.003 1 0        | 0.000 1 0           |                  | 0.005 1 11       |
| VOLATILES        | trans-1,3-Dichloropropene      | 1.8E+00    | 0.0005      | 0.005        | NE         | NE             | 1.8E+00    | 1                | 0.000 1 U        |                  | 0.005 1 0        | 0.000 1 0           |                  | 0.005 4 11       |
| VOLATILES        | Trichloroethene                | 3.7E+00    | 0,0005      | 0.005        | NE         |                | 3.7E+00    |                  | 0.000 1 0        |                  | 0.000 1 0        | 0.000 1 0           |                  | 0,009 1 1        |
| VOLATILES        | I richlorofluoromethane        | 2.66+02    | 0.0010      | 0.01         | NE         | NE             | 2.0E+02    | 1                | 0.010 1 0        |                  | 0.010 1 0        | 0.012 1 1           |                  | 0.009 1 U        |
| VOLATILES        | vinyi acetate                  | 5.7E+01    | 0.0010      | 0.01         | NE         | NE             | 5.7E+U1    | 1                | 0.010 1 U        |                  | 0.010 1 0        | 0.012 1 0           |                  | 0.009 1 1        |
| VOLATILES        | Vinvi chloride                 | 3.6E-02    | 0.0010      | U.01         | NE         | NE             | 3.6E-U2    | 1                | 0.010 1 0        |                  | 0.010 1 0        | 0.012 1 0           |                  | 0.000            |

1 of 1

Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

00066418

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066419

## Table 4-12 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump 012

| [SUMP] = SUMP012<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |  | TCEQ<br>Risk-Based<br>Screening | Method      | Method       | Bacl<br>Concentr<br>(95% U | ground<br>ations in Soil<br>PL, mo/ka) | Applicble<br>TCEQ<br>Risk-Based | 35SUMP012-SB01<br>35-SMP12-SB01-02<br>9/12/2006<br>11 - 11 Ft | 355UMP013-SB01<br>35-SMP13-SB01-01<br>9/12/2006<br>5 - 5 Et | 35SUMP013-SB01<br>35-SMP13-SB01-02<br>9/12/2006<br>10 - 10 Ft | WRS06-SB01<br>WR\$06-SB01-01<br>9/25/2006<br>5 - 5 Ft | WRS06-SB01<br>WRS06-SB01-02<br>9/25/2006<br>4 5 - 4 5 Et |
|--|--|---------------------------------|-------------|--------------|----------------------------|--|---------------------------------|---|---|---|---|--|
| \$AMPLE_PURPOSE  |  | Value                           | Detection   | Quantitation | Surface                    | Subsurface                             | Screening                       | REG   | REG   | REG   | REG   | REG  |
| Test Group<br>RANGE ORGANICS   | Parameter (Units = mg/kg)                        | (RBSV) *                        | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft                 | 1.5 - 2.5 Ft                           | Value                           | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VC  | Result DIL LQ VQ                                      | Result DIL LQ VQ   |
| RANGE_ORGANICS   | Carbon Range C28-C35                             | 4.0E+02                         | 25          | 50           | NE                         | NE                                     | 4.0E+02                         | 59.400 1 U  | 62.800 1 U  | 60.800 1 U  | 56.200 1 U U  | 40.800 F J B<br>38.400 1 J J                             |
| RANGE_ORGANICS   | Carbon Range C6-C12                              | 1.7E+02                         | 25          | 50           | NE                         | NE                                     | 1.7E+02                         | 59.400 1 U  | 62.800 1 U  | 60.800 1 U  | 56.200 1 U U  | 61.400 1 U U   |
| SEMIVOLATILES  | 1,2,4-1 nonbrobenzene<br>1,2-Dichlorobenzene     | 1.4E+02<br>5.6E+01              | 0.0825      | 0.165        | NE                         |  | 1.4E+02<br>5.6E+01              |   |   |   | 1.820 10 U U  | 0.205 1 U U<br>0.205 1 U U                               |
| SEMIVOLATILES  | 1,3-Dichlorobenzene                              | 5.1E+00                         | 0.0825      | 0,165        | NE                         | NE                                     | 5.1E+00                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | 1,4-Dichlorobenzene                              | 2.75+01                         | 0.0825      | 0.165        | NE                         | NE                                     | 2.7E+01                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | 2.4.6-Trichlorophenot                            | 4.52+03                         | 0.0825      | 0.165        | NE                         | NE                                     | 4.5E+01                         |   |   |   | 1.820 10 0 0  | 0.205 1 U U  |
| SEMIVOLATILES  | 2.4-Dichlorophenol                               | 4.7E+01                         | 0.0825      | 0.165        | NE                         | NE                                     | 4.7E+01                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | 2,4-Dimethylphenol<br>3,4-Dinitrophenol          | 3.1E+02                         | 0.0825      | 0.165        | NE                         | NE                                     | 3.1E+02                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | 2,4-Dinitrotoluene                               | 7.2E-01                         | 0.0825      | 0.165        | NE                         | NE                                     | 7.2E-01                         |   |   |   | 9.120 10 U U<br>1.820 10 U U                          | 1,030 1 U U<br>0,205 1 U U                               |
| SEMIVOLATILES  | 2,6-Dinitrotoluene                               | 7.2E-01                         | 0.0825      | 0.165        | NE                         | NE                                     | 7.2E-01                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | 2-Chloronaphthalene                              | 1.1E+03                         | 0.0825      | 0.165        | NE                         | NE                                     | 1.12+03                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | 2-Methylnaphthalene                              | 5.5E+01                         | 0.0825      | 0.165        | NE                         | NE                                     | 5.5E+01                         |   |   |   | 1.620 10 0 0  | 0.205 1 0 0  |
| SEMIVOLATILES  | 2-Methylphenol                                   | 7.7E+02                         | 0.0825      | 0.165        | NE                         | NE                                     | 7.7E+02                         |   |   |   | 1.820 10 U U  | 0.205 1 0 0  |
| SEMIVOLATILES  | 2-Nitroaniline                                   | 4.7E+00                         | 0.3300      | 0.825        | NE                         | NE                                     | 4.7E+00                         |   |   |   | 9.120 10 U U  | 1.030 1 U U  |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine                           | 1.1E+00                         | 0.0625      | 0.330        | NE                         | NE                                     | 3.1E+01<br>1.1E+00              |   |   |   | 1.820 10 U U<br>3.650 10 U U                          | 0.205 1 0 0  |
| SEMIVOLATILES  | 3-Nitroaniline                                   | 4.7E+00                         | 0.3300      | 0.825        | NE                         | NE                                     | 4.7E+00                         |   |   |   | 9.120 10 U U  | 1.030 1 U U  |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol                       | 3.1E+01                         | 0.3300      | 0.825        | NE                         | NE                                     | 3.1E+01                         |   |   |   | 9.120 10 U U  | 1.030 1 U U  |
| SEMIVOLATILES  | 4-Chloro-3-methylphenol                          | 3.1E-02<br>7.7E+01              | 0.0825      | 0.165        |                            | NE                                     | 1.7E-01<br>7.7E+01              |   |   |   | 1 820 10 U U  | 0.103 1 U U  |
| SEMIVOLATILES  | 4-Chloroaniline                                  | 6.2E+01                         | 0.0825      | 0.165        | NE                         | NE                                     | 6.2E+01                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | 4-Chlorophenyl phenyl ether                      | 2.8E-02                         | 0.0825      | 0.165        | NE                         | NE                                     | 1.7E-01                         |   |   |   | 0.938 10 U U  | 0.103 1 U U  |
| SEMIVOLATILES  | 4-Nitroaniline                                   | 1.7E+01                         | 0.0825      | 0.165        | NE                         | NE                                     | 7.7E+01<br>1.3E+01              |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | 4-Nitrophenol                                    | 3.1E+01                         | 0.3300      | 0.825        | NE                         | NE                                     | 3.1E+01                         |   |   |   | 9.120 10 U U  | 1.030 1 0 0  |
| SEMIVOLATILES  | Acenaphthene                                     | 8.2E+02                         | 0.0825      | 0.165        | NE                         | NÉ                                     | 8.2E+02                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Anthracene                                       | 6.2E+02<br>4 1E+03              | 0.0825      | 0.165        | NE                         | NE                                     | 8.2E+02<br>4.1E+03              |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Benzo(a)anthracene                               | 6.3E-01                         | 0.0825      | 0.165        | 0.02                       | NE                                     | 6.3E-01                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Benzo(a)pyrene                                   | 6.3E-02                         | 0.0825      | 0.165        | 0.02                       | NE                                     | 1.7E-01                         |   |   |   | 0.938 10 U U  | 0.103 1 Ū Ū  |
| SEMIVOLATILES  | Benzo(o)nuoraninene<br>Benzo(obi)nerviene        | 6.3E-01<br>4.1E+02              | 0.0825      | 0.165        | 0.02                       | NE                                     | 6.3E-01                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Benzo(k)fluoranthene                             | 6.3E+00                         | 0.0825      | 0.165        | 0.01                       | NE                                     | 6.3E+00                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Benzoic Acid                                     | 6.2E+04                         | 0.3300      | 0.825        | NE                         | NÉ                                     | 6.2E+04                         |   |   |   | 9.120 10 Ŭ UJ   | 1.030 1 U UJ   |
| SEMIVOLATILES  | bis(2-Chlomethoxy)methane                        | 4./E+03<br>2.9E-01              | 0.0825      | 0.165        | NE                         | NE                                     | 4.7E+03                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | bis(2-Chloroethyl)ether                          | 1.5E-01                         | 0.0825      | 0.165        | NE                         | NE                                     | 1.7E-01                         |   |   |   | 0.938 10 U U  | 0.205 1 0 0  |
| SEMIVOLATILES  | bis(2-Chloroisopropyl)ether                      | 4.8E+00                         | 0.0825      | 0.165        | NE                         | NE                                     | 4.8E+00                         |   |   |   | 1.820 10 U U  | 0.205 1 Ŭ Ŭ  |
| SEMIVOLATILES  | Dis(2-Emylnexyl)phthalate                        | 1.7E+01<br>3.1E+03              | 0.0825      | 0.165        | NE                         | NE                                     | 1.7E+01<br>7.1E+02              |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Chrysene   | 6.3E+01                         | 0.0825      | 0.165        | 0.02                       | NË                                     | 6.3E+01                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene                           | 6.3E-02                         | 0.0825      | 0.165        | NE                         | NE                                     | 1.7E-01                         |   | ÷   |   | 0.938 10 U U  | 0.103 1 U Ü  |
| SEMIVOLATILES<br>SEMIVOLATILES   | Dipenzoniran<br>Diethyl obtoglate                | 6.2E+01                         | 0.0825      | 0.165        | NE                         | NE                                     | 6.2E+01                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Dimethyl phthalate                               | 1.2E+04                         | 0.0825      | 0.165        | NE                         | NE                                     | 1.2E+04                         |   |   |   | 1.820 10 0 0<br>1.820 10 U U                          | 0.205 1 0 0  |
| SEMIVOLATILES  | di-ri-Butyl phthalate                            | 1.6E+03                         | 0.0825      | 0.165        | NE                         | NE                                     | 1.6E+03                         |   |   |   | 1,820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES<br>SEMIVOLATILES   | di-n-Octyl phthalate                             | 3.1E+02<br>5.5E+02              | 0.0825      | 0.165        | NE                         | NE                                     | 3.1E+02                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Fluorene   | 5.5E+02                         | 0.0825      | 0.165        | NE                         | NE                                     | 5.5E+02                         |   |   |   | 1.820 10 U U  | 0.205 1 0 0  |
| SEMIVOLATILES  | Hexachlorobenzene                                | 2.5E-01                         | 0.0825      | 0.165        | NE                         | NE                                     | 2.5E-01                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES<br>SEMIVOLATILES   | Hexachlorobutadiene<br>Hexachlorocucionentadiene | 1.6E+00                         | 0.0825      | 0.165        | NE                         | NE                                     | 1.6E+00                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Hexachloroethane                                 | 1.6E+01                         | 0.0825      | 0.165        | NE                         | NE                                     | 1.6E+00                         |   |   |   | 1.820 10 0 0  | 0.205 1 0 0  |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene                           | 6.3E-01                         | 0.0825      | 0.165        | 0.01                       | NE                                     | 6.3E-01                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Isophorone<br>Naphthalene                        | 5.2E+02                         | 0.0825      | 0.165        | NE                         | NE                                     | 5.2E+02                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Nitrobenzene                                     | 6.5E+00                         | 0.0825      | 0.165        | NE                         |  | 6.5E+00                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine                       | 4.1E-02                         | 0.0825      | 0.165        | NE                         | NE                                     | 1.7E-01                         |   |   |   | 0.938 10 U U  | 0.103 1 0 0  |
| SEMIVOLATILES  | n-Nitrosodiphenylamine<br>Pentachlorophenol      | 5.9E+01                         | 0.0825      | 0.165        | NE                         | NE                                     | 5.9E+01                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Phenanthrene                                     | 4.1E+02                         | 0.0825      | 0.625        | NF                         | NE                                     | 3.0E+00<br>4.1E+02              |   |   |   | 9.120 10 U U<br>1.820 10 11 U                         | 1.030 1 U U<br>0.205 1 11 U                              |
| SEMIVOLATILES  | Phenol   | 4.7E+03                         | 0.0825      | 0.165        | NE                         | NÉ                                     | 4.7E+03                         |   |   |   | 1.820 10 U U  | 0.205 1 U U  |
| SEMIVOLATILES  | Pyrene<br>Percent Solido                         | 4.1E+02                         | 0.0825      | 0.165        | 0.02                       | NE                                     | 4.1E+02                         | 00 700 4  | <b>TO 000</b>   |   | 1.820 10 U U  | 0.205 1 U U  |
| VOLATILES  | 1,1,1,2-Tetrachioroethane                        | 5.2E+00                         | 0.0005      | NVA<br>0.005 | N⊨                         | NE                                     | 5.2E+00                         | 82.700 1  | 79.600 1  | 82.100 1  | 88.000 1  | 80.400 1   |
| VOLATILES  | 1,1,1-Trichloroethane                            | 2.3E+02                         | 0.0005      | 0.005        | NE                         | NË                                     | 2.3E+02                         | 0.005 1 U   |   | 0.005 1 U   |   | 0.006 1 U U  |
| VOLATILES  | 1,1,2,2-Tetrachloroethane                        | 5.1E-01                         | 0.0005      | 0.005        | NE                         | NE                                     | 5.1E-01                         | 0.005 1 U   |   | 0.005 1 U   |   | 0.006 1 Ū Ū  |
| VULLILLED  | r, r,z-meniorgenane                              | 9.72-01                         | 0.0005      | 0.005        | NE                         | N⊂                                     | 9.7E-01                         | 0.005 1 U   |   | 0.005 1 U   |   | 0.006 1 U U  |

.

Chemical Concentrations In Soll Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

### Table 4-12 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump 012

| [SUMP] = SUMP012<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE PURPOSE |                                 | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UI<br>Surface | ground<br>ations in Soll<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP012-S501<br>35-SMP12-S801-02<br>9/12/2006<br>11 - 11 Ft<br>REG | 35SUMP013-SB01<br>35-SMP13-SB01-01<br>9/12/2006<br>_5-55<br>REG | 35SUMP013-\$801<br>35-SMP13-SB01-02<br>9/12/2006<br>10 - 10 Ft<br>REG | WR\$06-SB01<br>WR\$06-SB01-01<br>9/25/2006<br>55 Ft<br>REG | WRS06-SB01<br>WRS06-SB01-02<br>9/25/2006<br>4_5 - 4_5 Ft<br>REG |
|---|---------------------------------|--|---------------------|------------------------|---|--|--|--|---|---|--|---|
| Test Group  | Parameter (Units = mg/kg)       | (RB\$V) *                                | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ  |
| VOLATILES   | 1.1-Dichloroethane              | 8.9E+01                                  | 0.0010              | 0.005                  | NE                                      | NE   | 8.9E+01                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.005 1 0 0   |
| VOLATILES   | 1.1-Dichloroethene              | 2.7E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.7E+01                                      | 0.005 1 U  |   | 0.005 1 0   |  | 0.006 1 U U   |
| VOLATILES   | 1,1-Dichloropropene             | 9.9E-01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.2E+01                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | 1.2.3-Trichloropropage          | 9.2E-02                                  | 0.0010              | 0.005                  | NE                                      | NE   | 9.2E-02                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | 1.2.4-Trichlorobenzene          | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.4E+02                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | 1,2,4-Trimethylbenzene          | 9.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 9.6E+00                                      | 0.005 1 U  |   | 0.003 1 J   |  | 0.005 1 0 0   |
| VOLATILES   | 1,2-Dibromo-3-chloropropane     | 3,5E-01                                  | 0.0020              | 0,005                  | NE                                      | NE   | 3.5E-01                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 0 0   |
| VOLATILES   | 1,2-Dibromoethane               | 5.3E-02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 5.3E-02<br>5.6E+01                           | 0.005 1 10   |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | 1.2-Dichloroethane              | 2.7E-01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.7E-01                                      | 0.005 1 Ŭ  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | 1.2-Dichloropropane             | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.8E+00                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | 1,2-Dimethylbenzene (o-Xylene)  | 3.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.3E+03                                      | 0.005 1 U  |   | 0.002 1 J J   |  | 0.006 1 0 0   |
| VOLATILES   | 1,3,5-Trimethylbenzene          | 8.3E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 8.3E+00                                      | 0.005 1 U  |   | 0.001 1 3 3   |  | 0.006 1 U U   |
| VOLATILES   | 1,3-Dichlorobenzene             | 5.1E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.05+00                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | 1 4-Dichlombeozene              | 2.7E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.7E+01                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | 2,2-Dichloropropane             | 1.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.7E+00                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | 2-Butanone                      | 2.6E+03                                  | 0.0025              | 0.010                  | NE                                      | NE   | 2.6E+03                                      | 0.011 1 U  |   | 0.010 1 U   |  | 0.013 1 0 0   |
| VOLATILES   | 2-Chloroethyl vinyl ether       | 2.1E-01                                  | 0.0020              | 0.010                  | NE                                      | NE   | 2.1E-01                                      | 0.011 1 0  |   | 0.010 1 0   |  | 0.006 1 U U   |
| VOLATILES   | 2-Uniorotoluene                 | 1.52+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 6.2E+02                                      | 0.000 1 0  |   | 0.010 1 0 00  |  | 0.013 1 U U   |
| VOLATILES   | 4-Chlorotoluese                 | 3.4E-01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.4E-01                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | Acetone                         | 1.7E+02                                  | 0.0050              | 0.010                  | NE                                      | NE   | 1.7E+02                                      | 0.011 1 U UJ   |   | 0.010 1 U UJ  |  | 0.013 1 U U   |
| VOLATILES   | Benzene                         | 8.8E-01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 8.8E-01                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 0 0   |
| VOLATILES   | Bromobenzene                    | 1.1E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.1E+01<br>2.4E+01                           | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | Bromodicbloromethane            | 2.46+01                                  | 0,0005              | 0.005                  | NE                                      | NE   | 1.0E+01                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | Bromoform                       | 3.4E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.4E+01                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | Bromomethane                    | 3.5E-01                                  | 0.0010              | 0.010                  | NE                                      | NE   | 3,5E-01                                      | 0.011 1 U  |   | 0.010 1 U   |  | 0.013 1 U U   |
| VOLATILES   | Carbon disulfide                | 1.0E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.0E+02                                      | 0.005 1 U  |   | 0.005 1 0   |  | 0.006 1 11 11   |
| VOLATILES   | Carbon tetrachloride            | 3.5E-01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.3E-01                                      |  |   | 0.005 1 0   |  | 0.006 1 U U   |
| VOLATILES   | Chlomethane                     | 1 1E+03                                  | 0.0000              | 0.010                  | NE                                      | NE   | 1.1E+03                                      | 0.011 1 U  |   | 0.010 1 U   |  | 0.013 1 U U   |
| VOLATILES   | Chloraform                      | 3.1E-01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3,1E-01                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | Chloromethane                   | 2.3E-01                                  | 0.0020              | 0.010                  | NE                                      | NE   | 2.3E-01                                      | 0.011 1 U  |   | 0.010 1 U   |  | 0.013 1 U U   |
| VOLATILES   | cis-1,2-Dichloroethene          | 1.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.2E+02                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 0 0   |
| VOLATILES   | cis-1,3-Dichloropropene         | 7.65+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 7.6E+00                                      | 0.005 1 1  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | Dibromomethane                  | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.9E+01                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | Dichlorodifluoromethane         | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                      | NE   | 2.2E+02                                      | 0.011 1 U  |   | 0.010 1 U   |  | 0.013 1 U U   |
| VOLATILES   | Ethylbenzene                    | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.3E+02                                      | 0.005 1 U  |   | 0.005 1 J J   |  | 0.006 1 U U   |
| VOLATILES   | Hexachiorobutadiene             | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.6E+00                                      | 0.005 1 U  |   | 0.005 1 0   |  | 0.000 1 0 0   |
| VOLATILES   | Isopropyidenzene                | 0.4E+02                                  | 0.0005              | 0,005                  | NE                                      | NE   | 2.3E+02                                      | 0.005 1 U  |   | 0.010 1   |  | 0.006 1 U U   |
| VOLATILES   | Methyl isobutyl ketone          | 1.3E+03                                  | 0.0025              | 0.01                   | NE                                      | NE   | 1.3E+03                                      | 0.011 t U  |   | 0.010 1 U   |  | 0.013 1 U U   |
| VOLATILES   | Methylene chloride              | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                      | NE   | 8.7E+00                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | Naphthalene                     | 1.8E+01                                  | 0.0005              | 0.01                   | NE                                      | NE   | 1.8E+01                                      | 0.011 1 U  |   | 0.010 1 U   |  | 0.013 1 0 0   |
| VOLATILES   | n-BUTYLBENZENE                  | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2./E+02<br>3.2E+02                           | 0.005 1 0  |   | 0.005 1 0   |  | 0.006 1 1 1   |
| VOLATILES   | CISOPROPYLICITIENE              | 3.2E+02<br>4.2E+02                       | 0.0005              | 0.005                  | NE                                      | NE   | 4.2E+02                                      | 0.005 1 U  |   | 0.005 1 Ŭ   |  | 0.006 1 U U   |
| VOLATILES   | sec-BUTYLBENZENE                | 3.0 =+02                                 | 0.0005              | 0.005                  | NE                                      | NE   | 3.0E+02                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | Styrene                         | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.3E+03                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | tert-BUTYLBENZENE               | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.6E+02                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.000 1 0 0   |
| VOLATILES   | Letrachloroethene               | 6.0E+00                                  | 0.0005              | 0.005                  |   | NE   | 0.0E+00<br>1.1E+03                           | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | trans-1 2-Dichlomethene         | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.4E+02                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | trans-1,3-Dichloropropene       | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.8E+00                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | Trichtoroethene                 | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.7E+00                                      | 0.005 1 U  |   | 0.005 1 U   |  | 0.006 1 U U   |
| VOLATILES   | Trichlorofluoromethane          | 2.6E+02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 2.6E+02                                      | 0.011 1 U  |   | 0.010 1 0   |  | 0.013 1 U U   |
| VOLATILES   | Vinyi acetate<br>Vinyi chloride | 3.6E-02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 3.6E-02                                      | 0.011 1 U  |   | 0.010 1 U   |  | 0.013 1 U U   |

VOLATILES Vinvt chloride Footholes are shown on cover page to Tables Section. 00066420

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

#### Table 4-13

Shaw Environmental, Inc.

#### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 013

## 00066421

|                                | 0   |                    |             |              |            |                | 3                  |                  |                     |                   |                              | 0000042                     |
|--------------------------------|---|--------------------|-------------|--------------|------------|----------------|--------------------|------------------|---------------------|-------------------|------------------------------|-----------------------------|
| LOCATION CODE                  | 3   |                    |             |              |            |                |                    | 35SUMP012-SB01   | 35SUMP013-SB01      | 35SUMP013-SB01    | WRS06-SB01                   | WRS06-SB01                  |
| SAMPLE_NO                      |   | TCEQ               |             |              | Back       | ground         | Applicble          | 35-SMP12-SB01-02 | 35-SMP13-SB01-01    | 35-SMP13-SB01-02  | WRS06-SB01-01                | WRS06-SB01-02               |
| SAMPLE_DATE                    |   | Risk-Based         | t falls a d | Malhad       | Concentra  | itions In Soil | TCEQ               | 9/12/2006        | 9/12/2006           | 9/12/2006         | 9/25/2006                    | 9/25/2006                   |
| SAMPLE_PURPOS                  | E   | Value              | Detection   | Quantitation | Surface    | Subsurface     | Screening          | REG              | 0.5 - 0.5 Ft<br>REG | 10 - 10 Ft<br>REG | 0.5 - 0.5 Ft<br>REG          | 4.5 - 4.5 Ft<br>REG         |
| Test Group                     | Parameter (Units = mg/kg)                     | (RBSV) *           | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft   | Value              | Result DIL LQ VQ | Result DIL LO VO    | Result DIL LO VO  | Result DIL LO VO             | Result DIL LO VO            |
| RANGE_ORGANIC                  | S Carbon Range C12-C28                        | 4.0E+02            | 25          | 50           | NE         | NE             | 4.0E+02            | 59.400 1 U       | 62.800 1 U          | 60.800 1 U        | 36.200 1 J B                 | 40.800 1 J 8                |
| RANGE_ORGANIC                  | S Carbon Range C28-C35                        | 4.0E+02            | 25          | 50           | NE         | NE             | 4.0E+02            | 59.400 1 U       | 62.800 1 U          | 60.800 1 U        | 56.200 1 U U                 | 38.400 1 J J                |
| SEMIVOLATILES                  | 1.2.4-Trichlorobenzene                        | 1.4E+02            | 0.0825      | 0.165        | NE         | NE             | 1.7E+02<br>1.4E+02 | 59.400 1 U       | 62.800 1 0          | 60.800 1 U        | 1820 1 U U                   | 61.400 1 U U<br>0.205 1 U U |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene                           | 5.6E+01            | 0.0825      | 0.165        | NE         | NE             | 5.6E+01            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | 1,3-Dichlorobenzene                           | 5.1E+00            | 0.0825      | 0.165        | NE         | NE             | 5.1E+00            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES<br>SEMIVOLATILES | 1,4-Dichiorobenzene<br>2,4,5-Trichlorophenol  | 2.7E+01<br>1.6E+03 | 0.0825      | 0.165        | NE         | NE             | 2.7E+01            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol                         | 4.55+01            | 0.0825      | 0.165        | NE         | NE             | 4.5E+01            |                  |                     |                   | 1.820 10 0 0                 | 0.205 1 0 0                 |
| SEMIVOLATILES                  | 2,4-Dichlorophenol                            | 4.7E+01            | 0.0825      | 0.165        | NE         | NE             | 4.7E+01            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | 2,4-Dimethylphenol                            | 3.1E+02            | 0.0825      | 0.165        | NE         | NE             | 3.1E+02            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | 2.4-Dinitrotoluene                            | 7.2E-01            | 0.3300      | 0.620        | NE         | NE             | 3.1E+01<br>7.2E-01 |                  |                     |                   | 9.120 10 U U                 | 1.030 1 U U                 |
| SEMIVOLATILES                  | 2,6-Dinitrotoluene                            | 7.2E-01            | 0.0825      | 0.165        | NE         | NE             | 7.2E-01            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | 2-Chloronaphthalene                           | 1.1E+03            | 0.0825      | 0.165        | NE         | NE             | 1.1E+03            |                  |                     |                   | 1.620 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | 2-Chlorophenol<br>2-Methylogophthalana        | 1.1E+02            | 0.0825      | 0.165        | NE         | NE             | 1.1E+02            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | 2-Methylnaphthalene<br>2-Methylphenol         | 5.5E+01<br>7.7E+02 | 0.0625      | 0.105        | NE         | NE             | 5.5E+01<br>7.7E+02 |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | 2-Nitroaniline                                | 4.7E+00            | 0.3300      | 0.825        | NE         | NE             | 4.7E+00            |                  |                     |                   | 9.120 to U U                 | 1.030 1 1 1                 |
| SEMIVOLATILES                  | 2-Nitrophenol                                 | 3.1E+01            | 0.0825      | 0.165        | NE         | NE             | 3.1E+01            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzidine                        | 1.1E+00            | 0.1650      | 0.330        | NE         | NE             | 1.1E+00            |                  |                     |                   | 3.650 10 U U                 | 0.410 1 U U                 |
| SEMIVOLATILES                  | 4.6-Dinitro-2-methylohenol                    | 4.7E+00            | 0.3300      | 0.825        | NE         | NE             | 4.7E+00<br>3.1E+01 |                  |                     |                   | 9.120 10 U U                 | 1.030 1 U U                 |
| SEMIVOLATILES                  | 4-Bromophenyl phenyl ether                    | 3.1E-02            | 0.0825      | 0.165        | NE         | NE             | 1.7E-01            |                  |                     | ŝ                 | 9.120 10 0 0<br>0.938 10 U U | 0.103 1 U U                 |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol                       | 7.7E+01            | 0.0825      | 0.165        | NE         | NE             | 7.7E+01            |                  |                     | 13                | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | 4-Chloroaniline                               | 6.2E+01            | 0.0825      | 0.165        | NE         | NE             | 6.2E+01            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | 4-Chlorophenyl phenyl ether<br>4-Methylohenol | 2.85-02            | 0.0825      | 0.165        | NE         | NE             | 7.7E-01<br>7.7E+01 |                  |                     | 2                 | 0.938 10 U U                 | 0.103 1 U U                 |
| SEMIVOLATILES                  | 4-Nitroaniline                                | 1.3E+01            | 0.3300      | 0.825        | NE         | NE             | 1.3E+01            |                  |                     |                   | 9.120 10 U U                 | 1030 1 1 1                  |
| SEMIVOLATILES                  | 4-Nitrophenol                                 | 3.1E+01            | 0.3300      | 0.825        | NE         | NE             | 3.1E+01            |                  |                     |                   | 9.120 10 U U                 | 1.030 1 U U                 |
| SEMIVOLATILES                  | Acenaphthene                                  | 8.2E+02            | 0.0825      | 0.165        | NE         | NE             | 8.2E+02            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Anthracene                                    | 0.2E+02<br>4 1E+03 | 0.0825      | 0.165        | NE         | NE             | 8.2E+02<br>4.1E+03 |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Benzo(a)anthracene                            | 6.3E-01            | 0.0825      | 0.165        | 0.02       | NE             | 6.3E-01            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Benzo(a)pyrene                                | 6.3E-02            | 0.0825      | 0.165        | 0.02       | NÉ             | 1.7E-01            |                  |                     |                   | 0.938 10 U U                 | 0.103 1 U U                 |
| SEMIVOLATILES                  | Benzo(b)fluoranthene                          | 6.3E-01            | 0.0825      | 0.165        | 0.02       | NE             | 6.3E-01            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Benzo(k)fluoranthene                          | 6.3E+00            | 0.0825      | 0.165        | 0.01       | NE             | 4.1E+02<br>6.3E+00 |                  |                     |                   | 1.820 10 U U<br>1.820 10 U U | 0.205 1 U U                 |
| SEMIVOLATILES                  | Benzoic Acid                                  | 6.2E+04            | 0.3300      | 0.825        | NE         | NE             | 6.2E+04            |                  |                     |                   | 9.120 10 U UJ                | 1.030 1 U U.I               |
| SEMIVOLATILES                  | Benzyl Alcohol                                | 4.7E+03            | 0.0825      | 0.165        | NE         | NE             | 4.7E+03            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane                    | 2.96-01            | 0.0825      | 0.165        | NE         | NE             | 2.9E-01            |                  |                     | 2                 | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether                   | 4.8E+00            | 0.0825      | 0.165        | NE         | NE             | 4.85+00            |                  |                     | 新                 | 1 820 10 U U                 | 0,103 1 0 0                 |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthalate                    | 1.7E+01            | 0.0825      | 0.165        | NE         | NE             | 1.7E+01            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Butyl benzyl phthalate                        | 3.1E+03            | 0.0825      | 0.165        | NE         | NE             | 3.1E+03            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Dibenzo(a b)anthracena                        | 6.3E+01            | 0.0825      | 0.165        | 0.02       | NE             | 6.3E+01            |                  |                     | 8                 | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Dibenzofuran                                  | 6.2E+01            | 0.0825      | 0.165        | NE         | NE             | 6.2E+01            |                  |                     |                   | 1 935 10 U U                 | 0.103 1 U U                 |
| SEMIVOLATILES                  | Diethyl phthalate                             | 1.2E+04            | 0.0825      | 0.165        | NE         | NE             | 1.2E+04            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Dimethyl phthalate                            | 1.2E+04            | 0.0825      | 0.165        | NE         | NE             | 1.2E+04            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES<br>SEMIVOLATILES | di-n-Butyt phthalate                          | 1.6E+03<br>3.1E+02 | 0.0825      | 0.165        | NE         | NĘ             | 1.6E+03            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Fluoranthene                                  | 5.5E+02            | 0.0825      | 0.165        | 0.02       | NË             | 3,1E+02<br>5.5E+02 |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Fluorene                                      | 5.5E+02            | 0.0825      | 0.165        | NE         | NE             | 5.5E+02            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Hexachlorobenzene                             | 2.5E-01            | 0.0825      | 0.165        | NE         | NE             | 2.5E-01            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES<br>SEMIVOLATILES | Hexachioroputatione                           | 1.6E+00            | 0.0825      | 0.165        | NE         | NE             | 1.6E+00            |                  |                     | 4                 | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Hexachloroethane                              | 1.6E+01            | 0.0825      | 0.165        | NE         | NE             | 1.6E+00            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Indeno(1,2,3-cd)pyrene                        | 6.3E-01            | 0.0825      | 0.165        | 0.01       | NE             | 6.3E-01            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Isophorone                                    | 5.2E+02            | 0.0825      | 0.165        | NE         | NE             | 5.2E+02            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Nitrobenzene                                  | 1.85+01            | 0.0825      | 0.165        | NE         | NE             | 1.8E+01            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine                    | 4.1E-02            | 0.0825      | 0.165        | NE         | NE             | 1.76-01            |                  |                     | 额                 | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | n-Nitrosodiphenytamine                        | 5.9E+01            | 0.0825      | 0.165        | NE         | NE             | 5.9E+01            |                  |                     | ¥3                | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Pentachlorophenol                             | 3.0E+00            | 0.3300      | 0.825        | NE         | NE             | 3.0E+00            |                  |                     |                   | 9,120 10 U U                 | 1.030 1 Ū Ū                 |
| SEMIVOLATILES                  | Phenol  | 4.7E+02            | 0.0825      | 0.165        | NE         |                | 4.1E+02            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
| SEMIVOLATILES                  | Pyrene  | 4.1E+02            | 0.0825      | 0.165        | 0.02       | NE             | 4.1E+02            |                  |                     |                   | 1.820 10 U U                 | 0.205 1 U U                 |
|                                |   |                    |             |              |            |                | -                  |                  |                     |                   |                              |                             |

#### Table 4-13

Shaw Environmental, Inc.

#### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 013

### 00066422

|                  |   |                    |             |              |            |               |                    |                  |                  |                  |                  | 00000         |          |
|------------------|---|--------------------|-------------|--------------|------------|---------------|--------------------|------------------|------------------|------------------|------------------|---------------|----------|
| [SUMP] = SUMP013 |   |                    |             |              |            |               |                    | 35SUMP012-SB01   | 35SUMP013-SB01   | 35SUMP013-S801   | WRS06-SB01       | WRS06-SB01    |          |
| SAMPLE NO        |   | TCEQ               |             |              | Back       | ground        | Applicble          | 35-SMP12-SB01-02 | 35-SMP13-SB01-01 | 35-SMP13-SB01-02 | WRS06-SB01-01    | WRS06-SB01-02 |          |
| SAMPLE_DATE      |   | Risk-Based         |             |              | Concentra  | tions in Soil | TCEQ               | 9/12/2006        | 9/12/2006        | 9/12/2006        | 9/25/2006        | 9/25/2006     |          |
| DEPTH            |   | Screening          | Method      | Method       | (95% UF    | L, mg/kg)     | Risk-Based         | 11 - 11 Ft       | 0.5 - 0.5 Ft     | 10 - 10 Ft       | 0.5 - 0.5 Ft     | 4.5 - 4.5 Ft  |          |
| SAMPLE_PURPOSE   |   | Value              | Detection   | Quantitation | Surface    | Subsurface    | Screening          | REG              | REG              | REG              | REG              | REG           |          |
| Test Group       | Parameter (Units = mg/kg)                       | (RBSV)             | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value              | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL_LQ | VQ       |
| SOLIDS           | Percent Solids                                  | NE                 | NVA         | NVA          | NE         | NE            |                    | 82.700 1         | 79.600 1         | 82.100 1         | 88.000 1         | 80.400 1      |          |
| VOLATILES        | 1,1,1,2-Tetrachloroethane                       | 5.2E+00            | 0.0005      | 0.005        | NE         | NE            | 2.2E+00            | 0.005 1 0        |                  | 0.005 1 0        |                  | 0.006 1 U     | ŭ        |
| VOLATILES        | 1,1,1-Inchoroethane                             | 2.35702            | 0.0005      | 0.005        | NE         | NE            | 5.1E-01            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | ŭ        |
| VOLATILES        | 1.1.2-Trichloroethane                           | 9.7E-01            | 0.0005      | 0.005        | NE         | NE            | 9.7E-01            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | υ        |
| VOLATILES        | 1,1-Dichloroethane                              | 8.9E+01            | 0.0010      | 0.005        | NE         | NE            | 8.9E+01            | 0.005 t U        |                  | 0.005 1 U        |                  | 0.006 1 U     | U        |
| VOLATILES        | 1,1-Dichloroethene                              | 2.7E+01            | 0.0005      | 0.005        | NE         | NĘ            | 2.7E+01            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0,006 1 U     | U.       |
| VOLATILES        | 1,1-Dichloropropene                             | 9.9E-01            | 0.0005      | 0.005        | NE         | NE            | 9.9E-01            | 0.005 1 U        |                  | 0.005 1 0        |                  | 0.006 1 0     | U<br>II  |
| VOLATILES        | 1,2,3-Inchiorobenzene                           | 4.25+01            | 0.0005      | 0.005        | NE         |               | 4.2E+01            | 0.005 1 0        |                  | 0.005 1 U        |                  | 0.006 1 U     | ŭ        |
| VOLATILES        | 1.2.3 Trichlorobenzene                          | 1.4E+02            | 0.0010      | 0.005        | NE         | NE            | 1.4E+02            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | Ũ        |
| VOLATILES        | 1.2.4-Trimethylbenzene                          | 9.6E+00            | 0.0005      | 0.005        | NE         | NE            | 9.6E+00            | 0.005 1 U        |                  | 0.003 1 J        |                  | 0,006 1 V     | Ų        |
| VOLATILES        | 1,2-Dibromo-3-chloropropane                     | 3.5E-01            | 0.0020      | 0.005        | NE         | NE            | 3.5E-01            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 I U     | U        |
| VOLATILES        | 1,2-Dibromoethane                               | 5.3E-02            | 0.0005      | 0.005        | NE         | NE            | 5.3E-02            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | U        |
| VOLATILES        | 1,2-Dichlorobenzene                             | 5.6E+01            | 0.0005      | 0.005        | NE         | NE            | 5.6E+01            | 0.005 1 U        |                  | 0.005 1 0        |                  | 0.006 1 U     | ü        |
| VOLATILES        | 1,2-Dichloroethane                              | 2.78-01            | 0.0005      | 0.005        | NE         | NE            | 2.76-01            | 0.005 1 U        | •                | 0.005 1 U        |                  | 0.006 1 U     | ŭ        |
| VOLATILES        | 1.2-Dimethylbenzene (0-Xylene)                  | 3 3 5+03           | 0.0005      | 0.005        | NE         | NE            | 3.3E+03            | 0.005 1 U        |                  | 0.002 1 J J      |                  | 0.006 1 U     | ũ        |
| VOLATILES        | 1.3.5-Trimethylbenzene                          | 8.3E+00            | 0.0005      | 0.005        | NE         | NE            | 8.3E+00            | 0.005 1 U        |                  | 0.001 1 J J      |                  | 0.006 1 U     | U        |
| VOLATILES        | 1,3-Dichlorobenzene                             | 5.1E+00            | 0.0005      | 0.005        | NE         | NE            | 5.1E+00            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | U        |
| VOLATILES        | 1,3-Dichloropropane                             | 3.0E+00            | 0.0005      | 0.005        | NE         | NE            | 3.0E+00            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | U.       |
| VOLATILES        | 1,4-Dichlorobenzene                             | 2.7E+01            | 0.0005      | 0.005        | NE         | NE            | 2.7E+01            | 0.005 1 U        |                  | 0.005 1 0        |                  | 0.006 1 U     | ň        |
| VOLATILES        | 2,2-Dichloropropane                             | 1.76+00            | 0.0005      | 0.005        | NE         |               | 2.6E+03            | 0.011 1 14       |                  | 0.003 1 0        |                  | 0.013 1 U     | ŭ        |
| VOLATILES        | 2-Chlomethyl vinyl ether                        | 2.1E-01            | 0.0020      | 0.010        | NE         | NE            | 2.1E-01            | 0.011 1 U        |                  | 0.010 1 U        |                  | 0.013 1 U     | Ū        |
| VOLATILES        | 2-Chlorotoluene                                 | 1.5E+02            | 0.0005      | 0.005        | NE         | NE            | 1.5E+02            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0,006 1 U     | U        |
| VOLATILES        | 2-Hexanone                                      | 6.2E+00            | 0.0025      | 0.010        | NE         | NE            | 6.2E+00            | 0.011 1 U UJ     |                  | 0.010 1 U UJ     |                  | 0.013 1 U     | U        |
| VOLATILES        | 4-Chlorotoluene                                 | 3.4E-01            | 0.0005      | 0.005        | NE         | NE            | 3.4E-01            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | 0        |
| VOLATILES        | Acetone   | 1.7€+02            | 0.0050      | 0.010        | NE         |               | 1.75+02            |                  |                  | 0.010 1 0 03     |                  | 0.013 1 0     | ŭ        |
| VOLATILES        | Benzene   | 0.0E-01<br>1.1E+01 | 0.0005      | 0.005        | NE         | NE            | 1 1E+01            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | ŭ        |
| VOLATILES        | Bromochloromethane                              | 2.4E+01            | 0.0005      | 0.005        | NE         | NE            | 2.4E+01            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | Ū        |
| VOLATILES        | Bromodichloromethane                            | 1.0E+01            | 0.0005      | 0.005        | NE         | NE            | 1.0E+01            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0,006 1 V     | U        |
| VOLATILES        | Bromoform                                       | 3.4E+01            | 0.0005      | 0.005        | NE         | NE            | 3.4E+01            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | U        |
| VOLATILES        | Bromomethane                                    | 3.5E-01            | 0.0010      | 0.010        | NE         | NE            | 3.5E-01            | 0.011 1 U        |                  | 0.010 1 U        |                  | 0.013 1 U     |          |
| VOLATILES        | Carbon disultide                                | 1.06+02            | 0.0005      | 0.005        | NE         | NE            | 1.0E+02<br>2.5E-01 | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.000 1 0     | й        |
| VOLATILES        | Chlorobenzena                                   | 3.5E-01<br>4.0E+01 | 0.0005      | 0.005        | NE         | NE            | 4.0E+01            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | ŭ        |
| VOLATILES        | Chloroethane                                    | 1.1E+03            | 0.0010      | 0.010        | NE         | NE            | 1.1E+03            | 0.011 1 U        |                  | 0.010 1 U        |                  | 0.013 1 U     | U        |
| VOLATILES        | Chloroform                                      | 3.1E-01            | 0.0005      | 0.005        | NE         | NE            | 3.1E-01            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | U        |
| VOLATILES        | Chloromethane                                   | 2.3E-01            | 0.0020      | 0.010        | NE         | NE            | 2.3E-01            | 0.011 1 U        |                  | 0.010 1 U        |                  | 0.013 1 U     | U        |
| VOLATILES        | cis-1,2-Dichloroethene                          | 1.2E+02            | 0.0005      | 0.005        | NE         | NE            | 1.2E+02            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 0     |          |
| VOLATILES        | Cis-1,3-Dichloropropene<br>Dibromochloromethane | 1.2E+00            | 0.0005      | 0.005        | NE         | NE            | 7.65+00            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | ŭ        |
| VOLATILES        | Dibromomethane                                  | 1.9E+01            | 0.0005      | 0.005        | NE         | NE            | 1.9E+01            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | Ū        |
| VOLATILES        | Dichlorodifluoromethane                         | 2.2E+02            | 0.0010      | 0.010        | NE         | NE            | 2,2E+02            | 0.011 1 U        |                  | 0.010 1 U        |                  | 0.013 1 U     | υ        |
| VOLATILES        | Ethylbenzene                                    | 4.3E+02            | 0.0005      | 0.005        | NE         | NE            | 4.3E+02            | 0.005 1 U        |                  | 0.005 1 J J      |                  | 0.006 1 U     | U.       |
| VOLATILES        | Hexachlorobutadiene                             | 1.6E+00            | 0.0005      | 0.005        | NE         | NE            | 1.6E+00            | 0.005 1 U        |                  | 0.005 1 0        |                  | 0.006 1 U     | N.       |
| VOLATILES        | Isopropylbenzene                                | 5.4E+02            | 0.0005      | 0.005        | NE         | NE            | 5.45+02            |                  |                  | 0,001 1 3 3      |                  | 0.006 1 U     | ŭ        |
| VOLATILES        | m,p-Aylenes<br>Methyd isobutyd ketone           | 135+03             | 0.0005      | 0.005        | NE         | NE            | 1.35+03            | 0.005 1 0        |                  | 0.010 1 U        |                  | 0.013 1 U     | Ŭ        |
| VOLATILES        | Methylene chloride                              | 8.7E+00            | 0.0010      | 0.005        | NE         | NE            | 8.7E+00            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | Ū        |
| VOLATILES        | Naphthalene                                     | 1.8E+01            | 0.0005      | 0.01         | NE         | NE            | 1.8E+01            | 0.011 1 U        |                  | 0.010 1 U        |                  | 0.013 1 U     | U        |
| VOLATILES        | n-BUTYLBENZENE                                  | 2.7E+02            | 0.0005      | 0.005        | NE         | NE            | 2.7E+02            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | U        |
| VOLATILES        | n-PROPYLBENZENE                                 | 3.2E+02            | 0.0005      | 0.005        | NE         | NE            | 3.2E+02            | 0.005 1 U        |                  | 0.001 1 J J      |                  | 0.006 1 0     | Ň        |
| VOLATILES        | PISOPROPYLIOLUENE                               | 4.2E+02            | 0.0005      | 0.005        | NE         |               | 4.22+02            |                  |                  | 0.005 1 0        |                  | 0.000 1 0     | ŭ        |
| VOLATILES        | Styrene   | 1.3E+03            | 0.0005      | 0.005        | NE         | NE            | 1.35+03            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | ũ        |
| VOLATILES        | tert-BUTYLBENZENE                               | 2.6E+02            | 0.0005      | 0.005        | NE         | NE            | 2.6E+02            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | U        |
| VOLATILES        | Tetrachloroethene                               | 6.0E+00            | 0.0005      | 0.005        | NE         | NE            | 6.0E+00            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | U        |
| VOLATILES        | Toluene   | 1.1E+03            | 0.0005      | 0.005        | NE         | NE            | 1.1E+03            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | U        |
| VOLATILES        | trans-1,2-Dichloroethene                        | 1.4E+02            | 0.0005      | 0.005        | NE         | NE            | 1.45+02            | 0.005 1 U        |                  | 0.005 1 U        |                  | 0.006 1 U     | 0        |
| VOLATILES        | trans-1,3-Dichloropropene                       | 1.8E+00<br>3.7E+00 | 0.0005      | 0.005        |            | NE            | 1.8±+00<br>3.75+00 | 0.005 1 0        |                  | 0.005 1 1        |                  | 0.006 1 U     | ŭ        |
| VOLATILES        | Trichlorofluoromethane                          | 2.6E+02            | 0.0010      | 0,005        | NE         | NE            | 2.6E+02            | 0.011 1 U        |                  | 0.010 1 U        |                  | 0.013 1 U     | Ŭ        |
| VOLATILES        | Vinyl acetate                                   | 5.7E+01            | 0.0010      | 0.01         | NE         | NE            | 5.7E+01            | 0.011 1 U        |                  | 0.010 1 U        |                  | 0.013 1 U     | U        |
| VOLATILES        | Vinyl chloride                                  | 3.6E-02            | 0.0010      | 0.01         | NE         | NE            | 3.6E-02            | 0.011 1 U        |                  | 0.010 1 U        |                  | 0.013 1 U     | <u> </u> |

VOLATILES Vinyt chloride Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

00066423

### Table 4-14 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 014

| [SUMP] = SUMPO<br>LOCATION_COU<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPO | 14<br>E<br>98E            | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method -    | Back<br>Concentra<br>(95%_UF<br>Surface | ground<br>tions in Soll<br><sup>5</sup> L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | STEP-46SS01<br>46SS01(0-0.5)-020311<br>3/11/2002<br>0 - 0.5 Ft<br>REG | STEP-46SS01<br>46SS01(1-2)-020311<br>3/11/2002<br>1 - 2 Ft<br>REG | STEP-46SS02<br>46SS02(0-0.5)-020311<br>3/11/2002<br>0 - 0.5 Ft<br>REG | STEP-46SS02<br>46SS02(1-2)-020311<br>3/11/2002<br>1 - 2 Ft<br>REG |
|---|---------------------------|--|---------------------|-------------|---|---|--|---|---|---|---|
| Test Group  | Parameter (Units = mg/kg) | (R8\$V)*                                 | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DIL LO VO  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| PERC  | Perchlorate               | 1.4E+01                                  | 5.00E-03            | 0.010       | NE                                      | NE  | 1.4E+01                                      | 0.061 1 0 0   | 0.047 1 U U   | 0.061 <u>1UU</u>  | 0,051 1 U U   |

. .

Shaw Environmental, Inc.

00066424

#### Table 4-15 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 015

.

.

| [SUMP] = SUMP015<br>LOCATION CODE |  |                    |                |              |                      |                         |                    | 35SUMP015-SB01                | 35SUMP015-SB02               | 35SUMP015-SB02               | 35SUMP016-SB01               | 35SUMP016-SB01                  | 35SUMP016-SB01               | 35SUMP016-SB01                  |
|-----------------------------------|--|--------------------|----------------|--------------|----------------------|-------------------------|--------------------|-------------------------------|------------------------------|------------------------------|------------------------------|---------------------------------|------------------------------|---------------------------------|
| SAMPLE NO                         |  | TCEQ               |                |              | Back                 | pround<br>tions in Soil | Applicble<br>TCEO  | 35-SMP15-SB01-02<br>9/11/2006 | 35-SMP15-SB02-01<br>9/8/2006 | 35-SMP15-SB02-02<br>9/8/2006 | 35-SMP16-SB01-01<br>9/8/2006 | 35-SMP16-S901-01-QC<br>9/8/2006 | 35-SMP16-SB01-02<br>9/8/2006 | 35-SMP16-SE01-02-QC<br>9/8/2006 |
| DEPTH                             |  | Screening          | Method         | Method       | (95% UP              | L, mg/kg)               | Risk-Based         | 6-6 Ft                        | 0 - 0.5 Ft                   | 6-6Ft                        | 0 - 0.5 Ft                   | 0-0.5 Ft                        | 5 - 5 Ft<br>REG              | 5-5Ft<br>FD                     |
| SAMPLE_PURPOSE                    |  | Value              | Detection      | Quantitation | Suntace              | Subsulface              | Value              | REG<br>Result DILLO VO        | Result OIL LO VO             | Result DIL LO VO             | Result DIL LO VO             | Result DIL LQ VQ                | Result DIL_LQ_VC             | Result DIL LQ VQ                |
| METALS                            | Aluminum   | 1,6E+04            | 10.000         | 20,00        | 16300                | 2.08E+04                | 1.6E+04            | 14100.000 1                   | 13800.000 1                  | 7470.000 1                   | 7570.000 1                   | 8130.000 1                      | 7800.000 1                   |                                 |
| METALS                            | Antimony   | 7.3E+00<br>2.0E+01 | 0.500          | 0.10         | 0.94<br>4.61E+00     | 1.6<br>5.54E+00         | 7.3E+00<br>2.0E+01 | 0.116 1 U<br>0.664 1          | 0.104 1 U UJL<br>4.590 1 JL  | 2.310 1 JL                   | 2.520 1 JL                   | 2.500 1 JL                      | 6.620 1 JL                   |                                 |
| METALS                            | Barium   | 2.6E+03            | 0.075          | 0.30         | 1.52E+02             | 8.55E+01                | 2.6E+03            | 78.500 1                      | 129.000 1                    | 171.000 1                    | 66.400 1<br>0.252 4 J        | 61.300 1                        | 2430.000 10                  |                                 |
| METALS<br>METALS                  | Berytiium<br>Cadmium                                 | 4.6E+00<br>5.2E+00 | 0.012<br>0.025 | 0.50<br>0.10 | 6.45E-01<br>1.4      | 7.66E-01<br>0.4         | 4.6E+00<br>5.2E+00 | 0.499 1<br>0.094 1 J J        | 0.432 1<br>0.221 1 J J       | 0.150 1 J J                  | 0.062 1 J J                  | 0.060 1 J J                     | 0.376 1 J J                  |                                 |
| METALS                            | Calcium  | NE                 | NA             | NA           | NA                   | NA<br>DAE-04            | 5 05.00            | 813.000 1 J                   | 1640.000 1<br>10.000 1       | 753,000 1                    | 953.000 1<br>12.000 1 IH     | 968.000 1<br>13.100 1 .Ut       | 1970.000 1<br>8.430 1 JH     |                                 |
| METALS<br>METALS                  | Chromium<br>Cobait                                   | 5.9E+03<br>1.5E+03 | 0.100          | 0.40         | 2.00E+01<br>7.23E+00 | 5.61E+00                | 1.5E+03            | 5.170 1 J                     | 2.010 1 JH                   | 4.660 1 JH                   | 3.310 1 JH                   | 3.270 1 JH                      | 6.080 1 JH                   |                                 |
| METALS                            | Copper   | 1.0E+03            | 0.150          | 0.60<br>NA   | 5.55E+00<br>NA       | 9.25E+00<br>NA          | 1.0E+03            | 5.620 1                       | 7.900 1                      | 4.120 1 11900.000 1          | 2,330 1<br>10800,000 1       | 2.440 1<br>10500.000 1          | 5.720 1<br>15800.000 1       |                                 |
| METALS<br>METALS                  | Lead   | 5.0E+02            | 0.500          | 5.00         | 2.26E+01             | 1.14E+01                | 5.0E+02            | 13.000 1 J                    | 11.700 1 JL                  | 7.080 1 JL                   | 7.870 1 JL                   | 8.290 1 JL                      | 17.100 1 JL                  |                                 |
| METALS<br>METALS                  | Magnesium<br>Mannarese                               | NE<br>1 7E+03      | NA<br>0.050    | NA<br>0.20   | NA<br>1.25E+03       | NA<br>2.01E+02          | 1.7E+03            | 1550,000 1<br>22,400 1        | 841.000 1<br>75.000 1        | 23.400 1                     | 285.000 1                    | 231.000 1                       | 63.100 1                     |                                 |
| METALS                            | Mercury  | 1.1E-02            | 0.010          | 0.25         | 8.19E-02             | 0.36                    | 2.5E-01            | 0.012 1 U                     | 0.065 1 J J                  | 0.014 1 J J                  | 0.011 1 J J                  | 0.020 1 J J                     | 0.012 1 J J<br>18.600 1      |                                 |
| METALS<br>METALS                  | Nickel<br>Potassium                                  | 1.9E+02<br>NE      | 0.200<br>NA    | 0.80<br>NA   | 6.982+00<br>NA       | 1.16E+01<br>NA          | 1.9E+02            | 576.000 1                     | 430.000 1 JH                 | 314.000 1 JH                 | 234.000 1 JH                 | 260.000 1 JH                    | 501.000 1 JH                 |                                 |
| METALS                            | Selenium   | 1.3E+02            | 0.100          | 0.20         | 3.48E+00             | 5.57E+00                | 1.3E+02            | 0.231 1 U                     | 0.730 1                      | 0.216 1 J J                  | 0.288 1                      | 0.215 1                         | 0.246 1<br>1.720 1 U         |                                 |
| METALS                            | Solum  | 4.7E+01            | NA             | NA           | NA                   | NA                      | 4.76701            | 399.000 1                     | 33.000 1                     | 149,000 1                    | 34.000 1                     | 34.100 1                        | 649.000 1                    |                                 |
| METALS                            | Thallium   | 2.0E+00            | 0.010          | 0.02         | 0.47                 | NE<br>4.46E±01          | 2.0E+00<br>4.8E+01 | 0.095 1                       | 0.069 1                      | 0.070 1                      | 0.065 1 22.800 1             | 0.064 1<br>23.900 1             | 0.088 1<br>32.500 1          |                                 |
| METALS                            | Zinc   | 5.9E+03            | 0.625          | 2.50         | 61.6                 | 2.02E+01                | 5.9E+03            | 34.200 1                      | 60.500 1                     | 19.600 1                     | 10.400 1                     | 10.700 1                        | 19.200 1                     |                                 |
|                                   | Perchlorate<br>Carbon Range C12-C28                  | 1.4E+01            | 0.005          | 0.01         | NE                   | NE                      | 1.4E+01<br>4.0E+02 | 0.010 1 U<br>58.000 1 U       | 0.020 2 U<br>55.800 1 U      | 0.050 5 U<br>56.500 1 U      | 0.020 2 U<br>52.700 1 U      | 52.900 1 U                      | 55.900 1 U                   |                                 |
| RANGE_ORGANICS                    | Carbon Range C28-C35                                 | 4.0E+02            | 25             | 50           | NE                   | NE                      | 4.0E+02            | 58.000 1 U                    | 55.800 1 U                   | 56.500 1 U                   | 52.700 1 U                   | 52.900 1 U                      | 55.900 1 U                   |                                 |
| RANGE_ORGANICS                    | Carbon Range C6-C12<br>Percept Solids                | 1.7E+02<br>NF      | 25<br>NE       | 50<br>NE     | NE                   | NE<br>NE                | 1.7E+02            | 55,000 1 U<br>84,900 1        | 55.800 1 U<br>87.800 1       | 86.800 1 U                   | 93.800 1                     | 93.500 1                        | 89.400 1                     | 89.400 1                        |
| VOLATILES                         | 1,1,1,2-Tetrachloroethane                            | 5.2E+00            | 0.0005         | 0.005        | NE                   | NE                      | 5.2E+00            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 1 U<br>0.005 1 U          |
| VOLATILES                         | 1,1,1-Trichloroethane<br>1,1,2,2-Tetrachloroethane   | 2.3E+02<br>5.1E-01 | 0.0005         | 0.005        | NE                   | NE                      | 5.1E-01            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |
| VOLATILES                         | 1,1,2-Trichloroethane                                | 9.7E-01            | 0.0005         | 0.005        | NE                   | NE                      | 9.7E-01            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 1 U<br>0.005 1 U          |
| VOLATILES                         | 1,1-Dichloroethane<br>1,1-Dichloroethane             | 8.9E+01<br>2.7E+01 | 0.0010         | 0.005        | NE                   | NE                      | 2.7E+01            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |
| VOLATILES                         | 1,1-Dichloropropene                                  | 9.9E-01            | 0.0005         | 0.005        | NE                   | NE                      | 9.9E-01            | 0.005 1 U                     |                              | 0.005 1 U<br>0.005 1 U       |                              |                                 | 0.005 1 U<br>6.005 1 U       | 0.005 1 U<br>0.005 1 U          |
| VOLATILES                         | 1,2,3-Trichloreprepane                               | 9.2E+01            | 0.0005         | 0.005        | NE                   | NE                      | 9.2E-02            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |
| VOLATILES                         | 1,2,4-Trichlorobenzene                               | 1.45+02            | 0.0005         | 0.005        | NE                   | NE                      | 1.4E+02<br>9.6E+00 | 0.005 1 U                     |                              | 0.005 1 U<br>0.005 1 U       |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |
| VOLATILES                         | 1,2-Dibromo-3-chtoropropane                          | 3.5E-01            | 0.0020         | 0.005        | NE                   | NE                      | 3.5E-01            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0,005 1 U                    | 0.005 1 U                       |
| VOLATILES<br>VOLATILES            | 1,2-Dibromoethane<br>1,2-Dichlombenzene              | 5.3E-02<br>5.6E+01 | 0.0005         | 0.005        | NE                   | NE<br>NÉ                | 5.3E+02<br>5.6E+01 | 0.005 1 U<br>0.001 1 J J      |                              | 0.005 1 U<br>0.005 1 U       |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |
| VOLATILES                         | 1,2-Dichloroethane                                   | 2.7E-01            | 0.0005         | 0.005        | NE                   | NE                      | 2.7E-01            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |
| VOLATILES                         | 1,2-Dichloropropane<br>1,2-Dimethylbenzene (o-Xylene | 1.8E+00<br>3.3E+03 | 0.0005         | 0.005        | NE                   | NE                      | 1.8E+00<br>3.3E+03 | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |
| VOLATILES                         | 1,3,5-Trimethylbenzene                               | 8.3E+00            | 0.0005         | 0.005        | NE                   | NE                      | 8.3E+00            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U<br>0.005 1 U       | 0.005 1 U<br>0.005 1 U          |
| VOLATILES                         | 1,3-Dichloropropane                                  | 3.0E+00            | 0.0005         | 0.005        | NE                   | NE                      | 3.0E+00            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |
| VOLATILES                         | 1,4-Dichlorobenzene                                  | 2.7E+01            | 0.0005         | 0.005        | NE                   | NE                      | 2.7E+01<br>1.7E+00 | 0.005 1 U                     |                              | 0.005 1 10                   |                              |                                 | 0.005 1 U<br>0.005 1 U       | 0.005 1 U                       |
| VOLATILES                         | 2-Butanone   | 2.6E+03            | 0.0025         | 0.010        | NE                   | NE                      | 2.6E+03            | 0.010 1 U UJ                  |                              | 0.009 1 U                    |                              |                                 | 0.009 1 U                    | 0.010 1 U                       |
| VOLATILES<br>VOLATILES            | 2-Chloroethyl vinyl ether<br>2-Chlorotoluene         | 2.1E-01<br>1.5E+02 | 0.0020         | 0.010        | NE                   | NE                      | 2.1E-01<br>1.5E+02 | 0.010 1 U<br>0.005 1 U        |                              | 0.009 1 U<br>0.005 1 U       |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |
| VOLATILES                         | 2-Hexanone   | 6.2E+00            | 0.0025         | 0.010        | NE                   | NE                      | 6.2E+00            | 0.010 1 U UJ                  |                              | 0.009 1 U UJ                 |                              |                                 | 0.009 1 U                    | 0.010 1 U UJ                    |
| VOLATILES<br>VOLATILES            | 4-Chlorotoluene<br>Acetore                           | 3.4E-01<br>1.7E+02 | 0.0005         | 0.005        | NE                   | NE                      | 3.4E-01<br>1.7E+02 | 0.005 1 U<br>0.010 1 U        |                              | 0.005 1 U                    |                              |                                 | 0.009 1 U                    | 0.010 1 U                       |
| VOLATILES                         | Benzene  | 8.8E-01            | 0.0005         | 0.005        | NE                   | NE                      | 8.8E-01            | 0.005 1 U                     |                              | 0.605 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 1 U<br>0.005 1 U          |
| VOLATILES                         | Bromobenzene<br>Bromochloromethane                   | 1.1E+01<br>2.4E+01 | 0.0005         | 0.005        | NE                   | NE                      | 2.4E+01            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 t U                       |
| VOLATILES                         | Bromodichloromethane                                 | 1.0E+01            | 0.0005         | 0.005        | NË                   | NE                      | 1.0E+01            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U<br>0.005 1 U       | 0.005 1 U<br>0.005 1 U          |
| VOLATILES                         | Bromomethane   | 3.5E-01            | 0.0000         | 0.005        | NE                   | NE                      | 3.5E-01            | 0.010 1 U                     |                              | 0.009 1 U                    |                              |                                 | 0.009 1 U                    | 0.010 1 U                       |
| VOLATILES                         | Carbon disulfide                                     | 1.0E+02            | 0.0005         | 0.005        | NE                   | NE                      | 1.0E+02<br>3.5E-01 | 0.005 1 U                     |                              | 0.005 1 U<br>0.005 1 U       |                              |                                 | 0.005 1 U<br>0.005 1 U       | 0.005 1 U                       |
| VOLATILES                         | Chlorobenzene  | 4.0E+01            | 0.0005         | 0.005        | NE                   | NE                      | 4.0E+01            | 0.007 1                       |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |
| VOLATILES<br>VOLATILES            | Chloroethane   | 1.1E+03<br>3.1E-01 | 0.0010         | 0.010        | NE                   | NE                      | 1.1E+03<br>3.1E-01 | 0.010 1 U<br>0.005 1 U        |                              | 0.009 1 U<br>0.005 1 U       |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |
| VOLATILES                         | Chloromethane  | 2.3E-01            | 0.0020         | 0.010        | NE                   | NE                      | 2.3E-01            | 0.010 1 U                     |                              | 0.009 1 U                    |                              |                                 | 0.009 1 U                    | 0.010 1 U                       |
| VOLATILES<br>VOLATILES            | cis-1,2-Dichloroethene<br>cis-1,3-Dichloropropene    | 1.2E+02<br>1.2E+00 | 0.0005         | 0.005        | NE                   | NE<br>NË                | 1.2E+02<br>1.2E+00 | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |
| VOLATILES                         | Dibromochtoromethane                                 | 7.6E+00            | 0.0005         | 0.005        | NE                   | NE                      | 7.6E+00            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U<br>0.005 1 U       | 0.005 1 U<br>0.005 1 U          |
| VOLATILES<br>VOLATILES            | Dipromomethane<br>Dichlorodifluoromethane            | 1.9E+01<br>2.2E+02 | 0.0005         | 0.005        | NE                   | NE                      | 1.8±+01<br>2.2E+02 | 0.005 1 U                     |                              | 0.009 1 U                    |                              |                                 | 0.009 1 U                    | 0.010 1 Ŭ                       |
| VOLATILES                         | Ethylbenzene   | 4,3E+02            | 0.0005         | 0.005        | NE                   | NE                      | 4.3E+02            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U<br>0.005 1 U       | 0.005 1 U<br>0.005 1 U          |
| VOLATILES                         | nexachioroputadiene<br>Isopropylbenzene              | 1.0E+00<br>5.4E+02 | 0.0005         | 0.005        | NE                   | NE                      | 5.4E+02            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |
| VOLATILES                         | m,p-Xylenes  | 2.3E+02            | 0.0005         | 0.005        | NE                   | NE                      | 2.3E+02            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U<br>0.009 1 U       | 0.005 1 U<br>0.010 1 U          |
| VOLATILES                         | Methylene chloride                                   | 8.7E+03            | 0.0025         | 0.005        | NE                   | NE                      | 8.7€+00            | 0.005 1 U                     |                              | 0.005 1 U                    |                              |                                 | 0.005 1 U                    | 0.005 1 U                       |

Shaw Environmental, Inc.

00066425

#### Table 4-15 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 015

| [SUMP] = SUMP015<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _<br>Quantitation | Back<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br><u>L. mg/kg)</u><br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP015-SB01<br>35-SMP15-SB01-02<br>9/11/2006<br>6 - 6 Ft<br>REG | 35\$UMP015-SB02<br>35-SMP15-SB02-01<br>9/8/2006<br>0 - 0.5 Ft<br>REG | 355UMP015-SB02<br>35-SMP15-SB02-02<br>9/8/2006<br>6 - 5 Ft<br>REG | 35SUMP016-S801<br>35-SMP16-S801-01<br>9/8/2006<br>0 - 0.5 Ft<br>REG | 35SUMP016-SB01<br>35-SMP16-SB01-01-QC<br>9/8/2006<br>0 - 0,5 Ft<br>FD | 35SUMP016-SB01<br>35-SMP16-SB01-02<br>9/8/2006<br>5 - 5 Ft<br>REG | 355UMP016-SB01<br>35-SMP18-SB01-02-QC<br>9/8/2006<br>5 - 5 Ft<br>FD |
|---|---------------------------|--|---------------------|--------------------------|---|---|--|--|--|---|---|---|---|---|
| Test Group  | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL)              | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LO VO   | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LO VO  | Result DIL LO VO  | Result Dil LO VU  |
| VOLATILES   | Naphthaiene               | 1.8E+01                                  | 0,0005              | 0.010                    | NE                                      | NE  | 1.8E+01                                      | 0.010 1 U  |  | 0.009 1 U   |   |   | 0.009 1 0   | 0.010 1 0   |
| VOLATILES   | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                    | NE                                      | NE  | 2.7E+02                                      | 0.005 1 U  |  | 0.005 1 U   |   |   | 0.005 1 0   | 0.005 1 0   |
| VOLATILES   | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                    | NE                                      | NE  | 3.2E+02                                      | 0.005 1 U  |  | 0.005 1 U   |   |   | 0.000 1 0   | 0.005 1 1   |
| VOLATILES   | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                    | NE                                      | NE  | 4.2E+02                                      | 0.005 1 U  |  | 0.005 1 U   |   |   | 0.005 1 0   | 0,005 1 0   |
| VOLATILES   | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                    | NË                                      | NE  | 3.0E+02                                      | 0.005 1 U  |  | 0.005 1 U   |   |   | 0.005 1 0   |   |
| VOLATILES   | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                    | NE                                      | NE  | 1.3E+03                                      | 0.005 1 U  |  | 0.005 1 U   |   |   | 0.005 1 0   | 0.005 1 0   |
| VOLATILES   | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                    | NE                                      | NE  | 2.6E+02                                      | 0.005 1 U  |  | 0.005 1 U   |   |   | 0.005 1 0   | 0.005 1 0   |
| VOLATILES   | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                    | NE                                      | NE  | 6.0E+00                                      | 0.005 1 U  |  | 0.005 1 U   |   |   | 0.005 1 0   | 0.005 1 0   |
| VOLATILES   | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                    | NE                                      | NE  | 1.1E+03                                      | 0.005 1 U  |  | 0.005 1 U   |   |   | 0.005 1 0   | 0.005 1 0   |
| VOLATILES   | trans-1.2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                    | NÉ                                      | NE  | 1.45+02                                      | 0.005 1 U  |  | 0.005 1 U   |   |   | 0.005 1 U   | 0.005 1 0   |
| VOLATILES   | trans-1.3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                    | NE                                      | NE  | 1.6E+00                                      | 0.005 1 U  |  | 0.005 1 U   |   |   | 0.005 1 U   | 0.005 1 0   |
| VOI ATILES  | Trichlomethene            | 3.7E+00                                  | 0.0005              | 0.005                    | NË                                      | NE  | 3.7E+00                                      | 0.005 1 U  |  | 0.005 1 U   |   |   | 0.005 1 U   | 0.005 1 0   |
| VOLATILES   | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.010                    | NE                                      | NE  | 2.6E+02                                      | 0.010 1 U  |  | 0.009 1 U   |   |   | 0.009 1 U   | 0.010 1 U   |
| VOLATILES   | Vinvi acetate             | 5.7E+01                                  | 0.0010              | 0.010                    | NE                                      | NE  | 5.7E+01                                      | 0.010 1 U  |  | 0.009 1 U   |   |   | 0.009 1 U   | 0.010 1 U   |
| VOLATILES   | Vinvt chloride            | 3.6E-02                                  | 0.0010              | 0.010                    | NE                                      | NÉ  | 3.6E-02                                      | 0.010 1 U  |  | 0.009 1 U   |   |   | 0.009 1 U   | 0.010 1 0   |

Shaw Environmental, Inc.

00066426

# Table 4-16 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 016

| [SUMP] = SUMP016 |   |                    |              |              |                       |                 |                    | 2551 14004 | 5 0004  | 15010100  | 6 6000           | 250104004 | 6 6000   | 2602 (6400       | 16 6904         | 25010400   | 10 5004     | 255111004   | 6 6064          | 2501112046 0204     |
|------------------|---|--------------------|--------------|--------------|-----------------------|-----------------|--------------------|------------|---------|-----------|------------------|-----------|----------|------------------|-----------------|------------|-------------|-------------|-----------------|---------------------|
| SAMPLE_NO        |   | TCEQ               |              |              | Back                  | pround          | Applicible         | 35-SMP15-  | SB01-02 | 35-SMP15- | SB02-01          | 35-SMP15- | SB02-02  | 35-SMP16         | -SB01-01        | 35-SMP16-S | B01-01-QC   | 35-SMP16-S  | 5B01-02         | 35-SMP16-SB01-02-QC |
| SAMPLE_DATE      |   | Risk-Based         | b destine of | Mathead      | Concentra<br>(OFR/ UF | tions in Soil   | TCEQ               | 9/11/20    | X06     | 9/8/20    | 206              | 9/8/20    | X06      | 9/8/2            | D06             | 9/8/20     | )06<br>     | 9/8/20      | 06              | 9/8/2006            |
| SAMPLE_PURPOSE   |   | Value              | Detection    | Quantitation | Surface               | Subsurface      | Screening          | REG        | 5       | REC       | 3                | REG       | 3        | RÉ               | G               | FD         | )<br>)      | REG         | )               | FD                  |
| Test Group       | Parameter (Units = mg/kg)                             | (RBSV)             | Limit (MDL)  | Limit (MQL)  | 0 - 0.5 Ft            | 1.5 - 2.5 Ft    | Value              | Result D   | L LO VO | Result D  | IL LO VO         | Result D  | IL LO VO | Result_E         | NL LQ VQ        | Result E   | NL LO VO    | Result Di   | IL LQ VQ        | Result DIL LQ VQ    |
| METALS           | Atuminura   | 1.6E+04            | 10.000       | 20.00        | 16300                 | 2.08E+04        | 1.6E+04            | 14100,000  |         | 13800.000 | 1                | 7470.000  | 1        | 7570.000         | 1               | 8130.000   | 1           | 7800.000    | 1               |                     |
| METALS           | Anumony   | 2.3E+00<br>2.0E+01 | 0.500        | 0.10         | 0.94<br>4 81E+00      | 1.6<br>5.54E+00 | 7.3E+00<br>2.0E+01 | 0.116      |         | 0.104     | 1 U UJL<br>1 .II | 2 310     | 1 U UJL  | 0.107            | 1 U UJL<br>1 .B | 2 500      | 1000L       | 0.084 1     | 1 J ปี<br>1 .มี |                     |
| METALS           | Barlum  | 2.6E+03            | 0.075        | 0.30         | 1.52E+02              | 8.55E+01        | 2,6E+03            | 78.500     |         | 129.000   | 1                | 171.000   | 1 1      | 66.400           | 1               | 61.300     | 1           | 2430.000 1  | 0               |                     |
| METALS           | Beryllium .   | 4.6E+00            | 0.012        | 0.50         | 6.45E-01              | 7.66E-01        | 4.6E+00            | 0.499      | L       | 0.432     | 1                | 0.379     | 1 J J    | 0.352            | 1 J J           | 0.342      | 133         | 1.170       | 1               |                     |
| METALS           | Cadmium   | 5.2E+00            | 0.025        | 0.10         | 1.4                   | 0.4             | 5.2E+00            | 0.094      | 1 1 1   | 0.221     | 1 J J            | 0.150     | 1 J J    | 0.062            | 1 J J           | 0.060      | 1 J J       | 0.376 1     | 1 J J           |                     |
| METALS           | Chromiuza   | 5.9E+03            | 0.100        | 0.40         | 2.66E+01              | 3.01E+01        | 5.9E+03            | 13.900     | 1 5     | 19.200    | ,<br>1 ЛН        | 8.120     | 1 JH     | 12.000           | 1 JH            | 13,100     | ,<br>1. JH  | 8,430       | н, и            |                     |
| METALS           | Cobalt  | 1.5E+03            | 0.125        | 0.50         | 7.23E+00              | 5.61E+00        | 1.5E+03            | 5.170      | i a     | 2.010     | 1 JH             | 4.660     | 1 JH     | 3.310            | i JH            | 3.270      | 1 JH        | 6.080       | i JH            |                     |
| METALS           | Copper  | 1.0E+03            | 0.150        | 0.60         | 5.55E+00              | 9.25E+00        | 1.0E+03            | 5.620      | ļ       | 7.900     | 1                | 4.120     | 1        | 2.330            | 1               | 2.440      | 1           | 5.720       | 1               |                     |
| METALS           | lead  | 5 0E+02            | 0.500        | 5.00         | 2 26E+01              | NA<br>1 14E+01  | 5 0E+02            | 11400.000  |         | 37400.000 | 5<br>1 II        | 11900.000 | 1 1      | 10800.000        | 1 1             | 10500.000  | 1<br>1 II   | 15800.000 1 | 1               |                     |
| METALS           | Magnesium   | NE                 | NA           | NA           | NA                    | NA              | -                  | 1550.000   | i       | 841.000   | 1                | 993.000   | 1        | 395.000          | 1               | 425.000    | 1           | 1700.000 1  | 1               |                     |
| METALS           | Manganese   | 1.7E+03            | 0.050        | 0.20         | 1.25E+03              | 2.01E+02        | 1.7E+03            | 22.400     | L       | 75.000    | 1                | 23.400    | 1        | 285.000          | 1               | 231.000    | 1           | 63.100 1    | 1               |                     |
| METALS           | Mercury   | 1.1E-02            | 0.010        | 0.25         | 8.19E-02              | 0.36            | 2.5E-01            | 0.012      | U       | 0.065     | 1 J J            | 0.014     | 1 J J    | 0.011            | 1 J J           | 0.020      | 1 J J       | 0.012 1     | 1 J J           |                     |
| METALS           | Potassium   | NE                 | NA           | NA           | NA NA                 | NA              | 1.92402            | 576.000    | 1       | 430.000   | ,<br>1н          | 314,000   | і<br>1н  | 234.000          | 1.18            | 260.000    | і<br>1. JH  | 501.000 1   | ,<br>1 ЛН       |                     |
| METALS           | Selenium  | 1.3E+02            | 0.100        | 0.20         | 3.48E+00              | 5.57E+00        | 1.3E+02            | 0.231      | i U     | 0.730     | 1                | 0.216     | i J J    | 0.288            | 1               | 0.215      | 1           | 0.246       | 1               |                     |
| METALS           | Silver  | 4.7E+01            | 0.050        | 0.20         | 0.31                  | 0.37            | 4.7E+01            | 1.710      | i u     | 1.720     | 1 U              | 1.720     | 1 U      | 1.610            | 10              | 1.520      | i U         | 1.720       | ιU              |                     |
| METALS           | Thallium  | 2 0E+00            | NA<br>0.010  | NA<br>0.02   | NA<br>0.47            | NA              | 205-00             | 399.000    | l       | 33.000    | 1                | 149.000   | 1        | 34.000           | 1               | 34.100     | 1           | 649.000 1   |                 |                     |
| METALS           | Vanadium  | 4.8E+01            | 0.125        | 0.50         | 3.21E+01              | 4.46E+01        | 4.8E+01            | 15,000     |         | 40.800    | 1                | 15.900    | 1        | 22,800           | 1               | 23.900     | i           | 32,500 1    | 1               |                     |
| METALS           | Zinc  | 5.9E+03            | 0.625        | 2.50         | 61.6                  | 2.02E+01        | 5.9E+03            | 34.200     | i       | 60.500    | 1                | 19.600    | 1        | 10.400           | i               | 10.700     | 1           | 19.200 1    | 1               |                     |
| PERC             | Perchlorate   | 1.4E+01            | 0.005        | 0.01         | NE                    | NE              | 1.4E+01            | 0.010      | r u     | 0.020     | 2 U              | 0.050     | ទុប្     | 0.020            | 2 0             | 0.020      | 2 U         | 0.100 1     | 0 U             |                     |
| RANGE_ORGANICS   | Carbon Range C12-C28                                  | 4.0E+02<br>4.0E+02 | 25           | 50           | NE                    | NE              | 4.0E+02<br>4.0E+02 | 58,000     |         | 55,800    | 1 U<br>1 II      | 56,500    | 10       | 52,700<br>67,700 | 1 0             | 52,900     | 1 U<br>1 II | 55,900 1    | וו              |                     |
| RANGE_ORGANICS   | Carbon Range C6-C12                                   | 1.7E+02            | 25           | 50           | NE                    | NE              | 1.7E+02            | 58.000     | ίŭ      | 55.800    | 1 0              | 56,500    | ίŭ       | 52.700           | iŭ              | 52.900     | រំប័        | 55,900 1    | ίŭ              |                     |
| SOLIDS           | Percent Solids  | NE                 | NA           | NA           | NE                    | NE              |                    | 84.900     | 1       | 87.800    | 1                | 86.600    | 1        | 93.800           | 1               | 93,500     | 1           | 89.400      | 1               | 89.400 1            |
| VOLATILES        | 1,1,1,2-Tetrachioroethane                             | 5.2E+00            | 0.0005       | 0.005        | NE                    | NE              | 5.2E+00            | 0.005      | l U     |           |                  | 0.005     | 10       |                  |                 |            |             | 0.005 1     |                 | 0.005 1 U           |
| VOLATILES        | 1.1.2.2-Tetrachiomethane                              | 5.1E-01            | 0.0005       | 0.005        | NE                    | NE              | 2.3E+02<br>5.1E-01 | 0.005      |         |           |                  | 0.005     | 10       |                  |                 |            |             | 0.005 1     | 1 10            | 0.005 1 U           |
| VOLATILES        | 1,1,2-Trichloroethane                                 | 9.7E-01            | 0.0005       | 0.005        | NE                    | NE              | 9.7E-01            | 0.005      | ίŭ      |           |                  | 0.005     | iŭ       |                  |                 |            |             | 0.005 1     | ίŭ              | 0.005 1 U           |
| VOLATILES        | 1,1-Dichloroethane                                    | 8.9E+01            | 0.0010       | 0.005        | NE                    | NE              | 8.9E+01            | 0.005      | U       |           |                  | 0.005     | 1 U      |                  |                 |            |             | 0.005       | I U             | 0.005 1 U           |
| VOLATILES        | 1,1-Dictionomonene                                    | 2.7E+U1<br>9.9E-01 | 0.0005       | 0.005        | NE                    | NE              | 2.76+01            | 0.005      |         |           |                  | 0.005     | 10       |                  |                 |            |             | 0.005 1     |                 | 0.005 1 U           |
| VOLATILES        | 1.2.3-Trichkorobenzene                                | 4.2E+01            | 0.0005       | 0.005        | NE                    | NE              | 4.2E+01            | 0.005      | i ŭ     |           |                  | 0.005     | 1 U      |                  |                 |            |             | 0.005 1     | ιŭ              | 0.005 1 U           |
| VOLATILES        | 1,2,3-Trichloropropane                                | 9.2E-02            | 0.0010       | 0.005        | NE                    | NE              | 9.2E-02            | 0.005      | ίŨ      |           |                  | 0.005     | iũ       |                  |                 |            |             | 0.005       | ίŭ              | 0.005 1 U           |
| VOLATILES        | 1,2,4-Trichlorobenzene                                | 1.4E+02            | 0.0005       | 0.005        | NE                    | NE              | 1.4E+02            | 0.005      | I U     |           |                  | 0.005     | 1 U      |                  |                 |            |             | 0.005       | 1 U             | 0.005 1 U           |
| VOLATILES        | 1,2,4• Himetryidenzene<br>1,2-Dibromo-3-chloronronane | 9.0E+00<br>3.5E-01 | 0.0005       | 0.005        | NE                    | NE              | 9.65+00            | 0.005      |         |           |                  | 0.005     | 1 0      |                  |                 |            |             | 0.005 1     |                 | 0.005 1 0           |
| VOLATILES        | 1,2-Dibromoethane                                     | 5.3E-02            | 0.0005       | 0.005        | NE                    | NE              | 5.3E-02            | 0.005      | ίŭ      |           |                  | 0.005     | 1 0      |                  |                 |            |             | 0.005       | ίŭ              | 0.005 1 U           |
| VOLATILES        | 1,2-Dichiorobenzene                                   | 5.6E+01            | 0.0005       | 0.005        | NE                    | NE              | 5.6E+01            | 0.001      | JJ      |           |                  | 0.005     | 1 Ū      |                  |                 |            |             | 0.005       | U               | 0.005 1 U           |
| VOLATILES        | 1,2-Dichloroethane                                    | 2.7E-01            | 0.0005       | 0.005        | NE                    | NE              | 2,7E+01            | 0.005      |         |           |                  | 0.005     | 1 0      |                  |                 |            |             | 0.005 1     |                 | 0.005 1 U           |
| VOLATILES        | 1.2-Dimethylbenzene (o-Xytene)                        | 3.35+03            | 0.0005       | 0.005        | NE                    | NE              | 3.35+03            | 0.005      |         |           |                  | 0.005     | 1 0      |                  |                 |            |             | 0.005 1     | 1 11            | 0.005 1 0           |
| VOLATILES        | 1,3,5-Trimethylbenzene                                | 8.3E+00            | 0.0005       | 0.005        | NE                    | NE              | 8.3E+00            | 0.005      | ίŬ      |           |                  | 0.005     | iŭ       |                  |                 |            |             | 0.005 1     | ίŭ              | 0.005 1 U           |
| VOLATILES        | 1,3-Dichlorobenzene                                   | 5.1E+00            | 0.0005       | 0.005        | NE                    | NE              | 5.1E+00            | 0.005      | U U     |           |                  | 0.005     | 1 U      |                  |                 |            |             | 0.005       | 1.0             | 0.005 t U           |
| VOLATILES        | 1,3-Dichloropenzene                                   | 3.0E+00<br>2.7E+01 | 0.0005       | 0.005        | NE                    | NE              | 3.0E+00<br>2.7E+01 | 0.005      |         |           |                  | 0.005     | 10       |                  |                 |            |             | 0.005 1     | 10              | 0.005 1 U           |
| VOLATILES        | 2,2-Dichloropropane                                   | 1.7E+00            | 0.0005       | 0.005        | NĚ                    | NE              | 1.7E+00            | 0.005      | ίŭ      |           |                  | 0.005     | iŭ       |                  |                 |            |             | 0.005       | រើ              | 0.005 t U           |
| VOLATILES        | 2-Butanone  | 2.6E+03            | 0.0025       | 0.010        | NE                    | NE              | 2.6E+03            | 0.010      | ເປັນມ   |           |                  | 0.009     | i Ū      |                  |                 |            |             | 0.009       | i Ü             | 0.010 1 U           |
| VOLATILES        | 2-Chloroethyl vinyl ether                             | 2.1E-01            | 0.0020       | 0.010        | NE                    | NE              | 2.1E-01            | 0.010      | l N     |           |                  | 0.009     | 1 U      |                  |                 |            |             | 0.009 1     |                 | 0.010 1 U           |
| VOLATILES        | 2-Hexanone  | 6.2E+00            | 0.0005       | 0.005        | NE                    | NE              | 6.25+02            | 0.005      |         |           |                  | 0.005     | 10       |                  |                 |            |             | 0.005 1     | 1 11            | 0.005 1 0           |
| VOLATILES        | 4-Chlorotoluene                                       | 3.4E-01            | 0.0005       | 0.005        | NÉ                    | NE              | 3.4E-01            | 0.005      | iũ      |           |                  | 0.005     | iŭ       |                  |                 |            |             | 0.005 1     | ίŬ              | 0.005 1 U           |
| VOLATILES        | Acetone   | 1.7E+02            | 0.0050       | 0.010        | NE                    | NE              | 1.7E+02            | 0.010      | ι Ų     |           |                  | 0.009     | 1 J J    |                  |                 |            |             | 0.009 1     | I U             | 0.010 1 U           |
| VOLATILES        | Bronobenzene  | 8.8E-01            | 0,0005       | 0.005        |                       | NË              | 8.8E-01            | 0.005      | 1 0     |           |                  | 0.005     | 1 U      |                  |                 |            |             | 0.005 1     |                 | 0.005 1 U           |
| VOLATILES        | Bromochloromethane                                    | 2.4E+01            | 0.0005       | 0.005        | NE                    | NE              | 2.4E+01            | 0.005      | ιŭ      |           |                  | 0.005     | iŭ       |                  |                 |            |             | 0.005 1     | ŭ               | 0.005 1 U           |
| VOLATILES        | Bromodichloromethane                                  | 1.0E+01            | 0.0005       | 0.005        | NË                    | NΈ              | 1.0E+01            | 0.005      | Ū       |           |                  | 0.005     | i Ū      |                  |                 |            |             | 0.005 1     | Ū               | 0.005 1 U           |
| VOLATILES        | Bramoform   | 3.4E+01            | 0.0005       | 0,005        | NE                    | NE              | 3.4E+01            | 0.005      | I U     |           |                  | 0.005     | 1 U      |                  |                 |            |             | 0.005 1     | E U             | 0.005 1 U           |
| VOLATILES        | Carbon disulfide                                      | 3.5E-01            | 0.0010       | 0.010        | NE                    | NE              | 3.5E-01<br>1.0E+02 | 0.010      |         |           |                  | 0.009     | 1 U      |                  |                 |            |             | 0.009 1     |                 | 0.010 1 10          |
| VOLATILES        | Carbon tetrachloride                                  | 3.5E-01            | 0.0005       | 0.005        | NE                    | NE              | 3.5E-01            | 0.005      | เบี     |           |                  | 0.005     | ίŭ       |                  |                 |            |             | 0,005 1     | ŭ               | 0.005 1 U           |
| VOLATILES        | Chlorobenzene   | 4.0E+01            | 0.0005       | 0.005        | NE                    | NE              | 4.0E+01            | 0.007      |         |           |                  | 0.005     | 1 U      |                  |                 |            |             | 0.005 1     | U U             | 0.005 1 U           |
| VOLATILES        | Chlomform   | 1.1E+03<br>3.1E-01 | 0.0010       | 0.010        | NE                    | NE              | 1.1E+03            | 0.010      |         |           |                  | 0.009     | 1 U      |                  |                 |            |             | 0,009 1     | I U             | 0.010 1 U           |
| VOLATILES        | Chloromethane   | 2.3E-01            | 0.0000       | 0.005        | NE                    | NE              | 2.3E-01            | 0.005      | Ŭ       |           |                  | 0.005     | 110      |                  |                 |            |             | 0.005 1     |                 | 0.005 1 0           |
| VOLATILES        | cis-1,2-Dichloroethene                                | 1.2E+02            | 0.0005       | 0.005        | NE                    | NE              | 1.2E+02            | 0.005      | ŭ       |           |                  | 0.005     | រប័      |                  |                 |            |             | 0.005 1     | ίŭ              | 0.005 1 U           |
| VOLATILES        | cis-1,3-Dichloropropene                               | 1.2E+00            | 0.0005       | 0.005        | NE                    | NE              | 1.2E+00            | 0.005      | U       |           |                  | 0.005     | 1 U      |                  |                 |            |             | 0.005 1     | U U             | 0.005 1 U           |
| VOLATILES        | Dibromomethane  | 1.6E+00<br>1.9E+01 | 0.0005       | 200.0        | NE                    | NE              | 7.6E+00            | 0.005      | U U     |           |                  | 0.005     | 1 U      |                  |                 |            |             | 0.005 1     |                 | 0.005 1 U           |
| VOLATILES        | Dichlorodifluoromethane                               | 2.2E+02            | 0.0010       | 0.010        | NE                    | NE              | 2.2E+02            | 0.000      | ŭ       |           |                  | 0.003     | iŭ       |                  |                 |            |             | 0.009 1     | υ               | 0.010 1 U           |
| VOLATILES        | Ethylbenzene  | 4.3E+02            | 0.0005       | 0.005        | NE                    | NE              | 4.3E+02            | 0.005      | ũ       |           |                  | 0.005     | i ū      |                  |                 |            |             | 0.005 1     | บั              | 0.005 1 U           |
| VOLATILES        | Hexachlorobutadiene                                   | 1.6E+00            | 0.0005       | 0.005        | NE                    | NE              | 1.6E+00            | 0.005      | U       |           |                  | 0.005     | 1 U      |                  |                 |            |             | 0.005 1     | U U             | 0.005 1 U           |
| VOLATILES        | nsopropylicenzene<br>m.n-Xvienes                      | 2.4E+02            | 0.0005       | 0,005        | NE                    | NE              | 5.4E+02            | 0.005      |         |           |                  | 0.005     | 10       |                  |                 |            |             | 0.005 1     |                 | 0.005 1 U           |
| VOLATILES        | Methyl isobutyl ketone                                | 1.3E+03            | 0.0025       | 0.01         | NE                    | NE              | 1.3E+03            | 0.010      | Ŭ       |           |                  | 0.009     | iŭ       |                  |                 |            |             | 0.009 1     | ίŭ              | 0.010 t U           |

1 of 2

Shaw Environmental, Inc.

00066427

#### Table 4-16 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 016

| [SUMP] = SUMP016<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSI | Ē                         | TČEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _    | Back<br>Concentra<br>(95% Uf<br>Surface | ground<br>tions in Soll<br><u>PL, mg/kg)</u><br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35\$UMP015-S801<br>35-SMP15-S801-02<br>9/11/2006<br>6 + 6 Ft<br>REG | 35SUMP015-SB02<br>35-SMP15-SB02-01<br>9/8/2008<br>0 - 0.5 Ft<br>REG | 35SUMP015-SB02<br>35-SMP15-SB02-02<br>9/8/2006<br>6 - 6 Ft<br>REG | 355UMP016-SB01<br>35-SMP16-SB01-01<br>9/8/2006<br>0 - 0.5 Ft<br>REG | 35SUMP016-SB01<br>35-SMP16-SB01-01-QC<br>9/8/2006<br>0 - 0.5 Ft<br>FD | 35SUMP016-SB01<br>35-SMP16-SB01-02<br>9/8/2006<br>5 - 5 Ft<br>REG | 35SUMP016-S801<br>35-SMP16-S801-02-QC<br>9/8/2006<br>5 - 5 Ft<br>FD |
|--|---------------------------|--|---------------------|-------------|---|--|--|---|---|---|---|---|---|---|
| Test Group   | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ  | Result DIL_LO_VO  | Result DIL LO VO  | Result DIL LQ VQ  | Result Did LO VO  |   |   |
| VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005       | NË                                      | NE   | 8.7E+00                                      | 0.005 1 U   |   | 0.005 1 U   |   |   | 6.009 1 11  | 0.010 1 1   |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01        | NE                                      | NE   | 1.8E+01                                      | 0.030 1 0   |   | 0.009 1 0   |   |   | 0.005 1 1   | 0.005 1 1   |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.7E+02                                      | 0.005 1 U   |   | 0.005 1 0   |   |   | 0.005 1 1   | 0.005 1 1   |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.2E+02                                      | 0.005 1 U   |   | 0.005 1 0   |   |   | 0.005 1 1/  | 0.005 1 11  |
| VOLATILES  | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005       | NE                                      | NE,  | 4.2E+02                                      | 0.005 1 U   |   | 0.005 1 0   |   |   | 0.005 1 18  | 0.005 1 U   |
| VOLATILES  | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.0E+02                                      | 0.005 1 U   |   | 0.005 1 0   |   |   | 0.005 4 14  | 0.005 1 1   |
| VOLATILES  | Styrene                   | 1.3Ë+03                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.3E+03                                      | 0.005 1 U   |   | 0.005 1 0   |   |   | 0.005 1 1   | 0.005 1 11  |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.6E+02                                      | 0.005 1 U   |   | 0.005 1 0   |   |   | 0.005 1 11  | 0.005 1 1   |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 6.0E+00                                      | 0.005 1 U   |   | 0.005 1 U   |   |   | 0.005 1 0   | 0.005 1 0   |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.1E+03                                      | 0.005 1 U   |   | 0.005 1 U   |   |   | 0.005 1 0   | 0.005 1 U   |
| VOLATILES  | trans-1.2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.4E+02                                      | 0.005 1 U   |   | 0.005 1 U   |   |   | 0.005 1 0   | 0.005 1 0   |
| VOLATILES  | trans-1.3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005       | NÉ                                      | NE   | 1.8E+00                                      | 0.005 1 U   |   | 0.005 1 U   |   |   | 0.005 1 0   |   |
| VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.7E+00                                      | 0.005 1 U   |   | 0.005 1 U   |   |   | 0.005 1 0   | 0.003 1 0   |
| VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01        | NÉ                                      | NE .   | 2.6E+02                                      | 0.010 1 U   |   | 0.009 1 U   |   |   | 0.009 1 U   |   |
| VOLATILES  | Vinvl acetate             | 5.7E+01                                  | 0.0010              | 0.01        | NE                                      | NÈ   | 5.7E+01                                      | 0.010 1 U   |   | 0.009 1 U   |   |   | 0,009 1 0   | 0.010 1 0   |
| VOLATILES  | Vinvl chloride            | 3.6E-02                                  | 0.0010              | 0.01        | NE                                      | NE   | 3.6E-02                                      | 0.010 1 U   |   | 0.009 1 U   |   |   | 0.009 1 U   | 0.010 1 0   |

Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunilion Plani, Karnack, Texas

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

#### Shaw Environmental, Inc.

## Table 4-17 Comparision of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump 017

| [SUMP] = SUMP017         |                                |                    |                    |              |                  |                |                         | 35SUMP017-SB01   | 35SUMP017-SB01   | STEP-46SS03          | STEP-46SS03         |
|--------------------------|--------------------------------|--------------------|--------------------|--------------|------------------|----------------|-------------------------|------------------|------------------|----------------------|---------------------|
| SAMPLE NO                |                                | TCEQ               |                    |              | Backgi           | round          | Applicble               | 35-SMP17-SB01-01 | 35-SMP17-SB01-02 | 465503(0-0_5)-020312 | 465\$03(1-2)-020312 |
| SAMPLE_DATE              |                                | Risk-Based         |                    |              | Concentrati      | ons in Soil    | TCEQ                    | 9/11/2006        | 9/11/2006        | 3/12/2002            | 3/12/2002           |
| DEPTH                    |                                | Screening          | Method             | Method       | (95% UPL         | . mg/kg)       | Risk-Based              | 0 - 0.5 Ft       | 3.5 - 3.5 Ft     | 0 - 0.5 Ft           | 1-2 Ft<br>PEC       |
| SAMPLE_PURPOSE           |                                | value              | Detection          | Quantitation | Sunace           | Subsuriace     | Screening               |                  |                  |                      |                     |
| Test Group               | Parameter (Units = mg/kg)      | (RBSV)*            | <u>Elmit (MDL)</u> | Limit (MQL)  | 0 - 0.5 Ft<br>NE | 1.5 - 2.5 PC   | <u>Value</u><br>4.7€+02 | 0.249 1 II       |                  | Result DIC LQ VQ     | Result DIL LQ VQ    |
| EXPLOSIVES               | 1.3-Dinitrobenzene             | 1.6E+00            | 0.1                | 0.25         | NE               | NE             | 1.6E+00                 | 0.249 1 U        | 0.242 1 U        |                      |                     |
| EXPLOSIVES               | 2,4,6-Trinitrotoluene          | 7.7E+00            | 0.1                | 0.25         | NE               | NE             | 7.7E+00                 | 0.249 1 U        | 0.242 1 U        |                      |                     |
| EXPLOSIVES               | 2,4-Dinitrotoluene             | 7.2E-01            | 0.1                | 0.25         | NE               | NE             | 7.2E-01                 | 0.249 1 U        | 0.242 1 U        |                      |                     |
| EXPLOSIVES               | 2,6-Dinitrotoluene             | 7.2E-01            | 0.1                | 0.26         | NE               | NE             | 7.2E-01                 | 0.259 1 U        | 0.251 1 U        |                      |                     |
| EXPLOSIVES<br>EXPLOSIVES | 2-Amino-4,5-dinitrotoluene     | 2.65+00            | 0.1                | 0.20         | NE               | NE             | 2.6E+00                 | 0.259 1 0        | 0.251 1 0        |                      |                     |
| EXPLOSIVES               | HMX                            | 2.2E+02            | 0.1                | 2.20         | NE               | NE             | 2.2E+02                 | 2.190 1 U        | 2.130 1 U        |                      |                     |
| EXPLOSIVES               | m-Nitrotoluene                 | 4.4E+01            | 0.1                | 0.25         | NE               | NE             | 4.4E+01                 | 0.249 1 U        | 0.242 1 U        |                      |                     |
| EXPLOSIVES               | Nitrobenzene                   | 6.5E+00            | 0.1                | 0.26         | NE               | NE             | 6.5E+00                 | 0.259 1 U        | 0.251 1 U        |                      |                     |
| EXPLOSIVES               | o-Nitrotoluene                 | 4.7E+01            | 0.1                | 0.25         | NE               | NE             | 4.7E+01                 | 0.249 1 U        | 0.242 1 U        |                      |                     |
| EXPLOSIVES               | P-Nitrotoluene                 | 4.46+01            | 0.1                | 0.25         | NE               | NE             | 4.4E+01<br>3.6E+00      | 0.249 1 0        | 0.242 1 0        |                      |                     |
| EXPLOSIVES               | Tetry                          | 1.6E+02            | 0.2                | 0.65         | NE               | NE             | 1.6E+02                 | 0.647 1 U        | 0.628 1 U        |                      |                     |
| METALS                   | Aluminum                       | 1.6E+04            | 10.000             | 20.00        | 16300            | 2.08E+04       | 1.6E+04                 | 7240.000 1       | 28400.000 1      |                      |                     |
| METALS                   | Antimony                       | 7.3E+00            | 0.500              | 0.10         | 0.94             | 1.6            | 7.3E+00                 | 0.109 1 U        | 0.122 1 U        |                      |                     |
| METALS                   | Arsenic                        | 2.0E+01            | 0.075              | 0.30         | 4.81E+00         | 5.54E+00       | 2.0E+01                 | 2.270 1          | 1.120 1          |                      |                     |
| METALS                   | Barium                         | 2.6E+03            | 0.075              | 0.30         | 1.52E+02         | 8.55E+01       | 2.6E+03                 | 24.000 1         | 58.500 1         |                      |                     |
| METALS                   | Cadmium                        | 4.0E+00<br>5.2E+00 | 0.012              | 0.50         | 1.4              | 0.000-01       | 4.0E+00<br>5.2E+00      | 0.095 1          | 0.107 1          |                      |                     |
| METALS                   | Calcium                        | NE                 | NA                 | NA           | NA               | NA             |                         | 143.000 1 J      | 894.000 1 J      |                      |                     |
| METALS                   | Chromium                       | 5.9E+03            | 0,100              | 0.40         | 2.66E+01         | 3.01E+01       | 5.9E+03                 | 10.000 1         | 21.800 1         |                      |                     |
| METALS                   | Cobalt                         | 1.5E+03            | 0.125              | 0.50         | 7.23E+00         | 5.61E+00       | 1.5E+03                 | 0.461 1 J J      | 4.190 1 J        |                      |                     |
| METALS                   | Copper                         | 1.0E+03            | 0.150              | 0.60         | 5.55E+00         | 9.25E+00       | 1.0E+03                 | 2.550 1          | 6.430 1          |                      |                     |
| METALS                   | iron<br>Fead                   | NC<br>5 05+02      | 0.500              | NA<br>5.00   | NA<br>2 265+01   | NA<br>1 14E+01 | 5.05+02                 | 4 150 1          | 21200.000 1      |                      |                     |
| METALS                   | Magnesium                      | NE                 | NA                 | NA           | NA               | NA             | 0.06+02                 | 275.000 1        | 1740.000 1       |                      |                     |
| METALS                   | Manganese                      | 1.7E+03            | 0.050              | 0.20         | 1.25E+03         | 2.01E+02       | 1.7E+03                 | 17.900 1         | 24.900 1         |                      |                     |
| METALS                   | Mercury                        | 1.1E-02            | 0.010              | 0.25         | 8.19E-02         | 0.36           | 2.5E-01                 | 0.023 1 J J      | 0.029 1 J J      |                      |                     |
| METALS                   | Nickel                         | 1.9E+02            | 0.200              | 0.80         | 6.98E+00         | 1.16E+01       | 1.9E+02                 | 2.250 1          | 10.200 1         |                      |                     |
| METALS                   | Potassium                      | NE<br>1 25±02      | NA<br>0.100        | NA<br>0.20   | NA<br>2 495+00   | NA<br>5 575+00 | 4 25+02                 | 342.000 1        | 773.000 1        |                      |                     |
| METALS                   | Silver                         | 4.75+01            | 0.100              | 0.20         | 0.31             | 0.37           | 4.75+01                 | 1640 1 1         | 1.810 1 U        |                      |                     |
| METALS                   | Sodium                         | NE                 | NA                 | NA           | NA               | NA             |                         | 15.600 1 J J     | 325.000 1        |                      |                     |
| METALS                   | Thallium                       | 2.0E+00            | 0.010              | 0.02         | 0.47             | NE             | 2.0E+00                 | 0.039 1          | 0.099 1          |                      |                     |
| METALS                   | Vanadium                       | 4.8E+01            | 0.125              | 0.50         | 3.21E+01         | 4.46E+01       | 4.8E+01                 | 19.700 1         | 30.900 1         |                      |                     |
| METALS                   | Zinc                           | 5.9E+03            | 0.625              | 2.50         | 61.6             | 2.02E+01       | 5.9E+03                 | 94.600 1         | 34.700 1         | 0.050 4 11 11        | 0.047 1 11 11       |
| PANCE OPCANICS           | Carbon Pange C12-C28           | 1.4E+01<br>4.0E+02 | 0.005              | 50           | NE               | NE             | 1.4E+01<br>4.0E+02      | 27 900 1 I B     | 30.700 1 J B     | 0.059 1 0 0          | 0.047 1 0 0         |
| RANGE ORGANICS           | Carbon Range C28-C35           | 4.0E+02            | 25                 | 50           | NE               | NE             | 4.0E+02                 | 53,400 1 U       | 61.200 1 U       |                      |                     |
| RANGE_ORGANICS           | Carbon Range C6-C12            | 1.7E+02            | 25                 | 50           | NE               | NE             | 1.7E+02                 | 53.400 1 U       | 61.200 1 U       |                      |                     |
| SOLIDS                   | Percent Solids                 | NE                 | NA                 | NA           | NE               | NE             | -                       | 91.500 1         | 79.900 1         |                      |                     |
| VOLATILES                | 1,1,1,2-Tetrachloroethane      | 5.2E+00            | 0.0005             | 0.005        | NE               | NE             | 5.2E+00                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1,1,1-Trichloroethane          | 2.3E+02            | 0.0005             | 0.005        | NE               | NE             | 2.3E+02                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1 1 2-Trichlomethane           | 9.7E-01            | 0.0005             | 0.005        | NE               | NE             | 9.7E-01                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1.1-Dichloroethane             | 8.9E+01            | 0.0010             | 0.005        | NE               | NE             | 8.9E+01                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1,1-Dichloroethene             | 2.7E+01            | 0.0005             | 0.005        | NE               | NE             | 2.7E+01                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1,1-Dichloropropene            | 9.9E-01            | 0.0005             | 0.005        | NE               | NE             | 9,9E-01                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1,2,3-Trichlorobenzene         | 4.2E+01            | 0.0005             | 0.005        | NE               | NE             | 4.2E+01                 |                  | 0.006 1 0        |                      |                     |
| VOLATILES                | 1,2,3-Trichloropenzene         | 9.2E-02<br>1.4E+02 | 0.0010             | 0.005        | NE               |                | 9.2E-02<br>1.4E+02      |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1.2.4-Trimethylbenzene         | 9.6E+00            | 0.0005             | 0.005        | NE               | NE             | 9.6E+00                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1,2-Dibromo-3-chloropropane    | 3.5E-01            | 0.0020             | 0.005        | NE               | NE             | 3.5E-01                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1,2-Dibromoethane              | 5.3E-02            | 0.0005             | 0.005        | NE               | NE             | 5.3E-02                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1,2-Dichlorobenzene            | 5.6E+01            | 0.0005             | 0.005        | NE               | NE             | 5.6E+01                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1,2-Uichloroethane             | 2.7E-01            | 0.0005             | 0.005        | NE               | NE             | 2./E-01                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1.2-Dimethylbenzepe (o-Xvlene) | 3.3E+03            | 0.0005             | 0.005        | NE               | NE             | 3.36+03                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1,3,5-Trimethylbenzene         | 8.3E+00            | 0.0005             | 0.005        | NE               | NE             | 8.3E+00                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1,3-Dichlorobenzene            | 5.1E+00            | 0.0005             | 0.005        | NE               | NE             | 5.1E+00                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1,3-Dichloropropane            | 3.0E+00            | 0.0005             | 0.005        | NE               | NE             | 3.0E+00                 |                  | 0.006 1 U        |                      |                     |
| VOLATILES                | 1,4-Dichlorobenzene            | 2.7E+01            | 0.0005             | 0.005        | NE               | NE             | 2.7E+01                 |                  | 0.006 1 U        |                      |                     |
| VULATILES                | z,z-uknoropropane              | 1.76+00            | 0.0005             | 0.005        | NE               | NE             | 1.72=+00                |                  | 0.000 1 0        |                      |                     |

00066428
Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

#### Shaw Environmental, Inc.

00066429

### Table 4-17 Comparision of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump 017

| [SUMP] = SUMP017        |                           |            |             |              |            |               |            |                  |                  |                        |                      |
|-------------------------|---------------------------|------------|-------------|--------------|------------|---------------|------------|------------------|------------------|------------------------|----------------------|
| LOCATION_CODE           |                           |            |             |              |            |               |            | 35SUMP017-SB01   | 35SUMP017-SB01   | STEP-46SS03            | STEP-46SS03          |
| SAMPLE_NO               |                           | TCEQ       |             |              | Back       | ground        | Applicble  | 35-SMP17-SB01-01 | 35-SMP17-SB01-02 | 46\$\$03(0-0_5)-020312 | 46\$\$03(1-2)-020312 |
| SAMPLE_DATE             |                           | Risk-Based |             | • • • •      | Concentra  | tions in Solt | TCEQ       | 9/11/2006        | 9/11/2006        | 3/12/2002              | 3/12/2002            |
| DEPTH<br>DAMPLE PURPORT |                           | Screening  | Method      | Method       | (95% UP    | L, mg/kg)     | Risk-Based | 0 - 0.5 Ft       | 3.5 - 3.5 Ft     | 0 - 0.5 Ft             | 1 - 2 Ft             |
| SAMPLE_PURPOSE          |                           | Value      | Detection   | Quantitation | Surface    | Subsurface    | Screening  | REG              | REG              | REG                    | REG                  |
| Test Group              | Parameter (Units = mg/kg) | (RBSV) *   | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value      | Result DIL LQ VQ | Result DIL LQ V  | Result DIL LQ VQ       | Result DIL LQ VQ     |
| VOLATILES               | 2-Butanone                | 2.6E+03    | 0.0025      | 0.010        | NE         | NE            | 2.6E+03    |                  | 0.011 1 U U      | J                      |                      |
| VOLATILES               | 2-Chloroethyl vinyl ether | 2.1E-01    | 0.0020      | 0.010        | NE         | NE            | 2.1E-01    |                  | 0.011 1 U        |                        |                      |
| VOLATILES               | 2-Chlorotoluene           | 1.5E+02    | 0.0005      | 0.005        | NE         | NE            | 1.5E+02    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | 2-Hexanone                | 6.2E+00    | 0,0025      | 0.010        | NE         | NË            | 6.2E+00    |                  | 0.011 1 U U      | J                      |                      |
| VOLATILES               | 4-Chlorotoluene           | 3.4E-01    | 0.0005      | 0.005        | NE         | NE            | 3.4E-01    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Acetone                   | 1.7E+02    | 0.0050      | 0.010        | NE         | NE            | 1.7E+02    |                  | 0.011 1 U        |                        |                      |
| VOLATILES               | Benzene                   | 8.8E-01    | 0.0005      | 0.005        | NE         | NE            | 8.8E-01    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Bromobenzene              | 1.1E+01    | 0.0005      | 0.005        | NÉ         | NE            | 1.1E+01    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Bromochloromethane        | 2.4E+01    | 0.0005      | 0.005        | NE         | NE            | 2.4E+01    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Bromodichloromethane      | 1.0E+01    | 0.0005      | 0.005        | NE         | NE            | 1.0E+01    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Bromotorm                 | 3.4E+01    | 0.0005      | 0.005        | NE         | NE            | 3.4E+01    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Bromomelhane              | 3.5E-01    | 0.0010      | 0.010        | NĘ         | NE            | 3.5E-01    |                  | 0.011 1 U        |                        |                      |
| VOLATILES               | Carbon disulfide          | 1.0E+02    | 0.0005      | 0.005        | NE         | NE            | 1.0E+02    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Carbon tetrachloride      | 3.5E-01    | 0.0005      | 0.005        | NE         | NE.           | 3.5E-01    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Chlorobenzene             | 4.0E+01    | 0.0005      | 0.005        | NE         | NE            | 4.0E+01    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Chloroethane              | 1.1E+03    | 0.0010      | 0.010        | NE         | NE            | 1.1E+03    |                  | 0.011 1 U        |                        |                      |
| VOLATILES               | Chloroform                | 3.1E-01    | 0.0005      | 0.005        | NE         | NE            | 3.1E-01    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Chloromethane             | 2.3E-01    | 0.0020      | 0,010        | NE         | NE            | 2.3E-01    |                  | 0.011 1 U        |                        |                      |
| VOLATILES               | cis-1,2-Dichloroethene    | 1.2E+02    | 0.0005      | 0.005        | NĘ         | NE            | 1.2E+02    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | cis-1,3-Dichloropropene   | 1.2E+00    | 0.0005      | 0.005        | NE         | NE            | 1.2E+00    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Dibromochloromethane      | 7.6E+00    | 0.0005      | 0.005        | NE         | NE            | 7.6E+00    |                  | 0.006 t U        |                        |                      |
| VOLATILES               | Dibromomethane            | 1.9E+01    | 0.0005      | 0.005        | NE         | NE            | 1.9E+01    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Dichlorodifluoromethane   | 2.2E+02    | 0.0010      | 0.010        | NE         | NE            | 2.2E+02    |                  | 0.011 1 U        |                        |                      |
| VOLATILES               | Ethylbenzene              | 4.3E+02    | 0.0005      | 0.005        | NE         | NE            | 4.3E+02    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Hexachlorobutadiene       | 1.6E+00    | 0.0005      | 0.005        | NE         | NE            | 1.6E+00    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Isopropylbenzene          | 5.4E+02    | 0.0005      | 0.005        | NE         | NE            | 5.4E+02    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | m,p-Xylenes               | 2.3E+02    | 0,0005      | 0.005        | NE         | NE            | 2.3E+02    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Methyl isobutyl ketone    | 1.3E+03    | 0.0025      | 0.01         | NE         | NE            | 1.3E+03    |                  | 0.011 1 U        |                        |                      |
| VOLATILES               | Methylene chloride        | 8.7E+00    | 0.0010      | 0.005        | NE         | NE            | 8.7E+00    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Naphthalene               | 1.8E+01    | 0.0005      | 0.01         | NÊ         | NE            | 1.8E+01    |                  | 0.011 1 U        |                        |                      |
| VULATILES               | n-BUTYLBENZENE            | 2.7E+02    | 0.0005      | 0.005        | NE         | NË            | 2.7E+02    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | n-PROPYLBENZENE           | 3.2E+02    | 0.0005      | 0.005        | NE         | NE            | 3.2E+02    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | p-ISOPROPYLTOLUENE        | 4.2E+02    | 0.0005      | 0.005        | NE         | NE            | 4.2E+02    |                  | 0.006 1 U        |                        |                      |
| VULATILES               | SEC-BUTYLBENZENE          | 3.0E+02    | 0.0005      | 0.005        | NE         | NE            | 3.0E+02    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Styrene                   | 1.3E+03    | 0.0005      | 0.005        | NE         | NE            | 1.3E+03    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | IER-BUTYLBENZENE          | 2.6E+02    | 0.0005      | 0.005        | NĘ         | NE            | 2.6E+02    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Tetrachioroeutene         | 6.02+00    | 0.0005      | 0.005        | NE         | NE            | 6.0E+00    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Toluene                   | 1.1E+03    | 0.0005      | 0.005        | NE         | NE            | 1.1E+03    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | trans-1,2-Dicritoroetnene | 1.4E+02    | 0.0005      | 0.005        | NE         | NE            | 1.4E+02    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | rrans-1,3-Dichloropropene | 1.8E+00    | 0.0005      | 0.005        | NE         | NE            | 1.8E+00    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Triabless for a star      | 3.7E+00    | 0.0005      | 0.005        | NE         | NE            | 3.7E+00    |                  | 0.006 1 U        |                        |                      |
| VOLATILES               | Inchioronuoromethane      | 2.68+02    | 0.0010      | 0.01         | NE         | NE            | 2.6E+02    |                  | 0.011 1 U        |                        |                      |
| VOLATILES               | Vinyi acetate             | 5.7E+01    | 0.0010      | 0.01         | NE         | NE            | 5.7E+01    |                  | 0.011 1 U        |                        |                      |
| VOLATILES               | Vinyl chloride            | 3.6E-02    | 0.0010      | 0.01         | NE         | NE            | 3.6E-02    |                  | 0.011 1 U        |                        |                      |

.

Shaw Environmental, Inc.

00066430

# Table 4-18 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 018

| [SUMP] = SUMP018<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | i.                                    | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions In Soil<br><u>L. mg/kg)</u><br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP018-SB02<br>35-SMP18-SB02-02<br>9/11/2006<br>6 - 6 Ft<br>REG | 35SUMP037-SB01<br>35-SMP37-SB01-02<br>9/9/2006<br>4 - 4 Ft<br>REG | WR\$10-SB02<br>WR\$10-SB02-01<br>9/25/2006<br>0.5 - 0.5 Ft<br>REG | WRS10-SB02<br>WRS10-SB02-02<br>9/25/2006<br>4.5 - 4.5 Ft<br>REG |
|---|---------------------------------------|--|---------------------|------------------------|---|---|--|--|---|---|---|
| Test Group  | Parameter (Units = mg/kg)             | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ   | Result Dit LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| EXPLOSIVES  | 1,3,5-Trinitrobenzene                 | 4.7E+02                                  | 0.1                 | 0.25                   | NE                                      | NE  | 4.7E+02                                      | 0.238 1 U  | 0.246 1 U   | 0.245 1 U U   | 0.249 1 U U   |
| EXPLOSIVES<br>EXPLOSIVES  | 2.4.6-Trinitrototuone                 | 7.76+00                                  | 0.1                 | 0.25                   |   | NE  | 1.5E+00                                      | 0.238 1 U  | 0.246 1 U   | 0.245 1 0 0   | 0.249 1 0 0   |
| EXPLOSIVES  | 2.4-Dinitrotoluene                    | 7 2E-01                                  | 0.1                 | 0.25                   | NE                                      | NE  | 7.2E+00                                      | 0.238 1 1  | 0.246 1 1   | 0.245 1 0 0   | 0.249 1 0 0   |
| EXPLOSIVES  | 2,6-Dinitrotoluene                    | 7.2E-01                                  | 0,1                 | 0.26                   | NE                                      | NE  | 7.2E-01                                      | 0.248 1 U  | 0.256 1 U   | 0.255 1 U U   | 0.259 1 U U   |
| EXPLOSIVES  | 2-Amino-4,6-dinitrotoluene            | 2.6E+00                                  | 0.1                 | 0.26                   | NE                                      | NE  | 2.6E+00                                      | 0.248 1 U  | 0.256 1 U   | 0.255 1 U U   | 0.259 1 U U   |
| EXPLOSIVES  | 4-Amino-2,6-dinitrotoluene            | 2.6E+00                                  | 0.1                 | 0.26                   | NE                                      | NE  | 2.6E+00                                      | 0.248 1 U  | 0.256 1 U   | 0.255 1 U U   | 0.259 1 U U   |
| EXPLOSIVES  | HMX                                   | 2.2E+02                                  | 0.1                 | 2.20                   | NE                                      | NE  | 2.2E+02                                      | 2.100 1 U  | 2.170 1 U   | 2.160 1 U U   | 2.190 1 U U   |
| EXPLOSIVES  | Mitrobonzono                          | 4.42+01                                  | 0.1                 | 0.25                   | NE                                      | NE  | 4.4E+01                                      | 0.238 1 U  | 0.246 1 U   | 0.245 1 0 0   | 0.249 1 U U   |
| EXPLOSIVES  | o-Nitrotoluene                        | 4.7E+01                                  | 0.1                 | 0.20                   | NE                                      | NE  | 4.7E+00                                      | 0.246 1 0  | 0.250 1 0   | 0.255 1 0 0   | 0.239 1 0 0   |
| EXPLOSIVES  | p-Nitrotoluene                        | 4.4E+01                                  | 0.1                 | 0.25                   | NE                                      | NE  | 4.4E+01                                      | 0.238 1 U  | 0.246 1 U   | 0.245 1 U U   | 0.249 1 U U   |
| EXPLOSIVES  | RDX                                   | 3.6E+00                                  | 0.1                 | 1.00                   | NE                                      | NE  | 3.6E+00                                      | 0.952 1 U  | 0.985 1 U   | 0.980 1 U U   | 0.995 1 U U   |
| EXPLOSIVES  | Tetryl                                | 1.6E+02                                  | 0.2                 | 0.65                   | NE                                      | NE  | 1.6E+02                                      | 0.619 1 U  | 0.640 1 U   | 0.637 1 U U   | <u>0.647</u> 1 U U  |
| METALS  | Aluminum                              | 1.6E+04                                  | 10.000              | 20.00                  | 16300                                   | 2.08E+04  | 1.6E+04                                      | 15200.000 1  |   | 8760.000 1  | 28700.000 1   |
| METALS  | Anumony                               | 7.36+00                                  | 0.500               | 0.10                   | 0.94                                    | 1.6   | 7.3E+00                                      | 0.109 1 U  |   | 0.112 1 U UJL   | 0.123 1 U UJL   |
| METALS  | Barium                                | 2.0E+01                                  | 0.075               | 0.30                   | 4.010+00                                | 3.54E+00<br>8.55E+01                                      | 2.0E+01<br>2.6E+03                           |  |   | 76 500 1 JL   | 1.000 1 JL<br>63.300 1  |
| METALS  | Bervilium                             | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                | 7.66E-01  | 4.6E+00                                      | 0.631 1  |   | 0.375 1 .1 .1   | 0.757 1   |
| METALS  | Cadmium                               | 5.2E+00                                  | 0.025               | 0.10                   | 1.4                                     | 0.4   | 5.2E+00                                      | 0.114 1 J J  |   | 0.369 1 J J   | 0.063 1 J J   |
| METALS  | Calcium                               | NE                                       | NA                  | NA                     | NA                                      | NA  |  | 1250.000 f J   |   | 51000.000 10  | 828.000 1   |
| METALS  | Chromium                              | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                                | 3.01E+01  | 5.9E+03                                      | 16.100 1   |   | 24.100 1  | 23,300 1  |
| METALS  | Copper                                | 1.50+03                                  | 0.125               | 0.50                   | 7.23E+00                                | 5.61E+00  | 1.5±+03                                      | 7.290 1 J  |   | 2.790 1   | 4.600 1   |
| METALS  | linen                                 | NE                                       | NA                  | NA NA                  | 5.55E+00                                | 9.20E+00  | 1.02703                                      | 14900.000 1  |   | 21100 000 1   | 21700.000 1   |
| METALS  | Lead                                  | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                | 1.14E+01  | 5.0E+02                                      | 6.170 1 J  |   | 9.750 1   | 9.090 1   |
| METALS  | Magnesium                             | NE                                       | NA                  | NA                     | NA                                      | NA  | -  | 1770.000 1   |   | 981.000 1 JH  | 1610.000 1 JH   |
| METALS  | Manganese                             | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                | 2.01E+02  | 1.7E+03                                      | 21.700 1   |   | 134.000 1 J   | 21.900 1 J  |
| METALS  | Mercury                               | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                | 0.36  | 2.5E-01                                      | 0.018 1 J J  |   | 0.029 1 J J   | 0.084 1 J J   |
| METALS  | Nickel                                | 1,9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                | 1.16E+01  | 1.9E+02                                      | 19.100 1   |   | 6.620 1   | 11.500 1  |
| METALS  | Selecium                              | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                | 5 57E+00  | 135+02                                       | 0.218 1 11   |   | 0.142 1 .1 .8   | 0.128 1   |
| METALS  | Silver                                | 4.7E+01                                  | 0.050               | 0.20                   | 0.31                                    | 0.37  | 4.7E+01                                      | 1.700 1 U  |   | 1.680 1 U U   | 1.870 1 U U   |
| METALS  | Sodium                                | NE                                       | NA                  | NA                     | NA                                      | NA  | -  | 322.000 1  |   | 54.300 1  | 218.000 1   |
| METALS  | Thallium                              | 2.0E+00                                  | 0.010               | 0.02                   | 0.47                                    | NE  | 2.0E+00                                      | 0.091 1  |   | 0.045 1   | 0.108 1   |
| METALS  | Vanadium                              | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01                                | 4.46E+01  | 4.8E+01                                      | 23.200 1   |   | 34.400 1  | 40.200 1  |
| BANGE ORGANICS  | Carbon Range C12-C28                  | 5.9E+03<br>4.0E+02                       | 0.020               | 2.50                   | 61.6<br>ME                              | 2.028+01  | 5.9E+03                                      | 41.400 1   |   | 31.600 1  | 32.900 1  |
| RANGE ORGANICS  | Carbon Range C28-C35                  | 4.0E+02                                  | 25                  | 50                     | NE                                      | NE  | 4.0E+02                                      | 54,600 1 U   |   |   |   |
| RANGE_ORGANICS  | Carbon Range C6-C12                   | 1.76+02                                  | 25                  | 50                     | NE                                      | NE  | 1.7E+02                                      | 54.600 1 U   |   |   |   |
| SEMIVOLATILES   | 1,2,4-Trichlorobenzene                | 1.4E+02                                  | 0.083               | 0.17                   | NE                                      | NE  | 1.4E+02                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | 1,2-Dichlorobenzene                   | 5.6E+01                                  | 0.083               | 0.17                   | NE                                      | NE  | 5.6E+01                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | 1,3-Dichlorobenzene                   | 5.12+00                                  | 0.083               | 0.17                   | NE                                      | NE  | 5.1E+00                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | 2 4 5-Trichlomnhenol                  | 1.65+03                                  | 0.083               | 0.17                   | NE                                      | NE  | 2.7E+01<br>1.6E+03                           |  |   | 1.870 10 0 0  |   |
| SEMIVOLATILES   | 2,4,6-Trichlorophenol                 | 4.5E+01                                  | 0.083               | 0.17                   | NE                                      | NE  | 4.5E+01                                      |  |   | 1.870 10 U U  | 0.201 1 1 1   |
| SEMIVOLATILES   | 2,4-Dichlorophenol                    | 4.7E+01                                  | 0.083               | 0.17                   | NE                                      | NE  | 4.7E+01                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | 2,4-Dimethylphenol                    | 3.1E+02                                  | 0.083               | 0.17                   | NE                                      | NE  | 3.1E+02                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | 2,4-Dinitrophenol                     | 3.1E+01                                  | 0.330               | 0.83                   | NE                                      | NE  | 3.1E+01                                      |  |   | 9.330 10 U U  | 1.000 1 U U   |
| SEMIVOLATILES   | 2,4-Dinitrotoluene                    | 7.26-01                                  | 0.083               | 0.17                   | NE                                      | NE  | 7.2E-01                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | 2-Chloronaphthalene                   | 1.1E+03                                  | 0.083               | 0.17                   | NE                                      | NE  | 1 1E+03                                      |  |   | 1.870 10 0 0  | 0.201 1 0 0   |
| SEMIVOLATILES   | 2-Chlorophenol                        | 1.1E+02                                  | 0.083               | 0.17                   | NE                                      | NE  | 1.1E+02                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | 2-Methylnaphthalene                   | 5.5E+01                                  | 0.083               | 0.17                   | NE                                      | NE  | 5.5E+01                                      | ļ  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | 2-Methylphenol                        | 7.7E+02                                  | 0.083               | 0.17                   | NE                                      | NE  | 7.7E+02                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | 2-Nitroaniline                        | 4.7E+00                                  | 0.330               | 0.83                   | NE                                      | NE  | 4.7E+00                                      | 1  |   | 9.330 10 U U  | 1.000 1 U U   |
| SEMIVOLATILES   | 2-mitopreno<br>3 3'-Dichlorobenzidine | 3.1E+01<br>1.1E+00                       | 0.083               | 0.17                   | NE                                      | NE  | 3.16+01                                      |  |   | 1.8/0 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | 3-Nitroaniline                        | 4.7E+00                                  | 0.330               | 0.83                   | NE                                      | NE  | 4.76+00                                      |  |   | 9.330 10 10 10  |   |
| SEMIVOLATILES   | 4.6-Dinitro-2-methylphenol            | 3.1E+01                                  | 0.330               | 0.83                   | NE                                      | NE  | 3.1E+01                                      |  |   | 9.330 10 U U  | 1.000 1 U U   |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether            | 3.1E-02                                  | 0.083               | 0.17                   | NE                                      | NË  | 1.7E-01                                      |  | l   | 0.938 10 U U  | 0.102 1 U U   |
| SEMIVOLATILES   | 4-Chloro-3-methylphenol               | 7.7E+01                                  | 0.083               | 0.17                   | NE                                      | NE  | 7.7E+01                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether           | 0.2E+01<br>2.8E-02                       | 0.083               | 0.17                   | NE                                      | NE  | 6.2E+01                                      |  | 1   | 1.870 10 U U  | 0.201 1 U U   |
| φφτιτε <sub>τι</sub> Ω  | - omerophenyi phenyi ettiçi           | 5.06-9£                                  | 0.000               | 0.11                   | NG.                                     | NE  | 1.76-94                                      | · .  | 1   |   | 0.102 1 0 0   |

Shaw Environmental, Inc.

### Table 4-18 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump 018

| [SUMP] = SUMP018<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | 1                                    | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _<br>Quantitation | Backg<br>Concentrat<br>(95% UP<br>Surface | round<br>ions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP(<br>35-SMP18<br>9/11/<br>6 - (<br>RE | 018-SB02<br>3-SB02-02<br>2006<br>6 Ft<br>EG | 35SUMP037-SB01<br>35-SMP37-SB01-02<br>9/9/2006<br>4 - 4 Ft<br>REG | WRS10-SB02<br>WRS10-SB02-01<br>9/25/2006<br>0.5 - 0.5 Ft<br>REG | WR\$10-\$B02<br>WR\$10-\$B02-02<br>9/25/2006<br>4.5 - 4.5 Ft<br>REG |
|---|--------------------------------------|--|---------------------|--------------------------|---|--|--|---|---|---|---|---|
| Test Group  | Parameter (Units = mg/kg)            | (RBSV)*                                  | Limit (MDL)         | Limit (MQL)              | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft                                     | Value  | Result                                      | DIL LQ VQ                                   | Result DIL LO V   | Q Result DIL LQ VQ  | Result DIL LQ VQ  |
| SEMIVOLATILES   | 4-Methylphenol                       | 7.7E+01                                  | 0.083               | 0.17                     | NE  | NE   | 7.7E+01                                      |   |   |   | 1,670 10 U U<br>9330 10 U U                                     | 1000 1 1 1  |
| SEMIVOLATILES   | 4-Nitroaniline                       | 1.3E+01                                  | 0.330               | 0.83                     | NE  | NE   | 1.36+01                                      | 1   |   |   | 9330 10 0 0   | 1000 1 0 0  |
| SEMIVOLATILES   | 4-Nitrophenol                        | 3.16+01                                  | 0.330               | 0.63                     |   | NE   | 8.25+02                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Acenaphinene                         | 8 2 = + 02                               | 0.083               | 0.17                     | NE  | NE   | 8.2E+02                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Anthracene                           | 4.1E+03                                  | 0.0825              | 0.165                    | NE  | NE   | 4.1E+03                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Benzo(a)anthracene                   | 6.3E-01                                  | 0.0825              | 0.165                    | 0.02                                      | NE   | 6.3E-01                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Benzo(a)pyrene                       | 6.3E-02                                  | 0.0825              | 0.165                    | 0.02                                      | NE   | 1.7E-01                                      |   |   |   | 0 938 10 U U  | 0.102 1 U U   |
| SEMIVOLATILES   | Benzo(b)fluoranthene                 | 6.3E-01                                  | 0.0825              | 0.165                    | 0.02                                      | NE   | 6.3E-01                                      |   |   |   | 1.870 10 0 0  | 0.201 1 0 0   |
| SEMIVOLATILES   | Benzo(ghi)perviene                   | 4.1E+02                                  | 0.0825              | 0.165                    | 0.01                                      | NE   | 4.1E+02                                      |   |   |   | 1.870 10 0 0  | 0.201 1 1 1   |
| SEMIVOLATILES   | Benzo(k)nuorantriene                 | 0.3E+00                                  | 0.0623              | 0.100                    | 0.01                                      | NE   | 6.3E+00                                      | 1   |   |   | 9.330 10 U U  | 1.000 1 U UJ  |
| SEMIVOLATILES   | Benzul Alcohol                       | 4 7E+04                                  | 0.0825              | 0.165                    | NE  | NE   | 4.7E+03                                      | 1   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | bis(2-Chloroethoxy)methane           | 2.9E-01                                  | 0.0825              | 0,165                    | NÉ  | NE   | 2.9E-01                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | bis(2-Chloroethyl)ether              | 1.5E-01                                  | 0.0825              | 0.165                    | NE  | NE   | 1.7E-01                                      |   |   |   | 0.938 10 U U  | 0.102 1 U U   |
| SEMIVOLATILES   | bis(2-Chloroisopropyl)ether          | 4.8E+00                                  | 0.0825              | 0.165                    | NE  | NE   | 4.8E+00                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | bis(2-Ethylhexyl)phthalate           | 1.7E+01                                  | 0.0825              | 0.165                    | NE  | NE   | 1.7E+01                                      |   |   |   | 1.870 10 U U  |   |
| SEMIVOLATILES   | Butyl benzyl phthalate               | 3.1E+03                                  | 0.0825              | 0.165                    | NE  | NE   | 3.1E+03                                      |   |   |   | 1.870 10 0 0  | 0.201 1 0 0   |
| SEMIVOLATILES   | Chrysene<br>Dihanaa (a h) anthereana | 6.35+01                                  | 0.0825              | 0.105                    | 0.02                                      | NE   | 6.3E+01                                      |   |   |   | 0938 10 U U   | 0.102 1 U U   |
| SEMIVOLATILES   | Dibenzo(a,n)anuracene                | 6 2E+01                                  | 0.0825              | 0.105                    | NE  | NE   | 6.2E+01                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Diethvt phthalate                    | 1.2E+04                                  | 0.0825              | 0,165                    | NE  | NE   | 1.2E+04                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Dimethyl phthalate                   | 1.2E+04                                  | 0.0825              | 0.165                    | NE  | NE   | 1.2E+04                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | di-n-Butyl phthalate                 | 1.6E+03                                  | 0.0825              | 0.165                    | NE  | NE   | 1.6E+03                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | di-n-Octyl phthalate                 | 3.1E+02                                  | 0.0825              | 0.165                    | NE  | NE   | 3.1E+02                                      |   |   |   | 1.870 10 U U  | 0.201 1 0 0   |
| SEMIVOLATILES   | Fluoranthene                         | 5.5E+02                                  | 0.0825              | 0.165                    | 0.02                                      | NE   | 5.5E+02                                      |   |   |   |   | 0.201 1 0 0   |
| SEMIVOLATILES   | Huorene                              | 5.5E+02                                  | 0.0825              | 0,105                    | NE  | NE   | 2.5E-01                                      | 1   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Hexachlorobutadiene                  | 2.5E-01<br>1.6E+00                       | 0.0825              | 0.105                    | NE  | NE   | 1.6E+00                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Hexachtorocyclonentadiene            | 1.0E+00                                  | 0.0825              | 0.165                    | NË  | NE   | 1.0E+00                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Hexachloroethane                     | 1.6E+01                                  | 0.0825              | 0.165                    | NE  | NE   | 1.6E+01                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Indeno(1,2,3-cd)pyrene               | 6.3E-01                                  | 0.0825              | 0.165                    | 0.01                                      | NE   | 6.3E-01                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Isophorone                           | 5.2E+02                                  | 0.0825              | 0.165                    | NE  | NE   | 5.2E+02                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Naphthalene                          | 1.8E+01                                  | 0.0825              | 0.165                    | NE  | NE   | 1.8E+01                                      |   |   |   | 1.870 10 0 0  | 0.201 1 0 0   |
| SEMIVOLATILES   | Nitrobenzene                         | 0.0E+00                                  | 0.0625              | 0.105                    | NE  |  | 1.5E+00                                      |   |   |   | 0938 10 U U   | 0.102 1 U U   |
| SEMIVOLATILES   | n-Nitrosodiobenviamine               | 5.9E+01                                  | 0.0825              | 0.165                    | NE  | NE   | 5.9E+01                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Pentachlorophenol                    | 3.0E+00                                  | 0.3300              | 0.825                    | NE  | NE   | 3.0E+00                                      |   |   |   | 9.330 10 U U  | 1.000 1 U U   |
| SEMIVOLATILES   | Phenanthrene                         | 4.1E+02                                  | 0.0825              | 0.165                    | NE  | NE   | 4.1E+02                                      |   |   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES   | Phenol                               | 4.7E+03                                  | 0.0825              | 0.165                    | NE  | NE   | 4.7E+03                                      |   |   |   | 1.870 10 U U  | 0.201 1 0 0   |
| SEMIVOLATILES   | Pyrene                               | 4.1E+02                                  | 0.0825              | 0,165                    | 0.02                                      | NE   | 4.1E+02                                      | 00.500                                      |   | 02.000 1  | 1.870 10 0 0  | 81 100 1  |
| SOLIDS  | Percent Solids                       | NE<br>5 25+00                            | NE<br>0.0005        | NE<br>0.005              |   | NE   | 5 25+00                                      | 90,500                                      | 1<br>4 II                                   | 92.000 1  | 88.000  | 0.006 1 U U   |
| VOLATILES   | 1,1,1,2-retractionetinane            | 2 3E+02                                  | 0.0005              | 0.005                    |   | NE   | 2.35+02                                      | 0.005                                       | 1 Ŭ   |   |   | 0.006 1 U U   |
| VOLATILES   | 1.1.2.2-Tetrachloroethane            | 5.1E-01                                  | 0.0005              | 0.005                    | NE  | NE   | 5.1E-01                                      | 0.005                                       | 1 Ü   |   |   | 0.006 1 U U   |
| VOLATILES   | 1,1,2-Trichloroethane                | 9.7E-01                                  | 0.0005              | 0.005                    | NE  | NE   | 9.7E-01                                      | 0.005                                       | 1 U   |   |   | 0.006 1 U U   |
| VOLATILES   | 1,1-Dichloroethane                   | 8.9E+01                                  | 0.0010              | 0.005                    | NE  | NE   | 8.9E+01                                      | 0.005                                       | 1 U   |   |   | 0.006 1 U U   |
| VOLATILES   | 1,1-Dichtoroethene                   | 2.7E+01                                  | 0.0005              | 0.005                    | NE  | NE   | 2.7E+01                                      | 0.005                                       | 1 U   |   |   |   |
| VOLATILES   | 1,1-Dichloropropene                  | 9.9E-01                                  | 0.0005              | 0.005                    | NE  | NE   | 9.9E-01                                      | 0.005                                       | 1 0   |   |   | 0.006 1 1 1   |
| VOLATILES   | 1,2,3-Inchlorobenzene                | 4.20+01                                  | 0.0005              | 0.005                    | NE  | NE   | 4.26+01                                      | 0.005                                       | 1 11  |   |   | 0.006 1 U U   |
| VOLATILES   | 1.2.4.Trichlorobenzene               | 9.2E-02<br>1.4E+02                       | 0.0005              | 0.005                    | NE  | NE   | 1.4E+02                                      | 0.005                                       | 1 Ŭ   |   |   | 0.006 1 U U   |
| VOLATILES   | 1.2.4-Trimethylbenzene               | 9.6E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 9.6E+00                                      | 0.005                                       | 1 Ū   |   |   | 0.006 1 U U   |
| VOLATILES   | 1,2-Dibromo-3-chloropropane          | 3.5E-01                                  | 0.0020              | 0.005                    | NE  | NE   | 3.5E-01                                      | 0.005                                       | 1 U   |   | •   | 0.006 1 U U   |
| VOLATILES   | 1,2-Dibromoethane                    | 5.3E-02                                  | 0.0005              | 0.005                    | NE  | NE   | 5.3E-02                                      | 0.005                                       | 1 U   |   |   | 0.006 1 U U   |
| VOLATILES   | 1,2-Dichlorobenzene                  | 5.6E+01                                  | 0.0005              | 0.005                    | NE  | NE   | 5.6E+01                                      | 0.005                                       | 1 U   |   |   | 0.006 1 U U   |
| VOLATILES   | 1,2-Dichloroethane                   | 2.7E-01                                  | 0.0005              | 0.005                    | NE  | NE   | 2.7E-01                                      | 0.005                                       | 1 U<br>1 U                                  |   |   |   |
| VOLATILES   | 1,2-Dichloropropane                  | 1.85+00                                  | 0.0005              | 0.005                    |   | NE   | 1.8E+00<br>3.3E±03                           | 0.005                                       | 1 1   |   |   | 0.006 1 1 1   |
| VOLATILES   | 1.3.5-Trimethylbenzene               | 8.35+00                                  | 0.0005              | 0.005                    | NF  | NE   | 8.3F+00                                      | 0.005                                       | iŭ  |   |   | 0,006 1 U U   |
| VOLATILES   | 1.3-Dichlorobenzene                  | 5.1E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 5.1E+00                                      | 0.005                                       | 1 0   |   |   | 0.006 1 U U   |
| VOLATILES   | 1,3-Dichloropropane                  | 3.0E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 3.0E+00                                      | 0.005                                       | 1 U   |   |   | 0.006 1 U U   |
| VOLATILES   | 1,4-Dichlorobenzene                  | 2.7E+01                                  | 0.0005              | 0.005                    | NE  | NE   | 2.7E+01                                      | 0,005                                       | 1 U   |   |   | 0.006 1 U U   |
| VOLATILES   | 2,2-Dichloropropane                  | 1.7E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 1.7E+00                                      | 0.005                                       | 1 U   |   |   | 0.005 1 U U   |

2 of 3

#### Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

#### Shaw Environmental, Inc.

# Table 4-18 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 018

|   |                           |  |                     |             |   | -   |  |  |   |   |   |
|---|---------------------------|--|---------------------|-------------|---|---|--|--|---|---|---|
| [SUMP] = SUMP018<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _    | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>Itions in Soil<br>온, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP018-SB02<br>35-SMP18-SB02-02<br>9/11/2006<br>6 - 6 Ft<br>REG | 35SUMP037-SB01<br>35-SMP37-SB01-02<br>9/9/2006<br>4 - 4 Ft<br>REG | WRS10-SB02<br>WRS10-SB02-01<br>9/25/2006<br>0.5 - 0.5 Ft<br>REG | WRS10-SB02<br>WRS10-SB02-02<br>9/25/2006<br>4.5 - 4.5 Ft<br>REG |
| Test Group  | Parameter (Units = mg/kg) | (RBSV)*                                  | Limit (MOL)         | Limit (MQL) | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ_VQ  | Result DIL LQ VQ  |
| VOLATILES   | 2-Butanone                | 2.6E+03                                  | 0.0025              | 0.010       | NE                                      | NE  | 2.6E+03                                      | 0.010 1 U UJ   |   |   | 0.012 1 U U   |
| VOLATILES   | 2-Chloroethyl vinyl ether | 2.1E-01                                  | 0.0020              | 0.010       | NE                                      | NE  | 2.1E-01                                      | 0.010 1 U  |   |   | 0.012 1 0 0   |
| VOLATILES   | 2-Chlorotoluene           | 1.5E+02                                  | 0,0005              | 0.005       | NE                                      | NE  | 1.5E+02                                      | 0.005 1 U  |   |   | 0.006 1 0 0   |
| VOLATILES   | 2-Hexanone                | 6.2E+00                                  | 0.0025              | 0.010       | NE                                      | NE  | 6.2E+00                                      | 0.010 1 U UJ   |   |   | 0.012 1 U U   |
| VOLATILES   | 4-Chlorotoluene           | 3.4E-01                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.4E-01                                      | 0.005 1 U  |   |   |   |
| VOLATILES   | Acetone                   | 1.7E+02                                  | 0.0050              | 0.010       | NE                                      | NE  | 1.7E+02                                      | 0.010 1. 0   |   |   |   |
| VOLATILES   | Benzene                   | 8.8E-01                                  | 0.0005              | 0.005       | NE                                      | NE  | 8.8E-01                                      | 0.005 1 0  |   |   |   |
| VOLATILES   | Bromobenzene              | 1.1E+01                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.18+01                                      | 0.005 1 0  |   |   | 0.006 1 1 1   |
| VOLATILES   | Bromochloromethane        | 2.4E+01                                  | 0.0005              | 0.005       | NE                                      | NE  | 2.4E+01                                      | 0.005 1 0  |   |   |   |
| VOLATILES   | Bromodichloromethane      | 1.0E+01                                  | 0,0005              | 0.005       | NE                                      | NE  | 1,0E+01                                      | 0.005 1 0  |   |   |   |
| VOLATILES   | Bromoform                 | 3.4E+01                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.4E+01                                      | 0.005 1 0  |   |   | 0.000 1 0 0   |
| VOLATILES   | Bromomethane              | 3.5E-01                                  | 0.0010              | 0.010       | NE                                      | NE  | 3.5E-01                                      | 0.010 1 0  |   |   | 0.006 1 11 11   |
| VOLATILES   | Carbon disulfide          | 1,0E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.0E+02                                      | 0.005 1 0  |   |   | 0.006 1 U U   |
| VOLATILES   | Carbon tetrachloride      | 3.5E-01                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.5E-01                                      | 0.005 1 0  |   |   | 0.006 1 1 1   |
| VOLATILES   | Chlorobenzene             | 4.0E+01                                  | 0.0005              | 0.005       | NE                                      | NE  | 4.0E+01                                      | 0.005 1 0  |   |   | 0.000 1 0 0   |
| VOLATILES   | Chloroethane              | 1.1E+03                                  | 0.0010              | 0.010       | NE                                      | NE  | 1.1E+03                                      |  |   |   | 0.006 1 11 11   |
| VOLATILES   | Chlorotorm                | 3.1E-01                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.1E-01                                      | 0.005 1 0  |   |   | 0.012 1 11 11   |
| VOLATILES   | Chioromethane             | 2.35-01                                  | 0.0020              | 0.010       | NE                                      | NE  | 2.30-01                                      |  |   |   | 0.006 1 11 11   |
| VOLATILES   | cis-1,2-Dichloroetherie   | 1.2E+02                                  | 0.0005              | 0.005       | NE                                      |   | 1.20+02                                      |  |   |   | 0.006 1 1 1   |
| VOLATILES   | cis-1,3-Dichloropropene   | 1.26+00                                  | 0.0005              | 0.005       | NE                                      |   | 7.65+00                                      | 0.005 1 0  |   |   |   |
| VOLATILES   | Dibromochtoromethane      | 1.02+00                                  | 0.0005              | 0.005       |   |   | 1.05+01                                      | 0.005 1 0  |   |   | 0.006 1 U U   |
| VOLATILES   | Dipromometnane            | 1.92+01                                  | 0.0005              | 0.005       |   |   | 2.25+02                                      | 0.000 1 0  |   |   | 0.012 1 1 1   |
| VOLATILES   | Dichlorodinuoromethate    | 2.25102                                  | 0.0010              | 0.010       |   | ME  | 4 35+02                                      | 0.010 1 0  |   |   | 0.006 1 U U   |
| VOLATILES   | Einyidenzene              | 4.32702                                  | 0.0005              | 0.005       | NE                                      |   | 4.32+02                                      | 0.005 1 0  |   |   | 0.006 1 1 1   |
| VOLATILES   | Hexachioroputadiene       | 1.00+00                                  | 0.0005              | 0.005       |   | NE  | 6.4E+02                                      | 0.005 1 0  |   |   |   |
| VOLATILES   | m p Yudonee               | 3.46102                                  | 0.0005              | 0.005       | NE                                      | NE  | 235+02                                       | 0.005 1 11   |   |   | 0.006 1 U U   |
| VOLATILES   | m,p-Aylenes               | 1 35-02                                  | 0.0005              | 0.005       | NE                                      | NE  | 135+03                                       | 0.003 1 0  |   |   | 0.012 1 1 1   |
| VOLATILES   | Methylane chlaride        | 876+00                                   | 0.0020              | 0.005       |   |   | 8.75+00                                      | 0.005 1 1  |   |   | 0.006 1 U U   |
| VOLATILES   | Nanhthalana               | 1.85+01                                  | 0.0010              | 0.01        | NE                                      | NE  | 1 8E+01                                      | 0.010 1 U  |   |   | 0.012 1 U U   |
| VOLATILES   | o BLITYL BENZENE          | 2 7E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 2 7E+02                                      | 0 005 1 U  |   |   | 0.006 1 U U   |
| VOLATIEES   | n-DROPY BENZENE           | 3.25+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.2E+02                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATRES  | THIS OPPOPYLY TOULIENE    | 4 2E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 4.2E+02                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATHES  | SOC-BITTY BENZENE         | 3.05+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.05+02                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES   | Strene                    | 1.3E+03                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.35+03                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES   | tort-BLITVI BENZENE       | 2 6E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 2.65+02                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES   | Tetrachioroethene         | 6 0E+00                                  | 0.0005              | 0.005       | NE                                      | NE  | 6.0E+00                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES   | Tolvene                   | 1 1E+03                                  | 0.0005              | 0.005       | NE                                      | NE  | 1 1E+03                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES   | trans-1 2-Dichlomethene   | 1.4E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.4E+02                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES   | trans-1 3-Dichlorontopene | 185+00                                   | 0.0005              | 0.005       | NE                                      | NE  | 1.8E+00                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES   | Trichloroetheae           | 3.7E+00                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.7E+00                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES   | Tricblorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01        | NE                                      | NE  | 2.6E+02                                      | 0.010 1 U  |   |   | 0.012 1 U U   |
| VOLATILES   | Vinvi acetate             | 5.7E+01                                  | 0.0010              | 0.01        | NE                                      | NE  | 5.7E+01                                      | 0.010 1 U  |   |   | 0.012 1 U U   |
| VOLATILES   | Vinvi chintide            | 3.6E-02                                  | 0.0010              | 0.01        | NE                                      | NE  | 3.6E-02                                      | 0.010 1 U  |   |   | 0.012 1 U U   |

Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas 00066432

#### Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



Table 4-19Comparison of Chemical Concentrations in Soil to Risk-Based Screening ValuesSump 019

|  |                           |  |                     | •                      |  |  |  |   |                                      |              |    |
|--|---------------------------|--|---------------------|------------------------|--|--|--|---|--------------------------------------|--------------|----|
| [SUMP] = SUMP019<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backg<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP(<br>35-SMP19<br>9/9/2<br>5.5 -<br>RE | 019-S<br>0-SB0<br>2006<br>6 Ft<br>EG | 801<br>11-02 |    |
| Test Group   | Parameter (Units = mg/kg) | (RBSV) °                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                               | 1,5 - 2,5 Ft                                       | Value  | Result                                      | DIL                                  | LQ           | VQ |
| METALS   | Aluminum                  | 1.55E+04                                 | 10.000              | 20.00                  | 16300                                    | 2.08E+04   | 1.6E+04                                      | 8670.000                                    | 1                                    |              |    |
| METALS   | Antimony                  | 7.25E+00                                 | 0.500               | 0.10                   | 0.94                                     | 1.6  | 7.3E+00                                      | 0.065                                       | 1                                    | J            | J  |
| METALS   | Arsenic                   | 2.00E+01                                 | 0.075               | 0.30                   | 4.81E+00                                 | 5.54E+00   | 2.0E+01                                      | 1.580                                       | 1                                    |              |    |
| METALS   | Barium                    | 2.61E+03                                 | 0.075               | 0.30                   | 1.52E+02                                 | 8.55E+01   | 2.6E+03                                      | 123.000                                     | 1                                    |              |    |
| METALS   | Beryllium                 | 4.56E+00                                 | 0.012               | 0.50                   | 6.45E-01                                 | 7.66E-01   | 4.6E+00                                      | 0.673                                       | 1                                    |              |    |
| METALS   | Cadmium                   | 5.20E+00                                 | 0.025               | 0.10                   | 1.4                                      | . 0.4  | 5.2E+00                                      | 0.131                                       | 1                                    | J            | J  |
| METALS   | Calcium                   | NE                                       | NA                  | NA                     | NA                                       | NA   |  | 945.000                                     | 1                                    |              | J  |
| METALS   | Chromium                  | 5.93E+03                                 | 0.100               | 0.40                   | 2.66E+01                                 | 3.01E+01   | 5.9E+03                                      | 10.600                                      | 1                                    |              |    |
| METALS   | Cobalt                    | 1.53E+03                                 | 0.125               | 0.50                   | 7.23E+00                                 | 5.61E+00   | 1.5E+03                                      | 7.980                                       | 1                                    |              | J  |
| METALS   | Copper                    | 1.02E+03                                 | 0.150               | 0.60                   | 5.55E+00                                 | 9.25E+00   | 1.0E+03                                      | 5.010                                       | 1                                    |              |    |
| METALS   | Iron                      | NE                                       | NA                  | NA                     | NA                                       | NA   | -  | 14900.000                                   | 1                                    |              |    |
| METALS   | Lead                      | 5.00E+02                                 | 0.500               | 5.00                   | 2.26E+01                                 | 1.14E+01   | 5.0E+02                                      | 7.470                                       | 1                                    |              | J  |
| METALS   | Magnesium                 | NE                                       | NA                  | NA                     | NA                                       | NA   |  | 1290.000                                    | 1                                    |              |    |
| METALS   | Manganese                 | 1.68E+03                                 | 0.050               | 0.20                   | 1.25E+03                                 | 2.01E+02   | 1.7E+03                                      | 90.200                                      | 1                                    |              |    |
| METALS   | Mercury                   | 1.08E-02                                 | 0.010               | 0.25                   | 8,19E-02                                 | 0.36   | 2.5E-01                                      | 0.012                                       | 1                                    | Ų            |    |
| METALS   | Nickel                    | 1,87E+02                                 | 0.200               | 0.80                   | 6.98E+00                                 | 1.16E+01   | 1.9E+02                                      | 17.000                                      | 1                                    |              |    |
| METALS   | Potassium                 | NE                                       | NA                  | NA                     | NA                                       | NA   |  | 473.000                                     | 1                                    |              |    |
| METALS   | Selenium                  | 1.27E+02                                 | 0.100               | 0.20                   | 3.48E+00                                 | 5.57E+00   | 1.3E+02                                      | 0.177                                       | 1                                    | J            | J  |
| METALS   | Silver                    | 4.68E+01                                 | 0.050               | 0.20                   | 0.31                                     | 0.37   | 4.7E+01                                      | 1.710                                       | 1                                    | U            |    |
| METALS   | Sodium                    | NE                                       | NA                  | NA                     | NA                                       | NA   |  | 338.000                                     | 1                                    |              |    |
| METALS   | Thailium                  | 2.0E+00                                  | 0.010               | 0.02                   | 0.47                                     | NE   | 2.0E+00                                      | 0.089                                       | 1                                    |              |    |
| METALS   | Vanadium                  | 4.84E+01                                 | 0.125               | 0.50                   | 3.21E+01                                 | 4.46E+01   | 4.8E+01                                      | 17.100                                      | 1                                    |              |    |
| METALS   | Zinc                      | 5.94E+03                                 | 0.625               | 2.50                   | 61.6                                     | 2.02E+01   | 5.9E+03                                      | 39.200                                      | 1                                    |              |    |
| SOLIDS   | Percent Solids            | NE                                       |                     | 84.500                 | NE                                       | NE   | 8.5E+01                                      | 84.500                                      | 1                                    |              |    |

00066434

### Table 4-20

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump 020

| [SUMP] = SUMP020<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | <i>1</i>                              | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backg<br>Concentrat<br>(95% UP)<br>Surface | round<br>ions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP020-SB01<br>35-SMP20-SB01-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG | 35SUMP020-SB01<br>35-SMP20-SB01-02<br>9/11/2006<br>6.5 - 6.5 Ft<br>REG | STEP-46SS04<br>46SS04(0-0_5)-020312<br>3/12/2002<br>0 - 0.5 Ft<br>REG | STEP-46SS04<br>46SS04(1-2)-020312<br>3/12/2002<br>1 - 2 Ft<br>REG |
|--|---------------------------------------|--|---------------------|------------------------|--|--|--|--|--|---|---|
| Test Group   | Parameter (Units = mg/kg)             | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                                 | 1.5 - 2.5 Ft                                     | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LO VO  |
| METALS   | Aluminum                              | 1.6E+04                                  | 10,000              | 20.00                  | 16300                                      | 2.08E+04   | 1.6E+04                                      | 9290.000 1   | 12200.000 1  |   |   |
| METALS   | Antimony                              | 7.3E+00                                  | 0.500               | 0.10                   | 0.94                                       | 1.6  | 7.3E+00                                      | 0.068 1 J J  | 0,117 1 U  |   |   |
| METALS   | Arsenic                               | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                   | 5.54E+00   | 2.02+01                                      | 2.300 1  | 1.500 1  |   |   |
| METALS   | Banum                                 | 2.65+03                                  | 0.075               | 0.30                   | 6.45E-01                                   | 0.00E+01   | 2.6E+03                                      | 0.763 1  | 0.496 1  |   |   |
| METALS   | Cadmium                               | 5 2E+00                                  | 0.025               | 0.10                   | 1.4  | 0.4  | 5.2E+00                                      | 0.146 1 J J  | 0.145 1 J J  |   |   |
| METALS   | Calcium                               | NE                                       | NA                  | NA                     | NA   | NA   |  | 544.000 1 J  | 753.000 1 J  |   |   |
| METALS   | Chromium                              | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                                   | 3.01E+01   | 5.9E+03                                      | 10.700 1   | 13.800 1   |   |   |
| METALS   | Cobalt                                | 1.5E+03                                  | 0.125               | 0.50                   | 7.23E+00                                   | 5.61E+00   | 1.5E+03                                      | 3.820 1 J  | 5.650 1 J  |   | ,   |
| METALS   | Copper                                | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                                   | 9.25E+00   | 1.0E+03                                      | 3.820 1  | 5.740 1  |   |   |
| METALS   | Iron                                  | NE<br>E OE ION                           | NA<br>0.500         | NA<br>E 00             | NA<br>2.265±01                             | NA<br>1.14E+01                                   | E 0E+02                                      | 0 300 1  | 6230 1 .1  |   |   |
| METALS   | Lead                                  | 5.02+02                                  | 0.500               | 5.00<br>NA             | 2.2000+01                                  |  | 5.02+02                                      | 803.000 1  | 1190.000 1   |   |   |
| METALS   | Magnesium                             | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                   | 2.01E+02   | 1.7E+03                                      | 123.000 1  | 36.900 1   |   |   |
| METALS   | Mercury                               | 1,1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                   | 0.36   | 2.5E-01                                      | 0.053 1 J J  | 0.035 1 J J  |   |   |
| METALS   | Nickel                                | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                   | 1.16E+01   | 1.9E+02                                      | 5.710 1  | 15.400 1   |   |   |
| METALS   | Potassium                             | NE                                       | NA                  | NA                     | NA   | NA   |  | 408.000 1  | 617.000 1  |   |   |
| METALS   | Selenium                              | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                   | 5.57E+00   | 1.3E+02                                      | 0.437 1  | 0.234 1 0  |   |   |
| METALS   | Silver                                | 4.72+01                                  | 0.050               | 0.20<br>NA             | 0.31<br>NA                                 | 0.37<br>NA                                       | 4.76+01                                      | 40.800 1   | 172.000 1  |   |   |
| METALS   | Thelium                               | 2 0E+00                                  | 0.010               | 0.02                   | 0.47                                       | NE   | 2.0E+00                                      | 0.071 1  | 0.107 1  |   |   |
| METALS   | Vanadium                              | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01                                   | 4.46E+01   | 4.8E+01                                      | 22.700 1   | 20.900 1   |   |   |
| METALS   | Zinc                                  | 5.9E+03                                  | 0.625               | 2.50                   | 61.6                                       | 2.02E+01   | 5.9E+03                                      | 19.100 1   | 32.600 1   |   |   |
| PERC   | Perchlorate                           | 1.4E+01                                  | 0.005               | 0.01                   | NE   | NE   | 1.4E+01                                      | 0.010 1 U  | 0.010 1 U  | 0.054 1 U U   | 0.048 1 0 0   |
| RANGE_ORGANICS   | Carbon Range C12-C28                  | 4.0E+02                                  | 25                  | 50                     | NE   | NE   | 4.0E+02                                      | 56,800 1 0   | 58,000 1 0   |   |   |
| RANGE_ORGANICS   | Carbon Range C28-C35                  | 4.02+02                                  | 25                  | 50                     | NE   | NE   | 4.05+02                                      | 56.800 1 U   | 58,000 1 U   |   |   |
| SOLIDS   | Carbon Range Co-C12<br>Percent Solids | NF                                       | NA                  | NA                     | NE   | NE   |  | 87,700 1   | 85.400 1   |   |   |
| VOLATILES  | 1.1.1.2-Tetrachloroethane             | 5.2E+00                                  | 0.0005              | 0.005                  | NE   | NE   | 5.2E+00                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,1,1-Trichloroethane                 | 2.3E+02                                  | 0.0005              | 0.005                  | NE   | NE   | 2.3E+02                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,1,2,2-Tetrachloroethane             | 5.1E-01                                  | 0.0005              | 0.005                  | NE   | NE   | 5.1E-01                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,1,2-Trichloroethane                 | 9.7E-01                                  | 0.0005              | 0.005                  | NE   | NE   | 9.7E-01                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,1-Dichloroethane                    | 8.96+01                                  | 0.0010              | 0.005                  | NE   | NE   | 8.9E+01                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,1-Dichlorooronene                   | 9.9E-01                                  | 0.0005              | 0.005                  | NE   | NE   | 9.9E-01                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1.2.3-Trichlorobenzene                | 4.2E+01                                  | 0.0005              | 0.005                  | NE   | NE   | 4.2E+01                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,2,3-Trichloropropane                | 9.2E-02                                  | 0.0010              | 0.005                  | NE   | NE   | 9.2E-02                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,2,4-Trichlorobenzene                | 1.4E+02                                  | 0,0005              | 0.005                  | NE   | NE   | 1.4E+02                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,2,4-Trimethylbenzene                | 9.6E+00                                  | 0.0005              | 0.005                  | NE   | NE   | 9.6E+00                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,2-Dibromo-3-chloropropane           | 3.5E-01                                  | 0.0020              | 0.005                  | NE   | NE   | 3.52-01                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,2-Dipromoernane                     | 5.65+02                                  | 0.0005              | 0.005                  | NE   | NE   | 5.6E+01                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1.2-Dichlomethane                     | 2.7E-01                                  | 0.0005              | 0.005                  | NE   | NE   | 2.7E-01                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,2-Dichloropropane                   | 1.8E+00                                  | 0.0005              | 0.005                  | NE   | NE   | 1.8E+00                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylene)        | 3.3E+03                                  | 0.0005              | 0.005                  | NE   | NE   | 3.3E+03                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,3,5-Trimethylbenzene                | 8.3E+00                                  | 0.0005              | 0.005                  | NE   | NE   | 8.3E+00                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 1,3-Dichlorobenzene                   | 5.1E+00                                  | 0.0005              | 0.005                  | NE   | NE   | 5.12+00                                      |  | 0.005 1 0  |   |   |
| VOLATILES  | 1.3-Dichlorophopane                   | 275+01                                   | 0.0005              | 0.005                  | NE   | NE   | 2.7E+01                                      |  | 0.005 1 U  | -   |   |
| VOLATILES  | 2.2-Dichloropropane                   | 1.7E+00                                  | 0.0005              | 0.005                  | NE   | NE   | 1.7E+00                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 2-Butanone                            | 2.6E+03                                  | 0.0025              | 0.010                  | NE   | NE   | 2.6E+03                                      |  | 0.009 1 U UJ   |   |   |
| VOLATILES  | 2-Chloroethyl vinyl ether             | 2.1E-01                                  | 0.0020              | 0.010                  | NE   | NE   | 2.1E-01                                      |  | 0.009 t U  |   |   |
| VOLATILES  | 2-Chlorotoluene                       | 1.5E+02                                  | 0.0005              | 0.005                  | NE   | NE   | 1.5E+02                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | 2-Hexanone                            | 6.2E+00                                  | 0.0025              | 0.010                  | NE   | NE   | 6.2E+00                                      |  | 0.009 1 0 03   |   |   |
| VOLATILES  | 4-Unitororonuene<br>Acetone           | 3.4C-U1                                  | 0.0005              | 0.005                  | NE   | NE   | 1.7E+02                                      |  | 0.005 1 .  |   |   |
| VOLATILES  | Benzene                               | 8.8E-01                                  | 0,0005              | 0.005                  | NF   | NE   | 8.8E-01                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | Bromobenzene                          | 1.1E+01                                  | 0.0005              | 0.005                  | NE   | NE   | 1.1E+01                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | Bromochloromethane                    | 2.4E+01                                  | 0.0005              | 0.005                  | NE   | NE   | 2.4E+01                                      | 1  | 0.005 1 U  |   |   |
| VOLATILES  | Bromodichloromethane                  | 1.0E+01                                  | 0.0005              | 0.005                  | NE   | NE   | 1.0E+01                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | Bromoform                             | 3.4E+01                                  | 0.0005              | 0.005                  | NE   | NE   | 3.4E+01                                      |  | 0.005 1 U  |   |   |
| VOLATILES  | Bromomethane<br>Carbon disulfide      | 3.52-01                                  | 0.0010              | 0.010                  | NE   | NE   | 3.5E-01<br>1.0=+02                           | 1  | 0.005 1 1  |   |   |
| VOLATILES  |                                       | 1.02.02                                  | 0.0000              | 0.000                  | 1964                                       | 1 The  | 1.02.02                                      | •  |  |   |   |

Shaw Environmental, Inc.

### Table 4-20

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump 020

| [SUMP] ≈ SUMP020<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _    | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>itions in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUM<br>35-SMP<br>9/1<br>0 -<br>F | P020-SB01<br>20-SB01-01<br>1/2006<br>0.5 Ft<br>≷EG | 35SUMF<br>35-SMP<br>9/1<br>6.5<br>F | P020-SB01<br>20-SB01-02<br>1/2006<br>- 6.5 Ft<br>REG | STE<br>46SS04(<br>3/<br>0 | P-46SS04<br>D-0_5}-020312<br>12/2002<br>- 0.5 Ft<br>REG | STEF<br>46SS04(<br>3/1<br>1 | -46SS04<br>1-2)-020312<br>2/2002<br>- 2 Ft<br>REG |
|--|---------------------------|--|---------------------|-------------|---|--|--|------------------------------------|--|-------------------------------------|--|---------------------------|---|-----------------------------|---|
| Test Group   | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  | Result                             | DIL LA VA  | Result                              | DIL LQ VO  | Result                    | DIL LO VO   | Result                      | DIL LO VO   |
| VOLATILES  | Carbon tetrachloride      | 3.5E-01                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.5E-01                                      |                                    |  | 0,005                               | 1 U  |                           |   |                             |   |
| VOLATILES  | Chlorobenzene             | 4.0E+01                                  | 0.0005              | 0.005       | NE                                      | NE   | 4.0E+01                                      |                                    |  | 0.005                               | i 1 U  |                           |   |                             |   |
| VOLATILES  | Chloroethane              | 1.1E+03                                  | 0.0010              | 0.010       | NE                                      | NE   | 1.1E+03                                      |                                    |  | 0.009                               | ) 1 U  |                           |   |                             |   |
| VOLATILES  | Chloroform                | 3.1E-01                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.1E-01                                      |                                    |  | 0.005                               | 5 1 U  |                           |   |                             |   |
| VOLATILES  | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010       | NË                                      | NE   | 2.3E-01                                      |                                    |  | 0.009                               | 0 1 U  |                           |   |                             |   |
| VOLATILES  | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.2E+02                                      |                                    |  | 0.005                               | i 1 U  |                           |   |                             |   |
| VOLATILES  | cis-1,3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.2E+00                                      |                                    |  | 0.005                               | i 1 U  |                           |   |                             |   |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 7.6E+00                                      |                                    |  | 0.005                               | i 1 U  |                           |   |                             |   |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.9E+01                                      |                                    |  | 0.005                               | i 1 U  |                           |   |                             |   |
| VOLATILES  | Dichlorodifuoromethane    | 2.2E+02                                  | 0.0010              | 0.010       | NE                                      | NE   | 2.2E+02                                      |                                    |  | 0.005                               | H U  |                           |   |                             |   |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 4.3E+02                                      |                                    |  | 0.005                               | 5 1 U  |                           |   |                             |   |
| VOLATILES  | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.6E+00                                      |                                    |  | 0.005                               | 5 1 U  |                           |   |                             |   |
| VOLATILES  | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 5.4E+02                                      |                                    |  | 0.005                               | 5 1 U  |                           |   |                             |   |
| VOLATILES  | m.p-Xvlenes               | 2.3E+02                                  | 0.0005              | 0.005       | NÉ                                      | NE   | 2.3E+02                                      |                                    |  | 0.005                               | 51U  |                           |   |                             |   |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01        | NE                                      | NE   | 1.3E+03                                      |                                    |  | 0.009                               | 91U  |                           |   |                             |   |
| VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005       | NE.                                     | NE   | 8.7E+00                                      |                                    |  | . 0.005                             | 5 1 U  |                           |   |                             |   |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01        | NE                                      | NE   | 1.8E+01                                      |                                    |  | 0.009                               | 9 1 U  |                           |   |                             |   |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.7E+02                                      |                                    |  | 0.005                               | 51 U   |                           |   |                             |   |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.2E+02                                      |                                    |  | 0.005                               | 5 1 U  |                           |   |                             |   |
| VOLATILES  | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 4.2E+02                                      |                                    |  | 0.005                               | 51U  |                           |   |                             |   |
| VOLATILES  | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.0E+02                                      |                                    |  | 0.005                               | i 1 U  |                           |   |                             |   |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.3E+03                                      |                                    |  | 0.008                               | 51 U   |                           |   |                             |   |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.6E+02                                      |                                    |  | 0.005                               | 51 U   |                           |   |                             |   |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 6.0E+00                                      |                                    |  | 0.005                               | 51 U   |                           |   |                             |   |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.1E+03                                      |                                    |  | 0.005                               | 51U  |                           |   |                             |   |
| VOLATILES  | trans-1.2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.4E+02                                      |                                    |  | 0.005                               | 51 U   |                           |   |                             |   |
| VOLATILES  | trans-1,3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.8E+00                                      |                                    |  | 0.006                               | 51 U   |                           |   |                             |   |
| VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.7E+00                                      |                                    |  | 0.005                               | 5 1 U  |                           |   |                             |   |
| VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01        | NE                                      | NE   | 2.6E+02                                      |                                    |  | 0.009                               | ) 1 U  |                           |   |                             |   |
| VOLATILES  | Vinyl acetate             | 5.7E+01                                  | 0.0010              | 0.01        | NE                                      | NË   | 5.7E+01                                      |                                    |  | 0.009                               | ) 1 U  |                           |   |                             |   |
| VOLATILES  | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.01        | NE                                      | NE   | 3.6E-02                                      |                                    |  | 0.009                               | <u>1 U</u>   |                           |   |                             |   |

.....

## 00066436

# Table 4-21 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-021

| SUMP] = SUMP<br>LOCATION _CO<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH | 021<br>DE                        | TCEQ<br>Risk-Based<br>Screening | Method      | Method       | Back<br>Concentra<br>(95% UF | ground<br>tions in Soll<br>L, mg/kg) | Applicble<br>TCEQ<br>Risk-Based | 35SUMP021-SB0<br>35-SMP21-SB01-<br>9/11/2006<br>4.5 - 4.5 Ft | )1<br>02     | 35SUMP02<br>35-SMP21-5<br>9/11/20<br>4.5 - 4.5 | 1-SB0<br>SB02-<br>006<br>5 Ft | )2<br>02   |           |
|---|----------------------------------|---------------------------------|-------------|--------------|------------------------------|--------------------------------------|---------------------------------|--|--------------|--|-------------------------------|------------|-----------|
| SAMPLE_PURP   | OSE                              | Value                           | Detection   | Quantitation | Surface                      | Subsurface                           | Screening                       | REG  |              | REG  | •                             |            |           |
| Test Group  | Parameter (Units = mg/kg)        | (RBSV)                          | Limit (MDL) | Limit (MQL)  | 0-0.5 Ft                     | 1.5 - 2.5 Ft                         |                                 | Result DiL L   | <u>.a va</u> | 26700 000                                      |                               | <u>Q</u> \ | <u>/Q</u> |
|   | สมเตริเตรี                       | 1.0E+04                         | 10.000      | 20.00        | 0.40E-01                     | 2.00E+04<br>1.60E+00                 | 7.35+00                         | 0 129 1  | ., L         | 0 120  | 1                             | 11         |           |
| METALS  | Amonia                           | 2.05+00                         | 0.000       | 0.10         | 9.40E-01                     | 5.54E+00                             | 2.0E+01                         | 1410 1   | Ŭ .I         | 2 530  | 1                             | •          | л         |
| METALO  | Barium                           | 2.65+03                         | 0.075       | 0.30         | 1 52E+02                     | 8.555+01                             | 2.6E+03                         | 203.000 1  | •            | 154.000  | 1                             |            | -         |
| METALS  | Bendium                          | 4.65+00                         | 0.012       | 0.50         | 6.45E-01                     | 7.66E-01                             | 4.6E+00                         | 0.869 1  |              | 0.883  | i                             |            |           |
| METALS  | Cadmium                          | 5.2E+00                         | 0.025       | 0.10         | 1.40E+00                     | 4.00E-01                             | 5.2E+00                         | 0.188 1  | JJ           | 0.123  | 1                             | J          | J         |
| METALS  | Calcium                          | NE                              | NA          | NA           | NA                           | NA                                   | -                               | 2620.000 1   |              | 307.000  | 1                             |            |           |
| METALS  | Chromium                         | 5.9E+03                         | 0.100       | 0.40         | 2.66E+01                     | 3.01E+01                             | 5.9E+03                         | 23.400 1   |              | 25.600   | 1                             |            |           |
| METALS  | Cobalt                           | 1.5E+03                         | 0.125       | 0.50         | 7.23E+00                     | 5.61E+00                             | 1.5E+03                         | 5.770 1  |              | 8.290  | 1                             |            |           |
| METALS  | Copper                           | 1.0E+03                         | 0.150       | 0.60         | 5.55E+00                     | 9.25E+00                             | 1.0E+03                         | 7,020 1  |              | 6.450  | 1                             |            |           |
| METALS  | Iron                             | NE                              | NA          | NA           | NA                           | NA                                   |                                 | 21200.000 1  |              | 24100.000                                      | 1                             |            |           |
| METALS  | Lead                             | 5.0E+02                         | 0.500       | 5.00         | 2,26E+01                     | 1.14E+01                             | 5.0E+02                         | 9.980 1  | J            | 13.400   | 1                             |            | 1         |
| METALS  | Magnesium                        | NE                              | NA          | NA           |                              | NA<br>0.015.00                       | 1 75+02                         | 2140.000 1   |              | 107.000  | 4                             |            |           |
| METALS  | Manganese                        | 1,72+03                         | 0.050       | 0.20         | 1.202+03                     | 2.010+02                             | 2.55-01                         | 0.036 1  | 1 4          | 0.021  | -                             | 1          |           |
| METALO  | Nieko                            | 1.12-02                         | 0.010       | 0.20         | 6.095+02                     | 1 165+01                             | 1.05+01                         | 10 400 1   | 5 5          | 10 100   | 1                             | •          |           |
| METALS  | Dotaccium                        | NE                              | NA NA       | NA           | NA NA                        | NA                                   | 1.02.02                         | 660.000 1  |              | 680,000  | i                             |            |           |
| METALS  | Selenium                         | 135+02                          | 0 100       | 0.20         | 3 48E+00                     | 5.57E+00                             | 1.3E+02                         | 0.217 1  | JJ           | 0.206  | 1                             | J          | J         |
| METALS  | Silver                           | 4.7E+01                         | 0.050       | 0.20         | 3.10E-01                     | 3.70E-01                             | 4.7E+01                         | 1,940 1  | Ū            | 1.710  | 1                             | Ū          |           |
| METALS  | Sodium                           | NE                              | NA          | NA           | NA                           | NA                                   |                                 | 245.000 1  |              | 934.000  | 1                             |            |           |
| METALS  | Thallium                         | 2.0E+00                         | 0.010       | 0.02         | 4.70E-01                     | NE                                   | 2.0E+00                         | 0.094 1  |              | 0.140  | 1                             |            |           |
| METALS  | Vanadium                         | 4.8E+01                         | 0.125       | 0.50         | 3.21E+01                     | 4.46E+01                             | 4.8E+01                         | 35.300 1   |              | 42.600   | 1                             |            |           |
| METALS  | Zinc                             | 5.9E+03                         | 0.625       | 2.50         | 6.16E+01                     | 2.02E+01                             | 5.9E+03                         | 36.600 1   |              | 32,800   | 1                             |            |           |
| PERC  | Perchlorate                      | 1.4E+01                         | 0.005       | 0.01         | NE                           | NE                                   | 1.4E+01                         | 0.010 1  | U            | 0.010  | 1                             | U          |           |
| SOLIDS  | Percent Solids                   | NE                              | NA          | NA           | NE                           | NE                                   |                                 | 76.300 1   |              | 83.300   | 1                             |            |           |
| VOLATILES   | 1,1,1,2-Tetrachloroethane        | 5.2E+00                         | 0.0005      | 0.005        | NE                           | NE                                   | 5.2E+00                         | 0.006 1  | U            | 0.007  | 1                             | U.         |           |
| VOLATILES   | 1,1,1-Trichloroethane            | 2.3E+02                         | 0.0005      | 0.005        | NE                           | NE                                   | 2.3E+02                         | 0.006 1  | 0            | 0.007  | 1                             | u<br>      |           |
| VOLATILES   | 1,1,2,2-1 etrachioroethane       | 5.12-01                         | 0.0005      | 0.005        | NE                           | NE                                   | 0.1E-01                         | 0.006 1  |              | 0.007  | -                             | u<br>II    |           |
| VOLATILES   | 1,1,2-Inchoroethane              | 9.72-01                         | 0.0005      | 0.005        |                              |                                      | 9.75-01                         | 0.006 1  | ii ii        | 0.007  | 1                             | ŭ          |           |
| VOLATILES   | 1 1-Dichloroetherie              | 276+01                          | 0.0010      | 0.005        | NE                           | NE                                   | 2 7E+01                         | 0.006 1  | ŭ            | 0.007  | ÷                             | ŭ          |           |
| VOLATILES   | 1 1-Dichloronronene              | 9.9E-01                         | 0.0005      | 0.005        | NE                           | NE                                   | 9.9F-01                         | 0.006 1  | บั           | 0.007  | 1                             | ŭ          |           |
| VOLATILES   | 1.2.3-Trichlorobenzene           | 4.2E+01                         | 0.0005      | 0.005        | NE                           | NE                                   | 4.2E+01                         | 0.006 1  | Ũ            | 0.007  | 1                             | Ū          |           |
| VOLATILES   | 1.2.3-Trichloropropane           | 9.2E-02                         | 0.0010      | 0.005        | NE                           | NE                                   | 9.2E-02                         | 0.006 1  | Ū            | 0.007  | 1                             | Ú          |           |
| VOLATILES   | 1,2,4-Trichlorobenzene           | 1.4E+02                         | 0.0005      | 0.005        | NE                           | NE                                   | 1.4E+02                         | 0.006 1  | υ            | 0.007  | 1                             | U          |           |
| VOLATILES   | 1,2,4-Trimethylbenzene           | 9.6E+00                         | 0.0005      | 0.005        | NE                           | NE                                   | 9.6E+00                         | 0.006 1  | U            | 0.007  | 1                             | U          |           |
| VOLATILES   | 1,2-Dibromo-3-chloropropane      | 3.5E-01                         | 0.0020      | 0.005        | NE                           | NE                                   | 3.5E-01                         | 0.006 1  | U            | 0.007  | 1                             | U          |           |
| VOLATILES   | 1,2-Dibromoethane                | 5.3E-02                         | 0,0005      | 0.005        | NE                           | NE                                   | 5.3E-02                         | 0.006 1  | U            | 0,007  | 1                             | U.         |           |
| VOLATILES   | 1,2-Dichlorobenzene              | 5.6E+01                         | 0.0005      | 0.005        | NE                           | NE                                   | 5.6E+01                         | 0.006 1  | U.           | 0.007  | 1                             | U.         |           |
| VOLATILES   | 1,2-Dichloroethane               | 2.7E-01                         | 0.0005      | 0.005        | NE                           | NE                                   | 2.78-01                         | 0.006 1  | U            | 0.007  | 1                             | 0          |           |
| VOLATILES   | 1,2-Dichloropropane              | 1.8E+00                         | 0.0005      | 0.005        | NE                           | NE                                   | 1.8±+00                         | 0.006 1  | บ<br>11      | 0.007  | 4                             | U<br>11    |           |
|   | 1,2-Dinietnyibelizene (0-Aylene) | 3.35+03                         | 0.0005      | 0.005        |                              |                                      | 3.3E+03                         | 0.000 1  | ม            | 0.007  | 1                             | ň          |           |
|   | 1.3-Dichlorobeozene              | 516+00                          | 0.0005      | 0.005        | NE                           | NE                                   | 5 1E+00                         | 0.006 1  | ŭ            | 0.007  | i                             | นั         |           |
| VOLATILES   | 1.3-Dichloropronane              | 3 0E+00                         | 0.0005      | 0.005        | NE                           | NE                                   | 3.0E+00                         | 0.006 1  | ũ            | 0.007  | 1                             | Ũ          |           |
| VOLATILES   | 1.4-Dichlorobenzene              | 2.7E+01                         | 0.0005      | 0.005        | NE                           | NE                                   | 2.7E+01                         | 0.006 1  | Ū            | 0.007  | 1                             | Ū          |           |
| VOLATILES   | 2.2-Dichloropropane              | 1.7E+00                         | 0.0005      | 0.005        | NE                           | NE                                   | 1.7E+00                         | 0.006 1  | U            | 0.007  | 1                             | U          |           |
| VOLATILES   | 2-Butanone                       | 2.6E+03                         | 0.0025      | 0.010        | NE                           | NE                                   | 2.6E+03                         | 0.011 1  | υ            | 0.014  | 1                             | Ų          |           |
| VOLATILES   | 2-Chloroethyl vinyl ether        | 2.1E-01                         | 0.0020      | 0.010        | NË                           | NE                                   | 2.1E-01                         | 0.011 1  | U            | 0.014  | 1                             | U          |           |
| VOLATILES   | 2-Chlorototuene                  | 1.5E+02                         | 0.0005      | 0.005        | NE                           | NE                                   | 1.5E+02                         | 0.006 1  | U            | 0.007  | 1                             | U          |           |
| VOLATILES   | 2-Hexanone                       | 6.2E+00                         | 0.0025      | 0.010        | NE                           | NE                                   | 6.2E+00                         | 0.011 1  | U            | 0.014  | 1                             | U          |           |
| VOLATILES   | 4-Chlorotoluene                  | 3.4E-01                         | 0.0005      | 0.005        | NE                           | NE                                   | 3.4E-01                         | 0.006 1  | U _          | 0.007  | 1                             | U.         | _         |
| VOLATILES   | Acetone                          | 1.7E+02                         | 0.0050      | 0.010        | NE                           | NE                                   | 1.7E+02                         | 0.011 1  | JB           | 0.007  | 1                             | 1<br>J     | в         |
| VOLATILES   | Benzene                          | 8.8E-01                         | 0.0005      | 0.005        | NE                           | NE                                   | 8.8E-01                         | 0.006 1  | u<br>        | 0.007  | 1                             |            |           |
| VOLATILES   | Bromobenzene                     | 1.12+01                         | 0.0005      | 0.005        | NE                           | NE                                   | 1.1E+01                         | 0.000 1  | U<br>II      | 0.007  | 1                             | ü          |           |
| VOLATILES   | Bromodichloromothene             | 2.42101                         | 0.0005      | 0.005        |                              | NE                                   | 2.4ETU1                         | 0.000 1  | ŭ            | 0.007  | 1                             | ň          |           |
| VOLATILES   | Bromoform                        | 3.45+01                         | 0.0005      | 0.005        | NE                           | NE                                   | 3 45+01                         | 0.006 1  | ü            | 0.007  | 1                             | ŭ          |           |
| VOLATILES   | Bromomelhane                     | 3.55-01                         | 0.0000      | 0.005        | NE                           | NE                                   | 3.55-01                         | 0.011 1  | ũ            | 0.014  | i                             | ũ          |           |
| VOLATILES   | Carbon disulâde                  | 1.05+02                         | 0 0005      | 0.005        | NE                           | NE                                   | 1.0E+02                         | 0.006 1  | ม            | 0.007  | 1                             | ũ          |           |
| VOLATILES   | Carbon tetrachloride             | 3.5E-01                         | 0.0005      | 0.005        | NE                           | NE                                   | 3.5E-01                         | 0.006 1  | Ū            | 0.007  | 1                             | Ū          |           |
| VOLATILES   | Chlorobenzene                    | 4.0E+01                         | 0.0005      | 0.005        | NE                           | NE                                   | 4.0E+01                         | 0.006 1  | U            | 0.007  | 1                             | U          |           |
| VOLATILES   | Chloroethane                     | 1.1E+03                         | 0.0010      | 0.010        | NE                           | NE                                   | 1.1E+03                         | 0.011 1  | U            | 0.014  | 1                             | U          |           |
| VOLATILES   | Chloroform                       | 3.1E-01                         | 0.0005      | 0.005        | NE                           | NE                                   | 3.1E-01                         | 0.006 1  | U            | 0.007  | 1                             | u          |           |

## 00066437

|           | Table 4-21  |
|-----------|---|
| Compariso | n of Chemical Concentrations in Soil to Risk-Based Screening Values |
|           |   |

Sump-021

|  |                           |  |                     |                        | -                                       |  | 1 1  |  |  |
|--|---------------------------|--|---------------------|------------------------|---|--|--|--|--|
| [SOMP] = SOMP<br>LOCATION_CC<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURF | 2021<br>DDE<br>:<br>:     | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UP<br>Surface | ground<br>ations in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP021-S801<br>35-SMP21-S801-02<br>9/11/2006<br>4.5 - 4.5 Ft<br>REG | 35SUMP021-SB02<br>35-SMP21-SB02-02<br>9/11/2006<br>4.5 - 4.5 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg) | (RBSV)*                                  | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   |
| VOLATILES  | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NE                                      | NE   | 2.3E-01                                      | 0.011 1 U  | 0.014 1 U  |
| VOLATILES  | cis-1,2-Dichtoroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.2E+02                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | cis-1,3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.2E+00                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 7.6E+00                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.9E+01                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                      | NE   | 2.2E+02                                      | 0.011 1 U  | 0.014 1 U  |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NÉ   | 4.3E+02                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.6E+00                                      | 0.006 t U  | 0.007 1 U  |
| VOLATILES  | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NË   | 5.4E+02                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | m,p-Xylenes               | 2,3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.3E+02                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NË                                      | NE   | 1.3E+03                                      | 0.011 1 U  | 0.014 1 U  |
| VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                      | NE   | 8.7E+00                                      | 0.006 i U  | 0.007 1 U  |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NE                                      | NE   | 1.8E+01                                      | 0.011 1 U  | 0.014 1 U  |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.7E+02                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NÉ                                      | NE   | 3.2E+02                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.2E+02                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | Sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.0E+02                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.3E+03                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.6E+02                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | Tetrachioroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 6.0E+00                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.1E+03                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | trans-1,2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.4E+02                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | trans-1.3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.8E+00                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.7E+00                                      | 0.006 1 U  | 0.007 1 U  |
| VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 2.6E+02                                      | 0.011 1 U  | 0.014 1 U  |
| VOLATILES  | Vinvl acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NE                                      | NE   | 5.7E+01                                      | 0.011 1 U  | 0.014 1 U  |
| VOLATILES  | Vinvl chloride            | 3.6E-02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 3.6E-02                                      | 0.011 1 U  | 0.014 1 U  |

Shaw Environmental, Inc.

00066438

# Table 4-22 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|   |   |  |                     |                        |   | Su   | mp-022                                       |  |  |   |   |
|---|---|--|---------------------|------------------------|---|--|--|--|--|---|---|
| SUMP] = SUMP022<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PUBPOSE |   | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backg<br>Concentrat<br>(95% UP<br>Surface | round<br>ions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP022-SB01<br>35-SMP22-SB01-01<br>9/13/2006<br>0.5 - 0.5 Ft<br>REG | 355UMP022-SB01<br>35-SMP22-SB01-02<br>9/13/2006<br>8 - 8 Ft<br>REG | STEP-46SS05<br>46SS05(0-0_5)-020312<br>3/12/2002<br>0 - 0.5 Ft<br>REG | STEP-46SS05<br>46SS05(1-2)-020312<br>3/12/2002<br>1 - 2 Ft<br>REG |
| Test Group  | Parameter (Units = mg/kg)               | (RB\$V) "                                | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft                                     | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VQ  |
| METALS  | Aluminum                                | 1.6E+04                                  | 10.000              | 20.00                  | 1.63E+04                                  | 2.08E+04   | 16300  | 7240.000 1   | 6320.000 1   |   |   |
| METALS  | Antimony                                | 7.3E+00                                  | 0.500               | 0.10                   | 9.40E-01                                  | 1.60E+00   | 7.25   | 0.349 1  | 3 300 1  |   |   |
| METALS  | Arsenic<br>Barium                       | 2.02+01                                  | 0.075               | 0.30                   | 1.52E+02                                  | 8.55E+01   | 2610   | 88.600 1 J   | 43.600 1 J   |   |   |
| METALS  | Beryllium                               | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                  | 7.66E-01   | 4.56   | 0.402 1 J J  | 1.030 1  |   |   |
| METALS  | Cadmium                                 | 5.2E+00                                  | 0.025               | 0.10                   | 1.40E+00                                  | 4.00E-01   | 5.2  | 0.163 1 J J  | 0.119 1 J J  |   |   |
| METALS  | Calcium                                 | NE<br>5 OS±02                            | NA<br>0.100         | NA<br>0.40             | NA<br>2.665±01                            | NA<br>3.01E±01                                   | 5930   | 15 500 1 J   | 78.900 1 J   |   |   |
| METALS  | Cobalt                                  | 1.55+03                                  | 0.125               | 0.50                   | 7.235+00                                  | 5.61E+00   | 1530   | 3.140 1  | 5.760 1  |   |   |
| METALS  | Copper                                  | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                                  | 9.25E+00   | 1020   | 5.470 1  | 7.890 1  |   |   |
| METALS  | Iron                                    | NE                                       | NA                  | NA                     | NA  | NA   |  | 14700.000 1  | 56000.000 10   |   |   |
| METALS  | Lead                                    | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                  | 1.14E+01   | 500  | 11.700 1<br>508.000 1  | 585 000 1 J  |   |   |
| METALS  | Magnesium<br>Mangapese                  | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                  | 2.01E+02   | 1680   | 168.000 1  | 103.000 1  |   |   |
| METALS  | Mercury                                 | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                  | 3.60E-01   | 0.25   | 0.031 1 J J  | 0.023 1 J J  |   |   |
| METALS  | Nickel                                  | 1,9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                  | 1.16E+01   | 187  | 4.240 1  | 17.500 1   |   |   |
| METALS  | Potassium                               | NE<br>1 3E±02                            | NA<br>0.100         | NA<br>0.20             | NA<br>3.48E+00                            | NA<br>5.57E+00                                   | 127  | 0.371 1  | 0.224 1 U  |   |   |
| METALS  | Silver                                  | 4.7E+01                                  | 0.050               | 0.20                   | 3.10E-01                                  | 3.70E-01   | 46.8   | 1.680 1 U  | 1.750 1 U  |   |   |
| METALS  | Sodium                                  | NE                                       | NA                  | NA                     | NA  | NA   |  | 123.000 1  | 97.600 1   |   |   |
| METALS  | Thallium                                | 2.02+00                                  | 0.010               | 0.02                   | 4.70E-01                                  | NE<br>4 46E±04                                   | 2.038157282                                  |  | <u>0.097</u> 1<br>60.000 1 J                                       |   |   |
| METALS  | Ziac                                    | 4.65+01<br>5.95+03                       | 0.125               | 2.50                   | 5.21E+01<br>6 16E+01                      | 2.02E+01   | 5940   | 60.000 1 J   | 29.500 t J   |   |   |
| PERC  | Perchlorate                             | 1.4E+01                                  | 0.005               | 0.01                   | NE  | NE   | 13.9   |  |  | 0.051 1 U U   | 0.049 1 U U   |
| SEMIVOLATILES   | 1,2,4-Trichlorobenzene                  | 1.4E+02                                  | 0.083               | 0.17                   | NE  | NE   | 136  | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | 1,2-Dichlorobenzene                     | 5.6E+01                                  | 0.083               | 0.17                   | NE  | NE   | 50.1   | 0.361 2 0  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | 1,3-Dichlombenzene                      | 2.7E+00                                  | 0.083               | 0.17                   | NE  | NE   | 26.7   | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | 2,4,5-Trichlorophenol                   | 1.6E+03                                  | 0.083               | 0.17                   | NĒ  | NE   | 1550   | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | 2,4,6-Trichterophenol                   | 4.5E+01                                  | 0.083               | 0.17                   | NE  | NE   | 44.5   | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | 2,4-Dichlorophenol                      | 4.72+01                                  | 0.083               | 0.17                   | NE  |  | 40.0   | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | 2.4-Dinitrophenol                       | 3.1E+01                                  | 0,330               | 0.83                   | NE  | NE   | 31   | 1.800 2 U  | 0.903 1 U  |   |   |
| SEMIVOLATILES   | 2,4-Dinitrotoluene                      | 7.2E-01                                  | 0.083               | 0.17                   | NË  | NE   | 0.72   | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | 2,6-Dinitrotoluene                      | 7.2E-01                                  | 0.083               | 0.17                   | NE  | NE   | 0.72   | 0.361 2 U  | 0.181 1 0  |   |   |
| SEMIVOLATILES   | 2-Chloronapathalene                     | 1.1E+03<br>1.1E+02                       | 0.083               | 0,17                   | NE  | NE   | 100  | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | 2-Methylnaphthalene                     | 5.5E+01                                  | 0.083               | 0.17                   | NE  | NE   | 54.8   | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | 2-Methylphenol                          | 7.7E+02                                  | 0.083               | 0.17                   | NE  | NE   | 774  | 0,361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | 2-Nitroaniline                          | 4.7E+00                                  | 0,330               | 0.83                   | NE  | NE   | 4.65   | 0.361 2 1  | 0.903 1 0  |   |   |
| SEMIVOLATILES<br>SEMIVOLATILES  | 2-Nitrophenol<br>3 3'-Dicalorobenzidine | 1.1E+00                                  | 0.065               | 0.33                   | NE  | NE   | 1.09   | 0.721 2 U  | 0.361 1 U  |   |   |
| SEMIVOLATILES   | 3-Nitroaniline                          | 4.7E+00                                  | 0.330               | 0.83                   | NE  | NE   | 4.65   | 1.800 2 U  | 0.903 1 U  |   |   |
| SEMIVOLATILES   | 4,6-Dinitro-2-methylphenol              | 3.1E+01                                  | 0.330               | 0.83                   | NE  | NE   | 31   | 1.800 2 U  | 0.903 1 U  |   |   |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether              | 3.1E-02<br>7.7E+01                       | 0.083               | 0.17                   | NE  | NE   | 77.4   | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | 4-Chloroaniline                         | 6.2E+01                                  | 0.083               | 0.17                   | NE  | NE   | 62   | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether             | 2.8E-02                                  | 0.083               | 0.17                   | NE  | NE   | 0,165  | 0,183 2 U  | 0.094 1 U  |   |   |
| SEMIVOLATILES   | 4-Methylphenol                          | 7.7E+01                                  | 0.083               | 0.17                   | NE  | NE   | 77.4   | 0.361 2 U  | 0.181 1 0  |   |   |
| SEMIVOLATILES   | 4-Nitrophenol                           | 3 1E+01                                  | 0.330               | 0.63                   | NË  | NE   | 31   | 1.800 2 U  | 0.903 1 U  |   |   |
| SEMIVOLATILES   | Acenaphthene                            | 8.2E+02                                  | 0.083               | 0.17                   | NE  | NE   | 822  | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | Acenaphthylene                          | 8.2E+02                                  | 0.083               | 0.17                   | NE  | NE   | 822  | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | Anthracene                              | 4.1E+03                                  | 0.0825              | 0.165                  | 1 53E 03                                  | NE   | 4110   | 0.301 2 0  | 0.181 1 1  |   |   |
| SEMIVOLATILES<br>SEMIVOLATILES  | Benzo(a)ovrene                          | 6.3E-01                                  | 0.0825              | 0.165                  | 1.54E-02                                  | NE   | 0.165  | 0.183 2 U  | 0.094 1 U  |   |   |
| SEMIVOLATILES   | Benzo(b)fluoranthene                    | 6.3E-01                                  | 0.0825              | 0.165                  | 1.53E-02                                  | NE   | 0.625  | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | Benzo(ghi)perylene                      | 4.1E+02                                  | 0.0825              | 0.165                  | 1.23E-02                                  | NE   | 411  | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | Benzo(k)fluoranthene                    | 6.3E+00                                  | 0.0825              | 0.165                  | 1.30E-02                                  | NE   | 6.26   | 0,301 2 U<br>1800 2 U  | 0.181 I U<br>0.903 1 U   |   |   |
| SEMIVOLATILES   | Benzyl Alcohol                          | 4.7E+03                                  | 0.0825              | 0.165                  | NE  | NE   | 4650   | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | bis(2-Chloroethoxy)methane              | 2.9E-01                                  | 0.0825              | 0.165                  | NE  | NE   | 0.289  | 0.361 2 U  | 0.181 1 U  |   |   |
| SEMIVOLATILES   | bis(2-Chloroethyi)ether                 | 1.5E-01                                  | 0.0825              | 0.165                  | NE  | NE   | 0.165  | 0.361 2 U  | 0.094 1 0  |   |   |
| SEMIVOLATILES   | Dis(2-Unioroisopropyi)ether             | 4.00+00                                  | 0,0825              | 0.300                  | NE  | NE   | 4./0   | 0.001 4 0  | 0.101 1 0  |   |   |

### MARC No. W912OR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Karnack, Texas

#### Shaw Project No. 117591 7/13/2007

Shaw Environmental, Inc.

00066439

### Table 4-22

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sumo-022

|                        |  |                    |             |              |           | ວແ            | np-uzz     |                  |                  |                      |                                 |
|------------------------|--|--------------------|-------------|--------------|-----------|---------------|------------|------------------|------------------|----------------------|---------------------------------|
| LOCATION CODE          |  |                    |             |              |           |               |            | 2551140000 6004  | 2501 MD022 6004  | STED 460005          |                                 |
| SAMPLE NO              |  | TCEO               |             |              | Back      | around        | Applichle  | 35_SMP22_SB01_01 | 35-SMP22-SB01-02 | 465505(0_0_5\_020312 | 3127-405300                     |
| SAMPLE DATE            |  | Risk-Based         |             |              | Concentra | tions in Soil | TCEQ       | 9/13/2006        | 9/13/2006        | 3/12/2002            | 403305(1-2)-020312<br>3/12/2002 |
| DEPTH                  |  | Screening          | Method      | Method       | (95% UF   | L mo/kg)      | Risk-Based | 0.5-0.5 Ft       | 8-8Et            | 0-05Et               | 1.25                            |
| SAMPLE_PURPOSE         |  | Value              | Detection   | Quantitation | Surface   | Subsurface    | Screening  | REG              | REG              | REG                  | REG                             |
| Test Group             | Parameter (Units ≃ mo/ko)                              | (RBSV)*            | Limit (MDL) | Limit (MQL)  | 0-05Et    | 15-25 Ft      | Value      |                  | Result DIL LO VO | Regult DIL LO VO     |                                 |
| SEMIVOLATILES          | bis(2-Ethylhexyl)phthalate                             | 1.7E+01            | 0.0825      | 0.165        | NE        | NE            | 17.4       | 0.361 2 U        | 0.181 1 U        | Result Dit LQ VQ     | Result DIL LO VO                |
| SEMIVOLATILES          | Butyl benzyl phthalate                                 | 3.1E+03            | 0.0825      | 0.165        | NE        | NE            | 3100       | 0.361 2 U        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | Chrysene   | 6.3E+01            | 0.0825      | 0.165        | 1.51E-02  | NE            | 62.6       | 0.361 2 U        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | Dibenzo(a,h)anthracene                                 | 6.3E-02            | 0.0825      | 0.165        | NE        | NE            | 0.165      | 0.163 2 U        | 0.094 1 U        |                      |                                 |
| SEMIVOLATILES          | Dibenzoluran<br>Diatkud aktivalata                     | 6.2E+01            | 0.0825      | 0.165        | NE        | NE            | 62         | 0.361 2 U        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | Dimethyl obtholoto                                     | 1.26+04            | 0.0825      | 0.165        | NE        | NE            | 12400      | 0.361 2 U        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | di-n-Butyl phthalate                                   | 1.6E+03            | 0.0025      | 0,105        | NE        | NE            | 12400      | 0.361 2 0        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | di-n-Octyl phthalate                                   | 3.1E+02            | 0.0625      | 0.165        | NE        | NE            | 307        | 0.361 2 U        | 0 181 1 U        |                      |                                 |
| SEMIVOLATILES          | Fluoranthene   | 5.5E+02            | 0.0825      | 0.165        | 2.29E-02  | NE            | 548        | 0.361 2 U        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | Fluorene   | 5.5E+02            | 0.0825      | 0.165        | NE        | NE            | 548        | 0.361 2 U        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | Hexachlorobenzene                                      | 2.5E-01            | 0.0825      | 0.165        | NE        | NE            | 0.251      | 0.361 2 U        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | Hexachlorobutadiene                                    | 1.6E+00            | 0.0825      | 0.165        | NE        | NE            | 1.58       | 0.361 2 U        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | Hexachiorocyclopentadiene                              | 1.02+00            | 0.0825      | 0.165        | NE        | NE            | 1.02       | 0.361 2 U        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | Indepo(1.2.3-cd)ovrene                                 | 6.35-01            | 0.0625      | 0.100        | 1 43E 02  | NE            | 15.5       | 0.361 2 U        | U.181 1 U        |                      |                                 |
| SEMIVOLATILES          | Isophorone   | 5.2E+02            | 0.0825      | 0.165        | 1.43E-02  | NE            | 515        | 0.361 2 1        | 0.101 1 0        |                      |                                 |
| SEMIVOLATILES          | Naphthalene  | 1.8E+01            | 0.0825      | 0.165        | NE        | NE            | 18.1       | 0.361 2 U        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | Nitrobenzene   | 6.5E+00            | 0.0825      | 0.165        | NE        | NE            | 6.49       | 0.361 2 U        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | n-Nitroso-di-n-propylamine                             | 4.1E-02            | 0.0825      | 0.165        | NE        | NE            | 0.165      | Q.183 2 U        | 0.094 1 U        |                      |                                 |
| SEMIVOLATILES          | n-Nitrosodiphenylamine                                 | 5.9E+01            | 0.0825      | 0.165        | NE        | NE            | 58.5       | 0.361 2 U        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | Pencachiorophenol                                      | 3.0E+00            | 0.3300      | 0.825        | NE        | NE            | 3.01       | 1.800 2 U        | 0.903 t U        |                      |                                 |
| SEMIVOLATILES          | Phenol   | 4.10102            | 0.0825      | 0.105        | NE        | NE            | 411        | 0.361 2 0        | 0.181 1 U        |                      |                                 |
| SEMIVOLATILES          | Pyrene   | 4.1E+02            | 0.0825      | 0.165        | 1945-02   | NE            | 4000       | 0.361 2 0        | 0.181 1 10       |                      |                                 |
| SOLIDS                 | Percent Solids   | NE                 | NA          | NA           | NE        | NE            | _          | 90,100 1         | 88.100 1         |                      |                                 |
| VOLATILES              | 1,1,1,2-Tetrachtoroethane                              | 5.2E+00            | 0.0005      | 0.005        | NE        | NE            | 5.17       |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 1,1,1-Trichloroethane                                  | 2.3E+02            | 0.0005      | 0.005        | NE        | NE            | 232        |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 1,1,2,2-Tetrachloroethane                              | 5.1E-01            | 0.0005      | 0.005        | NE        | NE            | 0.508      |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 1,1,2-7 Inchloroethane                                 | 9.70-01            | 0.0005      | 0.005        | NE        | NE            | 0.969      |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 1.1-Dichloroethene                                     | 2.7E+01            | 0.0005      | 0.005        | NE        | NE            | 26.8       |                  | 0.005 1 1        |                      |                                 |
| VOLATILES              | 1,1-Dichloropropene                                    | 9.9E-01            | 0.0005      | 0.005        | NE        | NE            | 0.992      |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 1,2,3-Trichlorobenzene                                 | 4.2E+01            | 0.0005      | 0.005        | NE        | NE            | 42         |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 1,2,3-Trichloropropane                                 | 9.2E-02            | 0.0010      | 0.005        | NE        | NE            | 0.0915     |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 1,2,4-Inchiorobenzene                                  | 1.4E+02            | 0.0005      | 0.005        | NE        | NE            | 136        |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 1,2,4-riniteuryidenzene<br>1,2,Dibromo-3-chloropropage | 9.02+00            | 0.0005      | 0.005        | NE        | NE            | 9.6        |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 1.2-Dibromoethane                                      | 5.3E-02            | 0.0020      | 0.005        | NE        | NE            | 0.346      |                  | 0.005 1 0        |                      |                                 |
| VOLATILES              | 1,2-Dichlorobenzene                                    | 5.6E+01            | 0.0005      | 0.005        | NE        | NE            | 56.1       |                  | 0.005 1 11       |                      |                                 |
| VOLATILES              | 1,2-Dichloroethane                                     | 2.7E-01            | 0.0005      | 0.005        | NE        | NE            | 0.269      |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 1,2-Dichloropropane                                    | 1.8E+00            | 0.0005      | 0.005        | NE        | NE            | 1.8        |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 1,2-Dimethylbenzene (o-Xylene)                         | 3.3E+03            | 0.0005      | 0.005        | NE        | NE            | 3270       |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 1,3,5-1 nmeinylbenzene                                 | 8.3E+00<br>5.1E+00 | 0.0005      | 0.005        | NE        | NE            | 8.28       |                  | 0.005 t U        |                      |                                 |
| VOLATILES              | 1.3-Dichloropropane                                    | 3.05+00            | 0.0005      | 0.005        | NE        |               | 2,05       |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 1.4-Dichlorobenzene                                    | 2.7E+01            | 0.0005      | 0.005        | NE        | NE            | 2.50       |                  | 0.005 1 11       |                      |                                 |
| VOLATILES              | 2,2-Dichloropropane                                    | 1.7E+00            | 0.0005      | 0.005        | NE        | NE            | 1.7        |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 2-Butanone   | 2.6E+03            | 0.0025      | 0.010        | NE        | NE            | 2610       |                  | 0.010 1 U        |                      |                                 |
| VOLATILES              | 2-Chloroethyl vinyl ether                              | 2.1E-01            | 0.0020      | 0.010        | NE        | NE            | 0.214      |                  | 0.010 1 U        |                      |                                 |
| VOLATILES              | 2-Chlorotoluene  | 1.5E+02            | 0.0005      | 0.005        | NE        | NE            | 154        |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | 2-nexatione<br>4-Oblorotoluene                         | 0.2E+00            | 0.0025      | 0.010        | NE        | NE            | 6.2        |                  | 0.010 1 U        |                      |                                 |
| VOLATILES              | Acetone  | 1.7E+02            | 0.0000      | 0.000        | NE        | ME            | 174        |                  | 0.005 1 0        |                      |                                 |
| VOLATILES              | Benzene  | 8.8E-01            | 0.0005      | 0.005        | NE        | NE            | 0.882      |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | Bromobenzene   | 1.1E+01            | 0.0005      | 0.005        | NE        | NE            | 11.2       |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | Bromochloromethane                                     | 2.4E+01            | 0.0005      | 0.005        | NE        | NE            | 24.1       |                  | 0.005 1 Ū        |                      |                                 |
| VOLATILES              | Bromodichloromethane                                   | 1.0E+01            | 0.0005      | 0.005        | NE        | NE            | 10.3       | · · · · · ·      | 0.005 1 U        |                      |                                 |
| VOLATILES<br>VOLATILES | Bromomethace   | 3.4±+01            | 0.0005      | 0.005        | NE        | NE            | 33.5       |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | Carbon disuffide                                       | 1 0F+02            | 0.0010      | 0.010        | NE        |               | 0.349      |                  | 0.010 1 U        |                      |                                 |
| VOLATILES              | Carbon tetrachloride                                   | 3.5E-01            | 0.0005      | 0.005        | NE        |               | 0.353      |                  | 0.005 1 U        |                      |                                 |
| VOLATILES              | Chlorobenzene  | 4.0E+01            | 0.0005      | 0.005        | NE        | NE            | 39.6       | 1                | 0.005 1 U        |                      |                                 |
| VOLATILES              | Chloroethane   | 1.1E+03            | 0.0010      | 0.010        | NE        | NE            | 1130       |                  | 0.010 1 U        |                      |                                 |

Shaw Environmental, Inc.

### 00066440

| Table 4-22   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
|  |

|  |  |   |  |  |  | Sur  | mp-022  |  |  |   |   |
|--|--|---|--|--|--|--|---|--|--|---|---|
| [SUMP] = SUMP022<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE   |  | TCEQ<br>Risk-Based<br>Screening<br>Value  | Method<br>Detection  | Method<br>Quantitation   | Back<br>Concentra<br>(95% UF<br>Surface                              | ground<br>tions In Soil<br>PL, mg/kg)<br>Subsurface  | Applicble<br>TCEQ<br>Risk-Based<br>Screening  | 35SUMP022-SB01<br>35-SMP22-SB01-01<br>9/13/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP022-SB01<br>35-SMP22-SB01-02<br>9/13/2006<br>8 - 8 Ft<br>REG   | STEP-46SS05<br>46SS05(0-0_5)-020312<br>3/12/2002<br>0 - 0.5 Ft<br>REG | STEP-46SS05<br>46SS05(1-2)-020312<br>3/12/2002<br>1 - 2 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg)  | (RBSV) *  | Limit (MDL)  | Limit (MQL)  | 0 - 0.5 Ft   | 1.5 - 2.5 Ft   | Value   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL_LQ_VQ  | Result Dic Lo Vo  |
| Test Group           VOLATILES           r (Units = mg/kg)<br>Chloroform<br>Chloromethane<br>cis-1,2-Dichloroethene<br>cis-1,3-Dichloropropene<br>Dibromochloromethane<br>Dichlorodfluoromethane<br>Ethylbenzene<br>Hexachlorobutadiene<br>Hexachlorobutadiene<br>Hexachlorobutadiene<br>Hexachlorobutadiene<br>Hexachlorobutadiene<br>Hop-Xylenes<br>Methyl isobutyl ketone<br>Methyl isobutyl ketone<br>Methylene chloride<br>Naphthalene<br>n-BUTYLBENZENE<br>n-PROPYLBENZENE<br>p-ISOPROPYLDENZENE<br>Styrene<br>tert-BUTYLBENZENE<br>Tetrachloroethene | (RBSV)*<br>3.1E-01<br>2.3E-01<br>1.2E+02<br>1.2E+00<br>1.9E+01<br>2.2E+02<br>4.3E+02<br>1.6E+00<br>5.4E+02<br>2.3E+02<br>1.3E+03<br>8.7E+00<br>1.8E+01<br>2.7E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.0E+02<br>1.3E+03<br>2.6E+02<br>6.0E+00 | Limit (MOL)<br>0.0005<br>0.0020<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0 | Limit (MQL)<br>0.005<br>0.010<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.0 | 0-0.5 Ft<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE | 1.5 - 2.5 H<br>H<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE | Value<br>0.306<br>0.227<br>115<br>1.19<br>7.62<br>18.8<br>216<br>431<br>1.58<br>538<br>232.1026337<br>1290<br>8.68<br>18.1<br>270<br>321<br>420<br>300<br>1310<br>261<br>6.02 | Kesuk Dil Lu vu  | Resol         Dir.         Lu         Vu           0.005         1         U         0.005         1         U           it La va  |   |
| VOLATILES  | Toluene  | 1.1E+03   | 0.0005   | 0.005  | NE   | NE   | 1080  |  | 0.005 1 0  |   |   |
| VOLATILES  | trans-1,2-Dichloroethene   | 1.4E+02<br>1.8E+00  | 0.0005   | 0.005  | NE   | NE   | 1.83  |  | 0.005 1 U  |   |   |
| VOLATILES  | Trichlomethene   | 3.7E+00   | 0.0005   | 0.005  | NE   | NE   | 3.73  |  | 0.005 1 U  |   |   |
| VOLATILES  | Trichlorofuoromethane  | 2.6E+02   | 0.0010   | 0.01   | NE   | NE   | 263   |  | 0.010 1 U  |   |   |
| VOLATILES  | Vinvi acetate  | 5.7E+01   | 0.0010   | 0.01   | NE   | NE   | 57.4  |  | 0.010 1 U  |   |   |
| VOLATILES  | Vinvi chloride   | 3.6E-02   | 0.0010   | 0.01   | NË   | NE   | 0.0364  |  | <u>0.010 1 U</u>   |   |   |

#### Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066441

# Table 4-23 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-023

| [SUMP] = SUMPO<br>LOCATION_COL<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH | )23<br>)E                                     | TCEQ<br>Risk-Based<br>Screening | Method      | Method       | Backg<br>Concentrat<br>(95% UP | round<br>ions in Soil<br>L, mg/kg) | Applicble<br>TCEQ<br>Risk-Based | 35SUMP023-SB01<br>35-SMP23-SB01-02<br>9/12/2006<br>4.5 - 4.5 Ft<br>PEC | STEP-46SS08<br>46SS08(0-0_5)-020312<br>3/12/2002<br>0 - 0.5 Ft<br>REG | STEP-46SS08<br>46SS08(1-2)-020312<br>3/12/2002<br>1 - 2 Ft<br>8FG |
|---|---|---------------------------------|-------------|--------------|--------------------------------|------------------------------------|---------------------------------|--|---|---|
| SAMPLE_PURPL  |   | value                           | Detection   | Quantitation |                                | 15 2554                            | Value                           | Regult Dil 10 VO   | Result DIL 10 VO  | Result DIL 10 VO  |
| Test Group  | Parameter (Units = mg/kg)                     | (R8SV) -                        | 10.000      | Limit (MQL)  | 1.635+04                       | 2.08E+04                           | 1 6E+04                         | 6540.000 1   | Result DIL LQ VQ  | Respir Die EQ VQ  |
| METALS  | Antimony                                      | 7.3E+00                         | 0.500       | 0.10         | 9.40E-01                       | 1.60E+00                           | 7.3E+00                         | 0.101 1 J J  |   |   |
| METALS  | Arsenic                                       | 2.0E+01                         | 0.075       | 0,30         | 4.81E+00                       | 5.54E+00                           | 2.0E+01                         | 1.580 1  |   |   |
| METALS  | Barium  | 2.6E+03                         | 0.075       | 0.30         | 1.52E+02                       | 8.55E+01                           | 2.6E+03                         | 121.000 1  |   |   |
| METALS  | Beryllium                                     | 4.6至+00                         | 0.012       | 0.50         | 6.45E-01                       | 7.66E-01                           | 4.6E+00                         | 0.435 1  |   |   |
| METALS  | Cadmium                                       | 5.2E+00                         | 0.025       | 0.10         | 1.40E+00                       | 4.00E-01                           | 5.2E+00                         | 0.152 1 J J  |   |   |
| METALS  | Calcium                                       | NE                              | NA<br>0.400 | NA           |                                | NA<br>2.015+01                     | <br>E 0E+03                     | 12 000 1   | •   |   |
| METALS  | Cobalt  | 5.9E+03                         | 0.100       | 0.40         | 2,00E+01                       | 5.012+01<br>5.61E+00               | 1.5E+03                         | 4.440 1  |   |   |
| METALS  | Conner  | 1.0E+03                         | 0.150       | 0.60         | 5.55E+00                       | 9.25E+00                           | 1.0E+03                         | 6.160 1  |   |   |
| METALS  | Iron  | NE                              | NA          | NA           | NA                             | NA                                 | -                               | 9620.000 1   |   |   |
| METALS  | Lead  | 5.0E+02                         | 0.500       | 5.00         | 2.26E+01                       | 1.14E+01                           | 5.0E+02                         | 7.990 1  |   |   |
| METALS  | Magnesium                                     | NE                              | NA          | NA           | NA                             | NA                                 |                                 | 504.000 1  |   |   |
| METALS  | Manganese                                     | 1.7E+03                         | 0.050       | 0.20         | 1.25E+03                       | 2.01E+02                           | 1.7E+03                         | 145.000 1  |   |   |
| METALS  | Mercury                                       | 1.1E-02                         | 0.010       | 0.25         | 8.19E-02                       | 3.60E-01                           | 2.5E+01                         | 0.021 1 J J  |   |   |
| METALS  | Nickel  | 1.9E+02                         | 0.200<br>NA | 0.80<br>NA   | 0.90E+00                       | NA                                 | 1.85402                         | 234.000 1  |   |   |
| METALS  | Selenium                                      | 1.35+02                         | 0 100       | 0.20         | 3485+00                        | 5.57E+00                           | 1.3E+02                         | 0.384 1  |   |   |
| METALS  | Silver  | 4.7E+01                         | 0.050       | 0.20         | 3.10E-01                       | 3.70E-01                           | 4.7E+01                         | 1.650 1 U  |   |   |
| METALS  | Sodium  | NE                              | NA          | NA           | NA                             | NA                                 | -                               | 27.000 1   |   |   |
| METALS  | Thailium                                      | 2.0E+00                         | 0.010       | 0.02         | 4.70E-01                       | NE                                 | 2.0E+00                         | 0.055 1  |   |   |
| METALS  | Vanadium                                      | 4.8E+01                         | 0.125       | 0.50         | 3.21E+01                       | 4.46E+01                           | 4.8E+01                         | 19.500 1   |   |   |
| METALS  | Zinc  | 5.9E+03                         | 0.625       | 2.50         | 6.16E+01                       | 2.02E+01                           | 5.9E+03                         |  | 0.049 1 11 11   | 0.044 1 11 11   |
| PERC  | Perchiorate<br>Percent Solida                 | 1.45+01                         | 0.005       | 0.01<br>NA   | NE                             |                                    | 1.46401                         | 83,700 1   | 0.043 1 8 8   | 0.044 1 0 0   |
| VOLATILES   | t 1 1 2-Tetrachlomethane                      | 5 2E+00                         | 0 0005      | 0.005        | NE                             | NE                                 | 5.2E+00                         | 0.005 1 U  |   |   |
| VOLATILES   | 1.1.1-Trichloroethane                         | 2.3E+02                         | 0.0005      | 0.005        | NE                             | NE                                 | 2.3E+02                         | 0.005 1 U  |   |   |
| VOLATILES   | 1,1,2,2-Tetrachloroethane                     | 5.1E-01                         | 0.0005      | 0.005        | NE                             | NE                                 | 5.1E-01                         | 0.005 1 U  |   |   |
| VOLATILES   | 1,1,2-Trichloroethane                         | 9.7E-01                         | 0.0005      | 0.005        | NË                             | NE                                 | 9.7E-01                         | 0.005 1 U  |   |   |
| VOLATILES   | 1,1-Dichloroethane                            | 8.9E+01                         | 0.0010      | 0.005        | NE                             | NE                                 | 8.9E+01                         | 0.005 1 U  |   |   |
| VOLATILES   | 1,1-Dichloroethene                            | 2.76+01                         | 0.0005      | 0,005        | NE                             | NE                                 | 2.7E+01<br>9.9E-01              | 0.005 1 0  |   |   |
|   | 1,1-Dichloropropene<br>1,2,3-Trichloropenzene | 9.9E-01                         | 0.0005      | 0.005        | NE                             | NE                                 | 4.2E+01                         | 0.005 1 U  |   |   |
| VOLATILES   | 1.2.3-Trichloropropane                        | 9.2E-02                         | 0.0010      | 0.005        | NE                             | NE                                 | 9.2E-02                         | 0.005 1 U  |   |   |
| VOLATILES   | 1,2,4-Trichlorobenzene                        | 1.4E+02                         | 0.0005      | 0.005        | NE                             | NE                                 | 1.4E+02                         | 0.005 1 U  |   |   |
| VOLATILES   | 1,2,4-Trimethylbenzene                        | 9.6E+00                         | 0.0005      | 0.005        | NE                             | NE                                 | 9.6E+00                         | 0.005 1 U  |   |   |
| VOLATILES   | 1,2-Dibromo-3-chloropropane                   | 3.5E-01                         | 0.0020      | 0.005        | NE                             | NE                                 | 3.5E-01                         | 0.005 1 U  |   |   |
| VOLATILES   | 1,2-Dibromoethane                             | 5.3E-02                         | 0.0005      | 0.005        | NE                             | NE                                 | 5.3E-02                         | 0.005 1 U  |   |   |
| VOLATILES   | 1,2-Dichloropenzene                           | 2.0E+01                         | 0.0005      | 0.005        | NE                             | NE                                 | 275-01                          | 0.005 1 U  |   |   |
| VOLATILES   | 1.2-Dichlomoropane                            | 1.8E+00                         | 0.0005      | 0.005        | NE                             | NE                                 | 1.8E+00                         | 0.005 1 U  |   |   |
| VOLATILES   | 1.2-Dimethylbenzene (o-Xylene)                | 3.3E+03                         | 0.0005      | 0.005        | NE                             | NE                                 | 3.3E+03                         | 0.005 1 U  |   |   |
| VOLATILES   | 1,3,5-Trimethylbenzene                        | 8.3E+00                         | 0.0005      | 0.005        | NE                             | NE                                 | 8.3E+00                         | 0.005 1 U  |   |   |
| VOLATILES   | 1,3-Dichlorobenzene                           | 5.1E+00                         | 0.0005      | 0.005        | NE                             | NE                                 | 5.1E+00                         | 0.005 1 U  |   |   |
| VOLATILES   | 1,3-Dichloropropane                           | 3.0E+00                         | 0.0005      | 0,005        | NE                             | NE                                 | 3.0E+00                         | 0.005 1 U  |   |   |
| VOLATILES   | 1,4-Dichlorobenzene                           | 2.7E+01                         | 0.0005      | 0.005        | NE                             |                                    | 1.75+00                         | 0.005 1 U  |   |   |
| VOLATILES   | 2,2-Dichloropropane<br>2-Butenone             | 2 6E+03                         | 0.0005      | 0.010        | NE                             | NE                                 | 2.6E+03                         | 0.010 1 U  |   |   |
| VOLATILES   | 2-Chloroethyl vinvi ether                     | 2.1E-01                         | 0.0020      | 0.010        | NE                             | NE                                 | 2.1E-01                         | 0.010 1 U  |   |   |
| VOLATILES   | 2-Chlorotoluene                               | 1.5E+02                         | 0.0005      | 0.005        | NE                             | NE                                 | 1.5E+02                         | 0.005 1 U  |   |   |
| VOLATILES   | 2-Hexanone                                    | 6.2E+00                         | 0.0025      | 0.010        | NE                             | NE                                 | 6.2E+00                         | 0.010 1 U UJ   |   |   |
| VOLATILES   | 4-Chlorotoluene                               | 3.4E-01                         | 0.0005      | 0.005        | NE                             | NE                                 | 3.4E-01                         | 0.005 1 U  |   | ·   |
| VOLATILES   | Acetone                                       | 1.7E+02                         | 0.0050      | 0.010        | NE                             |                                    | 1.76+02                         | 0.020 1 J  |   |   |
| VOLATILES   | Benzene<br>Bromobenzene                       | 0.0E-01                         | 0.0005      | 0.005        |                                | NE                                 | 1 16+01                         | 0.005 1 1  |   |   |
| VOLATILES   | Bromochloromethane                            | 2.4E+01                         | 0,0005      | 0.005        | NE                             | NE                                 | 2.4E+01                         | 0.005 1 U  |   |   |
| VOLATILES   | Bromodichloromethane                          | 1.0E+01                         | 0.0005      | 0.005        | NE                             | NE                                 | 1.0E+01                         | 0.005 1 U  |   |   |
| VOLATILES   | Bromoform                                     | 3.4E+01                         | 0.0005      | 0.005        | NE                             | NE                                 | 3.4E+01                         | 0.005 1 U  |   |   |
| VOLATILES   | Bromomethane                                  | 3.5E-01                         | 0.0010      | 0.010        | NE                             | NE                                 | 3.5E-01                         | 0.010 1 U  |   |   |
| VOLATILES   | Carbon disulfide                              | 1.0E+02                         | 0.0005      | 0.005        | NE                             | NE                                 | 1.0E+02                         | 0.005 1 U  |   |   |
| VOLATILES   | Chlorobenzene                                 | 3.52-01                         | 0.0005      | 0.005        |                                |                                    | 3.52-01                         | 0.005 1 U  |   |   |
| VOLATILES   | Chloroethane                                  | 1.1E+03                         | 0.0000      | 0.005        |                                | NE                                 | 1.1E+03                         | 0.010 1 U  |   |   |
| VOLATILES   | Chloroform                                    | 3.1E-01                         | 0.0005      | 0.005        | NE                             | NE                                 | 3.1E-01                         | 0.005 1 U  |   |   |

Data Evaluation Report

Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps

00066442

# Table 4-23 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

| Sump_022 |          |     |     |    |
|----------|----------|-----|-----|----|
| Summarz  | <b>.</b> |     | - ^ | ~~ |
|          |          | Imr |     |    |

| [SUMP] = SUMPO<br>LOCATION _COE | 023<br>DE  |            |             |              | <b>0</b>   |               | A          | 35SUMP023-SB01   | STEP-46SS08          | STEP-46SS08      |
|---------------------------------|--|------------|-------------|--------------|------------|---------------|------------|------------------|----------------------|------------------|
| SAMPLE_NO                       |  | ICEQ       |             |              | Back       | ground        | Applicole  | 30-3WF23-3B01-02 | 403300(0-0_3)-020312 | 2/12/2002        |
| SAMPLE_DATE                     |  | Risk-Based |             |              | Concentra  | tions in Soil | TCEQ       | 9/12/2006        | 3/12/2002            | 1 2 5            |
| DEPTH                           |  | Screening  | Method      | Method _     | (95% UF    | L, mg/kg}     | Risk-Based | 4.5 - 4.5 FL     | 0-0.5 Ft             |                  |
| SAMPLE_PURPO                    | DSE  | Value      | Detection   | Quantitation | Surface    | Subsurface    | Screening  | REG              | REG                  | NEG              |
| Test Group                      | Parameter (Units = mg/kg)  | (RBSV) *   | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value      | Result DIL LQ VQ | Result DIL LQ VQ     | Result DIL LQ VQ |
| VOLATILES                       | Chloromethane  | 2.3E-01    | 0.0020      | 0.010        | NE         | NE            | 2.3E-01    | 0.010 1 U        |                      |                  |
| VOLATILES                       | cis-1,2-Dichtoroethene   | 1.2E+02    | 0.0005      | 0.005        | NE         | NE            | 1.2E+02    | 0.005 1 U        |                      |                  |
| VOLATILES                       | cis-1,3-Dichloropropene  | 1.2E+00    | 0.0005      | 0.005        | NE         | NE            | 1.2E+00    | 0.005 1 U        |                      |                  |
| VOLATILES                       | Dibromochloromethane   | 7.6E+00    | 0.0005      | 0.005        | NE         | NE            | 7.6E+00    | 0.005 1 U        |                      |                  |
| VOLATILES                       | Dibromomethane   | 1.9E+01    | 0.0005      | 0.005        | NE         | NE            | 1.9E+01    | 0.005 1 U        |                      |                  |
| VOLATILES                       | Dichlorodifluoromethane  | 2.2E+02    | 0.0010      | 0.010        | NE         | NE            | 2.2E+02    | 0.010 1 U        |                      |                  |
| VOLATILES                       | Ethylbenzene   | 4.3E+02    | 0.0005      | 0.005        | NE         | NE            | 4.3E+02    | 0.005 1 U        |                      |                  |
| VOLATILES                       | Hexachlorobutadiene  | 1,6E+00    | 0.0005      | 0.005        | NE         | NE            | 1.6E+00    | 0.005 1 U        |                      |                  |
| VOLATILES                       | Isopropylbenzene   | 5.4E+02    | 0.0005      | 0.005        | NE         | NĘ            | 5.4E+02    | 0.005 1 U        |                      |                  |
| VOLATILES                       | m.p-Xvlenes  | 2.3E+02    | 0.0005      | 0.005        | NE         | NE            | 2.3E+02    | 0.005 1 U        |                      |                  |
| VOLATILES                       | Methyl isobutyl ketone   | 1.3E+03    | 0.0025      | 0.01         | NE         | NË            | 1.3E+03    | 0.010 1 U        |                      |                  |
| VOLATILES                       | Methylene chloride   | 8.7E+00    | 0.0010      | 0.005        | NE         | NE            | 8.7E+00    | 0.005 1 U        |                      |                  |
| VOLATILES                       | Naphthalene  | 1.8E+01    | 0.0005      | 0.01         | NE         | NE            | 1.8E+01    | 0.010 1 U        |                      |                  |
| VOI ATILES                      | n-BUTYLBENZENE   | 2.7E+02    | 0.0005      | 0.005        | NE         | NE            | 2.7E+02    | 0.005 1 U        |                      |                  |
| VOLATILES                       | n-PROPYLBENZENE  | 3.2E+02    | 0.0005      | 0.005        | NE         | NE            | 3.2E+02    | 0.005 1 U        |                      |                  |
| VOLATILES                       | p-ISOPROPYLTOLUENE   | 4.2E+02    | 0.0005      | 0.005        | NE         | NE            | 4.2E+02    | 0.005 1 U        |                      |                  |
| VOLATILES                       | sec-BUTYLBENZENE   | 3.0E+02    | 0.0005      | 0.005        | NE         | NE            | 3.0E+02    | 0.005 1 U        |                      |                  |
| VOLATILES                       | Styrene  | 1.3E+03    | 0.0005      | 0.005        | NE         | NE            | 1.3E+03    | 0.005 t U        |                      |                  |
| VOLATILES                       | tert-BUTYLBENZENE  | 2.6E+02    | 0.0005      | 0.005        | NE         | NE            | 2.6E+02    | 0.005 1 U        |                      |                  |
| VOLATILES                       | Tetrachloroethene  | 6.0E+00    | 0.0005      | 0.005        | NE         | NE            | 6.0E+00    | 0.005 i U        |                      |                  |
| VOLATILES                       | Toluene  | 1.1E+03    | 0.0005      | 0.005        | NE         | NE            | 1.1E+03    | 0.005 1 U        |                      |                  |
| VOLATILES                       | trans-1.2-Dichloroethene   | 1.4E+02    | 0.0005      | 0.005        | NE         | NE            | 1.4E+02    | 0.005 1 U        |                      |                  |
| VOLATILES                       | trans-1.3-Dichtoropropene  | 1.8E+00    | 0.0005      | 0.005        | NE         | NE            | 1.8E+00    | 0.005 1 U        |                      |                  |
| VOLATILES                       | Trichlorgethene  | 3.7E+00    | 0.0005      | 0.005        | NE         | NE            | 3.7E+00    | 0,005 1 Ų        |                      |                  |
| VOLATILES                       | Trichlorofluoromethase   | 2.6E+02    | 0.0010      | 0.01         | NE         | NE            | 2.6E+02    | 0.010 1 U        |                      |                  |
| VOLATILES                       | Vinvl acetate  | 5.7E+01    | 0.0010      | 0.01         | NE         | NE            | 5.7E+01    | 0.010 1 U        |                      |                  |
| VOLATILES                       | Vinvl chloride   | 3.6E-02    | 0.0010      | 0.01         | NE         | NE            | 3.6E-02    | 0.010 1 U        |                      |                  |
|                                 | <ul> <li>A state of the sta</li></ul> |            |             |              |            |               |            |                  |                      |                  |

### 00066443

| Table 4-24   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |

Sump-024

|  |  |   |  |  |   | oamp oar.   |  | •   |                            |   |  |             |   |   |                  |                   |
|--|--|---|--|--|---|---|--|---|----------------------------|---|--|-------------|---|---|------------------|-------------------|
| [SUMP] = SUM<br>LOCATION_C<br>SAMPLE_NO<br>SAMPLE_DAT<br>DEPTH<br>SAMPLE_PUR   | P024<br>ODE<br>E<br>POSE   | TCEQ<br>Risk-Based<br>Screening<br>Value  | Method<br>Detection  | Method<br>Quantitation   | Backs<br>Concentra<br>(95% UP<br>Surface  | ground<br>tions in Soil<br>'L, mg/kg)<br>Subsurface   | Applicble<br>TCEQ<br>Risk-Based<br>Screening   | 35SUMP024-S<br>35-SMP24-SB0<br>9/9/2006<br>2 - 2.5 Ft<br>REG  | B01<br>1-02                | 35SUMP02<br>35-SMP24-5<br>9/9/20<br>2.5 - 2.5<br>REG  | 4-SB02<br>3802-02<br>06<br>5 Ft  |             | LH-S24<br>LH-S24-01-B<br>10/5/2<br>0 - 0<br>REC   | 4-01<br>ERA-<br>006<br>Ft<br>G  | SS01             | i                 |
| Test Group   | Parameter (Units = mg/kg)  | (RBSV) *  | Limit (MDL)  | Limit (MQL)  | 0 - 0.5 Ft  | 1.5 - 2.5 Ft  | Value  | Result DIL  | LQ VQ                      | Result D  | <u>IL LQ</u>   | VQ          | Result  | DIL   | LQ               | VQ                |
| Test Group<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS | Parameter (Units = mg/kg)<br>Aluminum<br>Antimony<br>Arsenic<br>Baryllium<br>Cadmium<br>Cadmium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Catcium<br>Lead<br>Magnesium<br>Manganese<br>Mercury | (RBSV)<br>1.6E+04<br>7.3E+00<br>2.0E+01<br>2.6E+03<br>4.6E+00<br>NE<br>5.9E+03<br>1.6E+03<br>1.0E+03<br>NE<br>5.0E+02<br>NE<br>1.7E+03<br>1.1E-02 | Limit (MDL)<br>10.000<br>0.500<br>0.075<br>0.075<br>0.075<br>0.012<br>0.025<br>NA<br>0.100<br>0.125<br>0.150<br>NA<br>0.500<br>NA<br>0.500<br>NA | Limit (MQL)<br>20.00<br>0.10<br>0.30<br>0.50<br>0.50<br>0.10<br>NA<br>0.40<br>0.50<br>0.60<br>NA<br>5.00<br>NA<br>5.00<br>NA<br>5.00 | 0-0.5H<br>1.63E404<br>9.40E-01<br>4.81E+00<br>1.52E402<br>6.45E-01<br>1.40E+00<br>NA<br>2.66E+01<br>7.23E+00<br>NA<br>2.26E+01<br>NA<br>1.25E+03<br>8.19E-02<br>0.05 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 H<br>0.5 | 1.5-2.5+1<br>2.08E+04<br>1.60E+00<br>5.54E+00<br>8.55E+01<br>7.66E-01<br>4.00E-01<br>NA<br>3.01E+01<br>5.61E+00<br>9.25E+00<br>NA<br>1.14E+01<br>NA<br>2.01E+02<br>3.60E-01 | Value<br>1.6E+04<br>7.3E+00<br>2.0E+01<br>2.6E+03<br>4.6E+00<br>5.2E+00<br>5.9E+03<br>1.5E+03<br>1.5E+03<br>1.5E+03<br>5.0E+02<br> | Result         Dic           16800.0001         1           3.100         1           93.600         1           0.566         1           0.165         1           4000.000         1           22.200         1           4.100         1           6.160         1           26400.000         1           1260.000         1           53.000         1           0.0550         1 | 1<br>1<br>1<br>1<br>1<br>1 | 7430.000<br>0.110<br>0.776<br>46.100<br>0.692<br>0.061<br>1320.000<br>9.810<br>7.780<br>7.780<br>1.690<br>9910.000<br>6.200<br>1110.000<br>62.400<br>0.011<br>9.130 | 1 U<br>1 U<br>1 U<br>1 J<br>1 J<br>1 J<br>1 1<br>1 1<br>1 1<br>1 U<br>1 U<br>1 U | 1<br>1<br>1 | 10100.000<br>0.170<br>8.300<br>149.000<br>0.470<br>1450.000<br>21.100<br>3.200<br>19.700<br>8120.000<br>24.600<br>542.000<br>36.500 | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | <br>J<br>J<br>J  | J<br>JL<br>J<br>J |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>PERC<br>SOLIDS   | Nickel<br>Potassium<br>Selenium<br>Silver<br>Sodium<br>Thallium<br>Vanadium<br>Zinc<br>Perchlorate<br>Percent Sotids   | 1.9E+02<br>NE<br>1.3E+02<br>4.7E+01<br>NE<br>2.0E+00<br>4.8E+01<br>5.9E+03<br>1.4E+01<br>NE   | 0.200<br>NA<br>0.100<br>0.050<br>NA<br>0.010<br>0.125<br>0.625<br>0.005<br>NA  | 0.80<br>NA<br>0.20<br>0.20<br>NA<br>0.02<br>0.50<br>2.50<br>0.01<br>NA   | 6.98E+00<br>NA<br>3.48E+00<br>3.10E-01<br>NA<br>4.70E-01<br>3.21E+01<br>6.16E+01<br>NE<br>NE  | 1.16E+01<br>NA<br>5.57E+00<br>3.70E-01<br>NA<br>NE<br>4.46E+01<br>2.02E+01<br>NE<br>NE  | 1.9E+02<br>1.3E+02<br>4.7E+01<br>2.0E+00<br>4.8E+01<br>5.9E+03<br>1.4E+01<br>  | 10.500 1<br>648.000 1<br>0.300 1<br>1.650 1<br>54.000 1<br>0.106 1<br>38.000 1<br>75.100 1<br>83.300 1  | U                          | 9,130<br>273,000<br>0,207<br>1,730<br>383,000<br>0,070<br>18,000<br>11,300<br>87,700  | 1<br>1 J<br>1 U<br>1<br>1<br>1<br>1  | J           | 359.000<br>0.840<br>0.059<br>58.800<br>0.130<br>27.300<br>345.000<br>0.050<br>79.500  | 1<br>1<br>1<br>1<br>1<br>1  | B<br>J<br>J<br>U | JL<br>J           |

### 00066444

# Table 4-25 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-025

|   |                           |  |                     |                        |   |   |  | -  |                                       |               |    |   |                                      |              |    |  |                            |         |   |
|---|---------------------------|--|---------------------|------------------------|---|---|--|--|---------------------------------------|---------------|----|---|--------------------------------------|--------------|----|--|----------------------------|---------|---|
| [SUMP] = SUMP025<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | round<br>lions in Soil<br>L. mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP<br>35-SMP2<br>9/9/<br>5.5 -<br>RI | 025-8<br>5-SB<br>2006<br>- 6 Ft<br>EG | 5801<br>01-02 | 2  | 35SUMP(<br>35-SMP25<br>9/9/2<br>5.5 -<br>RE | 025-8<br>3-SB0<br>2006<br>6 Ft<br>EG | B02<br>)2-02 |    | 35SUMP026<br>35-SMP26-S<br>9/9/200<br>4 - 4.5<br>REG | 6-SB0<br>801-(<br>)6<br>Ft | 1<br>)2 |   |
| Test Group  | Parameter (Units = mo/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft_                                     | Value  | Result                                   | DIL                                   | ιQ            | VQ | Result                                      | DIL                                  | LQ           | VQ | Result D   | UL L                       | Q VQ    |   |
| METALS  | Aluminum                  | 1.6E+04                                  | 10.000              | 20.00                  | 1.63E+04                                | 2.08E+04  | 1.6E+04                                      | 12700.000                                | 1                                     |               |    | 12600.000                                   | 1                                    |              |    | 32200.000  | 1                          |         |   |
| METALS  | Antimony                  | 7.3E+00                                  | 0.500               | 0.10                   | 9.40E-01                                | 1.60E+00  | 7.3E+00                                      | 0.112                                    | 1                                     | υ             |    | 0.112                                       | 1                                    | U            |    | 0.126  | 1 1                        | J       |   |
| METALS  | Arsenic                   | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                | 5.54E+00  | 2.0E+01                                      | 0.959                                    | 1                                     |               |    | 1.210                                       | 1                                    |              |    | 2.320  | 1                          |         |   |
| METALS  | Barium                    | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                | 8.55E+01  | 2.6E+03                                      | 380.000                                  | 1                                     |               |    | 442.000                                     | 1                                    |              |    | 79,400   | 1                          |         |   |
| METALS  | Bervilium                 | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                | 7.66E-01  | 4.6E+00                                      | 1.030                                    | 1                                     |               |    | 1.330                                       | 1                                    |              |    | 1.110  | 1                          |         |   |
| METALS  | Cadmium                   | 5.2E+00                                  | 0.025               | 0.10                   | 1.40E+00                                | 4.00E-01  | 5.2E+00                                      | 0.314                                    | 1                                     | J             | J  | 0.334                                       | 1                                    | J            | J  | 0.153  | 1                          | n 1     |   |
| METALS  | Calcium                   | NE                                       | NA                  | NA                     | NA                                      | NA  |  | 1170.000                                 | 1                                     |               | J  | 1550.000                                    | 1                                    |              | J  | 590.000  | 1                          | 1       |   |
| METALS  | Chromium                  | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                                | 3.01E+01  | 5.9E+03                                      | 12.800                                   | 1                                     |               |    | 13.200                                      | 1                                    |              |    | 28.200   | 1                          |         |   |
| METALS  | Cobalt                    | 1,5E+03                                  | 0.125               | 0.50                   | 7.23E+00                                | 5.61E+00  | 1.5E+03                                      | 6.460                                    | 1                                     |               | J  | 27.500                                      | 1                                    |              | J  | 7.510  | 1                          | J       |   |
| METALS  | Copper                    | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                                | 9.25E+00  | 1.0E+03                                      | 3.530                                    | 1                                     |               |    | 3.760                                       | 1                                    |              |    | 8,130  | 1                          |         |   |
| METALS  | Iron                      | NE                                       | NA                  | NA                     | NA                                      | NA  |  | 12400.000                                | 1                                     |               |    | 13600.000                                   | 1                                    |              |    | 27400.000  | 1                          |         |   |
| METALS  | Lead                      | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                | 1.14E+01  | 5.0E+02                                      | 5.970                                    | 1                                     |               | J  | 8.570                                       | 1                                    |              | J  | 10.300   | 1                          | J       |   |
| METALS  | Magnesium                 | NE                                       | NA                  | NA                     | NA                                      | NA  |  | 1250.000                                 | 1                                     |               |    | 1490.000                                    | 1                                    |              |    | 1940.000   | 1                          |         |   |
| METALS  | Manganese                 | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                | 2.01E+02  | 1.7E+03                                      | 49.500                                   | 1                                     |               |    | 398.000                                     | 1                                    |              |    | 89.900   | 1                          |         |   |
| METALS  | Mercury                   | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                | 3.60E-01  | 2.5E-01                                      | 0.012                                    | 1                                     | U             |    | 0.012                                       | 1                                    | U            |    | 0.117  | 1                          | l l     |   |
| METALS  | Nickel                    | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                | 1.16E+01  | 1.9E+02                                      | 12.500                                   | 1                                     |               |    | 19.500                                      | 1                                    |              |    | 18.400   | 1                          |         |   |
| METALS  | Potassium                 | NE                                       | NA                  | NA                     | NA                                      | NA  |  | 400.000                                  | 1                                     |               |    | 553.000                                     | 1                                    |              |    | 979.000  | 1                          |         |   |
| METALS  | Selenium                  | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                | 5.57E+00  | 1.3E+02                                      | 0,196                                    | 1                                     | J             | J  | 0.195                                       | 1                                    | J            | J  | 0.264  | 1                          |         |   |
| METALS  | Silver                    | 4.7E+01                                  | 0.050               | 0.20                   | 3.10E-01                                | 3.70E-01  | 4.7E+01                                      | 1.660                                    | 1                                     | U             |    | 1.780                                       | 1                                    | U            |    | 1,920  | 1                          | U       |   |
| METALS  | Sodium                    | NE                                       | NA                  | NA                     | NA                                      | NA  |  | 299.000                                  | 1                                     |               |    | 229.000                                     | 1                                    |              |    | 218.000  | 1                          |         |   |
| METALS  | Thallium                  | 2.0E+00                                  | 0.010               | 0.02                   | 4.70E-01                                | NE  | 2.0E+00                                      | 0,068                                    | 1                                     |               |    | 0.083                                       | 1                                    |              |    | 0.115  | 1                          |         |   |
| METALS  | Vanadium                  | 4.8E+01                                  | 0,125               | 0.50                   | 3.21E+01                                | 4.46E+01  | 4.8E+01                                      | 16.800                                   | 1                                     |               |    | 22.000                                      | 1                                    |              |    | 48.300   | 1                          |         |   |
| METALS  | Zinc                      | 5,9E+03                                  | 0.625               | 2.50                   | 6.16E+01                                | 2.02E+01  | 5.9E+03                                      | 20.600                                   | 1                                     |               |    | 23.900                                      | 1                                    |              |    | 43.600   | 1                          |         |   |
| SOLIDS  | Percent Solids            | NE                                       | NA                  | NA                     | NE                                      | NE  |  | 85.200                                   | 1                                     |               |    | 84.900                                      | 1                                    |              |    | 78.400   | 1                          |         | _ |

Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Kamack, Texas

### 00066445

| Table 4-26   |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |  |  |  |  |  |  |  |  |  |
| Sump-026   |  |  |  |  |  |  |  |  |  |

| [SUMP] = SUMPO<br>LOCATION_COU<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPO | )26<br>DE<br>DSE          | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backg<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>(L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP025<br>35-SMP25-S<br>9/9/200<br>5.5 - 6 I<br>REG | 5-SB01<br>801-02<br>96<br>Ft | 35SUMP0<br>35-SMP25<br>9/9/2<br>5.5 - 1<br>RE | 25-SB0<br>-SB02-<br>006<br>6 Ft<br>G | 02<br>02    | 35SUMP02<br>35-SMP26-{<br>9/9/20<br>4 - 4.5<br>REG | 26-SB<br>SB01<br>106<br>1 Ft<br>3 | 01<br>-02 |    |
|---|---------------------------|--|---------------------|------------------------|--|---|--|--|------------------------------|---|--------------------------------------|-------------|--|-----------------------------------|-----------|----|
| Test Group  | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value  | Result(SQL) DI   | L LQ                         | VQ Result(SQL)                                | DIL LO                               | <u>a</u> va | Result(SQL)  | DIL                               | LQ        | VQ |
| METALS  | Aluminum                  | 1.6E+04                                  | 10.000              | 20.00                  | 1.63E+04                                 | 2.08E+04  | 1.6E+04                                      | 12700.000 1  |                              | 12600.000                                     | 1                                    | . L         | 32200.000  | 1                                 |           |    |
| METALS  | Antimony                  | 7.3E+00                                  | 0.500               | 0.10                   | 9.40E-01                                 | 1.60E+00  | 7.3E+00                                      | 0.112 1  | U                            | 0.112   | 1 U                                  | ļ           | 0.126  | 1                                 | U         |    |
| METALS  | Arsenic                   | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                 | 5.54E+00  | 2.0E+01                                      | 0.959 1  |                              | 1.210   | 1                                    |             | 2.320  | 1                                 |           |    |
| METALS  | Barium                    | 2.6E+03                                  | 0.075               | 0,30                   | 1.52E+02                                 | 8.55E+01  | 2.6E+03                                      | 380.000 1  |                              | 442.000                                       | 1                                    |             | 79.400   | 1                                 |           |    |
| METALS  | Bervilium                 | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                 | 7.66E-01  | 4.6E+00                                      | 1.030 1  |                              | 1.330   | 1                                    |             | 1.110  | 1                                 |           |    |
| METALS  | Cadmium                   | 5.2E+00                                  | 0.025               | 0.10                   | 1.40E+00                                 | 4.00E-01  | 5.2E+00                                      | 0.314 1  | J                            | J 0.334                                       | 1 J                                  | IJ          | 0.153  | 1                                 | J         | J  |
| METALS  | Calcium                   | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 1170.000 1   |                              | J 1550.000                                    | 1                                    | J           | 590.000  | 1                                 |           | J  |
| METALS  | Chromium                  | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                                 | 3.01E+01  | 5.9E+03                                      | 12.800 1   |                              | 13.200  | 1                                    |             | 28.200   | 1                                 |           |    |
| METALS  | Cobait                    | 1.5E+03                                  | 0.125               | 0.50                   | 7.23E+00                                 | 5.61E+00  | 1.5E+03                                      | 6.460 1  |                              | J 27,500                                      | 1                                    | J           | 7.510  | 1                                 |           | J  |
| METALS  | Copper                    | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                                 | 9.25E+00  | 1.0E+03                                      | 3.530 1  |                              | 3.760   | 1                                    |             | 8.130  | 1                                 |           |    |
| METALS  | Iron                      | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 12400.000 1  | i                            | 13600.000                                     | 1                                    |             | 27400.000  | 1                                 |           |    |
| METALS  | Lead                      | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                 | 1.14E+01  | 5.0E+02                                      | 5.970 1  |                              | J 8.570                                       | 1                                    | J           | 10.300   | 1                                 |           | J  |
| METALS  | Magnesium                 | NE                                       | NA                  | NA                     | NA                                       | NA  | I  | 1250.000 1   | l i i i                      | 1490.000                                      | 1                                    |             | 1940.000   | 1                                 |           |    |
| METALS  | Manganese                 | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                 | 2.01E+02  | 1.7Ë+03                                      | 49,500 1   | 1                            | 398.000                                       | 1                                    |             | 89.900   | 1                                 |           |    |
| METALS  | Mercury                   | 1.1E-02                                  | 0.010               | 0.25                   | 8,19E-02                                 | 3.60E-01  | 2.5E-01                                      | 0.012 1  | U                            | 0.012   | 1 L                                  | )           | 0.117  | 1                                 | J         | J  |
| METALS  | Nickel                    | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                 | 1.16E+01  | 1.9E+02                                      | 12.500 1   |                              | 19.500  | 1                                    |             | 18.400   | 1                                 |           |    |
| METALS  | Potassium                 | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 400.000 1  |                              | 553.000                                       | 1                                    |             | 979.000  | 1                                 |           |    |
| METALS  | Selenium                  | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                 | 5.57E+00  | 1.3E+02                                      | 0.196 1  | L J                          | J 0.195                                       | 1 .                                  | J           | 0.264  | 1                                 |           |    |
| METALS  | Silver                    | 4 7F+01                                  | 0.050               | 0.20                   | 3.10E-01                                 | 3.70E-01  | 4.7E+01                                      | 1.660 1  | ιU                           | 1.780   | 1 L                                  | J           | 1.920  | 1                                 | Ų         |    |
| METALS  | Sodium                    | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 299.000 1  | t                            | 229.000                                       | 1                                    |             | 218.000  | 1                                 |           |    |
| METALS  | Thallium                  | 2.0E+00                                  | 0.010               | 0.02                   | 4.70E-01                                 | NE  | 2.0E+00                                      | 0.068 1  | i                            | 0.083   | 1                                    |             | 0.115  | 1                                 |           |    |
| METALS  | Vanadium                  | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01                                 | 4.46E+01  | 4.8E+01                                      | 16.800 1   | 1                            | 22.000  | 1                                    |             | 48.300   | 1                                 |           |    |
| METALS  | Zinc                      | 5.9E+03                                  | 0.625               | 2.50                   | 6.16E+01                                 | 2.02E+01  | 5.9E+03                                      | 20,600 1   | 1                            | 23,900  | 1                                    |             | 43.600   | 1                                 |           |    |
| SOLIDS  | Percent Solids            | NE                                       | NA                  | NA                     | NE                                       | NE  |  | 85.200 1   | 1                            | 84.900  | 1                                    |             | 78.400   | 1                                 |           |    |

Shaw Environmental, Inc.

### 00066446

#### Table 4-27 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sumo-027

|               |                                |            |             |              |            |               | bamp bai   |                  |                  |                  |                  |
|---------------|--------------------------------|------------|-------------|--------------|------------|---------------|------------|------------------|------------------|------------------|------------------|
| [SUMP] = SUMP | 027                            |            |             |              |            |               |            | 260UMD027 6D04   | 1601 NJD007-8801 | 475831           | 475831           |
| LOCATION_CO   | DE                             | -          |             |              | 0!         |               | Annllabla  | 25 PMP027-5001   | 35 SMP27-SR01-02 | 475831(0.0.5)    | 475831(1-2)      |
| SAMPLE_NO     |                                | ICEQ       |             |              | Backg      | round         | Applicole  | 0/12/2006        | 0/12/2006        | 6/5/2000         | 6/5/2000         |
| SAMPLE_DATE   |                                | Risk-Based |             |              | Concentral | tions in Soil | ICEO       | 9/12/2008        | 55 654           | 0-05 Et          | 1 - 2 Ft         |
| DEPTH         |                                | Screening  | Method      | Method       | (95% UP    | L, mg/kg)     | RISK-Based | 0-0.5 FL         | 3.3-0 R          | PEC              | REG              |
| \$AMPLE_PURP  | OSE                            | Value      | Detection   | Quantitation | Surface    | Subsurface    | Screening  | REG              | REG              | REG              |                  |
| Test Group    | Parameter (Units = mo/kg)      | (RBSV)*    | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value      | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LO VO |
| METALS        | Aluminum                       | 1.6E+04    | 10.000      | 20.00        | 1.63E+04   | 2.08E+04      | 1.6E+04    | 12200.000 1      | 8060.000 1       |                  |                  |
| METALS        | Antimony                       | 7.3E+00    | 0.500       | 0.10         | 9.40E-01   | 1.60E+00      | 7.3E+00    | 0.115 1 U        | 0.124 1 U        |                  |                  |
| METALS        | Arsenic                        | 2.0E+01    | 0.075       | 0.30         | 4.81E+00   | 5.54E+00      | 2.0E+01    | 8.420 1          | 2.660 1          |                  |                  |
| METALS        | Bariun                         | 2.6E+03    | 0.075       | 0.30         | 1.52E+02   | 8,55E+01      | 2.6E+03    | 101.000 1        | 135.000 1        |                  |                  |
| METALS        | Bervilium                      | 4.6E+00    | 0.012       | 0.50         | 6.45E-01   | 7.66E-01      | 4.6E+00    | 0.496 1          | 0.489 1          |                  |                  |
| METALS        | Cadmium                        | 5.2E+00    | 0.025       | 0.10         | 1.40E+00   | 4.00E-01      | 5.2E+00    | 0.090 1 J J      | 0.173 1 J J      |                  |                  |
| METALS        | Calcium                        | NE         | NA          | NA           | NA         | NA            |            | 2330.000 1       | 4080.000 1       |                  |                  |
| METALS        | Chromium                       | 5.9E+03    | 0.100       | 0.40         | 2.66E+01   | 3.01E+01      | 5.9E+03    | 15.200 1         | 10.200 1         |                  |                  |
| METALS        | Cobalt                         | 1.5E+03    | 0.125       | 0.50         | 7.23E+00   | 5.61E+00      | 1.5E+03    | 4,140 1          | 10.300 1         |                  |                  |
| METALS        | Copper                         | 1.0E+03    | 0.150       | 0.60         | 5.55E+00   | 9.25E+00      | 1.0E+03    | 5.050 1          | 3.080 1          |                  |                  |
| METALS        | Iron                           | NE         | NA          | NA           | NA         | NA            |            | 18300.000 1      | 12400.000 1      |                  |                  |
| METALS        | lead                           | 5.0E+02    | 0.500       | 5.00         | 2.26E+01   | 1.14E+01      | 5.0E+02    | 13.300 1         | 16.800 1         |                  |                  |
| METALS        | Magnesium                      | NF         | NA          | NA           | NA         | NA            | -          | 745,000 1        | 2480.000 1       |                  |                  |
| METALS        | Mananese                       | 1 7E+03    | 0.050       | 0.20         | 1.25E+03   | 2.01E+02      | 1.7E+03    | 204.000 1        | 520.000 1        |                  |                  |
| METALS        | Mercury                        | 1 1E-02    | 0.010       | 0.25         | 8.19E-02   | 3.60E-01      | 2.5E-01    | 0.022 1 J J      | 0.013 1 U        |                  |                  |
| METALS        | Nickel                         | 1.95+02    | 0 200       | 0.80         | 6 98E+00   | 1.16E+01      | 1.9E+02    | 6.380 1          | 10.900 1         |                  |                  |
| METALS        | Potassium                      | NE         | NA          | NA           | NA         | NA            |            | 357.000 1        | 319.000 1        |                  |                  |
| METALS        | Selenium                       | 1 3E+02    | 0 100       | 0.20         | 3.48E+00   | 5.57E+00      | 1.3E+02    | 0.341 1          | 0.218 1 J J      |                  |                  |
| METALS        | Silver                         | 4 75+01    | 0.050       | 0.20         | 3 10E-01   | 3 70E-01      | 4.7E+01    | 1.720 1 U        | 1.720 1 U        |                  |                  |
| METALS        | Sodium                         | NE         | NA NA       | NA           | NA NA      | NA            |            | 48,900 1         | 66.300 1         |                  |                  |
| METALS        | Thallium                       | 205+00     | 0.010       | 0.02         | 4 70E-01   | NE            | 2.0E+00    | 0.060 1          | 0.046 1          |                  |                  |
| METALS        | Vanadum                        | 4.85+01    | 0.125       | 0.50         | 3 21E+01   | 4 46E+01      | 4 8E+01    | 28,600 1         | 17.800 1         |                  |                  |
| METALS        | Zipe                           | 5.95+03    | 0.625       | 2.50         | 6 16E+01   | 2 02E+01      | 5.9E+03    | 36.000 1         | 15.700 1         |                  |                  |
| DEDC          | Perchlorate                    | 1.4E+01    | 0.005       | 0.01         | NE         | NE            | 1.4E+01    |                  |                  | 0.0059 1 < U     | 0.0058 1 < U     |
| SCH IDS       | Percent Solide                 | NE         | NA NA       | NA NA        | NE         | NE            |            | 86.300 1         | 79.000 1         |                  |                  |
| VOLATILES     | 1 1 1 2 Tetrachloroethane      | 5 25+00    | 0 0005      | 0.005        | NE         | NE            | 5.2E+00    |                  | 0.006 1 U        |                  |                  |
| VOLATICES     | 1 1 1 Teleblaroothano          | 2 25+02    | 0.0005      | 0.005        | NE         | ME            | 2 3E+02    |                  | 0.006 1 U        |                  |                  |
| VOLATILES     | 1 1 2 2 Totrachloroothann      | 5 15.01    | 0.0005      | 0.005        | NE         | NE            | 5 1E-01    |                  | 0.006 1 U        |                  |                  |
| VOLATILES     | 1,1,2,2-1 Clauno Ucenane       | 9.7E-01    | 0.0005      | 0.005        | NE         | NE            | 975-01     |                  | 0.006 1 U        |                  |                  |
| VOLATILES     | 1 d Disblarosibona             | 0.05104    | 0.0000      | 0.005        | NE         |               | 8 0E+01    |                  | 0.006 1 1        |                  |                  |
| VOLATILES     | 1.1 Dichloroothono             | 2 75+01    | 0.0010      | 0.005        | ALE NE     | NE            | 275+01     |                  | 0.006 1 1        |                  |                  |
| VOLATILES     | 1,1-Dichloropronana            | 0.05.01    | 0.0005      | 0.005        | NE         | NE            | 9.9E-01    |                  | 0.006 1 11       |                  |                  |
| VOLATILES     | 1,1-Dichloroproperae           | 9.95-01    | 0.0005      | 0.005        | NE         | NE            | 8.8C-01    |                  | 0.006 1 11       |                  |                  |
| VOLATILES     | 1,2,3-Tuchlorobenzene          | 4.46701    | 0.0000      | 0.005        |            | NE            | 0.25.02    |                  | 0.006 1 11       |                  |                  |
| VOLATILES     | 1,2,3+ Michiolopropane         | 9.20-02    | 0.0010      | 0.005        | NE         |               | 1 /5+02    |                  | 0.006 1 11       |                  |                  |
| VOLATILES     | 1,2,4-1 Honorobenzene          | 1.46702    | 0.0005      | 0.000        |            | NE            | 0.65400    |                  | 0.006 1 11       |                  |                  |
| VULATILES     | 1,2,4-1 rimeinyibenzene        | 9.02+00    | 0.0005      | 0.005        | NC NC      | NE            | 3,0000     |                  | 0.006 1 11       |                  |                  |
| VOLATILES     | 1,2-Dibionio-3-chibropropane   | 3.35-01    | 0.0020      | 0.005        | NE         | NE            | 5.0E-01    |                  | 0.006 1 11       |                  |                  |
| VOLATILES     | 1,2-Dibromoetnane              | 5,32-02    | 0.0005      | 0.005        | INE NE     | NE            | 5.55-02    |                  | 0,000 1 0        |                  |                  |
| VOLATILES     | 1,2-Dichlorobenzene            | 5.6E+U1    | 0.0005      | 0.005        | NC         | NE            | 0.0000     | 1                | 0.006 1 1        |                  |                  |
| VOLATILES     | 1,2-Dichloroethane             | 2.78-01    | 0.0005      | 0.005        |            | NE            | 2.75-01    | 1                | 0.000 1 0        |                  |                  |
| VOLATILES     | 1,2-Dichloropropane            | 1.8E+00    | 0.0005      | 0.005        | NE         | NE            | 1.02400    | t                | 0.000 1 0        |                  |                  |
| VOLATILES     | 1,2-Dimethylbenzene (o-Xylene) | 3.3E+03    | 0.0005      | 0.005        | NE         | NE            | 3.35703    |                  | 0.000 1 0        |                  |                  |
| VOLATILES     | 1,3,5-Trimethylbenzene         | 8.3E+00    | 0.0005      | 0.005        | NE         | NE            | 8.3E+00    |                  | 0.006 1 11       |                  |                  |
| VOLATILES     | 1.3-Dichlorobenzene            | 5.1E+00    | 0.0005      | 0.005        | NE         | NE.           | 0.1E+00    |                  | 0,000 1 0        |                  |                  |
| VOLATILES     | 1.3-Dichloropropane            | 3.0E+00    | 0.0005      | 0.005        | NE         | NE            | 3.02+00    |                  | 0.000 1 1        |                  |                  |
| VOLATILES     | 1,4-Dichlorobenzene            | 2.7E+01    | 0.0005      | 0.005        | NE         | NE            | 2.70+01    |                  | 0.000 1 0        |                  |                  |
| VOLATILES     | 2,2-Dichloropropane            | 1.7E+00    | 0.0005      | 0,005        | NE         | NE            | 1.7E+00    |                  | 0.006 1 0        |                  |                  |
| VOLATILES     | 2-Butanone                     | 2.62+03    | 0.0025      | 0.010        | NE         | NE            | 2.6E+03    |                  | 0.011 1 0        |                  |                  |
| VOLATILES     | 2-Chloroethyl vinyl ether      | 2.1E-01    | 0.0020      | 0.010        | NE         | NE            | 2.1E-01    |                  | 0.011 1 0        |                  |                  |
| VOLATILES     | 2-Chlorotoluene                | 1.5E+02    | 0.0005      | 0.005        | NE         | NE            | 1.56+02    |                  |                  |                  |                  |
| VOLATILES     | 2-Hexanone                     | 6.2E+00    | 0.0025      | 0.010        | NE         | NE            | 6.2E+00    |                  | 0.011 1 0 00     |                  |                  |
| VOLATILES     | 4-Chlorotoluene                | 3.4E-01    | 0.0005      | 0.005        | NE         | NE            | 3.4E-01    |                  | 0.006 1 0        |                  |                  |
| VOLATILES     | Acetone                        | 1.7E+02    | 0.0050      | 0.010        | NE         | NE            | 1.7E+02    |                  | 0.014 1 J        |                  |                  |
| VOLATILES     | Benzene                        | 8.8E-01    | 0.0005      | 0.005        | NE         | NE            | 8.8E-01    | 1                | 0.006 1 0        |                  |                  |
| VOLATILE\$    | Bromobenzene                   | 1.1E+01    | 0.0005      | 0.005        | NË         | NE            | 1.1E+01    | 1                | 0.006 1 U        |                  |                  |
| VOLATILES     | Bromochloromethane             | 2.4E+01    | 0.0005      | 0.005        | NE         | NE            | 2.4E+01    |                  | 0.006 1 0        |                  |                  |
| VOLATILES     | Bromodichloromethane           | 1.0E+01    | 0.0005      | 0.005        | NE         | NE            | 1.0E+01    |                  | 0.006 1 0        |                  |                  |
| VOLATILES     | Bromoform                      | 3.4E+01    | 0.0005      | 0.005        | NE         | NE            | 3.4E+01    |                  | 0.006 1 U        |                  |                  |
| VOLATILES     | Bromomethane                   | 3.5E-01    | 0.0010      | 0.010        | NE         | NE            | 3.5E-01    |                  | 0.011 1 U        |                  |                  |
| VOLATILES     | Carbon disulfide               | 1.0E+02    | 0.0005      | 0.005        | NE         | NE            | 1.0E+02    |                  | 0.006 1 U        |                  |                  |
| VOLATILES     | Carbon tetrachloride           | 3.5E-01    | 0.0005      | 0.005        | NE         | NE            | 3.5E-01    | 1                | 0.006 1 U        |                  |                  |
| VOLATILES     | Chlorobenzene                  | 4.0E+01    | 0.0005      | 0.005        | NE         | NE            | 4.0E+01    |                  | 0.006 1 U        |                  |                  |
| VOLATILES     | Chloroethane                   | 1.1E+03    | 0.0010      | 0.010        | NE         | NE            | 1.1E+03    |                  | 0.011 1 U        |                  |                  |
| VOLATILES     | Chloroform                     | 3.1E-01    | 0.0005      | 0.005        | NE         | NE            | 3.1E-01    |                  | 0.006 1 U        |                  |                  |
| VOLATILES     | Chloromethane                  | 2.3E-01    | 0.0020      | 0.010        | NE         | NE            | 2.3E-01    |                  | 0.011 1 U        |                  |                  |
| VOLATILES     | cis-1,2-Dichloroethene         | 1.2E+02    | 0.0005      | 0.005        | NE         | NE            | 1.2E+02    |                  | 0.006 1 U        |                  |                  |
| VOLATILES     | cis-1.3-Dichloropropene        | 1.2E+00    | 0,0005      | 0.005        | NE         | NE            | 1.2E+00    | 1                | 0.006 1 U        |                  |                  |
| VOLATILES     | Dibromochloromethane           | 7.6E+00    | 0.0005      | 0.005        | NE         | NE            | 7.6E+00    | 1                | 0.006 1 U        |                  |                  |
| VOLATILES     | Dibromomethane                 | 1.9E+01    | 0.0005      | 0.005        | NE         | NE            | 1.9E+01    | I                | 0.006 1 U        |                  |                  |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066447

Table 4-27 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-027

|   |                           |  |                     |             |   |  | oump-ori                                     | _  |  |  |  |
|---|---------------------------|--|---------------------|-------------|---|--|--|--|--|--|--|
| [SUMP] = SUMI<br>LOCATION _CO<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURF | P027<br>DDE<br>E<br>POSE  | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method      | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soll<br><u>PL, mg/kg)</u><br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP027-SB01<br>35-SMP27-SB01-01<br>9/12/2006<br>0 - 0.5 Ft<br>REG | 35SUMP027-SB01<br>35-SMP27-SB01-02<br>9/12/2006<br>5.5 - 6 Ft<br>REG | 47SB31<br>47SB31(0-0_5)<br>6/5/2000<br>0 - 0.5 Ft<br>REG | 47SB31<br>47SB31(1-2)<br><del>6/5/2000<br/>1 - 2 Ft</del><br>REG |
| Test Group  | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   |
| VOLATILES   | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010       | NE                                      | NE   | 2.2E+02                                      |  | 0.011 1 U  |  |  |
| VOLATILE\$  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 4.3E+02                                      |  | 0.005 1 U  |  |  |
| VOLATILES   | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.6E+00                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | Isopropylbenzene          | 5.4E+02                                  | 0,0005              | 0.005       | NE                                      | NÉ   | 5.4E+02                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | m.p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.3E+02                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01        | NE                                      | NE   | 1.3E+03                                      |  | 0.011 1 U  |  |  |
| VOLATILES   | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005       | NE                                      | NE   | 8.7E+00                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01        | NE                                      | NE   | 1.8E+01                                      |  | 0.011 1 U  |  |  |
| VOLATILES   | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.7E+02                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005       | NÉ                                      | NE   | 3.2E+02                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 4.2E+02                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.0E+02                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.3E+03                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.6E+02                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 6.0E+00                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.1E+03                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | trans-1,2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.4E+02                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | trans-1,3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.8E+00                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.7E+00                                      |  | 0.006 1 U  |  |  |
| VOLATILES   | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01        | NË                                      | NE   | 2.6Ë+02                                      |  | 0.011 1 U  |  |  |
| VOLATILES   | Vinyl acetate             | 5.7E+01                                  | 0.0010              | 0.01        | NE                                      | NE   | 5.7E+01                                      |  | 0.011 1 U  |  |  |
| VOLATILES   | Vinyl chloride            | 3.6E+02                                  | 0.0010              | 0.01        | NE                                      | ' NE   | 3.6E-02                                      |  | 0.011 1 U  |  |  |

VOLATILES Vinyl chloride 3. Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

### 00066448

| Table 4-28   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |

|                | Sump-028                    |                    |             |              |                 |                     |                    |                                    |                                    |                                    |                                    |  |
|----------------|-----------------------------|--------------------|-------------|--------------|-----------------|---------------------|--------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--|
| LOCATION_CODE  |                             | TOPO               |             |              | Back            | around              | Annlichle          | 35SUMP036-SB01<br>35-SMP36-SB01-01 | 35SUMP036-SB01<br>35-SMP36-SB01-02 | 35SUMP036-SB02<br>35-SMP36-SB02-01 | 35SUMP036-SB02<br>35-SMP36-SB02-02 |  |
|                |                             | Risk-Based         |             |              | Concentra       | tions in Soil       | TCEQ               | 9/12/2006                          | 9/12/2006                          | 9/12/2006                          | 9/12/2006                          |  |
| DEPTH          |                             | Screening          | Method      | Method       | (95% UF         | L, mg/kg)           | Risk-Based         | _5 - 5 Ft                          | 10 - 10 Ft                         | _55 Pt                             | 10 - 10 Ft<br>REG                  |  |
| SAMPLE_PURPOSE |                             | Value              | Detection   | Quantitation | Surface         | Subsurface          | Screening          | REG                                | REG                                |                                    |                                    |  |
| Test Group     | Parameter (Units = mg/kg)   | (RBSV)*            | Limit (MOL) | Limit (MQL)  | 0 - 0.5 Ft      | <u>1.5 - 2.5 Ft</u> | Value<br>1 6E+04   | 7140.000 1                         | 8930.000 1                         | 8580.000 1                         | 11800.000 1                        |  |
| METALS         | Aluminum<br>Antimony        | 1.6E+04<br>7.3E+00 | 0.500       | 20.00        | 0.94            | 2.002+04            | 7.3E+00            | 0.109 1 U                          | 0.121 1 U                          | 0.105 1 U                          | 0.071 1 J J                        |  |
| METALS         | Arsenic                     | 2.0E+01            | 0.075       | 0.30         | 4.81E+00        | 5.54E+00            | 2.0E+01            | 2.510 1                            | 0.188 1 J J                        | 2,290 1                            | 2.140 1                            |  |
| METALS         | Barium                      | 2.6E+03            | 0.075       | 0.30         | 1.52E+02        | 8.55E+01            | 2.6E+03            | 119.000 1                          | 51,100 1                           | 53.100 1                           | 1.920 1                            |  |
| METALS         | Berylium                    | 4.6E+00<br>5.2E+00 | 0.012       | 0.50         | 6.45E-01<br>1.4 | 0.4                 | 4.02+00<br>5.2E+00 | 0.135 1 J J                        | 0.141 1 J J                        | 0.065 1 J J                        | 0.136 1 J J                        |  |
| METALS         | Calcium                     | NE                 | NA          | NA           | NA              | NA                  | -                  | 1000.000 1                         | 1950.000 1                         | 547.000 1                          | 2440.000 1                         |  |
| METALS         | Chromium                    | 5.9E+03            | 0.100       | 0.40         | 2.66E+01        | 3.01E+01            | 5.9E+03            | 9.630 1                            | 13.900 1                           | 18.100 1                           | 18.400 1                           |  |
| METALS         | Cobalt                      | 1.5E+03            | 0.125       | 0.50         | 7.23E+00        | 5.61E+00            | 1.5E+03            | 2.120 1                            | 14 200 1                           | 2.620 1                            | 15,100 1                           |  |
| METALS         | Copper                      | 1.0E+03<br>NE      | 0.150<br>NA | NA NA        | 5.55E+00<br>NA  | 9.25E+00            | -                  | 11000.000 1                        | 13600.000 1                        | 13100.000 1                        | 17500.000 1                        |  |
| METALS         | Lead                        | 5.0E+02            | 0.500       | 5.00         | 2.26E+01        | 1.14E+01            | 5.0E+02            | 5.990 1                            | 7.830 1                            | 8.050 1                            | 15.000 1                           |  |
| METALS         | Magnesium                   | NE                 | NA          | NA           | NA              | NA                  | -                  | 288.000 1                          | 3200.000 1                         | 409,000 1                          | 4090.000 1                         |  |
| METALS         | Manganese                   | 1.7E+03            | 0.050       | 0.20         | 1.25E+03        | 2.01±+02            | 1.7E+03            | 0.022 1 .1 .1                      | 0.015 1 1                          | 0.018 1 J J                        | 0.012 1 U                          |  |
| METALS         | Nickel                      | 1.10-02            | 0.200       | 0.80         | 6.98E+00        | 1.16E+01            | 1.9E+02            | 2.920 1                            | 39,400 1                           | 4.330 1                            | 45.400 1                           |  |
| METALS         | Potassium                   | NE                 | NA          | NA           | NA              | NA                  | -                  | 236.000 1                          | 726.000 1                          | 253.000 1                          | 816.000 1                          |  |
| METALS         | Selenium                    | 1.3E+02            | 0.100       | 0.20         | 3.48E+00        | 5.57E+00            | 1.3E+02            | 0.444 1                            | 0.447 1                            | 0.397 1                            | 1.100 1                            |  |
| METALS         | Silver                      | 4.7E+01            | 0.050       | 0.20         | 0.31            | 0.37                | 4.7E+01            | 26,800 1                           | 682 000 1                          | 17.300 1 J J                       | 822.000 1                          |  |
| METALS         | Socium                      | N⊏<br>20E+00       | 0.010       | 0.02         | 0.47            | NE                  | 2.0E+00            | 0.044 1                            | 0.129 1                            | 0.073 1                            | 0.233 1                            |  |
| METALS         | Vanadium                    | 4.8E+01            | 0.125       | 0.50         | 3.21E+01        | 4.46E+01            | 4.8E+01            | 19.500 1                           | 18.700 1                           | 25.600 1                           | 18.300 1                           |  |
| METALS         | Zinc                        | 5.9E+03            | 0.625       | 2.50         | 61.6            | 2.02E+01            | 5.9E+03            | 8.950 1                            | 46,500 1                           | 10.700 1                           | 69.800 1<br>0.192 1 11             |  |
| SEMIVOLATILES  | 1,2,4-Trichlorobenzene      | 1.4E+02            | 0.0825      | 0.165        | NE              | NE                  | 1.4E+02            | 0.188 1 U                          | 0.196 I U                          | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | 1,2-Dichlorobenzene         | 5.0E+01            | 0.0825      | 0.165        | NE              | NE                  | 5.1E+00            | 0.188 1 U                          | 0.196 1 U                          | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | 1,4-Dichlorobenzene         | 2.7E+01            | 0.0825      | 0.165        | NE              | NE                  | 2.7E+01            | 0.188 1 U                          | 0.196 1 U                          | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | 2,4,5-Trichlorophenol       | 1.6E+03            | 0.0825      | 0.165        | NE              | NE                  | 1.6E+03            | 0.188 1 U                          | 0.196 1 U UJL                      | 0.1/1 1 U                          | 0,192 1 0                          |  |
| SEMIVOLATILES  | 2,4,6-Trichlorophenol       | 4.5E+01            | 0.0825      | 0.165        | NE              | NE                  | 4.5E+01            | 0.188 1 0                          | 0.196 1 0 00L                      | 0.171 1 1                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | 2,4-Dimethylphenol          | 4.7E+01<br>3.1E+02 | 0.0825      | 0.165        | NE              | NE                  | 3.1E+02            | 0.188 1 U                          | 0.196 1 U UJL                      | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | 2.4-Dinitrophenol           | 3.1E+01            | 0.3300      | 0.825        | NE              | NE                  | 3.1E+01            | 0.939 1 U                          | 0.982 1 U UJL                      | 0.857 1 U                          | 0.959 1 U                          |  |
| SEMIVOLATILES  | 2,4-Dinitrotokuene          | 7.2E-01            | 0.0825      | 0.165        | NE              | NE                  | 7.2E-01            | 0.188 1 U                          | 0.196 1 U                          | 0.171 1 0                          | 0.192 1 0                          |  |
| SEMIVOLATILES  | 2,6-Dinitrotoluene          | 7.2E-01            | 0.0825      | 0.165        | NE              | NE                  | 7.2E-01<br>1.1E+03 | 0.188 1 U                          | 0.196 1 U                          | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | 2-Chlorophenol              | 1.1E+03<br>1.1E+02 | 0.0825      | 0.165        | NE              | NE                  | 1.1E+02            | 0,188 1 U                          | 0.196 1 U UJL                      | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | 2-Methyinaphthalene         | 5.5E+01            | 0.0825      | 0.165        | NE              | NE                  | 5.5E+01            | 0.188 1 U                          | 0.196 1 U                          | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | 2-Methylphenol              | 7.7E+02            | 0.0825      | 0.165        | NE              | NE                  | 7.7E+02            | 0.188 1 U                          | 0.196 1 U UJL                      | 0.171 1 0                          | 0.192 I U                          |  |
| SEMIVOLATILES  | 2-Nitroaniline              | 4.7E+00            | 0.3300      | 0.825        | NE              | NE                  | 4.76+00            | 0.939 1 0                          | 0.196 1 U UJL                      | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | 3.3'-Dichlorobenzidine      | 1.1E+00            | 0.1650      | 0.330        | NE              | NE                  | 1.1E+00            | 0.376 1 U                          | 0.393 1 U                          | 0.343 1 U                          | 0.384 1 U                          |  |
| SEMIVOLATILES  | 3-Nitroaniline              | 4.7E+00            | 0.3300      | 0.825        | NE              | NE                  | 4.7E+00            | 0.939 1 U                          | 0.982 1 U                          | 0.857 1 U                          | 0.959 1 U                          |  |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol  | 3.1E+01            | 0.3300      | 0.825        | NE              | NE                  | 3.1E+01            | 0.939 1 U                          | 0.982 1 0 0.00                     | 0.657 1 0                          | 0.099 1 U                          |  |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether  | 3.1E-02<br>7.7E+01 | 0.0825      | 0.165        | NE              | NE                  | 7.7E+01            | 0.188 1 U                          | 0.196 1 U UJL                      | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | 4-Chloroaniline             | 6.2E+01            | 0.0825      | 0.165        | NE              | NE                  | 6.2E+01            | 0,188 1 U                          | 0.196 1 U                          | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | 4-Chlorophenyl phenyl ether | 2.8E-02            | 0.0825      | 0.165        | NE              | NË                  | 1.7E-01            | 0.096 1 U                          | 0.102 1 U                          | 0.089 1 U                          | 0.099 1 0                          |  |
| SEMIVOLATILES  | 4-Methylphenol              | 7.7E+01            | 0.0825      | 0,165        | NE              | NE                  | 7.7E+01            | 0.188 1 U                          | 0.196 1 0 0JL                      | 0.857 1 U                          | 0.959 1 U                          |  |
| SEMIVOLATILES  | 4-Nitroaniline              | 1.3E+01            | 0.3300      | 0.825        | NE              | NE                  | 3 15+01            | 0.939 1 U                          | 0.962 1 U UJL                      | 0.857 1 U                          | 0.959 1 U                          |  |
| SEMIVOLATILES  | Acenaphthene                | 8.2E+02            | 0.0825      | 0.165        | NE              | NE                  | 8.2E+02            | 0.188 1 U                          | 0.196 1 U                          | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | Acenaphthylene              | 8.2E+02            | 0.0825      | 0.165        | NE              | NE                  | 8.2E+02            | 0.188 1 U                          | 0.196 1 U                          | 0.171 1 U                          | 0,192 1 U<br>0,192 1 U             |  |
| SEMIVOLATILES  | Anthracene                  | 4.1E+03            | 0.0825      | 0.165        | NE              | NE                  | 4.1E+03            | 0.188 1 U                          | 0.196 1 U                          | 0.171 1 0                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | Benzo(a)anthracene          | 6.35-01            | 0.0825      | 0.105        | 0.0153          |                     | 1.7E-01            | 0.096 1 U                          | 0.102 1 U                          | 0.089 1 U                          | 0.099 1 U                          |  |
| SEMIVOLATILES  | Benzo(b)fluoranthene        | 6.3E-01            | 0.0825      | 0.165        | 0.0153          | NE                  | 6.3E-01            | 0.188 1 U                          | 0.196 1 U                          | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | Benzo(ghi)perylene          | 4.1E+02            | 0.0825      | 0.165        | 0.0123          | NE                  | 4.1E+02            | 0,188 1 U                          | 0.196 1 U                          | 0.171 1 U                          | 0.192 1 U<br>0.492 1 H             |  |
| SEMIVOLATILES  | Benzo(k)fluoranthene        | 6.3E+00            | 0.0825      | 0.165        | 0.013           | NE                  | 6.3E+00            | 0.168 1 U                          | 0.196 1 U<br>0.082 4 H             | 0.371 1 0                          | 0.959 1 U                          |  |
| SEMIVOLATILES  | Benzoic Acid                | 6.2E+04            | 0.3300      | 0.825        | NE              |                     | 0.2E+04<br>4.7E+03 | 0.188 1 U                          | 0.196 1 U                          | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane  | 2.9E-01            | 0.0825      | 0.165        | NE              | NE                  | 2.9E-01            | 0.188 1 U                          | 0.196 1 U                          | 0.171 1 U                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | bis(2-Chloroethyl)ether     | 1.5E-01            | 0.0825      | 0.165        | NE              | NE                  | 1.7E-01            | 0.096 1 U                          | 0.102 1 U                          | 0.089 1 U                          | 0.099 1 U                          |  |
| SEMIVOLATILES  | bis(2-Chloroisopropyl)ether | 4.8E+00            | 0.0825      | 0.165        | NE              | NE                  | 4.8E+00            | 0.188 1 U                          | 0.196 1 U                          | 0.171 1 0                          | 0.192 1 U                          |  |
| SEMIVOLATILES  | bis(2-Ethylhexyt)phthalate  | 1.7E+01            | 0.0825      | 0.105        | NE              | NE                  | 1.14101            | 0.100 1 0                          | 0.150 1 0                          | 0.111                              |                                    |  |

Shaw Environmental, Inc.

### 00066449

#### Table 4-28 . . . ... \_

| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values | 6 |
|--|---|
| Sump 029   |   |

|                |                               |            |             |              |            |               | imp-vzo    | _                                       |                  |                  |                    |
|----------------|-------------------------------|------------|-------------|--------------|------------|---------------|------------|---|------------------|------------------|--------------------|
| LOCATION CODE  |                               |            |             |              |            |               |            | 35SUMP036-SB01                          | 35SUMP036-SB01   | 35SUMP036-SB02   | 35SUMP036-SB02     |
| SAMPLE NO      |                               | TCEO       |             |              | Back       | around        | Applicble  | 35-SMP36-SB01-01                        | 35-SMP36-SB01-02 | 35-SMP36-SB02-01 | 35-SMP36-SB02-02   |
| SAMPLE DATE    |                               | Risk-Rased |             |              | Conceptor  | tions in Soil | TCEO       | 9/12/2006                               | 9/12/2006        | 9/12/2006        | 9/12/2006          |
| DEDTU          |                               | Scrooning  | Mothod      | Method       | /05% LIE   | na ma/ka)     | Risk-Based | 5-5Ft                                   | 10 - 10 Ft       | 5-5Ft            | 10 - 10 Ft         |
|                |                               | Value      | Detection   | Quantitation | Surface    | Subsurface    | Screening  | REG                                     | REG              | REG              | REG                |
| SAMPLE_PURPOSE |                               | value      | Delection   | Quantitation | Sunace     | 300301606     | ovicening  |   |                  |                  | Besult Dill 10 1/0 |
| Test Group     | Parameter (Units = mg/kg)     | (RBSV) "   | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value      | Result DIL LQ VQ                        | Result DIL LQ VQ | Result UIL LO VO | Result DIL LQ VQ   |
| SEMIVOLATILES  | Butyl benzyl phthalate        | 3.1E+03    | 0.0825      | 0.165        | NE         | NE            | 3.1E+03    | 0.188 1 U                               | 0.196 1 U        | 0.171 1 0        | 0.192 1 U          |
| SEMIVOLATILES  | Chrysene                      | 6.3E+01    | 0.0825      | 0.165        | 0.0151     | NE            | 6.3Ë+01    | 0.188 1 U                               | 0.196 1 U        | 0.171 1 U        | 0.192 1 0          |
| SEMIVOLATILES  | Dibenzo(a.h)anthracene        | 6.3E-02    | 0.0825      | 0.165        | NE         | NE            | 1.7E-01    | 0.096 1 U                               | 0.102 1 U        | 0.069 1 U        | 0.099 1 U          |
| SEMIVOLATILES  | Dibenzofuran                  | 6 2E+01    | 0.0825      | 0.165        | NE         | NE            | 6.2E+01    | 0.188 1 U                               | 0.196 1 U        | 0.171 1 U        | 0.192 1 U          |
| SEMIVOLATILES  | Diethyl obthalate             | 1 2 =+ 04  | 0.0825      | 0 165        | NE         | NE            | 1 2E+04    | 0.188 1 U                               | 0.196 1 U        | 0.171 1 U        | 0.192 1 U          |
| SEMIVOLATILES  | Directly philate              | 1.20104    | 0.0020      | 0.165        | NE         |               | 1 25+04    | 0.188 1 11                              | 0.196 1 11       | 0.171 1 U        | 0.192 1 U          |
| SEMIVOLATILES  | dia Dut datable               | 1.20704    | 0.0025      | 0.105        | NE         |               | 1.65-109   | 0.189 1 11                              | 0.106 1 11       | 0 171 1 11       | 0.192 1 1          |
| SEMIVOLATILES  | ol-n-Butyl primalate          | 1.02+03    | 0.0625      | 0.100        | NE         |               | 1.02103    | 0,100 1 0                               | 0.106 5 11       | 0.171 1 1        | 0.192 1 1          |
| SEMIVOLATILES  | di-n-Octyl phthalate          | 3.1E+02    | 0.0825      | 0,105        | NE         | NE            | 3.16402    | 0.100 1 0                               | 0.100 1 0        | 0.171 1 0        | 0.102 1 11         |
| SEMIVOLATILES  | Fluoranthene                  | 5.5E+02    | 0.0825      | 0.165        | 0.0229     | NE            | 5.5E+02    | 0.188 1 0                               | 0.196 1 0        | 0.171 1 0        | 0.102 1 0          |
| SEMIVOLATILES  | Fluorene                      | 5.5E+02    | 0.0825      | 0.165        | NE         | NE.           | 5.5E+02    | 0.188 1 0                               | 0.196 1 U        | 0.171 1 0        | 0.192 1 0          |
| SEMIVOLATILES  | Hexachlorobenzene             | 2.5E-01    | 0.0825      | 0.165        | NE         | NE            | 2.5E-01    | 0.188 1 U                               | 0.196 1 U        | 0.1/1 1 U        | 0.192 1 0          |
| SEMIVOLATILES  | Hexachlorobutadiene           | 1.6E+00    | 0.0825      | 0.165        | NE         | NE            | 1.6E+00    | 0.188 1 U                               | 0.196 1 U        | 0.171 1 U        | 0.192 1 U          |
| SEMIVOLATILES  | Hexachlorocyclopentadiene     | 1.0E+00    | 0.0825      | 0.165        | NE         | NE            | 1.0E+00    | 0.188 1 U                               | 0.196 1 U        | 0.171 1 U        | 0.192 1 U          |
| SEMIVOLATILES  | Hexachloroethane              | 1.6E+01    | 0.0825      | 0.165        | NE         | NE            | 1.6E+01    | 0.188 1 U                               | 0.196 1 U        | 0.171 1 U        | 0.192 1 U          |
| SEMIVOLATH ES  | Indeno(1.2.3-cd)nyrene        | 6.3E-01    | 0.0825      | 0.165        | 0.0143     | NE            | 6.3E-01    | 0.188 1 U                               | 0.196 1 U        | 0.171 1 U        | 0.192 1 U          |
| SEMIVOLATILES  | Isophorone                    | 5 2E+02    | 0.0825      | 0 165        | NF         | NE            | 5.2E+02    | 0.188 1 U                               | 0.196 1 U        | 0.171 1 U        | 0.192 t U          |
| SEMIVOLATILES  | Nanhthalana                   | 1 85+01    | 0.0020      | 0.165        | NE         | ME            | 1.8E+01    | 0.188 1 U                               | 0.196 1 U        | 0.171 1 U        | 0.192 1 U          |
| SEMIVOLATILES  | Nitrohonzono                  | 8 65+00    | 0.0025      | 0.165        | NE         | NE            | 6.5E+00    | 0.188 1 11                              | 0 196 1 1        | 0.171 1 U        | 0.192 1 U          |
| SEMIVOLATILES  | Nilitata di a providenzia e   | 445.00     | 0.0025      | 0.105        | NE         |               | 1.75-01    | 0.096 1 11                              | 0.102 1 11       | 0.089 1 11       | 0.099 1 U          |
| SEMIVOLATILES  | n-Nuroso-ui-n-propylamine     | 4.16-02    | 0.0020      | 0.105        | NG.        |               | 6.05+04    | 0.199 1 11                              | 0.106 1 11       | 0.171 1 1        | 0.192 1 11         |
| SEMIVOLATILES  | n-Nitrosodionenyiamine        | 5.96+01    | 0,0825      | 0.165        | NE         |               | 3.92701    | 0.166 1 0                               | 0.180 1 0        | 0.057 1 11       | 0.050 1 11         |
| SEMIVOLATILES  | Pentachlorophenol             | 3.0E+00    | 0.3300      | 0.825        | NE         | NE            | 3.0E+00    | 0.939 1 0                               | 0.962 1 0 03L    | 0.171 1 1        | 0.000 1 11         |
| SEMIVOLATILES  | Phenanthrene                  | 4.1E+02    | 0.0825      | 0.165        | NE         | NE            | 4.1E+02    | 0.188 1 U                               | 0,196 1 0        | 0.171 1 0        | 0.192 1 0          |
| SEMIVOLATILES  | Phenol                        | 4.7E+03    | 0.0825      | 0.165        | NE         | NE            | 4.7E+03    | 0.188 1 U                               | 0.196 1 U UJL    | 0.171 1 U        | 0.192 1 0          |
| SEMIVOLATILES  | Pyrene                        | 4.1E+02    | 0.0825      | 0.165        | 0.0194     | NE            | 4.1E+02    | 0.188 1 U                               | 0.196 1 U        | 0.171 1 U        | 0.192 1 0          |
| SOLIDS         | Percent Solids                | NE         | NA          | NA           | NE         | NE            | -          | 85.800 1                                | 81.000 1         | 93.000 1         | 83.300 1           |
| VOLATILES      | 1.1.1.2-Tetrachloroethane     | 5.2E+00    | 0.0005      | 0.005        | NE         | NE            | 5.2E+00    |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | 1.1.1-Trichloroethane         | 2.3E+02    | 0.0005      | 0.005        | NE         | NE            | 2.3E+02    |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | 1 1 2 2-Tetrachiomethane      | 5 15-01    | 0.0005      | 0.005        | NE         | NE            | 5.1E-01    |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | 1 1 2-Trichloroethone         | 9.75-01    | 0.0005      | 0.005        | NE         | NE            | 97E-01     |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | 1.1.Dichlomothana             | 8 05+01    | 0.0000      | 0.005        | NE         | NE            | 8 9 =+ 01  |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | 1 1 Dichlerseihene            | 0.32101    | 0.0010      | 0.005        | NE         | NE            | 2 75+01    |   | 0.006 1 11       |                  | 0.005 1 U          |
| VOLATILES      | 1,1-Dichloroemene             | 2.7 6701   | 0.0005      | 0.005        |            |               | 2.72101    |   | 0.006 1 1        |                  | 0.005 1 11         |
| VOLATILES      | 1,1-Dichloropropene           | 9.9E-01    | 0.0005      | 0.005        | NE         | NE            | 9.92-01    |   | 0.000 1 0        |                  | 0.005 1 1          |
| VOLATILES      | 1,2,3-Trichlorobenzene        | 4.2E+01    | 0.0005      | 0.005        | NE         | NE            | 4.2E+01    |   | 0.006 1 0        |                  | 0.005 1 0          |
| VOLATILES      | 1,2,3-Trichloropropane        | 9.2E-02    | 0.0010      | 0.005        | NE         | NE            | 9.2E-02    |   | 0.006 1 U        |                  |                    |
| VOLATILES      | 1,2,4-Trichlorobenzene        | 1.4E+02    | 0.0005      | 0.005        | NE         | NE            | 1.4E+02    |   | 0.006 1 U        |                  | 0.005 1 0          |
| VOLATILES      | 1,2,4-Trimethylbenzene        | 9.6E+00    | 0.0005      | 0.005        | NE         | NE            | 9.6E+00    |   | 0.006 1 U        |                  | 0.005 1 0          |
| VOLATILES      | 1,2-Dibromo-3-chloropropane   | 3.5E-01    | 0.0020      | 0.005        | NE         | NE            | 3.5E-01    |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | 1.2-Dibromoethane             | 5.3E-02    | 0.0005      | 0.005        | NE         | NE            | 5,3E-02    |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | 1.2-Dichlorobenzene           | 5.6E+01    | 0.0005      | 0.005        | NE         | NE            | 5.6E+01    |   | 0.006 1 U        |                  | 0,005 1 U          |
| VOLATILES      | 1.2-Dicbloroethane            | 2.7E-01    | 0.0005      | 0.005        | NE         | NË            | 2.7E-01    |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | 1.2-Dichloropronane           | 1.85+00    | 0.0005      | 0.005        | NE         | NE            | 1.8F+00    |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | 1.2-Dimethylhenzene (n-Xytene | 3.35+03    | 0.0005      | 0.005        | NE         | NE            | 3.3E+03    |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | 1.2 - Trimothulhonzono        | 0.02.00    | 0.0005      | 0.000        |            | NE            | 9.35+00    |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | 1.3,5-mineutypenzene          | 5.35700    | 0.0005      | 0.005        | NE         |               | 5 1 5 + 00 |   | 0.006 1 11       |                  | 0.005 1 11         |
| VOLATILES      | 1,3-Dichorobenzene            | 5.12700    | 0.0005      | 0.005        |            |               | 3.00.00    |   | 0.006 1 1        |                  | 0.005 1 11         |
| VOLATILES      | 1,3-Dichloropropane           | 3.0E+00    | 0.0005      | 0.005        | NE         |               | 3.02700    | \$                                      | 0.000 1 0        |                  | 0.005 1 1          |
| VOLATILES      | 1,4-Dichlorobenzene           | 2.7E+01    | 0.0005      | 0.005        | NE         | NE            | 2.7E+01    | 1                                       | 0.005 1 0        |                  | 0.005 1 0          |
| VOLATILES      | 2,2-Dichloropropane           | 1.7E+00    | 0.0005      | 0.005        | NE         | NE            | 1.7E+00    |   | 0.006 1 0        |                  | 0.005 1 0          |
| VOLATILES      | 2-Butanone                    | 2.6E+03    | 0.0025      | 0.010        | NE         | NE            | 2.6E+03    |   | 0.011 1 U        |                  | 0,010 1 0          |
| VOLATILES      | 2-Chloroethyl vinyt ether     | 2.1E-01    | 0.0020      | 0.010        | NE         | NÉ            | 2.1E-01    |   | 0.011 1 U        |                  | 0.010 1 0          |
| VOLATILES      | 2-Chlorotoluene               | 1.5E+02    | 0.0005      | 0.005        | NE         | NE            | 1.5E+02    |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | 2-Hexanone                    | 6.2E+00    | 0.0025      | 0.010        | NE         | NE            | 6.2E+00    |   | 0.011 1 U        |                  | 0.010 1 U          |
| VOLATILES      | 4-Chlorotoluene               | 3.4E-01    | 0.0005      | 0.005        | NE         | NE            | 3.4E-01    |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | Acetone                       | 1 7E+02    | 0.0050      | 0.010        | NE         | NE            | 1 7E+02    |   | 0.011 1 U        |                  | 0.010 1 U          |
| VOLATILES      | Benzene                       | 8.85-01    | 0.0005      | 0.005        | NE         | NE            | 8.8E-01    |   | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | Remohenzena                   | 1 15+01    | 0.0005      | 0.005        |            | NE            | 1 15+01    |   | 0.006 1 1        |                  | 0.005 1 U          |
| VOLATILES      | Dromoblaromethere             | 2.45104    | 0.0000      | 0.000        |            |               | 2 45-01    | 1 · · · · · · · · · · · · · · · · · · · | 0.006 1 11       |                  | 0.005 1 11         |
| VOLATILES      | anomocritoriometriane         | 2.40401    | 0.0005      | 0.005        | NE         | INE NE        | 2.46701    | 1                                       | 0.006 4 11       |                  | 0.005 1 11         |
| VOLATILES      | promodicnioromethane          | 1.06+01    | 0.0005      | 0.005        | NE         | NE            | 1.0E+01    | 1                                       | 0.000 1 0        |                  | 0.005 4 11         |
| VOLATILES      | Bromotorm                     | 3.4E+01    | 0.0005      | 0.005        | NE         | NE            | 3.4E+01    | 1                                       | 0.000 1 0        |                  | 0.005 1 0          |
| VOLATILES      | Bromomethane                  | 3.5E-01    | 0.0010      | 0.010        | NE         | NE            | 3.5E-01    | 1                                       | 0.011 1 U        |                  | 0.010 1 0          |
| VOLATILES      | Carbon disulfide              | 1.0E+02    | 0.0005      | 0.005        | NE         | NE            | 1.0E+02    | 1                                       | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | Carbon tetrachloride          | 3.5E-01    | 0.0005      | 0.005        | NE         | NE            | 3.5E-01    | 1                                       | 0.006 1 U        |                  | 0.005 1 U          |
| VOLATILES      | Chlorobenzene                 | 4.0E+01    | 0.0005      | 0.005        | NE         | NE            | 4.0E+01    | 1                                       | 0.006 1 U        |                  | . 0.005 1 U        |
| VOLATILES      | Chloroethane                  | 1.1E+03    | 0.0010      | 0,010        | NE         | NE            | 1.1E+03    |   | 0.011 1 U        |                  | 0.010 1 U          |
| VOLATILES      | Chloroform                    | 3.1E-01    | 0,0005      | 0,005        | NE         | NE            | 3.1E-01    | 1                                       | 0.006 1 U        |                  | 0.005 1 U          |
|                |                               |            |             |              |            |               |            | •                                       | · · · · ·        |                  |                    |

Shaw Environmental, Inc.

## 00066450

| Table 4-28   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |

| Sump-028   |                           |                                 |             |              |                              |                                       |                                 |  |  |   |  |  |
|--|---------------------------|---------------------------------|-------------|--------------|------------------------------|---------------------------------------|---------------------------------|--|--|---|--|--|
| LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                           | TCEQ<br>Risk-Based<br>Screening | Method      | Method _     | Back<br>Concentra<br>(95% UF | ground<br>tions in Soil<br>°L, mg/kg) | Applicble<br>TCEQ<br>Risk-Based | 35SUMP036-SB01<br>35-SMP36-SB01-01<br>9/12/2006<br>_5 - 5 Ft | 35SUMP036-SB01<br>35-SMP36-SB01-02<br>9/12/2006<br>10 - 10 Ft<br>8EC | 355UMP036-SB02<br>35-SMP36-SB02-01<br>9/12/2006<br>_55 Ft<br> | 35SUMP036-SB02<br>35-SMP36-SB02-02<br>9/12/2006<br>10 - 10 Ft<br>REG |  |
| SAMPLE_PURPOSE                                     |                           | Value                           | Detection   | Quantitation | Surface                      | Subsurface                            | Screening                       |  |  |   | Result DIL LO VO   |  |
| Test Group   | Parameter (Units = mg/kg) | (RBSV)                          | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft                   | 1.5 - 2.5 Ft                          | Value                           | Result DIL LQ VQ   |  | Result_DIE_EQ_VQ  | 0.010 1 U  |  |
| VOLATILES  | Chloromethane             | 2.3E-01                         | 0.0020      | 0.010        | NE                           | NE                                    | 2.3E-01                         |  | 0.006 1 11   |   | 0.005 t U  |  |
| VOLATILES  | cis-1,2-Dichloroethene    | 1.2E+02                         | 0.0005      | 0.005        | NE                           | NE                                    | 1.25+02                         |  | 0.006 1 1  |   | 0.005 1 U  |  |
| VOLATILES  | cls-1,3-Dichloropropene   | 1.2E+00                         | 0.0005      | 0.005        | NE                           | NE                                    | 1.28+00                         |  | 0.006 1 11   |   | 0.005 1 U  |  |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                         | 0.0005      | 0.005        | NE                           | NE                                    | 7.02700                         |  | 0.006 1 11   |   | 0.005 1 U  |  |
| VOLATILES  | Dibromomethane            | 1.9E+01                         | 0.0005      | 0.005        | NE                           | NE                                    | 1.96+01                         |  | 0.011 1 1  |   | 0.010 1 U  |  |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02                         | 0.0010      | 0.010        | NE                           | NE                                    | 2.26+02                         |  | 0.011 1 0  |   | 0.005 1 U  |  |
| VOLATILES  | Ethylbenzene              | 4.3E+02                         | 0.0005      | 0.005        | NE                           | NE                                    | 4.3E+02                         |  | 0.006 1 11   |   | 0.005 1 U  |  |
| VOLATILES  | Hexachlorobutadiene       | 1.6E+00                         | 0.0005      | 0.005        | NE                           | NE                                    | 1.00+00                         |  | 0.006 1 1  |   | 0.005 1 U  |  |
| VOLATILES  | Isopropylbenzene          | 5.4E+02                         | 0.0005      | 0.005        | NE                           | NE                                    | 5.4E+02                         |  | 0.006 1 1  |   | 0.005 1 U  |  |
| VOLATILES  | m,p-Xylenes               | 2.3E+02                         | 0.0005      | 0.005        | NE                           | NE                                    | 2.32+02                         |  | 0.011 1 1  |   | 0.010 1 U  |  |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                         | 0.0025      | 0.01         | NE                           | NE                                    | 1.3E+03                         |  | 0.006 1 11   |   | 0.005 1 U  |  |
| VOLATILES  | Methylene chloride        | 8.7E+00                         | 0.0010      | 0.005        | NE                           | NE                                    | 8.7E+00                         |  | 0.000 1 0  |   | 0.010 t U  |  |
| VOLATILES  | Naphthalene               | 1.8E+01                         | 0.0005      | 0.01         | ' NE                         | NE                                    | 1.8E+01                         |  | 0.006 1 1  |   | 0.005 1 U  |  |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                         | 0.0005      | 0.005        | NE                           | NE                                    | 2.7E+02                         |  | 0.000 1 0  |   | 0.005 1 U  |  |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                         | 0.0005      | 0.005        | NE                           | NE                                    | 3.2E+02                         |  | 0.000 1 0  |   | 0.005 1 1  |  |
| VOLATILES  | p-ISOPROPYLTOLUENE        | 4.2E+02                         | 0.0005      | 0.005        | NE                           | NE                                    | 4.2E+02                         |  | 0.006 1 0  |   | 0.005 1 U  |  |
| VOLATILES  | sec-BUTYLBENZENE          | 3.0E+02                         | 0.0005      | 0.005        | NE                           | NE                                    | 3.0E+02                         |  | 0.006 1 0  |   | 0.005 1 U  |  |
| VOLATILES  | Styrene                   | 1.3E+03                         | 0.0005      | 0.005        | NE                           | NE                                    | 1.3E+03                         |  |  |   | 0.005 1 U  |  |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                         | 0.0005      | 0.005        | NE                           | NE                                    | 2.6E+02                         |  |  |   | 0.005 1 11   |  |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                         | 0.0005      | 0.005        | NE                           | NE                                    | 6.0E+00                         |  | 0.006 1 0  |   | 0.005 1 1  |  |
| VOLATILES  | Toluene                   | 1,1E+03                         | 0.0005      | 0.005        | NË                           | NE                                    | 1.1E+03                         |  | 0.006 1 0  |   | 0.005 1 11   |  |
| VOLATILES  | trans-1.2-Dichloroethene  | 1.4E+02                         | 0.0005      | 0.005        | NE                           | NE                                    | 1.4E+02                         |  | 0.006 1 0  |   | 0.005 1 11   |  |
| VOLATILES  | trans-1.3-Dichloropropene | 1.8E+00                         | 0.0005      | 0.005        | NE                           | NE                                    | 1.8E+00                         |  | 0,006 1 0  |   | 0.005 1 11   |  |
| VOLATILES  | Trichloroethene           | 3.7E+00                         | 0.0005      | 0.005        | NE                           | NE                                    | 3.7E+00                         |  | 0.005 1 0  |   | 0.010 1 1  |  |
| VOI ATILES   | Trichlorofluoromethane    | 2.6E+02                         | 0.0010      | 0.01         | NE                           | NE                                    | 2.6E+02                         |  | 0.011 1 U  |   | 0.010 1 1  |  |
| VOLATILES  | Vinvi acetate             | 5.7E+01                         | 0.0010      | 0.01         | NE                           | NE                                    | 5.7E+01                         |  | 0.011 1 0  |   | 0.010 1 1  |  |
| VOLATILES  | Vinvi chloride            | 3.6E-02                         | 0.0010      | 0.01         | NE                           | NE                                    | 3.6E-02                         | I  | 0.011 1 U  | ·· ·· ·   | 0.010 1 0  |  |

### 00066451

### Table 4-29 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-029

|                                |  |                    |             | Sump         | 0-029      |                |                    |                  |                  |
|--------------------------------|--|--------------------|-------------|--------------|------------|----------------|--------------------|------------------|------------------|
| [SUMP] = SUMP029               |  |                    |             |              |            |                |                    |                  |                  |
| LOCATION_CODE                  |  |                    |             |              |            |                |                    | 35SUMP029-SB01   | 35SUMP029-SB02   |
| SAMPLE_NO                      |  | TCEQ               |             |              | Back       | ground         | Applicble          | 35-SMP29-SB01-02 | 35-SMP29-SB02-02 |
| SAMPLE_DATE                    |  | Risk-Based         | Marks and   | M-45-4       | Concentra  | ations in Soil | TCEQ               | 9/12/2006        | 9/12/2006        |
|                                |  | Screening          | Detection   | Oupptitation | (95% U)    | L, mg/kg)      | Risk-Based         | 12 - 12 Pt       | 12 - 12 FL       |
| Test Ores                      | D  | value<br>(Provide  | Delection   | Quantitation | Sunace     | Subsultace     | ocreening          |                  | REG              |
| METAL C                        | Parameter (Units = mg/kg)                            | (RBSV)*            | LIMIT (MUL) | Limit (MUL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft   | Value              | Result DIL LQ VQ | Result UIL LQ VQ |
| METALS                         | Antimony   | 7 35+00            | 0.000       | 20.00        | 0.405-04   | 2.00E+04       | 7.35+00            |                  | 0 120 1 II III   |
| METALS                         | Arsenic  | 2.00+01            | 0.000       | 6 30         | 4.81E+00   | 5.54E+00       | 2.05+01            | 1010 1           | 2350 1           |
| METALS                         | Barium   | 2.6E+03            | 0.075       | 0.30         | 1.52E+02   | 8.55E+01       | 2.6E+03            | 75.900 1 JH      | 161.000 1 JH     |
| METALS                         | Bervillum  | 4.6E+00            | 0.012       | 0.50         | 6.45E-01   | 7.66E-01       | 4.6E+00            | 1.080 1          | 1.790 1          |
| METALS                         | Cadmium  | 5.2E+00            | 0.025       | 0.10         | 1.40E+00   | 4.00E-01       | 5.2E+00            | 0.092 1 J J      | 0.172 1 J J      |
| METALS                         | Calcium  | . NE               | NA          | NA           | NA         | NA             |                    | 1980.000 1       | 2150.000 1       |
| METALS                         | Chromium   | 5.9E+03            | 0.100       | 0.40         | 2.66E+01   | 3.01E+01       | 5.9E+03            | 14.600 1 JH      | 17.200 1 JH      |
| METALS                         | Cobalt   | 1.5E+03            | 0.125       | 0.50         | 7.23E+00   | 5.61E+00       | 1.5E+03            | 33.000 1         | 41.200 1         |
| METALS                         | Copper   | 1.0E+03            | 0.150       | 0.60         | 5.55E+00   | 9.25E+00       | 1.0E+03            | 8.690 1          | 14.400 1         |
| METALS                         | Iron   |                    | NA<br>0.500 | NA<br>F 00   | NA         | NA             |                    | 12500.000 1      | 16900.000 1      |
| METALO                         | Leau<br>Magnasium                                    | 5.0E+02            | 0.000       | 5.00         | 2.202+01   | 1.146+01       | 5.0E+02            | 4.810 1          | 15.400 1         |
| METALS                         | Mannanese  | 170+03             | 0.050       | 0.20         | 1255+03    | 2.01E+02       | 175+03             | 215 000 1        | 195.000 1 11     |
| METALS                         | Mercury  | 1 1E-02            | 0.000       | 0.25         | 8 19E-02   | 3 60E-01       | 2.5E-01            | 0.021 1          | 0.012 1 1        |
| METALS                         | Nickel   | 1.9E+02            | 0.200       | 0.80         | 6.98E+00   | 1.16E+01       | 1.9E+02            | 27.600 1 JH      | 29.000 1 JH      |
| METALS                         | Potassium  | NE                 | NA          | NA           | NA         | NA             |                    | 929.000 1 JH     | 976.000 1 JH     |
| METALS                         | Selenium   | 1.3E+02            | 0.100       | 0.20         | 3.48E+00   | 5.57E+00       | 1.3E+02            | 0.528 1 JL       | 0.539 1 JL       |
| METALS                         | Silver   | 4.7E+01            | 0.050       | 0.20         | 3.10E-01   | 3.70E-01       | 4.7E+01            | 1.830 t U        | 1.800 1 U        |
| METALS                         | Sodium   | NE                 | NA          | NA           | NA         | NA             | -                  | 417.000 1        | 539.000 1        |
| METALS                         | Thallium   | 2.0E+00            | 0.010       | 0.02         | 4.70E-01   | NE             | 2.0E+00            | 0.245 1          | 0.216 1          |
| METALS                         | Vanadium   | 4.8E+01            | 0.125       | 0.50         | 3.21E+01   | 4.46E+01       | 4.8E+01            | 13.600 1 JH      | 20.500 1 JH      |
| SEMIL/OI ATH ES                | 1 2 4 Trichlerobenzena                               | 5.9E+03            | 0.020       | 2.50         | 0.102+01   | 2.02E+01       | 5.9E+03            | 0 102 1 11       | 0.100 1          |
| SEMIVOLATILES                  | 1.2-Dichlorobenzene                                  | 5.6E+01            | 0.0825      | 0.165        | NE         | NE             | 1.46702<br>5.6E+01 | 0.193 1 1        | 0.180 1 0        |
| SEMIVOLATILES                  | 1.3-Dichlorohenzene                                  | 5 1E+00            | 0.0825      | 0.165        | NE         | NE             | 5 16+00            | 0.193 1 11       | 0 198 1 11       |
| SEMIVOLATILES                  | 1.4-Dichlorobenzene                                  | 2.7E+01            | 0.0825      | 0.165        | NE         | NE             | 2.7E+01            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenol                                | 1.6E+03            | 0.0825      | 0.165        | NE         | NE             | 1.6E+03            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | 2,4,6-Trichlorophenol                                | 4.5E+01            | 0.0825      | 0.165        | NE         | NE             | 4.5E+01            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | 2,4-Dichlorophenol                                   | 4.7E+01            | 0.0825      | 0.165        | NE         | NE             | 4.7E+01            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | 2,4-Dimethylphenol                                   | 3.1E+02            | 0.0825      | 0.165        | NE         | NE             | 3.1E+02            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | 2,4-Dinitrophenol                                    | 3.1E+01            | 0.3300      | 0.825        | NE         | NE             | 3.1E+01            | 0.965 1 U        | 0.990 1 U        |
| SEMIVOLATILES<br>SEMIVOLATILES | 2,4-Dinitrotoluene                                   | 7.2E-01            | 0.0825      | 0.165        | NE         | NE             | 7.2E-01            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATEES                   | 2.Chlorooanhthalana                                  | 1.20-01            | 0.0625      | 0.100        | NE         | NE             | 1.20-01            | 0.193 1 U        | 0.198 1 0        |
| SEMIVOLATILES                  | 2-Chloronhenol                                       | 1.1E+02            | 0.0825      | 0.165        | NE         | NE             | 1.16+03            | 0.193 1 0        | 0.190 1 0        |
| SEMIVOLATILES                  | 2-Methylnaphthalene                                  | 5.5E+01            | 0.0825      | 0 165        | NE         | NË             | 5.55+01            | 0.193 1 11       | 0198 1 U         |
| SEMIVOLATILES                  | 2-Methylphenol                                       | 7.7E+02            | 0.0825      | 0.165        | NE         | NE             | 7.7E+02            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | 2-Nitroaniline                                       | 4.7E+00            | 0.3300      | 0.825        | NE         | NE             | 4.7E+00            | 0.965 1 U        | 0.990 1 U        |
| SEMIVOLATILES                  | 2-Nitrophenol  | 3.1E+01            | 0.0825      | 0.165        | NE         | NE             | 3.1E+01            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | 3,3'-Dichlombenzidine                                | 1.1E+00            | 0.1650      | 0.330        | NE         | NE             | 1.1E+00            | 0.386 1 U        | 0.396 1 U        |
| SEMIVOLATILES                  | 3-Nitroaniline                                       | 4.7E+00            | 0.3300      | 0.825        | NE         | NE             | 4.7E+00            | 0.965 1 U        | 0.990 1 U        |
| SEMIVOLATILES<br>SEMIVOLATILES | 4,6-Dinitro-2-methylpherol                           | 3.1E+01<br>2.4E-02 | 0.3300      | 0.825        | NE         | NE             | 3.1E+01            | 0.965 1 U        | 0.990 1 0        |
| SEMIVOLATILES                  | 4-Biomuphenyi prenyi ester<br>4-Chlom-3-methylohenol | 3.12-02            | 0.0825      | 0.105        | NE         | NE             | 1.75-01            | 0.100 1 0        | 0.102 1 0        |
| SEMIVOLATILES                  | 4-Chlomaniline                                       | 6.2E+01            | 0.0825      | 0.165        | NE         |                | 6.2E+01            | 0.193 1 0        | 0.190 1 0        |
| SEMIVOLATILES                  | 4-Chlorophenyl phenyl ether                          | 2.8E-02            | 0.0825      | 0.165        | NE         | NE             | 1.76-01            | 0.100 1 1        | 0.102 1 U        |
| SEMIVOLATILES                  | 4-Methylphenol                                       | 7.7E+01            | 0.0825      | 0,165        | NE         | NE             | 7.7E+01            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | 4-Nitroaniline                                       | 1.3E+01            | 0.3300      | 0.825        | NE         | NE             | 1.3E+01            | 0.965 1 U        | 0.990 1 U        |
| SEMIVOLATILES                  | 4-Nitrophenol  | 3.1E+01            | 0.3300      | 0.825        | NE         | NE             | 3.1E+01            | 0.965 1 U        | 0.990 1 U        |
| SEMIVOLATILES                  | Acenaphthene   | 8.2E+02            | 0.0825      | 0.165        | NE         | NE             | 8.2E+02            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | Acenaphthytene                                       | 8.2E+02            | 0.0825      | 0.165        | NE         | NÉ             | 8.2E+02            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | Anthracene   | 4.1E+03            | 0.0825      | 0.165        | NE         | NE             | 4.1E+03            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | Benzo(a)anthracene                                   | 6.3E-01            | 0.0825      | 0.165        | 0.0153     | NE             | 6.3E-01            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | Denzo(a)pyrene<br>Ronzo(b)fluomothono                | 0.3E-02<br>6.3E-04 | 0.0625      | 0.165        | 0.0154     |                | 1./E-01            | 0.100 1 0        | 0.102 1 0        |
| SEMIVOLATILES                  | Benzo(o)/abi)pep/epa                                 | 0.3E-01<br>4 1E+02 | 0.0825      | 0.165        | 0.0153     | NH#            | 0.38-01            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | Benzo(k)fluoranthene                                 | 6.3E+00            | 0.0025      | 0.105        | 0.0123     |                | 4.1ETU2<br>6.3E+00 | 0.193 1 U        | 0.190 1 U        |
| SEMIVOLATILES                  | Benzoic Acid   | 6.2E+04            | 0.3300      | 0.825        | NE         | NE             | 6.2E+04            | 0.965 1 11       | 0.990 1 11       |
| SEMIVOLATILES                  | Benzyl Alcohol                                       | 4.7E+03            | 0.0825      | 0.165        | NE         | NE             | 4.7E+03            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane                           | 2.9E-01            | 0.0825      | 0.165        | NE         | NE             | 2.9E-01            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether                              | 1.5E-01            | 0.0825      | 0.165        | NE         | NE             | 1.7E-01            | 0.100 1 U        | 0.102 1 U        |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether                          | 4.8E+00            | 0.0825      | 0.165        | NE         | NE             | 4.8E+00            | 0.193 1 U        | 0.198 1 U        |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthalate                           | 1.7E+01            | 0.0825      | 0.165        | NE         | NE             | 1.7E+01            | 0.193 1 U        | 0.198 1 U        |

-

٠

\_\_\_

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066452

### Table 4-29

### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-029

|  |  |                    |              | ouniț        | J-020             |                         |                                 |   |   |
|--|--|--------------------|--------------|--------------|-------------------|-------------------------|---------------------------------|---|---|
| [SUMP] = SUMP029<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE |  | TCEQ<br>Risk-Based |              | 64-34        | Back<br>Concentra | ground<br>tions in Soil | Applicble<br>TCEQ<br>Bisk Based | 35SUMP029-SB01<br>35-SMP29-SB01-02<br>9/12/2006<br>12 - 12 5t | 35SUMP029-SB02<br>35-SMP29-SB02-02<br>9/12/2006<br>12 - 12 Et |
| SAMPLE_PURPOSE   |  | Vatue              | Detection    | Quantitation | Surface           | Subsurface              | Screening                       | REG   | REG   |
| Test Group   | Parameter (Units = mg/kg)                | (RBSV)             | Limit (MDL)  | Limit (MQL)  | 0 - 0.5 Ft        | 1.5 - 2.5 Ft            | Value                           | Result DIL LQ VQ  | Result DIL LQ VQ  |
| SEMIVOLATILES  | Butyl benzyl phthalate                   | 3.1E+03<br>6.3E+01 | 0.0825       | 0.165        | NE<br>1.51E-02    | NE:                     | 3.1E+03<br>6.3E+01              | 0.193 1 U   | 0.198 1 U   |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene                   | 6.3E-02            | 0.0825       | 0.165        | NE                | NE                      | 1.7E-01                         | 0.100 1 U   | 0.102 1 U   |
| SEMIVOLATILES  | Dibenzofuran                             | 6.2E+01            | 0.0825       | 0.165        | NE                | NE                      | 6.2E+01                         | 0,193 1 U<br>0,493 1 H  | 0.198 1 U<br>0.198 1 U  |
| SEMIVOLATILES<br>SEMIVOLATILES                                 | Digethyl prknalate<br>Digethyl obthalate | 1.2E+04            | 0.0825       | 0.165        | NE                | NE                      | 1.2E+04                         | 0.193 1 U   | 0.198 1 U   |
| SEMIVOLATILES  | di-n-Butyl phthalate                     | 1.6E+03            | 0.0825       | 0.165        | NE                | NE                      | 1.6E+03                         | 0.193 1 U   | 0.198 1 U   |
| SEMIVOLATILES  | di-n-Octyl phthalate                     | 3.1E+02            | 0.0825       | 0.165        | NE<br>3 30E 03    | NE                      | 3.1E+02                         | 0.193 1 U<br>0.193 1 U  | 0.198 1 U<br>0.198 1 U  |
| SEMIVOLATILES  | Fluoranatene                             | 5.5E+02            | 0.0825       | 0.165        | NE                | NE                      | 5,5E+02                         | 0.193 1 U   | 0.198 1 U   |
| SEMIVOLATILES  | Hexachlorobenzene                        | 2.5E-01            | 0.0825       | 0.165        | NE                | NE                      | 2.5E-01                         | 0.193 1 U   | 0.198 1 U   |
| SEMIVOLATILES  | Hexachlorobutadiene                      | 1.6E+00            | 0.0825       | 0.165        | NE                | NE                      | 1,6E+00<br>1,0E+00              | 0.193 1 U   | 0.198 1 U<br>0.198 1 U  |
| SEMIVOLATILES  | Hexachlorocyclopentaolene                | 1.65+01            | 0.0825       | 0.165        | NE                | NE                      | 1.6E+01                         | 0.193 1 U   | 0.198 1 U   |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene                   | 6.3E-01            | 0.0825       | 0.165        | 1.43E-02          | NE                      | 6.3E-01                         | 0.193 1 U   | 0.198 1 U   |
| SEMIVOLATILES  | Isophorone                               | 5.2E+02            | 0.0825       | 0.165        | NE                | NE                      | 5.2E+02                         | 0.193 1 U   | 0,198 1 0   |
| SEMIVOLATILES<br>SEMIVOLATILES                                 | Naphthalene                              | 6.5E+01            | 0.0825       | 0.165        | NE                | NE                      | 6.5E+00                         | 0.193 1 U   | 0.198 1 U   |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine               | 4.1E-02            | 0.0825       | 0.165        | NE                | NE                      | 1.7E-01                         | 0.100 1 U   | 0.102 1 U   |
| SEMIVOLATILES  | n-Nitrosodiphenylamine                   | 5.9E+01            | 0.0825       | 0.165        | NE                | NE                      | 5.9E+01                         | 0.193 1 U   | 0.198 1 0   |
| SEMIVOLATILES  | Pentachiorophenoi<br>Phenanthrene        | 3.0E+00<br>4.1E+02 | 0.0825       | 0.825        | NE                | NE                      | 4.1E+02                         | 0.193 1 U   | 0.198 1 U   |
| SEMIVOLATILES  | Phenol                                   | 4.7E+03            | 0.0825       | 0.165        | NE                | NE                      | 4.7E+03                         | 0.193 1 U   | 0.198 1 U   |
| SEMIVOLATILES  | Pyrene<br>Remost Solido                  | 4.1E+02            | 0.0825<br>NA | 0.165<br>NA  | 1.94E+02          | NE                      | 4.1E+02                         | 0.193 1 0   | 0,198 1 U<br>80,700 1   |
| VOLATILES  | 1.1.1.2-Tetrachloroethane                | 5.22+00            | 0.0005       | 0.005        | NE                | NE                      | 5.2E+00                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | 1,1,1-Trichloroethane                    | 2.3E+02            | 0.0005       | 0.005        | NE                | NE                      | 2.3E+02                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | 1,1,2,2-Tetrachloroethane                | 5.1E-01            | 0.0005       | 0.005        | NE                | NE                      | 5.1E-01<br>9.7E-01              | 0.006 1 0   | 0.005 1 U   |
| VOLATILES  | 1.1-Dichloroethane                       | 8.9E+01            | 0.0000       | 0.005        | NE                | NE                      | 8.9E+01                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | 1,1-Dichloroethene                       | 2.7E+01            | 0.0005       | 0.005        | NE                | NE                      | 2.7E+01                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | 1,1-Dichloropropene                      | 9.9E-01            | 0.0005       | 0.005        | NE                | NE                      | 9.9E-01<br>4.2E+01              | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | 1.2.3-Trichloropropane                   | 9.2E-02            | 0.0010       | 0.005        | NE                | NE                      | 9.2E-02                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | 1,2,4-Trichlorobenzene                   | 1.4E+02            | 0.0005       | 0.005        | NE                | NE                      | 1.4E+02                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | 1,2,4-Trimethylbenzene                   | 9.6E+00            | 0.0005       | 0.005        | NE                | NE                      | 9.6E+00<br>3.5E-01              | 0.006 1 0   | 0.005 1 U   |
| VOLATILES  | 1.2-Dibromoethane                        | 5.3E-02            | 0.0005       | 0.005        | NE                | NE                      | 5.3E-02                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | 1,2-Dichlorobenzene                      | 5.6E+01            | 0.0005       | 0.005        | NE                | NE                      | 5.6E+01                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | 1,2-Dichloroethane                       | 2.7E-01            | 0.0005       | 0.005        | NE                | NE                      | 2.7E-01<br>1.8E+00              | 0.006 1 0   | 0.005 1 U   |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylene)           | 3.3E+03            | 0.0005       | 0.005        | NE                | NE                      | 3.3E+03                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | 1,3,5-Trimethylbenzene                   | 8.3E+00            | 0.0005       | 0.005        | NE                | NË                      | 8.3E+00                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | 1,3-Dichlorobenzene                      | 5.1E+00<br>3.0E+00 | 0.0005       | 0,005        | NE                | NE                      | 5.1E+00<br>3.0E+00              | 0.005 1 U   | 0.005 1 U   |
| VOLATILES  | 1,4-Dichlorobenzene                      | 2.7E+01            | 0.0005       | 0.005        | NE                | NE                      | 2.7E+01                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | 2,2-Dichloropropane                      | 1.7E+00            | 0.0005       | 0.005        | NE                | NE                      | 1.7E+00                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | 2-Butanone<br>2-Chloroothyd vinyd ether  | 2.6E+03            | 0.0025       | 0.010        | NE                | NE                      | 2.6E+03                         | 0.011 1 U   | 0.010 1 U   |
| VOLATILES  | 2-Chlorotoluene                          | 1.5E+02            | 0.0005       | 0.005        | NE                | NE                      | 1.5E+02                         | 0.006 1 U   | 0.005 i U   |
| VOLATILES  | 2-Hexanone                               | 6.2E+00            | 0.0025       | 0.010        | NE                | NE                      | 6.2E+00                         | 0.011 1 U   | 0.010 1 U UJ  |
| VOLATILES  | 4-Chiorotoluene                          | 3.4E-01            | 0.0005       | 0.005        | NE                | NE                      | 3.4E-01<br>1.7E+02              | 0.006 1 0   | 0.005 1 0   |
| VOLATILES  | Benzene                                  | 8.8E-01            | 0.0005       | 0.005        | NE                | NE                      | 8.8E-01                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | Bromobenzene                             | 1.1E+01            | 0.0005       | 0.005        | NE                | NE                      | 1.1E+01                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | Bromochloromethane                       | 2.4E+01<br>1.0E+01 | 0.0005       | 0.005        | NE                | NE                      | 2.4E+01                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | Bromoform                                | 3.4E+01            | 0.0005       | 0.005        | NE                | NE                      | 3.4E+01                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | Bromomethane                             | 3.5E-01            | 0.0010       | 0.010        | NE                | NE                      | 3.5E-01                         | 0.011 1 U   | 0.010 1 U   |
| VOLATILES  | Carbon disulfide                         | 1.0E+02<br>3.5E-01 | 0.0005       | 0.005        | NE                | NE                      | 1.0E+02<br>3.5E-01              | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | Chlorobenzene                            | 4.0E+01            | 0.0005       | 0.005        | NE                | NE                      | 4.0E+01                         | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | Chloroethane                             | 1.1E+03            | 0.0010       | 0.010        | NE                | NE                      | 1.1E+03                         | 0.011 1 U   | 0.010 1 U   |
| VOLATILES  | Chloroform                               | 3.1E-01            | 0.0005       | 0.005        | NE                | NE                      | 3.1E-01                         | 0.006 1 U   | 0.005 1 U   |

Shaw Environmental, Inc.

## 00066453

### Table 4-29 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-029

|  |                           |  |                     | Quin                   | 7-652                                   |   |  | _  |  |
|--|---------------------------|--|---------------------|------------------------|---|---|--|--|--|
| [SUMP] = SUMP029<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>itions in Soil<br><u>PL, mg/kg)</u><br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP029-SB01<br>35-SMP29-SB01-02<br>9/12/2006<br>12 - 12 Ft<br>REG | 35SUMP029-SB02<br>35-SMP29-SB02-02<br>9/12/2006<br>12 - 12 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   |
| VOLATILES  | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NE                                      | NE  | 2.3E-01                                      | 0.011 1 U  | 0.010 1 U  |
| VOLATILES  | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.2E+02                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | cis-1,3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.2E+00                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NË                                      | NE  | 7.6E+00                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.9E+01                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                      | NE  | 2.2E+02                                      | 0.011 1 U  | 0.010 1 U  |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 4.3E+02                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | Hexachlorobutadiene       | 1.6E+00                                  | 0,0005              | 0.005                  | NE                                      | NE  | 1.6E+00                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 5.4E+02                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | m.p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.3E+02                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NE                                      | NE  | 1.3E+03                                      | 0.011 1 U  | 0.010 1 U  |
| VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NÉ                                      | NE  | 8.7E+00                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NE                                      | NE  | 1.8E+01                                      | 0.011 1 U  | 0.010 1 V  |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.7E+02                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.2E+02                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 4.2E+02                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.0E+02                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.3E+03                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.6E+02                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NÉ  | 6.0E+00                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.1E+03                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | trans-1,2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1,4E+02                                      | 0.006 1 U  | 0.005 1 Ų  |
| VOLATILES  | trans-1,3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.8E+00                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.7E+00                                      | 0.006 1 U  | 0.005 1 U  |
| VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01                   | NE                                      | NĘ  | 2.6E+02                                      | 0.011 1 Ú  | 0.010 1 U  |
| VOLATILES  | Vinyl acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NE                                      | NE  | 5.7E+01                                      | 0.011 1 U  | 0.010 1 U  |
| VOLATILES  | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.01                   | NE                                      | NE  | 3.6E-02                                      | 0.011 1 U  | 0.010 1 U  |
|  |                           |  |                     |                        |   |   |  |  |  |

Shaw Environmental, Inc.

### 00066454

| Table 4-30   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump-030   |

| [SUMP] = SUMP030<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Background Applicble<br>Concentrations in Soil TCEQ<br>(95% UPL, mg/kg) Risk-Based<br>Surface Subsurface Screening |              | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP030-SB01<br>35-SMP30-SB01-02<br>9/9/2006<br>3.5 - 4 Ft<br>REG |        | 35SUMP0<br>35-SMP30-<br>9/9/20<br>4 - 4<br>RE0 | 355UMP030-SB02<br>35-SMP30-SB02-02<br>9/9/2006<br>4 - 4 Ft<br>REG |     |    | 35SUMP031-SB01<br>35-SMP31-SB01-02<br>9/12/2006<br>3.5 - 4 Ft<br>REG |           |     | 02<br>02    |    |  |
|--|---------------------------|--|---------------------|------------------------|--|--------------|--|---|--------|--|---|-----|----|--|-----------|-----|-------------|----|--|
| Test Group   | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft   | 1.5 - 2.5 Ft | Value  | Result  | DIL LC | <u>vq</u>                                      | Result  | DIL | LQ | VQ   | Result    | DIL | <u>ια</u> _ | VC |  |
| METALS   | Aluminum                  | 1.6E+04                                  | 10,000              | 20.00                  | 1.63E+04   | 2.08E+04     | 1.6E+04                                      | 12000.000   | 1      | L  | 28800.000   | 1   |    | _ L  | 19500.000 | 1   |             |    |  |
| METALS   | Antimony                  | 7.3E+00                                  | 0.500               | 0.10                   | 9,40E-01   | 1.60E+00     | 7.3E+00                                      | 0.112   | 1 U    |  | 0.120   | 1   | U. |  | 0.113     | 1   | U           |    |  |
| METALS   | Arsenic                   | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00   | 5.54E+00     | 2.0E+01                                      | 2.660   | 1      |  | 1.600   | 1   |    |  | 3.930     | 1   |             |    |  |
| METALS   | Barium                    | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02   | 8.55E+01     | 2.6E+03                                      | 429.000   | 1      |  | 121.000   | 1   |    |  | 78.100    | 1   |             |    |  |
| METALS   | Bervlium                  | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01   | 7.66E-01     | 4.6E+00                                      | 0.528   | 1      |  | 0.779   | 1   |    |  | 0.631     | 1   |             |    |  |
| METALS   | Cadmium                   | 5.2E+00                                  | 0.025               | 0.10                   | 1.40E+00   | 4.00E-01     | 5.2E+00                                      | 0.698   | 1      |  | 0.129   | 1   | J  | J  | 0.113     | 1   | J           | J  |  |
| METALS   | Calcium                   | NË                                       | NA                  | NA                     | NA   | NA           |  | 7920.000  | 1      | J  | 360.000   | 1   |    | J  | 361.000   | 1   |             |    |  |
| METALS   | Chromium                  | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01   | 3.01E+01     | 5.9E+03                                      | 166.000   | 1      |  | 24.600  | 1   |    |  | 18.600    | 1   |             |    |  |
| METALS   | Cobalt                    | 1.5E+03                                  | 0.125               | 0.50                   | 7.23E+00   | 5.61E+00     | 1.5E+03                                      | 2.980   | 1      | J  | 5.030   | 1   |    | J  | 2.510     | 1   |             |    |  |
| METALS   | Conner                    | 1 0E+03                                  | 0.150               | 0.60                   | 5.55E+00   | 9.25E+00     | 1.0E+03                                      | 5.570   | 1      |  | 4.340   | 1   |    |  | 4.750     | 1   |             |    |  |
| METALS   | iron                      | NE                                       | NA                  | NA                     | NA   | NA           |  | 28100.000   | 1      |  | 23300.000   | 1   |    |  | 30100.000 | 1   |             |    |  |
| METALS   | Lead                      | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01   | 1.14E+01     | 5.0E+02                                      | 11.700  | 1      | J  | 9.900   | 1   |    | J  | 10.300    | 1   |             |    |  |
| METALS   | Magnesium                 | NF                                       | NA                  | NA                     | NA   | NA           |  | 737.000   | 1      |  | 1290.000  | 1   |    |  | 916.000   | 1   |             |    |  |
| METALS   | Manganese                 | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03   | 2.01E+02     | 1.7E+03                                      | 138.000   | 1      |  | 23.400  | 1   |    |  | 29.200    | 1   |             |    |  |
| METALS   | Mercury                   | 1 1E-02                                  | 0.010               | 0.25                   | 8.19E-02   | 3.60E-01     | 2.5E-01                                      | 0.035   | 1 J    | J  | 0.105   | 1   | J  | J  | 0.020     | 1   | J           | J  |  |
| METALS   | Nickel                    | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00   | 1.16E+01     | 1.9E+02                                      | 7.420   | 1      |  | 8.380   | 1   |    |  | 5.200     | 1   |             |    |  |
| METALS   | Potassium                 | NE                                       | NA                  | NA                     | NA   | NA           | -  | 490.000   | 1      |  | 635.000   | 1   |    |  | 446.000   | 1   |             |    |  |
| METALS   | Selenium                  | 1 3E+02                                  | 0.100               | 0.20                   | 3.48E+00   | 5.57E+00     | 1,3E+02                                      | 0.245   | 1      |  | 0.185   | 1   | J  | J  | 0.513     | 1   |             |    |  |
| METALS   | Silver                    | 4 7E+01                                  | 0.050               | 0.20                   | 3.10E-01   | 3.70E-01     | 4.7E+01                                      | 1.720   | 1 U    |  | 1,840   | 1   | U  |  | 1.610     | 1   | U           |    |  |
| METALS   | Sodium                    | NE                                       | NA                  | NA                     | NA   | NA           | -  | 65.000  | 1      |  | 329.000   | 1   |    |  | 158.000   | 1   |             |    |  |
| METALO   | Thellum                   | 205+00                                   | 0.010               | 0.02                   | 4.70E-01   | NE           | 2.0E+00                                      | 0.069   | 1      |  | 0.127   | 1   |    |  | 0.180     | 1   |             |    |  |
| METALS   | Vanadium                  | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01   | 4.46E+01     | 4.8E+01                                      | 48.000  | 1      |  | 40.000  | 1   |    |  | 41.700    | 1   |             |    |  |
| METALS   | Zinc                      | 5 9E+03                                  | 0.625               | 2.50                   | 6.16E+01   | 2.02E+01     | 5.9E+03                                      | 31.700  | 1      |  | 30.100  | 1   |    |  | 18.700    | 1   |             |    |  |
|  | Porcent Solide            | NE                                       | NA                  | NA                     | NE   | NE           |  | 89,600  | 1      |  | 81,600  | 1   |    |  | 88.800    | 1   |             |    |  |
| 30003  | Feicentookua              |  |                     |                        |  |              |  |   |        |  |   |     |    |  |           |     |             |    |  |

## 00066455

| Table 4-31  |   |
|---|---|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Value | S |

.

1

Sump-031

| [SUMP] = SUMP<br>LOCATION_CO<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURP | 2031<br>DE<br>POSE        | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Delection | Method<br>Quantitation | Backg<br>Concentrat<br>(95% UP<br>Surface | round<br>lions in Soll<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP0<br>35-SMP30<br>9/9/2<br>3.5 -<br>RE | 30-SB0<br>-SB01-0<br>006<br>4 Ft<br>G | 1<br>)2 | 35\$UMP03<br>35-SMP30-3<br>9/9/20<br>4 - 4<br>REG | 10-SI<br>SB0<br>106<br>Ft | B02<br>2-02 |     | 35SUMP03<br>35-SMP31-<br>9/12/2<br>3.5 - 4<br>REG | 31-SE<br>SB01<br>006<br>Ft<br>G | 301<br> -02 |    |
|--|---------------------------|--|---------------------|------------------------|---|---|--|---|---------------------------------------|---------|---|---------------------------|-------------|-----|---|---------------------------------|-------------|----|
| Test Group   | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft_                                     | Value  | Result E                                    | HL LQ                                 | VQ      | Result I  |                           | LQ          | VQ  | Result  |                                 | LQ          | VQ |
| METALS   | Aluminum                  | 1.6E+04                                  | 10.000              | 20.00                  | 1.63E+04                                  | 2.08E+04  | 1.6E+04                                      | 12000.000                                   | 1                                     | L       | 28800.000   | 1                         |             | L., | 19500.000   | 1                               | ю.          |    |
| METALS   | Antimony                  | 7.3E+00                                  | 0.500               | 0.10                   | 9.40E-01                                  | 1.60E+00  | 7.3E+00                                      | 0.112                                       | 1 U                                   |         | 0.120   | 1                         | U           |     | 0.113   | 4                               | U           |    |
| METALS   | Arsenic                   | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                  | 5.54E+00  | 2.0E+01                                      | 2.660                                       | 1                                     |         | 1.600   | 1                         |             |     | 3.930   | 4                               |             |    |
| METALS   | Barium                    | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                  | 8.55E+01  | 2.6E+03                                      | 429.000                                     | 1                                     |         | 121.000   | 1                         |             |     | 70.100  | 4                               |             |    |
| METALS   | Bervilium                 | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                  | 7.66E-01  | 4.6E+00                                      | 0.528                                       | 1                                     |         | 0.779   | 1                         |             |     | 0.031   |                                 |             | 1  |
| METALS   | Cadmium                   | 5.2E+00                                  | 0.025               | 0.10                   | 1.40E+00                                  | 4,00E-01  | 5.2E+00                                      | 0.698                                       | 1                                     | -       | 0.129   | 1                         | J           | 1   | 0.113   | 1                               | J           | J  |
| METALS   | Calcium                   | NE                                       | NA                  | NA                     | NA  | NA  | -  | 7920.000                                    | 1                                     | J       | 360.000   | 1                         |             | J   | 361.000   | 1                               |             |    |
| METALS   | Chromium                  | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                                  | 3.01E+01  | 5.9E+03                                      | 166.000                                     | 1                                     |         | 24.600  | 1                         |             |     | 18.600  | 1                               |             |    |
| METALS   | Cobali                    | 1.5E+03                                  | 0.125               | 0.50                   | 7.23E+00                                  | 5.61E+00  | 1.5E+03                                      | 2.980                                       | 1                                     | 1       | 5.030   | 1                         |             | J   | 2.510   |                                 |             |    |
| METALS   | Copper                    | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                                  | 9.25E+00  | 1.0E+03                                      | 5.570                                       | 1                                     |         | 4,340   | 1                         |             |     | 4.750   | 1                               |             |    |
| METALS   | kron                      | NE                                       | NA                  | NA                     | NA  | NA  |  | 28100.000                                   | 1                                     |         | 23300.000   | 1                         |             |     | 30100.000   |                                 |             |    |
| METALS   | Lead                      | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                  | 1.14E+01  | 5.0E+02                                      | 11.700                                      | 1                                     | J       | 9.900   | 1                         |             | J   | 10.300  | 1                               |             |    |
| METALS   | Magnesium                 | NE                                       | NA                  | NA                     | NA  | NA  | -  | 737.000                                     | 1                                     |         | 1290.000  | 1                         |             |     | 916.000   | 1                               |             |    |
| METALS   | Manganese                 | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                  | 2.01E+02  | 1.7E+03                                      | 138.000                                     | 1                                     |         | 23.400  | 1                         |             |     | 29.200  | 1                               |             |    |
| METALS   | Mercury                   | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                  | 3.60E-01  | 2.5E-01                                      | 0.035                                       | 1 J                                   | J       | 0.105   | 1                         | J           | 3   | 0.020   | 1                               | J           | J  |
| METALS   | Nickel                    | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                  | 1.16E+01  | 1.9E+02                                      | 7.420                                       | 1                                     |         | 8.380   | 1                         |             |     | 5.200   | 1                               |             |    |
| METALS   | Potassium                 | NE                                       | NA                  | NA                     | NA  | NA  |  | 490.000                                     | 1                                     |         | 635.000   | 1                         |             |     | 446.000   | 1                               |             |    |
| METALS   | Selenium                  | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                  | 5.57E+00  | 1.3E+02                                      | 0.245                                       | 1                                     |         | 0.185   | 1                         | J           | J   | 0.513   | 1                               |             |    |
| METALS   | Silver                    | 4.7E+01                                  | 0.050               | 0.20                   | 3.10E-01                                  | 3.70E-01  | 4.7E+01                                      | 1.720                                       | 1 U                                   |         | 1.840   | 1                         | U           |     | 1.610   | 1                               | U           |    |
| METALS   | Sodium                    | NE                                       | NA                  | NA                     | NA  | NA  |  | 65.000                                      | 1                                     |         | 329.000   | 1                         |             |     | 158.000   | 1                               |             |    |
| METALS   | Thallium                  | 2.0E+00                                  | 0.010               | 0.02                   | 4.70E-01                                  | NE  | 2.0E+00                                      | 0.069                                       | 1                                     |         | 0.127   | 1                         |             |     | 0.180   | 1                               |             |    |
| METALS   | Vanadium                  | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01                                  | 4.46E+01  | 4.8E+01                                      | 48.000                                      | 1                                     |         | 40.000  | 1                         |             |     | 41.700  | 1                               |             |    |
| METALS   | Zine                      | 5.9E+03                                  | 0.625               | 2.50                   | 6.16E+01                                  | 2.02E+01  | 5.9E+03                                      | 31.700                                      | 1                                     |         | 30.100  | 1                         |             |     | 18.700  | 1                               |             |    |
| SUIDS  | Percent Solids            | NE                                       | NA                  | NA                     | NE  | NE  |  | 89.600                                      | 1                                     |         | 81.600  | 1                         |             |     | 88.800  | 1                               |             |    |

SOLIDS Percent Solids Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

### 00066456

| Table 4-32  |        |
|---|--------|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening | Values |
| Sump-032  |        |

.

.

| [SUMP] = SUMP032<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE PURPOSE |                                | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>12, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP032-SB01<br>35-SMP32-SB01-01<br>9/12/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP033-SB01<br>35-SMP33-SB01-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG | 35SUMP033-SB01<br>35-SMP33-SB01-02<br>9/11/2006<br>4.5 - 5 Ft<br>REG |
|--|--------------------------------|--|---------------------|------------------------|---|---|--|--|--|--|
| Test Group   | Parameter (Units = mg/kg)      | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   |
| METALS   | Aluminum                       | 1.6E+04                                  | 10.000              | 20.00                  | 1.63E+04                                | 2.08E+04  | 1.6E+04                                      | 6700.000 1   | 6020.000 1   | 12100.000 1  |
| METALS   | Antimony                       | 7.3E+00                                  | 0.500               | 0.10                   | 9.40E-01                                | 1.60E+00  | 7.3E+00                                      | 0.109 1 U  | 0.104 1 U  | 0.115 1 U  |
| METALŚ   | Arsenic                        | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                | 5.54E+00  | 2.0E+01                                      | 5.600 1  | 1.540 1 J  | 2.130 I J  |
| METALS   | Barium                         | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                | 8.55E+01  | 2.6E+03                                      | 80.100 1   |  | 0970 1   |
| METALS   | Beryllium                      | 4.62+00                                  | 0.012               | 0.50                   | 6.45E-01                                | 7.668-01  | 4.62+00                                      | 0.390 1  | 0,314 1 3 3  | 0.079 1  |
| METALS   | Cadmium                        | 5.28+00                                  | 0.025               | 0.10                   | 1.40E+00                                | 4.00E-01  | 5.2E+00                                      | 3000.000 1   | 620.000 1  | 915 000 1  |
| METALS   | Calcium                        |  | NA<br>0 100         | 0.40                   | 0 66E+01                                | 3.015+01  | 5 0E+03                                      | 26 200 1   | 11 800 1   | 13.000 1   |
|  | Cobolt                         | 155403                                   | 0.100               | 0.40                   | 7 23E+00                                | 5.615+00  | 1.5E+03                                      | 2.680 1  | 3.160 1  | 8.430 1  |
| METALO   | Capper                         | 1.05+03                                  | 0.150               | 0.60                   | 5 55E+00                                | 9.25E+00  | 1.0E+03                                      | 7.360 1  | 2,500 1  | 9.060 1  |
| METALS   | iron                           | NE                                       | NA                  | NA                     | NA                                      | NA  | _  | 19300.000 1  | 8570.000 1   | 20600.000 1  |
| METALS   | Lead                           | 5.0E+02                                  | 0,500               | 5.00                   | 2.26E+01                                | 1.14E+01  | 5.0E+02                                      | 22.800 1   | 8.630 1 J  | 7.370 1 J  |
| METALS   | Magnesium                      | NE                                       | NA                  | NA                     | NA                                      | NA  |  | 333.000 1  | 293.000 1  | 1890.000 1   |
| METALŞ   | Manganese                      | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                | 2.01E+02  | 1.7E+03                                      | 156.000 1  | 170.000 1  | 20.500 1   |
| METALS   | Mercury                        | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                | 3.60E-01  | 2.5E-01                                      | 0.109 1 J J  | 0.027 1 J J  | 0.020 1 J J  |
| METALS   | Nickel                         | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                | 1.16E+01  | 1.9E+02                                      | 4.190 1  | 2.710 1  | 260,000 1  |
| METALS   | Potassium                      | NE                                       | NA                  | NA                     | NA<br>0.405-000                         |   | 4 25,02                                      | 235.000 1  | 0.350 1  | 0.268 1  |
| METALS   | Setenium                       | 1.3E+02                                  | 0.100               | 0.20                   | 3.400-00                                | 3.57 2100   | 4.75+01                                      | 1470 1 11  | 1540 1 U   | 1.660 1 U  |
| METALS   | Silver                         | 4.76701                                  | 0.050               | 0.20<br>NA             | 5.10E-01                                | S.70E-01  | 4.72.01                                      | 21 200 1   | 19.900 1   | 478.000 1  |
| METALS   | Thallium                       | 2 05+00                                  | 0.010               | 0.02                   | 4.70E-01                                | NE  | 2.0E+00                                      | 0.044 1  | 0.060 1  | 0.133 1  |
| METALS   | Vanadium                       | 4.8E+01                                  | 0.125               | 0.50                   | 3,21E+01                                | 4.46E+01  | 4.8E+01                                      | 32.300 1   | 19.300 1   | 22.700 1   |
| METALS   | Zinc                           | 5.9E+03                                  | 0.625               | 2.50                   | 6.16E+01                                | 2.02E+01  | 5.9E+03                                      | 68.400 1   | 10.300 1   | 31.000 1   |
| RANGE_ORGANICS   | Carbon Range C12-C28           | 4.0E+02                                  | 25                  | 50                     | NE                                      | NE  | 4,0E+02                                      | 42.100 1 J B   | 51.500 1 U   | 35.800 1 J B   |
| RANGE_ORGANICS   | Carbon Range C28-C35           | 4.0E+02                                  | 25                  | 50                     | NE                                      | NE  | 4.0E+02                                      | 53.100 1 U   | 51.500 1 U   | 57.300 1 0   |
| RANGE_ORGANICS   | Carbon Range C6-C12            | 1.7E+02                                  | 25                  | 50                     | NE                                      | NE  | 1.7E+02                                      | 53.100 1 U   | 51.500 1 U   | 97.300 1 0   |
| SOLIDS   | Percent Solids                 | NE                                       | NA                  | NA                     | NE                                      | NE  | # 0F.00                                      | 92.000 1   | 45.000 1   | 0.005 1 11   |
| VOLATILES  | 1,1,1,2-Tetrachloroethane      | 5.2E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 0.2E+00<br>2.2E+02                           | l .  |  | 0.005 1 U  |
| VOLATILES  |                                | 2.35+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 5 1E-01                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1,1,2,2-1 etracinoroethane     | 9.7E-01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 9.7E-01                                      | 1  |  | 0.005 1 U  |
| VOLATILES  | 1 1-Dichloroethane             | 8.9E+01                                  | 0.0010              | 0.005                  | NE                                      | NE  | 8,9E+01                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1.1-Dichloroethene             | 2.7E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.7E+01                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1.1-Dichloropropene            | 9.9E-01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 9.9E-01                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1,2,3-Trichlorobenzene         | 4.2E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 4.2E+01                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1,2,3-Trichloropropane         | 9.2E-02                                  | 0.0010              | 0.005                  | NE                                      | NE  | 9.2E-02                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1,2,4-Trichlorobenzene         | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.4E+02                                      |  |  |  |
| VOLATILES  | 1,2,4-Trimethylbenzene         | 9.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 9.6E+00                                      |  |  | 0.005 1 0  |
| VOLATILES  | 1,2-Dibromo-3-chloropropane    | 3.5E-01                                  | 0,0020              | 0.005                  | NE                                      | NĘ  | 3.5E-01                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1,2-Dibromoetnane              | 5.3E-UZ                                  | 0.0005              | 0.005                  | NE                                      |   | 5.5E+01                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1.2-Dichloropenzene            | 275-01                                   | 0.0005              | 0.000                  | NE                                      | NE  | 2.7E-01                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1.2-Dichloropropane            | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.8E+00                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1.2-Dimethylbenzene (0-Xvlene) | 3.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.3E+03                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1.3.5-Trimethylbenzene         | 8.3E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 8.3E+00                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1,3-Dichlorobenzene            | 5.1E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 5.1E+00                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1,3-Dichloropropane            | 3.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.0E+00                                      |  |  | 0.005 1 U  |
| VOLATILES  | 1,4-Dichlorobenzene            | 2.7E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.7E+01                                      |  |  | 0.005 1 0  |
| VOLATILES  | 2,2-Dichloropropane            | 1.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.7E+00                                      | -  |  |  |
| VOLATILES  | 2-Butanone                     | 2.65+03                                  | 0.0025              | 0.010                  | NE                                      | NE  | 2.0E+03                                      |  |  | 0.011 1 U  |
| VOLATILES  | 2-Chloroetnyt vinyl ether      | 2.16-01                                  | 0.0020              | 0.010                  | NE                                      |   | 1.55-102                                     |  |  | 0.005 1 U  |
| VOLATILES  |                                | 1.00+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 6.2E+00                                      |  |  | 0,011 1 U  |
| VOLATILES  | 2-nexanone<br>4.Chiorotoluene  | 345-01                                   | 0.0025              | 0.005                  | NE                                      | NE  | 3.4E-01                                      | 1  |  | 0.005 1 U  |
| VOLATILES  | Acetone                        | 1.7E+02                                  | 0.0050              | 0.010                  | NE                                      | NE  | 1.7E+02                                      | 1 .  |  | 0.011 1 U  |
| VOLATILES  | Benzene                        | 8.8E-01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 8.8E-01                                      |  |  | 0.005 1 U  |
| VOLATILES  | Bromobenzene                   | 1.1E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.1E+01                                      | I .  |  | 0.005 1 U  |
| VOLATILES  | Bromochloromethane             | 2.4E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.4E+01                                      |  |  | 0.005 1 U  |
| VOLATILES  | Bromodichloromethane           | 1.0E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.05,+01                                     | 1  |  | 0.005 1 U  |

Shaw Environmental, Inc.

### 00066457

| Table 4-32   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump-032   |

|  |                           |  |                     |                          |   | P   |  |  |  |  |
|--|---------------------------|--|---------------------|--------------------------|---|---|--|--|--|--|
| [SUMP] = SUMP032<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method -<br>Quantitation | Back<br>Concentra<br>(95% UI<br>Surface | ground<br>tions in Soil<br>°L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP032-SB01<br>35-SMP32-SB01-01<br>9/12/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP033-SB01<br>35-SMP33-SB01-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG | 355UMP033-SB01<br>35-SMP33-SB01-02<br>9/11/2006<br>4.5 - 5 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL)              | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   |
| VOLATILES  | Bromoform                 | 3.4E+01                                  | 0.0005              | 0.005                    | NE                                      | NE  | 3.4E+01                                      |  |  | 0.005 1 U  |
| VOLATILES  | Bromomethane              | 3.5E-01                                  | 0.0010              | 0.010                    | NE                                      | NE  | 3.5E-01                                      |  |  | 0.011 1 U  |
| VOLATILES  | Carbon disulfide          | 1.0E+02                                  | 0.0005              | 0.005                    | NE                                      | NE  | 1.0Ë+02                                      |  |  | 0.005 1 U  |
| VOLATILES  | Carbon tetrachloride      | 3.5E-01                                  | 0.0005              | 0.005                    | NE                                      | NE  | 3.5E-01                                      |  |  | 0.005 1 U  |
| VOLATILES  | Chlorobenzene             | 4.0E+01                                  | 0.0005              | 0.005                    | NE                                      | NE  | 4.0E+01                                      |  |  | 0.005 1 U  |
| VOLATILES  | Chloroethane              | 1.1E+03                                  | 0.0010              | 0.010                    | NE                                      | NE  | 1.1E+03                                      |  |  | 0.011 1 U  |
| VOLATILES  | Chloroform                | 3.1E-01                                  | 0.0005              | 0.005                    | NE                                      | NE  | 3.1E-01                                      |  |  | 0.005 1 U  |
| VOLATILES  | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                    | NE                                      | NE  | 2.3E-01                                      |  |  | 0.011 1 U  |
| VOLATILES  | cis-1.2-Dichlorgethene    | 1.2E+02                                  | 0.0005              | 0.005                    | NE                                      | NE  | 1.2E+02                                      |  |  | 0.005 1 U  |
| VOLATILES  | cis-1.3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                    | NE                                      | NE  | 1.2E+00                                      |  |  | 0.005 1 U  |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                    | NE                                      | NE  | 7.6E+00                                      |  |  | 0.005 1 U  |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                    | NE                                      | NE  | 1.9Ë+01                                      |  |  | 0.005 1 U  |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                    | NE                                      | NE  | 2.2E+02                                      |  |  | 0.011 1 U  |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                    | NE                                      | NE  | 4.3E+02                                      |  |  | 0.005 1 U  |
| VOLATILES  | Hexachlombutadiene        | 1.6E+00                                  | 0.0005              | 0.005                    | NE                                      | NE  | 1.6E+00                                      |  |  | 0.005 1 U  |
| VOLATILES  | isonopylbenzene           | 5.4E+02                                  | 0.0005              | 0.005                    | NE                                      | NE  | 5.4E+02                                      |  |  | 0.005 1 U  |
| VOLATILES  | m p-Xvlenes               | 2.3E+02                                  | 0.0005              | 0.005                    | NE                                      | NÉ  | 2.3E+02                                      |  |  | 0.005 1 U  |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                     | NE                                      | NE  | 1.3E+03                                      |  |  | 0.011 1 U  |
| VOLATILES  | Methylene chinride        | 87E+00                                   | 0.0010              | 0.005                    | NE                                      | NE  | 8.7E+00                                      |  |  | 0.005 1 U  |
| VOLATILES  | Nanhihalene               | 1.8E+01                                  | 0.0005              | 0.01                     | NE                                      | NE  | 1.8E+01                                      |  |  | 0.011 1 U  |
| VOLATILES  | o-BUTYI BENZENE           | 275+02                                   | 0.0005              | 0.005                    | NE                                      | NE  | 2.7E+02                                      |  |  | 0.005 1 U  |
| VOLATILES  |                           | 3.2E+02                                  | 0.0005              | 0.005                    | NE                                      | NE  | 3.2E+02                                      |  |  | 0.005 1 U  |
| VOLATILES  |                           | 4 2 5+02                                 | 0.0005              | 0.005                    | NE                                      | NE  | 4 2E+02                                      |  |  | 0.005 1 U  |
| VOLATILES  | COLDENT RENZENE           | 30E+02                                   | 0.0005              | 0.005                    | NE                                      | NE  | 3.0E+02                                      |  |  | 0.005 1 U  |
| VOLATILES  | Strong                    | 135+03                                   | 0.0005              | 0.005                    | NE                                      | ME  | 1.35+03                                      |  |  | 0.005 1 U  |
| VOLATILES  | tort BLITYL BEN7CNE       | 2.65+02                                  | 0.0005              | 0.005                    | ME                                      | ME  | 2.65+02                                      |  |  | 0.005 1 U  |
| VOLATILES  | Totrahlaraothana          | 6.05+00                                  | 0.0005              | 0.005                    | ME                                      | NE  | 6.05+00                                      |  |  | 0.005 1 1  |
| VOLATILES  | Teliaciiloideilleille     | 1 1 5+03                                 | 0.0005              | 0.005                    | NE                                      | NE  | 1.1E+03                                      |  |  | 0.005 1 U  |
| VOLATILES  | troop 1.2 Dicklereothese  | 1.12+03                                  | 0.0005              | 0.000                    | NE                                      | NE  | 1.4E+02                                      |  |  | 0.005 1 U  |
| VOLATILES  | trans-1,2-Dichloroproposo | 1.45702                                  | 0.0005              | 0.005                    | NE                                      |   | 1.40402                                      |  |  | 0.005 1 U  |
| VOLATILES  | uans-1,3-Dichlorophopene  | 1.00-100                                 | 0.0000              | 0.000                    | NE                                      |   | 375+00                                       |  |  | 0.005 1 1  |
| VOLATILES  | Trichlordenene            | 3,/E+U0                                  | 0.0005              | 0.005                    |   | NE  | 3.7 2700                                     |  |  | 0.000 1 0  |
| VOLATILES  | i nonioronuorometnane     | 2.0E+U2                                  | 0.0010              | 0.01                     | NE                                      | NE  | 2.0C+U2<br>6.7C+04                           |  |  | 0.011 1 1  |
| VOLATILES  | vinyi acetate             | 5.7E+01                                  | 0.0010              | 0.01                     | NE                                      | NE  | 5.7E+01                                      |  |  | 0.011 1 0  |
| VOLATILES  | Vinvi chloride            | 3.66-02                                  | 0.0010              | 0.01                     | NE                                      | NE  | 3.0E-02                                      |  |  | 0.011 1 0  |

Shaw Environmental, Inc.

00066458

# Table 4-33 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-033

| [SUMP] ≈ SUMP033<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_DUBBOSE | TCEQ Background<br>Risk-Based Concentrations in S<br>Screening Method Method <u>(95%, UPL, mg/R)</u><br>Value Detection Quantitation Surface Subsu |                    |             | pround<br>tions in Soll<br>L, mg/kg) | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP0<br>35-SMP32<br>9/12/2<br>0.5 - 0<br>RE | 32-\$80<br>-\$801-0<br>:006<br>.5 Ft | 1<br>)1        | 35SUMP0<br>35-SMP33-<br>9/11/2<br>0 - 0.0<br>RE( | 33-SB01<br>SB01-01<br>006<br>5 Ft<br>G | 1        | 35SUMP03<br>35-SMP33-3<br>9/11/20<br>4.5 - 5<br>REG | 3-SB01<br>SB01-02<br>X06<br>Ft | WR<br>WRS   | RS015-5<br>5-015-SI<br>9/15/20<br>0.5 - 0.5<br>REG | 5801<br>801-01<br>96<br>Ft            |                  | WR\$015-\$<br>WR\$-015-\$B<br>9/15/200<br>4 - 4 Ft<br>REG | 301<br>91-02<br>3 | WR\$015-<br>WRS-15-SI<br>9/15/20<br>1 - 1 F<br>REG | 5802<br>302-01<br>06<br>t | WRS01<br>WRS-15<br>9/15<br>4 -<br>Ri | 15-SB02<br>-SB02-02<br>/2006<br>4 Ft<br>EG |                  |           |
|--|--|--------------------|-------------|--------------------------------------|--|--|--------------------------------------|----------------|--|--|----------|---|--------------------------------|-------------|--|---------------------------------------|------------------|---|-------------------|--|---------------------------|--------------------------------------|--|------------------|-----------|
| Tort Group   | Parameter (Linite = molito)  | (RBS)/)*           | Limit (MOL) | Limit (MOL)                          | 0-05Ft                                       | 15-25 Ft                                       | Value                                | Result D       | -<br>וו וס                                       | vo                                     | Result D | L LO  | va                             | Result DI   | LLQV   | Q Res                                 | uit DIL          | LO  | va                | Result Dil   | ια να                     | Result Dil                           | LQ VO                                      | ) Result I       | DIL LO VO |
| METALS   | Aluminum   | 1.6E+04            | 10.000      | 20.00                                | 1.63E+04                                     | 2.08E+04                                       | 1.6E+04                              | 6700.000       | 1  |  | 6020.000 | 1   | 1                              | 12100.000 1 |  | 6240.0                                | 00 1             |   |                   | 22200.000 1  |                           | 6340.000 1                           |  | 13500.000        | 1         |
| METALS   | Antimony   | 7.3E+00            | 0.500       | 0.10                                 | 9.40E-01                                     | 1.60E+00                                       | 7.3E+00                              | 0.109          | i U  |  | 0.104    | 1 0   | ,                              | 0.115 1     | U  | 0.1                                   | 05 1             | u   | u                 | 0.116 1  | υυ                        | 0.099 1                              | د د  | 2 310            | 1 0 0     |
| METALS   | Arsenic  | 2.0E+01<br>2.6E+03 | 0.075       | 0.30                                 | 4.81E+00<br>1.52E+02                         | 5.54E+00<br>8.55E+01                           | 2.02+01                              | 80.100         | 1  |  | 63.300   | 1   | 5                              | 67.400 1    |  | 61.0                                  | 00 1             |   |                   | 64.600 1   |                           | 48.000 1                             |  | 42.200           | i         |
| METALS   | Beryllium  | 4.6E+00            | 0.012       | 0,50                                 | 6.45E-01                                     | 7.66E-01                                       | 4.6E+00                              | 0.390          | i  |  | 0.314    | i J   | J                              | 0.970 1     |  | 0.4                                   | 66 1             |   |                   | 0.661 1  |                           | 0.417 1                              |  | 0.412            | 1         |
| METALS   | Cadmium  | 5.2E+00            | 0.025       | 0.10                                 | 1.40E+00                                     | 4.00E-01                                       | 5.2E+00                              | 0.444          | 1  |  | 0.130    | 1 J   | J                              | 0.079 1     | 1,   | 1 0.2                                 | 60 1<br>00 10    | J   | J                 | 0,080 1  | 1 1                       | 0.917 1                              |  | 289.000          | 1 J J     |
| METALS   | Calcium  | 5 9E+03            | NA<br>0.100 | N/A<br>0 40                          | NA<br>268F+01                                | 3 01E+01                                       | 5.9E+03                              | 26.200         | 1  |  | 11.800   | 1   |                                | 13.000 1    |  | 15.9                                  | 00 1             |   |                   | 28,700 1   |                           | 18.100 1                             |  | 14.400           | i         |
| METALS   | Cobalt   | 1.5E+03            | 0.125       | 0.50                                 | 7.23E+00                                     | 5.61E+00                                       | 1.5E+03                              | 2.680          | 1  |  | 3.160    | i   |                                | 8.430 1     |  | 3.4                                   | 20 1             |   |                   | 4.270 1  |                           | 3.010 1                              |  | 1.730            | 1         |
| METALS   | Copper   | 1.0E+03            | 0.150       | 0.60                                 | 5.55E+00                                     | 9.25E+00                                       | 1.0E+03                              | 7.360          | 1  |  | 2.500    | ţ   |                                | 9.060 1     |  | 5.1                                   | 10 1             |   |                   | 6.560 1  |                           | 5.740 1                              |  | 3.350            | 1         |
| METALS   | lion   | NE<br>5 OE+02      | NA<br>0.500 | NA<br>5.00                           | NA<br>2 266+01                               | NA<br>1 14E+01                                 | 5.0E+02                              | 19300.000      | 1<br>6   |  | 8,630    | 1   |                                | 7.370 1     |  | 23900.0                               | 00 i             |   |                   | 16,400 1   |                           | 19.200 1                             |  | 7.590            | 1         |
| METALS   | Magnesium  | NE                 | NA          | NA                                   | NA   | NA   | -                                    | 333.000        | i  |  | 293.000  | i   | •                              | 1890.000 1  |  | 897.0                                 | 00 1             |   |                   | 1130.000 1   |                           | 504.000 1                            |  | 546.000          | 1         |
| METALS   | Manganese  | 1.7E+03            | 0.050       | 0.20                                 | 1.25E+03                                     | 2.01E+02                                       | 1.7E+03                              | 156.000        | 1  |  | 170.000  | 1   |                                | 20.500 1    |  | 251.0                                 | 00 1             |   |                   | 57,100 1   |                           | 153.000 1                            |  | 30.500           | 1         |
| METALS   | Mercury  | 1.1E-02            | 0.010       | 0.25                                 | 8,19E-02<br>6,08E+00                         | 3.60E-01                                       | 2.5E-01<br>1.9E+02                   | 0.109<br>4.190 | 1 J<br>1   | J                                      | 2 710    | 1 5   | J                              | 16 100 1    | 3.   | 5.3                                   | 90 1             | 3   | 3                 | 8.540 1  | 3 3                       | 5,660 1                              | v .  | 4.450            | 1         |
| METALS   | Potassium  | NE                 | NA          | NA                                   | NA   | NA   |                                      | 236.000        | 1  |  | 196.000  | 1   |                                | 360.000 1   |  | 222.0                                 | 00 1             |   |                   | 554.000 1  |                           | 336.000 1                            |  | 380.000          | 1         |
| METALS   | Selenium   | 1.3E+02            | 0.100       | 0.20                                 | 3.48E+00                                     | 5.57E+00                                       | 1.3E+02                              | 0.358          | 1  |  | 0.350    | 1   |                                | 0.268 1     |  | 0.4                                   | 09 1             |   |                   | 0.653 1  |                           | 0.289 1                              |  | 0.315            | 1         |
| METALS   | Silver   | 4.7E+01            | 0.050       | 0.20                                 | 3.10E-01                                     | 3.70E-01                                       | 4.7E+01                              | 1.470          | 1 V<br>1   |  | 1.540    | 10  |                                | 478 000 1   | U  | 1.0                                   | 00 1             | U   | U                 | 64.200 1   | υĻ                        | 21.700 1                             | 5 5  | 24.000           | 1 0 0     |
| METALS   | Thallium   | 2.0E+00            | 0.010       | 0.02                                 | 4.70E-01                                     | NE   | 2.0E+00                              | 0.044          | 1  |  | 0.060    | i   |                                | 0.133 1     |  | 0.0                                   | 58 1             |   |                   | 0.170 1  |                           | 0.043 1                              |  | 0.281            | 1         |
| METALS   | Vanadium   | 4.8E+01            | 0.125       | 0.50                                 | 3.21E+01                                     | 4.46E+01                                       | 4.8E+01                              | 32.300         | 1  |  | 19.300   | 1   |                                | 22.700 1    |  | 32.9                                  | 00 1             |   |                   | 49.100 1   |                           | 41.500 1                             |  | 30.500           | 1         |
| METALS   | Zinc   | 5.9E+03            | 0.625       | 2.50                                 | 6.16E+01                                     | 2.02E+01                                       | 5.9E+03                              | 68.400         | 1  | B                                      | 10.300   | 1   |                                | 31,000 1    |  | 4-3.4<br>R 31.3                       | 00 1             | Л   | л                 | 24.300 1   |                           | 66.000 1                             |  | 55,000           | i u u     |
| RANGE_ORGANICS   | Carbon Range C12-C26   | 4.06+02            | 25          | 50                                   | NE   | NE   | 4.0E+02                              | 53.100         | ่ บ้   |  | 51.500   | ίŬ  |                                | 57.300 1    | Ŭ  | 33.5                                  | 00 1             | Ĵ   | J                 | 33.900 1   | ĴĴ                        | 56.000 1                             |  | 55.000           | 1 U U     |
| RANGE_ORGANICS   | Carbon Range C6-C12  | 1.7E+02            | 25          | 50                                   | NE   | NE   | 1.7E+02                              | 53,100         | 1 U  |  | 51.500   | 1 U   |                                | 57.300 1    | U  | 51.7                                  | 00 1             | U.  | Ü.                | 57.800 1   | U · U                     | 52.400 1                             | υu   | 55.000           | 1 0 0     |
| SEMIVOLATILES  | 1,2,4-Trichkorobenzene   | 1.4E+02            | 0.0825      | 0.165                                | NE   | NE   | 1.4E+02                              |                |  |  |          |   |                                |             |  | 1.7                                   | 00 10            | ŭ   | ŭ                 | 0.187 1  | υü                        | 3.460 20                             | บับ  | 0.180            | i ŭ ŭ     |
| SEMIVOLATILES<br>SEMIVOLATILES   | 1.3-Dichlorobenzene  | 5.1E+00            | 0.0825      | 0.165                                | NE   | NE   | 5.1E+00                              |                |  |  |          |   |                                |             |  | 1.7                                   | 00 10            | ū   | Ū                 | 0.187 1  | ŨŨ                        | 3.460 20                             | υŭ   | 0.180            | i U U     |
| SEMIVOLATILES  | 1,4-Dichlorobenzene  | 2.7E+01            | 0.0825      | 0.165                                | NE   | NE   | 2.7E+01                              |                |  |  |          |   |                                |             |  | 1.7                                   | 00 10            | U.  | ບ                 | 0.187 1  |                           | 3.460 20                             | U U  | 0.180            | 1 0 0     |
| SEMIVOLATILES  | 2,4,5-Trichlorophenol  | 1.62+03            | 0.0825      | 0.165<br>0.165                       | NE   | NE   | 1.6E+03                              |                |  |  |          |   |                                |             |  | 1.4                                   | 00 10            | U<br>U  | U<br>U            | 0.187 1  | υŭ                        | 3.460 20                             | U U  | 0.160            | ίŭŭ       |
| SEMIVOLATILES  | 2,4,6-1 Inchiotophenoi<br>2,4-Dichlorophenoi   | 4.52+01            | 0.0825      | 0.165                                | NE   | NE   | 4.72+01                              |                |  |  |          |   |                                |             |  | 1.7                                   | 00 10            | ŭ   | ŭ                 | 0.187 1  | υŬ                        | 3.460 20                             | ũũ   | 0.180            | ίŪŪ       |
| SEMIVOLATILES  | 2,4-Dimethylphenol   | 3.1E+02            | 0.0825      | 0.165                                | NE   | NE   | 3.1E+02                              |                |  |  |          |   |                                |             |  | 1.7                                   | 00 10            | U   | U                 | 0.187 1  | υυ                        | 3.460 20                             | U U  | 0.180            | 1 U U     |
| SEMIVOLATILES  | 2,4-Dinitrophenol  | 3.1E+01            | 0.3300      | 0.825                                | NE   | NE   | 3,1E+01                              |                |  |  |          |   |                                |             |  | 8.5                                   | 100 10<br>100 10 | Ň   | N.                | 0.937 1  | 1 1                       | 3460 20                              |  | 0.699            | 1 0 0     |
| SEMIVOLATILES<br>SEMIVOLATILES   | 2,4-Dinitrototuene<br>2 6-Dinitrototuene   | 7.2E-01            | 0.0625      | 0.165                                | NE   | NE   | 7.2E-01                              |                |  |  |          |   |                                |             |  | 1.7                                   | 00 10            | ŭ   | ŭ                 | 0.187 1  | บับั                      | 3.460 20                             | ŭŭ   | 0,180            | i Ū Ū     |
| SEMIVOLATILES  | 2-Chloronaphthalene  | 1.1E+03            | 0.0825      | 0.165                                | NE   | NE   | 1.1E+03                              |                |  |  |          |   |                                |             |  | 1.7                                   | 00 10            | Ŭ   | U                 | 0.187 1  | υu                        | 3.460 20                             | U U  | 0.180            | 1 U U     |
| SEMIVOLATILES  | 2-Chlorophenol   | 1.1E+02            | 0.0825      | 0.165                                | NE   | NE   | 1.1E+02                              |                |  |  |          |   |                                |             |  | 1.7                                   | 00 10            | U.  | U II              | 0.187 1  | U U                       | 3,460 20                             |  | 0.180            | 1 U U     |
| SEMIVOLATILES<br>SEMIVOLATILES   | 2-Methyloaphinalene<br>2-Methylobenol  | 5.5E+01<br>7 7E+02 | 0.0825      | 0.165                                | NE   | NE   | 0.0E+01<br>7.7E+02                   |                |  |  |          |   |                                |             |  | 1.7                                   | 00 10            | ŭ   | ŭ                 | 0,187 1  | ŭŬ                        | 3.460 20                             | ŬŬ   | 0.180            | ίŭŭ       |
| SEMIVOLATILES  | 2-Nitroaniline   | 4.7E+00            | 0.3300      | 0.825                                | NE   | NE   | 4.7E+00                              |                |  |  |          |   |                                |             |  | 8.5                                   | 00 10            | Ú   | U                 | 0.937 1  | U U                       | 17,300 20                            | UL   | 0.899            | 1 U U     |
| SEMIVOLATILES  | 2-Nitruphenol  | 3.1E+01            | 0.0825      | 0.165                                | NE   | NE   | 3.1E+01                              |                |  |  |          |   |                                |             |  | 1.7                                   | 00 10            | U II  | U<br>H            | 0.187 1  |                           | 3.460 20                             | 00   | 0.160            | 1 0 0     |
| SEMIVOLATILES<br>SEMIVOLATILES   | 3,3-Dichorobenzicine<br>3-Nitroaniline   | 476+00             | 0.1650      | 0.330                                | NE   | NE   | 4.7E+00                              |                |  |  |          |   |                                |             |  | 8.3                                   | 00 10            | ŭ   | ŭ                 | 0.937 1  | ŭŬ                        | 17,300 20                            | Ŭŭ   | 0.899            | iŭŭ       |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol   | 3.1E+01            | 0.3300      | 0.825                                | NE   | NE   | 3.1E+01                              |                |  |  |          |   |                                |             |  | 8.5                                   | 600 10           | Ū   | U                 | 0.937 1  | 0.0                       | 17.300 20                            | U U  | 0.899            | 1 9 9     |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether   | 3.1E-02            | 0.0825      | 0.165                                | NE   | NE   | 1.7E-01                              |                |  |  |          |   |                                |             |  | 01                                    | 65 10            | U   | U                 | 0.095 1  | 0 0                       | 1,759 20                             | υι<br>11 Ι                                 | 0.091            | 1 0 0     |
| SEMIVOLATILES<br>SEMIVOLATILES   | 4-Chloro-3-methylphenol<br>4-Chloroaniline   | 7.7E+01<br>8.2E+01 | 0.0825      | 0.165                                | NE   | NE   | 6.2E+01                              |                |  |  |          |   |                                |             |  | 1.7                                   | 00 10            | ŭ   | ŭ                 | 0.187 1  | ប ប                       | 3.460 20                             | บับ  | 0,180            | iŭŭ       |
| SEMIVOLATILES  | 4-Chlorophenyl phenyl ether  | 2.8E-02            | 0.0825      | 0.165                                | NE   | NE   | 1.7E-01                              |                |  |  |          |   |                                |             |  | 01                                    | 66 10            | Ŭ   | Ú                 | 0.096 1  | υυ                        | 1.759 20                             | υų   | 0.091            | 1 0 0     |
| SEMIVOLATILES  | 4-Methylphenol   | 7.7E+01            | 0.0825      | 0.165                                | NE   | NE   | 7.7E+01                              |                |  |  |          |   |                                |             |  | 1.7                                   | 00 10            | U   | ü                 | 0.187 1  |                           | 3.460 20                             |  | 0.180            | 1 0 0     |
| SEMIVOLATILES<br>SEMIVOLATILES   | 4-Naroaniine<br>4-Nitrophenol  | 1.3E+01<br>3.1E+01 | 0.3300      | 0.825                                | NE   | NE   | 3.1E+01                              |                |  |  |          |   |                                |             |  | 8.0                                   | 600 10           | Ŭ   | ŭ                 | 0.937 1  | ΰŭ                        | 17.300 20                            | ີບັບັ                                      | 0.699            | រែប៍រី    |
| SEMIVOLATILES  | Acenaphinene   | 8.2E+02            | 0.0825      | 0.165                                | NE   | NE   | 8.2E+02                              |                |  |  |          |   |                                |             |  | 1.5                                   | 00 10            | Ŭ   | Ŭ                 | 0.187 1  | ົບບ                       | 3.460 20                             | U L  | 0.180            | 1 U U     |
| SEMIVOLATILES  | Acenaphthylene   | 8.2E+02            | 0.0825      | 0.165                                | NE   | NE   | 8.2E+02                              |                |  |  |          |   |                                |             |  | 1.3                                   | 700 10<br>700 10 |   | 0                 | 0,187 1  | 00                        | 3.460 20                             | - U L                                      | 0,180            | 1 1 1     |
| SEMIVOLATILES  | Benzo(a)anthracene   | 6.3E-01            | 0.0825      | 0.165                                | 1.53E-02                                     | NE   | 6.3E-01                              |                |  |  |          |   |                                |             |  | 1.3                                   | 10 10            | ŭ   | ŭ                 | 0.187 1  | ŨŬ                        | 3,460 20                             | ŪŪ   | 0.180            | i Ū Ū     |
| SEMIVOLATILES  | Benzo(a)pyrene   | 6.3E-02            | 0,0825      | 0.165                                | 1.54E-02                                     | NE   | 1,7E-01                              |                |  |  |          |   |                                |             |  | · · · · · · · · · · · · · · · · · · · | 66 10            | U   | U                 | 0.096 1  | U U                       | 1,759 20                             | υι   | 0.091            | 1 0 0     |
| SEMIVOLATILES  | Benzo(b)fluoranthene   | 6.3E-01            | 0.0825      | 0.165                                | 1.538-02                                     | NE   | 6.3E-01                              |                |  |  |          |   |                                |             |  | 1.3                                   | 100 10           |   | H I               | 0.187 1  |                           | 3,460 20                             |  | I 0.160          | 1 0 0     |
| SEMIVOLATILES  | Benzo(gni)perviene<br>Benzo(k)filwranthene   | 4.1E+U2<br>6.3E+00 | 0.0825      | 0.105                                | 1.30E-02                                     | NE   | 6.3E+00                              |                |  |  |          |   |                                |             |  | 1.1                                   | 100 10           | Ŭ   | ŭ                 | 0.187 1  | ŭŭ                        | 3,460 20                             | ŬŬ   | 0.180            | iŬŬ       |
| SEMIVOLATILES  | Benzoic Acid   | 6.2E+04            | 0.3300      | 0.825                                | NE   | NE   | 6.2E+04                              |                |  |  |          |   |                                |             |  | 8.                                    | 500 10           | U   | U .               | 0.937 1  |                           | 17.300 20                            | U U  | 0.899            | 1 1 1     |
| SEMIVOLATILES  | Benzyl Alcohol   | 4.7E+03            | 0.0825      | 0.165                                | NE   | NE   | 4.7E+03                              |                |  |  |          |   |                                |             |  | 1.1                                   | 700 10<br>700 10 | . N   | 0                 | 0.187 1  | 0 0                       | 3.460 20                             |  | U.180<br>I 0.180 | 1 0 0     |
| SEMIVULATILES<br>SEMIVOLATILES   | bis(2-Chloroethoxy)methane<br>bis(2-Chloroethy)lether  | 2.9E-01<br>1.5E-01 | 0.0825      | 0.165                                | NE   | NE   | 2.9E-01                              |                |  |  |          |   |                                |             |  |                                       | 66 10            | บั  | ŭ                 | 0.096 1  | υŭ                        | 1 759 20                             | υί   | 0.091            | iŭŭ       |
| SEMIVOLATILES  | bis(2-Chloroisopropyl)ether  | 4.8E+00            | 0.0825      | 0.165                                | NE   | NE   | 4.8E+00                              |                |  |  |          |   |                                |             |  | 1.3                                   | 700 10           | U   | U                 | 0.187 1  | υυ                        | 3.460 20                             | u i  | 0.160            | 1 0 0     |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthatate   | 1.7E+01            | 0.0825      | 0.165                                | NE   | NE   | 1.7E+01                              |                |  |  |          |   |                                |             |  | 1.                                    | 700 10           | U   | N.                | 0.187 1  |                           | 3.460 20                             |  | 0.180            | 1 0 0     |
| SEMIVOLATILES  | Choreage   | 3.12+03            | 0.0825      | 0.165                                | 1.51E-02                                     | NE   | 6.35+01                              |                |  |  |          |   |                                |             |  | 1.                                    | 700 10           | ŭ   | ŭ                 | 0.187 1  | บับั                      | 3.460 20                             | ີບັບັ                                      | 0.180            | เบีย      |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene   | 6.3E-02            | 0.0825      | 0.165                                | NE   | NĚ   | 1.7E-01                              | 1              |  |  |          |   |                                |             |  | Ü                                     | 10               | Ŭ   | Ū                 | 0.096 1  | ŪŪ                        | 1,759 20                             | υι   | 0.091            | 1 U Ü     |
| SEMIVOLATILES  | Dibenzofuran   | 6.2E+01            | 0.0825      | 0.165                                | NE   | NË   | 6.2E+01                              |                |  |  |          |   |                                |             |  | 1.                                    | 00 10            | U.  | U                 | 0.187 1  | 8 9                       | 3.460 20                             | יטי  | 0.180            | 1 0 0     |
| SEMIVOLATILES  | Dietnyl phthalate<br>Dimethyl obthalate  | 1.2E+04<br>1.2E+04 | 0.0825      | 0.165                                | NE   | NE   | 1.22+04                              |                |  |  |          |   |                                |             |  | 1.                                    | 700 10           | ŭ   | ŭ                 | 0.187 1  | ŭŭ                        | 3,460 20                             | υ i  | 0.180            | iŭŭ       |
| SEMIVOLATILES  | di-n-Butyl phthalate   | 1.6E+03            | 0.0825      | 0.165                                | NE   | NE   | 1.6E+03                              |                |  |  |          |   |                                |             |  | 1.                                    | 700 10           | Ū   | Ū                 | 0.187 1  | ΰŰ                        | 3.460 20                             | U i  | 0.180            | 1 U U     |
| SEMIVOLATILES  | di-n-Octyl phthalate   | 3.1E+02            | 0.0825      | 0.165                                | NE   | NE   | 3.1E+02                              |                |  |  |          |   |                                |             |  | 1.                                    | 700 10           | U.  | ü                 | 0.187 1  |                           | 3.460 20                             | U U  | 0.180            | 1 1 1     |
| SEMIVOLATILES  | Fluoranthéne   | 5.5E+02            | 0,0825      | 0.165                                | 2.29E-02                                     | NE   | 5.5E+02                              |                |  |  |          |   |                                |             |  | 1.                                    | 700-10<br>700-10 | U U   | U                 | 0.187 1  | υŭ                        | 3.460 20                             |  | 0.180            | τυυ<br>1  |
| SEMIVOLATILES  | Hexachiorobenzene  | 2.5E-01            | 0.0825      | 0.165                                | NE   | NE   | 2.5E-01                              |                |  |  |          |   |                                |             |  | 1.                                    | 700 10           | ŭ   | ŭ                 | 0.187 1  | ųŭ                        | 3.460 20                             | ŭ  | 0.180            | ្រើបី     |
| SEMIVOLATILES  | Hexachlorobutadiene  | 1.6E+00            | 0.0825      | 0.165                                | NE   | NE   | 1.6E+00                              |                |  |  |          |   |                                |             |  | 1.                                    | 700 10           | U   | U                 | 0.187 1  | 2 2                       | 3.460 20                             | U L  | 0.180            | 1 U U     |
| SEMIVOLATILES  | Hexachiorocyclopentadiene  | 1.0E+00            | 0.0825      | 0.165                                | NE   | NE   | 1 1.0E+00                            | 1              |  |  |          |   |                                |             |  | 1.                                    | 109 10           | Ų   | Ų                 | 0.167 1  | 0 0                       | 3.400 ZU                             | υι   | 0.180            |           |

Table 4-33 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-033

|                        |  |                    |             |              |           |               |                    | Sump-03          | 55               |                  |                          |                 |                          |                            |
|------------------------|--|--------------------|-------------|--------------|-----------|---------------|--------------------|------------------|------------------|------------------|--------------------------|-----------------|--------------------------|----------------------------|
| [SUMP] = SUMP033       |  |                    |             |              |           |               |                    | 35SUMP032-SB01   | 35SUMP033-SB01   | 35SUMP033-SB01   | WRS015-SB01              | WRS015-SB01     | WRS015-S802              | WRS015-SB02                |
| SAMPLE NO              |  | TCEO               |             |              | Back      | cround        | Applichie          | 35-SMP32-SB01-01 | 35-SMP33-SB01-01 | 35-SMP33-SB01-02 | WR\$-015-SB01-01         | WRS-015-SB01-02 | WRS-15-SB02-01           | WRS-15-SB02-02             |
| SAMPLE_DATE            |  | Risk-Based         |             |              | Concentra | tions in Soll | TCEQ               | 9/12/2006        | 9/11/2006        | 9/11/2006        | 9/15/2006                | 9/15/2006       | 9/15/2006                | 9/15/2006                  |
| DEPTH                  |  | Screening          | Method      | Method       | (95% UF   | 2L, mg/kg)    | Risk-Based         | 0.5 - 0.5 Ft     | 0 - 0.5 Ft       | 4.5 - 5 Ft       | 0.5 - 0.5 Ft             | 4 - 4 Ft        | 1 - 1 Ft                 | 4 - 4 Ft                   |
| SAMPLE_PURPOSE         |  | Value              | Detection   | Quantitation | Surrace   | Subsurface    | Screening          | REG              | REG              | REG              | REG                      |                 | REG LO MO                |                            |
| Test Group             | Parameter (Units = mg/kg)                          | (RBSV)*            | Limit (MDL) | Limit (MQL)  | 0-0.5 Ft  | 1.5 - 2.5 Ft  | Value<br>1 ection  | Result OIL LO VO | Result DIL LQ VQ | Result DIL LO VO | 1 700 10 U U             | A 187 1 11 11   | 3460 20 U U              | 0.180 1 II II              |
| SEMIVOLATILES          | Indeno(1.2.3-cd)ovrene                             | 6.3E-01            | 0.0625      | 0.165        | 1.43E-02  | NE            | 6.3E-01            |                  |                  |                  | 1.700 10 U U             | 0.187 1 U U     | 3.460 20 U U             | 0.180 1 U U                |
| SEMIVOLATILES          | Isophorone   | 5.2E+02            | 0.0825      | 0.165        | NE        | NE            | 5.2E+02            |                  |                  |                  | 1.700 10 U U             | 0.187 1 U U     | 3.460 20 U U             | 0.180 1 U U                |
| SEMIVOLATILE\$         | Naphthalene  | 1.8E+01            | 0.0825      | 0.165        | NE        | NE            | 1.8E+01            |                  |                  |                  | 1.700 10 U U             | 0.187 1 U U     | 3.460 20 U U             | 0.180 1 U U                |
| SEMIVOLATILES          | Nitrobenzene                                       | 6.5E+00            | 0.0825      | 0.165        | NE        | NE            | 6.5E+00            |                  |                  |                  | 1.700 10 U U             | 0.187 1 U U     | 3.460 20 0 0             | 0.160 1 U U                |
| SEMIVOLATILES          | n-Nitrosodinbendamine                              | 4.1E+02<br>5.9E+01 | 0.0825      | 0.165        | NE        | NE            | 5.9E+01            |                  |                  | 807)<br>807)     | 1.700 10 U U             | 0.187 1 U U     | 3.460 20 U U             | 0.180 1 U U                |
| SEMIVOLATILES          | Pentachlorophenol                                  | 3.0E+00            | 0.3300      | 0.825        | NE        | NE            | 3.0E+00            |                  |                  |                  | 8.500 10 U U             | 0.937 1 U U     | 17.300 20 U U            | 0.899 1 U U                |
| SEMIVOLATILES          | Phenanthrene                                       | 4.1E+02            | 0.0825      | 0.165        | NE        | NE            | 4.1E+02            |                  |                  |                  | 1.700 10 U U             | 0,187 1 U U     | 3.460 20 U U             | 0.180 1 U U                |
| SEMIVOLATILES          | Phenol   | 4.7E+03            | 0.0825      | 0.165        | NE        | NE            | 4.7E+03            |                  |                  |                  | 1.700 10 U U             | 0.187 1 U U     | 3.460 20 U U             | 0.180 1 U U                |
| SEMIVOLATILES          | Pyrene<br>Bercent Solide                           | 4.1E+02            | 0.0825      | 0.165<br>NE  | 1.94E-02  | NE            | 4.1E+02            | 92.000 1         | 95.600 1         | 87 200 1         | 1.700 TO O O<br>95.300 1 | 86,000 1        | 3.460 20 0 0<br>93.600 1 | 90,300 1                   |
| VOLATILES              | 1 1 1 2-Tetrachlomethane                           | 5 2E+00            | 0.0005      | 0.005        | NE        | NE            | 5.2E+00            | 52,000           | 50.000 1         | 0.005 1 1        | 50.000                   | 0.007 1 U U     | 00.000                   | 0.005 1 U U                |
| VOLATILES              | 1,1,1-Trichloroethane                              | 2.3E+02            | 0.0005      | 0.005        | NE        | NE            | 2.3E+02            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | 1,1,2,2-Tetrachloroethane                          | 5.1E-01            | 0.0005      | 0.005        | NE        | NE            | 5.1E-01            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | 1,1,2-Trichloroethane                              | 9.7E-01            | 0.0005      | 0.005        | NE        | NE            | 9,7E-01            |                  |                  | 0.005 1 U        |                          | 0.007 1 0 0     |                          | 0.005 1 U U                |
| VOLATILES<br>VOLATILES | 1,1-Dichlomethene                                  | 2.9E+01            | 0.0010      | 0.005        | NE        | NE            | 2.5E+01            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | 1.1-Dichloropropene                                | 9.9E-01            | 0.0005      | 0.005        | NE        | NE            | 9.9E-01            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | 1,2,3-Trichlorobenzene                             | 4.2E+01            | 0.0005      | 0.005        | NĘ        | NE            | 4.2E+01            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | 1,2,3-Trichloropropane                             | 9.2E-02            | 0.0010      | 0.005        | NE        | NE            | 9.2E-02            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | 1,2,4-Trichlorobenzene                             | 1.4E+02            | 0.0005      | 0.005        | NE        | NE            | 1.4E+02            |                  |                  | 0.005 1 U        |                          | 0.007 1 0 0     |                          | 0.005 1 U U                |
| VOLATILES              | 1,2,4+1 meutybenzene<br>1,2,Dibramo-3chloroprogane | 3.5E+01            | 0.0003      | 0.005        | NE        | NE            | 3.5E-01            |                  |                  | 0.005 1 U        |                          | 0.007 1 1 1     |                          | 0.005 1 U U                |
| VOLATILES              | 1,2-Dibromoethane                                  | 5.3E-02            | 0.0005      | 0.005        | NE        | NE            | 5.3E-02            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | 1,2-Dichlorobenzene                                | 5.6E+01            | 0.0005      | 0.005        | NE        | NE            | 5.6E+01            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | 1,2-Dichloroethane                                 | 2.7E-01            | 0.0005      | 0.005        | NE        | NE            | 2.7E-01            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | 1,2-Dichioropropane                                | 1.02+00            | 0.0005      | 0.005        | NE        | NE            | 1.85+00            |                  |                  | 0.005 1 0        |                          | 0.007 1 U U     |                          | 0.005 1 0 0                |
| VOLATILES              | 1.3.5-Trimethylbenzene                             | 8.3E+00            | 0.0005      | 0.005        | NE        | NE            | 8.3E+00            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | 1,3-Dichloroberizene                               | 5.1E+00            | 0.0005      | 0.005        | NE        | NE            | 5.1E+00            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILE\$             | 1,3-Dichloropropane                                | 3.0E+00            | 0.0005      | 0.005        | NE        | NE            | 3.0E+00            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | 1,4-Dichiombenzene                                 | 2.7E+01            | 0.0005      | 0.005        | NE        | NE            | 2.7E+01            |                  |                  | 0.005 1 0        |                          | 0.007 1 U U     |                          | 0.005 1 0 0                |
| VOLATILES              | 2,2-Dichioropropane<br>2-Butanone                  | 1.7E+00<br>2.6E+03 | 0.0005      | 0.005        | NE        | NE            | 2.6E+03            |                  |                  | 0.003 1 0        |                          | 0.013 1 U U     |                          | 0.010 1 U U                |
| VOLATILES              | 2-Chloroethyl vinyl ether                          | 2.1E-01            | 0.0020      | 0.010        | NE        | ŇĒ            | 2.1E-01            |                  |                  | 0.011 1 U        |                          | 0.013 1 Ŭ Ŭ     |                          | 0.010 1 U U                |
| VOLATILES              | 2-Chlorotoluene                                    | 1.5E+02            | 0.0005      | 0.005        | NE        | NE            | 1.5E+02            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | 2-Hexanone   | 6.2E+00            | 0.0025      | 0.010        | NE        | NE            | 6.2E+00            |                  |                  | 0.011 1 U        |                          | 0.013 1 U U     |                          | 0.010 1 U U                |
| VOLATILES              | 4-Uniorotoluene                                    | 3.4E-01<br>1.7E+02 | 0.0000      | 0.005        | NE        | NE            | 3.4E-01<br>1.7E+02 |                  |                  | 0.005 1 0        |                          | 0.007 1 0 0     |                          | 0.003 1 0 0                |
| VOLATILES              | Benzene  | 8.8E-01            | 0.0005      | 0.005        | NE        | NE            | 8.8E-01            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | Bromobenzene                                       | 1.1E+01            | 0.0005      | 0.005        | NE        | NE            | 1.1E+01            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | Bromochloromethane                                 | 2.4E+01            | 0.0005      | 0.005        | NE        | NE            | 2.4E+01            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | Bromodichioromethane                               | 1.0E+01            | 0.0005      | 0.005        | NE        | NE            | 1.0E+01            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | Bromomethane                                       | 3.5E-01            | 0.0010      | 0.010        | NE        | NE            | 3.5E-01            |                  |                  | 0.003 1 0        |                          | 0.013 1 1 1     |                          | 0.010 1 U U                |
| VOLATILES              | Carbon disulfide                                   | 1.0E+02            | 0.0005      | 0.005        | NE        | NE            | 1.0E+02            |                  |                  | 0.005 1 U        |                          | 0.007 t U U     |                          | 0.005 1 U U                |
| VOLATILES              | Carbon tetrachloride                               | 3.5E-01            | 0.0005      | 0.005        | NE        | NE            | 3.5E-01            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | Chlorobenzene                                      | 4.0E+01            | 0.0005      | 0.005        | NE        | NE            | 4.0E+01            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | Chloroform   | 1.1E+03            | 0.0010      | 0.010        | NE        | NE            | 1.16+03            |                  |                  | 0.011 1 0        |                          | 0.043 1 0 0     |                          | 0.010 1 0 0                |
| VOLATILES              | Chloromethane                                      | 2.3E-01            | 0.0020      | 0.010        | NE        | NE            | 2.3E-01            |                  |                  | 0.011 1 U        |                          | 0.013 1 U U     |                          | 0.010 1 U U                |
| VOLATILES              | cls-1,2-Dichloroethene                             | 1_2E+02            | 0.0005      | 0.005        | NE        | NE            | 1.28+02            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | cis-1,3-Dichloropropene                            | 1.2E+00            | 0.0005      | 0.005        | NE        | NE            | 1.2E+00            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | Dibromochioromethane                               | 7.62+00            | 0.0005      | 0.005        | NE        | NE            | 1,62+00            |                  |                  | 0.005 1 0        |                          | 0.007 1: 0 0    |                          | 0.005 1 0 0                |
| VOLATILES              | Dichlorodifluoromethane                            | 2.2E+02            | 0.0010      | 0.010        | NE        | NE            | 2.2E+02            |                  |                  | 0.011 1 U        |                          | 0.013 1 U U     |                          | 0.010 1 U U                |
| VOLATILES              | Ethylbenzene                                       | 4.3E+02            | 0.0005      | 0.005        | NE        | NE            | 4.3E+02            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | Hexachlorobutadiene                                | 1.62+00            | 0.0005      | 0.005        | NE        | NE            | 1.6E+00            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | Isopropylbenzene                                   | 5.4E+02            | 0.0005      | 0.005        | NE        | NE            | 5.48+02            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | Method isobutol ketone                             | 2.3E+02            | 0.0005      | 0.005        | NE        | NÊ            | 135+02             |                  |                  | 0.000 1 0        |                          | 0.007 1 0 0     |                          | 6010 1 II II               |
| VOLATILES              | Methylene chloride                                 | 8.7E+00            | 0.0010      | 0.005        | NE        | NE            | 8.7E+00            |                  |                  | 0.005 1 U        |                          | 0,007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | Naphthalene  | 1.6E+01            | 0.0005      | 0.01         | NE        | NE            | 1.8E+01            |                  |                  | 0.011 1 U        |                          | 0.013 1 U U     |                          | 0.010 1 U U                |
| VOLATILES              | n-BUTYLBENZENE                                     | 2.7E+02            | 0.0005      | 0.005        | NE        | NE            | 2.7E+02            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | NEXTREMENT CONTRACTOR                              | 3.25+02            | 0.0005      | 0.005        | NC<br>NC  | NE            | 4.25-02            |                  |                  | 0.005 1 U        |                          | 0.007 1 0 0     |                          | 0.005 1 1 1                |
| VOLATILES              | sec-BUTYLBENZENE                                   | 3.0E+02            | 0.0005      | 0.005        | NE        | NE            | 3.0E+02            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | Styrene  | 1.3E+03            | 0.0005      | 0.005        | NE        | NE            | 1.35.+03           |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 Ū Ū                |
| VOLATILES              | tert-BUTYLBENZENE                                  | 2.6E+02            | 0.0005      | 0.005        | NE        | NE            | 2.6E+02            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES -            | Tetrachloroethene                                  | 6.0E+00            | 0.0005      | 0.005        | NE        | NE            | 6.0E+00            |                  |                  | 0.005 1 U        |                          | 0.007 1 1 1     |                          | 0.005 1 U U                |
| VOLATILES              | trans-1 2-Dichlomethene                            | 1.10+03            | 0.0005      | 0.005        | NE        | NE            | 1.1E+03<br>1.4E+02 |                  |                  | 0.000 1 0        |                          | 0.007 1 1 1     |                          | 0.005 1 1 1                |
| VOLATILES              | trans-1,3-Dichloropropene                          | 1.8E+00            | 0.0005      | 0.005        | NE        | NE            | 1.8E+00            |                  |                  | 0.005 1 U        |                          | 0.007 1 U U     |                          | 0.005 1 U U                |
| VOLATILES              | Trichloroethene                                    | 3.7E+00            | 0.0005      | 0.005        | NE        | NE            | 3.7E+00            |                  |                  | 0.005 1 U        |                          | 0.007 I U U     | +                        | 0.005 1 U U                |
| VOLATILES              | Trichlorofluoromethane                             | 2.6E+02            | 0.0010      | 0.01         | NE        | NE            | 2.6E+02            |                  |                  | 0.011 1 U        |                          | 0.013 1 U U     |                          | 0.010 1 U U                |
| VOLATILES              | vinyl acetate<br>Vinyl chloride                    | 5.7E+01            | 0.0010      | 0.01         | NE        | NE            | 3.6E-02            |                  |                  | 0.011 1 0        |                          | 0.013 1 0 0     |                          | 0.010 1 U U<br>0.010 1 U U |
|                        |  |                    | 0.0010      |              |           |               |                    |                  |                  |                  |                          | <u> </u>        |                          |                            |

Footnotes are shown on cover page to Tables Section.

#### Shaw Environmental, Inc.

### 00066459

· •

Shaw Environmental, Inc.

00066460

### Table 4-34 Comparison of Chemical Concentrations in Soil to Risk Based Screening Values

Sump 034

| [SUMP] = SUMP034<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE  |  | TCEQ<br>Risk-Based<br>Screening<br>Value   | Method<br>Detection  | Method<br>Quantitation  | Backgr<br>Concentratio<br>(95% UPL<br>Surface  | round<br>ons in Soil<br><u>-, mg/kg)</u><br>Subsurface   | Applicble<br>TCEQ<br>Rişk-Based<br>Screening  | 35SUMP034-SB01<br>35-SMP034-SB01-02<br>9/20/2006<br>4 - 4 Ft<br>REG  | 35SUMP034-SB01<br>35-SMP34-SB01-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG  | 35SUMP034-SB01<br>35-SMP34-SB01-01-QC<br>9/11/2006<br>0 - 0.5 Ft<br>FD   | 35SUMP034-SB02<br>35-SMP034-SB02-02<br>9/20/2006<br>4 - 4 Ft<br>REG  | 35SUMP034-SB02<br>35-SMP34-SB02-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG  | WRS015-SB01<br>WRS-015-SB01-01<br>9/15/2006<br>0.5 - 0.5 Ft<br>REG  | WRS015-S501<br>WRS-015-S801-02<br>9/15/2006<br>4 - 4 Ft<br>REG<br>Sawt Bit LO, VO   | WRS015-SB02<br>WRS-15-SB02-01<br>9/15/2006<br>1 - 1 Ft<br>REG  | WRS015-SB02<br>WRS-15-SB02-02<br>9/15/2006<br>4 - 4 Ft<br>REG<br>Besult 20, V0   |
|---|--|--|--|---|--|--|---|--|---|--|--|---|---|---|--|--|
| Test Group<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES  | Parameter (Units = mg/kg)<br>13,5-Tinitrobenzene<br>2,4-5-Tinitrobleurene<br>2,4-5-Tinitrobleurene<br>2,4-5-Tinitrobleurene<br>2,5-5-Tinitrobleurene<br>2,5-5-dinitrobleurene<br>HMX<br>m-Nitrobleurene<br>p-Nitrobleurene<br>p-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrobleurene<br>P-Nitrob   | (RBSV)*<br>4.7E+02<br>1.6E+00<br>7.7E+00<br>7.2E-01<br>2.6E+00<br>2.6E+00<br>2.6E+00<br>2.2E+02<br>4.4E+01<br>6.5E+00<br>4.7E+01<br>4.4E+01<br>3.6E+00   | Limit (MDL)<br>0.1<br>0.1<br>0.1<br>0.1<br>0.1<br>0.1<br>0.1<br>0.1<br>0.1<br>0.1  | Limit (MQL)<br>0.25<br>0.25<br>0.25<br>0.26<br>0.26<br>0.26<br>0.26<br>0.26<br>0.26<br>0.25<br>0.26<br>0.25<br>0.26<br>0.25<br>0.25<br>0.25<br>0.25<br>0.25<br>0.25<br>0.25 | 00.5 ft<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE  | 15-25 Ft<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE                               | Value<br>4.7E+02<br>1.6E+00<br>7.7E+00<br>7.2E-01<br>2.6E+00<br>2.6E+00<br>2.6E+00<br>2.4E+01<br>6.5E+00<br>4.7E+01<br>3.6E+00  | Result DLL         LO         VO           0249         1         U           0259         1         U           0259         1         U           0259         1         U           0259         1         U           0259         1         U           0259         1         U           0259         1         U           0259         1         U           0259         1         U           0249         1         U           0249         1         U           0249         1         U           0249         1         U   | Result bit         LC VC           0238         1           0238         1           0238         1           0238         1           0238         1           0238         1           0238         1           0238         1           0238         1           0238         1           0238         1           0248         1           0248         1           0238         1           0238         1           0238         1           0238         1           0238         1           0238         1           0238         1           0238         1           0238         1           0238         1 | Resolut Dil:         Li Vu           0239         1         U           0249         1         U           0249         1         U           0249         1         U           0239         1         U           0239         1         U           0239         1         U           0239         1         U           0239         1         U           0239         1         U           0239         1         U           0239         1         U           0239         1         U           0239         1         U           0239         1         U           0239         1         U           0239         1         U | N286         U         U           0.248         1         U           0.248         1         U           0.248         1         U           0.248         1         U           0.248         1         U           0.248         1         U           0.257         1         U           0.257         1         U           0.257         1         U           0.257         1         U           0.257         1         U           0.248         1         U           0.257         1         U           0.257         1         U           0.248         1         U           0.257         1         U           0.257         1         U           0.257         1         U           0.257         1         U           0.246         1         U           0.490         1         U | DL         Lu <thlu< th="">         Lu         Lu         Lu<!--</td--><td></td><td></td><td></td><td></td></thlu<> |   |   |  |  |
| EXPLOSIVES<br>EXPLOSIVES<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS  | Tetryl<br>Aluminum<br>Antimory<br>Arsenic<br>Barlum<br>Beryllum<br>Cadmium<br>Catolum<br>Catolum<br>Chomium<br>Cobat<br>Copper<br>Iron<br>Lead<br>Macnesium  | 1.6E+02<br>1.6E+04<br>7.3E+00<br>2.0E+01<br>2.6E+03<br>4.6E+00<br>5.2E+00<br>NE<br>5.9E+03<br>1.0E+03<br>1.0E+03<br>NE<br>5.0E+02<br>NE  | 0.2<br>10.000<br>0.500<br>0.075<br>0.075<br>0.075<br>0.075<br>0.075<br>0.075<br>0.075<br>0.075<br>0.075<br>0.125<br>0.150<br>NA<br>0.500<br>NA                                   | 0.66<br>20.00<br>0.10<br>0.30<br>0.50<br>0.50<br>0.50<br>0.50<br>0.50<br>0.60<br>NA<br>5.00<br>NA   | NE<br>1.632+04<br>9.40E-01<br>4.81E+00<br>1.52E+02<br>6.45E-01<br>1.40E+00<br>NA<br>2.66E+01<br>7.23E+00<br>5.55E+00<br>NA<br>2.26E+01<br>NA | NE<br>2.08E+04<br>1.60E+00<br>5.54E+00<br>8.55E+01<br>7.66E-01<br>NA<br>3.01E+01<br>9.25E+00<br>NA<br>1.14E+01<br>NA | 1.6E+02<br>1.6E+04<br>7.3E+00<br>2.0E+01<br>2.6E+03<br>4.6E+00<br>5.2E+00<br>   | 0.647         1         U           16800         1         0.122         1         U           1.540         1         88.800         1         0.325         1         0.179         1         J         1         16900         1         24.200         1         5.420         1         1         33100         5         9.2320         1         10.700         1         33100         5         9.230         1         17.10         1 <t< td=""><td>0.619 1 U<br/>11500 1<br/>0.106 1 U<br/>8.230 1 J<br/>226 1<br/>0.884 1<br/>5140 1<br/>20.200 1<br/>3.310 1<br/>16.700 1<br/>22100 1<br/>2230 100 J<br/>1140 1</td><td>0.622 1 U<br/>9410 1<br/>0.105 1 U<br/>4.310 1 J<br/>201 1<br/>0.421 1<br/>1.150 1<br/>8500 1<br/>19.700 1<br/>3.380 1<br/>20.200 1<br/>17900 1<br/>124 100 J<br/>1340 1</td><td>0.644         1         U           10700         1           0.118         1         U           5         1           716         1           0.541         1           3420         1           19.930         1           4.050         1           21500         1           76.800         5           1180         1</td><td>0.631 1 U<br/>10690 1<br/>0.105 1 U<br/>6.400 1 J<br/>1170 10<br/>0.811 1<br/>4100 1<br/>3.610 1<br/>8.410 1<br/>50000 10<br/>23.700 1 J<br/>1200 1</td><td>6240         1           0.105         1         U           5.940         1         J           0.465         1         J           0.466         1         J           15.940         1         J           44100         10         I           5.940         1         J           5.940         1         2           3.420         1         J           29300         1         2           29300         1         887</td><td>22200         1           0.116         1         U           4.360         1           64.600         1           0.080         1           2020         1           28.700         1           6.560         1           27700         1           16.400         1           116.400         1</td><td>6340         1         J         J           0.099         1         J         J           5.510         1         J         J           0.417         1         O         O           0.917         1         J         J           7080         1         I         I           8.100         1         J         J           5.740         1         J         J           2.7400         1         J         J           5.04         1         J         J</td><td>13500 1<br/>0.110 1 U U<br/>2.310 1<br/>42.200 1<br/>0.412 1<br/>0.047 1 J J<br/>2.89 1<br/>1.4.400 1<br/>1.730 1<br/>3.350 1<br/>14600 1<br/>7.590 1<br/>546 1</td></t<> | 0.619 1 U<br>11500 1<br>0.106 1 U<br>8.230 1 J<br>226 1<br>0.884 1<br>5140 1<br>20.200 1<br>3.310 1<br>16.700 1<br>22100 1<br>2230 100 J<br>1140 1  | 0.622 1 U<br>9410 1<br>0.105 1 U<br>4.310 1 J<br>201 1<br>0.421 1<br>1.150 1<br>8500 1<br>19.700 1<br>3.380 1<br>20.200 1<br>17900 1<br>124 100 J<br>1340 1  | 0.644         1         U           10700         1           0.118         1         U           5         1           716         1           0.541         1           3420         1           19.930         1           4.050         1           21500         1           76.800         5           1180         1  | 0.631 1 U<br>10690 1<br>0.105 1 U<br>6.400 1 J<br>1170 10<br>0.811 1<br>4100 1<br>3.610 1<br>8.410 1<br>50000 10<br>23.700 1 J<br>1200 1  | 6240         1           0.105         1         U           5.940         1         J           0.465         1         J           0.466         1         J           15.940         1         J           44100         10         I           5.940         1         J           5.940         1         2           3.420         1         J           29300         1         2           29300         1         887  | 22200         1           0.116         1         U           4.360         1           64.600         1           0.080         1           2020         1           28.700         1           6.560         1           27700         1           16.400         1           116.400         1   | 6340         1         J         J           0.099         1         J         J           5.510         1         J         J           0.417         1         O         O           0.917         1         J         J           7080         1         I         I           8.100         1         J         J           5.740         1         J         J           2.7400         1         J         J           5.04         1         J         J  | 13500 1<br>0.110 1 U U<br>2.310 1<br>42.200 1<br>0.412 1<br>0.047 1 J J<br>2.89 1<br>1.4.400 1<br>1.730 1<br>3.350 1<br>14600 1<br>7.590 1<br>546 1  |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS  | Manganese<br>Mercury<br>Nickel<br>Potassium<br>Selenium<br>Silver<br>Sodium<br>Thallium<br>Vanadium<br>Zinc<br>Carbon Range <u>C12-C28</u>   | 1.7E+03<br>1.1E-02<br>1.9E+02<br>1.3E+02<br>4.7E+01<br>NE<br>2.0E+00<br>4.8E+01<br>5.9E+03<br>4.0E+02  | 0.050<br>0.010<br>0.200<br>NA<br>0.100<br>0.050<br>NA<br>0.010<br>0.125<br>0.625<br>25   | 0.20<br>0.25<br>0.80<br>NA<br>0.20<br>0.20<br>NA<br>0.02<br>0.50<br>2.50<br>50  | 1.25E+03<br>8.19E-02<br>6.98E+00<br>NA<br>3.48E+00<br>3.10E-01<br>NA<br>4.70E-01<br>3.21E+01<br>6.16E+01<br>NE                               | 2.01E+02<br>3.60E-01<br>1.16E+01<br>NA<br>5.57E+00<br>3.70E-01<br>NA<br>NE<br>4.46E+01<br>2.02E+01<br>NE             | 1.7E+03<br>2.5E-01<br>1.9E+02<br>4.7E+01<br>-<br>2.0E+00<br>4.8E+01<br>5.9E+03<br>4.0E+02   | 101 1<br>0.032 1 J J<br>12.100 1<br>684 1<br>0.307 1<br>1.760 1 U<br>29 1<br>0.099 1<br>41.100 1<br>45.800 1   | 131     1       0.080     1       7.920     1       461     1       0.396     1       1.660     1       48200     1       0.084     1       31200     1       226     1   | 144 1<br>0.078 1 J J<br>6.360 1<br>434 1<br>0.353 1<br>0.212 1 J J<br>42 1<br>0.075 1<br>27.700 1<br>268 1   | 135 1<br>0.231 1 J J<br>7.010 1<br>453 1<br>0.274 1<br>1.650 1 U<br>45.900 1<br>0.060 1<br>35.900 1<br>200 1   | 196 1<br>0.077 1 J J J<br>7.240 1<br>402 1<br>0.449 1<br>1.610 1 U<br>38 1<br>0.070 1<br>63.600 1<br>54.200 1   | 253 1<br>0.046 1 J J<br>222 1<br>0.409 1<br>1.5500 1 U U<br>40.400 1<br>0.058 1<br>32.900 1<br>43.400 1<br>31.300 1 J J<br>33.500 1 J J J   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | 153 1 J J<br>0.030 1 J J<br>336 1<br>0.289 1<br>0.233 1 J J<br>24.700 1<br>0.043 1<br>41.500 1<br>102 1<br>66 1  | 0.010 1 J J<br>4.450 1<br>380 1<br>0.315 1<br>1.590 1 U U<br>24 1<br>0.281 1<br>30.500 1<br>12.800 1<br>55 1 U U<br>55 1 U U   |
| RANGE ORGANICS<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES | Carbon Rarge C26-C35<br>Carbon Rarge C3-C12<br>1,24-Trichtorobenzene<br>1,3-Dichtorobenzene<br>1,4-Dichtorobenzene<br>2,4,5-Trichtorophenol<br>2,4-Dichtorophenol<br>2,4-Dinttrophenol<br>2,4-Dinttrophenol<br>2,4-Dinttrobhene<br>2,4-Dinttrobhene<br>2,4-Dinttrobhene<br>2,4-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobhene<br>2,6-Dinttrobh | 4.0E+02<br>1.7E+02<br>1.4E+02<br>5.6E+01<br>5.1E+00<br>2.7E+01<br>1.6E+03<br>4.5E+01<br>3.1E+02<br>3.1E+01<br>7.2E-01<br>7.2E-01<br>1.1E+02<br>5.5E+01<br>7.7E+02<br>5.5E+01<br>7.7E+02  | 25<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825     | 50<br>50<br>0.185<br>0.185<br>0.185<br>0.165<br>0.165<br>0.165<br>0.185<br>0.185<br>0.185<br>0.185<br>0.185<br>0.185<br>0.185<br>0.185<br>0.185<br>0.185<br>0.185           | 222222222222222222222222222222222222222  | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~   | 4.0E+02<br>1.7E+02<br>1.4E+02<br>5.6E+01<br>1.8E+00<br>2.7E+01<br>1.8E+01<br>4.5E+01<br>4.7E+01<br>3.1E+02<br>3.1E+02<br>3.1E+02<br>3.1E+02<br>3.1E+01<br>7.2E-01<br>1.1E+02<br>5.5E+01<br>7.7E+02<br>4.7E+00 |  |   |  |  |   | 51.700         1         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700         16         U         U           1.700         16         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700 | 57.800         i         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.837         1         U         U                                    | 52.400         i         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U                              | 55         1         U         U           0.190         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U         U           0.180         1         U |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES  | 2-hitophenol<br>3,3-Dichlorobenzidine<br>3,3-Dichlorobenzidine<br>3,3-Dichlorobenzidine<br>4,6-Dinitro-2-methylphenol<br>4-Bonophenyl phenyl ether<br>4-Chlorophenyl phenyl ether<br>4-Chlorophenyl phenyl ether<br>4-Methylphenol<br>4-Mitrophenol<br>4-Mitrophenol<br>Accenaphitylene<br>Accenaphitylene<br>Benzo(a)pyrene<br>Benzo(a)pyrene<br>Benzo(b)fluoranthene<br>Benzo(b)fluoranthene   | 4.7E+001<br>1.1E+001<br>4.7E+001<br>3.1E+001<br>3.1E+001<br>3.1E+001<br>3.1E+001<br>3.8E+001<br>3.8E+002<br>4.1E+003<br>4.3E+002<br>4.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-002<br>6.3E-0 | 0.0825<br>0.1650<br>0.3300<br>0.3300<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825 | 0,165<br>0,330<br>0,825<br>0,825<br>0,165<br>0,165<br>0,165<br>0,165<br>0,165<br>0,165<br>0,165<br>0,165<br>0,165<br>0,165<br>0,165<br>0,165                                | NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>1.5345-02<br>1.2345-02<br>1.235-02   |  | 3.1E+01<br>1.1E+00<br>4.7E+00<br>3.1E+01<br>1.7E-01<br>7.7E+01<br>1.7E-01<br>1.3E+01<br>1.3E+01<br>3.1E+01<br>3.2E+02<br>4.1E+03<br>6.3E-01<br>1.7E-01<br>6.3E-01<br>4.1E+02                                  |  |   |  |  |   | 1.700         10         U         U           3.400         10         U         U           8.500         10         U         U           8.500         10         U         U           8.500         10         U         U           1.700         10         U         U           1.700         10         U         U           1.700         10         U         U           5.500         10         U         U           1.700         10         U         U           5.500         10         U         U           5.500         10         U         U           1.700                 1         U         U           0.375         1         U         U           0.837         1         U         U           0.837         1         U         U           0.837         1         U         U           0.837         1         U         U           0.837         1         U         U           0.167         1         U         U           0.867         1         U         U           0.867         1         U         U           0.937         1         U         U           0.937         1         U         U           0.937         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U         U           0.187         1         U | 3.460         20         U         U           6.820         20         U         U           17.300         20         U         U           17.300         20         U         U           3.450         20         U         U           3.460         20         U         U           3.460         20         U         U           17.300         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         20         U         U           3.460         < | 0.180     1     U     U       0.359     1     U     U       0.899     1     U     U       0.899     1     U     U       0.891     1     U     U       0.891     1     U     U       0.180     1     U     U       0.180     1     U     U       0.180     1     U     U       0.180     1     U     U       0.180     1     U     U       0.180     1     U     U       0.180     1     U     U       0.180     1     U     U       0.180     1     U     U       0.180     1     U     U       0.180     1     U     U       0.180     1     U     U       0.180     1     U     U  |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES  | Benzo(K)luoranthene<br>Benzo(K)luoranthene<br>Benzoic Acid<br>Benzyl Alcohol<br>bis(2-Chloroethoy)methane<br>bis(2-Chloroethyl)ether<br>bis(2-Chlorostopropyl)ether  | 6.3E+00<br>6.2E+04<br>4.7E+03<br>2.9E-01<br>1.5E-01<br>4.8E+00   | 0.0825<br>0.3300<br>0.0825<br>0.0825<br>0.0825<br>0.0825   | 0.165<br>0.825<br>0.165<br>0.165<br>0.165<br>0.165  | 1.30E-02<br>NE<br>NE<br>NE<br>NE<br>NE   | NE<br>NE<br>NE<br>NE<br>NE   | 6.3E+00<br>6.2E+04<br>4.7E+03<br>2.9E-01<br>1.7E-01<br>4.8E+00  |  |   |  |  |   | 1.700 10 U U<br>8.500 10 U U<br>1.700 10 U U<br>1.700 10 U U<br>1.700 10 U U<br>1.700 10 U U<br>1.700 10 U U  | 0.187 1 U U<br>0.937 1 U U<br>0.187 1 U U<br>0.187 1 U U<br>0.096 1 U U<br>0.187 1 U U  | 3.460 20 U U<br>17.300 20 U U<br>3.460 20 U U<br>3.460 20 U U<br>3.460 20 U U<br>3.460 20 U U<br>3.460 20 U U  | 0.180 1 U U<br>0.899 1 U U<br>0.180 1 U U<br>0.180 1 U U<br>0.180 1 U U<br>0.091 1 U U<br>0.180 1 U U  |

Shaw Environmental, Inc.

00066461

#### Table 4-34 Comparison of Chemical Concentrations in Soil to Risk Based Screening Values

Sump 034

| Description         Link of the left of the le                                | [SUMP] = SUMP034<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | 5   | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method .<br>Quantitation | Backy<br>Concentral<br>(95% UP<br>Surface | ground<br>itions in Soil<br>2 <u>L. mg/kg)</u><br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP034-SB01<br>35-SMP034-SB01-02<br>9/20/2006<br>4 - 4 Ft<br>REG | 35SUMP034-SB01<br>35-SMP34-SB01-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG | 35SUMP034-SB01<br>35-SMP34-SB01-01-QC<br>9/11/2006<br>0 - 0.5 Ft<br>FD | 35SUMP034-SB02<br>35-SMP034-SB02-02<br>9/20/2006<br>4 - 4 Ft<br>REG | 35SUMP034-SB02<br>35-SMP34-SB02-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG | WRS015-SB01<br>WRS-015-SB01-01<br>9/15/2006<br>0.5 - 0.5 Ft<br>REG | WR\$015-\$B01<br>WR\$-015-\$B01-02<br>9/15/2006<br>4 - 4 Ft<br>REG | WRS015-SB02<br>WRS-15-SB02-01<br>9/15/2006<br>1 - 1 Ft<br>REG | WRS015-SB02<br>WRS-15-SB02-02<br>9/15/2006<br>4 - 4 Ft<br>REG |
|---|--|---|--|---------------------|--------------------------|---|--|--|---|--|--|---|--|--|--|---|---|
|   | Test Groun   | Parameter (Units = mo/kn)                       | (RBSV)                                   | Limit (MDL)         | Limit (MQL)              | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft   | Value  | Result DiL LO VO  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LO VO   | Result DIL LO VO   | Result DIL LQ VQ   | Result DIL LO VO  | Result DIL LQ VQ  |
|   | SEMIVOLATILES  | bis(2-Ethylbexyl)phthalate                      | 1.7E+01                                  | 0.0825              | 0.165                    | NE  | NE   | 1.7E+01                                      |   |  |  |   |  | 1.700 10 U U   | 0.187 1 U U  | 3.460 20 U U  | 0.180 1 1 U   |
|   | SEMIVOLATILES  | Butyi benzyl phthalate                          | 3.1E+03                                  | 0.0825              | 0.165                    | NE  | NE   | 3.1E+03                                      |   |  |  |   |  | 1.700 10 U U   | 0.187 1 0 0  | 3.460 20 0 0  | 0.160 1 0 0   |
|   | SEMIVOLATILES  | Chrysene  | 6.3E+01                                  | 0.0825              | 0.165                    | 1.51E-02                                  | NE   | 6.3E+01                                      |   |  |  |   |  | 1,700 10 0 U   | 0.006 1 11 11  | 3,400 20 0 0  | 0.001 1 1 1   |
|   | SEMIVOLATILES  | Dibenzo(a,h)anthracene                          | 6.3E-02                                  | 0.0825              | 0,165                    | NE  | NE   | 1.7E-01                                      |   |  |  |   |  | 1700 10 11 11  | 0.187 1 U U  | 3.460 20 U U  | 0.160 1 U U   |
|   | SEMIVOLATILES  | Dipenzoruran<br>Distibul abtivalate             | 0.2E+V1                                  | 0,0825              | 0.105                    | NE  | NE   | 1.20+04                                      |   |  |  |   |  | 1.700 10 U U   | 0.187 1 U U  | 3.460 20 U U  | 0.180 1 U U   |
| Bissock 112           | SEMIVOLATILES  | Dimethyl onthalate                              | 1.2E+04                                  | 0.0825              | 0.165                    | NE  | NE   | 1.2E+04                                      |   |  |  |   |  | 1.700 10 U U   | 0.187 1 U U  | 3.460 20 U U  | 0.180 1 U U   |
|   | SEMIVOLATILES  | di-n-Butyl phthalate                            | 1.6E+03                                  | 0.0825              | 0.165                    | NE  | NË   | 1.6E+03                                      |   |  |  |   |  | 1.700 10 U U   | 0.187 1 U U  | 3.460 20 U U  | 0.180 1 U U   |
|   | SEMIVOLATILES  | di-n-Octyl phthalate                            | 3.1E+02                                  | 0.0825              | 0.165                    | NE  | NE   | 3.1E+02                                      |   |  |  |   |  | 1.700 10 0 0   | 0.167 1 U U  | 3.460 20 0 0  | 0.180 1 0 0   |
|   | SEMIVOLATILES  | Fluoranthene                                    | 5.5E+02                                  | 0.0625              | 0.165                    | 2.29E-02                                  | NE   | 5.5E+02                                      |   |  |  |   |  | 1700 10 0 0  | 0.187 1 U U  | 3.460 20 U U  | 0.180 1 U U   |
| Simulation         Simulat   | SEMIVOLATILES  | Fluorene  | 5.5E+U2                                  | 0.0825              | 0.165                    | NE  | NE   | 2.5E-01                                      |   |  |  |   |  | 1.700 10 U U   | 0.187 1 U U  | 3.460 20 U U  | 0.180 1 U U   |
|   | SEMIVOLATILES  | Bexachlorobutadiene                             | 1.6E+00                                  | 0.0825              | 0.165                    | NE  | NE   | 1.6E+00                                      |   |  |  |   |  | 1.700 10 U U   | 0.187 1 U U  | 3.460 20 U U  | 0.180 1 U U   |
| Band Ander Margen         Land Data <thland data<="" th=""></thland>  | SEMIVOLATILES  | Hexachiorocyclopentadiene                       | 1.0E+00                                  | 0.0825              | 0.165                    | NE  | NE   | 1.00+00                                      |   |  |  |   |  | 1.700 10 U U   | 0.187 1 U U  | 3,460 20 U U  | 0.180 1 U U   |
|   | SEMIVOLATILES  | Hexachloroethane                                | 1.6E+01                                  | 0.0825              | 0.165                    | NE  | NE   | 1.6E+01                                      |   |  |  |   |  | 1.700 10 U U   | 0.187 1 0 0  | 3.460 20 0 0  | 0.160 1 0 0   |
|   | SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene                          | 6.3E-01                                  | 0.0825              | 0.165                    | 1.43E-02                                  | NE   | 6.3E-01                                      |   |  |  |   |  | 1 700 10 0 0   | 0.187 1 0 0  | 3460 20 U U   | 0.180 1 Ŭ Ŭ   |
| Selection         Selection <t< td=""><td>SEMIVOLATILES</td><td>Isophorone<br/>Neebthalaga</td><td>5.2E+02</td><td>0.0825</td><td>0.165</td><td>NE</td><td>NE</td><td>1.85+01</td><td></td><td></td><td></td><td></td><td></td><td>1.700 10 U U</td><td>0.167 1 U U</td><td>3.460 20 U U</td><td>0.180 1 U U</td></t<>  | SEMIVOLATILES  | Isophorone<br>Neebthalaga                       | 5.2E+02                                  | 0.0825              | 0.165                    | NE  | NE   | 1.85+01                                      |   |  |  |   |  | 1.700 10 U U   | 0.167 1 U U  | 3.460 20 U U  | 0.180 1 U U   |
| Security Internation         I. I. G. G.         Dirac <thdi< td=""><td>SEMIVOLATILES</td><td>Nitrobenzene</td><td>6.5E+00</td><td>0.0825</td><td>0.165</td><td>NE</td><td>NE</td><td>6.5E+00</td><td></td><td></td><td></td><td></td><td></td><td>1.700 10 U U</td><td>0.187 1 U U</td><td>3,460 20 U U</td><td>0.180 1 U U</td></thdi<>   | SEMIVOLATILES  | Nitrobenzene                                    | 6.5E+00                                  | 0.0825              | 0.165                    | NE  | NE   | 6.5E+00                                      |   |  |  |   |  | 1.700 10 U U   | 0.187 1 U U  | 3,460 20 U U  | 0.180 1 U U   |
|   | SEMIVOLATILES  | n-Nitroso-di-n-propylamine                      | 4.1E-02                                  | 0.0825              | 0.165                    | NE  | NE   | 1.7E-01                                      |   |  |  |   |  | 0.866 10 U U   | 0.096 1 U U  | 1.759 20 U U  | 0.091 1 U U   |
|   | SEMIVOLATILES  | n-Nitrosociphenylamine                          | 5.9E+01                                  | 0.0825              | 0.165                    | NE  | NE   | 5.9E+01                                      |   |  |  |   |  | 1.700 10 U U   | 0.167 1 U U  | 3.460 20 0 0  | 0.180 1 0 0   |
|   | SEMIVOLATILE\$   | Pentachlorophenol                               | 3.0E+00                                  | 0.3300              | 0.825                    | NE  | NE   | 3.0E+00                                      |   |  |  |   |  | 1 700 10 0 0   | 0.937 1 0 0  | 3460 20 11 11   | 0.180 1 11 11   |
| Barrow         No. 1         Deale         No. 1         Processor        Processor        Processor  | SEMIVOLATILES  | Phenanthrene                                    | 4.1E+02                                  | 0.0825              | 0.165                    | NE  | NE   | 4.18+02                                      |   |  |  |   |  | 1.700 10 U U   | 0.187 1 U U  | 3.460 20 U U  | 0.180 1 U U   |
| Bartos         Press         Res         N.E         N.   | SEMINOLATICES  | Phenox<br>Rymana                                | 4.1E+02                                  | 0.0825              | 0.165                    | 1.94E-02                                  | NE   | 4.1E+02                                      |   |  |  |   |  | 1.700 10 U U   | 0.187 1 U U  | 3.460 20 U U  | 0.180 1 U U   |
| UDATES         11.1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1   | SOLIDS   | Percent Solids                                  | NE                                       | NA                  | NA                       | NE  | NE   |  | 81 1  | 91.400 1   | 92.500 1   | 84,600 1  | 90 1   | 95.300 1   | 86 1   | 93.800 1  | 90.300 1  |
| VDALES         1.1-Processing         2.5-0         0.000         V         0.000         1         0         0.000         0         0         0         0.000         0         0         0.000         0         0.000   | VOLATILES  | 1,1,1,2-Tetrachloroethane                       | 5.2E+00                                  | 0.0005              | 0.005                    | NË  | NE   | 5.2E+00                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 0 0   |
| VALATES         1.3 2-Machanama         0.42 Machanama   | VOLATILES  | 1.1.1-Trichloroethane                           | 2.3E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 2.3E+02                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 0 0  |   | 0.005 1 U U   |
| Vicializa         Li-basedenian         Sizia   | VOLATILES  | 1,1,2,2-Tetrachloroethane                       | 5.1E-01                                  | 0.0005              | 0.005                    | NE  | NE   | 9.7E-01                                      | 0.007 1 0   |  |  | 0.000 1 U   |  |  | 0.007 1 U U  |   | 0,005 1 U U   |
| Värintes         1: docksensminne         2:5:-0:         0:0:0:         Nie         Nie         2:5:-0:         0:0:0:0:         0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:   | VOLATILES  | 1 1-Dichlomethane                               | 8 9E+01                                  | 0.0000              | 0.005                    | NE  | NË   | 8.9E+01                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| U-CATES         1: - Catisonophene         B-SC         NC        NC         NC         N   | VOLATILES  | 1.1-Dichloroethene                              | 2.7E+01                                  | 0.0005              | 0.005                    | NE  | NE   | 2.7E+01                                      | 0.007 1 Ü   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VDA/LEB         1.2 *1762*Modemane         4.5 *1762*Modemane         4.5 *1762*Modemane         4.5 *1762*Modemane         0.007         1.0         0.007<  | VOLATILES  | 1,1-Dichloropropene                             | 9.9E-01                                  | 0.0005              | 0.005                    | NÉ  | NE   | 9.9E-01                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 0 0  |   |   |
| UDALTES         1.2 + Index properties         1.2 + Index properity         1.2 + Index properity         1.2 + Index proproperity         1.2 + Index properity <th< td=""><td>VOLATILES</td><td>1,2,3-Trichlorobenzene</td><td>4.2E+01</td><td>0.0005</td><td>0.005</td><td>NE</td><td>NE</td><td>4.2E+01</td><td>0.007 1 U</td><td></td><td></td><td>0.006 1 0</td><td></td><td></td><td>0.007 1 0 0</td><td></td><td>0.005 1 1 1</td></th<>   | VOLATILES  | 1,2,3-Trichlorobenzene                          | 4.2E+01                                  | 0.0005              | 0.005                    | NE  | NE   | 4.2E+01                                      | 0.007 1 U   |  |  | 0.006 1 0   |  |  | 0.007 1 0 0  |   | 0.005 1 1 1   |
| ViciAlES         1.2.4/Instrument         0.2.80         0.000 </td <td>VOLATILES</td> <td>1,2,3-1 richloropropane</td> <td>9.2E-02</td> <td>0.0010</td> <td>0.005</td> <td>NE</td> <td>NE</td> <td>9.2E-02<br/>1 4F+02</td> <td>0.007 1 1</td> <td></td> <td></td> <td>0.006 1 U</td> <td></td> <td></td> <td>0.007 1 U U</td> <td></td> <td>0.005 1 U U</td>  | VOLATILES  | 1,2,3-1 richloropropane                         | 9.2E-02                                  | 0.0010              | 0.005                    | NE  | NE   | 9.2E-02<br>1 4F+02                           | 0.007 1 1   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| ViciAntes         1.320eronsham         3.65-01         0.020         No.         No.         0.000         1         U         0.000         1 <thu< th="">         0.000         <thu< th="">         U<td>VOLATILES</td><td>1.2.4-Trimethylbenzene</td><td>9.6E+00</td><td>0.0005</td><td>0.005</td><td>NE</td><td>NE</td><td>9.6E+00</td><td>0.007 1 U</td><td></td><td></td><td>0.006 1 U</td><td></td><td></td><td>0.007 1 U U</td><td></td><td>0.005 1 U U</td></thu<></thu<>  | VOLATILES  | 1.2.4-Trimethylbenzene                          | 9.6E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 9.6E+00                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VDATURE         1.200emethane         5.26-02         0.007         NE         NE         5.26-02         0.007         1         0   | VOLATILES  | 1,2-Dibromo-3-chloropropane                     | 3.5E-01                                  | 0.0020              | 0.005                    | NE  | NE   | 3,5E-01                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VCLATES         1.32/0500000000000000000000000000000000000  | VOLATILES  | 1,2-Dibromoethane                               | 5.3E-02                                  | 0.0005              | 0.005                    | NE  | NÉ   | 5.3E-02                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 1 0   |
| VickArtes         1.5-bitscorpsing         fue-for         Doods         NE         NE         NE         Second  | VOLATILES  | 1.2-Dichlorobenzene                             | 5.6E+01                                  | 0.0005              | 0.005                    | NE  | NE   | 5.6E+01                                      | 0.007 1 0   |  |  | 0.006 1 0   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATLES         1-2-Discription/encome         0.2-Mini hybrid encome         0-Mini hybrid encome <t< td=""><td>VOLATILES</td><td>1,2-Dichlomomoane</td><td>1.85+00</td><td>0.0005</td><td>0.005</td><td>NE</td><td>NE</td><td>1.8E+00</td><td>0.007 1 U</td><td></td><td></td><td>0.006 1 U</td><td></td><td></td><td>0.607 1 U U</td><td></td><td>0.005 1 Ū Ū</td></t<>  | VOLATILES  | 1,2-Dichlomomoane                               | 1.85+00                                  | 0.0005              | 0.005                    | NE  | NE   | 1.8E+00                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.607 1 U U  |   | 0.005 1 Ū Ū   |
| VÖLATLES         1.3.5-Timeltybinsterning         6.3.8-60         0.005         NE         NE         8.8-60         0.007         1         0         0         0.005         1         0         0.005         1         0         0.005         1         0         0         0.005         1         0         0         0.005         1         0         0         0.005         1         0         0         0.005         1         0         0.005         1         0         0.005         1         0         0.005         1         0         0.005         1         0         0.005         1         0         0.005         1         0         0.005         1         0         0.005         1         0         0.005         1         0         0.005         1         0         0.005         1         0         0.005         0.007         1         0         0.005         0.007         1         0         0.005         0.007         1         0         0.005         0.007         0.007         0         0.007         0         0.007         1         0         0.006         0.007         0         0.006         0.007         0         0.007   | VOLATILES  | 1.2-Dimethylbenzene (o-Xyl                      | 3.3E+03                                  | 0.0005              | 0,005                    | NE  | NE   | 3.3E+03                                      | 0.007 1 U   |  |  | 0.006 t U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| Vicularities         1.3-Dickhongensame         5.1E+00         0.005         NE         NE         5.2E+00         0.007         1         U         0.000         0.000         1         U         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         <   | VOLATILES  | 1,3,5-Trimethylbenzene                          | 8.3E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 8.3E+00                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 0 0   |
| UCLATILES         1.4-Licenspersal         3.5E-00         Labos <thlabos< th=""> <thlabos< th="">         Labos<!--</td--><td>VOLATILES</td><td>1,3-Dichlorobenzene</td><td>5.1E+00</td><td>0.0005</td><td>0.005</td><td>NE</td><td>NE</td><td>5.1E+00</td><td>0.007 1 U</td><td></td><td></td><td>0,006 1 0</td><td></td><td></td><td>0.007 1 U U</td><td></td><td>0.005 1 1 1</td></thlabos<></thlabos<>   | VOLATILES  | 1,3-Dichlorobenzene                             | 5.1E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 5.1E+00                                      | 0.007 1 U   |  |  | 0,006 1 0   |  |  | 0.007 1 U U  |   | 0.005 1 1 1   |
| V0LV11ES       12:000000000000000000000000000000000000  | VOLATILES  | 1,3-Dichloropropane                             | 3.0E+00<br>2.7E+01                       | 0.0005              | 0.005                    | NE  | NE   | 2.7E+01                                      | 0.007 1 0   |  |  | 0.006 1 U   |  |  | 0.007 1 0 0  |   | 0.005 1 U U   |
| <sup>1</sup> CULTUES <sup>2</sup> Situance <sup>2</sup> <sup>2</sup> CULTUES <sup>2</sup> Situance <sup>2</sup> <sup>2</sup> CULTUES <sup>2</sup> Situance <sup>2</sup> <sup>0</sup> CULTUES <sup>2</sup> Situance <sup>2</sup> <sup>0</sup> CULTUES <sup>2</sup> Situance <sup>2</sup> <sup>0</sup> CULTUES <sup>2</sup> Situance <sup>2</sup> <sup>0</sup> CULTUES <sup>2</sup> Situance <sup>2</sup> <sup>0</sup> CULTUES <sup>2</sup> Situance <sup>2</sup> <sup>0</sup> CULTUES <sup>2</sup> Situance <sup>2</sup> <sup>0</sup> CULTUES <sup>2</sup> Situance <sup>2</sup> <sup>0</sup> CULTUES <sup>2</sup> Situance <sup>2</sup> <sup>0</sup> CULTUES <sup>2</sup> Situance <sup>2</sup> <sup>0</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES <sup>2</sup> CULTUES          | VOLATILES  | 2.2-Dichloropropane                             | 1.7E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 1.7E+00                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| Valuates       2-chonomisment       1.54-00       0.002       0.014       1       0       0.002       1       0       0.002       0       0.003       1       0       0.003 <td>VOLATILES</td> <td>2-Butanone</td> <td>2.6E+03</td> <td>0.0025</td> <td>0.010</td> <td>NE</td> <td>NE</td> <td>2.6E+03</td> <td>0.014 1 U</td> <td></td> <td></td> <td>0.012 1 U</td> <td></td> <td></td> <td>0.013 1 0 0</td> <td></td> <td>0.010 1 0 0</td>   | VOLATILES  | 2-Butanone                                      | 2.6E+03                                  | 0.0025              | 0.010                    | NE  | NE   | 2.6E+03                                      | 0.014 1 U   |  |  | 0.012 1 U   |  |  | 0.013 1 0 0  |   | 0.010 1 0 0   |
| VOLATLES         2-Champalante         15E-420         0.005         NE         NE         1.62-420         0.007         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.000         1         U         0.000         1         U         0.000         1         U         0.000         1         U         0.000         1         U         0.000         1         U         0.000         1         U         0.000         1         U         0.000         1         U         0.000         1         U         0.000         1         U         0.000         0.000         1         U         0.000         1         U         0.000         1         U         0.000         1         U         0.000         0.000         NE         NE         2.66-01         0.0007         1         U         0.0007         1         U         0.0007         1         U         0.0007         1         U         0.0007         1         U         0.000  | VOLATILES  | 2-Chloroethyl vinyl ether                       | 2.1E-01                                  | 0.0020              | 0.010                    | NE  | NE   | 2.1E-01                                      | 0.014 1 U   |  |  | 0.012 1 U   |  |  | 0.013 1 0 0  |   | 0.005 1 U U   |
| Valuation         Categorie <thcategorie< th=""> <thcategorie< th=""> <thc< td=""><td>VOLATILES</td><td>2-Chlorotoluene</td><td>1.5E+02</td><td>0.0005</td><td>0.005</td><td>NE</td><td>NE</td><td>6.25+02</td><td></td><td></td><td></td><td>0.000 1 0</td><td></td><td></td><td>0.013 1 U U</td><td></td><td>0.010 1 U U</td></thc<></thcategorie<></thcategorie<>  | VOLATILES  | 2-Chlorotoluene                                 | 1.5E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 6.25+02                                      |   |  |  | 0.000 1 0   |  |  | 0.013 1 U U  |   | 0.010 1 U U   |
| Action       172-62       0.0050       NE       NE       NE       172-62       0.0051       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.003       1       U       0.005       1       U       0.005       1       U       0.003       1       U       0.  | VOLATILES  | 4-Chlomtniuene                                  | 3.4E-01                                  | 0.0025              | 0.005                    | NE  | NE   | 3.4E-01                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATLES       Berance       6.8E-01       0.0005       0.005       NE       NE       6.8E-01       0.007       1       0.006       1       0       0.006       1       0       0.006       1       0       0.006       1       0       0.006       1       0       0.007       1       0       0.006       1       0       0.007       1       0   | VOLATILES  | Acetone   | 1.7E+02                                  | 0.0050              | 0.010                    | NE  | NĘ   | 1.7E+02                                      | 0.014 1 U   |  |  | 0.012 1 U   |  |  | 0.013 1 U U  |   | 0.010 1 U U   |
| VOLATLES       Bromoblenzente       1.1±/1       UUUU       UUUU       UUUU       UUUU       OODS       1       U       O       OODS       1       U       O       OODS       1       U       O       OODS       1       U       O       OODS       1       U       O       OODS       1       U       O       OODS       1       U       O       OODS       1       U       O       OODS       1       U       O       OODS       1       U       O       OODS       1       U       O       OODS       1       U       O <td>VOLATILES</td> <td>Benzene</td> <td>8.8E-01</td> <td>0.0005</td> <td>0.005</td> <td>NE</td> <td>NE</td> <td>8.8E-01</td> <td>0.007 1 U</td> <td></td> <td></td> <td>0.006 1 U</td> <td></td> <td></td> <td>0.007 1 0 0</td> <td></td> <td>0.005 1 U U</td>   | VOLATILES  | Benzene   | 8.8E-01                                  | 0.0005              | 0.005                    | NE  | NE   | 8.8E-01                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 0 0  |   | 0.005 1 U U   |
| VUCATLES         Dimmonsumerulation         2.82-17         CACCA         CACC  | VOLATILES  | Bromobenzene *                                  | 1.16+01                                  | 0.0005              | 0.005                    | NE  | NE   | 246+01                                       | 0.007 1 0   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES         Biomodram         3.4E-01         0.0005         N.E         N.E         3.4E-01         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.001         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         0.005         0.005         N <e< th="">         N<e< th="">         3.56-01         0.007         1         U         0.006         1         U         0.001         1         U         0.005         0.005         0.005         N<e< th="">         N<e< th="">         3.56-01         0.007         1         U</e<></e<></e<></e<>   | VOLATILES  | Bromodichloromethane                            | 1.0E+01                                  | 0.0005              | 0.005                    | NE  | NE   | 1.0E+01                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATLES       Bimmomethane       3.5E-01       0.010       NE       NE       3.5E-01       0.011       1       0       0.007       1       0       0.001       1       0       0.001       1       0       0.001       1       0       0.001       1       0       0.001       1       0       0.001       1       0       0.001       1       0   | VOLATILES  | Bromoform                                       | 3.4E+01                                  | 0.0005              | 0.005                    | NE  | NE   | 3.4E+01                                      | 0.007 1 Ū   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES       Carbon disulfide       1.0E+02       0.0005       0.005       NE       NE       1.0E+02       0.007       1       U       0.007       <   | VOLATILES  | Bromomethane                                    | 3.5E-01                                  | 0.0010              | 0.010                    | NE  | NE   | 3.5E-01                                      | 0.014 1 U   |  |  | 0.012 1 U   |  |  | 0.013 1 U U  |   | 0.010 1 0 0   |
| VOLATILES         Carbon tetrachindre         3/3E-01         0.0005         N.E         N.E         N.E         3/3E-01         0.007         1         U         0.005         1         U         0.007         1         U         0.007         1         U         0.007         1         U         0.007         1         U         0.007         1         U         0.007         1         U         0.007         1         U         0.007         1         U  | VOLATILES  | Carbon disulfide                                | 1.0E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 1.0E+02                                      | 0.007 1 U   |  |  | 0.005 1 0   |  |  | 0.007 1 U U  |   | 0.005 1 1 1   |
| VOLATILES       Chilonole Zafler       4.55-00       Condo       Life 43       Condo       Nie  | VOLATILES  | Carbon tetrachionide                            | 3,3E-01                                  | 0.0005              | 0.005                    | NE  | NE   | 4 00+01                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES       Chloroform       3.1E-01       0.0005       N.E       N.E       N.E       3.1E-01       0.0007       1       U       0.0016       1       U       0.0017       1       U       0.0015       1       U       0.0013       1       U  | VOLATILES  | Chioroethane                                    | 1.1E+03                                  | 0.0010              | 0.010                    | NE  | NE   | 1.1E+03                                      | 0.014 1 U   |  |  | 0.012 1 U   |  |  | 0.013 1 U U  |   | 0.010 1 U U   |
| VOLATILES       Chloromethane       2.3E-01       0.010       NE       NE       2.3E-01       0.014       1       U       0.013       1       U       0.010       1       U       0.010       1       U       0.010       1       U       0.010       1       U       0.010       1       U       0.007       U       0.007       1       U       0.007       1       U       0.007   | VOLATILES  | Chloroform                                      | 3.1E-01                                  | 0.0005              | 0.005                    | NE  | NE   | 3.1E-01                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES       cs-1,2-brichnorphene       1,22+402       0.000       1       1       0.000       1       0   | VOLATILES  | Chloromethane                                   | 2.3E-01                                  | 0.0020              | 0.010                    | NÉ  | NE   | 2.3E-01                                      | 0.014 1 U   |  |  | 0.012 1 U   |  |  | 0.013 1 0 0  |   | 0.030 1 0 0   |
| VOLATILES       Disrumonthane       7.66400       0.0005       NE       NE       NE       1.0       0.007       1         | VOLATILES  | cis-1,2-Dichloroethene                          | 1.2E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 1.26+02                                      | 0.007 1 0   |  |  | 0.000 1 10  |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| Outcome than         1.94-01         0.0005         NE         NE         1.92-01         0.007         1         U         0.007         1         U         0.005         1         U   | VOLATILES  | cis-1,3-Dichloropropene<br>Disromochloromethane | 1.2E+00<br>7 6E±00                       | 0.0005              | 0.005                    | NE  | NF   | 7.6F+00                                      | 0.007   |  |  | 0.006 1 1   |  |  | 0.007 1 U U  |   | 0.005 1 Ū Ū   |
| VOLATILES       Dichlorodifiuoromethane       2.2E+02       0.010       NE       NE       2.2E+02       0.011       1       U       0.013       1       U       0.010       1       U       0.010       1       U       0.010       1       U       0.010       1       U       0.010       1       U       0.010       1       U       0.010       1       U       0.010       1       U       0.010       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.001       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1   | VOLATILES  | Dibromomethane                                  | 1.9E+01                                  | 0.0005              | 0.005                    | NE  | NE   | 1.9E+01                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES         Ethylbenzene         4.3E+02         0.006         NE         NE         4.3E+02         0.007         1         0         0.006         1         U         0.005 <th<< td=""><td>VOLATILES</td><td>Dichlorodifluoromethane</td><td>2.2E+02</td><td>0.0010</td><td>0.010</td><td>NE</td><td>NE</td><td>2.2E+02</td><td>0.014 1 U</td><td></td><td></td><td>0.012 1 U</td><td></td><td></td><td>0.013 1 U U</td><td></td><td>0.010 1 U U</td></th<<>  | VOLATILES  | Dichlorodifluoromethane                         | 2.2E+02                                  | 0.0010              | 0.010                    | NE  | NE   | 2.2E+02                                      | 0.014 1 U   |  |  | 0.012 1 U   |  |  | 0.013 1 U U  |   | 0.010 1 U U   |
| VOLATILES         Hexachlorobutadiene         1.6E+00         0.005         N.E         N.E         1.6E+00         0.007         1         0         0.006         1         0         0.007         1         0         0.006         1         0         0.007         1         0         0.006         1         0         0.007         1         0         0         0.007         1         0         0         0         0.007         1         0         0         0         0         0         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0         0.007         1         0 </td <td>VOLATILES</td> <td>Ethylbenzene</td> <td>4.3E+02</td> <td>0.0005</td> <td>0.005</td> <td>NE</td> <td>NE</td> <td>4.3E+02</td> <td>0.007 1 U</td> <td></td> <td></td> <td>0.006 1 U</td> <td></td> <td></td> <td>0.007 1 0 0</td> <td></td> <td>0,005 1 U U</td>  | VOLATILES  | Ethylbenzene                                    | 4.3E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 4.3E+02                                      | 0.007 1 U   |  |  | 0.006 1 U   |  |  | 0.007 1 0 0  |   | 0,005 1 U U   |
| VOLATILES         Inspiropriodiziane         0.467 12         0.000 1         0.0000 1         0.0000 1         0.000 1   | VOLATILES  | Hexachlorobutadiene                             | 1.6E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 1.6E+00                                      | 0.007 1 U   |  |  | 0.005 1 U   |  |  | 0.007 1 11 11  |   | 0.005 1 LI LI   |
| Notifie         Number of 1.3E+03         0.0025         0.01         NE         NE         1.3E+03         0.014         1         0         0.012         1         U         0.010         1         U         0.011         1         U         0.010         1         U         0.011         1         U         0.011         1         U         0.011         1         U         0.011         1         U         0.011 <th< td=""><td>VOLATILES</td><td>isopropyidenzene<br/>m.n.Yulenes</td><td>0.4E+U2<br/>2 3E±02</td><td>0.0005</td><td>0.005</td><td>NE</td><td>NE</td><td>2.35+02</td><td>0.007 1 1</td><td></td><td></td><td>0.006 1 U</td><td></td><td></td><td>0.007 1 U U</td><td></td><td>0.005 1 U U</td></th<>  | VOLATILES  | isopropyidenzene<br>m.n.Yulenes                 | 0.4E+U2<br>2 3E±02                       | 0.0005              | 0.005                    | NE  | NE   | 2.35+02                                      | 0.007 1 1   |  |  | 0.006 1 U   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES         Methylene chloride         8.7E+00         0.005         NE         NE         8.7E+00         0.004         1         B         0.002         1         J         B         0.007         1         U         0.005         1         U           VOLATILES         Naphthalene         1.8E+01         0.004         1         J         B         0.007         1         U         0.005         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0  | VOLATILES  | Methyl isobutyl ketone                          | 1.3E+03                                  | 0.0025              | 0.01                     | NE  | NE   | 1.3E+03                                      | 0.014 1 U   |  |  | 0.012 1 U   |  |  | 0.013 1 Ū Ū  |   | 0.010 1 U U   |
| VOLATILES Naphthalene 1.8E+01 0.0005 0.01 NE NE 1.8E+01 0.014 1 U 0.012 1 U 0.013 1 U U 0.010 1 U U VOLATILES 0-BUTVLERNEZNE 2.7E+02 0.0005 0.005 NE NE 2.7E+02 0.007 1 U 0.006 1 U 0.006 1 U 0.006 1 U 0.007 1 U U 0.005 1 U U 0.005 1 U U   | VOLATILES  | Methylene chloride                              | 8.7E+00                                  | 0.0010              | 0.005                    | NE  | NE   | 8.7E+00                                      | 0.004 1 J 8   |  |  | 0.002 1 J B   |  |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES → PUTUENTENTE 2.7±172 UUUS 0.000 NE NE 2.7±172 UUUS 0.007 1 U 0.000 1 U 0.0 | VOLATILES  | Naphthalene                                     | 1.8E+01                                  | 0,0005              | 0.01                     | NE  | NE   | 1.8E+01                                      | 0.014 1 U   |  |  | 0.012 1 U   |  |  | 0.013 1 0 0  |   | 0.000 1 0 0   |
|   | VOLATILES  | D-PROPYLBENZENE                                 | 2.7E+02<br>3.2E+02                       | 0.0005              | 0.005                    | NE  | NE   | 3.2E+02                                      | 0.007 1 U   |  |  | 0,006 1 U   |  |  | 0.007 1 U U  |   | 0.005 I U U   |

### MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas

Shaw Environmental, Inc.

00066462

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

#### Table 4-34

### Comparison of Chemical Concentrations in Soil to Risk Based Screening Values

|   |                            |  |                     |             |  |   |  |   | ភពពាភ ក្រុ  | •  |  |  |  |  |   |   |           |
|---|----------------------------|--|---------------------|-------------|--|---|--|---|---|--|--|--|--|--|---|---|-----------|
| SUMP) = SUMP034<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_BUSPOS | f                          | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method      | Back<br>Concentra<br>(95% U<br>Surface | kground<br>ations in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP034-SB01<br>35-SMP034-SB01-02<br>9/20/2006<br>4 - 4 Ft<br>REG | 35\$UMP034-SB01<br>35-SMP34-SB01-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG | 35SUMP034-S801<br>35-SMP34-S801-01-QC<br>9/11/2006<br>0 - 0.5 Ft<br>FD | 3551JMP034-SB02<br>35-SMP034-SB02-02<br>9/20/2006<br>4 - 4 Ft<br>REG | 35\$UMP034-\$B02<br>35-\$MP34-\$B02-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG | WRS015-SB01<br>WRS-015-SB01-01<br>9/15/2006<br>0.5 - 0.5 Ft<br>REG | WRS015-SB01<br>WRS-015-SB01-02<br>9/15/2006<br>4 - 4 Ft<br>REG | WRS015-SB02<br>WRS-15-SB02-01<br>9/15/2006<br>1 - 1 Ft<br>REG | WRS015-SB02<br>WRS-15-SB02-<br>9/15/2006<br>4 - 4 Ft<br>REG | 2<br>02   |
| Genifice_fore ou  | Parameter (Lipite - ma(ka) | (PBSV)*                                  | Limit (MDL)         | Limit (MOL) | 0-05 Ft                                | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LO VO   | Result DIL LQ VQ   | Result Dil. LQ VQ   | Result DIL LO   | <u>vo</u> |
| Hest Group  | A SOPPOPYLTOLLIENE         | 4.26+02                                  | 0.0005              | 0.005       | NE                                     | NE  | 4.2E+02                                      | 0.007 1 U   |   |  | 0.006 1 U  |  |  | 0.007 1 U U  |   | 0.005 1 U   | N.        |
|   |                            | 3.05+02                                  | 0.0005              | 0.005       | NE                                     | NE  | 3.05+02                                      | 0.007 1 U   |   |  | 0.006 1 U  |  |  | 0.007 1 U U  |   | 0.005 1 0   |           |
| VULATILES   | SEC-BUTTLDENZEINE          | 3.0ET02                                  | 0.0005              | 0.000       | NE                                     | NE  | 1 35+03                                      | 0.007 1 U   |   |  | 0.006 1 U  |  |  | 0.007 1 U U  |   | 0.005 1 0   | U         |
| VOLATILES   | Styrene                    | 1.3E+03                                  | 0.0005              | 0.000       |  | NE  | 2 65402                                      | 0.007 1 1   |   |  | 0.006 1 11   |  |  | 0.007 1 U U  |   | 0.005 1 U   | u         |
| VOLATILES   | tert-BUTYLBENZENE          | 2.6E+02                                  | 0.0005              | 0.005       | NE                                     | NE  | 2,02102                                      | 0.007 1 1   |   |  | 0.006 1 11   |  |  | 0.007 1 U U  |   | 0.005 1 U   | U         |
| VOLATILES   | Tetrachloroethene          | 6.0E+00                                  | D.0005              | 0.005       | NE                                     | NE  | 0.0E+00                                      | 0.007 1 0   |   |  | 0.006 1 11   |  |  | 0.007 1 1 1  |   | 0.005 1 U   | υ         |
| VOLATILES   | Toluene                    | 1.1E+03                                  | 0.0005              | 0.005       | NE                                     | NE  | 1.1E+03                                      | 0.007 1 U   |   |  | 0.006 1 0  |  |  | 0.007 1 11 11  |   | 0.005 1 11  | ū         |
| VOLATIEËS   | trans-12-Dichlomethene     | 1.4E+02                                  | 0.0005              | 0.005       | NE                                     | NE  | 1,4E+02                                      | 0.007 1 U   |   |  | 0.006 1 U  |  |  |  |   | 0.005 1 1   | ŭ.        |
| VOLATILES   | trans-1 3-Dichloronopene   | 1 8E+00                                  | 0.0005              | 0.005       | NE                                     | NE  | 1.8E+00                                      | 0.007 1 U   |   |  | 0.006 1 U  |  |  | 0.007 1 0 0  |   | 0.005 1 0   |           |
| VOLATILES   | Trichlemethern             | 3 76+00                                  | 0.0005              | 0.005       | NE                                     | NE  | 3.7E+00                                      | 0.007 1 U   |   |  | 0.006 1 U  |  |  | 0.007 1 U U  |   | 0.000 1 0   |           |
| VOLATILES   | Thankinetie                | 3.72+00                                  | 0.0000              | 0.000       | ME                                     | NE  | 2.6E+02                                      | 0.014 1 11  |   |  | 0.012 1 U  |  |  | 0.013 1 U U  |   | 0.010 1 U   | u         |
| VOLATILES   | Trichlorofluoromethane     | 2.66+02                                  | 0.0010              | 0.01        |  |   | 5.75.04                                      |   |   |  | 0.012 1 11 111   |  |  | 0.013 1 U U  |   | 0.010 1 U   | U         |
| VOLATILES   | Vinyl acetate              | 5.7E+01                                  | 0.0010              | 0.01        | NE                                     | NE  | 5./E+UI                                      |   |   |  | 0.012 1 1  |  |  | 0.013 1 U U  |   | 0.010 1 U   | U         |
|   | A Profile State State      | 2 CE 02                                  | 0.0010              | 0.01        | NE                                     | NH-   | 61-112                                       | E 0.014 3 1.1   |   |  | 0.012 1 0  |  |  |  |   |   |           |

VOLATILES Vinyl chloride 3 Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

### 00066463

#### Table 4-35 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 035

| [SUMP] = SUMP035<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |  | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _    | Backg<br>Concentrat<br>(95% UP<br>Surface | round<br>tons in Soll<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP035-SB01<br>35-SMP35-SB01-01<br>9/12/2006<br>.55 Ft<br>REG | 35SUMP035-SB01<br>35-SMP35-SB01-02<br>9/12/2006<br>4 - 4.5 Ft<br>REG | 35SUMP035-SB02<br>35-SMP35-SB02-01<br>9/12/2006<br>0 - 0.5 Ft<br>REG | 35SUMP035-SB02<br>35-SMP35-SB02-02<br>9/12/2006<br>4 - 4.5 Ft<br>REG |
|--|--|--|---------------------|-------------|---|--|--|--|--|--|--|
| Test Group   | Parameter (Units = mg/kg)                        | (R8SV)                                   | Limit (MDL)         | Limit (MQL) | 0-0.5 Ft                                  | 1.5 - 2.5 Ft                                     | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LO VO   |
| EXPLOSIVES   | 1.3-Dinitrobenzene                               | 4.7E+02<br>1.6E+00                       | 0.1                 | 0.25        | NE  | NE   | 4.7E+02<br>1.6E+00                           | 0.249 1 U  | 0.243 1 U<br>0.243 1 U   | 0.248 1 U  | 0.245 1 U  |
| EXPLOSIVES   | 2,4,6-Trinitrotoluene                            | 7.7E+00                                  | 0.1                 | 0.25        | NE  | NE   | 7.7E+00                                      | 0.249 1 U  | 0.243 1 U  | 0.248 1 U  | 0.245 1 U  |
| EXPLOSIVES   | 2,4-Dinitrotoluene                               | 7.2E-01                                  | 0.1                 | 0.25        | NE  | NE   | 7.2E-01                                      | 0.249 1 U  | 0.243 1 U  | 0.248 1 U  | 0.245 1 U  |
| EXPLOSIVES<br>EXPLOSIVES   | 2,6-Dinitrotoluene<br>2-Amino-4 6-dinitrotoluene | 7.2E-01                                  | 0.1                 | 0.26        | NE  | NE   | 7.2E-01                                      | 0.259 1 U  | 0.252 1 U  | 0.257 1 U  | 0.255 1 U  |
| EXPLOSIVES   | 4-Amino-2.6-dinitrotoluene                       | 2.6E+00                                  | 0.1                 | 0.26        | NE  | NE   | 2.6E+00                                      | 0.259 1 0  | 0.252 1 0  | 0.257 1 U  | 0.255 1 0  |
| EXPLOSIVES   | HMX  | 2.2E+02                                  | 0.1                 | 2.20        | NE  | NE   | 2.2E+02                                      | 2.190 1 U  | 2.140 1 U  | 2.180 1 U  | 2.160 1 U  |
| EXPLOSIVES   | m-Nitrotoluene                                   | 4.4E+01                                  | 0.1                 | 0.25        | NE  | NE   | 4.4E+01                                      | 0.249 1 U  | 0.243 1 U  | 0.248 1 U  | 0.245 1 U  |
| EXPLOSIVES<br>EXPLOSIVES   | o-Nitrotoluene                                   | 4.7E+00                                  | 0.1                 | 0.26        |   | NE   | 6.5E+00                                      | 0.259 1 U  | 0.252 1 U  | 0.257 1 U  | 0.255 1 U  |
| EXPLOSIVE\$  | p-Nitrotoluene                                   | 4.4E+01                                  | 0.1                 | 0.25        | NE  | NE   | 4.4E+01                                      | 0.249 1 U  | 0.243 1 U  | 0.248 1 U  | 0.245 1 U  |
| EXPLOSIVES   | RDX  | 3.6E+00                                  | 0.1                 | 1.00        | NE  | NE   | 3.6E+00                                      | 0.995 1 U  | 0.971 1 U  | 0.990 1 U  | 0.980 1 U  |
| EXPLOSIVES<br>METALS   | Tetryi   | 1.6E+02                                  | 0.2                 | 0.65        | NE  | NE   | 1.6E+02                                      | 0.647 1 U  | 0.631 1 U  | 0.644 1 U  | 0.637 1 U  |
| METALS   | Antimony   | 7.3E+00                                  | 0.500               | 20.00       | 1.63E+04<br>9.40E-01                      | 2.08E+04<br>1.60E+00                             | 1.6E+04<br>7.3E+00                           | 6090.000 1   | 3050.000 1   | 6430.000 1   | 14200.000 1  |
| METALS   | Arsenic  | 2.0E+01                                  | 0.075               | 0.30        | 4.81E+00                                  | 5.54E+00   | 2.0E+01                                      | 6.230 1  | 1.870 1  | 7.100 1  | 2.710 1  |
| METALS   | Barium   | 2.6E+03                                  | 0.075               | 0.30        | 1.52E+02                                  | 8.55E+01   | 2.6E+03                                      | 59.200 1   | 31.200 1   | 45.400 1   | 70.800 1   |
| METALS   | Beryllium<br>Cadmium                             | 4.6E+00                                  | 0.012               | 0.50        | 6.45E-01                                  | 7.66E-01   | 4.6E+00                                      | 0.426 1  | 0.294 1 J J  | 0.671 1  | 0.831 1  |
| METALS   | Calcium  | NE                                       | NA                  | NA          | NA  | 4.00E-01<br>NA                                   | J.2C+00                                      | 1550 000 1   | 460,000 1  | 0.189 1 J J<br>1630.000 1  | 0.067 1 J J<br>1080.000 4  |
| METALS   | Chromium   | 5.9E+03                                  | 0.100               | 0.40        | 2.66E+01                                  | 3.01E+01   | 5.9E+03                                      | 12.500 1   | 6.270 1  | 21,200 1   | 21.500 1   |
| METALS   | Cobalt   | 1.5E+03                                  | 0.125               | 0.50        | 7.23E+00                                  | 5.61E+00   | 1.5E+03                                      | 3.790 1  | 2.210 1  | 3.890 1  | 3.860 1  |
| METALS   | Lopper   | 1.0E+03<br>NE                            | 0.150<br>NA         | 0.60        | 5.55E+00<br>NA                            | 9.25E+00   | 1.0E+03                                      | 6.730 1  | 1.350 1  | 4.300 1  | 5.490 1  |
| METALS   | Lead   | 5.0E+02                                  | 0.500               | 5.00        | 2.26E+01                                  | 1.14E+01   | 5.0E+02                                      | 21.600 1   | 4 660 1  | 29200.000 1  | 7 440 1  |
| METALS   | Magnesium  | NE                                       | NA                  | NA          | NA  | NA   | -  | 337.000 1  | 185.000 1  | 295.000 1  | 707.000 1  |
| METALS   | Manganese  | 1.7E+03                                  | 0.050               | 0.20        | 1.25E+03                                  | 2.01E+02   | 1.7E+03                                      | 177.000 1  | 110.000 1  | 251.000 1  | 127.000 1  |
| METALS   | Nickel   | 1.9E+02                                  | 0.010               | 0.25        | 6,196+02<br>6,98E+00                      | 3.60E-01<br>1.16E+01                             | 2.5E-01<br>1.9E+02                           | 0.110 1 J J<br>4.450 1   | 0.016 1 J J L<br>2340 1  | 6 430 1  | 0.032 1 J J<br>8.380 1   |
| METALS   | Potassium  | NE                                       | NA                  | NA          | NA  | NA   |  | 264.000 1  | 150,000 1  | 221.000 1  | 510.000 1  |
| METALS   | Setenium   | 1.3E+02                                  | 0.100               | 0.20        | 3.48E+00                                  | 5.57E+00   | 1.3E+02                                      | 0.369 1  | 0.258 1  | 0.388 1  | 0.469 1  |
| METALS   | Solver   | 4.7E+01                                  | 0.050               | 0.20        | 3.10E-01                                  | 3.70E-01   | 4.7E+01                                      | 1.690 1 U  | 1.560 1 U  | 1.590 1 U  | 1.600 1 U  |
| METALS   | Thallium   | 2.0E+00                                  | 0.010               | 0.02        | NA  | NA   | 205+00                                       | 0.065 1  | 0.032 1  | 0.049 1  | 18.200 1 J J<br>0.074 1  |
| METALS   | Vanadium   | 4.8E+01                                  | 0.125               | 0.50        | 3.21E+01                                  | 4.46E+01   | 4.8E+01                                      | 18.000 1   | 12.400 1   | 35.800 1   | 40.700 1   |
| METALS   | Zinc<br>Research Calida                          | 5.9E+03                                  | 0.625               | 2.50        | 6.16E+01                                  | 2.02E+01   | 5.9E+03                                      | 59.400 1   | 5.470 1  | 38.000 1   | 18.000 1   |
| VOLATILES  | 1.1.1.2-Tetrachlomethane                         | 5 2E+00                                  | 0.0005              | 0.005       | NE  | NE   | 5 2E+00                                      | 89.200 1   | 87.100 1   | 88.300 1   | 84.200 1   |
| VOLATILES  | 1,1,1-Trichloroethane                            | 2.3E+02                                  | 0.0005              | 0.005       | NÉ  | NE   | 2.3Ë+02                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,1,2,2-Tetrachloroethane                        | 5.18-01                                  | 0.0005              | 0.005       | NE  | NE   | 5.1E-01                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,1,2-I richloroethane                           | 9.7E-01<br>8.9E±01                       | 0.0005              | 0.005       | NE  | NE   | 9.7E-01                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,1-Dichloroethene                               | 2.7E+01                                  | 0.0005              | 0.005       | NE  | NE   | 2.7E+01                                      |  | 0.005 1 U  |  | 0,005 1 0  |
| VOLATILES  | 1,1-Dichloropropene                              | 9.9Ë-01                                  | 0.0005              | 0.005       | NE  | NE   | 9.9E-01                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,2,3 Trichlorobenzene                           | 4.2E+01                                  | 0.0005              | 0.005       | NE  | NE   | 4.2E+01                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1.2.4-Trichlorobenzene                           | 1.4E+02                                  | 0.0005              | 0.005       | NE  | NE   | 9.2E-02<br>1.4E+02                           |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1.2,4-Trimethylbenzene                           | 9.6E+00                                  | 0.0005              | 0.005       | NE  | NE   | 9.6E+00                                      |  | 0.005 1 U  |  | 0.005 t U  |
| VOLATILES  | 1.2-Dibromo-3-chloropropane                      | 3.5E-01                                  | 0.0020              | 0.005       | NE  | NË   | 3.5E-01                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1.2-Dichlorohenzene                              | 5.3E-02                                  | 0.0005              | 0.005       | NE  | NE   | 5.3E-02                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,2-Dichloroethane                               | 2.7E-01                                  | 0.0005              | 0.005       | NE  | NE   | 2.7E-01                                      |  | 0.005 1 U  |  | 0.005 1 0  |
| VOLATILES  | 1.2-Dichloropropane                              | 1.8E+00                                  | 0.0005              | 0.005       | NE  | NE   | 1.8E+00                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylene)                   | 3.3E+03                                  | 0.0005              | 0.005       | NE  | NE   | 3.3E+03                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1.3-Dichlombenzene                               | 5 1E+00                                  | 0.0005              | 0.005       | NE  | NE   | 8.3E+00<br>5.1E+00                           |  | 0.005 1 0  |  | 0.005 1 U  |
| <b>VOLATILES</b>   | 1,3-Dichloropropane                              | 3.0E+00                                  | 0.0005              | 0.005       | NE  | NE   | 3.0E+00                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 1,4-Dichlorobenzene                              | 2.7E+01                                  | 0.0005              | 0.005       | NE  | NE   | 2.7E+01                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 2,2-Dichloropropane                              | 1.7E+00<br>2.6E±03                       | 0.0005              | 0.005       | NE  | NE   | 1.7E+00                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 2-Chloroethyl vinyl ether                        | 2.1E-01                                  | 0.0020              | 0.010       | NE  | NE   | 2.02+03<br>2.1E-01                           |  | 0.010 1 U  |  | 0.010 1 U  |
| VOLATILES  | 2-Chlorotoluene                                  | 1.5E+02                                  | 0.0005              | 0.005       | NE  | NE   | 1.5E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | 2-Hexanone                                       | 6.2E+00                                  | 0.0025              | 0.010       | NE  | NE   | 6.2E+00                                      |  | 0.010 1 U UJ   |  | 0.010 1 U UJ   |
| VOLATILES  | Acetone  | 3.4E-01<br>1.7E+02                       | 0,0005              | 0.005       | NE  |  | 3.4E-01                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Benzene  | 8.8E-01                                  | 0.0005              | 0.005       | NE  | NE   | 8.8E-01                                      |  | 0.005 1 U  |  | 0.010 1 0 00   |
| VOLATILES  | Bromobenzene                                     | 1.1E+01                                  | 0.0005              | 0.005       | NË  | NΕ   | 1.1E+01                                      |  | 0.005 1 Ŭ  |  | 0.005 1 U  |
| VOLATILES  | promocnioromethane<br>Bromodichlaromethane       | 2.4E+01<br>1.0E+01                       | 0.0005              | 0.005       | NE  | NE   | 2.4E+01                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Bromoform  | 3.4E+01                                  | 0.0005              | 0.005       | NE  | NE   | 3.4E+01                                      |  | 0.005 1 U  |  | 0,005 1 U<br>0,005 1 U   |
|  |  |  |                     |             |   | •  |  |  |  |  |  |

Shaw Environmental, Inc.

### 00066464

### Table 4-35 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

| [SUMP] = SUMP035<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% US<br>Surface | ground<br>ations in Soli<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP035-SB01<br>35-SMP35-SB01-01<br>9/12/2006<br>.55 Ft<br>REG | 35SUMP035-SB01<br>35-SMP35-SB01-02<br>9/12/2006<br>4 - 4.5 Ft<br>REG | 35SUMP035-SB02<br>35-SMP35-SB02-01<br>9/12/2006<br>0 - 0.5 Ft<br>REG | 35SUMP035-SB02<br>35-SMP35-SB02-02<br>9/12/2006<br>4 - 4,5 Ft<br>REG |
|--|---------------------------|--|---------------------|------------------------|---|--|--|--|--|--|--|
| Test Group   | Parameter (Units = mo/ko) | (RB\$V)*                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   |
| VOLATILES  | Bromomethane              | 3.5E-01                                  | 0,0010              | 0.010                  | NË                                      | NË   | 3.5E-01                                      |  | 0.010 1 U  |  | 0.010 1 U  |
| VOLATILES  | Carbon disulfide          | 1.0E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.0E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Carbon tetrachloride      | 3.5E-01                                  | 0.0005              | 0.005                  | NE.                                     | NE   | 3.5E-01                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Chlorobenzene             | 4.0E+01                                  | 0.0005              | 0.005                  | NË                                      | NE   | 4.0E+01                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Chloroethane              | 1.1E+03                                  | 0.0010              | 0.010                  | NE                                      | NE   | 1.1E+03                                      |  | 0.010 1 U  |  | 0.010 1 U  |
| VOLATILES  | Chloroform                | 3.1E-01                                  | 0.0005              | 0.005                  | NE                                      | NĘ   | 3.1E-01                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NE                                      | NÉ   | 2.3E-01                                      |  | 0.010 1 U  |  | 0.010 1 U  |
| VOLATILES  | cis-1.2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.2E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | cis-1.3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                  | NË                                      | NE   | 1.2E+00                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0006              | 0.005                  | NE                                      | NË   | 7.6E+00                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NĘ.                                     | NE   | 1.9E+01                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                      | NE   | 2.2E+02                                      |  | 0.010 1 U  |  | 0.010 1 0  |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.3E+02                                      |  | 0.005 1 U  |  | 0.005 1 0  |
| VOLATILES  | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.6E+00                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0,005                  | NE                                      | NE   | 5.4E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | m.p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NË                                      | NE   | 2.3E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NE                                      | NE,  | 1.3E+03                                      |  | 0.010 1 U  |  | 0.010 1 U  |
| VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                      | NE   | 8.7E+00                                      |  | 0.001 1 J J  |  | 0.001 1 J J  |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NE                                      | NE   | 1.8E+01                                      |  | 0.010 1 U  |  | 0.010 1 U  |
| VOLATILES  | n-BUTYLBENZENE            | 2,7E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.7E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NΕ                                      | NE   | 3.2E+02                                      |  | 0.005 1 U  |  | 0,005 1 U  |
| VOLATILES  | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.2E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.0E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.3E+03                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                      | NË   | 2.6E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 6.0E+00                                      |  | 0.005 1 U  |  | 0.005 1 0  |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                      | NĘ   | 1.1E+03                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | trans-1,2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NĘ                                      | NE   | 1.4E+02                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | trans-1,3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NÉ                                      | NE   | 1.8E+00                                      |  | 0.005 1 U  |  | 0.005 1 U  |
| VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.7E+00                                      |  | 0.005 1 U  |  | 0.005 1 0  |
| VOLATILES  | Trichlorofluoromethane    | 2,6E+02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 2.6E+02                                      |  | 0.010 1 U  |  | 0.010 1 0  |
| VOLATILES  | Vinyl acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NE                                      | NE   | 5.7E+01                                      |  | 0.010 1 U  |  | 0,010 1 U  |
| VOLATILES  | Vinvi chloride            | 3.6E-02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 3.6E-02                                      | l  | 0.0 <u>10 1 U</u>  |  | 0.010 1 U  |
Shaw Environmental, Inc.

00066465

#### Table 4-36 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 036

| [SUMP] = SUMP036<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |  | TCEQ<br>Risk-Based<br>Screening | Method      | Method      | Backg<br>Concentrat<br>(95% UP | round<br>ions in Soil<br>L, mg/kg) | Applicble<br>TCEQ<br>Risk-Based | 35SUMP0:<br>35-SMP36-<br>9/12/2<br>0.5 - 0.<br>RF( | 36-SB0<br>-SB01-0<br>:006<br>I.5 Ft | 1<br>31 | 35SUMP036-<br>35-SMP36-SE<br>9/12/200<br>10 - 10 F<br>RFG | \$801<br>101-02<br>3<br>t |            | 35SUMP03<br>35-SMP36-<br>9/12/20<br>0.5 - 0.<br>REC | 6-SB02<br>SB02-01<br>006<br>5 Ft |    | 35SUMP036<br>35-SMP36-SI<br>9/12/200<br>10 - 10 F<br>REG | -SB02<br>302-02<br>6<br>*t |
|--|--|---------------------------------|-------------|-------------|--------------------------------|------------------------------------|---------------------------------|--|-------------------------------------|---------|---|---------------------------|------------|---|----------------------------------|----|--|----------------------------|
| Tool Crown   | Becometer (Lipite e motive)                    | /DBS\/\=                        | Limit (MDL) | Limit (MOL) | 0.05 5                         | 15-25 Ft                           | Value                           | Result D   | ພົ່ວ                                | vo      | Result DiL  | LO \                      | /0         | Result D  | LLQV                             | /Q | Result DIL   | LQ VQ                      |
| METALS   | Aluminum                                       | 1.6E+04                         | 10.000      | 20.00       | 1.63E+04                       | 2.08E+04                           | 1.6E+04                         | 7140.000   | 1                                   | 14      | 8930.000 1  |                           | - <u> </u> | 8580.000 1  |                                  | 11 | 800.000 1  |                            |
| METALS   | Antimony                                       | 7.3E+00                         | 0.500       | 0.10        | 9.40E-01                       | 1.60E+00                           | 7,3E+00                         | 0.109  | 1 U                                 |         | 0.121 1   | υ                         |            | 0.105 1   | U                                |    | 0.071 1  | JJ                         |
| METALS   | Arsenic  | 2.0E+01                         | 0.075       | 0.30        | 4.81E+00                       | 5.54E+00                           | 2.0E+01                         | 2.510  | 1                                   |         | 0.188 1   | J                         | 1          | 2.290 1   |                                  |    | 2.140 1  |                            |
| METALS   | Barium   | 2.6E+03                         | 0.075       | 0.30        | 1.52E+02                       | 8.55E+01                           | 2.6E+03                         | 119.000  | 1                                   |         | 51.100 1  |                           |            | 53,100 1  |                                  |    | 1 020 1  |                            |
| METALS   | Beryllium                                      | 4.6E+00                         | 0.012       | 0.50        | 5.45E-01                       | 7.66E-01                           | 4.0E+00<br>5.2E+00              | 0.285  | 1 J<br>4 I                          | 1       | 0 141 1   | л                         | .1         | 0.400   |                                  | L  | 0.136 1  | J J                        |
| METALS   | Calcium  | 0.22400<br>NE                   | NA NA       | NA          | NA                             | NA                                 | 0.22.00                         | 1000.000   | iĭ                                  | v       | 1950,000 1  | •                         | •          | 547.000 1   |                                  | 2  | 440.000 1  |                            |
| METALS   | Chromium                                       | 5.9E+03                         | 0.100       | 0.40        | 2.66E+01                       | 3.01E+01                           | 5.9E+03                         | 9,630  | 1                                   |         | 13.900 1  |                           |            | 18.100 1  |                                  |    | 18.400 1   |                            |
| METALS   | Cobalt   | 1.5E+03                         | 0.125       | 0.50        | 7.23E+00                       | 5.61E+00                           | 1.5E+03                         | 2.120  | 1                                   |         | 38.000 1  |                           |            | 4.090 1   |                                  |    | 32.500 1   |                            |
| METALS   | Copper   | 1.0E+03                         | 0.150       | 0,60        | 5.55E+00                       | 9.25E+00                           | 1.0E+03                         | 1.450  | 1                                   |         | 14.200 1  |                           |            | 2.620 1   |                                  | 15 | 15.100 1   |                            |
| METALS   | fron   | NE<br>5.05402                   | NA<br>0.500 | NA<br>5.00  | NA<br>2.26E±01                 | NA<br>1 14E+01                     | 5 05+02                         | 11000.000  | 1                                   |         | 7 830 1   |                           |            | 8.050 1   |                                  |    | 15.000 1   |                            |
| METALS   | Lead<br>Magnesium                              | 5.0E702                         | 0.500<br>NA | NA NA       | 2.20E+01                       | NA                                 | 0.02+02                         | 288.000  | i                                   |         | 3200.000 1  |                           |            | 409.000   |                                  | 4  | 690.000 1  |                            |
| METALS   | Manganese                                      | 1.7E+03                         | 0.050       | 0.20        | 1.25E+03                       | 2.01E+02                           | 1.7E+03                         | 69.600   | 1                                   |         | 325.000 1   |                           |            | 204.000 1   |                                  |    | 214.000 1  |                            |
| METALS   | Mercury  | 1.1E-02                         | 0.010       | 0.25        | 8.19E-02                       | 3.60E-01                           | 2.5E-01                         | 0.022  | 1 J                                 | Ł       | 0.015 1   | J                         | 1          | 0.018   | J.                               | 1  | 0.012 1  | U                          |
| METALS   | Nickel   | 1.9E+02                         | 0.200       | 0.80        | 6.98E+00                       | 1.16E+01                           | 1.9E+02                         | 2.920  | 1                                   |         | 39.400 1  |                           |            | 4.330   |                                  |    | 45.400 1   |                            |
| METALS   | Potassium                                      | 1 25402                         | NA<br>0.100 | 0.20        | NA<br>2 495+00                 | NA<br>5.57E±00                     | 1 35+02                         | 230.000  | 1                                   |         | 0447 1  |                           |            | 0.397   |                                  |    | 1.100 1  |                            |
| METALS   | Silvar   | 4 76+01                         | 0.100       | 0.20        | 3.40E+00                       | 3.70E-01                           | 4.7E+01                         | 1.750  | iυ                                  |         | 1,700 1   | υ                         |            | 1.530   | U                                |    | 1.600 1  | U                          |
| METALS   | Sodium   | NE                              | NA          | NA          | NA                             | NA                                 | -                               | 26.800   | 1                                   |         | 682.000 1   |                           |            | 17,300  | J .                              | J  | 822.000 1  |                            |
| METALS   | Thallium                                       | 2.0E+00                         | 0.010       | 0.02        | NA                             | NA                                 | 2.0E+00                         | 0.044  | 1                                   |         | 0.129 1   |                           |            | 0.073   |                                  |    | 0.233 1  |                            |
| METALS   | Vanadium                                       | 4.8E+01                         | 0.125       | 0.50        | 3.21E+01                       | 4.46E+01                           | 4.8E+01                         | 19.500   | 1                                   |         | 18.700 1  |                           |            | 25.600  |                                  |    | 18.300 1   |                            |
| METALS   | Zinc   | 5.9E+03                         | 0.625       | 2.50        | 6.16E+01                       | 2.02E+01                           | 5.9E+03                         | 0.199  | 1                                   |         | 40.000 1  |                           |            | 0.170   | u                                |    | 03.000 1   |                            |
| SEMIVOLATILES  | 1,2,4+ ( nonioropenzene<br>1,2-Dichlorobenzene | 7.4E+02<br>5.6E+01              | 0.0825      | 0.165       | NE                             | NE                                 | 5.6E+01                         | 0.188  | ίŭ                                  |         | 0.196 1   | ŭ                         |            | 0.171   | ίŬ                               |    | 0.192 1  | บี                         |
| SEMIVOLATILES  | 1.3-Dichlorobenzene                            | 5.1E+00                         | 0.0825      | 0.165       | NE                             | NE                                 | 5.1E+00                         | 0.188  | i ŭ                                 |         | 0,196 1   | Ú                         |            | 0.171   | ιu                               |    | 0.192 1  | U                          |
| SEMIVOLATILES  | 1,4-Dichlorobenzene                            | 2.7E+01                         | 0.0825      | 0.165       | NE                             | NE                                 | 2.7E+01                         | 0,188  | 1 U                                 |         | 0.196 1   | U.                        |            | 0.171   | U U                              |    | 0.192 1  | U                          |
| SEMIVOLATILES  | 2,4,5-Trichlorophenol                          | 1.6E+03                         | 0.0825      | 0.165       | NE                             | NE                                 | 1.6E+03                         | 0.188  | 1 0                                 |         | 0.196 1   | U L                       | JJL        | 0.1/1   |                                  |    | 0.192 1  | ů.                         |
| SEMIVOLATILES  | 2,4,6-Trichlorophenol                          | 4.5E+01                         | 0.0825      | 0.165       | NE                             | NE                                 | 4.5E+01                         | 0.168  | 1 0                                 |         | 0.190 1   |                           | 1.12       | 0.171   |                                  |    | 0.192 1  | ŭ                          |
| SEMIVOLATILES  | 2,4-Dimethylohenol                             | 3.1E+02                         | 0.0825      | 0.165       | NE                             | NE                                 | 3.1E+02                         | 0.188  | រំប័                                |         | 0.196 1   | υĭ                        | JJL        | 0.171   | ίŭ                               |    | 0.192 1  | ũ                          |
| SEMIVOLATILES  | 2.4-Dinitrophenol                              | 3.1E+01                         | 0.3300      | 0.825       | NE                             | NE                                 | 3.1E+01                         | 0.939  | ίŪ                                  |         | 0.982 1   | υ.                        | JJL        | 0.857   | U                                |    | 0.959 1  | U                          |
| SEMIVOLATILES  | 2.4-Dinitrotoluene                             | 7.2E-01                         | 0.0825      | 0.165       | NE                             | NE                                 | 7.2E-01                         | 0.188  | 1 U                                 |         | 0.196 1   | U .                       |            | 0.171   | U U                              |    | 0.192 1  | U.                         |
| SEMIVOLATILES  | 2,6-Dinitrotoluene                             | 7.2E-01                         | 0.0825      | 0.165       | NE                             | NE                                 | 7.2E-01                         | 0.188  | 1 U                                 |         | 0.196 1   | 1                         |            | 0.171   |                                  |    | 0.192 1  | ü                          |
| SEMIVOLATILES  | 2-Chioronaphinalene                            | 1.10+03                         | 0.0625      | 0.165       | NE                             |                                    | 1.1E+02                         | 0.188  | ίŭ                                  |         | 0.196 1   | ບັນ                       | JIL        | 0.171   | Ŭ                                |    | 0,192 1  | ŭ                          |
| SEMIVOLATILES  | 2-Methylnaphthalene                            | 5.5E+01                         | 0.0825      | 0.165       | NE                             | NE                                 | 5.5E+01                         | 0.188  | ίŬ                                  |         | 0.196 1   | Ū                         |            | 0.171   | Ŭ                                |    | 0.192 1  | Ŭ                          |
| SEMIVOLATILES  | 2-Methylphenol                                 | 7.7E+02                         | 0.0825      | 0,165       | NE                             | NE                                 | 7.7E+02                         | 0.188  | 1 U                                 |         | 0.196 1   | υι                        | JJL        | 0.171   | U                                |    | 0.192 1  | U                          |
| SEMIVOLATILES  | 2-Nitroaniline                                 | 4.7E+00                         | 0.3300      | 0.825       | NE                             | NE                                 | 4.7E+00                         | 0.939  | 1 U                                 |         | 0.982 1   |                           |            | 0.857   | 1 11                             |    | 0.959 1  | 0                          |
| SEMIVOLATILES  | 2-Nitrophenol                                  | 3.1E+01                         | 0.0825      | 0.165       | NE                             |                                    | 3.1E+01<br>1.1E+00              | 0.100  | 1 1                                 |         | 0.190 1   | -й V                      | JJL        | 0.343   | ый                               |    | 0.384 1  | ŭ                          |
| SEMIVOLATILES  | 3-Nitroaniline                                 | 4.7E+00                         | 0.3300      | 0.825       | NE                             | NE                                 | 4.7E+00                         | 0.939  | ίŬ                                  |         | 0.982 1   | ŭ                         |            | 0.857   | ιŬ                               |    | 0.959 1  | Ŭ                          |
| SEMIVOLATILES  | 4.6-Dinitro-2-methylphenol                     | 3.1E+01                         | 0.3300      | 0.825       | NE                             | NE                                 | 3.1E+01                         | 0.939  | 1 Ū                                 |         | 0.982 1   | υι                        | JJL        | 0.857   | U                                |    | 0.959 1  | υ                          |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether                     | 3.1E-02                         | 0.0825      | 0.165       | NE                             | NE                                 | 1.7E-01                         | 0.096  | 1 U                                 |         | 0.102 1   | <u>.</u>                  |            | 0.089   | I U                              |    | 0.099 1  | U                          |
| SEMIVOLATILES  | 4-Chloro-3-methylphenol                        | 7.7E+01                         | 0.0825      | 0.165       | NE                             | NE                                 | 7.7E+01                         | 0.188  | 1 U                                 |         | 0.196 1   | u u                       | JJL        | 0.171   |                                  |    | 0,192 1  | 11                         |
| SEMIVOLATILES  | 4-Chlorophamil phonul other                    | 2.85.02                         | 0.0825      | 0.100       | NE                             | NE                                 | 1.75-01                         | 0,100  | ίŭ                                  |         | 0.160 1   | ŭ                         |            | 0.089   | ŭ                                |    | 0.099 1  | ŭ                          |
| SEMIVOLATILES  | 4-Methylobenol                                 | 7.7E+01                         | 0.0825      | 0.165       | NE                             | NE                                 | 7.7E+01                         | 0.188  | i ŭ                                 |         | 0.196 1   | ūι                        | JJL        | 0.171   | ιŬ                               |    | 0.192 1  | Ū                          |
| SEMIVOLATILES  | 4-Nitroaniline                                 | 1.3E+01                         | 0.3300      | 0.825       | NE                             | NE                                 | 1.3E+01                         | 0.939  | 1 U                                 |         | 0.982 1   | U                         |            | 0.857   | I U                              |    | 0.959 1  | U.                         |
| SEMIVOLATILES  | 4-Nitrophenol                                  | 3.1E+01                         | 0.3300      | 0.825       | NE                             | NE                                 | 3.1E+01                         | 0.939  | 1                                   |         | 0.982 1   | 0.0                       | JJL,       | 0.857   | 1 0                              |    | 0,959 1  | U<br>II                    |
| SEMIVOLATILES  | Acenaphthene                                   | 8.2E+02                         | 0.0825      | 0.165       | NE                             | NE                                 | 8.2E+02 ·                       | 0,188  |                                     |         | 0.190 1   | ň                         |            | 0.171   | i ŭ                              |    | 0.192 1  | ŭ                          |
| SEMIVOLATILES  | Adenaphinylene                                 | 0.2E702<br>4 1E+03              | 0.0625      | 0.165       |                                | NE                                 | 4 1E+02                         | 0.188  | ែម័                                 |         | 0.196 1   | ŭ                         |            | 0.171   | ίŭ                               |    | 0,192 1  | ŭ                          |
| SEMIVOLATILES  | Benzo(a)anthracene                             | 6.3E-01                         | 0.0825      | 0.165       | 1.53E-02                       | NE                                 | 6.3E-01                         | 0.188  | i Ū                                 |         | 0.196 1   | Ū                         |            | 0.171   | 1 U                              |    | 0.192 1  | U                          |
| SEMIVOLATILES  | Benzo(a)pyrene                                 | 6.3E-02                         | 0.0825      | 0.165       | 1.54E-02                       | NE                                 | 1.7E-01                         | 0.096  | 1 U                                 |         | 0.102 1   | U                         |            | 0.089   | U                                |    | 0.099 1  | U.                         |
| SEMIVOLATILES  | Benzo(b)fluoranihene                           | 6.3E-01                         | 0.0825      | 0.165       | 1.53E-02                       | NE                                 | 6.3E-01                         | 0,188  | 1 0                                 |         | 0,196 1   | U<br>H                    |            | 0.171   |                                  |    | 0.192 1  | U<br>H                     |
| SEMIVOLATILES  | Benzo(ghi)perylene<br>Renzo(k)fuoranthene      | 4.12+02                         | 0.0825      | 0.165       | 1.23E-02<br>1.30E-02           | NE                                 | 4.1E+02<br>6.3E+00              | 0.160  | 1 1                                 |         | 0.196 1   | ŭ                         |            | 0.171   | ιŭ                               |    | 0.192 1  | บั                         |
| SEMIVOLATILES  | Benzoic Acid                                   | 6.2E+04                         | 0.3300      | 0.825       | NE                             | NE                                 | 6.2E+04                         | 0.939  | ίŭ                                  |         | 0.962 1   | Ũ                         |            | 0.857   | เบิ                              |    | 0.959 1  | Ŭ                          |
| SEMIVOLATILES  | Benzyi Alcohol                                 | 4.7E+03                         | 0.0825      | 0.165       | NE                             | NE                                 | 4.7E+03                         | 0,188  | 1 Ú                                 |         | 0,196 1   | υ                         |            | 0.171   | U                                |    | 0.192 1  | U                          |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane                     | 2.9E-01                         | 0.0825      | 0.165       | NE                             | NE                                 | 2.9E-01                         | 0.188  | 1 U                                 |         | 0.196 1   | Ü                         |            | 0.171   | ើប                               |    | 0.192 1  | N.                         |
| SEMIVOLATILES  | bis(2-Chloroethyl)ether                        | 1.5E-01                         | 0.0825      | 0.165       | NE                             | NE                                 | 1.7E-01                         | 0.096  | 1 0                                 |         | 0.102 1   | ů.                        |            | 0.069   | 1 11                             |    | 0.099 1  | ŭ                          |
| SEMIVOLATILES  | bis(2-Ethylbeyyl)obtbalate                     | 4.8E+00<br>1.7E+01              | 0.0825      | 0.100       | NE                             | NE                                 | 4.0E+00<br>1.7E+01              | 0.188  | 1 11                                |         | 0.196 1   | ŭ                         |            | 0.171   | ιŭ                               |    | 0.192 1  | ŭ                          |
| SEMIVOLATILES  | Butyl benzyl phthalate                         | 3.1E+03                         | 0.0825      | 0.165       | NE                             | NE                                 | 3.1E+03                         | 0.188  | ίŬ                                  |         | 0,196 1   | ũ                         |            | 0.171   | ٢Ū                               |    | 0.192 1  | Ú                          |
| SEMIVOLATILES  | Chrysene                                       | 6.3E+01                         | 0.0825      | 0.165       | 1.51E-02                       | NE                                 | 6.3E+01                         | 0.188  | 1 Ú                                 |         | 0.196 1   | U                         |            | 0.171   | I U                              |    | 0.192 1  | U                          |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene                         | 6.3E-02                         | 0.0825      | 0.165       | NE                             | NE                                 | 1.7E-01                         | 0.096  | 1 1                                 |         | 0.102 1   | U.                        |            | 0.089   |                                  |    | 0.099 1  | 10                         |
| SEMIVOLATILES  | Dipenzofuran<br>Dipethyl obthalata             | 6.2E+01                         | 0.0825      | 0.165       | NE                             | NE                                 | 6.2E+01                         | 0.188  | 1 U<br>1 U                          |         | 0.196 1   | U<br>II                   |            | 0.171   | 1 11                             |    | 0.192 1  | ម                          |
| SEMIVOLATILES  | Dimethyl phthalate                             | 1.20+04                         | 0.0826      | 0.165       | NE                             | NF                                 | 1.2E+04                         | 0.189  | 1 U                                 |         | 0.196 1   | ŭ                         |            | 0.171   | iŭ                               |    | 0.192 1  | บี                         |
| SEMIVOLATILES  | di-n-Butyl phthalate                           | 1.6E+03                         | 0.0825      | 0.165       | NE                             | NE                                 | 1.6E+03                         | 0.188  | ίŨ                                  |         | 0.196 1   | บี                        |            | 0.171   | ۱Ŭ                               |    | 0.192 1  | U                          |
| SEMIVOLATILES  | di-n-Octyl phthalate                           | 3.1E+02                         | 0.0825      | 0.165       | NE                             | NE                                 | 3.1E+02                         | 0.188  | 1 U                                 |         | 0.196 1   | U                         |            | 0.171   | 1 U                              |    | 0.192 1  | U                          |

Shaw Environmental, Inc.

00066466

#### Table 4-36 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 036

| Bit And Low         TCD         TCD         TCD         Bit And Low         Stat And Low  |                                   |  |                    |           |              |                    | Juni             | P 030              |                         |                               |                        |                         |
|--|-----------------------------------|--|--------------------|-----------|--------------|--------------------|------------------|--------------------|-------------------------|-------------------------------|------------------------|-------------------------|
| Barter (D) The control of th                        | [SUMP] = SUMP036<br>LOCATION_CODE |  |                    |           |              | <b>.</b> .         |                  |                    | 35SUMP036-SB01          | 35SUMP036-SB01                | 35SUMP036-SB02         | 35SUMP036-SB02          |
| Deprint         Science         Method         Cold Part Log Part Part Log Part Part Log Part Part Part Part Part Part Part Part   | SAMPLE_NO<br>SAMPLE DATE          |  | TCEQ<br>Risk-Based |           |              | Backe<br>Concentra | tions in Soil    | TCEQ               | 9/12/2006               | 35-SMP36-SB01-02<br>9/12/2006 | 9/12/2006              | 9/12/2006               |
| SAMA_UPCE         Water         View         Deckson <thdeckson< th=""> <thdeckson< th=""> <thdeck< td=""><td>DEPTH</td><td></td><td>Screening</td><td>Method</td><td>Method</td><td>(95% UF</td><td>L, mg/kg}</td><td>Risk-Based</td><td>0.5 - 0.5 Ft</td><td>10 - 10 Ft</td><td>0.5 - 0.5 Ft</td><td>10 - 10 Ft</td></thdeck<></thdeckson<></thdeckson<>   | DEPTH                             |  | Screening          | Method    | Method       | (95% UF            | L, mg/kg}        | Risk-Based         | 0.5 - 0.5 Ft            | 10 - 10 Ft                    | 0.5 - 0.5 Ft           | 10 - 10 Ft              |
| BARCOLITES         Factorism         Discription         End of the second sec   | SAMPLE_PURPOSE                    |  | Value              | Detection | Quantitation | Surface            | Subsurface       | Screening          | REG<br>Beeuth DII LO MO | REG<br>Bosult Dit LO VO       |                        | REG<br>Result Dit LO VO |
| SIMUCALLES         Pacera         Base of the second  | SEMIVOLATILES                     | Fluoranthene                                     | 5.5E+02            | 0.0825    | 0.165        | 2.29E-02           | 1.5-2.5 Ft<br>NE | 5.5E+02            | 0.188 1 U               | 0.196 1 U                     | 0.171 1 U              | 0.192 1 U               |
| Samodelling          | SEMIVOLATILES                     | Fluorene   | 5.5E+02            | 0.0825    | 0.165        | NE                 | NE               | 5.5E+02            | 0.188 1 U               | 0.196 1 U                     | 0.171 1 U              | 0.192 1 U               |
| BINDCALTES         Headsterrophenelation         16-00         0.012         0.012         0         0.017         1         0         0.012         1         0         0.012         1         0         0.012         1         0         0.017         1         0         0.012         1         0         0.017         1         0         0.012         1         0         0.012         1         0         0.012         1         0         0.012         1         0         0.012         1         0         0.012         1         0         0.012         1         0         0.012         1         0         0.012         1         0         0.012         1         0         0.012         1         0         0.012         1         0         0.012         1         0         0.012         0         0.017         1         0         0.022         0         0.017         1         0         0.022         0.017         1         0         0.022         0.017         1         0         0.022         1         0         0.022         0.017         1         0         0.022         0.017         1         0         0.022         0.017 <th< td=""><td>SEMIVOLATILES<br/>SEMIVOLATILES</td><td>Hexachlorobenzene<br/>Hexachlorobutadiene</td><td>2.5E-01<br/>1.6E+00</td><td>0.0825</td><td>0.165</td><td>NE<br/>NE</td><td>NE</td><td>2.6E-01<br/>1.6E+00</td><td>0.188 1 0</td><td>0.196 1 U</td><td>0.171 1 U</td><td>0.192 1 U</td></th<>   | SEMIVOLATILES<br>SEMIVOLATILES    | Hexachlorobenzene<br>Hexachlorobutadiene         | 2.5E-01<br>1.6E+00 | 0.0825    | 0.165        | NE<br>NE           | NE               | 2.6E-01<br>1.6E+00 | 0.188 1 0               | 0.196 1 U                     | 0.171 1 U              | 0.192 1 U               |
| SHANGALLES HeardErStandormen 1.51-71 0.052 0.003 HE RE 0.152-70 0.051 1.0 0.017 1.0 0.017 1.0 0.012 1.0 0.002 1.0 0.017 1.0 0.012 1.0 0.012 1.0 0.017 1.0 0.012 1.0 0.012 1.0 0.017 1.0 0.012 1.0 0.012 1.0 0.017 1.0 0.012 1.0 0.012 1.0 0.017 1.0 0.012 1.0 0.012 1.0 0.017 1.0 0.012 1.0 0.012 1.0 0.017 1.0 0.012 1.0 0.003 1.0 0. | SEMIVOLATILES                     | Hexachlorocyclopentadiene                        | 1.0E+00            | 0.0825    | 0.165        | NE                 | NE               | 1.0E+00            | 0.188 1 U               | 0.196 1 U                     | 0.171 1 U              | 0.192 1 U               |
| Stantovartnes         Disprison <thdisprison< th=""></thdisprison<>  | SEMIVOLATILES                     | Hexachloroethane                                 | 1.6E+01<br>6.3E-01 | 0.0825    | 0.165        | NE<br>1.43E-02     | NE               | 1.6E+01<br>6.3E-01 | 0.188 1 1               | 0.196 1 U                     | 0.171 1 U<br>0.171 1 U | 0.192 1 U<br>0.192 1 U  |
| SEMUCATLES         Number Provide         16E-11         0.062         16E-10         0.008         1         0         0.171         1         0         0.182         1           SEMUCATLES         Number Semucation         6.16-7         0.022         0.02         1         0         0.022         1         0         0.022         1         0         0.022         1         0         0.022         1         0         0.022         1         0         0.022         1         0         0.022         1         0         0.022         1         0         0.022         1         0         0.022         1         0         0.022         1         0         0.022         1         0         0.022         1         0         0.023         1         0         0.023         1         0         0.023         1         0         0.023         0         0.025         0         0.025         0         0.025         0         0.025         0         0.025         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0   | SEMIVOLATILES                     | Isophorone                                       | 5.2E+02            | 0.0825    | 0.165        | NË                 | NE               | 5.2E+02            | 0.188 1 U               | 0.196 1 U                     | 0.171 1 U              | 0.192 1 U               |
| SEMUCATLES         Networkshow         CHECK   | SEMIVOLATILES                     | Naphthalene                                      | 1.8E+01            | 0.0825    | 0.165        | NE                 | NE               | 1.8E+01            | 0.188 1 U               | 0.196 1 U                     | 0.171 1 U              | 0.192 1 U               |
| SEMUCATLES         n-Meroscherperinden         SEG-01         0.003         1         U         0.017         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         U         0.012         1         0.012         1         0.012         1         0.012         1         0.012         1         0.012         1         0.012 <td>SEMIVOLATILES</td> <td>n-Nitroso-di-n-propylamine</td> <td>6.5E+00<br/>4.1E-02</td> <td>0.0825</td> <td>0.165</td> <td>NE</td> <td>NE</td> <td>0.5E+00<br/>1.7E-01</td> <td>0.096 1 U</td> <td>0.102 1 U</td> <td>0.089 1 U</td> <td>0.099 1 U</td>  | SEMIVOLATILES                     | n-Nitroso-di-n-propylamine                       | 6.5E+00<br>4.1E-02 | 0.0825    | 0.165        | NE                 | NE               | 0.5E+00<br>1.7E-01 | 0.096 1 U               | 0.102 1 U                     | 0.089 1 U              | 0.099 1 U               |
| SEMUCATLES         Personant of the second seco                                 | SEMIVOLATILES                     | n-Nitrosodiphenylamine                           | 5.9E+01            | 0.0825    | 0.165        | NE                 | NE               | 5.9E+01            | 0.188 1 U               | 0,196 1 U                     | 0.171 1 U              | 0.192 1 U               |
| SERVICATIES         Priorit         ATE-03         DASS         DASS         NE         NE         ATE-03         DASS         I         DASS         DASS         I         DASS         I         DASS         I         DASS         DASS         I         DASS         I         DASS         DASS         I         DASS         DASS         I         DASS         DASS         I         DASS         DASS         DASS         I         DASS <thdass< th="">         DASS        DASS</thdass<>   | SEMIVOLATILES                     | Pentachlorophenol<br>Phenonthrene                | 3.0E+00<br>4 1E+02 | 0.3300    | 0.825        | NE                 | NE               | 3.0E+00<br>4.1E+02 | 0.939 1 U<br>0.168 1 U  | 0.982 1 U UJL<br>0.196 1 U    | 0.857 1 U<br>0.171 1 Ú | 0.959 1 U<br>0.192 1 U  |
| BELINUCATLES         Pyron         L.E.C.2         0.022         0.165         1.945-02         NE         L.E.C.2         0.083         I         U         0.071         I         U         0.071         I         U         0.001         I         0.003         I         U         0.003   | SEMIVOLATILES                     | Phenol   | 4.7E+03            | 0.0825    | 0.165        | NE                 | NE               | 4.7E+03            | 0.188 1 U               | 0.196 1 U UJL                 | 0.171 1 U              | 0.192 1 U               |
| Subject         Phile Free Researce free researce re                                 | SEMIVOLATILES                     | Pyrene   | 4.1E+02            | 0.0825    | 0.165        | 1.94E-02           | NE               | 4.1E+02            | 0.188 1 U               | 0.196 1 U                     | 0.171 1 U              | 0.192 1 U               |
| VicLATLES         11.1-Traburghame         2.55-02         0.056         U         0.057         U           VicLATLES         11.2-1 fright-generation         0.056         NE         NE         0.152-0         0.056         U         <  | VOLATILES                         | 1.1.1.2-Tetrachloroethane                        | 5.2E+00            | 0.0005    | 0,005        | NE                 | NE               | 5.2E+00            | 00.000                  | 0.006 1 U                     | 93.000 l               | 0.005 1 U               |
| VGLATLES         11.25.4 (relate/bargehame         3.5.6 (relate/bargehame         0.0000         NE         NE         NE         S.6.6 (relate/bargehame         0.0000         1         0.00000         1         0.0000  | VOLATILES                         | 1,1,1-Trichloroethane                            | 2.3E+02            | 0,0005    | 0.005        | NE                 | NE               | 2.3E+02            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATLES         1:Disboorban         0.000         NE         NE         8.86-01         0.000         1.U         0.005         1.U           VOLATLES         1:Disboorban         0.26-01         0.000         1.U         0.000  | VOLATILES                         | 1,1,2,2-Tetrachloroethane                        | 5.1E-01<br>9.7E-01 | 0.0005    | 0.005        | NE                 | NE               | 5.1E-01<br>9.7E-01 |                         | 0.006 1 U<br>0.006 1 U        |                        | 0.005 1 U               |
| VOLATLES         12-biologeneme         12-biologeneme         12-biologeneme         02-biologeneme  | VOLATILES                         | 1,1-Dichloroethane                               | 8.9E+01            | 0.0010    | 0.005        | NE                 | NE               | 8.9E+01            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VickArtEs         1:25-71/s1000/berner         25-91         0.008         1         0.0   | VOLATILES                         | 1,2-Dichloroethene                               | 1.2E+02            | 0.0005    | 0.005        | NE                 | NE               | 1.2E+02            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATLES         12.3-Finitheopogene         9.25-02         0.006         1         U         0.005         1 <thu< th="">         0.005         1         U<!--</td--><td>VOLATILES</td><td>1,2,3-Trichlorobenzene</td><td>4.2E+01</td><td>0.0005</td><td>0.005</td><td>NE</td><td>NE</td><td>4.2E+01</td><td></td><td>0.006 1 U</td><td></td><td>0.005 1 U</td></thu<>  | VOLATILES                         | 1,2,3-Trichlorobenzene                           | 4.2E+01            | 0.0005    | 0.005        | NE                 | NE               | 4.2E+01            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATLES         1.2.4.1000000000000000000000000000000000  | VOLATILES                         | 1,2,3-Trichloropropane                           | 9.2E-02            | 0.0010    | 0.005        | NE                 | NE               | 9.2E-02            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VCLATLES         12:Detramo-s-chronopognane         3:56:01         0.000         NE         NE         5:36:01         0.000         1         0         0.000         1         0           VCLATLES         1:2:Detramo-s-chronopognane         5:SE-02         0.000         1         0         0.000   | VOLATILES<br>VOLATILES            | 1,2,4-Trichlorobenzene<br>1,2,4-Trimethythenzene | 1.4E+02<br>9.6E+00 | 0.0005    | 0.005        | NE                 | NE               | 1.4E+02<br>9.6E+00 |                         | 0.006 1 U<br>0.006 1 U        |                        | 0.005 1 0               |
| VCLATLES         1.20/Elthomosthame         5.3E-02         0.005         N.E         N.E         5.3E-02         0.006         I         U         0.000         I         U           VCLATLES         1.20/Elthomostrame         0.607         0.0055         0.005 <td>VOLATILES</td> <td>1,2-Dibromo-3-chloropropane</td> <td>3.5E-01</td> <td>0.0020</td> <td>0.005</td> <td>NE</td> <td>NE</td> <td>3.5E-01</td> <td></td> <td>0.006 1 U</td> <td></td> <td>0.005 1 U</td>  | VOLATILES                         | 1,2-Dibromo-3-chloropropane                      | 3.5E-01            | 0.0020    | 0.005        | NE                 | NE               | 3.5E-01            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VUCATLES         12-Dictionopoliane         27:E         0.005         I         U         0.005         I         U           VCLATLES         12-Dictionopopane         18:F00         0.005         N.U         0.005         I         U         0.005 <td< td=""><td>VOLATILES</td><td>1,2-Dibromoethane</td><td>5.3E-02</td><td>0.0005</td><td>0.005</td><td>NE</td><td>NE</td><td>5.3E-02</td><td></td><td>0.006 1 U<br/>0.006 1 U</td><td></td><td>0.005 1 U<br/>0.005 1 U</td></td<>  | VOLATILES                         | 1,2-Dibromoethane                                | 5.3E-02            | 0.0005    | 0.005        | NE                 | NE               | 5.3E-02            |                         | 0.006 1 U<br>0.006 1 U        |                        | 0.005 1 U<br>0.005 1 U  |
| VCLATILES         1.2.Dieth/oppragente         1.8E+00         0.006         1         0         0.006         1         0           VCLATILES         1.3.Diright/pherzente         0.3.Diright/pherzente         0.2.Diright/pherzente         0.3.Dirigh  | VOLATILES                         | 1,2-Dichloroethane                               | 2.7E-01            | 0.0005    | 0.005        | NE                 | NE               | 2.7E-01            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATLES         1.2.Unterlyaddeden         0.2.Wei         N.E         N.E         3.3E+10         0.000         1         U         0.000         1         U           VOLATLES         1.3-brichtonspropane         3.1E+00         0.005         N.E         N.E         S.SE+100         0.006         1         U         0.006         1         U         0.006         1         U         0.006         1         U         0.006         1         U         0.006         1         U         0.006         1         U         0.006         1         U         0.006         1         U         0.005         1         U         0.005         1         U         0.006         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         0.005         0.005         0.005         0.005         0.005         0.005         0.005         0.005         0.007         0.007         0.007         0.007         0.007         0.007         0.007         0.007         0.007         0.007         0.007         0.007         0.007         0.007   | VOLATILES                         | t 2-Dichloropropane                              | 1.8E+00            | 0.0005    | 0.005        | NE                 | NE               | 1.8E+00            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VCLATILES       13-Dichloroberzene       3.1E+00       0.006       1       U       0.06       1       U       0.06       1       U       0.05       1       U         VCLATILES       13-Dichloroprane       2.7E+01       0.006       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.05       1       U       0.06       1       U       0.06       1       U       0.06       1       U       0.06       1       U       0.06       1       U       0.06       1       U       0.06       1       U       0.06       1       U       0.06       1       U       0.06       1       U       0.06       1       U       0.06       1       U  | VOLATILES                         | 1.3.5-Trimethylbenzene (o-Xylene)                | 3.3E+03<br>8.3E+00 | 0.0005    | 0.005        | NE<br>NE           | NE               | 3.3E+03<br>8.3E+00 |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATILES       1.4.Dehtorspropane       3.0E+00       0.008       1       0       0.005       1       U         VOLATILES       2.2.Dehtorspropane       1.7E+00       0.006       1       U       0.001       1       U         VOLATILES       2.2.Dehtorspropane       1.7E+00       0.006       1       U       0.001       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1 <td>VOLATILES</td> <td>1.3-Dichlorobenzene</td> <td>5.1E+00</td> <td>0.0005</td> <td>0.005</td> <td>NE</td> <td>NE</td> <td>5.1E+00</td> <td></td> <td>0.006 1 U</td> <td></td> <td>0.005 1 U</td>  | VOLATILES                         | 1.3-Dichlorobenzene                              | 5.1E+00            | 0.0005    | 0.005        | NE                 | NE               | 5.1E+00            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VCLATILES         2.2.2.1:distorpoparie         1.7E+00         0.0005         V.U.         0.0005         V.U.         0.0005         V.U.           VCLATILES         2.2.0.1:distorpoparie         1.7E+00         0.0005         V.U.         0.0011         V.U.         0.0005         V.U.  | VOLATILES<br>VOLATILES            | 1,3-Dichloropropane<br>1,4-Dichloropenzene       | 3.0E+00<br>2.7E+01 | 0.0005    | 0.005        | NE                 | NE               | 3.0E+00<br>2.7E+01 |                         | 0.006 1 U<br>0.006 1 U        |                        | 0.005 1 U               |
| VCLATILES       2.84uanone       2.6E+03       0.011       1       U       0.010       1       U         VCLATILES       2.2Chicotokuene       1.5E+02       0.000       NE       NE       2.1E+01       0.011       1       U       0.003       1       U         VCLATILES       2.2Chicotokuene       1.5E+02       0.001       1       U       0.003       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005   | VOLATILES                         | 2.2-Dichloropropane                              | 1.7E+00            | 0.0005    | 0.005        | NE                 | NE               | 1.7E+00            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATILES         2-LEUD         Lobade         COUR         NE         NE         NE         1         Council and the second seco  | VOLATILES                         | 2-Butanone<br>2 Chlorostind visua other          | 2.6E+03            | 0.0025    | 0.010        | NE                 | NE               | 2.6E+03            |                         | 0.011 1 U                     |                        | 0.010 1 U               |
| VOLATILES         2-Hexanone         6.2E+00         0.011 f         U         0.011 f         U         0.011 f         U         0.011 f         U         0.011 f         U         0.015 f         U           VOLATILES         Acatone         1.7E+02         0.005 0         0.000 N         NE         NE         NE         0.4E-01         0.006 f         U         0.005 f         U           VOLATILES         Beracene         3.8E-01         0.0005 0         0.005 NE         NE         NE         0.8E-01         0.006 f         U         0.005 f         U           VOLATILES         Bromochormetene         1.4E+01         0.005 0         NE         NE         NE         1.4E+01         0.006 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f         U         0.005 f<   | VOLATILES                         | 2-Chlorotoluene                                  | 1.5E+02            | 0.0005    | 0.005        | NE                 | NE               | 1.5E+02            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VULATILES         A-Chilorodiulerie         3.4E-01         DU005         I         U         0.003         I         U           VOLATILES         Acchone         1.7E+02         0.005         0.005         NE         NE         NE         3.4E-01         0.005         I         U         0   | VOLATILES                         | 2-Hexanone                                       | 6.2E+00            | 0.0025    | 0.010        | NE                 | NE               | 6.2E+00            |                         | 0.011 1 U                     |                        | 0.010 1 U               |
| VOLATILES         Berzene         88E-01         0.0005         0.005         NE         NE         88E-01         0.0006         1         U         0.005         1         U           VOLATILES         Bromochomethane         2.4E+01         0.0005         NE         NE         2.4E+01         0.006         1         U         0.005         1         U   | VOLATILES                         | 4-Chiorotoluene<br>Acetone                       | 3.4E-01<br>1.7E+02 | 0.0005    | 0.005        | NE                 | NE               | 3.4E-01<br>1 7E+02 |                         | 0.006 1 0                     |                        | 0.010 1 U               |
| VOLATILES         Bromobenzene         1.1E+01         0.0005         VOLATILES         Bromochisomethane         2.4E+01         0.0005         I         0.0005         I           VOLATILES         Bromochisomethane         1.0E+01         0.0005         NE         NE         1.0E+01         0.0005         I         0   | VOLATILES                         | Benzene  | 8.8E-01            | 0.0005    | 0.005        | NE                 | NE               | 8.8E-01            |                         | 0.006 1 U                     |                        | 0.005 1 Ü               |
| VOLATILES       Brandichlormethane       1.6E-01       Cool       File       Lite       Lite       Cool       I       Cool       Cool       I       Cool       I       Cool       I       Cool       Cool       I       Cool       Cool       I       Cool       Cool       I       Cool       Cool       I       Cool       Cool       I       Cool   | VOLATILES                         | Bromobenzene<br>Bromochloromethene               | 1.1E+01<br>2.4E+01 | 0.0005    | 0.005        | NE                 | NE               | 1.1E+01<br>2.4E+01 |                         | 0.006 1 U                     |                        | 0.005 1 U<br>0.005 1 U  |
| VOLATILES       Bromoleftane       3.4E+01       0.0005       N.E       N.E       N.E       3.4E+01       0.0005       1       U       0.0005       1       U         VOLATILES       Bromoreftane       3.5E+01       0.0005       N.E       N.E       1.0E+02       0.006       1       U       0.005       1       U         VOLATILES       Carbon disuffice       3.5E+01       0.0005       0.005       N.E       N.E       1.0E+02       0.006       1       U       0.005       1       U         VOLATILES       Chiorobenzene       4.0E+01       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1       U       0.005       1  | VOLATILES                         | Bromodichloromethane                             | 1.0E+01            | 0.0005    | 0.005        | NE                 | NE               | 1.0E+01            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATILES         Domonentative         3.5E-01         0.0010         NE         NE         3.5E-01         0.0011         C         0.   | VOLATILES                         | Bromoform  | 3.4E+01            | 0.0005    | 0.005        | NE                 | NE               | 3.4E+01            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATILES         Carbon tetrachloride         3.5E-01         0.006         1         U         0.005         1         U           VOLATILES         Chiorobenzene         4.0E+01         0.005         NE         NE         4.0E+01         0.006         1         U         0.005         1         U           VOLATILES         Chiorobenzene         1.1E+03         0.0010         0.010         NE         NE         1.1E+03         0.011         U         0.005         1         U           VOLATILES         Chioroform         3.1E-01         0.0020         0.010         NE         NE         3.1E-01         0.006         1         U         0.010         1         U           VOLATILES         Chioroform         3.1E-01         0.0020         0.010         NE         NE         2.3E-01         0.006         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1 <td>VOLATILES</td> <td>Carbon disulfide</td> <td>1.0E+02</td> <td>0.0005</td> <td>0.005</td> <td>NE</td> <td>NE</td> <td>1.0E+02</td> <td></td> <td>0.006 1 U</td> <td></td> <td>0.005 1 U</td>  | VOLATILES                         | Carbon disulfide                                 | 1.0E+02            | 0.0005    | 0.005        | NE                 | NE               | 1.0E+02            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATILES         Chlorobenzene         4.0E+01         0.0005         1         0         0.0005         1         0           VOLATILES         Chlorobrane         1.1E+03         0.0010         0.010         NE         NE         1.1E+03         0.0011         1         0         0.005         1         0           VOLATILES         Chlorobrane         3.1E-01         0.0020         0.010         NE         NE         3.1E-01         0.006         1         U         0.005         1         U           VOLATILES         Chlorobrane         3.1E-01         0.0020         0.010         NE         NE         3.1E-01         0.006         1         U         0.005         1         U           VOLATILES         Chlorobrane         1.2E+02         0.0005         0.005         NE         NE         1.2E+02         0.0006         1         U         0.005         1         U           VOLATILES         Dibromochloropropene         1.2E+00         0.0005         0.005         NE         NE         1.2E+00         0.0006         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005   | VOLATILES                         | Carbon tetrachloride                             | 3.5E-01            | 0.0005    | 0.005        | NE                 | NE               | 3.5E-01            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATILES         Chidroform         3.1E-01         0.0005         0.003         NE         NE         1.1E-01         0.0006         1         U         0.005         1         U           VOLATILES         Chidroform         2.3E-01         0.0025         0.003         NE         NE         2.3E-01         0.0006         1         U         0.001         1         U           VOLATILES         cis-1,2-Dichloropethene         1.2E+02         0.0005         0.005         NE         NE         1.2E+02         0.0011         1         U         0.005         1         U           VOLATILES         cis-1,3-Dichlorophene         1.2E+02         0.0005         0.005         NE         NE         1.2E+00         0.0005         1         U           VOLATILES         Dibromochloropropene         1.2E+00         0.0005         NE         NE         1.2E+00         0.0006         1         U         0.005         1         U           VOLATILES         Dibromochloropropene         1.2E+01         0.0005         NE         NE         1.2E+02         0.0011         U         0.005         1         U         0.005         1         U         0.005         1         U <t< td=""><td>VOLATILES</td><td>Chlorobenzene</td><td>4.0E+01<br/>1.1E+03</td><td>0.0005</td><td>0.005</td><td>NE</td><td>NE</td><td>4.0E+01<br/>1 1E+03</td><td></td><td>0.006 1 U<br/>0.011 1 U</td><td></td><td>0.005 1 0</td></t<>   | VOLATILES                         | Chlorobenzene                                    | 4.0E+01<br>1.1E+03 | 0.0005    | 0.005        | NE                 | NE               | 4.0E+01<br>1 1E+03 |                         | 0.006 1 U<br>0.011 1 U        |                        | 0.005 1 0               |
| VOLATILES         Chloromethane         2.3E-01         0.0020         0.010         NE         NE         2.3E-01         0.011         1         U         0.010         1         U           VOLATILES         cis-1,2-Dichloroethene         1.2E+02         0.0005         NE         NE         NE         1.2E+02         0.0005         1         U           VOLATILES         cis-1,2-Dichloroethene         1.2E+02         0.0005         NE         NE         NE         1.2E+00         0.0005         1         U           VOLATILES         Dibromochloromethane         1.9E+01         0.0005         0.005         NE         NE         1.2E+00         0.0006         1         U         0.005         1         U           VOLATILES         Dibromochloromethane         1.9E+01         0.0005         0.005         NE         NE         1.9E+01         0.0006         1         U         0.001         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1 <td>VOLATILES</td> <td>Chloroform</td> <td>3.1E-01</td> <td>0.0005</td> <td>0.005</td> <td>NE</td> <td>NE</td> <td>3.1E-01</td> <td></td> <td>0.006 1 U</td> <td></td> <td>0.005 1 U</td>   | VOLATILES                         | Chloroform                                       | 3.1E-01            | 0.0005    | 0.005        | NE                 | NE               | 3.1E-01            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATILES       Class L2 + 1,2 - Dichloroptione       1,2 + 02       0,0005       0,0005       N E       N E       1,2 + 02       0,0005       1       U         VOLATILES       Class L2 + 00       0,0005       0,0005       N E       N E       1,2 + 02       0,0005       1       U       0,005       1       U         VOLATILES       Dibromochloromethane       7,6 + 00       0,0005       N E       N E       1,8 + 00       0,0005       1       U       0,005       1       U         VOLATILES       Dibromochloromethane       1,9 + 01       0,0005       0,0005       N E       N E       1,9 + 01       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005       1       U       0,0005   | VOLATILES                         | Chloromethane                                    | 2.3E-01            | 0.0020    | 0.010        | NE                 | NE               | 2.3E-01            |                         | 0.011 1 U                     |                        | 0.010 1 U               |
| VOLATILES         Dibromochloromethane         7.6E+00         0.0005         0.005         NE         NE         7.6E+00         0.0006         1         U         0.005         1         U           VOLATILES         Dibromothoromethane         1.9E+01         0.0005         0.005         NE         NE         1.9E+01         0.0006         1         U         0.005         1         U           VOLATILES         Dichlorodifuoromethane         2.2E+02         0.0010         0.010         NE         NE         2.2E+02         0.011         U         0.005         1         U           VOLATILES         Ethyloenzene         4.3E+02         0.0005         0.005         NE         NE         4.3E+02         0.0006         U         0.005         1         U           VOLATILES         Hexachlorobutadiene         1.6E+00         0.0005         0.005         NE         NE         4.3E+02         0.0006         U         0.005         1         U           VOLATILES         Isopropylbenzene         5.4E+02         0.0005         0.005         NE         NE         5.4E+02         0.0006         U         0.005         1         U           VOLATILES         mp-Xylenes  | VOLATILES                         | cis-1,3-Dichtoropropene                          | 1.2E+02            | 0.0005    | 0.005        | NE                 | NE               | 1.2E+02<br>1.2E+00 |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATILES         Dioronimemane         1,9E+01         0,0005         NE         NE         1,9E+01         0,0005         1         0         0,0005         1         0           VOLATILES         Dioronimemane         2.2E+02         0.0010         0.010         NE         NE         2.2E+02         0.0011         1         U         0.005         1         U           VOLATILES         Ethylbenzene         4.3E+02         0.0005         0.005         NE         NE         4.3E+02         0.0011         1         U         0.005         1         U           VOLATILES         Hexachiorobutadiene         1.6E+00         0.0005         0.005         NE         NE         1.6E+00         0.0006         1         U         0.005         1         U           VOLATILES         Isopropylenzzne         5.4E+02         0.0005         NE         NE         5.4E+02         0.0006         1         U         0.005         1         U           VOLATILES         m.p-Xylenes         2.3E+02         0.0005         0.005         NE         NE         5.4E+02         0.0006         1         U         0.001         1         U         0.001         1         U <td< td=""><td>VOLATILES</td><td>Dibromochloromethane</td><td>7.6E+00</td><td>0.0005</td><td>0.005</td><td>NE</td><td>NE</td><td>7.6E+00</td><td></td><td>0.006 1 U</td><td></td><td>0.005 1 U</td></td<>  | VOLATILES                         | Dibromochloromethane                             | 7.6E+00            | 0.0005    | 0.005        | NE                 | NE               | 7.6E+00            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATILES         Ethylbenzene         4.3E+02         0.0005         0.005         NE         NE         4.3E+02         0.006         1         U         0.005         1         U           VOLATILES         Hexachiorobutadiene         1.6E+00         0.0005         0.005         NE         NE         4.3E+02         0.0006         1         U         0.005         1         U           VOLATILES         Hexachiorobutadiene         1.6E+00         0.0005         0.0005         NE         NE         1.6E+00         0.0006         1         U         0.005         1         U           VOLATILES         mop-Xylenes         2.3E+02         0.0005         0.005         NE         NE         5.4E+02         0.0006         1         U         0.005         1         U           VOLATILES         mop-Xylenes         2.3E+02         0.0005         0.005         NE         NE         2.3E+02         0.001         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         1         U         0.005         0.005         0.005         No         Ne         Ne         <   | VOLATILES                         | Dipromomethane                                   | 1.9E+01<br>2.2E+02 | 0.0005    | 0.005        | NE                 | NE               | 1.9E+01<br>2.2E+02 |                         | 0.006 1 U<br>0.011 1 U        |                        | 0.005 1 U               |
| VOLATILES         Hexachlorobutadiene         1.6E+00         0.0005         0.005         NE         NE         1.6E+00         0.0006         1         U         0.005         1         U           VOLATILES         Isopropylbenzene         5.4E+02         0.0005         0.005         NE         NE         5.4E+02         0.006         1         U         0.005         1         U           VOLATILES         mp-Xylenes         2.3E+02         0.0005         0.005         NE         NE         2.3E+02         0.006         1         U         0.005         1         U           VOLATILES         Methylisobutyl ketone         1.3E+03         0.0025         0.01         NE         NE         1.3E+03         0.011         1         U         0.001         1         U           VOLATILES         Methylisobutyl ketone         1.8E+01         0.005         0.01         NE         NE         8.7E+00         0.001         1         U         0.01         1         U         0.010         1         U         0.010         1         U         0.010         1         U         0.011         1         U         0.011         1         U         0.010         1  | VOLATILES                         | Ethylbenzene                                     | 4.3E+02            | 0.0005    | 0.005        | NE                 | NE               | 4.3E+02            | 1                       | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATILES         Insprogramme chioritie         3.42 Tu2         0.0005         INE         NE         5.42 FU2         0.0005         I         0         0.001         I         0           VOLATILES         methylisobutyl kelone         1.32 F03         0.0005         0.005         NE         NE         2.32 F02         0.0006         I         0         0.0005         I         U           VOLATILES         Methylisobutyl kelone         1.32 F03         0.001         NE         NE         1.32 F03         0.011         I         U         0.005         1         U           VOLATILES         Methylisobutyl kelone         8.72 F00         0.005         NE         NE         8.72 F00         0.001         1         U         0.005         1         U           VOLATILES         Naphthalene         1.82 F01         0.0005         0.01         NE         NE         1.88 F01         0.011         1         U         0.010         1         U           VOLATILES         n-BUTYLBENZENE         2.72 F02         0.0005         0.005         NE         NE         2.72 F02         0.0006         1         U         0.005         1         U           VOLATILES         n-P  | VOLATILES                         | Hexachlorobutadiene                              | 1.6E+00            | 0.0005    | 0.005        | NE                 | NE               | 1.6E+00            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATILES         Methyl isobutyl kelone         1.3E+03         0.0025         0.01         NE         NE         1.3E+03         0.011         1         U         0.010         1         U           VOLATILES         Methyl isobutyl kelone         8.7E+00         0.0010         0.005         NE         NE         8.7E+00         0.001         1         U         0.010         1         U           VOLATILES         Methylene chioride         8.7E+01         0.0005         0.01         NE         NE         8.7E+00         0.001         1         U         0.010         1         U           VOLATILES         n-BUTYLBENZENE         2.7E+02         0.0005         0.005         NE         NE         2.7E+02         0.0006         1         U         0.005         1         U           VOLATILES         n-PROPYLBENZENE         3.2E+02         0.0005         NE         NE         3.2E+02         0.0006         1         U         0.005         1         U           VOLATILES         n-PROPYLBENZENE         3.2E+02         0.0005         0.005         NE         NE         3.2E+02         0.0006         1         U         0.005         1         U           V   | VOLATILES                         | m,p-Xylenes                                      | 2.3E+02            | 0.0005    | 0.005        | NE                 | NE               | 2.3E+02            |                         | 0.006 1 U                     |                        | 0.005 1 U               |
| VOLATILES         Meanyania cinona         6.72*90         0.000         NE         NE         8.72*00         0.000         1         0         0.000         1         0           VOLATILES         Naphhalana         1.82*01         0.0005         0.01         NE         NE         1.88*01         0.000         1         0         0.01         1         0         0.01         1         0         0.01         1         0         0.005         1         0   | VOLATILES                         | Methyl isobutyl ketone                           | 1.3E+03            | 0.0025    | 0.01         | NE                 | NE               | 1.3E+03            |                         | 0.011 1 U                     |                        | 0.010 1 U               |
| VOLATILES         n-BUTYLBENZENE         2.7E+02         0.0005         0.005         NE         NE         2.7E+02         0.006         1         U         0.005         1         U           VOLATILES         n-PROPYLBENZENE         3.2E+02         0.0005         0.005         NE         NE         3.2E+02         0.006         1         U         0.005         1         U           VOLATILES         p-IsOPROPYLBENZENE         3.2E+02         0.0005         0.005         NE         NE         4.2E+02         0.006         1         U         0.005         1         U   | VOLATILES                         | Merryiene chionoe<br>Naphthalene                 | 8.7E+00<br>1.8E+01 | 0.00010   | 0.005        | NE                 | NE<br>NE         | 8.7E+00<br>1.8E+01 |                         | 0.005 1 0                     |                        | 0.000 1 U               |
| VOLATILES IN-PROPYLBENZENE 3.2E+02 0.0005 0.005 NE NE 3.2E+02 0.006 1 U 0.005 1 U<br>VOLATILES IN-ISOPROPYLTOLUENE 4.2E+02 0.0005 0.005 NE NE 4.2E+02 0.006 1 U 0.005 1 U  | VOLATILES                         | n-BUTYLBENZENE                                   | 2.7E+02            | 0.0005    | 0.005        | NE                 | NE               | 2.7E+02            | 1                       | 0.006 1 U                     |                        | 0.005 1 U               |
|  | VOLATILES                         | n-PROPYLBENZENE<br>D-ISOPROPYLTOLUENE            | 3.2E+02<br>4.2E+02 | 0.0005    | 0.005        | NE<br>NE           | NE<br>NE         | 3.2E+02<br>4.2E+02 |                         | 0.006 1 U<br>0.006 1 U        |                        | 0.005 1 U<br>0.005 1 U  |

#### Shaw Environmental, Inc.

00066467

#### Table 4-36 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump 036

|  | Suih vso                         |  |                     |             |   |   |  |   |  |  |  |  |  |
|--|----------------------------------|--|---------------------|-------------|---|---|--|---|--|--|--|--|--|
| [SUMP] = SUMP036<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | Ē                                | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method      | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35\$UMP036-SB01<br>35-SMP36-SB01-01<br>9/12/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP036-SB01<br>35-SMP36-SB01-02<br>9/12/2006<br>10 - 10 Ft<br>REG | 35SUMP036-SB02<br>35-SMP36-SB02-01<br>9/12/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP036-SB02<br>35-SMP36-SB02-02<br>9/12/2006<br>10 - 10 Ft<br>REG |  |  |
| Test Group   | Parameter (Units = mg/kg)        | (RBSV) *                                 | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DiL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   |  |  |
| VOLATILES  | sec-BUTYLBENZENE                 | 3.0E+02                                  | 0.0005              | 0.005       | NË                                      | NE  | 3.0E+02                                      |   | 0.006 1 U  |  | 0.005 1 U  |  |  |
| VOLATILES  | Styrene                          | 1.3E+03                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.3E+03                                      |   | 0.006 1 U  |  | 0.005 1 0  |  |  |
| VOLATILES  | tert-BUTYLBENZENE                | 2.6E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 2.6E+02                                      |   | 0.006 1 U  |  | 0.005 1 U  |  |  |
| VOLATILES  | Tetrachioroethene                | 6.0E+00                                  | 0.0005              | 0.005       | NE                                      | NÉ  | 6.0E+00                                      |   | 0.006 1 U  |  | 0.005 1 U  |  |  |
| VOLATILES  | Toluene                          | 1.1E+03                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.1E+03                                      |   | 0.006 1 U  |  | 0.005 1 U  |  |  |
| VOLATILES  | trans-1.2-Dichloroethene         | 1.4E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.4E+02                                      |   | 0.006 1 U  |  | 0.005 1 U  |  |  |
| VOLATILES  | trans-1.3-Dichloropropene        | 1.8E+00                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.8E+00                                      |   | 0.006 1 U  |  | 0.005 1 U  |  |  |
| VOLATILES  | Trichloroethene                  | 3.7E+00                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.7E+00                                      |   | 0.006 1 U  |  | 0.005 1 U  |  |  |
| VOLATILES  | Trichlorofluoromethane           | 2.6E+02                                  | 0.0010              | 0.01        | NE                                      | NE  | 2.6E+02                                      |   | 0.011 1 U  |  | 0.010 1 U  |  |  |
| VOLATILES  | Vinyl acetate                    | 5.7E+01                                  | 0.0010              | 0.01        | NE                                      | NE  | 5.7E+01                                      |   | 0.011 1 U  |  | 0.010 1 U  |  |  |
| VOLATILES  | Vinyl chloride                   | 3.6E-02                                  | 0.0010              | 0.01        | NE                                      | NE  | 3.6E-02                                      |   | 0.011 1 U  |  | 0.010 1 U  |  |  |
| Footnotes are shown  | on cover page to Tables Section. |  |                     |             |   |   |  |   |  |  |  |  |  |

.

Page 3 of 3

Shaw Environmental, Inc.

## 00066468

### Table 4-37 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-037

| Party - Barbar         TUG         Expansion         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Athen         Company         Co  |   |   |  |                     |             |   | ouni  | h-021  |  |   |  |   |
|--|---|---|--|---------------------|-------------|---|---|--|--|---|--|---|
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $  | SUMP) = SUMP037<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |   | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _    | Backg<br>Concentrat<br>(95% UP<br>Surface | round<br>tions in Soil<br>L. mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP018-SB02<br>35-SMP18-SB02-02<br>9/11/2006<br>5.5 - 6 Ft<br>REG | 35SUMP037-SB01<br>35-SMP37-SB01-02<br>9/9/2006<br>3 - 4 Ft<br>REG | WRS10-SB02<br>WRS10-SB02-01<br>9/25/2006<br>05 Ft<br>REG | WRS10-SB02<br>WRS10-SB02-02<br>9/25/2006<br>3.5 - 4.5 Ft<br>REG |
| DATORNEY         L3.5         Instructure         Title         Discrete         Title         Discrete <thdiscrete< th=""> <thdiscre< th=""> <thdiscre<< td=""><td>Tast Group</td><td>Persmeter /I (nits = ma/ka)</td><td>(885\/) *</td><td>Limit (MDL)</td><td>Limit (MOL)</td><td>0 - 0.5 Ft</td><td>1.5 - 2.5 Ft</td><td>Value</td><td>Result DIL LQ VQ</td><td>Result DIL LQ VQ</td><td>Result DIL LQ VC</td><td>Result DIL LQ VQ</td></thdiscre<<></thdiscre<></thdiscrete<>  | Tast Group  | Persmeter /I (nits = ma/ka)                   | (885\/) *                                | Limit (MDL)         | Limit (MOL) | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft                                      | Value  | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VC   | Result DIL LQ VQ  |
| Dirk Grieß         1.2 Berlanderstem         556-00         Cols         Nie   | EXPLOSIVES  | 1.3.5-Trinitrobenzene                         | 4.7E+02                                  | 0.1                 | 0.25        | NE  | NE  | 4.7E+02                                      | 0.238 1 U  | 0.246 1 U   | 0.245 1 U U  | 0.249 1 U U   |
| DPUCAPRE         2.4.5-microbase         7.74-00         0.1         0.25         N         N         N         N         0         0.25         1         0         0.25        1         0         0.  | EXPLOSIVES  | 1.3-Dinitrobenzene                            | 1.6E+00                                  | 0.1                 | 0.25        | NE  | NE  | 1.6E+00                                      | 0.238 1 U  | 0.246 1 U   | 0.245 1 U U  | 0.249 1 U U   |
| Der Constra         2.4 Absolutioners         7.2501         0         0         0.238         1         0         0         0.238         1         0         0         0         0         0         0.238         1   | EXPLOSIVES  | 2,4,6-Trinitrotoluene                         | 7.7E+00                                  | 0.1                 | 0.25        | NE  | NE  | 7.7E+00                                      | 0.238 1 U  | 0.246 1 U   | 0.245 1 U U  | 0.249 1 0 0   |
| Deck-groups         JAMBES | EXPLOSIVES  | 2,4-Dinitrotoluene                            | 7.2E-01                                  | 0.1                 | 0.25        | NE  |   | 7.2E-01<br>7.2E-01                           | 0.238 1 0  | 0.240 1 0   | 0.255 1 U U  | 0.259 1 U U   |
| Deric Gosses         Lames J. Jahres J. Jahres J. Jahres J. J. J. J. J. J. J. J. J. J. J. J. J.  | EXPLOSIVES  | 2,6-Dinitrotoluene                            | 7.2E-01<br>2.6E+00                       | 0.1                 | 0.20        | NE  | NE  | 2.6E+00                                      | 0.248 1 U  | 0.256 1 U   | 0.255 1 U U  | 0.259 1 U U   |
| Dipologies         Huk         Z24:00         L1         Z20         K         K         Z24:00         L <thl< th="">         L         <thl< th=""> <thl< th=""></thl<></thl<></thl<>  | EXPLOSIVES<br>EXPLOSIVES  | 4-Amino-2.6-dinitrotoluene                    | 2.6E+00                                  | 0,1                 | 0.26        | NE  | NE  | 2.6E+00                                      | 0.248 1 U  | 0.256 1 U   | 0.255 1 U U  | 0.259 1 U U   |
| DPLOSURE         mmlinobare         6.42-00         0.1         0.23         1         0         0 </td <td>EXPLOSIVES</td> <td>HMX</td> <td>2.2E+02</td> <td>0.1</td> <td>2.20</td> <td>NE</td> <td>NE</td> <td>2.2E+02</td> <td>2.100 1 U</td> <td>2.170 1 U</td> <td>2.160 1 U U</td> <td>2.190 1 U U</td>   | EXPLOSIVES  | HMX   | 2.2E+02                                  | 0.1                 | 2.20        | NE  | NE  | 2.2E+02                                      | 2.100 1 U  | 2.170 1 U   | 2.160 1 U U  | 2.190 1 U U   |
| DepCosystem       Numbersoname       0.35 (1)       0.1       0.22       Nie       Nie       4.474-00       0.228 (1)       0.228 (1)       0.236 (1)       0.248 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0       0.268 (1)       0.0 <th0.0< th="">       0.0       <th0.0< th="">       0</th0.0<></th0.0<>  | EXPLOSIVES  | m-Nitrotoluene                                | 4.4E+01                                  | 0.1                 | 0.25        | NE  | NE  | 4.4E+01                                      | 0.238 1 U  | 0.246 1 U   | 0.245 1 0 0  | 0.249 1 0 0   |
| Christianisher         Aderin         Old  | EXPLOSIVES  | Nitrobenzene                                  | 6.55+00                                  | 0.1                 | 0.26        | NE  | NE  | 4.7E+01                                      | 0.248 1 0  | 0.246 1 U   | 0.245 1 U U  | 0.249 1 U UJ  |
| Dir Construction         Safe-60         0.1         1.60         NE         NE         Safe-70         0.000         1         0         0.000         1         0         0.000         1         0  | EXPLUSIVES  | o-Nitrotohiene                                | 4.72+01<br>4.4E+01                       | 0.1                 | 0.25        | NE  | NÉ  | 4.4E+01                                      | 0.238 1 U  | 0.246 1 U   | 0.245 1 U U  | 0.249 1 U U   |
| Epricipies         Tety         14E-02         0.2         0.0         1.0         0.040         1         0         0.00         1.0         0.00 <th0< td=""><td>EXPLOSIVES</td><td>RDX</td><td>3.6E+00</td><td>0.1</td><td>1.00</td><td>NE</td><td>NE</td><td>3.6E+00</td><td>0.952 1 U</td><td>0.985 1 U</td><td>0.980 1 U U</td><td>0.995 1 U U</td></th0<>   | EXPLOSIVES  | RDX   | 3.6E+00                                  | 0.1                 | 1.00        | NE  | NE  | 3.6E+00                                      | 0.952 1 U  | 0.985 1 U   | 0.980 1 U U  | 0.995 1 U U   |
| Marting       Appendix       Set-do       Out       Set-do  | EXPLOSIVES  | Tetryl  | 1.6E+02                                  | 0.2                 | 0.65        | NE  | NE  | 1.6E+02                                      | 0.619 1 U  | 0.640 1 U   | 0.637 1 U U  | 0.64/ 1 0 0   |
| Mathag       Among       J. Elevin       Output       Distance       J. Elevin       J. Elevin       J. Elevin       J. Elevin       J. Elevin       J. Elevin       J. Elevin       J. Elevin       J. Elevin       J. Elevin       J. Elevin       J. Elevin       J. Elevin       J. Elevin       J. Elevin       J. J. Elevin </td <td>METALS</td> <td>Aluminum</td> <td>1.6E+04</td> <td>10.000</td> <td>20.00</td> <td>1.63E+04</td> <td>2.08E+04</td> <td>1.6E+04</td> <td>15200.000 1</td> <td></td> <td>0.112 1 1 11</td> <td>0 123 1 U U.I.</td>   | METALS  | Aluminum                                      | 1.6E+04                                  | 10.000              | 20.00       | 1.63E+04                                  | 2.08E+04  | 1.6E+04                                      | 15200.000 1  |   | 0.112 1 1 11   | 0 123 1 U U.I.  |
| Internal       Description       2.28-03       0.328-02       8.82-04       7.84-05       1       7.850       1       0.330       1         METALS       Berylam       6.52-07       0.000       0.42-07       0.000       1       J       0.000       0       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       1       J       0.000       J       J       0.000       J       J       0.000       J       J       0.000       J       J       J       0.000       J       J       0.000       J       J       0.000       J       J       J       J       J       J       J       J       J       J       J       J       J       J       J       J   | METALS  | Antimony                                      | 7.3E+00<br>2.0E+01                       | 0.500               | 0.10        | 9.40E-01<br>4.81E+00                      | 5.54E+00  | 2.0E+01                                      | 1.120 1  |   | 1.290 1 JL   | 1.060 1 JL  |
| Internals         Despition         4.66-00         C.012         C.263         C.405-01         C.2010         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         1         J         C.375         T         J         C.375         T         J         C.375         T         J         C.375         T         J         J         C.375         T         J         C.375         T         C.375         T         C.375         T         C.375         T         J         C.375         T         J         J         C.375         T         J         J         J         J         J </td <td>METALS</td> <td>Barium</td> <td>2.6E+03</td> <td>0.075</td> <td>0.30</td> <td>1.52E+02</td> <td>8.55E+01</td> <td>2.6E+03</td> <td>78,400 1</td> <td></td> <td>76.500 1</td> <td>63.300 1</td>  | METALS  | Barium  | 2.6E+03                                  | 0.075               | 0.30        | 1.52E+02                                  | 8.55E+01  | 2.6E+03                                      | 78,400 1   |   | 76.500 1   | 63.300 1  |
| METALS       Cachulun       SZE:00       0.03       d.0.0       1.40E;00       4.00       1.00       1.00       1.0       1.200       1.0       1.200       1.0       1.200       1.0       1.200       1.0       1.200       1.0       1.200       1.0       1.2000       1.0       1.2000       1.0       1.2000       1.0       1.2000       1.0       1.2000       1.0       1.2000       1.0       1.2000       1.0       1.2000   | METALS  | Beryllium                                     | 4.6E+00                                  | 0.012               | 0.50        | 6.45E-01                                  | 7.66E-01  | 4.6E+00                                      | 0.631 1  |   | 0.375 1 J J  | 0.757 1   |
| METALS       Caluary       RE       140       A  | METALS  | Cadmium                                       | 5.2E+00                                  | 0.025               | 0.10        | 1.40E+00                                  | 4.00E-01  | 5.2E+00                                      | 0.114 1 J J  |   | 0.369 1 J J  | 0.063 1 J J<br>828.000 1  |
| MicriAls       Column       Size-00       Soft-00       Tize-00  | METALS  | Calcium                                       | NE                                       | NA                  | NA<br>0.40  | NA<br>D CCE+04                            | NA<br>2.016+01                                    | 5.05+03                                      | 1250.000 J J   |   | 24 100 1   | 23.300 1  |
| minimized Source       Coopering       1000000000000000000000000000000000000   | METALS  | Cobelt  | 5.9E≠03<br>1.5E+03                       | 0.100               | 0.40        | 7.23E+00                                  | 5.61E+00  | 1.5E+03                                      | 7.290 1 J  |   | 2.790 1  | 4.600 1   |
| NETALS         Indi         NE         NA         <   | METALS  | Copper  | 1.0E+03                                  | 0.150               | 0.60        | 5.55E+00                                  | 9.25E+00  | 1.0E+03                                      | 5.200 1  |   | 5.370 1  | 6.780 1   |
| METALS       Lead       5.06       2.22400       1.4500       5.06-02       (71.00)       1       J       91.00       1       µH       (6000       1.35       1         METALS       Magnation       1.75-00       0.000       0.23       5.06-02       2.016-02       2.25-01       1.000       1       J       0.020       1       J       0.020       1       J       0.020       1       J       0.020       1       J       0.020       1       J       0.020       1       J       0.020       1       J       0.020       1       J       0.020       1       J       0.020       1       J       0.020       1       J       0.020       1       J       0.020       1       J       0.020       1       J       J       0.020       1       J       J       0.020       1       J       J       0.020       1       J       J       0.020       1       J       J       0.020       1       J   | METALS  | iron  | NE                                       | NA                  | NA          | NA  | NA  | -  | 14900.000 1  |   | 21100.000 1  | 21700.000 1   |
| METALS       Magnetism       Tr. Coto       No. <td>METALS</td> <td>Lead</td> <td>5.0E+02</td> <td>0.500</td> <td>5.00</td> <td>2.26E+01</td> <td>1.14E+01</td> <td>5.0E+02</td> <td>6.170 1 J</td> <td></td> <td>9,750 1</td> <td>1610.000 1 .1H</td>   | METALS  | Lead  | 5.0E+02                                  | 0.500               | 5.00        | 2.26E+01                                  | 1.14E+01  | 5.0E+02                                      | 6.170 1 J  |   | 9,750 1  | 1610.000 1 .1H  |
| Milling        | METALS  | Magnesium                                     | 1 7E±02                                  | NA<br>0.050         | 0.20        | 1 255-03                                  | NA<br>2.01E±02                                    | 1 75+03                                      | 21 700 1   |   | 134.000 1 J  | 21.900 1 J  |
| mterials         Nikad         1.8E+02         0.200         0.200         0.200         0.200         0.200         1.8E+02         19:100         1         6.820         1         17:000         1           METALS         Solution         1.2E+02         0.000         0.200         3.1EE-01         3.200         1         0.000         1         0.200         1.2E+02         0.200         1.2E+02         0.200         1         0.220         1.2E+02         0.200         1         0         0.200         1         0         0         0.200         1         0         0.200         1         0         0.200  | METALS  | Marganese                                     | 1.1E-02                                  | 0.010               | 0.25        | 8.19E-02                                  | 3.60E-01  | 2.5E-01                                      | 0.018 1 J J  |   | 0.029 1 J J  | 0.084 1 J J   |
| METALS         Polasium         NE         NA   | METALS  | Nickel  | 1.9E+02                                  | 0.200               | 0.80        | 6.98E+00                                  | 1.16E+01  | 1.9E+02                                      | 19.100 1   |   | 6.620 1  | 11.500 1  |
| METALS       Selenium       1.3E+02       0.100       0.20       3.48E+100       1.35+02       1.750       1       U       1.860       1       U       1.860       1       U       1.860       1       U       1.860       1       U       1.860       1       U       1.860       1       U       1.860       1       U       1.860       1       U       1.860       1       U       1.860       1       U       1.860       1       U       1.860       1       U       1.860       1       U       1.860       1       U       1.860       1       U       1.860       1       1.860       1       1.860       1       1.860       1       1.860       1       1.860       1       1.860       1       1.860       1       1.860       1.860       1       1.860       1       1.860       1       1.860       1       1.860   | METALS  | Potassium                                     | NE                                       | NA                  | NA          | NA  | NA  |  | 766.000 1  |   | 346.000 1  | 772.000 1   |
| METALS         Storm         NE         NA         AA         Store         Participant         Partitipant         Partitip   | METALS  | Selenium                                      | 1.3E+02                                  | 0.100               | 0.20        | 3.48E+00                                  | 5.57E+00  | 1.3E+02                                      | 1 0,218 1 U  |   | 1.680 1 U U  | 1.870 1 U U   |
| INTETALS         Traillin         2,02+00         0.010         0.022         4,702-01         NE         2,026+00         0.001         1         0.045         1         0.040         1           METALS         Vanadum         4,66+01         0.125         0.66         31,600         1         31,600         1         31,600         1         31,600         1         31,600         1         31,600         1         31,600         1         31,600         1         31,600         1         31,600         1         31,600         1         31,600         1         31,600         1         31,600         1         31,600         1         31,600         1         31,600         1         1         31,600         1         1         31,600         1         1         31,600         1         1         31,600         1         1         31,600         1         1         31,600         1         1         31,600         1         1         31,600         1         1         31,600         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1   | METALS  | Sodium  | 4.7ETUI                                  | 0.030<br>NA         | 0.20<br>NA  | 3.10E-01                                  | NA  | 4.12101                                      | 322.000 1  |   | 54.300 1   | 218.000 1   |
| NETALS         Vanadium         4.8E+01         0.125         0.50         3.21E+01         2.4200         1         34.400         1         32.400         1           RAKE         Carbon Range C12-C28         1.7E+02         25         50         NE         NE         1.7E+02         54.600         1         U         32.000         1         32.000         1         32.000         1         32.000         1         32.000         1         32.000         1         32.000         1         U         32.000         1         U         32.000         1         U         32.000         1         U         32.000         1         U         32.000         1         U         32.000         1         U         32.000         1         U         32.000         1         U         32.000         1         U         0.000         32.000         1         U         0.000         32.000         1         U         0.000         32.000         1         U         0.000         32.000         1         U         0.000         32.000         1         U         0.000         32.000         1         U         0.000         32.000         1         0.000   | METALS  | Thallium                                      | 2.0E+00                                  | 0.010               | 0.02        | 4.70E-01                                  | NE  | 2.0E+00                                      | 0.091 1  |   | 0.045 1  | 0.108 1   |
| METALS       Zanc       Schemol  | METALS  | Vanadium                                      | 4.8E+01                                  | 0.125               | 0.50        | 3.21E+01                                  | 4.46E+01  | 4.8E+01                                      | 23.200 1   |   | 34.400 1   | 40.200 1  |
| DAME         Description         Descrin <thdescrin< th="">         Descrin<!--</td--><td>METALS</td><td>Zinc</td><td>5.9E+03</td><td>0.625</td><td>2.50</td><td>6.16E+01</td><td>2.02E+01</td><td>5.9E+03</td><td>41.400 1</td><td></td><td>31.000 1</td><td>52.800 1</td></thdescrin<>   | METALS  | Zinc  | 5.9E+03                                  | 0.625               | 2.50        | 6.16E+01                                  | 2.02E+01  | 5.9E+03                                      | 41.400 1   |   | 31.000 1   | 52.800 1  |
| Provide         Carbon Range CoRC4C12         17E+02         25         50         NE         NE         NE         17E+02         54.800 1         U           SEMIVOLATILES         1.2-Dichloroberzne         5.6E+01         0.025         0.165         NE         NE         1.4E+02         56E+01         1.870 10         U         0.201 1 <t< td=""><td>RANGE_ORGANICS</td><td>CAPRON RANGE C28-C35</td><td>1.78+02</td><td>20<br/>25</td><td>50</td><td>NE</td><td>NE</td><td>1.7E+02</td><td>54.600 1 U</td><td></td><td></td><td></td></t<>  | RANGE_ORGANICS  | CAPRON RANGE C28-C35                          | 1.78+02                                  | 20<br>25            | 50          | NE  | NE  | 1.7E+02                                      | 54.600 1 U   |   |  |   |
| SEMINOLATILES       12.4 Trichtonberzene       1.4E+02       0.0825       0.165       NE       NE       1.4E+02       1.4E+02       1.4C+02<   | RANGE ORGANICS  | Carbon Range C6-C12                           | 1,7E+02                                  | 25                  | 50          | NE  | NE  | 1.7E+02                                      | 54.600 1 U   |   |  |   |
| SEMMOLATILES       1,2-Dichloroberzene       5,6E+01       1,0/1       0 <td>SEMIVOLATILES</td> <td>1,2,4-Trichlorobenzene</td> <td>1.4E+02</td> <td>0.0825</td> <td>0.165</td> <td>NE</td> <td>NE</td> <td>1.4E+02</td> <td></td> <td></td> <td>1.870 10 U U</td> <td>0.201 1 U U</td>  | SEMIVOLATILES   | 1,2,4-Trichlorobenzene                        | 1.4E+02                                  | 0.0825              | 0.165       | NE  | NE  | 1.4E+02                                      |  |   | 1.870 10 U U   | 0.201 1 U U   |
| SEMMOLATLES       1,3-bichioroberzene       2,7E+01       1,1070       0       0       0       2,201       1       0       0       2,201       1       0       0       2,201       1       0   | SEMIVOLATILES   | 1,2-Dichlorobenzene                           | 5.6E+01                                  | 0.0825              | 0.165       | NE  | NE  | 5.6E+01                                      |  |   | 1.870 10 0 0   | 0.201 1 0 0   |
| Starting       1.42 - Distribution       1.62 - 03       1.62 - 03       1.62 - 03       1.62 - 03       1.67 - 01       U       U       0.201       1       U       U       <   | SEMIVOLATILES   | 1,3-Dichlorobenzene                           | 5.1E+00<br>2.7E+01                       | 0.0825              | 0.165       | NE  | NE  | 2.1E+00                                      |  |   | 1.870 10 U U   | 0.201 1 U U   |
| SEMUCIATLES       2.4.6-Trichtorophenol       4.5E+01       1.870 10 U U       0.201 1 U       U         SEMUCIATLES       2.4.6-Direktyphenol       3.1E+02       0.0825       NIE       NE       4.5E+01       1.870 10 U U       0.201 1 U       U         SEMUCIATLES       2.4-Direktyphenol       3.1E+02       0.0825       NIE       NE       NE       3.1E+02       1.870 10 U U       0.020 1 U       U </td <td>SEMIVOLATILES</td> <td>2.4.5-Trichlorophenol</td> <td>1.6E+03</td> <td>0.0825</td> <td>0.165</td> <td>NE</td> <td>NE</td> <td>1.6E+03</td> <td></td> <td></td> <td>1.870 10 U U</td> <td>0.201 1 U U</td>   | SEMIVOLATILES   | 2.4.5-Trichlorophenol                         | 1.6E+03                                  | 0.0825              | 0.165       | NE  | NE  | 1.6E+03                                      |  |   | 1.870 10 U U   | 0.201 1 U U   |
| SEMIVOLATLES       2.4-Dinterbylnehol       3.1E+01       0.0825       0.165       NE       NE       4.7E+01       1.870       10       U       0.0201       1       <  | SEMIVOLATILES   | 2,4,6-Trichlorophenol                         | 4.5E+01                                  | 0.0825              | 0.165       | NE  | NE  | 4.5E+01                                      |  |   | 1.870 10 U U   | 0.201 1 U U   |
| SEMUCLATLES       2.4-Dimetrylphenol       3.16+02       0.025       0.165       NE       NE       3.16+02       5.336       0.0       0 <td>SEMIVOLATILES</td> <td>2,4-Dichlorophenol</td> <td>4.7E+01</td> <td>0.0825</td> <td>0.165</td> <td>NE</td> <td>NË</td> <td>4.7E+01</td> <td></td> <td></td> <td>1.870 10 U U</td> <td>0.201 1 0 0</td>  | SEMIVOLATILES   | 2,4-Dichlorophenol                            | 4.7E+01                                  | 0.0825              | 0.165       | NE  | NË  | 4.7E+01                                      |  |   | 1.870 10 U U   | 0.201 1 0 0   |
| SEMVOLATILES       2.4Dinitroblemento       7.2E-01       0.0225       0.165       NE       NE       7.2E-01       0.021       1       U       0.201       1       0.201       1   | SEMIVOLATILES   | 2,4-Dimethylphenol                            | 3.1E+02                                  | 0.0825              | 0.165       | NE  | NE  | 3.16+02                                      |  |   | 9330 10 U U  | 1.000 1 U U   |
| Definition         72E-01         0.0825         0.185         NE         NE         72E-01         1.870         10         U         0.201         1         U         0           SEMVOLATILES         2.Chiononapittalene         1.1E+03         0.0825         0.185         NE         NE         1.1E+03         1.870         10         U         0.201         1         U         0           SEMVOLATILES         2.Chiononapittalene         1.1E+02         1.870         10         U         0.201         1         U         0           SEMVOLATILES         2.Metryphenol         7.7E+02         1.870         10         U         0.201         1         U         0           SEMVOLATILES         2.Metryphenol         7.7E+02         1.870         10         U         0.201         1         U         0           SEMVOLATILES         2.Mitrophenol         3.1E+01         0.825         NE         NE         4.7E+00         9.330         10         U         0.011         U         0         0.011         U         0         0.011         U         0         0.011         U         0.021         1         U         0.021         1         U         0.02   | SEMIVOLATILES<br>SEMIVOLATILES  | 2,4-Dinitrophenol                             | 7.2E-01                                  | 0.0825              | 0.625       | NE  | NE  | 7.2E-01                                      |  |   | 1.870 10 U U   | 0.201 1 U U   |
| SEMVOLATILES       2-Chiorophythalene       1.16+03       0.0825       0.165       NE       NE       1.16+03       1.870       10       U       0.201       1       U       0.201  | SEMIVOLATILES   | 2,6-Dinitrotoluene                            | 7.2E-01                                  | 0.0825              | 0.165       | NE  | NE  | 7.2E-01                                      |  |   | 1.870 10 U U   | 0.201 1 U U   |
| SEMIVOLATILES       2-Chiorophenol       1.1E+02       0.0825       0.165       NE       NE       1.1E+02       1.1E+02       0.070       0<   | SEMIVOLATILES   | 2-Chloronaphthatene                           | 1.1E+03                                  | 0.0825              | 0.165       | NE  | NE  | 1.1E+03                                      |  |   | 1.870 10 U U   | 0,201 1 U U   |
| SEMIVOLATILES       2-Metryinapintalene       5.5E-01       0.0825       0.165       NE       NE       7.7E+02       1.800       0 </td <td>SEMIVOLATILES</td> <td>2-Chlorophenol</td> <td>1.1E+02</td> <td>0.0825</td> <td>0.165</td> <td>NE</td> <td>NE</td> <td>1.1E+02</td> <td></td> <td></td> <td>1.870 10 U U</td> <td>0.201 1 U U</td>   | SEMIVOLATILES   | 2-Chlorophenol                                | 1.1E+02                                  | 0.0825              | 0.165       | NE  | NE  | 1.1E+02                                      |  |   | 1.870 10 U U   | 0.201 1 U U   |
| SEMIVOLATILES         2-Nitrogniline         4.7E+00         0.3300         0.825         NE         NE         4.7E+00         9.330         10         U         U         1.000         1         U         1   | SEMIVOLATILES<br>SEMIVOLATILES  | 2-Methylapanol                                | 7.5E+01                                  | 0.0825              | 0.165       | NE  | NE  | 7.7E+02                                      |  |   | 1.870 10 U U   | 0.201 1 U U   |
| SEMIVOLATILES       2-Nitrophenol       3.1E-01       0.0205       0.165       NE       NE       3.1E-01       0.201       1       U       0.201   | SEMIVOLATILES   | 2-Nitroaniline                                | 4.7E+00                                  | 0.3300              | 0.825       | NE  | NE  | 4.7E+00                                      |  |   | 9.330 10 U U   | 1.000 1 U U   |
| SEMIVOLATILES       3,3 <sup>+</sup> Dichlorobenzidine       1,1 <sup>+</sup> 400       0,1 <sup>+</sup> 400       9,130       0       0       0       0,400       1       0       0       0       0,400       1       0 <t< td=""><td>SEMIVOLATILES</td><td>2-Nitrophenol</td><td>3.1E+01</td><td>0.0825</td><td>0.165</td><td>NE</td><td>NE</td><td>3.1E+01</td><td></td><td></td><td>1.870 10 U U</td><td>0.201 1 U U</td></t<>   | SEMIVOLATILES   | 2-Nitrophenol                                 | 3.1E+01                                  | 0.0825              | 0.165       | NE  | NE  | 3.1E+01                                      |  |   | 1.870 10 U U   | 0.201 1 U U   |
| SEMIVOLATILES       3-Nutoraniline       4.7E+00       0.3300       0.825       NE       NE       4.7E+00       9-330       10       U       1.000       1       U       U         SEMIVOLATILES       4-Bointo-2-methylphenol       3.1E+01       0.3300       0.825       NE       NE       1.7E+01       9-330       10       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.201       1       U       U       0.201       1       U       U       0.201       1       U       U       0.201       1       U       U       0.201       1       U       U       0.201       1       U       U       0.201       1       U       U       0.201       1       U       U       0.201       1       U   | SEMIVOLATILES   | 3,3'-Dichlorobenzidine                        | 1.1E+00                                  | 0.1650              | 0.330       | NE  | NE  | 1.12+00                                      |  |   | 9330 10 U U  | 1.000 1 U U   |
| SEMIVOLATILES         4-Bromphenyl pienyl ether         3.1E-02         0.0825         0.165         NE         NE         1.7E-01         0.8988         10         U         0.102         1         U         U           SEMIVOLATILES         4-Bromphenyl pienyl ether         3.1E-02         0.0825         0.165         NE         NE         7.7E+01         1.870         10         U         0.201         1         U         U           SEMIVOLATILES         4-Chloro-amethylphenol         7.7E+01         0.8925         0.165         NE         NE         7.7E+01         1.870         10         U         0.201         1         U         U         SEMIVOLATILES         4-Chloro-amethylphenol         7.7E+01         0.8925         0.165         NE         NE         1.7E-01         1.870         10         U         0.201         1         U         U         0.102         1         U         U         0.102         1         U         U         0.201         1         U         U         0.102         1         U         U         0.201         1         U         U         0.201         1         U         U         0.102         1         U         U         0.102   | SEMIVOLATILES   | a-muoaniine<br>4.6-Dinitro-2-methylobenol     | 4.7E+00<br>3.1E+01                       | 0.3300              | 0.825       | NE  | NE  | 3.1E+01                                      | 1  |   | 9.330 10 U U   | 1.000 1 U U   |
| SEMIVOLATILES       4-Chloro-a-methylphenol       7.7E-01       0.822       0.165       NE       NE       7.7E-01       1.870       10       U       0.201       1       U       U         SEMIVOLATILES       4-Chloro-a-methylphenol       6.2E+01       0.8825       0.165       NE       NE       6.2E+01       1.870       10       U       U       0.201       1       U       U         SEMIVOLATILES       4-Chlorophenyl phenyl ether       2.8E-02       0.0825       0.165       NE       NE       1.7E-01       1.870       10       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.102       1       U       U       0.100       1       U       U       0.201       1       U       U       0.201       1       U </td <td>SEMIVOLATILES</td> <td>4-Bromophenyl phenyl ether</td> <td>3.1E-02</td> <td>0.0825</td> <td>0.165</td> <td>NE</td> <td>NE</td> <td>1.7E-01</td> <td>1</td> <td></td> <td>0,938 10 U U</td> <td>0.102 1 U U</td>  | SEMIVOLATILES   | 4-Bromophenyl phenyl ether                    | 3.1E-02                                  | 0.0825              | 0.165       | NE  | NE  | 1.7E-01                                      | 1  |   | 0,938 10 U U   | 0.102 1 U U   |
| SEMIVOLATILES       4-Chloroaniline       6.2E+01       0.8/2       0.165       NE       NE       6.2E+01       1.8/0       0       0       0.201       1       0       0       0.201       1       0       0       0.201       1       0       0       0       0.201       1       0       0       0       0.201       1       0       0       0       0.201       1       0       0       0       0.201       1       0       0       0       0       0.201       1       0       0       0       0.012       1       0       0       0       0       0       0.021       1       0       0       0       0       0.021       1       0       0       0       0       0.021       1       0  | SEMIVOLATILES   | 4-Chloro-3-methylphenol                       | 7.7E+01                                  | 0.0825              | 0.165       | NE  | NE  | 7.7E+01                                      |  |   | 1.870 10 U L   | 0.201 1 U U   |
| Stem/VOLATILES       4-Chrotopheny preny energ         | SEMIVOLATILES   | 4-Chloroaniline                               | 6.2E+01                                  | 0.0825              | 0.165       | NE  | NE  | 6.2E+01                                      |  |   | 1.8/0 10 U U   | 0.402 1 11 11   |
| SEMIVOLATILES         Antrophenol         1.3E+01         0.3300         0.825         NE         NE         1.3E+01         9.330         0         U         1.000         1         U           SEMIVOLATILES         4-Nitrophenol         3.1E+01         0.3300         0.825         NE         NE         3.1E+01         9.330         10         U         U         1.000         1         U         0         SEMIVOLATILES         4-Nitrophenol         3.1E+01         0.3300         0.825         NE         NE         3.1E+01         9.330         10         U         U         1.000         1         U         V           SEMIVOLATILES         4-Nitrophenol         3.1E+01         0.3300         0.825         NE         NE         3.1E+01         9.330         10         U         U         0.201         1         U         U         0.201         1         U         U         0.201         1         U         U         0.201         1         U         U         0.201         1         U         U         0.201         1         U         0.201         1         U         0.201         1         U         0.201         1         U         0.201 <td< td=""><td>SEMIVOLATILES<br/>SEMIVOLATILES</td><td>4-Chiorophenyi phenyi ether<br/>4-Methylobenol</td><td>2.8E-02<br/>7.75+04</td><td>0.0825</td><td>0.165</td><td>NE</td><td>NE</td><td>7.7E+01</td><td>1</td><td></td><td>1.870 10 U L</td><td>0.201 1 U U</td></td<>   | SEMIVOLATILES<br>SEMIVOLATILES  | 4-Chiorophenyi phenyi ether<br>4-Methylobenol | 2.8E-02<br>7.75+04                       | 0.0825              | 0.165       | NE  | NE  | 7.7E+01                                      | 1  |   | 1.870 10 U L   | 0.201 1 U U   |
| SEMIVOLATILES         4-Nitrophenol         3.1E+01         0.3300         0.825         NE         NE         3.1E+01         9.330         10         U         1.000         1         U           SEMIVOLATILES         Acenaphthene         8.2E+02         0.0825         0.165         NE         NE         8.2E+02         1.870         10         U         0.201         1         U         U           SEMIVOLATILES         Acenaphthylene         8.2E+02         0.0825         0.165         NE         NE         8.2E+02         1.870         10         U         0.201         1         U         U           SEMIVOLATILES         Acenaphthylene         8.2E+02         0.0825         0.165         NE         NE         8.2E+02         1.870         0         U         0.201         1         U         U           SEMIVOLATILES         Anthracene         4.1E+03         0.0825         0.165         NE         NE         4.1E+03         1.870         0         U         0.201         1         U           SEMIVOLATILES         Benzo(a)anthracene         6.3E-01         0.6825         0.165         1.53E-02         NE         6.3E-01         1.670         0         U  | SEMIVOLATILES   | 4-Nitroaniline                                | 1.3E+01                                  | 0.3300              | 0.825       | NE  | NE  | 1.3E+01                                      | 1  |   | 9.330 10 U L   | 1.000 Î Û Û   |
| SEMIVOLATILES         Accmaphthene         8.2E+02         0.0825         0.165         NE         NE         8.2E+02         1.870         10         U         0.201         1         U         U           SEMIVOLATILES         Accmaphthylene         8.2E+02         0.0825         0.165         NE         NE         8.2E+02         1.870         10         U         0.201         1         U         U           SEMIVOLATILES         Anthracene         4.1E+03         0.0825         0.165         NE         NE         4.1E+03         1.870         10         U         0.201         1         U         U           SEMIVOLATILES         Benzo(a)anthracene         6.3E-01         0.6825         0.165         NE         NE         4.1E+03         1.870         10         U         0.201         1         U           SEMIVOLATILES         Benzo(a)anthracene         6.3E-01         0.6825         0.165         1.53E-02         NE         6.3E-01         1.670         0         U         0.201         1         U  | SEMIVOLATILES   | 4-Nitrophenol                                 | 3.1E+01                                  | 0.3300              | 0.825       | NE  | NE  | 3.1E+01                                      | 1  |   | 9.330 10 U L   | 1.000 1 U U   |
| SEMIVOLATILES         Anthracene         4.1E+03         0.0825         0.165         NE         NE         8.2E+02         1.670         10         0         0         0.201         1         0         0         0         0.201         1         0         0         0         0.201         1         0         0         0         0         0         0         0         0.201         1         0 <th0< th="">         0&lt;</th0<>   | SEMIVOLATILES   | Acenaphthene                                  | 8.2E+02                                  | 0.0825              | 0.165       | NE  | NE  | 8.2E+02                                      |  |   | 1.8/0 10 U U   | 0.201 1 0 0   |
| SEMIVOLATILES Benzo(a)anthracene 6.3E-01 0.0825 0.165 1.53E-02 NE 6.3E-01 1.070 10 U U 0.201 1 U U   | SEMIVOLATILES   | Acenaphthylene                                | 0.2E+02<br>4 1E+07                       | 0.0825              | 0.105       | NE  | NE  | 0.2E+02<br>4 1E+03                           | 1  |   | 1.870 10 U U   | 0.201 1 U U   |
| , ,  | SEMIVOLATILES   | Benzo(a)anthracene                            | 6.3E-01                                  | 0.0825              | 0.165       | 1.53E-02                                  | NE  | 6.3E-01                                      | 1  |   | 1.870 10 U U   | 0.201 1 U Ū   |

Shaw Environmental, Inc.

00066469

### Table 4-37

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-037

|                                |                                |                    |             |              |            | Suin          | p-037              |                  |                   |                    |                  |
|--------------------------------|--------------------------------|--------------------|-------------|--------------|------------|---------------|--------------------|------------------|-------------------|--------------------|------------------|
| [SUMP] = SUMP037               |                                |                    |             |              |            |               |                    | 35SUMP018-SB02   | 35SUMP037-SB01    | WRS10-SB02         | WRS10-\$802      |
|                                |                                | TCEO               |             |              | Backe      | pround        | Applicble          | 35-SMP18-SB02-02 | 35-SMP37-\$B01-02 | WRS10-SB02-01      | WR\$10-SB02-02   |
| SAMPLE_NO                      |                                | Risk-Based         |             |              | Concentral | tions in Soit | TCEQ               | 9/11/2006        | 9/9/2006          | 9/25/2006          | 9/25/2006        |
| DEPTH                          |                                | Screening          | Method      | Method       | (95% UP    | L, mg/kg)     | Risk-Based         | 5.5 - 6 Ft       | 3 - 4 Ft          | 05 Ft              | 3.5 - 4.5 Ft     |
| SAMPLE_PURPOSE                 |                                | Value              | Detection   | Quantitation | Surface    | Subsurface    | Screening          | REG              | REG               | REG                | REG              |
| Test Group                     | Parameter (Units = mg/kg)      | (RBSV)             | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value              | Result DIL LQ VQ | Result DIL LQ V   | Q Result DIL LQ_VQ | Result DIL LO VO |
| SEMIVOLATILES                  | Benzo(a)pyrene                 | 6.3E-02            | 0.0825      | 0.165        | 1.54E-02   | NE            | 1.7E-01            |                  |                   | 0.938 10 U U       | 0.102 1 U U      |
| SEMIVOLATILES                  | Benzo(b)fluoranthene           | 6.3E-01            | 0.0825      | 0.165        | 1.53E-02   | NE            | 6.3E-01            |                  |                   | 1.870 10 0 0       | 0.201 1 0 0      |
| SEMIVOLATILES                  | Benzo(ghi)perylene             | 4.1E+02            | 0.0825      | 0.165        | 1.235-02   | NE            | 4.1E+02            |                  |                   | 1870 10 0 0        | 0.201 1 U U      |
| SEMIVOLATILES                  | Benzo(k)ituoranthene           | 0.3E+00<br>6.2E+04 | 0.0825      | 0.100        | 1.30E-02   | NE            | 625+04             |                  |                   | 9.330 10 U UJ      | 1.000 1 U UJ     |
| SEMIVOLATILES                  | Benzul Alcohol                 | 4.7E+03            | 0.0825      | 0.165        | NE         | NE            | 4.7E+03            |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SEMIVOLATILES                  | bis(2-Chloroethoxy)methane     | 2.9E-01            | 0,0825      | 0.165        | NE         | NE            | 2.9E-01            |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether        | 1.5E-01            | 0.0825      | 0.165        | NE         | NE            | 1.7E-01            |                  |                   | 0.938 10 U U       | 0.102 1 U U      |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether    | 4.8E+00            | 0.0825      | 0.165        | NE         | NE            | 4.8E+00            |                  |                   | 1,870 10 0 0       | 0.201 1 0 0      |
| SEMIVOLATILES                  | bis(2-Ethylhexyi)phthalate     | 1.7E+01            | 0.0825      | 0.165        | NE         | NE            | 1.75+01            |                  |                   | 1870 10 0 0        | 0.201 1 U U      |
| SEMIVOLATILES                  | Butyl benzyl phthalate         | 3.1E+03            | 0.0625      | 0.165        | 151E-02    | NE            | 8 3E+01            |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SEMIVOLATILES                  | Dibenzo/a b)antbracene         | 6.3E+01            | 0.0025      | 0.165        | NE         | NE            | 1.7E-01            |                  |                   | 0.938 10 U U       | 0.102 1 U U      |
| SEMIVOLATILES                  | Dibenzofuran                   | 6.2E+01            | 0.0825      | 0,165        | NE         | NE            | 6.2E+01            |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SEMIVOLATILES                  | Diethyl phthalate              | 1.2E+04            | 0.0825      | 0.165        | NE         | NE            | 1.2E+04            |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SEMIVOLATILES                  | Dimethyl phthalate             | 1.2E+04            | 0.0825      | 0.165        | NE         | NE            | 1.2E+04            |                  |                   | 1.870 10 U U       | 0.201 1 0 0      |
| SEMIVOLATILES                  | di-n-Butyl phthalate           | 1.6E+03            | 0.0825      | 0.165        | NE         | NE            | 1.65+03            |                  |                   | 1.870 10 0 0       | 0.201 1 U U      |
| SEMIVOLATILES                  | di-n-Octyl phthalate           | 3.1E+02            | 0.0825      | 0.165        | 2 20E.02   | NE            | 3.1E+02<br>5.5E+02 |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SEMIVOLATILES                  | Fluoranmene                    | 5.5E+02            | 0.0825      | 0.165        | 2.28E-02   | NE            | 5.5E+02            |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SEMIVOLATILES                  | Hexachlombenzene               | 2.5E-01            | 0.0825      | 0.165        | NE         | NE            | 2.5E-01            |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SEMIVOLATILES                  | Hexachlorobutadiene            | 1.6E+00            | 0.0825      | 0.165        | NE         | NE            | 1.6E+00            |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene      | 1.0E+00            | 0.0825      | 0.165        | NE         | NE            | 1.0E+00            |                  |                   | 1.870 10 U U       | 0.201 1 0 0      |
| SEMIVOLATILES                  | Hexachloroethane               | 1.6E+01            | 0.0825      | 0.165        | NE         | NE            | 1.66+01            |                  |                   | 1870 10 0 0        | 0.201 1 0 0      |
| SEMIVOLATILES                  | Indeno(1,2,3-cd)pyrene         | 6.3E-01            | 0.0825      | 0,165        | 1.43E-02   | NE            | 5.25+02            |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SEMIVOLATILES<br>SEMIVOLATILES | Naphthalene                    | 1.8E+01            | 0.0825      | 0.165        | NE         | NE            | 1.8E+01            |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SEMIVOLATILES                  | Nitrobenzene                   | 6.5E+00            | 0.0825      | 0.165        | NE         | NÊ            | 6.5E+00            |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SEMIVOLATILES                  | n-Nitroso-di-n-propylamine     | 4.1E-02            | 0.0825      | 0.165        | NE         | NË            | 1.7E-01            |                  |                   | 0.938 10 U U       | 0.102 1 U U      |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine         | 5.9E+01            | 0.0825      | 0.165        | NE         | NE            | 5.9E+01            |                  |                   | 1.870 10 U U       | 1000 1 1 1       |
| SEMIVOLATILES                  | Pentachlorophenol              | 3.0E+00            | 0.3300      | 0.825        | NE         | NE            | 3.0E+00            |                  |                   | 1870 10 11 11      | 0201 1 U U       |
| SEMIVOLATILES                  | Phenanthrene                   | 4.16+02            | 0.0825      | 0.165        | NE         | NE            | 4.1E+02<br>4.7E+03 |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SEMIVOLATILES                  | Pirene                         | 4 1F+02            | 0.0825      | 0.165        | 1.94E-02   | NE            | 4.1E+02            |                  |                   | 1.870 10 U U       | 0.201 1 U U      |
| SOLIDS                         | Percent Solids                 | NE                 | NA          | NA           | NË         | NE            | _                  | 90.500 1         | 92.800 1          | 88.000 1           | 81.100 1         |
| VOLATILES                      | 1,1,1,2-Tetrachloroethane      | 5.2E+00            | 0.0005      | 0.005        | NE         | NE            | 5.2E+00            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 1,1,1-Trichloroethane          | 2.3E+02            | 0.0005      | 0.005        | NE         | NE            | 2.3E+02            | 0.005 1 U        |                   |                    | 0,006 1 0 0      |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane      | 5.1E-01            | 0.0005      | 0.005        | NE         |               | 0.1E-01            | 0.005 1 0        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 1,1,2-) nonioroethane          | 9.7E-01<br>8.0E+01 | 0.0005      | 0.005        | NE         | NE            | 8.9E+01            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 1.1-Dichloroethene             | 2.7E+01            | 0.0005      | 0.005        | NE         | NE            | 2.7E+01            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 1,1-Dichloropropene            | 9.9E-01            | 0.0005      | 0.005        | NE         | NE            | 9.9E-01            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 1,2,3-Trichlorobenzene         | 4.2E+01            | 0.0005      | 0.005        | NE         | NE            | 4.2E+01            | 0.005 1 U        |                   |                    |                  |
| VOLATILES                      | 1,2,3-Trichloropropane         | 9.2E-02            | 0.0010      | 0.005        | NE         | NE            | 9.2E-02            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 1,2,4-1 honioropenzene         | 1.46+02            | 0.0005      | 0.005        | NE         | NE            | 9.6E+00            | 0.005 1 U        |                   |                    | 0.006 t U U      |
| VOLATILES                      | 1.2-Dibromo-3-chloropropane    | 3.5E-01            | 0.0020      | 0.005        | NE         | NE            | 3.5E-01            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 1.2-Dibromoethane              | 5.3E-02            | 0.0005      | 0.005        | NE         | NE            | 5.3E-02            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 1,2-Dichlorobenzene            | 5.6E+01            | 0.0005      | 0.005        | NE         | NE            | 5.6E+01            | 0.005 1 U        |                   |                    | 0.005 1 U U      |
| VOLATILES                      | 1,2-Dichloroethane             | 2.7E-01            | 0.0005      | 0.005        | NE         | NE            | 2.7E-01            | 0.005 1 U        |                   |                    | 0.006 1 0 0      |
| VOLATILES                      | 1,2-Dichloropropane            | 1.85+00            | 0.0005      | 0.005        | NE         | NE            | 1.85+00            |                  |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 1.2-Dimethylbenzene (o-Aylene) | 3.3C+03<br>8.3E+00 | 0.0005      | 0.005        |            | NE            | 8.3E+00            | 0.005 1 11       |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 1.3-Dichlorobenzene            | 5.1E+00            | 0.0005      | 0.005        | NE         | NE            | 5.1E+00            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 1.3-Dichloropropane            | 3.0E+00            | 0.0005      | 0.005        | NE         | NÉ            | 3.0E+00            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 1.4-Dichlorobenzene            | 2.7E+01            | 0.0005      | 0.005        | NE         | NE            | 2.7E+01            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 2,2-Dichloropropane            | 1.7E+00            | 0.0005      | 0.005        | NE         | NE            | 1.7E+00            | 0.005 1 U        |                   |                    | 0.000 1 0 0      |
| VOLATILES                      | 2-Butanone                     | 2.6E+03            | 0.0025      | 0.010        | NE         | NE<br>NE      | 2.6E+03            |                  |                   |                    | 0.012 1 U U      |
| VOLATILES                      | 2-Chlorotoluene                | 1.5E+02            | 0.0020      | 0.005        | NE         | NE            | 1.5E+02            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | 2-Hexanone                     | 6.2E+00            | 0.0025      | 0.010        | NE         | NE            | 6.2E+00            | 0.010 1 U UJ     |                   |                    | 0.012 1 U U      |
| VOLATILES                      | 4-Chlorotoluene                | 3.4E-01            | 0.0005      | 0.005        | NE         | NE            | 3.4E-01            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | Acetone                        | 1.7E+02            | 0.0050      | 0.010        | NE         | NE            | 1.7E+02            | 0.010 1 U        |                   |                    | 0.012 1 U U      |
| VOLATILES                      | Benzene                        | 8.8E-01            | 0.0005      | 0.005        | NE         | NE            | 8.8E-01            | 0.005 1 U        |                   |                    | 0.006 1 11 11    |
| VOLATILES                      | Bromochloromathane             | 7.16+01            | 0.0005      | 0.005        | NE         | NE            | 246+01             | 0.005 1 0        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | Bromodichloromethane           | 1.0E+01            | 0.0005      | 0,005        | NE         | NE            | 1.0E+01            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | Bromoform                      | 3.4E+01            | 0.0005      | 0.005        | NE         | NE            | 3.4E+01            | 0.005 1 U        |                   |                    | 0.006 1 U U      |
| VOLATILES                      | Bromomethane                   | 3.5E-01            | 0.0010      | 0.010        | NE         | NE            | 3.5E-01            | 0.010 1 U        |                   |                    | 0.012 1 U U      |
| VOLATILES                      | Carbon disulfide               | 1.0E+02            | 0.0005      | 0.005        | NE         | NE            | 1.0E+02            | 0.005 1 U        |                   |                    | 0,006 1 U U      |
| VOLATILES                      | Carbon tetrachloride           | 3.5E-01            | 0.0005      | 0.005        | NE         | NE            | 3.5E-01            | 0.000 1 0        |                   |                    | 0.000 1 0 0      |

| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values  |   |  |  |   |   |  |  |   |   | 00000  |   |
|---|---|--|--|---|---|--|--|---|---|--|---|
|   |   |  |  |   |   | Sum  | p-037  |   |   |  |   |
| [SUMP] = SUMP037<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE  |   | TCEQ<br>Risk-Based<br>Screening<br>Value   | Method<br>Detection  | Method _  | Backy<br>Concentra<br><u>(95% UF</u><br>Surface   | ground<br>titons in Soll<br><sup>2</sup> L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening   | 355UMP018-SB02<br>35-SMP18-SB02-02<br>9/11/2008<br>5.5 - 6 Ft<br>REG  | 35SUMP037-SB01<br>35-SMP37-SB01-02<br>9/9/2006<br>3 - 4 Ft<br>REG | WRS10-SB02<br>WRS10-SB02-01<br>9/25/2006<br>05 Ft<br>REG | WRS10-SB02<br>WRS10-SB02-02<br>9/25/2006<br>3.5 - 4.5 Ft<br>REG   |
| Test Group  | Parameter (Units = mg/kg)   | (RBSV) *   | Limit (MDL)  | Limit (MQL)   | 0 - 0.5 Ft  | 1.5 - 2.5 Ft_  | Value  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ  |
| 1010000           VOLATILES           V | Chloroberzene<br>Chloroberzene<br>Chloroform<br>Chloromthane<br>cis-1,3-Dichloropropene<br>Dibromoctuoromethane<br>Dibromoctuoromethane<br>Dibromechane<br>Dibromethane<br>Ethylberzene<br>Hexachlorobutadiene<br>Isopropylberzene<br>mp-Xylenes<br>Methyl isobutyl ketone<br>Methylene chloride<br>Naphthalene<br>n-BUTYLBENZENE<br>p-ISOPROPYLTOLUENE<br>sec-BUTYLBENZENE<br>DisoPROPYLENZENE<br>Styrene<br>tert-BUTYLBENZENE<br>Tetrachloroethene<br>Toluene<br>trans-1,2-Dichloroethene | 4.0E+01<br>1.1E+03<br>3.1E+01<br>2.3E-01<br>2.3E-01<br>1.2E+02<br>1.2E+02<br>1.2E+02<br>1.3E+01<br>2.2E+02<br>1.3E+01<br>2.2E+02<br>1.3E+03<br>8.7E+00<br>1.8E+01<br>2.7E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>1.3E+03<br>1.3E+03<br>1.3E+03<br>2.6E+02<br>6.0E+00<br>1.1E+03<br>1.4E+03<br>1.4E+03<br>1.4E+03<br>1.4E+03<br>1.4E+03<br>1.4E+04<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4E+05<br>1.4 | 0.0005<br>0.0010<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>00 | 0.005<br>0.010<br>0.010<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005 | ,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>,<br>, | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~                           | 4.0E+01<br>1.1E+03<br>3.1E-01<br>2.3E-01<br>1.2E+02<br>1.2E+02<br>1.2E+02<br>1.2E+02<br>1.3E+01<br>2.2E+02<br>1.3E+02<br>1.3E+02<br>1.3E+02<br>1.3E+02<br>1.3E+02<br>3.7E+00<br>1.3E+01<br>2.7E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>1.3E+03<br>1.3E+03<br>1.3E+03<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4E+02<br>1.4 | 0.005 1 U<br>0.010 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U |   |  | 0.006         1         U         U           0.012         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U |
| VOLATILES<br>VOLATILES  | trans-1,3-Dichloropropene<br>Trichloroethene  | 1.8E+00<br>3.7E+00   | 0.0005<br>0.0005   | 0.005<br>0.005  | NE  | NE<br>NE   | 1.8E+00<br>3.7E+00   | 0.005 1 U<br>0.005 1 U  |   |  | 0.006 1 U U   |
| VOLATILES<br>VOLATILES<br>VOLATILES   | Trichlorofluoromethane<br>Vinyl acetate<br>Vinyl chloride   | 2.6E+02<br>5.7E+01<br>3.6E-02  | 0.0010<br>0.0010<br>0.0010   | 0.01<br>0.01<br>0.01  | NË<br>NE<br>NE  | NE<br>NE<br>NE   | 2.6E+02<br>5.7E+01<br>3.6E-02  | 0.010 1 U<br>0.010 1 U<br>0.010 1 U   |   |  | 0.012 1 U U<br>0.012 1 U U<br>0.012 <u>1 U U</u>  |

Table 4-37

VOLATILES Vinvl chloride Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

#### Shaw Environmental, Inc.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps



Table 4-38 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-038

|   |  |                    |             |                | 5ump-038             |                      |                    |   |   |
|---|--|--------------------|-------------|----------------|----------------------|----------------------|--------------------|---|---|
| SUMP] = SUMP038<br>OCATION _CODE<br>SAMPLE_NO | i  | TCEQ               |             |                | Backg                | iround               | Applicble          | 35SUMP038-SB01<br>35-SMP38-SB01-01<br>9/12/2006 | 35SUMP038-SB01<br>35-SMP38-SB01-02<br>9/12/2006 |
| SAMPLE_DATE                                   |  | Risk-Based         | Method      | Method         | (95% LIP             | l ma/ka)             | Risk-Based         | 0.5 - 0.5 Ft                                    | 2.5 - 3 Ft                                      |
| AMPLE PURPOS                                  | E  | Value              | Detection   | Quantitation   | Surface              | Subsurface           | Screening          | REG   | REG   |
| lest Group                                    | _<br>Parameter (Units ≃ mo/ko)             | (RBSV)*            | Limit (MDL) | Limit (MQL)    | 0 - 0,5 Ft           | 1.5 - 2.5 Ft         | Value              | Result DIL LQ VQ                                | Result DIL LQ VQ                                |
| AETALS  | Aluminum                                   | 1.6E+04            | 10.000      | 20.00          | 1.63E+04             | 2.08E+04             | 1.6E+04            | 8030.000 1                                      | 8350.000 1                                      |
| /IETALS                                       | Antimony                                   | 7.3E+00            | 0.500       | 0.10           | 9.40E-01             | 1.60E+00             | 7.35+00            | 3.240 1   | 3 820 1   |
| AETALS  | Arsenic                                    | 2.0E+01            | 0.075       | 0.30           | 4,81E+00<br>1.52E+02 | 5.54E+00<br>8.55E+01 | 2.6E+03            | 40,400 1  | 39.700 1  |
| AETALS  | Bendlium                                   | 4.6E+00            | 0.012       | 0.50           | 6.45E-01             | 7.66E-01             | 4.6E+00            | 0.340 1 J J                                     | 0.311 1 J J                                     |
| AETALS  | Cadmium                                    | 5.2E+00            | 0.025       | 0.10           | 1.40E+00             | 4.00E-01             | 5.2E+00            | 0.274 1 J J                                     | 0.054 1 J J                                     |
| AETALS  | Calcium                                    | NE                 | NA          | NA             | NA                   | NA                   |                    | 882.000 1                                       | 12 700 1  |
| METALS  | Chromium                                   | 5.9E+03            | 0.100       | 0.40           | 2.00E+01             | 3.01E+01<br>5.61E+00 | 1.5E+03            | 1,700 1   | 1.430 1   |
|   | Conner                                     | 1.0E+03            | 0.120       | 0.60           | 5.55E+00             | 9.25E+00             | 1.0E+03            | 247.000 1                                       | 13.100 1  |
| METALS  | Iron                                       | NE                 | NA          | NA             | NA                   | NA                   |                    | 15000.000 1                                     | 16100.000 1                                     |
| VETALS  | Lead                                       | 5.0E+02            | 0.500       | 5.00           | 2.26E+01             | 1.14E+01             | 5.0E+02            | 19.100 1  | 7.790 1   |
| METALS  | Magnesium                                  | NE                 | NA          | NA             | NA<br>4 DEE 102      | NA<br>2.015+02       | 175+03             | 70 100 1  | 84.700 1  |
| METALS  | Manganese                                  | 1.7E+03            | 0.050       | 0.20           | 1.25E+03<br>8 19E-02 | 3.60E-01             | 2.5E-01            | 0.043 1 J J                                     | 0.027 1 J J                                     |
| METALS  | Nickel                                     | 1.9E+02            | 0.200       | 0.80           | 6.98E+00             | 1.16E+01             | 1.9E+02            | 3.160 1   | 2.450 1   |
| VETALS  | Potassium                                  | NE                 | NA          | NA             | NA                   | NA                   | -                  | 249.000 1                                       | 223.000 1                                       |
| VETALS  | Selenium                                   | 1.3E+02            | 0.100       | 0.20           | 3.48E+00             | 5.57E+00             | 1.3E+02            | 0.481 1   | 1700 1 1  |
| METALS  | Silver                                     | 4.7E+01            | 0.050       | 0.20           | 3.10E-01             | 3.70E-01<br>NA       | 4.7 2+01           | 15.300 1 J J                                    | 20.400 1 J J                                    |
| METALS  | Teallium                                   | 2.0E+00            | 0.010       | 0.02           | NA                   | NA                   | 2.0E+00            | 0.073 1   | 0.075 1   |
| METALS  | Vanadium                                   | 4.8E+01            | 0.125       | 0.50           | 3,21E+01             | 4.46E+01             | 4.8€+01            | 25.900 1  | 30.700 1  |
| METALS  | Zinc                                       | 5.9E+03            | 0.625       | 2.50           | 6.16E+01             | 2.02E+01             | 5.9E+03            | 431,000 1                                       | 34.800 1  |
| SEMIVOLATILES                                 | 1,2,4-Trichlorobenzene                     | 1.4E+02            | 0.0825      | 0.165          | NE                   | NE                   | 1.4E+02<br>5.6E+01 | 0.182 1 U                                       | 0.181 1 U                                       |
|   | 1,2-Dichlorobenzene<br>1,3-Dichlorobenzene | 5.0E+01            | 0.0825      | 0.165          | NE                   | NE                   | 5.1E+00            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | 1.4-Dichlorobenzene                        | 2.7E+01            | 0.0825      | 0.165          | NE                   | NE                   | 2.7E+01            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | 2,4,5-Trichlorophenol                      | 1.6E+03            | 0.0825      | 0.165          | NE                   | NE                   | 1.6E+03            | 0.162 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | 2,4,6-Trichlorophenol                      | 4.5E+01            | 0.0825      | 0.165          | NE                   | NE                   | 4.55+01            | 0.182 1 0                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | 2.4-Dichlorophenol                         | 4.76+01            | 0.0825      | 0.165          | NE                   | NE                   | 3.1E+02            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | 2.4-Dinitrophenol                          | 3.1E+01            | 0.3300      | 0.825          | NE                   | NE                   | 3.1E+01            | 0.908 1 U                                       | 0.905 1 U                                       |
| SEMIVOLATILES                                 | 2,4-Dinitrotoluene                         | 7.2E-01            | 0.0825      | 0.165          | NE                   | NE                   | 7.2E-01            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | 2,6-Dinitrotoluene                         | 7.2E-01            | 0.0825      | 0.165          | NE                   | NE                   | 7.2E-01            | 0.182 1 0                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | 2-Chloronaphthalene                        | 1.16+03            | 0.0825      | 0.165          | NE                   | NE                   | 1.1E+02            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | 2-Methylnaphthalene                        | 5.5E+01            | 0.0825      | 0.165          | NE                   | NË                   | 5.5E+01            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | 2-Methylphenol                             | 7.7E+02            | 0.0825      | 0.165          | NE                   | NE                   | 7.7E+02            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | 2-Nitroaniline                             | 4.7E+00            | 0.3300      | 0.825          | NE                   | NE                   | 4.7E+00            | 0.908 1 0                                       | 0.905 1 0                                       |
| SEMIVOLATILES                                 | 2-Nitrophenol                              | 3.1E+01            | 0.0825      | 0.165          | NE                   | NE                   | 1 1E+00            | 0.363 1 U                                       | 0.362 1 U                                       |
| SEMIVOLATILES                                 | 3-Nitroaniline                             | 4.7E+00            | 0.3300      | 0.825          | NE                   | NE                   | 4.7E+00            | 0.908 1 U                                       | 0.905 1 U                                       |
| SEMIVOLATILES                                 | 4,6-Dinitro-2-methylphenol                 | 3.1E+01            | 0.3300      | 0.825          | NE                   | NE                   | 3.1E+01            | 0.908 1 U                                       | 0.905 1 U                                       |
| SEMIVOLATILES                                 | 4-Bromophenyl phenyl ether                 | 3.1E-02            | 0.0825      | 0.165          | NE                   | NE                   | 1.7E-01            | 0.092 1 U                                       | 0.095 1 0                                       |
| SEMIVOLATILES                                 | 4-Chloro-3-methylphenol                    | 7.7E+01            | 0.0825      | 0.165<br>0.165 | NE                   | NE                   | 6.2E+01            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | 4-Chlorophenyl phenyl ether                | 2.8E-02            | 0.0825      | 0.165          | NE                   | NE                   | 1.7E-01            | 0.092 1 U                                       | 0.095 1 U                                       |
| SEMIVOLATILES                                 | 4-Methylphenol                             | 7.7E+01            | 0.0825      | 0.165          | NE                   | NE                   | 7.7E+01            | 0.162 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | 4-Nitroaniline                             | 1.3E+01            | 0.3300      | 0.825          | NE                   | NE                   | 1.3E+01            | 0.908 1 U                                       | 0,905 1 0                                       |
| SEMIVOLATILES                                 | 4-Nitrophenol                              | 3.1E+01            | 0.3300      | 0.825          |                      | NE                   | 3.1E+01<br>8.2E+02 | 0.905 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | Acenaphthylene                             | 0.2E+02<br>8.2E+02 | 0.0825      | 0.165          | NE                   | NE                   | 8.2E+02            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | Anthracene                                 | 4.1E+03            | 0.0825      | 0.165          | NE                   | NE                   | 4.1E+03            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | Benzo(a)anthracene                         | 6.3E-01            | 0.0825      | 0.165          | 1.53E-02             | NE                   | 6.3E-01            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | Benzo(a)pyrene                             | 6.3E-02            | 0.0825      | 0.165          | 1.54E-02             | NE                   | 1.7E-01<br>6.3E-01 | 0.092 1 0                                       | 0.095 1 0                                       |
| SEMIVOLATILES                                 | Benzo(b)lluoran@ene<br>Benzo(obi)neoviene  | 6.3E-01<br>4 1E+02 | 0.0825      | 0,165          | 1.03E-02<br>1.23E-02 | NE                   | 4.1E+02            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | Benzo(ghi)perylene<br>Benzo(k)fluoranthene | 6.3E+00            | 0.0825      | 0.165          | 1.30E-02             | NE                   | 6.3E+00            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | Benzoic Acid                               | 6.2E+04            | 0.3300      | 0.825          | NE                   | NE                   | 6.2E+04            | 0.908 1 U                                       | 0.905 1 U                                       |
| SEMIVOLATILES                                 | Benzyl Alcohol                             | 4.7E+03            | 0.0825      | 0.165          | NE                   | NE                   | 4.7E+03            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | bis(2-Chloroethoxy)methane                 | 2.9E-01            | 0.0825      | 0.165          | NE                   | NE                   | 1.75-01            | 0.092 1 U                                       | 0.095 1 U                                       |
| SEMIVOLATILES                                 | bis(2-Chloroisopropyl)ether                | 4.8E+00            | 0.0825      | 0.165          | NE                   | NE                   | 4.8E+00            | 0.182 1 U                                       | 0.181 1 U                                       |
| SEMIVOLATILES                                 | bis(2-Ethylhexyl)phthalate                 | 1.7E+01            | 0.0825      | 0.165          | NE                   | NE                   | 1,7E+01            | 0.182 1 U                                       | 0.181 1 U                                       |

Shaw Environmental, Inc.

## 00066472

 Table 4-38

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-038

| [SUMP] = SUMP038<br>LOCATION _CODE<br>SAMPLE_NO | 8  | TCEQ               |             |              | Back       | ground        | Applicble          | 35SUMP038-SB01<br>35-SMP38-SB01-01 | 35SUMP038-SB01<br>35-SMP38-SB01-02 |
|---|--|--------------------|-------------|--------------|------------|---------------|--------------------|------------------------------------|------------------------------------|
| SAMPLE_DATE                                     |  | Risk-Based         | Mathod      | Mathad       | Concentra  | tions in Soil | TCEQ<br>Bick-Based | 9/12/2006<br>0.5 - 0.5 Ft          | 9/12/2006<br>2.5 - 3.Ft            |
| DEPTH<br>SAMPLE PURPOS                          | iΕ   | Value              | Detection   | Quantitation | Surface    | Subsurface    | Screening          | REG                                | REG                                |
| Test Group                                      | Parameter (Units = mg/kg)                          | (RBSV) *           | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value              | Result DIL LQ VQ                   | Result DIL LQ VQ                   |
| SEMIVOLATILES                                   | Butyl benzyl phthalate                             | 3.1E+03            | 0.0825      | 0.165        | NE         | NE            | 3.1E+03            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | Chrysene   | 6.3E+01            | 0.0825      | 0.165        | 1.51E-02   | NE            | 6.3E+01            | 0.182 1 0                          | 0.181 1 0                          |
| SEMIVOLATILES                                   | Dibenzofuran                                       | 6.2E+01            | 0.0825      | 0.165        | NE         | NE            | 6.2E+01            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | Diethyl phthalate                                  | 1.2E+04            | 0.0825      | 0.165        | NE         | NE            | 1.2E+04            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | Dimethyl phthalate                                 | 1.2E+04            | 0.0825      | 0.165        | NE         | NE            | 1.2E+04            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | di-n-Butyl phthalate                               | 1.6E+03            | 0.0825      | 0.165        | NE         | NE            | 1.6E+03            | 0.182 1 U<br>0.182 1 U             | 0.181 1 U                          |
| SEMIVOLATILES                                   | di-n-Octyl philalaile<br>Elugraphane               | 3.1E+02<br>5.5E+02 | 0.0825      | 0.165        | 2 29E-02   | NE            | 5.5E+02            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | Fluorene   | 5.5E+02            | 0.0825      | 0.165        | NE         | NE            | 5.5E+02            | 0.182 t U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | Hexachlorobenzene                                  | 2.5E-01            | 0.0825      | 0.165        | NE         | NE            | 2.5E-01            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | Hexachlorobutadiene                                | 1.6E+00            | 0.0825      | 0.165        | NË         | NE            | 1.6E+00            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | Hexachlorocyclopentadiene                          | 1.0E+00            | 0.0825      | 0.165        | NE         |               | 1.0E+00<br>1.6E+01 | 0.102 1 0                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | ndepo(1.2.3-cd)pyrene                              | 6 3E-01            | 0.0625      | 0.165        | 1 435-02   | NE            | 6.3E-01            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | Isophorone   | 5.2E+02            | 0.0825      | 0.165        | NE         | NE            | 5.2E+02            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | Naphthalene  | 1.8E+01            | 0.0825      | 0,165        | NE         | NE            | 1.8E+01            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | Nitrobenzene                                       | 6.5E+00            | 0.0825      | 0.165        | NE         | NE            | 6.5E+00            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | n-Nitroso-di-n-propytamine                         | 4.1E-02            | 0.0825      | 0.165        | NE         | NE            | 5.9E+01            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | Pentachlorophenol                                  | 3.0E+00            | 0.3300      | 0.825        | NE         | NE            | 3.0E+00            | 0.908 1 U                          | 0,905 1 U                          |
| SEMIVOLATILES                                   | Phenanthrene                                       | 4.1E+02            | 0.0825      | 0.165        | NE         | NE            | 4.1E+02            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | Phenol   | 4.7E+03            | 0.0825      | 0.165        | NE         | NE            | 4.7E+03            | 0.182 1 U                          | 0.181 1 U                          |
| SEMIVOLATILES                                   | Pyrene<br>Demost Solido                            | 4.1E+02            | 0.0825      | U.165        | 1.94E-02   | NE            | 4.16+02            | 89,500 1                           | 87 300 1                           |
| VOLATHES  | 1 1 1 2-Tetrachloroethane                          | 5.2E+00            | 0.0005      | 0.005        | NE         | NE            | 5.2E+00            | 00.000                             | 0.006 1 U                          |
| VOLATILES                                       | 1,1,1-Trichloroethane                              | 2.3E+02            | 0.0005      | 0.005        | NE         | NE            | 2.3E+02            |                                    | 0.006 1 U                          |
| VOLATILES                                       | 1,1,2,2-Tetrachloroethane                          | 5.1E-01            | 0.0005      | 0,005        | NE         | NE            | 5.1E-01            |                                    | 0.006 1 U                          |
| VOLATILES                                       | 1,1,2-Trichloroethane                              | 9.7E-01            | 0.0005      | 0.005        | NE         | NE            | 9.7E-01            |                                    | 0.006 1 U                          |
| VOLATILES                                       | 1,1-Dichloroethene                                 | 2.92+01            | 0.0010      | 0.005        | NE         | NE            | 2.7E+01            |                                    | 0.006 1 U                          |
| VOLATILES                                       | 1.1-Dichloropropene                                | 9.9E-01            | 0.0005      | 0.005        | NE         | NE            | 9.9E-01            |                                    | 0.006 1 U                          |
| VOLATILES                                       | 1,2,3 Trichlorobenzene                             | 4.2E+01            | 0.0005      | 0.005        | NE         | NE            | 4.2E+01            |                                    | 0.006 1 U                          |
| VOLATILES                                       | 1.2.3 Trichloropropane                             | 9.2E-02            | 0.0010      | 0.005        | NE         | NE            | 9.2E-02            |                                    | 0.006 1 0                          |
| VOLATILES                                       | 1,2,4-Trichlorobenzene                             | 1.4E+02            | 0.0005      | 0.005        | NE         |               | 9.6E+00            |                                    | 0.000 1 U                          |
| VOLATILES                                       | 1.2-Dibromo-3-chloropropage                        | 3.5E-01            | 0.0020      | 0.005        | NE         | NË            | 3.5E-01            | 1                                  | 0.006 1 U                          |
| VOLATILES                                       | 1 2-Dibromoethane                                  | 5.3E-02            | 0.0005      | 0.005        | NE         | NE            | 5.3E-02            |                                    | 0.006 1 U                          |
| VOLATILES                                       | 1,2-Dichlorobenzene                                | 5.6E+01            | 0.0005      | 0.005        | NE         | NE            | 5.6E+01            |                                    | 0.006 1 U                          |
| VOLATILES                                       | 1,2-Dichloroethane                                 | 2.7E-01            | 0.0005      | 0.005        | NE         | NE            | 2,72-01            |                                    | 0.006 1 U                          |
| VOLATILES                                       | 1.2-Dichloropropane<br>1.2-Dimethylbenzene (o-Xyle | 3.35+03            | 0.0005      | 0.005        | NE         | NE            | 3.3E+03            |                                    | 0.006 1 U                          |
| VOLATILES                                       | 1,3,5-Trimethylbenzene                             | 8.3E+00            | 0.0005      | 0.005        | NE         | NE            | 8.3E+00            |                                    | 0.006 1 U                          |
| VOLATILES                                       | 1,3-Dichlorobenzene                                | 5.1E+00            | 0.0005      | 0.005        | NE         | NE            | 5.1E+00            |                                    | 0.006 1 U                          |
| VOLATILES                                       | 1.3-Dichloropropane                                | 3.0E+00            | 0.0005      | 0.005        | NE         |               | 3.05+00            |                                    | 0.006 1 U                          |
| VOLATILES                                       | 2.2-Dichloropronane                                | 1.7E+00            | 0.0005      | 0.005        | NE         | NE            | 1.7E+00            | 1                                  | 0.006 1 U                          |
| VOLATILES                                       | 2-Butanone   | 2.6E+03            | 0.0025      | 0.010        | NE         | NE            | 2.6E+03            | 1                                  | 0.012 1 U                          |
| VOLATILES                                       | 2-Chloroethyl vinyl ether                          | 2.1E-01            | 0.0020      | 0.010        | NE         | NË            | 2.1E-01            |                                    | 0.012 1 U                          |
| VOLATILES                                       | 2-Chlorotoluene                                    | 1.5E+02            | 0.0005      | 0.005        | NE         | NE            | 1.5E+02            |                                    | 0.006 1 0                          |
| VOLATILES                                       | 4-Chlorotoluene                                    | 0.2E+00<br>3.4E-01 | 0.0025      | 0.010        | NE         | NE            | 3.4E-01            |                                    | 0.006 1 U                          |
| VOLATILES                                       | Acetone  | 1.7E+02            | 0.0050      | 0.010        | NE         | NE            | 1.7E+02            |                                    | 0.012 1 U                          |
| VOLATILES                                       | Benzene  | 8.8E-01            | 0.0005      | 0.005        | NE         | NE            | 8.8E-01            |                                    | 0.006 1 U                          |
| VOLATILES                                       | Bromobenzene                                       | 1.1E+01            | 0.0005      | 0.005        | NE         | NE            | 1.1E+01            |                                    | 0.006 1 0                          |
| VOLATILES                                       | Bromocnioromethane                                 | 2.4E+01            | 0.0005      | 0.005        | NE         | NE            | 1.0E+01            | 1                                  | 0.006 1 U                          |
| VOLATILES                                       | Bromoform  | 3.45+01            | 0.0005      | 0.005        | NE         | NE            | 3.4E+01            |                                    | 0.006 1 U                          |
| VOLATILES                                       | Bromomethane                                       | 3.5E-01            | 0.0010      | 0.010        | NE         | NE            | 3.5E-01            | 1                                  | 0.012 1 U                          |
| VOLATILES                                       | Carbon disulfide                                   | 1.0E+02            | 0.0005      | 0.005        | NE         | NE            | 1.0E+02            | 1                                  | 0.006 1 U                          |
| VOLATILES                                       | Carbon tetrachloride                               | 3.5E-01            | 0.0005      | 0.005        | NE         | NE            | 3.5E-01<br>4.0E+01 |                                    | 0.006 1 1                          |
| VOLATILES                                       | Chloroethane                                       | 4.0E+01<br>1.1E+03 | 0.0003      | 0.005        | NE         | NE            | 1,1E+03            |                                    | 0.012 1 U                          |
| VOLATILES                                       | Chloroform   | 3.1E-01            | 0.0005      | 0,005        | NE         | NE            | 3.1E-01            |                                    | 0.006 1 U                          |

Shaw Environmental, Inc.

# 00066473

 Table 4-38

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-038

|  |                           |  |                     |                        | -                                       |   |  |  |  |
|--|---------------------------|--|---------------------|------------------------|---|---|--|--|--|
| [SUMP] = SUMP0<br>LOCATION _COE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPC | 38<br>)E<br>)SE           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br><sup>2</sup> L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP038-SB01<br>35-SMP38-SB01-01<br>9/12/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP038-SB01<br>35-SMP38-SB01-02<br>9/12/2006<br>2.5 - 3 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   |
| VOLATILES  | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NE                                      | NE  | 2.3E-01                                      |  | 0.012 1 0  |
| VOLATILES  | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NĘ                                      | NE  | 1.2E+02                                      |  |  |
| VOLATILES  | cis-1.3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.2E+00                                      |  | 0.006 1 0  |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 7.6E+00                                      |  |  |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.9E+01                                      |  | 0,006 1 0  |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                      | NE  | 2.2E+02                                      |  | 0.012 1 0  |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 4.3E+02                                      |  | 0.008 1 0  |
| VOLATILES  | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.6E+00                                      |  | 0.006 1 U  |
| VOLATILES  | Isopropyibenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 5.4E+02                                      |  | 0.006 1 U  |
| VOLATILES  | m.p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.3E+02                                      |  | 0.006 1 U  |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NË                                      | NE  | 1.3E+03                                      |  | 0.012 1 0  |
| VOLATILES  | Methviene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                      | NE  | 8.7E+00                                      |  | 0.006 1 U  |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NE                                      | NË  | 1.8E+01                                      |  | 0.012 1 U  |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.7E+02                                      |  | 0.006 1 U  |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.2E+02                                      |  | 0.006 1 U  |
| VOLATILES  | D-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 4.2E+02                                      |  | 0.006 1 U  |
| VOLATILES  | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.0E+02                                      |  | 0.006 I U  |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.3E+03                                      |  | 0.006 1 U  |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.6E+02                                      |  | 0.006 1 U  |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NË  | 6.0E+00                                      |  | 0.006 1 U  |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.1E+03                                      |  | 0.006 1 U  |
| VOLATILES  | trans-1 2-Dichtoroethene  | 1 4E+02                                  | 0.0005              | 0.005                  | NE                                      | NË  | 1.4E+02                                      |  | 0.006 1 U  |
| VOLATILES  | trans-1.3-Dichloropronene | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.8E+00                                      |  | 0.006 1 U  |
| VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NË  | 3.7E+00                                      |  | 0.006 1 U  |
| VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01                   | NE                                      | NE  | 2.6E+02                                      |  | 0.012 1 U  |
| VOLATILES  | Vinvl acetate             | 57E+01                                   | 0.0010              | 0.01                   | NE                                      | NE  | 5.7E+01                                      |  | 0.012 1 U  |
| VOLATILES  | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.01                   | NE                                      | NE  | 3.6E-02                                      |  | 0.012 1 U  |

Shaw Environmental, Inc.

# 00066474

 Table 4-39

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

 Sump-039

| SUMP] = SUMP039<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE PURPOSE |                                | TCEQ<br>Rísk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back(<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>2L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP040<br>35-SMP40-S<br>9/14/20<br>3.5 - 4<br>REG | D-SB01<br>B01-02<br>D6<br>Ft |
|---|--------------------------------|--|---------------------|------------------------|--|---|--|--|------------------------------|
| Test Groun  | Parameter (Units = mo/ko)      | (RBSV)*                                  | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value  | Result D   | IL LQ VQ                     |
| METALS  | Aluminum                       | 1.6E+04                                  | 10.000              | 20.00                  | 1.63E+04                                 | 2.08E+04  | 1.6E+04                                      | 14300.000 1  |                              |
| METALS  | Antimony                       | 7.3E+00                                  | 0.500               | 0.10                   | 9.40E-01                                 | 1.60E+00  | 7.3E+00                                      | 0.108  | U                            |
| METALS  | Arsenic                        | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                 | 5.54E+00  | 2.0E+01                                      | 0.441 1  |                              |
| METALS  | Barlum                         | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                 | 8.55E+01  | 2.6E+03                                      | 50.100 1   |                              |
| METALS  | Beryllium                      | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                 | 7.66E-01  | 4.6E+00                                      | 0.363 1  |                              |
| METALS  | Cadmium                        | 5.2E+00                                  | 0.025               | Q.10                   | 1.40E+00                                 | 4.00E-01  | 5.2E+00                                      | 0.386 1  | U                            |
| METALS  | Calcium                        | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 495,000 1  |                              |
| METALS  | Chromium                       | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                                 | 3.01E+01  | 5.9E+03                                      | 14.900   |                              |
| METALS  | Cobalt                         | 1.5E+03                                  | 0.125               | 0.50                   | 7.23E+00                                 | 5.01E+00  | 1.00103                                      | 2,330  |                              |
| METALS  | Copper                         | 1.0E+03                                  | 0.150               | 0.00                   | 0,00ETUU                                 | 9.200400  | 1.06700                                      | 16600.000  | 1                            |
| METALS  | Iron                           |  | NA<br>0.500         | 11/4                   | 2 265+01                                 | 1 145+01  | 5.05+02                                      | 5.680  |                              |
| METALS  | Lead                           | 5.02+02                                  | 0.000               | 5.00<br>NA             | 2.202+01                                 | NA  | 0.02.02                                      | 549.000  | È                            |
| METALS  | Magnesium                      |  | 0.050               | 0.20                   | 1 25E+03                                 | 2 01E+02  | 1.7E+03                                      | 24.400   | Í                            |
| METALS  | Manganese                      | 1.7 2403                                 | 0.030               | 0.25                   | 8 19E-02                                 | 3 60E-01  | 2.5E-01                                      | 0.011  | ιυ                           |
| METALS  | Nickol                         | 1 9E+02                                  | 0.010               | 0.80                   | 6.98E+00                                 | 1.16E+01  | 1.9E+02                                      | 4.950  | 1                            |
| METALO  | Potassium                      | NE                                       | NA                  | NA                     | NA                                       | NA  | -  | 355.000  | 1                            |
| METALS  | Selenium                       | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                 | 5,57E+00  | 1.3E+02                                      | 0.216  | 1 U                          |
| METALS  | Silver                         | 4.7E+01                                  | 0.050               | 0.20                   | 3.10E-01                                 | 3.70E-01  | 4.7E+01                                      | 1.540  | 1 U                          |
| METALS  | Sodium                         | NE                                       | NA                  | NA                     | NA                                       | NA  | -  | 46.800   | 1                            |
| METALS  | Thallium                       | 2.0E+00                                  | 0.010               | 0.02                   | 4.70E-01                                 | NE  | 2.0E+00                                      | 0.053  | 1                            |
| METALS  | Vanadium                       | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01                                 | 4.46E+01  | 4.8E+01                                      | 30,300   | 1                            |
| METALS  | Zinc                           | 5.9E+03                                  | 0.625               | 2.50                   | 6.16E+01                                 | 2.02E+01  | 5.9E+03                                      | 15.900   |                              |
| PERC  | Perchlorate                    | 1.4E+01                                  | 0.005               | 0.01                   | NE                                       | NE  | 1.46+01                                      | 0.010  | 1 U                          |
| SOLIDS  | Percent Solids                 | NE                                       | NA                  | NA                     | NE                                       | NE  | E 05.00                                      | 92.500   |                              |
| VOLATILES   | 1,1,1,2-Tetrachloroethane      | 5.2E+00                                  | 0.0005              | 0.005                  | Na                                       | NE  | 5.2E+00                                      | 0.006  | 1 11                         |
| VOLATILES   | 1,1,1-Trichloroethane          | 2.3E+02                                  | 0.0005              | 0.005                  |  | NE  | 2.35702                                      | 0.000  | iŭ                           |
| VOLATILES   | 1,1,2,2-Tetrachloroethane      | 5.1E-01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 0.7E-01                                      | 0.000  | i ŭ                          |
| VOLATILES   | 1,1,2-Inchloroethane           | 9.75-01                                  | 0.0005              | 0.005                  | NE                                       | NË  | 8.95+01                                      | 0.006  | เบ้                          |
| VOLATILES   | 1,1-Dichloroethane             | 275+01                                   | 0.0010              | 0.005                  | NE                                       | NE  | 2.7E+01                                      | 0.006  | ίŨ                           |
| VOLATILES   | 1,1-Dichloropropene            | 9.9E-01                                  | 0.0000              | 0.005                  | NE                                       | NE  | 9.9E-01                                      | 0.006  | 1 Ū                          |
| VOLATILES   | 1.2.3-Trichlombenzene          | 4 2E+01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 4.2E+01                                      | 0.006  | 1 U                          |
| VOLATILES   | 1.2.3-Trichloropronane         | 9.2E-02                                  | 0.0010              | 0.005                  | NE                                       | NE  | 9.2E-02                                      | 0.006  | 1 U                          |
| VOLATILES   | 1.2.4-Trichlorobenzene         | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.45+02                                      | 0.006  | 1 U                          |
| VOLATILES   | 1,2,4-Trimethylbenzene         | 9.6E+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 9.6E+00                                      | 0.006  | 1 U                          |
| VOLATILES   | 1,2-Dibromo-3-chloropropane    | 3.5E-01                                  | 0.0020              | 0.005                  | NE                                       | NE  | 3.5E-01                                      | 0.006  | 1 U                          |
| VOLATILES   | 1,2-Dibromoethane              | 5.3E-02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 5.3E-02                                      | 0.006  | 1 0                          |
| VOLATILES   | 1,2-Dichlorobenzene            | 5.6E+01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 5.5E+01                                      | 0.000  | 1 0                          |
| VOLATILES   | 1,2-Dichloroethane             | 2.7E-01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 4.70-01                                      | 0.000  | 1 11                         |
| VOLATILES   | 1,2-Dichloropropane            | 1.8E+00                                  | 0.0005              | 0.005                  |  | NE  | 3.35+03                                      | 0.000  | 1 11                         |
| VOLATILES   | 1,2-Dimethylbenzene (0-Aylene) | 3.36+03                                  | 0.0005              | 0.005                  | NE                                       | NE  | 8.3E+00                                      | 0.006  | i ŭ                          |
| VOLATILES   | 1.3.5-mineurybenzene           | 5 16+00                                  | 0.0005              | 0.005                  | NE                                       | NË  | 5.1E+00                                      | 0.006  | 1 Ū                          |
| VOLATILES   | 1.3-Dichloropropaga            | 3.05+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 3.0E+00                                      | 0.006  | 1 U                          |
| VOLATILES   | 1 4-Dichlorobenzene            | 2.7E+01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 2.7E+01                                      | 0.006  | 1 U                          |
| VOLATILES   | 2.2-Dichleropropane            | 1.7E+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.7E+00                                      | 0.006  | 1 U                          |
| VOLATILES   | 2-Butanone                     | 2.6E+03                                  | 0.0025              | 0.010                  | NE                                       | NE  | 2.6E+03                                      | 0.011  | 1 U                          |
| VOLATILES   | 2-Chloroethyl vinyl ether      | 2.1E-01                                  | 0.0020              | 0.010                  | NE                                       | NE  | 2.1E-01                                      | 0.011  | 1 U                          |
| VOLATILES   | 2-Chlorotoluene                | 1.5E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.5E+02                                      | 0.006  | 1 0                          |
| VOLATILES   | 2-Hexanone                     | 6.2E+00                                  | 0.0025              | 0.010                  | NE                                       | NE  | 6.2E+00                                      | 0,011  | 1 U                          |
| VOLATILES   | 4-Chlorotoluene                | 3.4E-01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 3.4E-01                                      | 0.006  | 1 U                          |
| VOLATILES   | Acetone                        | 1.7E+02                                  | 0.0050              | 0.010                  | NE                                       | NE  | 1./E+02                                      | 0.011  | 1 U<br>1 U                   |
| VOLATILES   | Benzene                        | 8.8E-01                                  | 0.0005              | 0.005                  | NE                                       |   | 8.8E-01                                      | 0.006  | 1 11                         |
| VOLATILES   | Bromobenzene                   | 1.1E+01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 2.45+01                                      | 0.008  | 1 11                         |
| VOLATILES   | Bromochloromethane             | 2.42+01                                  | 0.0005              | 0.000                  | NE                                       |   | 1.05+01                                      | 0.006  | 1 0                          |
| VOLATILES   | Bromolom                       | 1.05+01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 3.4E+01                                      | 0.006  | 1 Ŭ                          |
| VOLATILES   | Bromorpethane                  | 3.45101                                  | 0.0003              | 0.010                  | NE                                       | NE  | 3.5E-01                                      | 0.011  | 1 Ŭ                          |
| VOLATILES   | Carbon disulfide               | 1 0E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.0E+02                                      | 0,006  | 1 U                          |
| VOLATILES   | Carbon tetrachloride           | 3.5E-01                                  | 0,0005              | 0.005                  | NE                                       | NE  | 3.5E-01                                      | 0.006  | 1 U                          |
| VOLATILES   | Chlorobenzene                  | 4.0E+01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 4.0E+01                                      | 0.006  | 1 U                          |

### 00066475

 Table 4-39

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-039

| (SUMP) = SUMP039<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% Uf<br>Surface | ground<br>ations in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP040-SB01<br>35-SMP40-SB01-02<br>9/14/2006<br>3.5 - 4 Ft<br>REG |
|--|---------------------------|--|---------------------|------------------------|---|--|--|--|
| Test Group   | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  |  |
| VOLATILES  | Chloroethane              | 1.1E+03                                  | 0.0010              | 0.010                  | NE                                      | NE   | 1.1E+03                                      | 0.006 1 11   |
| VOLATILES  | Chloroform                | 3.1E-01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.1E-01                                      |  |
| VOLATILES  | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NE                                      | NE   | 2.3E-01                                      | 0.011 1 0  |
| VOLATILES  | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.2E+02                                      | 0.006 1 0  |
| VOLATILES  | cis-1,3-Dichloropropene   | 1.28+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.2E+00                                      |  |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 7.6E+00                                      | 0.006 1 U  |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.9E+01                                      | 0.006 1 0  |
| VOLATILES  | Dichtorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                      | NE   | 2.2E+02                                      | 0.011 1 0  |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.3E+02                                      | 0.006 1 U  |
| VOLATILES  | Hexachtorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                      | · NE   | 1.6E+00                                      | 0.006 1 U  |
| VOLATILES  | Isonropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 5.4E+02                                      | 0.006 1 U  |
| VOLATILES  | m.p-Xvienes               | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.3E+02                                      | 0.006 1 U  |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NE                                      | NE   | 1.3E+03                                      | 0.011 1 U  |
| VOLATEES   | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                      | NE   | 8.7E+00                                      | 0.006 1 U  |
| VOLATILES  | Nanhihalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NE                                      | NE   | 1.8E+01                                      | 0.011 1 U  |
| VOLATILES  | n-BLITYI BENZENE          | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.7E+02                                      | 0.006 1 U  |
| VOLATILES  | D-DRORVI BENZENE          | 3 2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.2E+02                                      | 0.006 1 U  |
| VOLATILES  | N ISOPPOPYI TO LIENE      | 4 2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.2E+02                                      | 0.006 1 U  |
| VOLATILES  | SOC-BLITY BENZENE         | 3.05+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.0E+02                                      | 0.006 1 U  |
| VOLATILES  | Strong                    | 1 3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.3E+03                                      | 0.006 1 U  |
| VOLATILES  | tort BUTVI BENZENE        | 2 8E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.6E+02                                      | 0.006 1 U  |
| VOLATILES  | Totochloroothone          | 6.05+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 6.0E+00                                      | 0.006 t U  |
| VOLATILES  | Taluano                   | 1 1 = + 03                               | 0.0005              | 0.005                  | NE                                      | NE   | 1.1E+03                                      | 0.006 1 U  |
| VOLATILES  | trong 4.2 Dichlemethene   | 1.12.00                                  | 0.0000              | 0.005                  | NE                                      | NE   | 1.4E+02                                      | 0.006 1 U  |
| VOLATILES  | trans-1,2-Dichloroedene   | 195+00                                   | 0.0005              | 0.000                  | NE                                      | NE   | 1.8E+00                                      | 0.006 1 U  |
| VOLATILES  | Trickleresthese           | 3.75+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.7E+00                                      | 0.006 1 U  |
| VOLATILES  | Trichlorofueremethone     | 3.7 6700                                 | 0.0000              | 0.000                  | NE                                      | NE   | 2.6E+02                                      | 0.011 1 U  |
| VOLATILES  | Incherosuorometriane      | 2.02702                                  | 0.0010              | 0.01                   | 1                                       | NE   | 5.7E+01                                      | 0.011 1 U  |
| VULATILES  | vinyi acetate             | 0.72+01                                  | 0.0010              | 0.01                   | NE                                      | NE   | 3.6E-02                                      | 0.011 1 U  |
| VOLATILES  | VINVI CNIORAB             | 3.0E+02                                  | 0.0010              | 0.01                   |   |  | 0,02.02                                      |  |

Shaw Environmental, Inc.

### 00066476

### Table 4-40

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

.

.

Sump-040

| [SUMP] = SUMP040 |                                |            |             |              |                      |                |                    | 35SUMP040-SB01         |
|------------------|--------------------------------|------------|-------------|--------------|----------------------|----------------|--------------------|------------------------|
| LOCATION_CODE    |                                | TCEO       |             |              | Backo                | round          | Applicble          | 35-SMP40-SB01-02       |
| SAMPLE DATE      |                                | Risk-Based |             |              | Concentral           | tions in Soil  | TCEQ               | 9/14/2006              |
| DEPTH            |                                | Screening  | Method      | Method       | (95% UP              | L, mg/kg)      | Risk-Based         | 3.5-4.0                |
| SAMPLE_PURPOSE   |                                | Value      | Detection   | Quantitation | Surface              | Subsurface     | Screening          | REG                    |
| Test Group       | Parameter (Units = mg/kg)      | (RBSV) *   | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft           | 1.5 - 2.5 Ft   | Value              | Result DIL LQ VC       |
| METALS           | Aluminum                       | 1.6E+04    | 10.000      | 20.00        | 1.63E+04             | 2.08E+04       | 1.68+04            | 14300.000 1            |
| METALS           | Antimony                       | 7.3E+00    | 0.000       | 0.10         | 9.40E-01             | 5.545+00       | 2.05+01            | 0.100 0                |
| METALO           | Banum                          | 2.02+01    | 0.075       | 0.30         | 1.52E+02             | 8.55E+01       | 2.6E+03            | 50,100 1               |
| METALS           | Bendlium                       | 4.65+00    | 0.012       | 0.50         | 6.45E-01             | 7.66E-01       | 4.6E+00            | 0.363 1 J J            |
| METALS           | Cadmium                        | 5.2E+00    | 0.025       | 0.10         | 1.40E+00             | 4.00E-01       | 5.2E+00            | 0.386 1 U              |
| METALS           | Calcium                        | NE         | NA          | NA           | NA                   | NA             | -                  | 495.000 1              |
| METALS           | Chromium                       | 5.9E+03    | 0.100       | 0.40         | 2.66E+01             | 3.01E+01       | 5.9E+03            | 14,900 1               |
| METALS           | Cobalt                         | 1.5E+03    | 0.125       | 0.50         | 7.23E+00             | 5.61E+00       | 1.5E+03            | 2.330 1                |
| METALS           | Copper                         | 1.0E+03    | 0.150       | 0.60         | 5.55E+00             | 9.25E+UU       | 1.0E+03            | 2.000 I<br>16600.000 I |
| METALS           | load                           | 5 05±02    | 0.500       | 5.00         | 2 26 - + 01          | 1 14E+01       | 5.0E+02            | 5,680 1                |
| METALS           | Magnesium                      | NF         | NA          | NA           | NA                   | NA             |                    | 549,000 1              |
| METALS           | Manganese                      | 1.7E+03    | 0.050       | 0.20         | 1.25E+03             | 2.01E+02       | 1.7E+03            | 24.400 1               |
| METALS           | Mercury                        | 1.1E-02    | 0.010       | 0.25         | 8.19E-02             | 3.60E-01       | 2.5E-01            | 0.011 1 U              |
| METALS           | Nickel                         | 1.9E+02    | 0.200       | 0.80         | 6.98E+00             | 1.16E+01       | 1.9E+02            | 4.950 1                |
| METALS           | Potassium                      | NE         | NA          | NA           | NA                   | NA             | -                  | 355.000 1              |
| METALS           | Selenium                       | 1.36+02    | 0.100       | 0.20         | 3.48E+00<br>2.40E-04 | 5.57E+00       | 1.32+02            | 1.540 1 1              |
| METALS           | Silver                         | 4.72+01    | V.050       | 0.20<br>NA   | 5.10E-01             | 5.70E-01<br>NA | 4.72701            | 46.800 1               |
| METALS           | Thatlitum                      | 2.0E+00    | 0.010       | 0.02         | 4.70E-01             | NE             | 2.0E+00            | 0.053 1                |
| METALS           | Vanadium                       | 4.8E+01    | 0.125       | 0.50         | 3.21E+01             | 4.46E+01       | 4.8E+01            | 30.300 1               |
| METALS           | Zinc                           | 5.9E+03    | 0.625       | 2.50         | 6.16E+01             | 2.02E+01       | 5.9E+03            | 15.900 1               |
| PERC             | Perchlorate                    | 1.4E+01    | 0.005       | 0.01         | NE                   | NE             | 1.4E+01            | 0.010 1 U              |
| SOLIDS           | Percent Solids                 | NE         | NA          | NA           | NE                   | NE             |                    | 92.500 1               |
| VOLATILES        | 1,1,1,2-Tetrachloroethane      | 5.2E+00    | 0.0005      | 0.005        | NE                   | NE             | 5.2E+00            |                        |
| VOLATILES        | 1,1,1,1-Inchloroesiane         | 2.32702    | 0.0005      | 0.005        | NE                   | NE             | 5 1E-01            | 0,006 1 1              |
| VOLATILES        | 1 1 2-Trichloroethane          | 9.7E-01    | 0.0005      | 0.005        | NE                   | NE             | 9.7E-01            | 0.006 1 U              |
| VOLATILES        | 1.1-Dichloroethane             | 8.9E+01    | 0.0010      | 0.005        | NE                   | NE             | 8.9E+01            | 0.006 1 U              |
| VOLATILES        | 1,1-Dichloroethene             | 2.7E+01    | 0.0005      | 0.005        | NE                   | NE             | 2.7E+01            | 0.006 1 U              |
| VOLATILES        | 1,1-Dichloropropene            | 9.9E-01    | 0.0005      | 0,005        | NE                   | NE             | 9.9E-01            | 0.006 1 U              |
| VOLATILES        | 1,2,3-Trichlorobenzene         | 4.2E+01    | 0.0005      | 0.005        | NE                   | NE             | 4.2E+01            | 0.006 1 U              |
| VOLATILES        | 1,2,3-Trichloropropane         | 9.2E-02    | 0.0010      | 0.005        | NE                   | NE             | 9.2E-02<br>1.4E+02 | 0.006 1 0              |
| VOLATILES        | 1,2,4-1 nonioroperizene        | 9.65+00    | 0.0005      | 0.005        | NE                   |                | 9.6E+00            | 0.006 1 U              |
| VOLATILES        | 1.2-Dibromo-3-chloropropage    | 3.5E-01    | 0.0020      | 0.005        | NE                   | NE             | 3.5E-01            | 0.006 1 U              |
| VOLATILES        | 1,2-Dibromoethane              | 5.3E-02    | 0.0005      | 0.005        | NE                   | NE             | 5.3E-02            | 0.006 t U              |
| VOLATILES        | 1,2-Dichlorobenzene            | 5.6E+01    | 0.0005      | 0.005        | NE                   | NE             | 5.6E+01            | 0.006 1 U              |
| VOLATILES        | 1,2-Dichloroethane             | 2.7E-01    | 0.0005      | 0.005        | NE                   | NE             | 2.7E-01            | 0.006 1 U              |
| VOLATILES        | 1,2-Dichloropropane            | 1.8E+00    | 0.0005      | 0.005        | NE                   | NE             | 1.8E+00            |                        |
| VOLATILES        | 1,2-Dimethylbenzene (0-Aylene) | 3.3E+U3    | 0.0005      | 0.005        |                      | NE             | 8.3E+00            |                        |
| VOLATILES        | 1,3,54 mineurybenzene          | 5 1E+00    | 0.0005      | 0.005        | NE                   | NE             | 5.1E+00            | 0.006 1 U              |
| VOLATILES        | 1.3-Dichloropropane            | 3.0E+00    | 0.0005      | 0.005        | NE                   | NE             | 3.0E+00            | 0.006 1 U              |
| VOLATILES        | 1,4-Dichlorobenzene            | 2.7E+01    | 0.0005      | 0.005        | NE                   | NE             | 2.7E+01            | 0.006 1 U              |
| VOLATILES        | 2,2-Dichloropropane            | 1.7E+00    | 0.0005      | 0.005        | NE                   | NE             | 1.7E+00            | 0.006 1 U              |
| VOLATILES        | 2-Butanone                     | 2.6E+03    | 0.0025      | 0.010        | NE                   | NE             | 2.6E+03            | 0.011 1 U              |
| VOLATILES        | 2-Chloroethyl vinyl ether      | 2.1E-01    | 0.0020      | 0.010        | NE                   | NE             | 2.1E-01            |                        |
| VOLATILES        | 2-Gillorololuene<br>2-Hevenope | 6.25+02    | 0.0005      | 0.000        | NE                   | NE             | 6.2E+00            | 0.011 1 U              |
| VOLATILES        | 4-Chlorotoluene                | 3.4E-01    | 0.0005      | 0.005        | NE                   | NE             | 3.4E-01            | 0.006 1 U              |
| VOLATILES        | Acetone                        | 1.7E+02    | 0.0050      | 0.010        | NE                   | NE             | 1.7E+02            | 0.011 1 U              |
| VOLATILES        | Benzene                        | 8.8E-01    | 0.0005      | 0.005        | NE                   | NE             | 8.8E-01            | 0.006 1 U              |
| VOLATILES        | Bromobenzene                   | 1.1E+01    | 0.0005      | 0.005        | NE                   | NE             | 1.1E+01            | 0.006 1 U              |
| VOLATILES        | Bromochloromethane             | 2.4E+01    | 0.0005      | 0.005        | NE                   | NE             | 2.4E+01            | 0.006 1 U              |
| VOLATILES        | Bromodichloromethane           | 1.0E+01    | 0.0005      | 0.005        | NE                   | NE             | 1.0E+01            |                        |
| VOLATILES        | Bromomethane                   | 3.46+01    | 0.0005      | 0.005        | NE                   | NE .           | 3.4E+01            |                        |
| VOLATILES        | Carbon disulfide               | 1.0E+02    | 0.0005      | 0.005        | NE                   | NE             | 1.0E+02            | 0.006 1 U              |
| VOLATILES        | Carbon tetrachloride           | 3.5E-01    | 0.0005      | 0.005        | NE                   | NE             | 3.5E-01            | 0.006 1 U              |
| VOLATILES        | Chlorobenzene                  | 4.0E+01    | 0.0005      | 0.005        | NE                   | NE             | 4.0E+01            | 0.006 1 U              |
| VOLATILES        | Chloroethane                   | 1.1E+03    | 0.0010      | 0.010        | NE                   | NE             | 1.1E+03            | 0.011 1 U              |

Shaw Environmental, Inc.

### 00066477

| Table 4-40   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump-040   |

| [SUMP] = SUMP040<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>ations in Soll<br>PL, mg/kg}<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP040-SB01<br>35-SMP40-SB01-02<br>9/14/2006<br>3.5-4.0<br>REG |
|---|---------------------------|--|---------------------|------------------------|---|--|--|---|
| Test Group  | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL,)           | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ  |
| VOLATILES   | Chloroform                | 3.1E-01                                  | 0.0005              | 0.005                  | NE                                      | NĘ   | 3.1E-01                                      | 0.006 1 U   |
| VOLATILES   | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NE                                      | NE   | 2.3E-01                                      | 0.011 1 U   |
| VOLATILES   | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.2E+02                                      | 0.006 1 U   |
| VOLATILES   | cis-1,3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.2E+00                                      | 0.006 1 U   |
| VOLATILES   | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 7.6E+00                                      | 0.006 1 U   |
| VOLATILES   | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.9E+01                                      | 0.006 1 U   |
| VOLATILES   | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                      | NE   | 2.2E+02                                      | 0.011 1 U   |
| VOLATILES   | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.3E+02                                      | 0.006 1 U   |
| VOLATILES   | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.6E+00                                      | 0.006 1 U   |
| VOLATILES   | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 5.4E+02                                      | 0.006 1 U   |
| VOLATILES   | m,p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.3E+02                                      | 0.006 1 U   |
| VOLATILES   | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NE                                      | NE   | 1.3E+03                                      | 0.011 1 U   |
| VOLATILES   | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                      | NE   | 8.7E+00                                      | 0.006 1 U   |
| VOLATILES   | Naphthalene               | 1,8E+01                                  | 0.0005              | 0.01                   | NE                                      | NE   | 1.8E+01                                      | 0.011 1 U   |
| VOLATILES   | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.7E+02                                      | 0.006 1 U   |
| VOLATILES   | n-PROPYLBENZENE           | 3,2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.2E+02                                      | 0.006 1 U   |
| VOLATILES   | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.2E+02                                      | 0.006 1 U   |
| VOLATILES   | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.0E+02                                      | 0.006 1 U   |
| VOLATILES   | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.3E+03                                      | 0.005 1 U   |
| VOLATILES   | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.6E+02                                      | 0.006 1 U   |
| VOLATILES   | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 6.0E+00                                      | 0.006 1 U   |
| VOLATILES   | Toluene                   | 1.1E+03                                  | 0.0005              | 0,005                  | NE                                      | NE   | 1.1E+03                                      | 0.006 1 U   |
| VOLATILES   | trans-1.2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NÉ                                      | NE   | 1.4E+02                                      | 0.006 1 U   |
| VOLATILES   | trans-1.3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.8E+00                                      | 0.006 1 U   |
| VOLATILES   | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.7E+00                                      | 0.006 1 U   |
| VOLATILES   | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 2.6E+02                                      | 0.011 1 U   |
| VOLATILES   | Vinvl acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NE                                      | NE   | 5.7E+01                                      | 0.011 1 U   |
| VOLATILES   | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 3.6E-02                                      | 0.011 1 U   |

Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, TO No. DS02 Longtrom Army Ammunition Plant, Karnack, Texas

Shaw Environmental, Inc.

### 00066478

Table 4-41 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-041

| [SUMP] = SUMP041<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                                | TCEQ<br>Risk-Based<br>Screening | Method      | Method       | Backo<br>Concentra<br>(95% UP | ground<br>tions in Solf<br>'L, mg/kg) | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP041-SB01<br>35-SMP41-SB01-01<br>9/12/2006<br>0.5 Ft<br>BEG | 35SUMP041-SB01<br>35-SMP41-SB01-02<br>9/12/2006<br>3.5 - 4 Ft<br>REG |
|---|--------------------------------|---------------------------------|-------------|--------------|-------------------------------|---------------------------------------|--|--|--|
| SAMPLE_PORPOSE  |                                | value                           | Detection   | Quanturation | Sunace                        | Subsullace                            | Ourseining                                   |  | 0  |
| Test Group  | Parameter (Units = mg/kg)      | (RBSV)                          | Limit (MOL) | Limit (MQL)  | 0 - 0.5 Ft                    | 1.5 - 2.5 Ft                          | Value  | Result Dit LQ VQ   | ZADO DOD 1   |
| METALS  | Aluminum                       | 1.6E+04                         | 10,000      | 20.00        | 1.63E+04                      | 1.55E+05                              | 1.0E+04                                      | 0.110 1 11   | 0.113 1 1  |
| METALS  | Antimony                       | 7.3E+00                         | 0.500       | 0.10         | 9.406-01                      | 2.005+01                              | 2.05+01                                      | 2,800 1  | 0.945 1  |
| METALS  | Arsenic                        | 2.05+01                         | 0.075       | 0.30         | 4.612700                      | 2.000+01                              | 2.65+03                                      | 70 100 1   | 34,200 1   |
| METALS  | Banum<br>Republicam            | 2.0E+03                         | 0.075       | 0.50         | 6.455-01                      | 4.56E+01                              | 4.6E+00                                      | 0.378 1 J J  | 0.334 1 J J  |
| METALO  | Codmium                        | 5.2E+00                         | 0.025       | 0.10         | 1.40E+00                      | 2.40E+02                              | 5.2E+00                                      | 0,116 1 J J  | 0.064 1 J J  |
| METALS  | Calcium                        | NE                              | NA          | NA           | NA                            | NA                                    |  | 680.000 1  | 1200.000 1   |
| METALS  | Chromium                       | 5.9E+03                         | 0.100       | 0.40         | 2.66E+01                      | 5.93E+04                              | 5.9E+03                                      | 24.200 1   | 7.540 1  |
| METALS  | Cobalt                         | 1.5E+03                         | 0.125       | 0.50         | 7.23E+00                      | 1.53E+04                              | 1.5E+03                                      | 2.270 1  | 6.420 1  |
| METALS  | Copper                         | 1.0E+03                         | 0.150       | 0.60         | 5.55E+00                      | 1.02E+04                              | 1.0E+03                                      | 4.100 1  | 3.360 1  |
| METALS  | Iron                           | NE                              | NA          | NA           | NA                            | NA                                    | - 0 <b>-</b> 00                              | 15500.000 1  | 7270.000 1   |
| METALS  | Lead                           | 5.0E+02                         | 0.500       | 5.00         | 2.266+01                      | 5.00E+02                              | 5.06+02                                      | 0.990 I<br>507.000 4   | 1240.000 1   |
| METALS  | Magnesium                      | NE                              | NA          | NA<br>0.00   |                               | 1 695+04                              | 175+03                                       | 82.400 1   | 37 300 1   |
| METALS  | Manganese                      | 1.7 =+03                        | 0.050       | 0.20         | 8 195-02                      | 1.08E-01                              | 2.5E-01                                      | 0.020 1 .1 .1  | 0.011 1 U  |
| METALS  | Nickel                         | 1.12-02                         | 0.010       | 0.80         | 6.98E+00                      | 1.87E+03                              | 1.9E+02                                      | 5.810 1  | 10.700 1   |
| METALS  | Potassium                      | NE                              | NA          | NA           | NA                            | NA                                    | -  | 340.000 1  | 210.000 1  |
| METALS  | Selenium                       | 1.3E+02                         | 0.100       | 0.20         | 3.48E+00                      | 1.27E+03                              | 1.3E+02                                      | 0.900 1  | 0.160 1 J J  |
| METALS  | Silver                         | 4.7E+01                         | 0.050       | 0.20         | 3.10E-01                      | 4.68E+02                              | 4.7E+01                                      | 1.560 1 U  | 1.640 1 U  |
| METALS  | Sodium                         | NE                              | NA          | NA           | NA                            | NA                                    | -  | 18.000 1 J J   | 284.000 1  |
| METALS  | Thallium                       | 2.0E+00                         | 0.010       | 0.02         | 4.70E-01                      | 1.49E+02                              | 2.0E+00                                      | 0.072 1  | 0.079 1  |
| METALS  | Vanadium                       | 4.8E+01                         | 0.125       | 0.50         | 3.21E+01                      | 4.84E+02                              | 4.85+01                                      | 31.100 1   | 14,000 1   |
| METALS  | Zinc                           | 5.9E+03                         | 0.625       | 2.50         | 0.10E+01                      | 5.94C+04<br>4 20E+02                  | 0.9ET03                                      | 0.010 1 1  | 0.050 5 11   |
| PERC  | Perchiorate<br>Bergopt Solida  | 1.4E+01                         | 0.005       | 0.01<br>NA   | NE                            | 1.395+02                              | -  | 90,100 1   | 88,400 1   |
| VOLATILES   | 1 1 1 2-Tetrachlomethane       | 5 2E+00                         | 0 0005      | 0.005        | NE                            | 5.17E+01                              | 5.2E+01                                      |  | 0.005 1 U  |
| VOLATILES   | 1.1.1-Trichloroethane          | 2.3E+02                         | 0.0005      | 0.005        | NE                            | 2.32E+03                              | 2.3E+03                                      |  | 0.005 1 U  |
| VOLATILES   | 1.1.2.2-Tetrachloroethane      | 5.1E-01                         | 0.0005      | 0.005        | NE                            | 5.08E+00                              | 5.1E+00                                      |  | 0.005 1 U  |
| VOLATILES   | 1,1,2-Trichloroethane          | 9.7E-01                         | 0.0005      | 0.005        | NE                            | 9.69E+00                              | 9.7E+00                                      |  | 0.005 1 U  |
| VOLATILES   | 1,1-Dichloroethane             | 8.9E+01                         | 0.0010      | 0.005        | NE                            | 8.892+02                              | 8.9E+02                                      |  | 0.005 1 U  |
| VOLATILES   | 1,1-Dichloroethene             | 2.78+01                         | 0.0005      | 0.005        | NE                            | 2.68E+02                              | 2.7E+02                                      |  | 0.005 1 0  |
| VOLATILES   | 1,1-Dichloropropene            | 9.9E-01                         | 0.0005      | 0.005        | NE                            | 9,92E-01                              | 9.9E-01                                      |  | 0.005 1 0  |
| VOLATILES   | 1,2,3-Trichlorobenzene         | 4.2E+01                         | 0.0005      | 0.005        |                               | 4.20E+02                              | 4,2E+02                                      |  | 0.005 1 1  |
| VOLATILES   | 1,2,3-Trichloropropane         | 9.25-02                         | 0.0010      | 0.005        | NE                            | 1365+02                               | 1.4E+03                                      |  | 0.005 1 U  |
| VOLATILES   | 1,2,4-Trimethylbenzene         | 9.6E+00                         | 0.0005      | 0.005        | NE                            | 9.60E+01                              | 9.6E+01                                      |  | 0.005 1 U  |
| VOLATILES   | 1.2.4 minetry benzene          | 3.5E-01                         | 0.0020      | 0.005        | NE                            | 3,48E-01                              | 3.5E-01                                      |  | 0.005 1 U  |
| VOLATILES   | 1.2-Dibromoethane              | 5.3E-02                         | 0.0005      | 0.005        | NE                            | 5.31E-02                              | 5.3E-02                                      |  | 0.005 1 U  |
| VOLATILES   | 1,2-Dichlorobenzene            | 5.6E+01                         | 0.0005      | 0.005        | NE                            | 5.61E+02                              | 5.6E+02                                      | 1  | 0.005 1 U  |
| VOLATILES   | 1,2-Dichloroethane             | 2.7E-01                         | 0.0005      | 0.005        | NE                            | 2.69E-01                              | 2.7E-01                                      | 1  | 0.005 1 U  |
| VOLATILES   | 1,2-Dichloropropane            | 1.8E+00                         | 0.0005      | 0.005        | NE                            | 9.42E+00                              | 9.4E+00                                      |  | 0.005 1 U  |
| VOLATILES   | 1,2-Dimethylbenzene (o-Xylene) | 3.3E+03                         | 0.0005      | 0.005        | NE                            | 3.276+04                              | 3.3E+04                                      |  | 0.005 1 0  |
| VOLATILES   | 1,3,5-Inmethylbenzene          | 8.3E+00<br>6.1E+00              | 0,0005      | 0.005        |                               | 5.05E+01                              | 515+01                                       |  | 0.005 1 U  |
| VOLATILES   | 1.3-Dichloropropage            | 3.0E+00                         | 0.0005      | 0.005        | NE                            | 2.98E+01                              | 3.0E+01                                      |  | 0.005 1 U  |
| VOLATILES   | 1 4-Dichlorobenzene            | 2.7E+01                         | 0.0005      | 0.005        | NE                            | 2.67E+02                              | 2.7E+02                                      |  | 0.005 1 U  |
| VOLATILES   | 2.2-Dichloroproparie           | 1.7E+00                         | 0.0005      | 0.005        | NE                            | 1.70E+01                              | 1.7E+01                                      |  | 0.005 1 U  |
| VOLATILES   | 2-Butanone                     | 2.6E+03                         | 0.0025      | 0.010        | NE                            | 2.61E+04                              | 2.6E+04                                      |  | 0.011 1 U  |
| VOLATILES   | 2-Chloroethyl vinyl ether      | 2.1E-01                         | 0.0020      | 0.010        | NE                            | 2.14E+00                              | 2.1E+00                                      |  | 0.011 1 U  |
| VOLATILES   | 2-Chlorotoluene                | 1.5E+02                         | 0.0005      | 0.005        | NE                            | 1.54E+03                              | 1.5E+03                                      | ł  | 0.005 1 U  |
| VOLATILES   | 2-Hexanone                     | 6.2E+00                         | 0.0025      | 0.010        | NE                            | 6.20E+01                              | 6.2E+01                                      |  | 0.011 1 0  |
| VOLATILES   | 4-Chlorotoluene                | 3.4E-01                         | 0.0005      | 0.005        | NE                            | 3.44E+00                              | 1 75+00                                      |  | 0.005 1 0  |
| VOLATILES   | Acetone                        | 1.76+02                         | 0.0050      | 0.010        | NE                            | 8.825-01                              | 8.85-01                                      |  | 0.011 1 U  |
| VOLATILES   | Bromobenzene                   | 1 1 =+01                        | 0.0003      | 0.005        | NE                            | 1.12E+02                              | 1.1E+02                                      |  | 0.005 1 U  |
| VOLATILES   | Bromochloromethane             | 2.4F+01                         | 0,0005      | 0,005        | NE                            | 2.41E+02                              | 2.4E+02                                      |  | 0.005 1 U  |
| VOLATILES   | Bromodichloromethane           | 1.0E+01                         | 0.0005      | 0.005        | NE                            | 1.03E+01                              | 1.0E+01                                      |  | 0.005 1 U  |
| VOLATILES   | Bromotorm                      | 3.4E+01                         | 0.0005      | 0.005        | NE                            | 3.35E+01                              | 3.4E+01                                      |  | 0.005 1 U  |
| VOLATILES   | Bromomethane                   | 3.5E-01                         | 0.0010      | 0.010        | NE                            | 3.49E+00                              | 3.5E+00                                      |  | 0.011 1 U  |
| VOLATILES   | Carbon disulfide               | 1.0E+02                         | 0.0005      | 0.005        | NE                            | 1.03E+03                              | 1.0E+03                                      |  | 0.005 1 U  |
| VOLATILES   | Carbon tetrachloride           | 3.5E-01                         | 0.0005      | 0.005        | NE                            | 3.53E-01                              | 3.5E-01                                      |  | 0.005 1 U  |
| VOLATILES   | Chloropenzene                  | 4.06+01                         | 0.0005      | 0.005        | NE                            | 3.985402                              | 4.06+02                                      |  | 0.003 1 0  |
| VOLATILES   | Chloroform                     | 1.1E+03<br>3.1E-01              | 0.0010      | 0.010        | NE                            | 3.06E-01                              | 3.16-01                                      |  | 0.005 1 1  |
| Y YEAHEED   | QUINT                          | Q, ( C-V )                      | 0.0000      | 0.000        |                               | 0.000-01                              |  | •  |  |

Shaw Environmental, Inc.

## 00066479

Table 4-41 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-041

|   |                           |  |                     |                        | •                                       |   |  | 1                                       |  |   |                                   |           |    |
|---|---------------------------|--|---------------------|------------------------|---|---|--|---|--|---|-----------------------------------|-----------|----|
| [SUMP] = SUMP04<br>LOCATIONCODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOS | E                         | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMF<br>35-SMP4<br>9/12<br>0.5 -<br>F | P041-SB01<br>41-SB01-01<br>2/2006<br>-0 .5 Ft<br>REG | 35SUMP04<br>35-SMP41-<br>9/12/2<br>3.5 - 4<br>RE6 | 41-SE<br>SB01<br>006<br>4 Ft<br>3 | 01<br>-02 |    |
| Test Group  | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result                                  | DIL LQ VQ  | Result  | DIL                               | <u>LQ</u> | VQ |
| VOLATILES   | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NE                                      | 2.27E+00  | 2.3E+00                                      |   |  | 0.011   | 1                                 | U         |    |
| VOLATILES   | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NE                                      | 1.15E+03  | 1.2E+03                                      |   |  | 0.005   | 1                                 | U         |    |
| VOLATILES   | cis-1,3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                  | NE                                      | 1.19E+01  | 1.2E+01                                      |   |  | 0.005   | 1                                 | Ų         |    |
| VOLATILES   | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NE                                      | 7.62E+01  | 7.6E+01                                      |   |  | 0.005   | 1                                 | U         |    |
| VOLATILES   | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                      | 1.88E+02  | 1.9E+02                                      |   |  | 0.005   | 1                                 | U         |    |
| VOLATILES   | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                      | 2.16E+03  | 2.2E+03                                      |   |  | 0.011   | 1                                 | U         |    |
| VOLATILES   | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                      | 4.31E+03  | 4.3E+03                                      |   |  | 0.005   | 1                                 | U         |    |
| VOLATILES   | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                      | 1.58E+01  | 1.6E+01                                      |   |  | 0.005   | 1                                 | U         |    |
| VOLATILES   | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                      | 5.38E+03  | 5.4E+03                                      |   |  | 0.005   | 1                                 | U         |    |
| VOLATILES   | m.p-Xylenes               | 2.3E+02                                  | 0.0005              | 0,005                  | NE                                      | 3.26E+03  | 3.3E+03                                      |   |  | 0.005   | 1                                 | U         |    |
| VOLATILES   | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NE                                      | 1.29E+04  | 1.3E+04                                      |   |  | 0.011   | 1                                 | U         |    |
| VOLATILES   | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                      | 8.68E+00  | 8.7E+00                                      |   |  | 0.005   | 1                                 | υ         |    |
| VOLATILES   | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NE                                      | 1.81E+02  | 1.8E+02                                      |   |  | 0.011   | 1                                 | Ų.        |    |
| VOLATILES   | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                      | 2.70E+03  | 2.7E+03                                      |   |  | 0.005   | 1                                 | U         |    |
| VOLATILES   | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NE                                      | 3.21E+03  | 3.2E+03                                      |   |  | 0.005   | 1                                 | Ų         |    |
| VOLATILES   | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                      | 4.20E+03  | 4.2E+03                                      |   |  | 0.001   | 1                                 | J         | J  |
| VOLATILES   | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                      | 3.00E+03  | 3.0E+03                                      |   |  | 0.005   | 1                                 | Ų         |    |
| VOLATILES   | Styrene                   | 1.35+03                                  | 0.0005              | 0.005                  | NE                                      | 1.31E+04  | 1.3E+04                                      |   |  | 0.005   | 1                                 | U         |    |
| VOLATE ES   | tert-BLITYI BENZENE       | 2 6E+02                                  | 0.0005              | 0.005                  | NE                                      | 2.61E+03  | 2.6E+03                                      |   |  | 0.005   | 1                                 | U         |    |
| VOLATIES  | Tetrachloroethene         | 6 0E+00                                  | 0.0005              | 0 005                  | NE                                      | 6.02E+00  | 6.0E+00                                      |   |  | 0.005   | 1                                 | Ú.        |    |
| VOLATILES   | Tolyene                   | 1 1 = +03                                | 0.0005              | 0.005                  | NE                                      | 1.08E+04  | 1.1E+04                                      |   |  | 0.005   | 1                                 | Ū.        |    |
| VOLATHES  | Irans-1 2-Dickloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | 1.38E+03  | 14E+03                                       |   |  | 0.005   | 1                                 | U         |    |
| VOLATIES  | trong 1 3 Dichloropropane | 1.85+00                                  | 0.0005              | 0.005                  | NE                                      | 1.83E+01  | 1.85+01                                      |   |  | 0.005   | 1                                 | Ŭ         |    |
| VOLATILES   | Trichloroothono           | 375+00                                   | 0.0005              | 0.005                  | NE                                      | 373E+00   | 3.7E+00                                      |   |  | 0.005   | i                                 | บี        |    |
| VOLATILES   | Trichlorofuoromethane     | 2.6E+02                                  | 0.0000              | 0.01                   | NE                                      | 2.63E+03  | 2.6E+03                                      |   |  | 0 011   | 1                                 | ū         |    |
| VOLATILES   | Vind acotate              | 5.75+01                                  | 0.0010              | 0.01                   | NE                                      | 574 =+02  | 575+02                                       |   |  | 0.011   | 1                                 | ŭ         |    |
| VOLATILES   | Vinyi accurc              | 3.10101                                  | 0.0010              | 0.01                   | NE                                      | 3.645-02  | 3.65-02                                      |   |  | 0.011   | ÷                                 | ũ         |    |
|   |                           | J.UE*UZ                                  | 0.0010              | 0.01                   |   | 0.0-12-02   | V.V.   |   |  | 0.011   |                                   |           | _  |

### 00066480

Table 4-42

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-042

|  |   |                     |             |              |                | ·····                |                    |   |   |  |
|--|---|---------------------|-------------|--------------|----------------|----------------------|--------------------|---|---|--|
| [SUMP] = SUMP042<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_NO |   | TCEQ<br>Pick Bacad  |             |              | Backg          | round                | Applicble          | 35SUMP042-SB01<br>35-SMP42-SB01-01<br>9/12/2006 | 35SUMP042-SB01<br>35-SMP42-SB01-02<br>9/12/2006 | 35SUMP042-SB01<br>35-SMP42-SB01-02-QC<br>9/12/2006 |
| DEPTH  |   | Screening           | Method      | Method       | (95% UPL       | ., mg/kg)            | Risk-Based         | 00.5  | 3.5 - 4 Ft                                      | 3.5 - 4 Ft   |
| SAMPLE_PURPOSE   |   | Value               | Detection   | Quantitation | Surface        | Subsurface           | Screening          | REG   | REG   | FU<br>Baselt DILLO VO                              |
| Test Group<br>METALS   | Parameter (Units = mg/kg)<br>Aluminum                 | (RBSV) -<br>1.6E+04 | 10.000      | 20.00        | 1.63E+04       | 2.08E+04             | 1.6E+04            | 7890.000 1                                      | 19200.000 1                                     | 18200.000 1  |
| METALS   | Antimony  | 7.3E+00             | 0.500       | 0.10         | 9.40E-01       | 1.60Ë+00             | 7.3E+00            | 0.110 1 U UJL                                   | 0.107 1 J J                                     | 0.115 1 U  |
| METALS   | Arsenic   | 2.0E+01<br>2.6E+03  | 0,075       | 0.30         | 4.81E+00       | 5.54E+00<br>8.55E+01 | 2.0E+01<br>2.6E+03 | 5.660 1<br>146.000 1 .IH                        | 1.340 1<br>38.000 1 JH                          | 2.220 1 32.500 1                                   |
| METALS   | Beryllium   | 4.6E+00             | 0.012       | 0.50         | 6.45E-01       | 7.66E-01             | 4.6E+00            | 1   | 0.516 1   | 0.469 1  |
| METALS   | Cadmium   | 5.2E+00             | 0.025       | 0.10         | 1.40E+00       | 4.00E-01             | 5.2E+00            | 0.303 1 J J                                     | 0.065 1 J J                                     | 0.058 1 J J  |
| METALS   | Calcium   | NE<br>5 0E±03       | NA<br>0.100 | NA<br>0.40   | NA<br>2.66E+01 | NA<br>3.015+01       | <br>5 9E+03        | 1840.000 1<br>77.100 1                          | 898.000 1<br>17.500 1 .IH                       | 844.000 1<br>19.400 1                              |
| METALS   | Cobalt  | 1.5E+03             | 0.125       | 0.50         | 7.23E+00       | 5.61E+00             | 1.5E+03            | 3.770 1   | 2.840 1   | 2.540 1  |
| METALS   | Copper  | 1.0E+03             | 0.150       | 0.60         | 5,55E+00       | 9.25E+00             | 1.0E+03            | 8.330 1   | 4.220 1   | 4.960 1  |
| METALS   | tron  | NE<br>5.0E±02       | NA<br>0.500 | NA<br>5.00   | NA<br>2 26E+01 | NA<br>1 14E+01       | -<br>5 0E+02       | 20.400 1  | 24100.000 1<br>8.500 1                          | 23200.000 1<br>9.490 1                             |
| METALS   | Magnesium   | NE                  | NA          | NA           | NA             | NA                   |                    | 492.000 1                                       | 1030.000 1                                      | 1040.000 1   |
| METALS   | Manganese   | 1.7E+03             | 0.050       | 0.20         | 1.25E+03       | 2.01E+02             | 1.7E+03            | 228.000 1 JL                                    | 28.300 1 JL                                     | 12.500 1 J   |
| METALS   | Mercury   | 1.1E-02             | 0.010       | 0.25         | 8,19E-02       | 3.60E-01             | 2.5E-01            | 0.062 1 J J<br>5320 1 IH                        | 0.124 1 J J<br>7300 1 JH                        | 0.115 1 J J<br>7.160 1                             |
| METALS   | Potasslum   | NE                  | NA          | NA           | NA             | NA                   |                    | 309.000 1 JH                                    | 429.000 1 JH                                    | 363.000 1  |
| METALS   | Selenium  | 1.3E+02             | 0.100       | 0.20         | 3.48E+00       | 5.57E+00             | 1.3E+02            | 0.403 1 JL                                      | 0.213 1 J JL                                    | 2.420 1 J  |
| METALS   | Silver  | 4.7E+01             | 0.050       | 0.20         | 3.10E-01       | 3.70E-01             | 4.7E+01            | 1.560 1 U                                       | 1.650 1 U                                       | 1.600 1 U  |
| METALS   | Thallium  | 1.5E+02             | 0.010       | 0.02         | 4.70E-01       | NE                   | 1.5E+02            | 0.063 1   | 0.101 1   | 0.110 1  |
| METALS   | Vanadium  | 4.8E+01             | 0.125       | 0.50         | 3.21E+01       | 4.46E+01             | 4.8E+01            | 24.800 1 JH                                     | 31.800 1 JH                                     | 33.600 1   |
| METALS   | Zinc  | 5.9E+03             | 0.625       | 2.50         | 6.16E+01       | 2.02E+01             | 5.9E+03            |   | 27.100 1  | 20.000 1   |
| SOLIDS   | Percent Solids  | NE                  | NA          | NA.          | NE             | NE                   |                    | 90.800 1  | 86.800 1  | 86.100 1   |
| VOLATILES  | 1,1,1,2-Tetrachloroethane                             | 5.2E+00             | 0.0005      | 0.005        | NE             | NE                   | 5.2E+00            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,1,1-Trichloroethane                                 | 2.3E+02             | 0.0005      | 0.005        | NE             | NE                   | 2.3E+02            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,1,2,2-1 etractioroethane                            | 9.7E-01             | 0.0005      | 0.005        | NE             | NE                   | 9.7E-01            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,1-Dichloroethane                                    | 8.9E+01             | 0.0010      | 0.005        | NE             | NE                   | 8.9E+01            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,1-Dichloroethene                                    | 2.7E+01             | 0.0005      | 0.005        | NE             | NË                   | 2.7E+01            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,1-Dichloropropene<br>1,2,3-Trichloropenzene         | 9.9E-01<br>4 2E+01  | 0.0005      | 0.005        | NE             | NE                   | 4.2E+01            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,2,3-Trichloropropane                                | 9.2E-02             | 0.0010      | 0.005        | NE             | NE                   | 9.2E-02            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,2,4-Trichlorobenzene                                | 1.4E+02             | 0.0005      | 0.005        | NE             | NE                   | 1.4E+02            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES<br>VOLATILES                                       | 1,2,4-Trimethyloenzene<br>1,2-Dibromo-3-chloropropane | 9.6E+00<br>3.5E-01  | 0.0005      | 0.005        | NE             | NE                   | 9.6E+00<br>3.5E-01 |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,2-Dibromoethane                                     | 5.3E-02             | 0.0005      | 0.005        | NE             | NE                   | 5.3E-02            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,2-Dichlorobenzene                                   | 5.6E+01             | 0.0005      | 0.005        | NE             | NE                   | 5.6E+01            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,2-Dichloroemane                                     | 2.7E-01             | 0.0005      | 0.005        | NE             | NE                   | 2.7E-01<br>1.8E+00 |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylene)                        | 3.3E+03             | 0.0005      | 0.005        | NE             | NE                   | 3.3E+03            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,3,5-Trimethylbenzene                                | 8.3E+00             | 0.0005      | 0.005        | NE             | NE                   | 8.3E+00            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,3-Dichloropenzene<br>1,3-Dichloropropane            | 5.1±+00<br>3.0E+00  | 0.0005      | 0.005        | NE             | NE                   | 3.0E+00            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 1,4-Dichlorobenzene                                   | 2.7E+01             | 0.0005      | 0.005        | NE             | NE                   | 2.7E+01            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 2,2-Dichloropropane                                   | 1.7E+00             | 0.0005      | 0.005        | NE             | NE                   | 1.7E+00            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 2-Bulanone<br>2-Chlomethyl vinyl ether                | 2.0E+03<br>2.1E-01  | 0.0025      | 0.010        | NE             | NE                   | 2.0E+03<br>2.1E-01 |   | 0.010 1 U                                       | 0.012 1 U  |
| VOLATILES  | 2-Chlorotoluene                                       | 1.5E+02             | 0.0005      | 0.005        | NE             | NE                   | 1.5E+02            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | 2-Hexanone  | 6.2E+00             | 0.0025      | 0.010        | NE             | NE                   | 6.2E+00            |   | 0.010 1 U                                       | 0.012 1 U UJ                                       |
| VOLATILES  | 4-Chlorotoluene                                       | 3.4E-01<br>1.7E+02  | 0.0005      | 0.005        | NE             | NE                   | 3.4E+01<br>1.7E+02 |   | 0.005 1 0                                       | 0.000 I U<br>0.012 I U UJ                          |
| VOLATILES  | Benzene   | 8.8E-01             | 0.0005      | 0.005        | NE             | NE                   | 8.8E-01            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | Bromobenzene  | 1.1E+01             | 0.0005      | 0.005        | NE             | NE                   | 1.1E+01            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | Bromochteromethane                                    | 2.4E+01<br>1.0E+01  | 0.0005      | 0.005        | NE             | NE<br>NE             | 2.4E+01<br>1.0E+01 |   | 0.005 1 0                                       | 0.006 1 U  |
| VOLATILES  | Bromoform   | 3.4E+01             | 0.0005      | 0.005        | NE             | NE                   | 3.4E+01            |   | 0.005 1 U                                       | 0.006 1 U  |
| VOLATILES  | Bromomethane  | 3.5E-01             | 0.0010      | 0.010        | NE             | NE                   | 3.5E-01            |   | 0.010 1 U                                       | 0.012 1 U  |
| VOLATILES  | Carbon disultide                                      | 1.0E+02<br>3.5E-01  | 0.0005      | 0.005        | NE             | NE                   | 1.0E+02<br>3.5F-01 |   | 0.005 1 0                                       | 0.006 1 U  |
| VOLATILES  | Chlorobenzene   | 4.0E+01             | 0.0005      | 0.005        | NE             | NE                   | 4.0E+01            |   | 0.005 1 U                                       | 0.006 1 U  |

Shaw Environmental, Inc.

### 00066481

| Table 4-42   |  |
|--|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |  |

1

Sump-042

|  |                           |  |                     |                        |   | • .  | -  |                             |   |   |  |  |                                     |            |
|--|---------------------------|--|---------------------|------------------------|---|--|--|-----------------------------|---|---|--|--|-------------------------------------|------------|
| [SUMP] = SUMP042<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backg<br>Concentrati<br>(95% UPI<br>Surface | round<br>ions in Soil<br>_, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUM<br>35-SMP<br>9/1<br>0 | P042-SB01<br>42-SB01-01<br>2/2006<br>0.5<br>REG | 35SUMP0<br>35-SMP42<br>9/12/<br>3.5 -<br>RE | 942-SB01<br>-SB01-02<br>2006<br>4 Ft<br>:G | 35SUMP0<br>35-SMP42-S<br>9/12/2<br>3.5 -<br>FI | 42-SB<br>801-0<br>2006<br>4 Ft<br>0 | 01<br>2-QC |
| Test Group   | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                                  | 1.5 - 2.5 Ft                                     | Value  | Result                      | DIL LO VO                                       | Result                                      | <u>DIL LQ VQ</u>                           | Result   |                                     |            |
| VOLATILES  | Chloroethane              | 1,1E+03                                  | 0.0010              | 0.010                  | NE  | NE   | 1.1E+03                                      |                             |   | 0.010                                       | 1 0  | 0.012  | 4                                   |            |
| VOLATILES  | Chloroform                | 3.1E-01                                  | 0.0005              | 0.005                  | NE  | NE   | 3.1E-01                                      |                             |   | 0.005                                       | 1 0  | 0.000  | -                                   | iii ii     |
| VOLATILES  | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NE  | NE   | 2.3E-01                                      |                             |   | 0.010                                       | 1 0  | 0,012  | 4                                   | U II       |
| VOLATILES  | cls-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 1.2E+02                                      |                             |   | 0.005                                       | 1 0  | 0.000  | 1                                   | N.         |
| VOLATILES  | cis-1,3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 1.2E+00                                      |                             |   | 0.005                                       | 1 0  | 0.006  | 1                                   | 1          |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 7.6E+00                                      |                             |   | 0.005                                       | 1 0  | 0.000  | 1                                   | U U        |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE  | NE   | 1.9E+01                                      |                             |   | 0.005                                       | 1 0  | 0.000  | 1                                   |            |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE  | NE   | 2.2E+02                                      |                             |   | 0.010                                       | 1 0  | 0.012  | 4                                   | U U        |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 4.3E+02                                      |                             |   | 0.005                                       | 1 0  | 0.000  | 1                                   |            |
| VOLATILES  | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 1.6E+00                                      |                             |   | 0.005                                       | 1 0  | 0.006  | 1                                   | N.         |
| VOLATILES  | (sopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 5.4E+02                                      |                             |   | 0.005                                       | 1 0  | 0.005  | 1                                   |            |
| VOLATILES  | m,p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 2.3E+02                                      |                             |   | 0.005                                       | 1 U  | 0.005  | 1                                   |            |
| VOLATILES  | Methyl Isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NE  | NE   | 1.3E+03                                      |                             |   | 0.010                                       | 1 U  | 0.012  | 1                                   | U<br>U     |
| VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE  | NE   | 8.7E+00                                      |                             |   | 0.005                                       | 1 U  | 0.006  | 1                                   | U.         |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NË  | NE   | 1.8E+01                                      |                             |   | 0.010                                       | 1 U  | 0.012  | 1                                   | U          |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 2.7E+02                                      |                             |   | 0.005                                       | 1 U  | 0.006  | 1                                   | U.         |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 3.2E+02                                      |                             |   | 0.005                                       | 1 U  | 0.006  | 1                                   | U          |
| VOLATILES  | D-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 4.2E+02                                      |                             |   | 0.005                                       | 1 0  | 0.006  | 1                                   | U          |
| VOLATILES  | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 3.0E+02                                      | 1                           |   | 0.005                                       | 1 U  | 0.006  | 1                                   | U          |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE  | NE   | 1.3E+03                                      |                             |   | 0,005                                       | 1 U  | 0.006  | 1                                   | U          |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE  | NÉ   | 2.6E+02                                      |                             |   | 0.005                                       | 1 U  | 0.006  | 1                                   | U          |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NË  | NE   | 6.0E+00                                      |                             |   | 0.005                                       | i 1 U                                      | 0.006  | 1                                   | U          |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE  | NE   | 1.1E+03                                      |                             |   | 0.005                                       | i 1 U                                      | 0.006  | 1                                   | U          |
| VOLATILES  | trans-1.2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 1.4E+02                                      |                             |   | 0.005                                       | 5 1 U                                      | 0.006  | 1                                   | U          |
| VOLATILES  | trans-1.3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 1.8E+00                                      | •                           |   | 0.005                                       | 1 U  | 0.006  | 1                                   | U          |
| VOLATILES  | Trichlorcethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 3.7E+00                                      | 1                           |   | 0.005                                       | i 1 U                                      | 0.006  | 1                                   | U          |
| VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01                   | NE  | NĘ   | 2.6E+02                                      | 1                           |   | 0.010                                       | ) 1 U                                      | 0.012  | 1                                   | U          |
| VOLATILES  | Vinvl acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NE  | NE   | 5.7E+01                                      | 1                           |   | 0.010                                       | 110  | 0.012  | 1                                   | U          |
| VO! ATILES   | Vinvi chioride            | 3.6E-02                                  | 0.0010              | 0.01                   | NE  | NE   | 3.6E-02                                      | l                           |   | 0.010                                       | ) 1 U                                      | 0.012  | 1                                   | <u> </u>   |

00066482

### Table 4-43

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-043

|  |  |  | ```                 | Jump-040               |   |  |  | 1   |                           |    |
|--|--|--|---------------------|------------------------|---|--|--|---|---------------------------|----|
| [SUMP] = SUMPO-<br>LOCATION_COD<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPO | 43<br>E<br>SE                              | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backg<br>Concentrat<br>(95% UP<br>Surface | ground<br>lions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP043-<br>35-SMP43-SE<br>9/14/200<br>2.5 - 2.5 /<br>REG | SB01<br>101-02<br>6<br>=t |    |
| Test Group   | Parameter (Units = mg/kg)                  | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft                                       | Value  | Result D  | LLQ                       | VQ |
| METALS   | Aluminum                                   | 1.6E+04                                  | 10.000              | 20.00                  | 1.63E+04                                  | 2.08E+04   | 1.6E+04                                      | 6330.000 1  |                           |    |
| METALS   | Antimony                                   | 7.3E+00                                  | 0.500               | 0.10                   | 9.40E-01                                  | 1.60E+00   | 7.3E+00                                      | 0.067 1   | J                         | J  |
| METALS   | Arsenic                                    | 2.05+01                                  | 0.075               | 0.30                   | 4.012+00<br>1.52E+02                      | 8.55E+01   | 2.6E+01                                      | 62,700  |                           |    |
| METALS   | Berdlium                                   | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                  | 7.66E-01   | 4.6E+00                                      | 0.457 1   |                           |    |
| METALS   | Cadmium                                    | 5.2E+00                                  | 0.025               | 0.10                   | 1.40E+00                                  | 4.00E-01   | 5.2E+00                                      | 0.264 1   | J                         | J  |
| METALS   | Catcium                                    | NA                                       | NA                  | NA                     | NA  | NA   | -  | 1210.000 1  |                           |    |
| METALS   | Chromium                                   | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                                  | 3.01E+01   | 5.9E+03                                      | 17.400 1  |                           |    |
| METALS   | Cobalt                                     | 1.5E+03                                  | 0.125               | 0.50                   | 7.232+00                                  | 5.61E+00   | 1.5E+03                                      | 3,050   |                           |    |
| METALS   | Copper                                     | 1.0c+03                                  | 0.150<br>NA         | NA                     | 0.00E+00                                  | NA   |  | 10900.000   |                           |    |
| METALS   | Lead                                       | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                  | 1.14E+01   | 5.0E+02                                      | 9.740   |                           |    |
| METALS   | Magnesium                                  | NA                                       | NA                  | NA                     | NA  | NA   |  | 309.000 1   |                           |    |
| METALS   | Manganese                                  | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                  | 2.01E+02   | 1.7E+03                                      | 198.000 1   |                           |    |
| METALS   | Mercury                                    | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                  | 3.60E-01   | 2.5E-01                                      | 0.031   | J                         | J  |
| METALS   | Nickel                                     | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                  | 1.16E+U1   | 1,95+02                                      | 231,000   |                           |    |
| METALS   | Potassium                                  | 1 3E+02                                  | 0 100               | 0.20                   | 3 48E+00                                  | 5 57 5+00  | 1.3E+02                                      | 0.337   |                           |    |
| METALS   | Silver                                     | 4 7E+01                                  | 0.050               | 0.20                   | 3.10E-01                                  | 3.70E-01   | 4.7E+01                                      | 1.650   | Ų                         |    |
| METALS   | Sodium                                     | NA                                       | NA                  | NA                     | NA  | NA   | -  | 17.500  | J                         | J  |
| METALS   | Thallium                                   | 2.0E+00                                  | 0.010               | 0.02                   | 4.70E-01                                  | NE   | 2.0E+00                                      | 0.045   |                           |    |
| METALS   | Vanadium                                   | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01                                  | 4.46E+01   | 4.8E+01                                      | 21.900  |                           |    |
| METALS   | Zinc                                       | 5.9E+03                                  | 0.625               | 2.50                   | 6.16E+01                                  | 2.02E+01   | 5.92+03                                      | 76.100  |                           |    |
| PERC   | Perchiorate<br>Dereset Selide              | 1.42+01                                  | 0.005               | 0.01                   | NE  | NE   | 1.42*01                                      | 90,300  |                           |    |
| VOLATILES  | 1 1 1 2-Tetrachloroethane                  | 5 2E+00                                  | 0.0005              | 0.005                  | NË  | NE   | 5.2E+00                                      | 0.005   | U                         |    |
| VOLATILES  | 1.1.1-Trichloroethane                      | 2.3E+02                                  | 0.0005              | 0.005                  | NE  | NĘ   | 2.3E+02                                      | 0.005   | U                         |    |
| VOLATILES  | 1,1,2,2-Tetrachloroethane                  | 5.1E-01                                  | 0.0005              | 0.005                  | NE  | NE   | 5.1E-01                                      | 0,005   | U                         |    |
| VOLATILES  | 1,1,2-Trichloroethane                      | 9.7E-01                                  | 0.0005              | 0.005                  | NE  | NE   | 9.7E-01                                      | 0.005   | U                         |    |
| VOLATILES  | 1,1-Dichloroethane                         | 8.9E+01                                  | 0.0010              | 0.005                  | NE  | NE   | 8.9E+01                                      | 0.005   |                           |    |
| VOLATILES  | 1,1-Dichloroethene                         | 2.7E+01                                  | 0.0005              | 0.005                  | NE  | NE   | 2.76+01                                      | 0.005   |                           |    |
| VOLATILES  | 1,1-Dichloropropene                        | 9.9E-01                                  | 0.0005              | 0.005                  | NE  | NE   | 4.2E+01                                      | 0.005   | ίŬ                        |    |
| VOLATILES  | 1.2.3-Trichlompronane                      | 9.26-02                                  | 0.0010              | 0.005                  | NE  | NE   | 9.2E-02                                      | 0.005   | Ū                         |    |
| VOLATILES  | 1,2,4-Trichlorobenzene                     | 1.4E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 1.4E+02                                      | 0.005   | υ                         |    |
| VOLATILES  | 1,2,4-Trimethylbenzene                     | 9.6E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 9.6E+00                                      | 0.005   | U                         |    |
| VOLATILES  | 1,2-Dibromo-3-chloropropane                | 3.5E-01                                  | 0.0020              | 0.005                  | NE  | NE   | 3.5E-01                                      | 0.005   |                           |    |
| VOLATILES  | 1,2-Dibromoethane                          | 5,3E-02                                  | 0.0005              | 0.005                  | NE  | NE   | 5.3E-02                                      | 0.005   |                           |    |
| VOLATILES  | 1,2-Dichlorobenzene                        | 5.6E+01                                  | 0.0005              | 0.005                  |   | NE   | 2.0E+01                                      | 0.005   | i u                       |    |
| VOLATILES  | 1.2-Dichloropropage                        | 1.8E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 1.8E+00                                      | 0.005   | ίŬ                        |    |
| VOLATILES  | 1.2-Dimethylbenzene (o-Xviene)             | 3.3E+03                                  | 0.0005              | 0.005                  | NE  | NE   | 3.3E+03                                      | 0.005   | ιÚ                        |    |
| VOLATILES  | 1,3,5-Trimethylbenzene                     | 8.3E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 8.3E+00                                      | 0.005   | I U                       |    |
| VOLATILES  | 1,3-Dichlorobenzene                        | 5.1E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 5.1E+00                                      | 0.005   | I U                       |    |
| VOLATILES  | 1,3-Dichloropropane                        | 3.0E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 3.02+00                                      | 0.005   | 1 11                      |    |
| VOLATILES  | 1,4-Dichloropenzene<br>2,2 Dichloropropena | 2.76+01                                  | 0.0005              | 0.005                  | NE  | NE   | 175+00                                       | 0.005   | ίŬ                        |    |
| VOLATILES  | 2-Butanoae                                 | 2.65+03                                  | 0.0025              | 0.010                  | NE  | NE   | 2.6E+03                                      | 0.011   | ίŬ                        |    |
| VOLATILES  | 2-Chloroethyl vinyl ether                  | 2.1E-01                                  | 0.0020              | 0.010                  | NE  | NE   | 2.1E-01                                      | 0.011   | ιU                        |    |
| VOLATILES  | 2-Chlorotoluene                            | 1.5E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 1.5E+02                                      | 0.005   | I U                       |    |
| VOLATILES  | 2-Hexanone                                 | 6.2E+00                                  | 0.0025              | 0.010                  | NE  | NE   | 6.2E+00                                      | 0.011   |                           |    |
| VOLATILES  | 4-Chlorotoluene                            | 3.4E-01                                  | 0.0005              | 0.005                  | NE  | NE   | 3.4E-01                                      | 0.005   |                           |    |
| VOLATILES  | Acetone                                    | 1.7E+02                                  | 0.0050              | 0.010                  | NE  | NE .   | 8.8E-01                                      | 0.011   | ίŭ                        |    |
| VOLATILES  | Bromobenzene                               | 1 1E+01                                  | 0.0005              | 0.005                  | NE  | NE   | 1.1E+01                                      | 0.005   | เบิ                       |    |
| VOLATILES  | Bromochloromethane                         | 2.4E+01                                  | 0.0005              | 0.005                  | NE  | NE   | 2.4E+01                                      | 0.005   | ιŰ                        |    |
| VOLATILES  | Bromodichloromethane                       | 1.0E+01                                  | 0.0005              | 0.005                  | NE  | NE   | 1.0E+01                                      | 0.005   | ιU                        |    |
| VOLATILES  | Bromoform                                  | 3.4E+01                                  | 0.0005              | 0.005                  | NE  | NE   | 3.4E+01                                      | 0.005   | i U                       |    |
| VOLATILES  | Bromomethane                               | 3.5E-01                                  | 0.0010              | 0.010                  | NE  | NE   | 3.5E-01                                      | 0.011   | 1 U                       |    |
| VOLATILES  | Carbon disultide                           | 1.0E+02                                  | 0.0005              | 0.005                  |   |  | 1.0E+02<br>3.5E-01                           | 0.005   | 1 U                       |    |
|  | Chlorobenzene                              | 3.0E-01<br>4 0F+01                       | 0.0005              | 0,005                  | NF  | NE   | 4.0E+01                                      | 0.005   | เบ                        |    |
| VOLATILES  | Chloroethane                               | 1.1E+03                                  | 0.0010              | 0.010                  | NE  | NE   | 1.1E+03                                      | 0.011   | រេប៍                      |    |

Shaw Environmental, Inc.

### 00066483

# Table 4-43 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-043

| [SUMP] = SUMPO<br>LOCATION _COD<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPO | 43<br>Æ<br>9SE            | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backg<br>Concentrat<br>(95% UP<br>Surface | pround<br>tions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP043-SB01<br>35-SMP43-SB01-02<br>9/14/2006<br>2.5 - 2.5 Ft<br>REG |
|--|---------------------------|--|---------------------|------------------------|---|--|--|--|
| Test Group   | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                                | 1,5 - 2.5 Ft                                       | Value  | Result DIL LQ VQ   |
| VOLATILES  | Chloroform                | 3.1E-01                                  | 0.0005              | 0.005                  | NE  | NE   | 3.1E-01                                      | 0.005 1 U  |
| VOLATILES  | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NE  | NE   | 2.3E-01                                      | 0.011 I U  |
| VOLATILES  | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 1.2E+02                                      | 0.005 1 U  |
| VOLATILES  | cis-1,3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                  | NË  | NE   | 1.2E+00                                      | 0.005 1 U  |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 7.6E+00                                      | 0.005 1 U  |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE  | NE   | 1.9E+01                                      | 0.005 1 U  |
| VOLATILES  | Dichlorodifuoromethane    | 2.2E+02                                  | 0.0010              | 0.010                  | NE  | NE   | 2.2E+02                                      | 0.011 1 U  |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 4.3E+02                                      | 0.005 1 U  |
| VOLATILES  | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 1.6E+00                                      | 0.005 1 U  |
| VOLATILES  | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 5.4E+02                                      | 0.005 1 U  |
| VOLATILES  | m.p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 2.3E+02                                      | 0.005 1 U  |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NE  | NE   | 1.3E+03                                      | 0.011 1 U  |
| VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE  | NE   | 8.7E+00                                      | 0.005 1 U  |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NE  | NE   | 1.8E+01                                      | 0.011 1 U  |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 2.7E+02                                      | 0.005 1 U  |
| VOLATILES  | n-PROPYL8ENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 3.2E+02                                      | 0.005 1 U  |
| VOLATILES  | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 4.2E+02                                      | 0.005 1 U  |
| VOLATILES  | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 3.0E+02                                      | 0.005 1 U  |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE  | NE   | 1.3E+03                                      | 0.005 1 U  |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 2.6E+02                                      | 0.005 1 U  |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 6.0E+00                                      | 0.005 1 U  |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE  | NE   | 1.1E+03                                      | 0.005 1 U  |
| VOLATILES  | trans-1.2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE  | NE   | 1.4E+02                                      | 0.005 1 U  |
| VOLATILES  | trans-1.3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 1.8E+00                                      | 0.005 1 U UJ   |
| VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE  | NE   | 3.7E+00                                      | 0.005 i U  |
| VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01                   | NE  | NE   | 2.6E+02                                      | 0.011 1 U  |
| VOLATILES  | Vinvi acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NE  | NE   | 5.7E+01                                      | 0.011 I U  |
| VOLATILES  | Vinvi chloride            | 3.6E-02                                  | 0.0010              | 0.01                   | NE  | NE   | 3.6E-02                                      | 0.011 <b>1</b> U   |

Shaw Environmental, Inc.

# 00066484

| Table 4-44   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump_107   |

|               |                            |            |             |              |            |               | oump       | -101              |                   |                    |                    |                    |
|---------------|----------------------------|------------|-------------|--------------|------------|---------------|------------|-------------------|-------------------|--------------------|--------------------|--------------------|
| [SUMP] = SUMP | 107                        |            |             |              |            |               |            |                   |                   | 050UD407 0000      | 2501020407 0002    | 3591 MID407 - 9002 |
| LOCATION_CO   | DE                         |            |             |              |            |               | Applicble  | 35SUMP107-SB01    | 35SUMP107-SB01    | 355UMP107-5802     | 333UMP 107-3802    | 35 SMP 107-3502    |
| SAMPLE_NO     |                            | TCEQ       |             |              | Backg      | round         | Applicble  | 35-SMP107-SB01-01 | 35-SMP107-SB01-02 | 35-599-107-3602-01 | 35-3WF 107-3802-02 | 0/44/00/2          |
| SAMPLE_DATE   |                            | Risk-Based |             |              | Concentra  | tions in Soil | TCEQ       | 9/14/2006         | 9/14/2006         | 9/14/2006          | 9/14/2006          | 9/14/2008          |
| DEPTH         |                            | Screening  | Method      | Method       | (95% UP    | L, mg/kg)     | Risk-Based | 0.0 - 0.5 Ft      | 2.5 - 3 Ft        | 0.0 - 0.5 Ft       | 2.5 - 3 Ft         | 2.5 - 3 Ft         |
| SAMPLE_PURP   | OSE                        | Value      | Detection   | Quantitation | Surface    | Subsurface    | Screening  | REG               | REG               | REG                | REG                | FD                 |
| Test Group    | Parameter (Units = mg/kg)  | (RBSV)     | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value      | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   |
| EXPLOSIVES    | 1.3.5-Trinitrobenzene      | 4.7E+02    | 0.1         | 0.25         | NE         | NE            | 4.7E+02    | 0.243 1 U         | 0.245 1 U         | 0.239 1 U          | 0.242 1 U          | 0.245 1 U          |
| EXPLOSIVES    | 1.3-Dinitrobenzene         | 1.6E+00    | 0.1         | 0.25         | NE         | NE            | 1.6E+00    | 0.243 1 U         | 0.245 1 U         | 0.239 1 U          | 0.242 1 U          | 0.245 1 U          |
| EXPLOSIVES    | 2.4.6 Trinitrotoluene      | 7.7E+00    | 0.1         | 0.25         | NE         | NE            | 7.7E+00    | 0.243 1 U         | 0.245 1 U         | 0.239 1 U          | 0.242 1 U          | 0.245 1 U          |
| EXPLOSIVES    | 2.4-Dinitrotoluene         | 7.2E-01    | 0.1         | 0.25         | NE         | NE            | 7.2E-01    | 0.243 1 U         | 0.245 1 U         | 0.239 1 U          | 0.242 1 U          | 0.245 1 U          |
| EXPLOSIVES    | 2.6-Dinitrotoluene         | 7.2E-01    | 0.1         | 0.26         | NE         | NE            | 7.2E-01    | 0.252 1 U         | 0.255 1 U         | 0.249 1 U          | 0.251 1 U          | 0.255 1 U          |
| EXPLOSIVES    | 2-Amino-4.6-dinitrotoluene | 2.6E+00    | 0.1         | 0.26         | NE         | NE            | 2.6E+00    | 0.252 1 U         | 0.255 1 U         | 0.249 1 U          | 0.251 1 U          | 0.255 1 U          |
| EXPLOSIVES    | 4-Amino-2.6-dinitrotoluene | 2.6E+00    | 0.1         | 0.26         | NE         | NE            | 2.6E+00    | 0.252 1 U         | 0.255 1 U         | 0.249 1 U          | 0.251 1 U          | 0.255 1 U          |
| EXPLOSIVES    | HMX                        | 2.2E+02    | 0.1         | 2.20         | NE         | NE            | 2.2E+02    | 2.140 1 U         | 2.160 1 U         | 2.110 1 U          | 2.130 1 U          | 2.160 1 U          |
| EXPLOSIVES    | m-Nitrotoluene             | 4.4E+01    | 0.1         | 0.25         | NE         | NE            | 4.4E+01    | 0.243 1 U         | 0.245 1 U         | 0.239 1 U          | 0.242 1 U          | 0.245 I U          |
| EXPLOSIVES    | Nitrobenzene               | 6.5E+00    | 0.1         | 0.26         | NE         | NE            | 6.5E+00    | 0.252 1 U         | 0.255 1 U         | 0.249 1 U          | 0.251 1 U          | 0.255 1 U          |
| EXPLOSIVES    | p-Nitrotoluene             | 4.7E+01    | 0.1         | 0.25         | NE         | NE            | 4.7E+01    | 0.243 1 U         | 0.245 1 U         | 0.239 1 U          | 0.242 1 U          | 0.245 1 U          |
| EXPLOSIVES    | p-Nitrotoluene             | 4.4E+01    | 0.1         | 0.25         | NE         | NE            | 4.4E+01    | 0.243 1 U         | 0.245 1 U         | 0.239 1 U          | 2.920 1            | 0.245 1 U          |
| EXPLOSIVES    | RDX                        | 3.6E+00    | 0.1         | 1.00         | NE         | NE            | 3.6E+00    | 0,971 1 U         | 0.980 1 U         | 0.957 1 U          | 0.966 1 U          | 0.980 1 U          |
| EXPLOSIVES    | Tetrut                     | 1.6E+02    | 02          | 0.65         | NE         | NE            | 1.6E+02    | 0.631 1 U         | 0.637 1 U         | 0.622 1 U          | 0.628 1 U          | 0.637 1 U          |
| METALS        | Aluminum                   | 1.6E+04    | 10.000      | 20.00        | 1.63E+04   | 2.08E+04      | 1.6E+04    | 5690.000 1        | 4900.000 1        | 7690.000 1         | 10100.000 1        | 8460,000 1         |
| METALS        | Antimony                   | 7.3E+00    | 0.500       | 0.10         | 9 40E-01   | 1.60E+00      | 7.3E+00    | 0.108 1 U         | 0.106 1 U         | 0.074 1 J J        | 0.108 1 U          | 0.112 1 U          |
| METALS        | Arsenic                    | 2 0E+01    | 0.075       | 0.30         | 4.81E+00   | 5.54E+00      | 2.0E+01    | 0.917 1           | 0.376 1           | 1.040 1            | 0.948 1            | 0.532 1            |
| METALS        | Barium                     | 2.6E+03    | 0.075       | 0.30         | 1.52E+02   | 8.55E+01      | 2.6E+03    | 59,600 1 J        | 37.000 1 J        | 111.000 1 J        | 86.100 1 J         | 216.000 1 J        |
| METALS        | Bendlium                   | 4.6E+00    | 0.012       | 0.50         | 6.45E-01   | 7.66E-01      | 4.6E+00    | 0.306 1 J J       | 0.324 1 J J       | 0.349 1 J J        | 0.809 1            | 1.230 1            |
| METALS        | Cadmium                    | 5 2E+00    | 0.025       | 0.10         | 1 40E+00   | 4 00E-01      | 5.2E+00    | 0.197 1 J J       | 0.063 1 J J       | 0.451 1            | 0.090 1 J J        | 0.163 1 J J        |
| METALS        | Calcium                    | NF         | NA          | NA           | NA         | NA            |            | 964.000 1         | 425.000 1         | 1890.000 1         | 1080.000 1         | 1140.000 1         |
| METALS        | Chromium                   | 5 9E+03    | 0 100       | 0.40         | 2 66F+01   | 3.01E+01      | 5.9E+03    | 10.500 1          | 13.200 1          | 14.100 1           | 13.000 1           | 13.100 1           |
| METALS        | Cobalt                     | 1.55+03    | 0.125       | 0.50         | 7 23 5+00  | 5.61E+00      | 1.5E+03    | 3,490 1           | 1.940 1           | 3.090 1            | 4.840 1            | 6.040 1            |
| METALS        | Copper                     | 1.0E+03    | 0.150       | 0.60         | 5.55E+00   | 9 25 5+00     | 1.0E+03    | 3.660 1           | 1.220 1           | 7,590 1            | 2.130 1            | 1.440 1            |
| METALS        | Iron                       | NE         | NA          | NA           | NA         | NA            |            | 10500.000 1 J     | 10800.000 1 J     | 11200.000 1        | 11300.000 1 J      | 21900.000 1        |
| METALS        | lon lon                    | 5.05+02    | 0.600       | 5.00         | 2 26E+01   | 1 14E+01      | 5 0E+02    | 23.300 1          | 34.300 1          | 27.400 1 J         | 8.220 1            | 6.790 1 J          |
| METALS        | Magnesium                  | NE         | NA          | NA           | NA         | NA            |            | 412.000 1         | 412.000 1         | 856.000 1          | 938.000 1          | 829.000 1          |
| METALS        | Manganese                  | 1 7E+03    | 0.050       | 0.20         | 1 25E+03   | 2.01E+02      | 1.7E+03    | 183.000 1 J       | 53.200 1 J        | 126.000 1 J        | 96.000 1 J         | 480.000 1 J        |
| METALS        | Mercury                    | 1 16-02    | 0.010       | 0.25         | 8 19E-02   | 3.60E+01      | 2.5E-01    | 0.017 1 J J       | 0.022 1 J J       | 0.034 1 J J        | 0.015 1 J J        | 0.014 1 J J        |
| METALS        | Nickel                     | 1 95+02    | 0.200       | 0.80         | 6 98E+00   | 1.16E+01      | 1.9E+02    | 3.810 1           | 3.520 1           | 5.900 1            | 6.150 1            | 5.790 1            |
| METALS        | Potossium                  | NE         | NA          | NA.          | NA         | NA            |            | 188.000 1         | 147.000 1         | 258.000 1          | 251.000 1          | 184.000 1          |
| METALS        | Selenium                   | 1.3E+02    | 0 100       | 0.20         | 3 48E+00   | 5 57E+00      | 1.3E+02    | 0.224 1           | 0.213 1 U         | 0.319 1            | 0.342 1            | 0.198 1 J J        |
| METALS        | Silver                     | 4 7E+01    | 0.050       | 0.20         | 3 10E-01   | 3 70E-01      | 475+01     | 1.520 1 U         | 1.610 1 U         | 1.630 t U          | 1.560 1 U          | 1.660 f U          |
| METALS        | Sodium                     |            | NA NA       | NA           | NA         | NA            |            | 51,900 1          | 76.100 1          | 35.800 1           | 66.800 1           | 59.500 1           |
| METALS        | Thallum                    | 2 0E+00    | 0.010       | 0.02         | 4 705-01   | NE            | 2.0E+00    | 0.035 1           | 0.027 1           | 0.035 1            | 0.041 1            | 0.043 1            |
| METALS        | Vanadium                   | 4 8F+01    | 0 125       | 0.50         | 3 21E+01   | 4 46E+01      | 4.8E+01    | 18,700 1          | 19.900 1          | 20,400 1           | 22.600 1           | 30.300 1           |
| METALS        | Zine                       | 5.9E+03    | 0.625       | 2.50         | 6 16E+01   | 2.02E+01      | 5.9E+03    | 29.800 1          | 11.600 1          | 132.000 1          | 13.500 1           | 14.200 1           |
| SOLIDS        | Percent Solids             | NE         | NA          | NA           | NF         | NE            |            | 92,400 1          | 92.600 1          | 92,400 1           | 91.200 1           | 89.400 1           |
| 00000         | r ercent conda             |            |             |              |            |               |            |                   |                   |                    |                    |                    |

Shaw Environmental, Inc.

00066485

| T    | able | e 4- | 45  |
|------|------|------|-----|
| - 14 | au   |      | -+0 |

| Comparison of Chemical | Concentrations in Soil to Risk-Based Screening Values |
|------------------------|---|
|------------------------|---|

Sump-108 .

| [SUMP] = SUMP<br>LOCATION _CO<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURP | 108<br>DE<br>OSE           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backç<br>Concentra<br>(95% UP<br>Surface | round<br>tions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP107-SB01<br>35-SMP107-SB01-01<br>9/14/2006<br>0.0 - 0.5 Ft<br>REG | 35SUMP107-SB01<br>35-SMP107-SB01-02<br>9/14/2006<br>2.5 - 3 Ft<br>REG | 35SUMP107-SB02<br>35-SMP107-SB02-01<br>9/14/2006<br>0.0 - 0.5 Ft<br>REG | 35SUMP107-SB02<br>35-SMP107-SB02-02<br>9/14/2006<br>2.5 - 3 Ft<br>REG | 35SUMP107-SB02<br>35-SMP107-SB02-02-QC<br>9/14/2006<br>2.5 - 3 Ft<br>FD |
|---|----------------------------|--|---------------------|------------------------|--|---|--|---|---|---|---|---|
| Test Group  | Parameter (Units = mg/kg)  | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft                                      | Value  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| EXPLOSIVES  | 1,3,5-Trinitrobenzene      | 4.7E+02                                  | 0.1                 | 0.25                   | NE                                       | NE  | 4.7E+02                                      | 0.243 1 U   | 0.245 1 U   | 0.239 1 U   | 0.242 1 U   | 0.245 1 U   |
| EXPLOSIVES  | 1,3-Dinitrobenzene         | 1.6E+00                                  | 0.1                 | 0.25                   | NË                                       | NE  | 1.6E+00                                      | 0.243 1 U   | 0.245 I U   | 0.239 1 U   | 0.242 1 0   | 0.245 1 U   |
| EXPLOSIVES  | 2,4,6-Trinitrotoluene      | 7.7E+00                                  | 0.1                 | 0.25                   | NE                                       | NE  | 7.7E+00                                      | 0.243 1 U   | 0.245 1 U   | 0.239 1 U   | 0.242 1 0   | 0.245 1 0   |
| EXPLOSIVES  | 2,4-Dinitrotoluene         | 7.2E-01                                  | 0.1                 | 0.25                   | NE                                       | NÉ  | 7.2E-01                                      | 0.243 1 U   | 0.245 1 U   | 0.239 1 U   | 0.242 1 0   | 0.245 1 0   |
| EXPLOSIVES  | 2.6-Dinitrotoluene         | 7.2E-01                                  | 0.1                 | 0.26                   | NE.                                      | NE  | 7.2E-01                                      | 0.252 1 U   | 0.255 1 U   | 0.249 1 U   | 0.251 1 0   | 0.255 1 U   |
| EXPLOSIVES  | 2-Amino-4,6-dinitrotoluene | 2.6E+00                                  | 0.1                 | 0.26                   | NE                                       | NE  | 2.6E+00                                      | 0.252 1 U   | 0.255 1 U   | 0.249 1 U   | 0.251 1 0   | 0.255 1 U   |
| EXPLOSIVES  | 4-Amino-2,6-dinitrotoluene | 2.6E+00                                  | 0.1                 | 0.26                   | NE                                       | NE  | 2.6E+00                                      | 0.252 1 U   | 0.255 1 U   | 0.249 1 U   | 0.251 1 0   | 0.255 1 U   |
| EXPLOSIVES  | HMX                        | 2.2E+02                                  | 0.1                 | 2.20                   | NE                                       | NÉ  | 2.2E+02                                      | 2.140 1 U   | 2.160 1 U   | 2.110 1 U   | 2.130 1 U   | 2.160 1 U   |
| EXPLOSIVES  | m-Nitrotoluene             | 4.4E+01                                  | 0.1                 | 0.25                   | NE                                       | NE  | 4.4E+01                                      | 0.243 1 U   | 0.245 1 U   | 0.239 1 U   | 0.242 1 U   | 0.245 1 U   |
| EXPLÓSIVES  | Nitrobenzene               | 6.5E+00                                  | 0.1                 | 0.26                   | NE                                       | NE  | 6.5E+00                                      | 0.252 1 U   | 0.255 1 U   | 0.249 1 U   | 0.251 1 U   | 0.255 1 U   |
| EXPLOSIVES  | o-Nitrotoluene             | 4.7E+01                                  | 0.1                 | 0.25                   | NE                                       | NE  | 4.7E+01                                      | 0.243 1 U   | 0.245 1 U   | 0.239 1 U   | 0.242 1 0   | 0.245 1 0   |
| EXPLOSIVES  | p-Nitrotoluene             | 4,4E+01                                  | 0.1                 | 0.25                   | NE                                       | NE  | 4.4E+01                                      | 0.243 1 U   | 0.245 1 U   | 0.239 1 U   | 2.920 1   | 0.245 1 U   |
| EXPLOSIVES  | RDX                        | 3.6E+00                                  | 0.1                 | 1.00                   | NE                                       | NE  | 3.6E+00                                      | 0.971 1 U   | 0.980 1 U   | 0.957 1 U   | 0,966 1 U   | 0.980 1 0   |
| EXPLOSIVES  | Tetryl                     | 1.6E+02                                  | 0.2                 | 0.65                   | NE                                       | NE  | 1,6E+02                                      | 0.631 1 U   | 0.637 1 U   | 0.622 1 U   | 0.628 1 U   | 0.637 1 U   |
| METALS  | Aluminum                   | 1.6E+04                                  | 10.000              | 20.00                  | 1.63E+04                                 | 2.08E+04  | 1.6E+04                                      | 5690.000 1  | 4900.000 1  | 7690.000 1  | 10100.000 1   | 8460.000 1  |
| METALS  | Antimony                   | 7.3E+00                                  | 0.500               | 0.10                   | 9.40E-01                                 | 1.60E+00  | 7.3E+00                                      | 0.108 1 U   | 0.106 1 U   | 0.074 1 J J   | 0.108 1 U   | 0.112 1 0   |
| METALS  | Arsenic                    | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                 | 5.54E+00  | 2.0E+01                                      | 0.917 1   | 0.376 1   | 1.040 1   | 0.948 1   | 0.532 1   |
| METALS  | Barium                     | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                 | 8.55E+01  | 2.6E+03                                      | 59.600 1 J  | 37.000 1 J  | 111.000 1 J   | 86.100 1 J  | 216.000 1 J   |
| METALS  | Beryllium                  | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                 | 7.66E-01  | 4.6E+00                                      | 0.306 1 J J   | 0.324 1 J J   | 0.349 1 J J   | 0.809 1   | 1.230 1   |
| METALS  | Cadmium                    | 5.2E+00                                  | 0.025               | 0.10                   | 1.40E+00                                 | 4.00E-01  | 5.2E+00                                      | 0,197 1 J J   | 0.063 1 J J   | 0.451 1   | 0.090 1 J J   | 0.163 1 J J   |
| METALS  | Calcium                    | NE                                       | NA                  | NA                     | NA                                       | NA  | -  | 964.000 1   | 425.000 1   | 1890.000 1  | 1080.000 1  | 1140.000 1  |
| METALS  | Chromium                   | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                                 | 3.01E+01  | 5.9E+03                                      | 10.500 1  | 13.200 1  | 14.100 1  | 13.000 1  | 13.100 1  |
| METALS  | Cobalt                     | 1.5E+03                                  | 0.125               | 0.50                   | 7.23E+00                                 | 5.61E+00  | 1.5E+03                                      | 3.490 1   | 1.940 1   | 3.090 1   | 4.840 1   | 6.040 1   |
| METALS  | Copper                     | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                                 | 9.25E+00  | 1.0E+03                                      | 3.660 i   | 1.220 1   | 7.590 1   | 2.130 1   | 1.440 1   |
| METALS  | Iron                       | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 10500.000 1 J   | 10800.000 1 J   | 11200.000 1   | 11300.000 1 J   | 21900.000 1   |
| METALS  | Lead                       | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                 | 1.14E+01  | 5.0E+02                                      | 23.300 1  | 34.300 1  | 27.400 1 J  | 8.220 1   | 6.790 1 J   |
| METALS  | Magnesium                  | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 412.000 1   | 412.000 1   | 856.000 1   | 938.000 1   | 829.000 1   |
| METALS  | Manganese                  | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                 | 2.01E+02  | 1.7E+03                                      | 183.000 1 J   | 53.200 1 J  | 126.000 1 J   | 96.000 1 J  | 480.000 1 J   |
| METALS  | Mercury                    | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                 | 3.60E-01  | 2.5E-01                                      | 0.017 1 J J   | 0.022 1 J J   | 0.034 1 J J   | 0.015 1 J J   | 0.014 1 J J   |
| METALS  | Nickel                     | 1.9E+02                                  | 0.200               | 0.80                   | 6,98E+00                                 | 1.16E+01  | 1.9E+02                                      | 3.810 1   | 3.520 1   | 5.900 t   | 6.150 1   | 5.790 1   |
| METALS  | Potassium                  | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 188.000 1   | 147,000 1   | 258.000 1   | 251.000 1   | 184.000 1   |
| METALS  | Selenium                   | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                 | 5.57E+00  | 1.3E+02                                      | 0.224 1   | 0.213 1 U   | 0.319 1   | 0.342 1   | 0.198 1 J J   |
| METALS  | Silver                     | 4.7E+01                                  | 0.050               | 0.20                   | 3.10E-01                                 | 3.70E-01  | 4.7E+01                                      | 1.520 1 U   | 1.610 1 U   | 1.630 1 U   | 1.560 1 U   | 1.660 1 U   |
| METALS  | Sodium                     | NE                                       | NA                  | NA                     | NA                                       | NA  |  | 51,900 1  | 76.100 1  | 35.800 1  | 66.800 1  | 59.500 1  |
| METALS  | Thallium                   | 2.0E+00                                  | 0.010               | 0.02                   | 4.70E-01                                 | NE  | 2.0E+00                                      | 0.035 1   | 0.027 1   | 0.035 1   | 0.041 1   | 0.043 1   |
| METALS  | Vasadium                   | 4 8E+01                                  | 0 125               | 0.50                   | 3 21E+01                                 | 4.46E+01  | 4.8E+01                                      | 18,700 1  | 19.900 1  | 20.400 1  | 22,600 1  | 30.300 1  |
| METALS  | Zinc                       | 5.9E+03                                  | 0.625               | 2 50                   | 6.16E+01                                 | 2.02E+01  | 5.9E+03                                      | 29.800 1  | 11.600 1  | 132.000 1   | 13.500 1  | 14.200 1  |
| SUIUS   | Percent Solide             |  | MA                  | NA NA                  | NE                                       | NE  |  | 92,400 1  | 92 600 1  | 92 400 1  | 91.200 1  | 89.400 1  |

Footnotes are shown on cover page to Tables Section.

.

Shaw Environmental, Inc.

### 00066486

| Table 4-46   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |

Sump-109

| [SUMP] = SUMP10 | 59                             |                     |             |              |            |               |            | 355UMD100-\$801   | 35SHMP100-SB02    |
|-----------------|--------------------------------|---------------------|-------------|--------------|------------|---------------|------------|-------------------|-------------------|
| LOCATION_COD    | E                              | TOFO                |             |              | Back       | havor         | Annlicable | 35-SMP109-SB01-02 | 35-SMP109-SB02-02 |
| SAMPLE_NO       |                                | Risk-Based          |             |              | Concentra  | tions in Soil | TCEQ       | 9/14/2006         | 9/14/2006         |
| DEPTH           |                                | Screening           | Method      | Method       | (95% UF    | L, mg/kg)     | Risk-Based | 2.5 - 3 Ft        | 2.5 - 3 Ft        |
| SAMPLE_PURPO    | SE                             | Value               | Detection   | Quantitation | Sunace     | Subsurface    | Screening  | REG               | REG               |
| Test Group      | Parameter (Upits = mo/ko)      | (RBSV) <sup>a</sup> | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value      | Result DIL LQ VQ  | Result DIL LO VQ  |
| METALS          | Aluminum                       | 1.6E+04             | 10,000      | 20.00        | 1.63E+04   | 2.08E+04      | 1.6E+04    | 7550.000 1        | 6740.000 1        |
| METALS          | Antimony                       | 7.3E+00             | 0.500       | 0.10         | 9.40E-01   | 1.60E+00      | 7.3E+00    | 0.117 1 U         | 0.119 1 U         |
| METALS          | Arsenic                        | 2.0E+01             | 0.075       | 0.30         | 4.81E+00   | 5.54E+00      | 2.0E+01    | 0.350 1 U         | 0.144 1 J J       |
| METALS          | Barium                         | 2.6E+03             | 0.075       | 0.30         | 1.52E+02   | 8.55E+01      | 2.6E+03    | 101.000 1         | 75.200 1          |
| METALS          | Beryllium                      | 4.6E+00             | 0.012       | 0,50         | 6.45E-01   | 7.66E-01      | 4.6E+00    | 0.241 1 J J       | 0.438 1           |
| METALS          | Cadmium                        | 5.2E+00             | 0.025       | 0.10         | 1.40E+00   | 4.00E-01      | 5.2E+00    | 0.104 1 J J       | 0.070 1 J J       |
| METALS          | Calcium                        | NE                  | NA          | NA           | NA         | NA            |            | 1080.000 1        | 1190.000 1        |
| METALS          | Chromium                       | 5.9E+03             | 0.100       | 0.40         | 2.666+01   | 3.01E+01      | 5.9E+03    | 17.900 1          | 2 200 1           |
| METALS          | Cobait                         | 1.5E+03             | 0.125       | 0.50         | 7.23E+00   | 0.012+00      | 1,35,403   | 4.020 1           | 0.965 1 11        |
| METALS          | Copper                         | NC                  | U, 190      | 0.00         | 5.55E700   | 9.23E+00      | 1.00000    | 9970.000 1        | 8590.000 1        |
| METALS          | lead :                         | 5.05+02             | 0.500       | 5.00         | 2 26E+01   | 1 14E+01      | 5.05+02    | 6610 1            | 4.190 1           |
| METALS          | Magnesium                      | NE                  | NA          | NA           | NA         | NA            |            | 1770.000 1        | 1300.000 1        |
| METALS          | Manganese                      | 1.7E+03             | 0.050       | 0.20         | 1.25E+03   | 2.01E+02      | 1.7E+03    | 28,800 1          | 9.620 1           |
| METALS          | Mercury                        | 1.1E-02             | 0.010       | 0.25         | 8.19E-02   | 3.60E-01      | 2.5E-01    | 0.012 1 U         | 0.012 1 U         |
| METALS          | Nickel                         | 1.9E+02             | 0.200       | 0.80         | 6.98E+00   | 1.16E+01      | 1.9E+02    | 12.400 i          | 8.810 1           |
| METALS          | Potassium                      | NE                  | NA          | NA           | NA         | NA            | -          | 336.000 1         | 231.000 1         |
| METALS          | Selenium                       | 1.3E+02             | 0.100       | 0.20         | 3.48E+00   | 5.57E+00      | 1.3E+02    | 0.134 1 J J       | 0.238 1 U         |
| METALS          | Silver                         | 4.7E+01             | 0.050       | 0.20         | 3.10E-01   | 3.70E-01      | 4.7E+01    | 1.770 1 U         | 1.730 1 U         |
| METALS          | Sodium                         | NE                  | NA          | NA           | NA         | NA            |            | 262.000 1         | 875.000 1         |
| METALS          | Thallium                       | 2.02+00             | 0.010       | 0.02         | 4.70E-01   |               | 2.05+00    | 19,000 1          | 14 200 1          |
| METALO          | Vanaolum                       | 4.02+01             | 0.120       | 2.50         | 3.21ETUI   | 2.025+01      | 4.0E+01    | 30300 1           | 21 100 1          |
| DEDC            | Perchlomate                    | 1.45+01             | 0.025       | 2.00         | NE         | 2.026+01      | 140        | 0.050 5 11        | 0.050 5 11        |
| SOLIDS          | Percent Solids                 | NE                  | NA          | NA           | NE         | NE            | -          | 85 200 1          | 83,800 1          |
| VOLATILES       | 1.1.1.2-Tetrachloroethane      | 5.2E+00             | 0.0005      | 0.005        | NE         | NE            | 5.2E+00    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1.1.1-Trichloroethane          | 2.3E+02             | 0.0005      | 0.005        | NE         | NE            | 2.3E+02    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1,1,2,2-Tetrachloroethane      | 5.1E-01             | 0.0005      | 0.005        | NE         | NE            | 5.1E-01    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1,1,2-Trichloroethane          | 9.7E-01             | 0.0005      | 0.005        | NE         | NE            | 9.7E-01    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1,1-Dichloroethane             | 8.9E+01             | 0.0010      | 0.005        | NE         | NE            | 8.9E+01    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1,1-Dichloroethene             | 2.7E+01             | 0.0005      | 0.005        | NE         | NE            | 2.7E+01    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1,1-Dichloropropene            | 9.9E-01             | 0.0005      | 0.005        | NE         | NE            | 9.9E-01    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1,2,3-Trichlorobenzene         | 4.2E+01             | 0.0005      | 0.005        | NE         | NE            | 4.2E+01    | 0.005 1 U         | 0.005 1 0         |
| VOLATILES       | 1.2.3- Inchioropropane         | 9.2E-02             | 0.0010      | 0.005        | NE .       | NE            | 9.25-02    | 0.005 1 0         | 0.005 1 0         |
| VOLATILES       | 1,2,4-Tricritoroberizene       | 0.65+00             | 0.0005      | 0.005        | ME         |               | 9.65+00    | 0.005 1 U         | 0.005 1 0         |
| VOLATILES       | 1.2-Dibromo-3-chloropropage    | 3.5E-01             | 0.0020      | 0.005        | NE         | NE            | 3.5E-01    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1.2-Dibromoethane              | 5.3E-02             | 0.0005      | 0.005        | NE         | NE            | 5.3E-02    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1,2-Dichlorobenzene            | 5.6E+01             | 0.0005      | 0.005        | NE         | NE            | 5.6E+01    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1,2-Dichloroethane             | 2.7E-01             | 0.0005      | 0.005        | NE         | NE            | 2.7E-01    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1,2-Dichloropropane            | 1.8E+00             | 0.0005      | 0.005        | NE         | NE            | 1.8E+00    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1,2-Dimethylbenzene (o-Xylene) | 3.3E+03             | 0.0005      | 0.005        | NE         | NE            | 3.3E+03    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1,3,5-Trimethylbenzene         | 8.3E+00             | 0.0005      | 0.005        | NE         | NE            | 8.3E+00    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 1,3-Dichlorobenzene            | 5.18+00             | 0.0005      | 0.005        |            | NE            | 5.1E+00    | 0.005 1 0         | 0.005 1 0         |
| VOLATILES       | 1,3-Dichloropropane            | 3.0E+00             | 0.0005      | 0.005        | NE         | NE            | 3.00+00    | 0.005 1 0         | 0.005 1 0         |
| VOLATILES       | 2.2 Dichloropropona            | 175+00              | 0,0005      | 0.005        | NE         | ME            | 1.76+00    | 0.005 1 0         | 0.005 1 1         |
| VOLATILES       | 2-Butanone                     | 2.60+03             | 0.0005      | 0.000        | NE         | NE            | 2.65+03    | 0.010 1 1         | 0.011 1 U         |
| VOLATILES       | 2-Chloroethyl vinyl ether      | 2 15-01             | 0.0020      | 0.010        | NE         | NE            | 2.1E-01    | 0.010 1 U         | 0.011 1 U         |
| VOLATILES       | 2-Chlorotoluene                | 1.5E+02             | 0.0005      | 0.005        | NE         | NE            | 1.5E+02    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | 2-Hexanone                     | 6.2E+00             | 0.0025      | 0.010        | NE         | NE            | 6.2E+00    | 0.010 1 U         | 0.011 1 U         |
| VOLATILES       | 4-Chlorotoluene                | 3.4E-01             | 0.0005      | 0.005        | NE         | NE            | 3.4E-01    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | Acetone                        | 1.7E+02             | 0.0050      | 0.010        | NE         | NE            | 1.7E+02    | 0.010 1 U         | 0.011 1 U         |
| VOLATILES       | Benzene                        | 8.8E-01             | 0.0005      | 0.005        | NE         | NE            | 8.8E-01    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | Bromobenzene                   | 1.1E+01             | 0.0005      | 0.005        | NE         | NE            | 1.1E+01    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | Bromochioromethane             | 2.4=+01             | 0.0005      | 0.005        | NE         | NE            | 2.46+01    | 0.005 1 0         | 0.005 1 U         |
| VOLATILES       | Bromoform                      | 1.02+01             | 0.0005      | 0.005        | NE         |               | 1.02+01    | 0.005 1 0         | 0.000 1 0         |
| VOLATILES       | Bromomethane                   | 3,401               | 0.0005      | 0.005        | NE         |               | 3.50-01    | 0.000 1 0         | 0.011 1 1         |
| VOLATILES       | Carbon disulfide               | 1.0E+02             | 0.0010      | 0.005        | NE         | NE            | 1.0E+02    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | Carbon tetrachloride           | 3.5E-01             | 0.0005      | 0.005        | NE         | NE            | 3.5E-01    | 0.005 1 U         | 0.005 1 U         |
| VOLATILES       | Chlorobenzene                  | 4.0E+01             | 0.0005      | 0.005        | NE         | NE            | 4.0E+01    | 0.005 1 U         | 0.005 1 U         |

Shaw Environmental, Inc.

### 00066487

| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-109 |                           |  |                     |                        |   |   |   |   |   |  |  |  |
|---|---------------------------|--|---------------------|------------------------|---|---|---|---|---|--|--|--|
| [SUMP] = SUMP<br>LOCATION _CO<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURP     | 109<br>DE<br>OSE          | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>PL, mg/kg)<br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP109-SB01<br>35-SMP109-SB01-02<br>9/14/2006<br>2.5 - 3 Ft<br>REG | 35SUMP109-SB02<br>35-SMP109-SB02-02<br>9/14/2006<br>2.5 - 3 Ft<br>REG |  |  |  |
| Test Group  | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value   | Result DIL LQ VQ  | Result DIL LQ VQ  |  |  |  |
| VOLATILES   | Chloroethane              | 1.1E+03                                  | 0.0010              | 0.010                  | NE                                      | NE  | 1.1E+03                                       | 0.010 1 U   | 0.011 1 U   |  |  |  |
| VOLATILES   | Chloroform                | 3.1E-01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.1E-01                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NE                                      | NE  | 2.3E-01                                       | 0.010 1 U   | 0.011 1 U   |  |  |  |
| VOLATILES   | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.2E+02                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | cis-1,3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.2E+00                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 7.6E+00                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.9E+01                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                      | NE  | 2.2E+02                                       | 0.010 1 U   | 0.011 1 U   |  |  |  |
| VOLATILES   | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 4.3E+02                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | Hexachlorobutadiene       | 1.6臣+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.6E+00                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 5.4E+02                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | m.p-Xylenes e             | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.3E+02                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NE                                      | NE  | 1.3E+03                                       | 0.010 1 U   | 0.011 1 U   |  |  |  |
| VOLATILES   | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                      | NE  | 8.7E+00                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NE                                      | NE  | 1.8E+01                                       | 0.010 1 U   | 0.011 1 U   |  |  |  |
| VOLATILES   | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.7E+02                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.2E+02                                       | 0.005 1 Ų   | 0.005 1 U   |  |  |  |
| VOLATILES   | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 4.2E+02                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.0E+02                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.3E+03                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.6E+02                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 6.0E+00                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.1E+03                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | trans-1,2-Dichtoroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.4E+02                                       | 0.005 1 U UJ  | 0.005 1 U   |  |  |  |
| VOLATILES   | trans-1,3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NÉ  | 1.8E+00                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.7E+00                                       | 0.005 1 U   | 0.005 1 U   |  |  |  |
| VOLATILES   | Trichlorofluoromethane    | 2.62+02                                  | 0.0010              | 0.01                   | NE                                      | NE  | 2.6E+02                                       | 0.005 1 U   | 0.011 1 U   |  |  |  |
| VOLATILES   | Vinyl acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NË                                      | NE  | 5.7E+01                                       | 0.010 1 U   | 0.011 1 U   |  |  |  |
| VOLATILES   | Vinyl chloride            | 3.65-02                                  | 0.0010              | 0.01                   | NE                                      | NE  | 3.6E-02                                       | 1 0.010 1 U   | 0.011 1 U   |  |  |  |

Table 4-46

### 00066488

### Table 4-47 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-110

|   |                                |                                 |             |              | mp-rro                        |                                      |                                 |   |   |
|---|--------------------------------|---------------------------------|-------------|--------------|-------------------------------|--------------------------------------|---------------------------------|---|---|
| [SUMP] = SUMP1<br>LOCATION_COE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH | 10<br>)E                       | TCEQ<br>Risk-Based<br>Screening | Method      | Method       | Backç<br>Concentra<br>(95% UP | ground<br>tions in Soil<br>L, mg/kg) | Applicble<br>TCEQ<br>Risk-Based | 35SUMP110-SB01<br>35-SMP110-SB01-02<br>9/14/2006<br>4.5 - 5.5 Ft<br>250 | 35SUMP110-SB02<br>35-SMP110-SB02-02<br>9/14/2006<br>4.5 - 5.5 Ft<br>BEC |
| SAMPLE_PURPU  | 3E                             | value                           | Detection   | Quantitation | Sunace                        | Subsurace                            | Screening                       | REG   | REG   |
| Test Group  | Parameter (Units = mg/kg)      | (RBSV)                          | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft                    | 1.5 - 2.5 Ft                         | Value                           | Result DIL LQ VQ  | Result DIL LQ VQ  |
| EXPLOSIVES<br>EXPLOSIVES  | 1,3,5- Minirobenzene           | 4.7E+02                         | 0.1         | 0.25         | NE                            | NE                                   | 4.7E+02<br>1.6E+00              | 0.244 1 0   | 0.248 1 U   |
| EXPLOSIVES  | 2.4.6-Trinitrotokrene          | 7.7E+00                         | 0.1         | 0.25         | NE                            | NÉ                                   | 7.7E+00                         | 0.244 1 U   | 0.248 1 U   |
| EXPLOSIVES  | 2,4-Dinitrotoluene             | 7.2E-01                         | 0.1         | 0.25         | NE                            | NE                                   | 7.2E-01                         | 0.244 1 U   | 0.248 1 U   |
| EXPLOSIVES  | 2,6-Dinitrotoluene             | 7.2E-01                         | 0.1         | 0.26         | NE                            | NE                                   | 7.2E-01                         | 0.254 1 U   | 0.257 1 U   |
| EXPLOSIVES  | 2-Amino-4,6-dinitrotoluene     | 2.6E+00                         | 0.1         | 0.26         | NE                            | NE                                   | 2.6E+00                         | 0.254 1 U   | 0.257 1 U   |
| EXPLOSIVES  | 4-Amino-2,6-dinitrotoluene     | 2.6E+00                         | 0.1         | 0.26         | NE                            | NE                                   | 2.6E+00                         | 0.254 1 U   | 0.257 1 U   |
| EXPLOSIVES  | m.Nitrotolueze                 | 2.20702                         | 0.1         | 2.20         | NE                            |                                      | Z.2E+02<br>A 4E+01              | 0.244 1 11  | 0.248 1 11  |
| EXPLOSIVES  | Nitrobenzene                   | 6.5E+00                         | 0.1         | 0.26         | NE                            | NE                                   | 6.5E+00                         | 0.254 1 U   | 0.257 1 U   |
| EXPLOSIVES  | o-Nitrotoluene                 | 4.7E+01                         | 0.1         | 0.25         | NE                            | NE                                   | 4.7E+01                         | 0.244 1 U   | 0.248 1 U   |
| EXPLOSIVES  | p-Nitrotoluene                 | 4.4E+01                         | 0.1         | 0.25         | NE                            | NE                                   | 4.4E+01                         | 0.244 1 U   | 1.350 1   |
| EXPLOSIVES  | RDX                            | 3.6E+00                         | 0.1         | 1.00         | NE                            | NE                                   | 3.6E+00                         | 0.976 1 U   | 0.990 1 U   |
| EXPLOSIVES  | Tetryl                         | 1.6E+02                         | 0.2         | 0.65         | NE                            | NE                                   | 1.6E+02                         | 0.634 1 U   | 0.644 1 U   |
| METALS  | Antimony                       | 7.3E+00                         | 0.000       | 20.00        | 9.405-04                      | 1.60E+04                             | 735+00                          | 0.115 1 1   | 0.116 1 11  |
| METALS  | Arsenic                        | 2.0E+01                         | 0.075       | 0.30         | 4.81E+00                      | 5.54E+00                             | 2.0E+01                         | 0.128 1 J J   | 0.119 1 J J   |
| METALS  | Barium                         | 2.6E+03                         | 0.075       | 0.30         | 1.52E+02                      | 8.55E+01                             | 2.6E+03                         | 76.100 1  | 144.000 1   |
| METALS  | Beryllium                      | 4.6E+00                         | 0.012       | 0.50         | 6.45E-01                      | 7.66E-01                             | 4.6E+00                         | 0.482 1   | 0.850 1   |
| METALS  | Cadmium                        | 5.2E+00                         | 0.025       | 0.10         | 1.40E+00                      | 4.00E-01                             | 5.2E+00                         | 0.077 1 J J   | 0.119 1 J J   |
| METALS  | Calcium                        |                                 | NA<br>0.400 | NA<br>0.40   | NA<br>2 CELOA                 | NA<br>2.045+04                       | E 05-03                         | 343.000 1   | 512.000 1   |
| METALS  | Cohalt                         | 156+03                          | 0.100       | 0.40         | 2.00E+01<br>7.23E+00          | 5.616+00                             | 1.55+03                         | 6 240 1   | 9.430 1   |
| METALS  | Copper                         | 1.0E+03                         | 0.150       | 0.60         | 5.55E+00                      | 9.25E+00                             | 1.0E+03                         | 3.260 1   | 5.510 1   |
| METALS  | Iron                           | NE                              | NA          | NA           | NA                            | NA                                   | -                               | 12600.000 1   | 16200.000 1   |
| METALS  | Lead                           | 5.0E+02                         | 0.500       | 5.00         | 2.26E+01                      | 1.14E+01                             | 5.0E+02                         | 6.350 1   | 4.660 1   |
| METALS  | Magnesium                      | NE                              | NA          | NA           | NA<br>4 055 - 02              | NA                                   | 4 75.00                         | 848.000 1   | 1280.000 1  |
| METALS  | Marganese                      | 1.70+03                         | 0.050       | 0.20         | 1.20E+03<br>8 10E-02          | 2.012+02                             | 1.7E+03<br>2.5E-01              | 0.016 1 1   | 0.012 1 11  |
| METALS  | Nickel                         | 1.9E+02                         | 0.200       | 0.80         | 6.98E+00                      | 1.16E+01                             | 1.9E+02                         | 8.280 1   | 10.800 1  |
| METALS  | Potassium                      | NE                              | NA          | NA           | NA                            | NA                                   |                                 | 271.000 1   | 317.000 1   |
| METALS  | Selenium                       | 1.3E+02                         | 0.100       | 0.20         | 3.48 <b>E+</b> 00             | 5.57E+00                             | 1.3E+02                         | 0.276 1   | 0.185 1 J J   |
| METALS  | Silver                         | 4.7E+01                         | 0.050       | 0.20         | 3.10E-01                      | 3.70E-01                             | 4.7E+01                         | 1.570 1 U   | 1.700 1 U   |
| METALS  | Thatlium                       | 2 0E+00                         | NA<br>0.010 | NA<br>0.02   | NA<br>4705-01                 | N/A<br>N/E                           | 2 05+00                         | 441.000 1   | 4/3.000 1   |
| METALS  | Vanadium                       | 4.8E+01                         | 0.125       | 0.50         | 3 21E+01                      | 4 46E+01                             | 4.8E+01                         | 19.600 1  | 15.700 1  |
| METALS  | Zinc                           | 5.9E+03                         | 0.625       | 2.50         | 6.16E+01                      | 2.02E+01                             | 5.9E+03                         | 14.600 1  | 20.200 1  |
| SOLIDS  | Percent Solids                 | NE                              | NA          | NA           | NE                            | NE                                   | -                               | 85.600 1  | 85.900 1  |
| VOLATILES   | 1,1,1,2-Tetrachloroethane      | 5.2E+00                         | 0.0005      | 0.005        | NE                            | NE                                   | 5.2E+00                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 1,1,1-Trichloroethane          | 2.3E+02                         | 0.0005      | 0,005        | NE                            | NE                                   | 2.3E+02                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 1,1,2,2-1etracaloroethane      | 0.7E-01                         | 0.0005      | 0.005        | NE                            | NE                                   | 0.1E+01<br>0.7E-01              | 0.005 1 U   | 0.005 1 0   |
| VOLATILES   | 1,1-Dichloroethane             | 8.9E+01                         | 0.0010      | 0.005        | NE                            | NE                                   | 8.9E+01                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 1,1-Dichloroethene             | 2.7E+01                         | 0.0005      | 0.005        | NE                            | NE                                   | 2.7E+01                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 1,1-Dichloropropene            | 9.9E-01                         | 0.0005      | 0.005        | NE                            | NE                                   | 9.9E-01                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 1,2,3-Inchlorobenzene          | 4.2E+01                         | 0.0005      | 0.005        | NE                            | NE                                   | 4,2E+01                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 1,2,3-Trichlombenzene          | 9.25-02                         | 0.0010      | 0.005        | NE                            | NE                                   | 9.2E-02<br>1.4E+02              | 0.005 1 0   | 0.005 1 0   |
| VOLATILES   | 1.2.4-Trimethylbenzene         | 9.6E+00                         | 0.0005      | 0.005        | NE                            | NE                                   | 9.6E+00                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 1,2-Dibromo-3-chloropropane    | 3.5E-01                         | 0.0020      | 0.005        | NE                            | NE                                   | 3.5E-01                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 1,2-Dibromoethane              | 5.3E-02                         | 0.0005      | 0.005        | NE                            | NE                                   | 5.3E-02                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 1,2-Dichlorobenzene            | 5.6E+01                         | 0.0005      | 0.005        | NE                            | NE                                   | 5.6E+01                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 1,2-Dichloropmane              | 2.7E-01<br>1.9E+00              | 0.0005      | 0.005        | NE                            | NE                                   | 2.76-01                         | 0.005 1 0   | 0.005 1 0   |
| VOLATILES   | 1.2-Dimethylbenzene (o-Xviene) | 3.3E+03                         | 0.0005      | 0.005        | NE                            | NE                                   | 3.3E+03                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 1,3,5-Trimethylbenzene         | 8.3E+00                         | 0.0005      | 0.005        | NE                            | NE                                   | 8.3E+00                         | 0.005 t U   | 0.005 1 U   |
| VOLATILES   | 1,3-Dichlorobenzene            | 5.1E+00                         | 0.0005      | 0.005        | NE                            | NE                                   | 5.1E+00                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 1,3-Dichloropropane            | 3.0E+00                         | 0.0005      | 0.005        | NE                            | NE                                   | 3.0E+00                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 1,4-Dictiloropenzene           | 2.7E+01                         | 0.0005      | 0.005        | NE                            | NE                                   | 2.7E+01                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | 2-Butanone                     | 2.6E+03                         | 0.0005      | 0.005        | NE                            | NE                                   | 2.65+03                         | 0.000 L U   | 0.003 1 0   |
| VOLATILES   | 2-Chloroethyl vinyl ether      | 2.1E-01                         | 0.0020      | 0.010        | NE                            | NE                                   | 2.1E-01                         | 0.010 1 U   | 0.010 1 U   |
| VOLATILES   | 2-Chlorotoluene                | 1.5E+02                         | 0.0005      | 0.005        | NE                            | NE                                   | 1.5E+02                         | 0.005 1 U   | 0.005 1 U   |

Shaw Environmental, Inc.

### 00066489

Table 4-47 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-110

|   |   |           |   | ຣເ           | 1mp-110                      |  |                                 |   |   |
|---|---|-----------|---|--------------|------------------------------|--|---------------------------------|---|---|
| [SUMP] = SUMP1<br>LOCATION_COU<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH | SUMP1 = SUMP110<br>.OCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |           | TCEQ<br>Risk-Based<br>Screening Method Method<br>Value Detection Quantitation |              | Back<br>Concentra<br>(95% UF | ground<br>itions in Soil<br>PL, mg/kg) | Applicble<br>TCEQ<br>Risk-Based | 35SUMP110-SB01<br>35-SMP110-SB01-02<br>9/14/2006<br>4.5 - 5.5 Ft<br>BEC | 35SUMP110-SB02<br>35-SMP110-SB02-02<br>9/14/2006<br>4.5 - 5.5 Ft<br>BEG |
| SAMPLE_PURPL  | JSE   | value     | Detection   | Quantication | Sunace                       | Subsuliace                             | Screening                       |   |   |
| Test Group  | Parameter (Units = mg/kg)   | (RBSV)    | Limit (MDL)   | Limit (MQL)  | 0 - 0.5 Ft                   | 1.5 - 2.5 Ft                           | Value                           | Result DIL LQ VQ  | Result Dat LQ VQ  |
| VOLATILES   | 2-Hexanone  | 6.2E+00   | 0.0025  | 0.010        | NE                           | NE                                     | 6.2E+00                         | 0.010 1 0   | 0.010 1 0   |
| VOLATILES   | 4-Chlorotoluene   | 3.4E-01   | 0.0005  | 0.005        | NE                           | NE                                     | 3.4E-01                         | 0.005 1 0   | 0.005 1 0   |
| VOLATILES   | Acetone   | 1.7E+02   | 0.0050  | 0.010        | NE                           | NE                                     | 1.76+02                         | 0.010 1 0   | 0.010 1 0   |
| VOLATILES   | Benzene   | 8.8E-01   | 0.0005  | 0.005        | NE                           | NE                                     | 8.8E-01                         | 0.005 1 0   | 0.005 1 0   |
| VOLATILES   | Bromobenzene  | 1.1E+01   | 0.0005  | 0.005        | NE                           | NE                                     | 1.16+01                         |   | 0.005 1 0   |
| VOLATILES   | Bromochloromethane  | 2,4E+01   | 0.0005  | 0.005        | NE                           | NE                                     | 2.4E+01                         |   | 0.005 1 0   |
| VOLATILES   | Bromodichloromethane  | 1.06+01   | 0.0005  | 0.005        | NE                           | NE                                     | 1.02+01                         | 0.005 1 0   | 0.005 1 0   |
| VOLATILES   | Bromotorm   | 3.4E+01   | 0.0005  | 0.005        | NE                           | NE                                     | 3.48+01                         |   | 0.003 1 0   |
| VOLATILES   | Bromomethane  | 3,5E-01   | 0.0010  | 0.010        | NE                           |  | 3.35-01                         |   | 0.010 1 0   |
| VOLATILES   | Carbon disulfide  | 1.06+02   | 0.0005  | 0.005        | NE                           | NE                                     | 2.55.01                         | 0.005 1 0   | 0.005 1 U   |
| VOLATILES   | Carbon tetrachionoe   | 3.0E-01   | 0.0005  | 0.005        | NE                           |  | 4.0E+01                         | 0.005 1 1   | 0.005 1 1   |
| VOLATILES   | Chlorobenzene   | 4.02401   | 0.0000  | 0.005        |                              |  | 4.02101                         | 0.000 1 1   | 0.000 1 11  |
| VOLATILES   | Chloroestane  | 1.18+03   | 0.0010  | 0.010        | NE                           | NE                                     | 2 15 01                         | 0.010 1 0   | 0.005 1 11  |
| VOLATILES   | Chlorotenn  | 0.12-01   | 0.0000  | 0.000        | NE                           |  | 0.15-01                         | 0.010 1 1   | 0.010 1 11  |
| VOLATILES   | chloromethalte  | 2.35-01   | 0.0020  | 0.010        | NE                           |  | 1 25-01                         | 0.010 1 0   | 0.005 1 11  |
| VOLATILES   | cis-1,2-Dichiorostopana   | 1.25+02   | 0.0005  | 0.005        | ME                           |  | 1.2E+00                         | 0.005 1 U   | 0.005 1 11  |
| VOLATILES   | Dibramanblaromothono  | 7 65+00   | 0.0005  | 0.005        | NE                           | NE                                     | 7.65+00                         | 0.005 1 1   | 0.005 1 U   |
| VOLATILES   | Dibromomothono  | 1.05+00   | 0.0005  | 0.005        | NE                           | NE                                     | 1904-01                         | 0.005 1 1   | 0.005 1 1   |
| VOLATILES   | Distionation  | 2 25-02   | 0.0000  | 0.000        | NE                           | NE                                     | 2 2E+02                         | 0.010 1 11  | 0.010 1 U   |
| VOLATILES   | Ethylhonzono  | 436+02    | 0.0016  | 0.010        | NE                           | NE                                     | 4 3E+02                         | 0.005 1 11  | 0.005 1 U   |
| VOLATILES   | Heyechlorobutediene   | 1.85+00   | 0.0005  | 0.005        | NE                           | NE                                     | 1.6E+00                         | 0.005 1 1   | 0.005 1 U   |
| VOLATILES   | Isopropulbanzana  | 5.45+02   | 0.0005  | 0.005        |                              | NE                                     | 5.4E+02                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | m n-Yidenes   | 2 35+02   | 0.0005  | 0.005        | NE                           | NE                                     | 2 3E+02                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | Methyl isobutid ketone  | 1 3 = +03 | 0.0000  | 0.01         | NE                           | NE                                     | 135+03                          | 0.010 1 U   | 0.010 1 U   |
| VOLATILES   | Methylene chloride  | 8 7E+00   | 0.0010  | 0.005        | NE                           | NE                                     | 87E+00                          | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | Nanhthalene   | 1.8E+01   | 0.0005  | 0.01         | NE                           | NE                                     | 1.8E+01                         | 0.010 1 U   | 0.010 1 U   |
| VOLATE ES   | n-BLITYI BENZENE  | 2 7E+02   | 0.0005  | 0.005        | NE                           | NE                                     | 2.7E+02                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | n-PROPVI BENZENE  | 3.25+02   | 0.0005  | 0.005        | NE                           | NE                                     | 3.2E+02                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | PUSOPROPY! TOLUENE  | 4 2E+02   | 0.0005  | 0.005        | NE                           | NE                                     | 4.2E+02                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | sec-BUTYI BENZENE   | 3.0E+02   | 0.0005  | 0.005        | NE                           | NE                                     | 3.0E+02                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | Styrene   | 1.3E+03   | 0.0005  | 0.005        | NE                           | NE                                     | 1.3E+03                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | tert-BLITYI BENZENE   | 2 6E+02   | 0 0005  | 0.005        | NE                           | NE                                     | 2.6E+02                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | Tetrachioroethene   | 6.0E+00   | 0.0005  | 0.005        | NE                           | NE                                     | 6.0E+00                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | Toluene   | 1.1E+03   | 0.0005  | 0.005        | NE                           | NE                                     | 1.1E+03                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | trans-1.2-Dichloroethene  | 1.4E+02   | 0.0005  | 0.005        | NE                           | NE                                     | 1.4E+02                         | 0.005 1 U UJ  | 0.005 1 U   |
| VOLATILES   | trans-1.3-Dichloropropene   | 1.8E+00   | 0.0005  | 0.005        | NE                           | NE                                     | 1.8E+00                         | 0.005 1 U   | 0.005 1 U UJ  |
| VOLATILES   | Trichloroethene   | 3.7E+00   | 0.0005  | 0.005        | NE                           | NE                                     | 3.7E+00                         | 0.005 1 U   | 0.005 1 U   |
| VOLATILES   | Trichlorofluoromethane  | 2.6E+02   | 0.0010  | 0.01         | NE                           | NE                                     | 2.6E+02                         | 0.010 1 U   | 0.010 1 U   |
| VOLATILES   | Vinyl acetate   | 5.7E+01   | 0.0010  | 0.01         | NE                           | NE                                     | 5.7E+01                         | 0.010 1 U   | 0.010 1 U   |
| VOLATILES   | Vinyl chloride  | 3.6E-02   | 0.0010  | 0.01         | NE                           | NE                                     | 3.6E-02                         | 0.010 1 U   | 0.010 1 U   |

### 00066490

|   | WRSump-004                         |   |  |   |   |   |   |                        |                          |                        |                          |
|---|------------------------------------|---|--|---|---|---|---|------------------------|--------------------------|------------------------|--------------------------|
| [SUMP] = WRSUMP004           LOCATION, CODE           SAMPLE_NO           TCEQ           Backgr           SAMPLE_DATE           Risk-Based           Concentration           DEPTH           SAMPLE_PURPOSE           Value           Detection |                                    | round<br>tions in Soil<br>L. mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP001-SB01<br>35-SMP01-SB01-01<br>9/7/2006<br>0.5 - 1 Ft<br>REG | 35SUMP001-SB01<br>35-SMP01-SB01-02<br>9/7/2006<br>5 - 6 Ft<br>REG | 35SUMP001-SB02<br>35-SMP01-SB02-01<br>9/7/2006<br>0 - 0.5 Ft<br>REG | 35SUMP001-SB02<br>35-SMP01-SB02-02<br>9/7/2006<br>5 - 6 Ft<br>REG |                        |                          |                        |                          |
| Test Group  | -<br>Parameter (Units = mg/kg)     | (RBSV) *  | Limit (MDL)                                  | Limit (MQL)   | 0 - 0.5 Ft  | 1.5 - 2.5 Ft  | Value   | Result DIL LQ VQ       | Result DIL LQ VQ         | Result DIL LQ VQ       | Result DIL LQ VQ         |
| METALS  | Aluminum                           | 1.6E+04   | 10.000                                       | 20.00   | 1.63E+04  | 2.08E+04  | 1.6E+04   | 4640.000 1             | 5460.000 1               | 7060.000 1             | 6510.000 1               |
| METALS  | Antimony                           | 7.3E+00   | 0.500  | 0.10  | 9.40E-01  | 1.60E+00  | 7.3E+00   | 0.055 1 J J<br>1 250 1 | 0.113 1 U<br>0.752 1     | 0.120 1 2.590 1        | 0.114 1 U<br>0.832 1     |
| METALS  | Barium                             | 2.6E+01   | 0.075  | 0.30  | 1.52E+02  | 8.55E+01  | 2.6E+03   | 30.200 1               | 26.200 1                 | 71.500 1               | 29.900 1                 |
| METALS  | Beryllium                          | 4.6E+00   | 0.012  | 0.50  | 6.45E-01  | 7.66E-01  | 4.6E+00   | 0.208 1 J J            | 0.475 1                  | 0.545 1                | 0.891 1                  |
| METALS  | Cadmium                            | 5.2E+00   | 0.025  | 0.10  | 1.40E+00  | 4.00E-01  | 5.2E+00   | 0.039 1 J J            | 0.047 1 J J<br>716.000 1 | 0.495 1                | 0.095 1 J J<br>962.000 1 |
| METALS  | Chromium                           | 5.9E+03   | 0.100  | 0.40  | 2.66E+01  | 3.01E+01  | 5.9E+03   | 8.410 1                | 7.160 1                  | 31.600 1               | 20,300 1                 |
| METALS  | Cobalt                             | 1.5E+03   | 0.125  | 0.50  | 7.23E+00  | 5.61E+00  | 1.5E+03   | 1.570 1                | 6.710 1                  | 3.880 1                | 7.880 1                  |
| METALS  | Copper                             | 1.0E+03   | 0.150  | 0.60  | 5.55E+00  | 9.25E+00  | 1.0E+03   | 1.700 1                | 3.480 1                  | 31.600 1               | 7.140 1                  |
| METALS  | 1ron<br>Leart                      | NE<br>5.0E+02                                     | NA<br>0.500                                  | 5.00  | 2 26E+01  | 1 14E+01  | 5.0E+02   | 5 350 1                | 4 670 1                  | 53.500 5               | 5.760 1                  |
| METALS  | Magnesium                          | NE  | NA   | NA  | NA  | NA  | _   | 229.000 1              | 973.000 1                | 2080.000 1             | 1350.000 1               |
| METALS  | Manganese                          | 1.7E+03   | 0.050  | 0.20  | 1.25E+03  | 2.01E+02  | 1.7E+03   | 48.800 1               | 30.800 1                 | 132.000 1              | 58.300 1                 |
| METALS  | Mercury                            | 1.1E-02   | 0.010  | 0.25  | 8.19E-02<br>6.98E+00  | 3.60E-01  | 2.5E-01<br>1.9E+02  | 0.010 1 J J<br>2.270 1 | 10.012 1 0               | 0.026 1 J J<br>7.100 1 | 16,900 1                 |
| METALS  | Potassium                          | NE  | NA NA  | NA  | NA  | NA  | -   | 221.000 1              | 274.000 1                | 174.000 1              | 307.000 1                |
| METALS  | Selenium                           | 1.3E+02   | 0.100  | 0.20  | 3.48E+00  | 5.57E+00  | 1.3E+02   | 0.145 1 J J            | 0.214 1 J J              | 0.289 1                | 0.117 1 J J              |
| METALS  | Silver                             | 4.7E+01   | 0.050  | 0.20  | 3.10E-01  | 3.70E-01  | 4.7E+01   | 1.500 1 U              | 1.800 1 U                | 1.690 1 U<br>53.100 1  | 1.690 1 U<br>528.000 1   |
| METALS  | Thallium                           | 2 0E+00   | 0.010  | 0.02  | 4.70E-01  | NE  | 2.0E+00   | 0.042 1                | 0.061 1                  | 0.028 1                | 0.097 1                  |
| METALS  | Vanadium                           | 4.8E+01   | 0.125  | 0.50  | 3.21E+01  | 4.46E+01  | 4.8E+01   | 15.600 1               | 9.210 1                  | 61.100 1               | 19.900 1                 |
| METALS  | Zinc                               | 5.9E+03   | 0.625  | 2.50  | 6.16E+01  | 2.02E+01  | 5.9E+03   | 5.950 1                | 19.600 1                 | 115.000 1              | 32.800 1                 |
| SEMIVOLATILES<br>SEMIVOLATILES  | 1.2,4-Trichlorobenzene             | 1.4E+02<br>5.6E+01                                | 0.083  | 0.17  | NE  |   | 1.4±+02<br>5.6E+01  |                        |                          |                        |                          |
| SEMIVOLATILES   | 1.3-Dichlorobenzene                | 5.1E+00   | 0.083  | 0.17  | NË  | NĚ  | 5.1E+00   | 1                      |                          |                        |                          |
| SEMIVOLATILES   | 1.4-Dichlorobenzene                | 2.7E+01   | 0.083  | 0.17  | NE  | NE  | 2.7E+01   |                        |                          |                        |                          |
| SEMIVOLATILES   | 2.4.5-Trichlorophenol              | 1.6E+03   | 0.083  | 0.17  | NE  | NE  | 1.6E+03   |                        |                          |                        |                          |
| SEMIVOLATILES   | 2.4-Dichlorophenol                 | 4.7E+01   | 0.083  | 0.17  | NE  | NE  | 4.7E+01   |                        |                          |                        |                          |
| SEMIVOLATILE\$  | 2,4-Dimethylphenol                 | 3.1E+02   | 0.083  | 0.17  | NE  | NE  | 3.1E+02   |                        |                          |                        |                          |
| SEMIVOLATILES   | 2,4-Dinitrophenol                  | 3.1E+01   | 0.330  | 0.83  | NE  | NE  | 3.1E+01   |                        |                          |                        |                          |
| SEMIVOLATILES   | 2.6-Dinitrotoluene                 | 7.2E-01   | 0.083  | 0.17  | NE  | NE  | 7.2E-01   |                        |                          |                        |                          |
| SEMIVOLATILES   | 2-Chloronaphthalene                | 1.1E+03   | 0.083  | 0.17  | NE  | NE  | 1.1E+03   |                        |                          |                        |                          |
| SEMIVOLATILES   | 2-Chlorophenol                     | 1.18+02   | 0.083  | 0.17  | NE  | NE  | 1.1E+02   |                        |                          |                        |                          |
| SEMIVOLATILES   | 2-Methylphenol                     | 7.7£+02   | 0.083  | 0.17  | NE  | NE  | 7.7E+02   |                        |                          |                        |                          |
| SEMIVOLATILES   | 2-Nitroaniline                     | 4.7E+00   | 0.330  | 0.83  | NE  | NE  | 4.7E+00   |                        |                          |                        |                          |
| SEMIVOLATILES   | 2-Nitrophenol                      | 3.1E+01   | 0.083  | 0.17  | NE  | NE  | 3.1E+01   |                        |                          |                        |                          |
| SEMIVOLATILES<br>SEMIVOLATILES  | 3-Nitroaniline                     | 475+00  | 0.165  | 0.33  | NE  | NE  | 476+00  |                        |                          |                        |                          |
| SEMIVOLATILES   | 4,6-Dinitro-2-methylphenol         | 3.1E+01   | 0.330  | 0.83  | NE  | NE  | 3.1E+01   |                        |                          |                        |                          |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether         | 3.1E-02   | 0.083  | 0.17  | NE  | NE  | 1.7E-01   |                        |                          |                        |                          |
| SEMIVOLATILES<br>SEMIVOLATILES  | 4-Chlomanilize                     | 7.7E+U1<br>6.2E+01                                | 0.083  | 0.17  | NE  | NE  | 6.2E+01   |                        |                          |                        |                          |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether        | 2.8E-02   | 0.083  | 0.17  | NE  | NE  | 1.7E-01   |                        |                          |                        |                          |
| SEMIVOLATILES   | 4-Methylphenol                     | 7.7E+01   | 0.083  | 0.17  | NE  | NE  | 7.7E+01   |                        |                          |                        |                          |
| SEMIVOLATILES   | 4-Nitrophenal                      | 1.3E+01<br>3.1E+01                                | 0.330  | 0.83  | NE  | NE  | 1.3±+01   |                        |                          | ÷                      |                          |
| SEMIVOLATILES   | Acenaphthene                       | 8.2E+02   | 0.083  | 0.17  | NE  | NE  | 8.2E+02   |                        |                          |                        |                          |
| SEMIVOLATILES   | Acenaphthylene                     | 8.2E+02   | 0.083  | 0.17  | NE  | NE  | 8.2E+02   |                        |                          |                        |                          |
| SEMIVOLATILES   | Anthracene<br>Repro(a)asthrapopo   | 4.1E+03   | 0.0825                                       | 0.165   | NE<br>1 535 02  | NE  | 4.1E+03   |                        |                          |                        |                          |
| SEMIVOLATILES   | Benzo(a)pyrene                     | 6.3E-02   | 0.0825                                       | 0.165   | 1.54E-02  | NE  | 1.7E-01   |                        |                          |                        |                          |
| SEMIVOLATILES   | Benzo(b)fluoranthene               | 6.3E-01   | 0.0825                                       | 0.165   | 1.53E-02  | NE  | 6.3E-01   |                        |                          |                        |                          |
| SEMIVOLATILES   | Benzo(ghi)perylene                 | 4.1E+02   | 0.0825                                       | 0.165   | 1.23E-02  | NE  | 4.1E+02   |                        |                          |                        |                          |
| SEMIVOLATILES   | Benzoic Acid                       | 6.2E+00   | 0.0823                                       | 0.825   | NE  | NE  | 6.2E+04   |                        |                          |                        |                          |
| SEMIVOLATILES   | Benzyl Alcohol                     | 4.7E+03   | 0.0825                                       | 0.165   | NE  | NE  | 4.7E+03   |                        |                          |                        |                          |
| SEMIVOLATILES   | bis(2-Chloroethoxy)methane         | 2.9E-01   | 0.0825                                       | 0.165   | NE  | NE  | 2.9E-01   |                        |                          |                        |                          |
| SEMIVOLATILES   | bis(2-Chloroisopropy)ether         | 1.5E-01<br>4.8E+00                                | 0.0825                                       | 0.165   | NE  | NE  | 1.7E-01<br>4.8E+00  |                        |                          |                        |                          |
| SEMIVOLATILES   | bis(2-Ethylhexyl)phthalate         | 1.7E+01   | 0.0825                                       | 0.165   | NE  | NE  | 1.7E+01   | · ·                    |                          |                        |                          |
| SEMIVOLATILES   | Butyl benzyl phthalate             | 3.1E+03   | 0.0825                                       | 0.165   | NE  | NE  | 3.1E+03   |                        |                          |                        |                          |
| SEMIVULATILES   | Unrysene<br>Dibenzo(a b)anthracene | 6.3E+01<br>6.3E+02                                | 0.0825                                       | 0.165   | 1,51E-02<br>NF  | NE  | 6.3E+01<br>1.7E-01  |                        |                          |                        |                          |
| SEMIVOLATILES   | Dibenzofuran                       | 6.2E+01   | 0.0825                                       | 0.165   | NE  | NE  | 6.2E+01   |                        |                          |                        |                          |

### Table 4-48

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

### 00066491

Table 4-48

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

| WRSump-004 |  |
|------------|--|
| <b>1</b> . |  |

| [SUMP] = WRSUMP(               | 004   |                    |                     |             |                    |                         |                    |                  |                        | 2550 IMD001 SB02   | 35SUMP001-SB02         |
|--------------------------------|---|--------------------|---------------------|-------------|--------------------|-------------------------|--------------------|------------------|------------------------|--------------------|------------------------|
| LOCATION_CODE                  |   | TCEO               |                     |             | Backo              | round                   | Applicble          | 35-SMP01-SB01-01 | 35-SMP01-SB01-02       | 35-SMP01-SB02-01   | 35-SMP01-SB02-02       |
| SAMPLE_DATE                    |   | Risk-Based         |                     |             | Concentrat         | ions in Soil            | TCEQ               | 9/7/2006         | 9/7/2006               | 9/7/2006<br>0.055t | 9/7/2006<br>5 - 6 Ft   |
| DEPTH<br>SAMPLE PURPOSE        |   | Screening<br>Value | Method<br>Detection | Method _    | (95% UP<br>Surface | L, mg/kg)<br>Subsurface | Screening          | REG              | REG                    | REG                | REG                    |
| Test Groun                     | Parameter (Units = mo/kg)                             | (RBSV) *           | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft         | 1.5 - 2.5 Ft            | Value              | Result DIL LQ VQ | Result DIL LQ VQ       | Result DIL LQ VQ   | Result DIL LQ VQ       |
| SEMIVOLATILES                  | Diethyl phthalate                                     | 1.2E+04            | 0.0825              | 0.165       | NE                 | NE                      | 1.2E+04            |                  |                        |                    |                        |
| SEMIVOLATILES                  | Dimethyl phthalate                                    | 1.2E+04<br>1.6E+03 | 0.0825              | 0.165       | NE                 | NE                      | 1.2E+04<br>1.6E+03 |                  |                        |                    |                        |
| SEMIVOLATILES                  | di-n-Octyl phthalate                                  | 3.1E+02            | 0.0825              | 0.165       | NE                 | NE                      | 3.1E+02            |                  |                        |                    |                        |
| SEMIVOLATILES                  | Fluoranthene  | 5.5E+02            | 0.0825              | 0.165       | 2.29E-02           | NE                      | 5.5E+02            |                  |                        |                    |                        |
| SEMIVOLATILES<br>SEMIVOLATILES | Fluorene<br>Hexachlorobeozene                         | 5.5E+02<br>2.5E-01 | 0.0825              | 0.165       | NE                 | NE                      | 2.5E-01            |                  |                        |                    |                        |
| SEMIVOLATILES                  | Hexachlorobutadiene                                   | 1.6E+00            | 0.0825              | 0.165       | NE                 | NE                      | 1.6E+00            |                  |                        |                    |                        |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene                             | 1.0E+00            | 0.0825              | 0.165       | NE                 | NE                      | 1.0E+00            |                  |                        |                    |                        |
| SEMIVOLATILES                  | Indeno(1.2.3-cd)ovrene                                | 6.3E-01            | 0.0825              | 0.165       | 1.43E-02           | NE                      | 6.3E-01            |                  |                        |                    |                        |
| SEMIVOLATILES                  | Isophorone  | 5.2E+02            | 0.0825              | 0.165       | NE                 | NE                      | 5.2E+02            |                  |                        |                    |                        |
| SEMIVOLATILES                  | Naphthalene   | 1.8E+01            | 0.0825              | 0.165       | NE                 | NE                      | 1.8E+01<br>6.5E+00 |                  |                        |                    |                        |
| SEMIVOLATILES                  | natroberizene<br>n-Nitroso-di-n-propylamine           | 4.1E-02            | 0.0825              | 0.165       | NE                 | NE                      | 1.7E-01            |                  |                        |                    |                        |
| SEMIVOLATILES                  | n-Nitrosodiphenylamine                                | 5.9E+01            | 0.0825              | 0.165       | NE                 | NE                      | 5.9E+01            |                  |                        |                    |                        |
| SEMIVOLATILES                  | Pentachiorophenol                                     | 3.0E+00            | 0.3300              | 0.825       | NE                 | NE                      | 3.0E+00<br>4.1E+02 |                  |                        |                    |                        |
| SEMIVOLATILES                  | Phenoi  | 4.7E+02            | 0.0825              | 0.165       | NE                 | NE                      | 4.7E+03            |                  |                        |                    |                        |
| SEMIVOLATILES                  | Pyrene  | 4.1E+02            | 0.0825              | 0.165       | 1.94E-02           | NE                      | 4.1E+02            |                  | 05.000 4               | 00 200 4           | 97.500 1               |
| SOLIDS                         | Percent Solids  | NE<br>E 2E+00      | NE<br>0.0005        | NE<br>0.005 | NE                 | NE                      | 5 2 =+00           | 95.900 1         | 0.005 1 U              | 90.300 1           | 0.005 1 U              |
| VOLATILES                      | 1.1.1-Trichloroethane                                 | 2.3E+02            | 0.0005              | 0.005       | NE                 | NE                      | 2.3E+02            |                  | 0.005 t U              |                    | 0.005 1 U              |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane                             | 5.1E-01            | 0.0005              | 0.005       | NE                 | NE                      | 5.1E-01            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | 1,1,2-Trichloroethane                                 | 9.7E-01            | 0.0005              | 0.005       | NE                 |                         | 9.7E-01<br>8.9E+01 |                  | 0.005 1 U UJ           |                    | 0.005 1 U UJ           |
| VOLATILES                      | 1.1-Dichloroethene                                    | 2.7E+01            | 0.0005              | 0,005       | NE                 | NE                      | 2.7E+01            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | 1.1-Dichloropropene                                   | 9.9E-01            | 0.0005              | 0.005       | NE                 | NE                      | 9.9E-01            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | 1,2,3-Trichlorobenzene                                | 4.2E+01<br>9.2E-02 | 0.0005              | 0.005       | NE                 | NE                      | 4.2E+01<br>9.2E-02 |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | 1,2,4-Trichlorobenzene                                | 1.4E+02            | 0.0005              | 0.005       | NE                 | NE                      | 1.4E+02            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | 1,2,4-Trimethylbenzene                                | 9.6E+00            | 0.0005              | 0.005       | NE                 | NE                      | 9.6E+00            |                  | 0.005 1 U              |                    | 0.005 1 0              |
| VOLATILES                      | 1,2-Dibromo-3-chioropropane<br>1,2-Dibromoethane      | 3.5E-01<br>5.3E-02 | 0.0020              | 0.005       | NE                 | NE                      | 5.3E-01            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | 1,2-Dichlorobenzene                                   | 5.6E+01            | 0.0005              | 0.005       | NE                 | NE                      | 5.6E+01            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | 1,2-Dichloroethane                                    | 2.7E-01            | 0.0005              | 0.005       | NE                 | NE                      | 2.7E-01            |                  | 0.005 1 U<br>0.005 1 U |                    | 0.005 1 U              |
| VOLATILES                      | 1.2-Directionopropane<br>1.2-Directivibenzene (o-Xvie | 3.3E+03            | 0.0005              | 0.005       | NE                 | NE                      | 3.3E+03            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | 1,3,5-Trimethylbenzene                                | 8.3E+00            | 0,0005              | 0.005       | NE                 | NE                      | 8.3E+00            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | 1.3-Dichlorobenzene                                   | 5.1E+00            | 0.0005              | 0.005       | NE                 | NE                      | 5,1E+00<br>3.0E+00 |                  | 0.005 1 0              |                    | 0.005 1 U              |
| VOLATILES                      | 1.4-Dichlorobenzene                                   | 2.7E+01            | 0.0005              | 0.005       | NE                 | NE                      | 2.7E+01            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | 2.2-Dichloropropane                                   | 1.7E+00            | 0.0005              | 0.005       | NE                 | NE                      | 1.7E+00            | 1                | 0.005 1 U              |                    | 0.005 1 0              |
| VOLATILES                      | 2-Butanone<br>2-Chlomethyl vioud ether                | 2.6E+03<br>2.4E-01 | 0.0025              | 0.010       | NE                 | NE                      | 2.0E+03<br>2.1E-01 |                  | 0.009 1 U              |                    | 0.009 1 U              |
| VOLATILES                      | 2-Chlorotoluene                                       | 1.5E+02            | 0.0005              | 0.005       | NE                 | NE                      | 1,5E+02            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | 2-Hexanone  | 6.2E+00            | 0.0025              | 0.010       | NE                 | NE                      | 6.2E+00            |                  | 0.009 1 U              |                    | 0.009 1 0              |
| VOLATILES                      | 4-Chiorotoluene                                       | 3.4E-01<br>1.7E+02 | 0.00050             | 0.005       | NE                 | NE                      | 1.7E+02            |                  | 0.009 1 U              |                    | 0.009 1 U              |
| VOLATILES                      | Benzene   | 8.8E-01            | 0.0005              | 0.005       | NE                 | NE                      | 8.8E-01            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | Bromobenzene  | 1.1E+01            | 0.0005              | 0.005       | NE                 | NE                      | 1.1E+01<br>2.4E+01 |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES<br>VOLATILES         | Bromodichloromethane                                  | 1.0E+01            | 0.0005              | 0.005       | NE                 | NE                      | 1.0E+01            |                  | 0.006 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | Bromoform   | 3.4E+01            | 0.0005              | 0.005       | NE                 | NE                      | 3.4E+01            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | Bromomethane  | 3.5E-01            | 0.0010              | 0,010       | NE                 | NE                      | 3.5E-01            |                  | 0.009 1 0 03           |                    | 0.005 1 U              |
| VOLATILES                      | Carbon tetrachloride                                  | 3.55-01            | 0.0005              | 0.005       | NE                 | NE                      | 3.5E-01            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | Chlorobenzene   | 4.0E+01            | 0.0005              | 0.005       | NE                 | NE                      | 4.0E+01            |                  | 0.005 1 U              | 1                  | 0.005 1 U              |
| VOLATILES                      | Chloroethane  | 1.1E+03<br>3.1E-01 | 0.0010              | 0.010       | NE                 | NE                      | 1.1E+03<br>3.1E-01 |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | Chloromethane   | 2.3E-01            | 0.0020              | 0.010       | NE                 | NE                      | 2.3E-01            |                  | 0.009 1 U              |                    | 0.009 1 U              |
| VOLATILES                      | cis-1,2-Dichloroethene                                | 1.2E+02            | 0.0005              | 0.005       | NË                 | NE                      | 1.2E+02            | ł                | 0.005 1 U UJ           |                    | 0.005 1 U UJ           |
| VOLATILES                      | cis-1,3-Dichloropropene<br>Dibromochloromethane       | 1.2E+00<br>7.6E+00 | 0.0005              | 0.005       | NE                 | NE                      | 7.6E+00            | 1                | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | Dibromomethane  | 1.9E+01            | 0.0005              | 0.005       | NE                 | NE                      | 1.9E+01            |                  | 0.005 1 U              |                    | 0.005 1 U              |
| VOLATILES                      | Dichlorodifluoromethane                               | 2.2E+02            | 0.0010              | 0.010       | NE                 | NE                      | 2.2E+02            |                  | 0.009 1 U<br>0.005 1 U |                    | 0.009 1 U<br>0.005 1 U |
| VOLATILES                      | Hexachlorobutadiene                                   | 4.32+02<br>1.6E+00 | 0.0005              | 0.005       | NÉ                 | NE                      | 1.6E+00            |                  | 0.005 1 U              |                    | 0.005 1 U              |

Shaw Environmental, Inc.

# 00066492

| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values                         |  |  |  |  |   |   |  |   |  |   |   |  |  |
|--|--|--|--|--|---|---|--|---|--|---|---|--|--|
| WRSump-004   |  |  |  |  |   |   |  |   |  |   |   |  |  |
| [SUMP] = WRSUMP<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE             | 004  | TCEQ<br>Risk-Based<br>Screening<br>Value   | Method<br>Detection  | Method .<br>Quantitation   | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>?L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening   | 35SUMP001-SB01<br>35-SMP01-SB01-01<br>9/7/2006<br>0.5 - 1 Ft<br>REG | 35SUMP001-SB01<br>35-SMP01-SB01-02<br>97/2006<br>5 - 6 Ft<br>REG                                     | 35SUMP001-SB02<br>35-SMP01-SB02-01<br>9/7/2006<br>0 - 0.5 Ft<br>REG | 35SUMP001-SB02<br>35-SMP01-SB02-02<br>97/12006<br>5 - 6 Ft<br>REG                       |  |  |
| Test Group   | Parameter (Units = mg/kg)  | (RBSV)*  | Limit (MDL)  | Limit (MQL)  | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VQ  |  |  |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES | Isopropylbenzene<br>m,p-Xylenes<br>Methyl isobutyl ketone<br>Methylene citloride<br>Naphthalene<br>n-BUTYLBENZENE<br>n-PROPYLBENZENE<br>n-SPORPVI TON JENE | 5.4E+02<br>2.3E+02<br>1.3E+03<br>8.7E+00<br>1.8E+01<br>2.7E+02<br>3.2E+02<br>4.2E+02 | 0.0005<br>0.0025<br>0.0010<br>0.0005<br>0.0005<br>0.0005<br>0.0005 | 0.005<br>0.005<br>0.01<br>0.005<br>0.01<br>0.005<br>0.005<br>0.005 | NE E E E E E E E E E E E E E E E E E E  | 222222222222  | 5.4E+02<br>2.3E+02<br>1.3E+03<br>8.7E+00<br>1.8E+01<br>2.7E+02<br>3.2E+02<br>4.2E+02 |   | 0.005 1 U<br>0.005 1 U<br>0.009 1 U<br>0.005 1 U<br>0.009 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U |   | 0.005 1 U<br>0.005 1 U<br>0.009 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U |  |  |
| VOLATILES<br>VOLATILES   | sec-BUTYLBENZENE<br>Styrene  | 3.0E+02<br>1.3E+03   | 0.0005   | 0.005  | NE<br>NE                                | NE<br>NE  | 3.0E+02<br>1,3E+03   |   | 0.005 1 U<br>0.005 1 U   |   | 0.005 1 U<br>0.005 1 U  |  |  |
| VOLATILES<br>VOLATILES<br>VOLATILES  | tert-BUTYLBENZENE<br>Tetrachloroethene<br>Toluene  | 2.6E+02<br>6.0E+00<br>1.1E+03  | 0.0005<br>0.0005<br>0.0005   | 0.005<br>0.005<br>0.005  | NE<br>NE<br>NE                          | NE<br>NE<br>NE                                      | 2.6E+02<br>6.0E+00<br>1.1E+03  |   | 0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U   |   | 0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U  |  |  |
| VOLATILES<br>VOLATILES   | trans-1,2-Dichloropropene<br>Trichloroethene   | 1.4E+02<br>1.8E+00<br>3.7E+00  | 0.0005   | 0.005  | NE<br>NE                                | NE  | 1.8E+00<br>3.7E+00   |   | 0.005 1 U<br>0.005 1 U<br>0.005 1 U  |   | 0.005 1 U<br>0.005 1 U<br>0.005 1 U   |  |  |
| VOLATILES<br>VOLATILES<br>VOLATILES  | Vinyl acetate<br>Vinyl chloride  | 5.7E+02<br>5.7E+01<br>3.6E-02  | 0.0010   | 0.01   |   | NE<br>NE  | 5.7E+02<br>5.6E-02   | , , , , , , , , , , , , , , , , , , ,                               | 0.009 1 U<br>0.009 1 U<br>0.009 1 U  |   | 0.009 1 U<br>0.009 1 U  |  |  |

Table 4-48

00066493

#### Table 4-48

### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

WRSump-004

|                  |  |                     |             |              |                      |              |                    | _                |                    |
|------------------|--|---------------------|-------------|--------------|----------------------|--------------|--------------------|------------------|--------------------|
| [SUMP] = WRSUMPO | 004                                    |                     |             |              |                      |              |                    |                  | WIDEO4 6804        |
| LOCATION_CODE    |  |                     |             |              | Daala                |              | Appliable          | WRS04-5B01       | WRS04-SB01         |
| SAMPLE_NO        |  | I CEU<br>Risk-Resed |             |              | Conceptrat           | ions in Soil | TCEO               | 9/25/2006        | 9/25/2006          |
| DEPTH            |  | Screening           | Method      | Method       | (95% UP              | L. ma/ka)    | Risk-Based         | 0.0 - 0.5 Ft     | 3,5 - 4.5 Ft       |
| SAMPLE PURPOSE   |  | Value               | Detection   | Quantitation | Surface              | Subsurface   | Screening          | REG              | RÉG                |
| Test Groun       | Parameter (Units = mg/kg)              | (RBSV)*             | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft           | 1.5 - 2.5 Ft | Value              | Result DIL LQ VQ | Result DIL LQ VQ   |
| METALS           | Atuminum                               | 1.6E+04             | 10.000      | 20.00        | 1.63E+04             | 2.08E+04     | 1.6E+04            | 7500.000 1       | 10200.000 1        |
| METAL\$          | Antimony                               | 7.3E+00             | 0.500       | 0.10         | 9.40E-01             | 1.60E+00     | 7.3E+00            | 0.109 1 U UJL    | 0.113 1 U UJL      |
| METALS           | Arsenic                                | 2.0E+01             | 0.075       | 0.30         | 4.81E+00             | 5.54E+00     | 2.02+01            | 1.050 1 JL       | 21300 1 JL         |
| METALS           | Banum                                  | 2.62+03             | 0.075       | 0.50         | 1.32E+02<br>6.45E-01 | 7.66E-01     | 2.6E+00            | 0.519 1          | 0.403 1 J J        |
| METALS           | Cadmium                                | 5.28+00             | 0.025       | 0.10         | 1.40E+00             | 4.00E-01     | 5.2E+00            | 0.094 1 J J      | 0.413 1 U U        |
| METALS           | Calcium                                | NE                  | NA          | NA           | NA                   | NA           | -                  | 1310.000 i       | 514.000 1          |
| METALS           | Chromium                               | 5.9E+03             | 0.100       | 0.40         | 2.66E+01             | 3.01E+01     | 5.9E+03            | 41.500 1         | 10.700 1           |
| METALS           | Cobalt                                 | 1.5E+03             | 0.125       | 0.50         | 7.23E+00             | 5.61E+00     | 1.5E+03            | 1.750 1          | 6.360 1<br>2.490 1 |
| METALS           | Copper                                 | 1.0E+03             | 0.150       | 0.60         | 0.000                | 9.25E+00     | 1.02+03            | 52100.000 10     | 10200.000 1        |
| METALS           | lead                                   | 5 0E+02             | 0.500       | 500          | 2 26E+01             | 1.14E+01     | 5.0E+02            | 10.100 1         | 5.090 1            |
| METALS           | Magnesium                              | NE                  | NA          | NA           | NA                   | NA           |                    | 325.000 1 JH     | 890.000 1 JH       |
| METALS           | Manganese                              | 1.7E+03             | 0.050       | 0.20         | 1.25E+03             | 2.01E+02     | 1.7E+03            | 97.700 1 J       | 17.100 1 J         |
| METALS           | Mercury                                | 1.1E-02             | 0.010       | 0.25         | 8.19E-02             | 3.60E-01     | 2.5E-01            | 0.021 1 J J      | 0.011 1 J J        |
| METALS           | Nickel                                 | 1.9E+02             | 0.200       | 0.80         | 6.98E+00             | 1.16E+01     | 1.9E+02            | 3.180 1          | 336,000 4          |
| METALS           | Potassium<br>Selenium                  | 135+02              | 0 100       | 020          | 3 48E+00             | 5.575+00     | 13E+02             | 0.134 1 J JL     | 0.226 1 U UJL      |
| METALS           | Silver                                 | 4.7E+01             | 0.050       | 0.20         | 3.10E-01             | 3.70E-01     | 4.7E+01            | 1.720 1 U U      | 1.650 1 U U        |
| METALS           | Sodium                                 | NE                  | NA          | NA           | NA                   | NA           | _                  | 35.000 1         | 254.000 1          |
| METALS           | Thallium                               | 2.0E+00             | 0.010       | 0.02         | 4.70E-01             | NE           | 2.0E+00            | 0.036 1          | 0.055 1            |
| METALS           | Vanadium                               | 4.8E+01             | 0.125       | 0.50         | 3.21E+01             | 4.46E+01     | 4.8E+01            | 46.700 1         | 13.900 1           |
| METALS           | Zinc                                   | 5.9E+03             | 0.625       | 2.50         | 0.10E+U1             | 2.02E+01     | 5.9ET03<br>1.4E+02 | 1840 10 11 11    | 0187 1 11 11       |
| SEMIVOLATILES    | 1.2.4-Michlorobenzene                  | 5.6E+01             | 0.003       | 0.17         | NE                   | NE           | 5.6E+01            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | 1.3-Dichlorobenzene                    | 5.1E+00             | 0.083       | 0.17         | NE                   | NE           | 5.1E+00            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | 1,4-Dichlorobenzene                    | 2.7E+01             | 0.083       | 0.17         | NE                   | NE           | 2.7E+01            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol                  | 1.6E+03             | 0.083       | 0.17         | NE                   | NE           | 1.6E+03            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol                  | 4.5E+01             | 0.083       | 0.17         | NE                   | NE           | 4.5E+01            |                  | 0.187 1 0 0        |
| SEMIVOLATILES    | 2,4-Dimethylobenol                     | 4.7E+01<br>3.1E+02  | 0.083       | 0.17         | NE                   | NE           | 3.1E+02            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | 2.4-Dinitrophenol                      | 3.1E+01             | 0.330       | 0.83         | NE                   | NE           | 3.1E+01            | 9.190 10 U U     | 0.934 1 U U        |
| SEMIVOLATILES    | 2,4-Dinitrotoluene                     | 7.2E-01             | 0.083       | 0.17         | NE                   | NE           | 7.2E-01            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | 2,6-Dinitrotoluene                     | 7.2E-01             | 0.083       | 0.17         | NE                   | NE           | 7.2E-01            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | 2-Chloronaphthalene                    | 1.1E+03             | 0.083       | 0.17         | NE                   | NE           | 1,1E+03            | 1.840 10 U       | 0.187 1 0 0        |
| SEMIVOLATILES    | 2-Chlorophenol                         | 1.12+02             | 0.083       | 0.17         | NE                   | NE           | 1.1E+02<br>5.5E+01 | 1.840 10 0 0     | 0.187 1 U U        |
| SEMIVOLATILES    | 2-Methylphenol                         | 7.7E+02             | 0.083       | 0.17         | NE                   | NE           | 7.7E+02            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | 2-Nitroaniline                         | 4.7E+00             | 0.330       | 0.83         | NE                   | NE           | 4.7E+00            | 9.190 10 U U     | 0.934 1 U U        |
| SEMIVOLATILES    | 2-Nitrophenol                          | 3.1E+01             | 0.083       | 0.17         | NE                   | NE           | 3.1E+01            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | 3,3-Dichlorobenzidine                  | 1.1E+00             | 0.165       | 0.33         | NE                   | NE           | 1.1E+00            | 3.670 10 U U     | 0.373 1 U U        |
| SEMIVOLATILES    | 3-Nitroanline                          | 4.7E+00             | 0.330       | 0.83         | NE                   | NE           | 4./E+00<br>3.1E+01 | 9.190 10 0 0     | 0.934 1 0 0        |
| SEMIVOLATILES    | 4,0-Dinito-2-methylotenot              | 3.1E+01             | 0.083       | 0.03         | NE                   | NE           | 1.7E-01            | 0.924 10 U       | 0.093 1 U U        |
| SEMIVOLATILES    | 4-Chloro-3-methylphenol                | 7.7E+01             | 0.083       | 0.17         | NE                   | NE           | 7.7E+01            | 1.840 10 U       | 0.187 1 Ú U        |
| SEMIVOLATILES    | 4-Chloroaniline                        | 6.2E+01             | 0.083       | 0.17         | NE                   | NE           | 6.2E+01            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether            | 2.8E-02             | 0.083       | 0.17         | NE                   | NE           | 1.75-01            | 0.924 10 U U     | 0.093 1 0 0        |
| SEMIVOLATILES    | 4-Methylphenoi<br>4 Mittra apilina     | 7.78+01             | 0.083       | 0.17         | NE                   | NE           | 135+01             | 9 100 10 0 U     | 0.187 1 0 0        |
| SEMIVOLATILES    | 4-Nitrophenol                          | 3 1E+01             | 0.330       | 0.83         | NE                   | NE           | 3.1E+01            | 9,190 10 U U     | 0.934 1 U U        |
| SEMIVOLATILES    | Acenaphthene                           | 8.2E+02             | 0.083       | 0.17         | NE                   | NE           | 8.2E+02            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | Acenaphthylene                         | 8.2E+02             | 0.083       | 0.17         | NE                   | NE           | 8.2E+02            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | Anthracene                             | 4.1E+03             | 0.0825      | 0.165        | NE                   | NE           | 4.1E+03            | 1.840 10 U       | 0.187 1 U U        |
| SEMIVOLATILES    | Benzo(a)anthracene                     | 6.3E-01             | 0.0825      | 0.165        | 1.53E-02             | NE           | 6.3E-01            | 1.840 10 0 0     | 0.187 1 0 0        |
| SEMIVOLATILES    | Benzo(a)pyrene<br>Benzo(b)fluoranthene | 6.3E-02<br>6.3E-01  | 0.0825      | 0.165        | 1.54E-02             | NE           | 6.3E-01            | 1.840 10 U U     | 0.187 1 1 1        |
| SEMIVOLATILES    | Benzo(ohi)perviene                     | 4.1E+02             | 0.0825      | 0.165        | 1.23E-02             | NE           | 4.1E+02            | 1.840 10 U U     | 0.187 I Ŭ Ŭ        |
| SEMIVOLATILES    | Benzo(k)fluoranthene                   | 6.3E+00             | 0.0825      | 0,165        | 1.30E-02             | NE           | 6.3E+00            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | Benzoic Acid                           | 6.2E+04             | 0.3300      | 0.825        | NE                   | NE           | 6.2E+04            | 9.190 10 U UJ    | 0.934 1 U UJ       |
| SEMIVOLATILES    | Benzyl Alcohol                         | 4.7E+03             | 0.0825      | 0.165        | NE                   | NE           | 4.7E+03            |                  | 0.187 1 0 0        |
| SEMIVOLATILES    | bis(2-Chloroethol)ether                | 2.9E-01<br>1.5E-01  | 0.0825      | 0.165        | NE                   | NE           | 2.8E-01<br>1.7E-01 |                  | 0.093 1 U U        |
| SEMIVOLATILES    | bis(2-Chioroisopropy)ether             | 4.8E+00             | 0.0825      | 0.165        | NE                   | NE           | 4.8E+00            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate             | 1.7E+01             | 0.0825      | 0.165        | NE                   | NE           | 1.7E+01            | 1.840 10 U U     | 0.187 1 U Ū        |
| SEMIVOLATILES    | Butyl benzyl phthalate                 | 3.1E+03             | 0.0825      | 0.165        | NE                   | NE           | 3.1E+03            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | Chrysene                               | 6.3E+01             | 0.0825      | 0.165        | 1.51E-02             | NE           | 6.3E+01            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene                 | 6.3E-02             | 0.0825      | 0.165        |                      |              | 1.7E-01<br>8.2E+01 | 1 840 10 11 11   |                    |
| SEMIVOLATILES    | Diethyl nhthalate                      | 1.2E+04             | 0.0625      | 0.165        | NE                   | NE           | 1.2E+04            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | Dimethyl phthalate                     | 1.2E+04             | 0.0825      | 0.165        | NE                   | NE           | 1.2E+04            | 1.840 10 U U     | 0.187 1 U U        |
| SEMIVOLATILES    | di-n-Butyl phthalate                   | 1.6E+03             | 0.0825      | 0,165        | NE                   | NE           | 1.6E+03            | 1.840 10 U U     | 0.187 1 U U        |

00066494

### Table 4-48

### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

WRSump-004

| SUMP] = WRSUMP   | 004                             |                    |             |              |           |                           |                           |                  |                   |
|------------------|---------------------------------|--------------------|-------------|--------------|-----------|---------------------------|---------------------------|------------------|-------------------|
| LOCATION_CODE    |                                 | TOPO               |             |              | D. J      |                           | • <b>P</b> . <b>b</b> 1 . | WRS04-SB01       | WR\$04-\$B01      |
| SAMPLE_NO        |                                 | ICEQ<br>Bist Based |             |              | Conceptor | ground                    | Applicble                 | WRS04-SB01-01    | WRS04-5801-02     |
| DEDTH            |                                 | Screening          | Method      | Method       | (05% LIS  | Nuurisiin 304<br>Nimarka) | Rick-Based                | 0.0 - 0.5 Et     | 35.45 Ft          |
| SAMPLE PURPOSE   | <u>.</u>                        | Value              | Detection   | Quantitation | Surface   | Subsurface                | Screening                 | REG              | REG               |
| Test Group       | Parameter // loits = maika)     | /PRSVA             | Limit (MDL) | Limit (MOL)  | 0.055     | 15 25 51                  | Value                     | Result DIL 10 VO | Pacult Dill LO VO |
| SEMIVOLATILES    | di-p-Octvl phthalate            | 3.1E+02            | 0.0825      | 0.165        | NE        | NE                        | 3 1E+02                   | 1.840 10 U U     | 0.187 1 U U       |
| SEMIVOLATILES    | Fluoranthene                    | 5.5E+02            | 0.0825      | 0.165        | 2.29E-02  | NE                        | 5.5E+02                   | 1.840 10 U U     | 0.187 1 Ū Ū       |
| SEMIVOLATILES    | Fluorene                        | 5.5E+02            | 0.0825      | 0.165        | NE        | NE                        | 5.5E+02                   | 1.840 10 U U     | 0.187 1 U U       |
| SEMIVOLATILES    | Hexachiorobenzene               | 2.5E-01            | 0.0825      | 0.165        | NĒ        | NË                        | 2.5E-01                   | 1.840 10 U U     | 0.187 1 U U       |
| SEMIVOLATILES    | Hexachiorobutadiene             | 1.6E+00            | 0.0825      | 0.165        | NE        | NE                        | 1.6E+00                   | 1.840 10 U U     | 0.187 1 U U       |
| SEMIVOLATILES    | Hexachlorocyclopentadiene       | 1.0E+00            | 0.0825      | 0.165        | NE        | NE                        | 1.0E+00                   | 1.840 10 U U     | 0.187 1 U U       |
| SEMIVOLATILES    | Hexachloroethane                | 1.6E+01            | 0.0825      | 0.165        | NE        | NE                        | 1.6E+01                   | 1.840 10 0 0     | 0.187 1 U U       |
| SEMIVULATILES    | Indeno(1,2,3-co)pyrene          | 0.3E-01            | 0.0825      | 0.165        | 1.43E-02  | NE                        | 0.3E-01                   |                  | 0.187 1 0 0       |
| SEMIVOLATILES    | Nanhthalene                     | 1 8E+01            | 0.0025      | 0.165        | NE        | NE                        | 1.8E+01                   | 1840 10 11 11    | 0.187 1 1 1       |
| SEMIVOLATILES    | Nitrobenzene                    | 6.5E+00            | 0.0825      | 0.165        | NE        | NE                        | 6.5E+00                   | 1.840 10 U U     | 0.187 1 Ŭ Ŭ       |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine      | 4.1E-02            | 0.0825      | 0.165        | NE        | NE                        | 1.7E-01                   | 0.924 10 U U     | 0.093 1 U U       |
| SEMIVOLATILES    | n-Nitrosodiphenylamine          | 5.9E+01            | 0.0825      | 0.165        | NE        | NE                        | 5.9E+01                   | 1.840 10 U U     | 0.187 1 U U       |
| Semivolatiles    | Pentachlorophenol               | 3.0E+00            | 0.3300      | 0.825        | NE        | NE                        | 3.0E+00                   | 9.190 10 U U     | 0.934 1 U U       |
| SEMIVOLATILES    | Phenanthrene                    | 4.1E+02            | 0,0825      | 0.165        | NE        | NE                        | 4.1E+02                   | 1.840 10 U U     | 0.187 1 U U       |
| SEMIVOLATILES    | Phenol                          | 4.7E+03            | 0.0825      | 0.165        | NE        | NE                        | 4.7E+03                   | 1.840 10 U       | 0.187 1 U U       |
| SEMIVULATILES    | Pyrene<br>Demont Salida         | 4.16+02            | 0.0825      | 0.165        | 1.94E-02  | NE                        | 4.1E+02                   | 1.840 10 0 0     | 0.187 1 U U       |
|                  | 1 1 1 2 Tetrachloroethane       | 5 25+00            | 0.0005      | 0.005        | NE        |                           | 5 25+00                   | 69.300 1         | 0.004 1 11 11     |
|                  | 1 1 1 Trichlomethane            | 230+02             | 0.0005      | 0.005        | NE        | NE                        | 235+02                    |                  | 0.004 1 0 0       |
| VOLATILES        | 1.1.2.2-Tetrackloroethane       | 5.1E-01            | 0.0005      | 0.005        | NE        | NE                        | 5 1E-01                   |                  | 0.004 1 0 0       |
| VOLATILES        | 1,1,2-Trichloroethane           | 9.7E-01            | 0.0005      | 0.005        | NE        | NE                        | 9.7E-01                   |                  | 0.004 1 U U       |
| VOLATILES        | 1,1-Dichloroethane              | 8.9E+01            | 0.0010      | 0.005        | NE        | NE                        | 8.9E+01                   |                  | 0.004 1 Ū Ū       |
| VOLATILES        | 1,1-Dichloroethene              | 2.7E+01            | 0.0005      | 0.005        | NE        | NE                        | 2.7E+01                   |                  | 0.004 1 U U       |
| VOLATILES        | 1,1-Dichloropropene             | 9.9E-01            | 0.0005      | 0.005        | NE        | NE                        | 9.9E-01                   |                  | 0.004 1 U U       |
|                  | 1,2,3- I richlorobenzene        | 4.2E+01            | 0.0005      | 0.005        | NE        | NE                        | 4.2E+01                   |                  | 0.004 1 0 0       |
|                  | 1,2,3-Trichloropenzene          | 9.ZE-02            | 0.0010      | 0.005        | NE        | NE                        | 9.20-02                   |                  |                   |
|                  | 1.2.4-Trimelhylbenzene          | 9.6E+00            | 0.0005      | 0.005        | NE        | NE                        | 9.65+00                   |                  | 0.004 1 0 0       |
| VOLATILES        | 1.2-Dibromo-3-chloropropane     | 3.5E-01            | 0.0020      | 0.005        | NE        | NE                        | 3.5E-01                   |                  | 0.004 1 U U       |
| VOLATILES        | 1,2-Dibromoethane               | 5.3E-02            | 0.0005      | 0.005        | NE        | NE                        | 5.3E-02                   |                  | 0.004 1 U U       |
| VOLATILES        | 1,2-Dichlorobenzene             | 5.6E+01            | 0.0005      | 0.005        | NE        | NE                        | 5.6E+01                   |                  | 0.004 1 U U       |
| VOLATILES        | 1,2-Dichloroethane              | 2.7E-01            | 0.0005      | 0.005        | NE        | NE                        | 2.7E-01                   |                  | 0.004 1 U U       |
| VOLATILES        | 1.2-Dichloropropane             | 1.8E+00            | 0.0005      | 0.005        | NE        | NE                        | 1.8E+00                   |                  | 0.004 1 U U       |
|                  | 1,2-Dimetry/Denzene (0-Xyle     | 3.3E+03            | 0.0005      | 0.005        | NE        | NE                        | 3.3E+03                   |                  | 0.004 1 U U       |
|                  | 1.3.Dichtorobenzene             | 5.1E+00            | 0.0005      | 0.005        | NE        | NE                        | 6.3E+00                   |                  | 0.004 1 U U       |
| VOLATILES        | 1.3-Dichloropropane             | 3.0E+00            | 0.0005      | 0.005        | NE        | NE                        | 3.0E+00                   |                  | 0.004 1 U U       |
| VOLATILES        | 1.4-Dichlorobenzene             | 2.7E+01            | 0.0005      | 0.005        | NE        | NE                        | 2.7E+01                   |                  | 0.004 1 Ŭ Ŭ       |
| VOLATILES        | 2,2-Dichloropropane             | 1.7E+00            | 0.0005      | 0.005        | NÉ        | NE                        | 1.7E+00                   |                  | 0.004 1 U U       |
| VOLATILES        | 2-Butanone                      | 2.6E+03            | 0.0025      | 0.010        | NÉ        | NE                        | 2.6E+03                   |                  | 0.009 1 U U       |
| VOLATILES        | 2-Chloroethyl vinyl ether       | 2.1E-01            | 0.0020      | 0.010        | NE        | NE                        | 2.1E-01                   |                  | 0.009 1 U U       |
| VOLATILES        | 2-Chlorotoluene                 | 1.5E+02            | 0.0005      | 0.005        | NE        | NE                        | 1.5E+02                   |                  | 0.004 1 U U       |
|                  | 2-Nexanone<br>4 Objectelucino   | 0.2E+00            | 0.0025      | 0.010        | NE        | NE                        | 6.2E+00                   |                  |                   |
| VOLATILES        | Acetone                         | 1 7E+02            | 0.0050      | 0.000        | NE        | NE                        | 1.7E+02                   |                  | 0.009 1 0 0       |
| VOLATILES        | Benzene                         | 8.8E-01            | 0.0005      | 0.005        | NE        | NE                        | 8.8E-01                   |                  | 0.004 1 U U       |
| VOLATILES        | Bromobenzene                    | 1.1E+01            | 0.0005      | 0.005        | NE        | NE                        | 1.1E+01                   |                  | 0.004 1 U U       |
| VOLATILES        | Bromochloromethane              | 2.4E+01            | 0.0005      | 0.005        | NE        | NE                        | 2.4E+01                   |                  | 0.004 1 U U       |
| VOLATILES        | Bromodichloromethane            | 1.0E+01            | 0.0005      | 0.005        | NE        | NE                        | 1.0E+01                   |                  | 0.004 1 U U       |
|                  | Bromotorm                       | 3.4E+01            | 0,0005      | 0.005        | NE        | NE                        | 3.4E+01                   |                  | 0.004 1 U U       |
|                  | Bromomemane<br>Carbon digulfide | 3.5E-01            | 0.0010      | 0.010        | NE        | NE                        | 3.5E-07                   |                  | 0.009 1 U U       |
|                  | Carbon tetrachloride            | 3.5E-01            | 0.0005      | 0.005        | NE        |                           | 2.6E 01                   |                  |                   |
| VOLATILES        | Chlorobenzene                   | 4.0E+01            | 0.0005      | 0.005        | NE        | NE                        | 4.0E+01                   |                  | 0.004 1 U U       |
| VOLATILES        | Chloroethane                    | 1.1E+03            | 0.0010      | 0.010        | NË        | NE                        | 1.1E+03                   |                  | 0.009 1 U U       |
| VOLATILES        | Chloroform                      | 3.1E-01            | 0.0005      | 0.005        | NE        | NE                        | 3.1E-01                   |                  | 0.004 1 U U       |
| VOLATILES        | Chloromethane                   | 2.3E-01            | 0.0020      | 0.010        | NE        | NE                        | 2.3E-01                   |                  | 0.009 1 U U       |
| VOLATILES        | cis-1,2-Dichloroethene          | 1.2E+02            | 0.0005      | 0.005        | NE        | NE                        | 1.2E+02                   |                  | 0.004 1 U U       |
|                  | cis-1,3-Dichloropropene         | 1.26+00            | 0.0005      | 0.005        | NE        | NE                        | 1.2E+00                   | 1                | 0.004 1 U U       |
|                  | Dibromomethane                  | 1.00+00            | 0.0005      | 0.005        |           |                           | 7.6E+00                   | 1                | 0.004 1 U U       |
| /OLATILES        | Dichlomrifluoromethane          | 2.25+02            | 0.0000      | 0.000        |           |                           | 2.95+01                   |                  |                   |
| /OLATILES        | Ethylbenzene                    | 4 3E+02            | 0.0005      | 0.005        | NE        | NE                        | 4.3E+02                   | 1                | 0.004 1 11 11     |
| <b>OLATILES</b>  | Hexachlorobutadiene             | 1.6E+00            | 0.0005      | 0.005        | NE        | NE                        | 1.6E+00                   | 1                | 0.004 1 U U       |
| OLATILES         | Isopropylbenzene                | 5.4E+02            | 0.0005      | 0.005        | NE        | NE                        | 5.4E+02                   |                  | 0.004 1 Ŭ Ŭ       |
| <b>VOLATILES</b> | m,p-Xylenes                     | 2.3E+02            | 0.0005      | 0.005        | NË        | NÈ                        | 2.3E+02                   |                  | 0.004 1 U U       |
| VOLATILES        | Methyl isobutyl ketone          | 1.3E+03            | 0.0025      | 0.01         | NE        | NE                        | 1.3E+03                   |                  | 0.009 1 U U       |
|                  | Memylene chloride               | 8.7E+00            | 0.0010      | 0.005        | NE        | NE                        | 8.7E+00                   | l l              | 0.004 1 U U       |
| OLATILES         | n-BUTYLBENZENE                  | 276-102            | 0.0005      | 0.01         |           |                           | 1.8E+U1                   |                  |                   |
|                  |                                 |                    | 0.0000      | 0.000        | 140       | 116                       | 6.15776                   | 4                | 0.004 1 0 0       |

Shaw Environmental, Inc.

00066495

#### Table 4-48 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-004

| (SUMP) = WRSUM<br>LOCATION_CODI<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPO:  | IP004<br>E<br>SE  | TCEQ<br>Risk-Based<br>Screening<br>Value  | Method<br>Detection  | Method<br>Quantitation  | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>?L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening   | WRS04-SB01<br>WRS04-SB01-01<br>9/25/2006<br>0.0 - 0.5 Ft<br>REG | WRS04-SB01<br>WRS04-SB01-02<br>9/25/2006<br>3.5 - 4.5 Ft<br>REG  |
|--|---|---|--|---|---|---|--|---|--|
| Test Group   | Parameter (Units = mg/kg)   | (RBSV) *  | Limit (MOL)  | Limit (MQL)   | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LO VO  | Result DIL LQ VQ   |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES | n-PROPYLBENZENE<br>p-ISOPROPYLBENZENE<br>sec-BUTYLBENZENE<br>Styrene<br>tert-BUTYLBENZENE<br>Tetrachloroethene<br>Totuene<br>trans-1,2-Dichloroethene<br>trans-1,3-Dichloroethene<br>trans-1,3-Dichloroethene<br>trans-1,3-Dichloroethene | 3.2E+02<br>3.2E+02<br>3.0E+02<br>3.0E+02<br>6.0E+00<br>1.1E+03<br>1.4E+00<br>1.8E+00<br>3.7E+00 | 0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005 | 0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005 |   |   | 3.2E+02<br>4.2E+02<br>3.0E+02<br>1.3E+03<br>2.6E+02<br>6.0E+00<br>1.1E+03<br>1.4E+00<br>3.7E+00<br>3.7E+00 |   | 0.004 1 U U<br>0.004 1 U U<br>0.004 1 U U<br>0.004 1 U U<br>0.004 1 U U<br>0.004 1 U U<br>0.004 1 U U<br>0.004 1 U U<br>0.004 1 U U<br>0.004 1 U U<br>0.004 1 U U<br>0.004 1 U U |
| VOLATILES<br>VOLATILES<br>VOLATILES  | Trichlorofluoromethane<br>Vinyl acetate<br>Vinyl chloride   | 2.6E+02<br>5.7E+01<br>3.6E-02   | 0.0010<br>0.0010<br>0.0010   | 0.01<br>0.01<br>0.01  | NE<br>NE<br>NE                          | NE<br>NE<br>NE                                      | 2.6E+02<br>5.7E+01<br>3.6E-02  |   | 0.009 1 U U<br>0.009 1 U U<br>0.00 <u>9 1 U U</u>  |

والمراجع والمعقوم والمترابي المتلا المستقيل المستقل والمراجع

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066496

#### Table 4-49 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-005

| (SUMP) = WRSUMP00<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH | 5   | TCEQ<br>Risk-Based<br>Screening | Method      | Method       | Backg<br>Concentrat<br>(95% UP | round<br>ions in Soit<br>L, mg/kg} | Applicble<br>TCEQ<br>Risk-Based | 35SUMP008-SB01<br>35-SMP08-SB01-02<br>9/8/2006<br>5.5 - 6 Ft | 35\$UMP009-\$B01<br>35-\$MP09-\$B01-02<br>9/11/2006<br>7 - 8 Ft | WRSUMP005-SB01<br>WRSMP005-SB01-01<br>9/22/2006<br>0.0 - 0.5 Ft | WRSUMP005-SB01<br>WRSMP005-SB01-02<br>9/22/2006<br>4 - 5 Ft | WRSUMP005-SB02<br>WRSMP005-SB02-02<br>9/22/2006<br>4 - 5 Ft | WRSUMP005-SB02<br>WRSMP005-SB02-02-QC<br>9/22/2006<br>4 - 5 Ft |
|---|---|---------------------------------|-------------|--------------|--------------------------------|------------------------------------|---------------------------------|--|---|---|---|---|--|
| SAMPLE_FURPOSE  |   | Value                           | Detection   | Quantitation | Surrace                        | Subsurrace                         | Screening                       |  | REG   |   |   |   | Result DILLO VO  |
| Test Group  | Parameter (Units = mg/kg)<br>1.3.5-Tooltophanzene | (RBSV)<br>4 7E+02               | Limit (MDL) |              | 0 - 0.5 Ft<br>NE               | <u>15-25Ft</u><br>NE               | 4.7E+02                         | 0.263 1 LI   | 0.245 1 U   | 0.242 1 U U   | 0.238 1 U U   | 0.245 1 U U   | 0.242 1 U U  |
| EXPLOSIVES  | 1,3-Dinitrobenzene                                | 1.6E+00                         | 0.1         | 0.25         | NE                             | NE                                 | 1.6E+00                         | 0.283 1 U  | 0.245 1 U   | 0.242 1 U U   | 0.238 1 U U   | 0.245 1 U U   | 0.242 1 U U  |
| EXPLOSIVES  | 2,4,6-Trinitrotoluene                             | 7.7E+00                         | 0.1         | 0.25         | NE                             | NE                                 | 7.7E+00                         | 0.283 1 U  | 0.245 1 U   | 0.242 1 U U   | 0.238 1 0 0   | 0.245 1 U U<br>0.245 1 U U                                  | 0.242 1 0 0  |
| EXPLOSIVES  | 2,4-Dinitrotoluene<br>2.6-Dinitrotoluene          | 7.26-01                         | 0.1         | 0.25         | NE                             | NE                                 | 7.2E-01                         | 0.283 1 0  | 0.255 1 U   | 0.251 1 U U   | 0.248 1 U U   | 0.255 1 U U   | 0.251 1 U U  |
| EXPLOSIVES  | 2-Amino-4,6-dinitrotoluene                        | 2.6E+00                         | 0.1         | 0.26         | NE                             | NE                                 | 2.6E+00                         | 0.294 1 U  | 0.255 1 U   | 0.251 1 U U   | 0.248 1 U U   | 0.255 1 U U   | 0.251 1 U U  |
| EXPLOSIVES  | 4-Amino-2,6-dinitrotoluene                        | 2.6E+00                         | 0.1         | 0.26         | NE                             | NE                                 | 2.6E+00                         | 0.294 1 U  | 0.255 1 U   | 0.251 1 U U   | 0.248 1 U U<br>2100 1 U U                                   | 0.255 1 0 0   | 2130 1 1 1   |
| EXPLOSIVES  | HMX<br>m-Nitrotoluane                             | 2.2E+02<br>4.4E+01              | 0.1         | 0.25         | NE                             | NE                                 | 2.2E+02<br>4.4E+01              | 0.283 1 U  | 0.245 1 U   | 0.242 1 U U   | 0.238 1 U U   | 0.245 1 U U   | 0.242 1 U U  |
| EXPLOSIVES  | Nitrobenzene                                      | 6.5E+00                         | 0.1         | 0.26         | NE                             | NĒ                                 | 6.5E+00                         | 0.294 1 U  | 0.255 t U   | 0.251 1 U U   | 0.248 1 U U   | 0.255 1 U U   | 0.251 1 U U  |
| EXPLOSIVE\$   | o-Nitrototuene                                    | 4.7E+01                         | 0.1         | 0.25         | NE                             | NE                                 | 4.7E+01                         | 0.283 1 U  | 0.245 1 U   | 0.242 1 U U   | 0.238 1 U U   | 0.245 1 U U   | 0.242 1 U U  |
| EXPLOSIVES  | p-Nitrotoluene                                    | 4.4E+01                         | 0.1         | 0.25         | NE                             | NE                                 | 4.45+01                         | 0.283 1 0  | 0.245 1 0   | 0.242 1 0 0   | 0.235 1 0 0   | 0.245 1 U U   | 0.966 1 U U  |
| EXPLOSIVES  | Tetryl  | 1.6E+02                         | 0.2         | 0.65         | NE                             | NE                                 | 1.6E+02                         | 0.735 1 U  | 0.637 1 U   | 0.628 1 U U   | 0.619 1 U U   | 0.637 1 U U   | 0.628 1 U U  |
| METALS  | Aluminum  | 1.6E+04                         | 10.000      | 20.00        | 1.63E+04                       | 2.08E+04                           | 1.6E+04                         | 8220.000 1   | 12300.000 1   | 9106.000 1  | 18800.000 1   | 20900.0001  | 16000.000 1  |
| METALS  | Antimony  | 7.3E+00                         | 0.500       | 0.10         | 9.40E-01                       | 1.60E+00                           | 7.3E+00                         | 0.117 1 U UJL  | 0.111 1 U   | 0.113 1 U UJL<br>4.260 1  | 1 330 1   | 0,076 1 J JL<br>1770 1                                      | 1.730 1  |
| METALS  | Arsenic<br>Barium                                 | 2.6E+03                         | 0.075       | 0.30         | 1.52E+02                       | 8.55E+01                           | 2.6E+03                         | 39.000 1   | 25,300 1  | 129.000 1 JH  | 51.400 1 JH   | 65.600 1 JH   | 61.900 1 JH  |
| METALS  | Beryllium   | 4.6E+00                         | 0.012       | 0.50         | 6.45E-01                       | 7.66E-01                           | 4.6E+00                         | 0.517 1  | 0.793 1   | 0.560 1   | 0.939 1   | 1.090 1   | 0.849 1  |
| METALS  | Cadmium   | 5.2E+00                         | 0.025       | 0.10         | 1.40E+00                       | 4.00E-01                           | 5.2E+00                         | 0.062 t J J  | 0.079 1 J J   | 0.151 1 J J   | 0.076 1 J J   | 0.073 1 J J<br>610.000 1                                    | 662,000, 1   |
| METALS<br>METALS  | Chromium  | NE<br>5 9E+03                   | 0 100       | 0.40         | 0A<br>2.66E+01                 | 3.01E+01                           | 5.9E+03                         | 8.670 1 JH   | 11.400 1  | 14.100 1 JH   | 16.900 1 JH   | 24.100 1 JH   | 16.500 1 JH  |
| METALS  | Cobalt  | 1.5E+03                         | 0.125       | 0.50         | 7.23E+00                       | 5.61E+00                           | 1.5E+03                         | 7.530 1 JH   | 10.100 1 J  | 4.220 1   | 7.330 1   | 9.060 1   | 7.640 1  |
| METALS  | Copper  | 1.0E+03                         | 0.150       | 0.60         | 5.55E+00                       | 9.25E+00                           | 1.0E+03                         | 4.360 1  | 3.800 1   | 2.270 1   | 5.020 1   | 6.800 1<br>24500.000 1 L                                    | 5.520 1  |
| METALS  | Iron<br>1 april                                   | NE<br>5.0E±02                   | 0.500       | NA<br>5.00   | 2 26F+01                       | NA<br>1.149+01                     | 5 0E+02                         | 5.520 1 .1   | 5.570 1 .   | 8.970 1   | 11.500 1  | 11.900 1  | 10.700 1   |
| METALS  | Magnesium   | NE                              | NA          | NA           | NA                             | NA                                 |                                 | 912.000 1  | 2170.000 1  | 550.000 1   | 1550.000 1  | 1500.000 1  | 1180.000 1   |
| METALS  | Manganese   | 1.7E+03                         | 0.050       | 0.20         | 1.25E+03                       | 2.01E+02                           | 1.7E+03                         | 23.600 1   | 21.900 1  | 129.000 1 J   | 27.700 1 J  | 59.200 1 J  | 63.300 1 J   |
| METALS  | Mercury   | 1.1E-02<br>1.9E+02              | 0.010       | 0.25         | 6.98E+00                       | 3.60E-01                           | 2.5E-01                         | 10.400 1   | 16.700 1  | 4.760 1 JH  | 10.100 1 JH   | 11.700 1 JH   | 8.940 1 JH   |
| METALS  | Potașslum   | NE                              | NA          | NA           | NA                             | NA                                 |                                 | 426.000 1 JH   | 509.000 1   | 262.000 1 JH  | 467.000 1 JH  | 522.000 1 JH  | 401.000 1 JH   |
| METALS  | Selenium  | 1.3E+02                         | 0.100       | 0.20         | 3.48E+00                       | 5.57E+00                           | 1.3E+02                         | 0.164 1 J J  | 0.221 1 U   | 0.293 1   | 0.148 1 J J   | 0.247 1 J J   | 0.262 1  |
| METALS  | Silver<br>Sodium                                  | 4.7E+01                         | 0.050       | 0.20<br>NA   | 3.10E-01<br>NA                 | 3.70E-01<br>NA                     | 4.78+01                         | 1.800 1 U  | 550.000 1   | 42,500 1  | 326.000 1   | 243.000 1   | 212.000 1  |
| METALS  | Thallium  | 2.0E+00                         | 0.010       | 0.02         | 4.70E-01                       | NE                                 | 2.0E+00                         | 0.074 1  | 0.073 1   | 0.058 1   | 0.114 1   | 0.107 1   | 0.105 1  |
| METALS  | Vanadium  | 4.8E+01                         | 0.125       | 0.50         | 3.21E+01                       | 4.46E+01                           | 4.8E+01                         | 18.800 1   | 16.500 1  | 31.700 1 JH   | 29.700 1 JH   | 41.000 1 JH   | 28.900 1 JH  |
| METALS<br>SEMINIOLATHES   | Zinc<br>1.2.4 Trichlembergroom                    | 5.9E+03<br>1.4E+02              | 0.625       | 2.50         | 6.16E+01                       | 2.02E+01                           | 5,92+03                         | 34.500 1   | 31.000 1  | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | 1.2-Dichlorobenzene                               | 5.6E+01                         | 0.0825      | 0.165        | NE                             | NE                                 | 5.6E+01                         |  |   | 30.000 5  | 0.247 1   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | 1,3-Dichlorobenzene                               | 5.1E+00                         | 0.0825      | 0.165        | NE                             | NE                                 | 5.1E+00                         |  |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | 1,4-Dichlorobenzene<br>2,4,6 Trichterenhand       | 2.7E+01                         | 0.0825      | 0.365        | NE                             | NE                                 | 2.7E+01<br>1.6E+03              |  |   | 0.922 5 0 0   | 0.201 1 0 0   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | 2.4.6-Trichlomohenol                              | 4.5E+01                         | 0.0825      | 0.165        | NE                             | NE                                 | 4.5E+01                         |  |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0,204 1 U U  |
| SEMIVOLATILES   | 2,4-Dichlorophenol                                | 4.7E+01                         | 0.0825      | 0.165        | NE                             | NE                                 | 4.7E+01                         |  |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | 2,4-Dimethylphenol                                | 3.1E+02                         | 0.0825      | 0.165        | NE                             | NE                                 | 3.1E+02                         |  |   | 4610 5 11 11  | 1010 1 11 11  | 1.030 1 1 0   | 1.020 1 0 0  |
| SEMIVOLATILES   | 2.4-Omacphenar<br>2.4-Dinitrotoluene              | 7.2E+01                         | 0.0825      | 0.165        | NE                             | NE                                 | 7.2E-01                         |  |   | 0.922 5 U U   | 0.201 1 0 0   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | 2,6-Dinitrotoluene                                | 7.2E-01                         | 0.0825      | 0.165        | NE                             | NE                                 | 7.2E-01                         |  |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | 2-Chloronaphthalene                               | 1.1E+03                         | 0.0825      | 0.165        | NE                             | NE                                 | 1.3E+03                         |  |   | 0.922 5 0 0   | 0.201 1 0 0   | 0.207 1 0 0   | 0.204 1 0 0  |
| SEMIVOLATILES   | 2-Methylnaphthalene                               | 5.5E+01                         | 0.0825      | 0.165        | NE                             | NE                                 | 5.5E+01                         |  |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | 2-Methylphenol                                    | 7.7E+02                         | 0.0625      | 0.165        | NE                             | NE                                 | 7.7E+02                         |  |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | 2-Nitroaniline                                    | 4.7E+00                         | 0.3300      | 0.825        | NE                             | NE                                 | 4.7E+00                         |  |   | 4.610 5 U U<br>8.922 5 U U                                      | 1.010 1 U U   | 0.207 1 0 0   | 0.204 1 U U  |
| SEMIVOLATILES   | 3.3'-Dichlorobenzidine                            | 1.1E+00                         | 0.1650      | 0,330        | NE                             | NE                                 | 1.12+00                         |  |   | 1.840 5 U U   | 0.402 1 U U   | 0.414 1 U U   | 0.407 t U U  |
| SEMIVOLATILES   | 3-Nitroaniline                                    | 4.7E+00                         | 0.3300      | 0.825        | NE                             | NE                                 | 4.7E+00                         |  |   | 4.610 5 U U   | 1.010 1 U U   | 1.030 1 U U   | 1.020 1 U U  |
| SEMIVOLATILES   | 4,6-Dinitro-2-methylphenol                        | 3.1E+01                         | 0.3300      | 0.825        | NE                             | NE                                 | 3.18+01                         |  |   | 4.610 5 U U<br>9.267 5 II U                                     | 0.101 1 1 1   | 0.103 1 U U   | 0.103 1 U U  |
| SEMIVOLATILES   | 4-Chloro-3-methylphenol                           | 7.7E+01                         | 0.0825      | 0.165        | NE                             | NE                                 | 7.7E+01                         |  |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | 4-Chloroaniline                                   | 6.2E+01                         | 0.0825      | 0.165        | NE                             | NE                                 | 6.2E+01                         |  |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether                       | 2.8E-02                         | 0.0825      | 0.165        | NE                             | NE                                 | 1,7E-01<br>7 7E-01              |  |   | 0922 5 11 11  | 0.201 1 0 0   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | 4-Nitroaniline                                    | 1.3E+01                         | 0,3300      | 0.825        | NE                             | NE                                 | 1.3E+01                         |  |   | 4.610 5 U U   | 1.010 1 Ŭ Ŭ   | 1.030 1 U U   | 1.020 1 Ú U  |
| SEMIVOLATILES   | 4-Nitrophenol                                     | 3.1E+01                         | 0.3300      | 0.825        | NE                             | NE                                 | 3.1E+01                         |  |   | 4.610 5 U U   | 1.010 1 U U   | 1.030 1 U U   | 1.020 1 U U  |
| SEMIVOLATILES   | Acenaphthene                                      | 8.2E+02                         | 0.0825      | 0.165        | NE                             | NE                                 | 8.2E+02                         |  |   | 0.922 5 0 0   | 0.201 1 0 0   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Anthracene  | 4.1E+03                         | 0.0825      | 0.165        | NE                             | NE                                 | 4.1E+03                         | 1  |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 I U U  |
| SEMIVOLATILES   | Benzo(a)anthracene                                | 6.3E-01                         | 0.0825      | 0.165        | 1.53E-02                       | NE                                 | 6.3E-01                         |  |   | 0.922 5 U U   | 0.201 1 U Ú   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Benzo(a)pyrene                                    | 6.3E-02                         | 0.0825      | 0.165        | 1.54E-02                       | NE                                 | 1.7E-01                         |  |   | 0.467 5 U U   | 0.101 1 1 0 0   | 0,193 1 U U 0   | 0.103 1 0 0  |
| SEMIVOLATILES   | Senzo(o)nuoranmene<br>Senzo(ohi)perviene          | 4.1E+02                         | 0.0825      | 0,165        | 1.03E-02<br>1.23E-02           | NE                                 | 4.1E+02                         |  |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Benzo(k)fluoranthene                              | 6.3E+00                         | 0.0825      | 0.165        | 1.30E-02                       | NE                                 | 6.3E+00                         |  |   | 0.922 5 U U   | 0.201 1 U Ū   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Benzoic Acid                                      | 6.2E+04                         | 0.3300      | 0.825        | NE                             | NE                                 | 6.2E+04                         | 1  |   | 4.610 5 U UJ  | 1.010 1 U UJ  | 1.030 1 U UJ  | 1.020 1 U UJ<br>0.204 1 U U                                    |
| SEMIVOLATILES   | bis(2-Chioroethoxy)methane                        | 2.9E-01                         | 0.0825      | 0.165        | NE                             | NË                                 | 4./E+03                         |  |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | bis(2-Chloroethyl)ether                           | 1.5E-01                         | 0.0825      | 0.165        | NE                             | NE                                 | 1.7E-01                         |  |   | 0,467 5 Ú Ú   | 0.101 1 0 0   | 0.103 1 U U   | 0.103 1 U U  |
| SEMIVOLATILES   | bis(2-Chioroisopropyl)ether                       | 4.8E+00                         | 0.0825      | 0.165        | NE                             | NE                                 | 4.8E+00                         |  |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVULATILES   | via(z-zusyliscsyl)protalate                       | 1.12401                         | 0.0020      | V.100        | 116                            | NE                                 | 1 1.75+01                       | 1  |   | 0.944 3 V U   | 0.401 I U U   | 0.201 1 0 0   | 0.504 1 0 0  |

Shaw Environmental, Inc.

## 00066497

#### Table 4-49 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-005

| [SUMP] = WRSUMP00<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE | 5  | TCEQ<br>Risk-Based | Mathad      | blothad      | Backg<br>Concentral | round<br>tions in Soil | Applicble<br>TCEQ<br>Pick-Based | 35SUMP008-SB01<br>35-SMP08-SB01-02<br>9/8/2006<br>55-6 Et | 35SUMP009-SB01<br>35-SMP09-SB01-02<br>9/11/2006<br>7 - 8 Ft | WRSUMP005-SB01<br>WRSMP005-SB01-01<br>9/22/2006<br>0.0 - 0.5 Ft | WRSUMP005-SB01<br>WRSMP005-SB01-02<br>9/22/2006<br>4 - 5 Ft | WRSUMP005-SB02<br>WRSMP005-SB02-02<br>9/22/2006<br>4 - 5 Ft | WRSUMP005-SB02<br>WRSMP005-SB02-02-QC<br>9/22/2006<br>4 - 5 Ft |
|--|--|--------------------|-------------|--------------|---------------------|------------------------|---------------------------------|---|---|---|---|---|--|
| DEPTH<br>SAMPLE PURPOSE  |  | Screening<br>Value | Detection   | Quantitation | Surface             | Subsurface             | Screening                       | REG   | REG   | REG   | REG   | REG   | FD   |
| Test Group   | Parameter (Units = mg/kg)                  | (RBSV)             | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft          | 1.5 - 2.5 Ft           | Value                           | Result DIL LQ VQ  | Result DIL LQ VI  | Q Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LO VO  | Result DIL LO VO   |
| SEMIVOLATILES  | Butyl benzyl phthalate                     | 3.1E+03            | 0.0825      | 0.165        | NE<br>151E-02       | NE                     | 3.1E+03<br>6.3E+01              |   |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 t U U   | 0.204 1 U U  |
| SEMIVOLATILES  | Dibenzo(a.h)anthracene                     | 6.3E-02            | 0.0825      | 0.165        | NE                  | NE                     | 1.7E-01                         |   |   | 0,487 5 U U   | 0.101 1 U U   | 0.103 1 U U   | 0.103 1 U U  |
| SEMIVOLATILES  | Dibenzofuran                               | 6.2E+01            | 0.0825      | 0.165        | NE                  | NE                     | 6.2E+01                         |   |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 0 0   | 0.204 1 0 0  |
| SEMIVOLATILES  | Direthyl phthalate<br>Directhyl obthalate  | 1.2E+04<br>1.2E+04 | 0.0825      | 0.165        | NE                  | NE                     | 1.2E+04                         |   |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES  | di-n-Butyl phthalate                       | 1.6E+03            | 0.0825      | 0.165        | NE                  | NE                     | 1.6E+03                         |   |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES  | di-n-Octyl phthalate                       | 3.1E+02            | 0.0825      | 0.165        | NE no               | NE                     | 3,1E+02                         | 95,000 1  |   | 0.922 5 0 0   | 0.201 1 0 0   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES  | Fluoranthene                               | 5.5E+02            | 0.0825      | 0.165        | 2.29E+02<br>NÉ      | NE                     | 5.5E+02<br>5.5E+02              | 92.900 1  |   | 0.922 5 U U   | 0.201 1 Ŭ Ŭ   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES  | Hexachiorobenzene                          | 2.5E-01            | 0.0825      | 0.165        | NE                  | NE                     | 2.5E-01                         |   |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES  | Hexachlorobutadiene                        | 1.6E+00            | 0.0825      | 0.165        | NE                  | NE                     | 1.6E+00                         |   |   | 0.922 5 U U   | 0.201 1 0 0   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES<br>SEMIVOLATILES                                 | Hexachiorocyclopentaolene                  | 1.62+00            | 0.0625      | 0.165        | NE                  | NE                     | 1.6E+01                         |   |   | 0.606 5 J J   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene                     | 6.3E-01            | 0.0825      | 0.165        | 1.43E-02            | NE                     | 6.3E-01                         | ]   |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 0 0  |
| SEMIVOLATILES  | Isophorone                                 | 5.2E+02            | 0.0825      | 0.165        | NE                  | NE                     | 5.2E+02                         |   |   | 0.922 5 U U   | 0.201 1 0 0   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES  | Naphinalene                                | 1.8E+01<br>6.5E+00 | 0.0825      | 0.165        | NE                  | NE                     | 6.5E+00                         |   |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine                 | 4.12-02            | 0.0825      | 0.165        | NE                  | NE                     | 1.7E-01                         |   |   | 0.467 5 U U   | 0.101 1 U U   | 0.103 1 U U   | 0.103 1 U U<br>0.204 1 U U                                     |
| SEMIVOLATILES  | n-Nitrosodiphenylamine                     | 5.9E+01            | 0.0825      | 0.165        | NE                  | NE                     | 5.9E+01                         |   |   | 4610 5 11 11  | 1.010 1 U U   | 1.030 1 1 0   | 1.020 1 U U  |
| SEMIVOLATILES  | Pentachlorophenol<br>Obenanthrene          | 3.0E+00<br>4.1E+02 | 0.3300      | 0.825        | NE                  | NE                     | 4.1E+02                         |   |   | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES  | Phenol                                     | 4.7E+03            | 0.0825      | 0.165        | NE                  | NE                     | 4.7E+03                         | 1   |   | 0.922 5 U U   | 0,201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES  | Pyrene                                     | 4.1E+02            | 0.0825      | 0.165        | 1.94E-02            | NE                     | 4.1E+02                         | 1   | 87 700 1  | 0.922 5 U U<br>88.400 1   | 81.600 1  | 79.800 1  | 80.000 1   |
| SOLIDS<br>VOLATILES  | Percent Solids                             | NE<br>528+00       | 0.0005      | 0.005        | NE                  | NË                     | 5.2E+00                         | 1   | 01.100  |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | 1,1,1-Trichloroethane                      | 2.3E+02            | 0.0005      | 0.005        | NE                  | NE                     | 2.3E+02                         |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 10 0   |
| VOLATILES  | 1,1,2,2-Tetrachloroethane                  | 5.1E-01            | 0.0005      | 0.005        | NE                  | NE                     | 5,1≿-01<br>97E-01               |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | 1.1-Dichloroethane                         | 8,9E+01            | 0.0010      | 0.005        | NE                  | NE                     | 8.9E+01                         |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | 1,1-Dichloroethene                         | 2.7E+01            | 0.0005      | 0.005        | NE                  | NE                     | 2.7E+01                         |   |   |   | 0.006 1 U U   | 0.006 1 0 0   | 0.006 1 U U  |
| VOLATILES  | 1,1-Dichloropropene                        | 9.9E-01            | 0.0005      | 0.005        | NE                  | NE                     | 9.9E-01<br>4.2E+01              |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | 1.2.3-Trichloropropane                     | 9.2E-02            | 0.0010      | 0.005        | NE                  | NE                     | 9.2E-02                         | 1   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | 1,2,4-Trichlorobenzene                     | 1.4E+02            | 0.0005      | 0.005        | NE                  | NE                     | 1.4E+02                         |   |   |   | 0.006 1 1 1   | 0.006 1 0 0   | 0.006 1 10 0   |
| VOLATILES  | 1,2,4-Trimethylbenzene                     | 9.6E+00            | 0.0005      | 0.005        | NE                  | NE                     | 9.6E+00<br>3.5P-01              |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | 1,2-Dibromoethane                          | 5.32-02            | 0.0005      | 0.005        | NE                  | NE                     | 5.3E-02                         |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | 1,2-Dichlorobenzene                        | 5.6E+01            | 0.0005      | 0.005        | NE                  | NÊ                     | 5.6E+01                         |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | 1,2-Dichloroethane                         | 2.7E-01<br>1.8E+00 | 0.0005      | 0.005        | NE                  | NE                     | 1.8E+00                         |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylend              | 3.3E+03            | 0.0005      | 0.005        | NE                  | NE                     | 3.3E+03                         |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | 1,3,5-Trimethylbenzene                     | 8.3E+00            | 0.0005      | 0.005        | NE                  | NE                     | 8.3E+00                         |   |   |   | 0.006 1 0 0   | 0.006 1 0 0   | 0.006 1 0 0  |
| VOLATILES  | 1,3-Dichloropenzene<br>1,3-Dichloropenzene | 5.1E+00<br>3.0P+00 | 0.0005      | 0.005        | NE                  | NE                     | 3.0E+00                         |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | 1,4-Dichlorobenzana                        | 2.7E+01            | 0.0005      | 0.005        | NE                  | NE                     | 2.7E+01                         | -   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | 2,2-Dichloropropane                        | 1.7E+00            | 0.0005      | 0.005        | NE                  | NE                     | 1.7E+00                         |   |   |   | 0.011 1 U U   | 0.012 1 U U   | 0.012 I U U  |
| VOLATILES  | 2-Butanone<br>2-Chloroethyl vinyl ether    | 2.1E-01            | 0.0020      | 0.010        | NE                  | NE                     | 2.1E-01                         |   |   |   | 0.011 1 U U   | 0.012 1 U U   | 0.012 1 U U  |
| VOLATILES  | 2-Chlorotoluene                            | 1.5E+02            | 0.0005      | 0.005        | NE                  | NE                     | 1.5E+02                         |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0,006 1 U U<br>0.012 1 U U                                     |
| VOLATILES  | 2-Hexanone                                 | 6.2E+00            | 0.0025      | 0.010        | NË                  | NE                     | 6.2E+00                         |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | Acetine                                    | 1.7E+02            | 0.0050      | 0.010        | NE                  | NE                     | 1.7E+02                         |   |   |   | 0.011 1 U U   | 0.012 1 U U   | 0.012 1 U U  |
| VOLATILES  | Benzene                                    | 8.8E-01            | 0.0005      | 0.005        | NE                  | NE                     | 8.8E-01                         |   |   |   | 0,006 1 U U   | 0.006 1 U U   | 0.006 1 0 0  |
| VOLATILES  | Bromobenzene                               | 1.1E+01<br>2.4E+01 | 0.0005      | 0.005        | NE                  | NE                     | 1.1E+01<br>2.4E+01              | 1   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | Bromodichloromethane                       | 1.0E+01            | 0.0005      | 0.005        | NE                  | NË                     | 1.0E+01                         |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | Bromoform                                  | 3.4E+01            | 0.0005      | 0.005        | NE                  | NE                     | 3.4E+01                         |   |   |   | 0.006 1 0 0   | 0.012 1 U U   | 0.000 1 U U  |
| VOLATILES  | Bromomethane<br>Codoor disutlide           | 3.5E-01<br>1.0E+02 | 0.0010      | 0.010        | NE                  | NE                     | 1.0E+02                         |   |   |   | 0.006 1 Ŭ Ŭ   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | Carbon tetrachloride                       | 3.5E-01            | 0.0005      | 0.005        | NE                  | NE                     | 3.5E-01                         |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | Chloroberizene                             | 4.0E+01            | 0.0005      | 0.005        | NE                  | NE                     | 4.0E+01                         |   |   |   | 0.005 1 0 0   | 0.012 1 U U   | 0.012 1 U U  |
| VOLATILES  | Chiomform                                  | 3.1E-01            | 0.0005      | 0.005        | NE                  | NE                     | 3.1E-01                         |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | Chloromethane                              | 2.3E-01            | 0.0020      | 0.010        | NE                  | NE                     | 2.3E-01                         |   |   |   | 0.011 1 U U   | 0.012 1 U U   | 0.012 1 U U  |
| VOLATILES  | cis-1,2-Dichloroethene                     | 1.2E+02            | 0.0005      | 0.005        | NE                  | NE                     | 1.2E+02                         |   |   |   | 0.006 1 0 0   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | Dibramochloromethane                       | 1.2E+00<br>7.6E+00 | 0.0005      | 0.005        | NE                  | NE                     | 7.6E+00                         | 1   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | Dioromomethane                             | 1.9E+01            | 0.0005      | 0.005        | NE                  | NE                     | 1.9E+01                         |   |   |   | 0.006 1 U U   | 0.006 1 U U   | 0,006 1 0 0  |
| VOLATILES  | Dichlorodifluoromethane<br>Ethylbooroge    | 2.2E+02            | 0.0010      | 0.010        | NE                  | NE                     | 2.2E+02<br>4.3E+02              |   |   |   | 0.006 1 1 1   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | Hexachlorobutadiene                        | 4.52+02<br>1.6E+00 | 0.0005      | 0.005        | NE                  | NE                     | 1.6E+00                         |   |   |   | 0.006 1 U U   | 0.006 1 Ú Ú   | 0.006 1 U U  |
| VOLATILES  | Isopropylbenzene                           | 5.4E+02            | 0.0005      | 0.005        | NE                  | NE                     | 5.4E+02                         | 1   |   |   | 0.006 1 U U   | 0.006 1 U U<br>0.006 1 1 U                                  | 9.906 1 U U<br>0.806 1 U U                                     |
| VOLATILES  | m,p-Xylenes<br>Methyl isobutyl ketype      | 2.3E+02<br>1.3E+03 | 0.0005      | 0.005        | NE                  | NE                     | 2.3E+02<br>1.3E+03              |   | · · · · ·   |   | 0.011 1 U U   | 0.012 1 U U   | 0.012 1 U U  |
| VOLATILES  | Methylene chloride                         | 8.7E+00            | 0.0010      | 0.005        | NE                  | NE                     | 8.7E+00                         |   |   |   | 0.002 1 J J   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES  | Naphinalene                                | 1.8E+01            | 0.0005      | 0.01         | NE                  | NE                     | 1.8E+01                         | 1   |   |   | 0.011 1 U U   | 0.012 1 0 0   | 0.002 1 0 0  |
| VOLATILES  | n-BUTYLBENZENE                             | Z.7E+02            | 0,0005      | 0.005        | NE                  | NE                     | 1 Z.(E+U2                       | 1   |   |   |   | · • •   |  |

Shaw Environmental, Inc.

00066498

#### Table 4-49 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-005

|   |                           |  |                     |             |  | _   |  |                               | ump-ooo  |  |  |  |  |  |  |
|---|---------------------------|--|---------------------|-------------|--|---|--|-------------------------------|--|--|--|--|--|--|--|
| [SUMP] = WRSUMP00<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | 6                         | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method      | Backy<br>Concentra<br>(95% UP<br>Surface | )round<br>tions in Soil<br>11. mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUM<br>35-SMP<br>9/4<br>5.1 | 19008-SB01<br>208-SB01-02<br>8/2006<br>5 - 6 Ft<br>REG | 35SUMF<br>35-\$MF(<br>9/1<br>7 -<br>7 -<br>F | P009-5801<br>09-5801-02<br>1/2006<br>- 8 Ft<br>REG | WRSUMP005-SB01<br>WRSMP005-SB01-01<br>9/22/2006<br>0.0 - 0.5 Ft<br>REG | WRSUMP005-SB01<br>WRSMP005-SB01-02<br>9/22/2006<br>4 - 5 Ft<br>REG | WRSUMP005-SB02<br>WRSMP005-SB02-02<br>9/22/2006<br>4 - 5 Ft<br>REG | WRSUMP005-SB02<br>WRSMP005-SB02-02-QC<br>9/22/2006<br>4 - 5 Ft<br>FD |
| Test Group  | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value  | Result                        | DIL LQ VQ  | Result                                       | DIL LO VO  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL_LQ_VQ   | Result DIL LO VO   |
| VOLATILES   | n-PROPYL8ENZENE           | 3.2E+02                                  | 0.0005              | 0.005       | NE                                       | NË  | 3.2E+02                                      |                               |  |  |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES   | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005       | NE                                       | NE  | 4.2E+02                                      |                               |  |  |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES   | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005       | NE                                       | NE  | 3.0E+02                                      |                               |  |  |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES   | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005       | NĖ                                       | NE  | 1.3E+03                                      |                               |  |  |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES   | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005       | NE                                       | NE  | 2.62+02                                      |                               |  |  |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES   | Tetrachiomethene          | 6 0E+00                                  | 0.0005              | 0.005       | NE                                       | NE  | 6.0E+00                                      |                               |  |  |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES   | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005       | NÉ                                       | NE  | 1.1E+03                                      |                               |  |  |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES   | trans-1 2-Dichlomethene   | 14E+02                                   | 0.0005              | 0.005       | NE                                       | NE  | 1.4E+02                                      |                               |  |  |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES   | traps-1 3-Dichloropmoene  | 1.85+00                                  | 0.0005              | 0.005       | NE                                       | NE  | 1.8E+00                                      |                               |  |  |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES   | Trichioroethene           | 375+00                                   | 0.0005              | 0.005       | NE                                       | NE  | 3.7E+00                                      |                               |  |  |  |  | 0.006 1 U U  | 0.006 1 U U  | 0.006 1 U U  |
| VOLATILES   | Trichlomfluommelbane      | 2.6E+02                                  | 0.0010              | 0.01        | NE                                       | NE  | 2.6E+02                                      |                               |  |  |  |  | 0.011 1 U U  | 0.012 1 U U  | 0.012 1 U U  |
| VOLATILES   | Vinvi acetate             | 5 7E+01                                  | 0.0010              | 0.01        | NE                                       | NE  | 5.7E+01                                      |                               |  |  |  |  | 0.011 1 U U  | 0.012 1 U UJ   | 0.012 1 U U  |
| VOLATILES   | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.01        | NE                                       | NE  | 3.6E-02                                      |                               |  |  |  |  | 0.011 1 U U  | 0.012 1 U U  | 0.012 1 U U  |

### 00066499

| Table 4-49  |
|---|
| omparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
|   |

|   | ., | ne | <b>.</b> |     |    | • | • | -  |  |
|---|----|----|----------|-----|----|---|---|----|--|
| ۲ | ¥. | Γ. | ۶u       | 211 | ν- | U | U | Э. |  |

| [SUMP] = WRSUMP00<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | 5  | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method .    | Backg<br>Concentrat<br>(95% UP<br>Surface | round<br>ions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WRSUMP005-SB01<br>WRSMP005-SB01-01<br>9/22/2006<br>0.0 - 0.5 Ft<br>REG | WRSUMP005-SB01<br>WRSMP005-SB01-02<br>9/22/2006<br>4 - 5 Ft<br>REG | WRSUMP005-SB02<br>WRSMP005-SB02-02<br>9/22/2006<br>4 - 5 Ft<br>REG | WRSUMP005-S802<br>WRSMP005-S802-02-QC<br>9/22/2006<br>4 - 5 Ft<br>FD |
|---|--|--|---------------------|-------------|---|--|--|--|--|--|--|
| Test Groun  | Parameter (Units = mo/ko)                  | (R8SV)                                   | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft                                     | Value  | Result DIL LQ VQ   | Result DIL LO VO   | Result DIL LQ  | VO Result DIL LQ VQ  |
| EXPLOSIVES  | 1,3,5-Trinitrobenzene                      | 4.7E+02                                  | 0.1                 | 0.25        | NË  | NE   | 4.7E+02                                      | 0.242 1 U U  | 0.238 1 U U  | 0.245 1 U  | U 0.242 1 U U  |
| EXPLOSIVES  | 1,3-Dinitrobenzene                         | 1.6E+00                                  | 0.1                 | 0.25        | NE  | NE   | 1.6E+00                                      | 0.242 1 U U  | 0.238 1 U U  | 0.245 1 U  | 0 0.242 1 0 0  |
| EXPLOSIVES  | 2,4,6-Trinitrotoluene                      | 7.7E+00                                  | 0.1                 | 0.25        | NE  | NE   | 7.7E+00                                      | 0.242 1 U U  | 0.238 1 U U  | 0.245 1 0  | 0 0.242 1 0 0  |
| EXPLOSIVES  | 2,4-Dinitrotoluene                         | 7.2E-01                                  | 0.1                 | 0.25        | NE  | NE   | 7.25-01                                      | 0.242 1 0 0  | 0.230 1 0 0  | 0.245 1 0  | 0.251 1 U U  |
| EXPLOSIVES  | 2,6-Dinitrotoluene                         | 7.2E-01                                  | 0.1                 | 0.20        | NE  | NE   | 2.6E+00                                      | 0.251 1 0 0  | 0.248 1 U U  | 0.255 1 U  | บ้ 0.251 1 บีบ   |
| EXPLOSIVES  | 4-Amino-2.6-dinitratoluene                 | 2.62+00                                  | 0.1                 | 0.26        | NE  | NE   | 2.6E+00                                      | 0.251 1 U U  | 0.248 1 U U  | 0.255 1 U  | U 0.251 1 U U  |
| EXPLOSIVES  | HMX  | 2.2E+02                                  | 0.1                 | 2.20        | NE  | NË   | 2.2E+02                                      | 2.130 1 U U  | 2.100 1 U U  | 2.160 1 U  | U 2.130 1 U U  |
| EXPLOSIVES  | m-Nitrotoluene                             | 4.4E+01                                  | 0.1                 | 0.25        | NE  | NE   | 4.4E+01                                      | 0.242 1 U U  | 0.238 1 U U  | 0.245 1 U  | U 0.242 1 U U  |
| EXPLOSIVES  | Nitrobenzene                               | 6.5E+00                                  | 0.1                 | 0.26        | NE  | NE   | 6.5E+00                                      | 0.251 1 U U  | 0.248 1 0 0  | 0.205 1 U  |  |
| EXPLOSIVES  | o-Nitrotoluene                             | 4.7E+01                                  | 0.1                 | 0.25        | NE  | NE   | 4.7E+01                                      |  | 0.238 1 1 1  | 0.245 1 U  | U 0.242 1 U U  |
| EXPLOSIVES  | p-Nitrotoluene                             | 4.46±01                                  | 0.1                 | 1.00        | NE  | NE   | 3.6E+00                                      | 0.966 1 U U  | 0.952 1 U U  | 0.980 1 U  | Ŭ 0.966 1 U U  |
| EXPLOSIVES  | Tetrvi                                     | 1.6E+02                                  | 0.2                 | 0.65        | NE  | NE   | 1.6E+02                                      | 0.628 1 U U  | 0.619 1 U U  | <u>0.637</u> 1 U   | U 0.628 1 U U  |
| METALS  | Aluminum                                   | 1.6E+04                                  | 10.000              | 20.00       | 1.63E+04                                  | 2.08E+04   | 1.6E+04                                      | 9100.000 1   | 18800.000 1  | 20900.000 1  | 16000.000 1  |
| METALS  | Antimony                                   | 7.3E+00                                  | 0.500               | 0.10        | 9.40E-01                                  | 1.60E+00   | 7.3E+00                                      | 0.113 1 U UJL  | 0.115 1 U UJ   | L 0.076 1 J  | JL 0.120 1 0 0JL<br>1 730 1  |
| METALS  | Arsenic                                    | 2.0E+01                                  | 0.075               | 0.30        | 4.81E+00                                  | 5.54E+00   | 2.0E+01                                      | 4.260 1  | 1.330 1<br>51.400 1 II-  | 65.600 1   | IH 61 900 1 .1H  |
| METALS  | Bandin<br>Bandium                          | 2,02+03                                  | 0.075               | 0.50        | 6.45E-01                                  | 7.66E-01   | 4 6E+00                                      | 0.560 1  | 0.939 1  | 1.090 1  | 0.849 1  |
| METALS  | Cadmium                                    | 5.2E+00                                  | 0.025               | 0.10        | 1.40E+00                                  | 4.00E-01   | 5.2E+00                                      | 0.151 1 J J  | 0.076 1 J J  | 0.073 1 J  | J 0.099 1 J J  |
| METALS  | Calcium                                    | NE                                       | NA                  | NA          | NA  | NA   |  | 1510.000 1   | 940.000 1  | 610.000 1  | 662.000 1  |
| METALS  | Chromium                                   | 5.9E+03                                  | 0.100               | 0.40        | 2.66E+01                                  | 3.01E+01   | 5.9E+03                                      | 14.100 1 JH  | 16.900 1 J⊦  | 24.100 1   | JH 16.500 1 JH   |
| METALS  | Cobalt                                     | 1.5E+03                                  | 0.125               | 0.50        | 7.23E+00                                  | 5.61E+00   | 1.5E+03                                      | 4,220 1  | 7.330 1  | 9.060 1  | 7.340 I<br>5.520 1   |
| METALS  | Copper                                     | 1.0E+03                                  | 0.150               | 0.60        | 5.55E+00                                  | 9.25E+00   | 1.02+03                                      | 28700.000 1  | 19200.000 1 .1   | 24500.000 1  | J 18500.000 1 J  |
| METALS  | tron                                       | 5 0E+02                                  | . NA<br>0.500       | 5.00        | 2 26E+01                                  | 1 145+01   | 5 0E+02                                      | 8.970 1  | 11.500 1   | 11.900 1   | 10,700 1   |
| METALS  | Magnesium                                  | NE                                       | NA                  | NA          | NA  | NA   | _  | 550.000 1  | 1550.000 1   | 1500.000 1   | 1180.000 1   |
| METALS  | Manganese                                  | 1.7E+03                                  | 0.050               | 0.20        | 1.25E+03                                  | 2.01E+02   | 1.7E+03                                      | 129,000 1 J  | 27.700 1 J   | 59.200 1   | J 63.100 1 J   |
| METALS  | Mercury                                    | 1.1E-02                                  | 0.010               | 0.25        | 8.19E-02                                  | 3.60E-01   | 2.5E-01                                      | 0.015 1 J J  | 0.012 1 U U  | 0.063 1 J  | J 0.042 1 J J  |
| METALS  | Nickel                                     | 1.9E+02                                  | 0.200               | 0.80        | 6.98E+00                                  | 1.16E+01   | 1.9E+02                                      | 4.760 1 JM   | 10.100 1 JF  | 11.700 1<br>522.000 1  | JH 0.940 1 JA  |
| METALS  | Potassium                                  | A 2E-102                                 | NA<br>0.100         | NA<br>0.20  | 2 495+00                                  | NA<br>5 575400                                   | 1 35+02                                      | 0.293 1  | 6148 1   | 0.247 1 .  | J 0.262 1  |
| METALS  | Silver                                     | 4.75+01                                  | 0.050               | 0.20        | 3.10E-01                                  | 3.70E-01   | 4.7E+01                                      | 1.680 1 U U  | 1.870 1 U U  | 1,820 1 U  | U 1.920 1 U U  |
| METALS  | Sodium                                     | NE                                       | NA                  | NA          | NA  | NA   | -  | 42.500 1   | 326.000 1  | 243.000 1  | 212.000 1  |
| METALS  | Thallium                                   | 2.0E+00                                  | 0.010               | 0.02        | 4.70E-01                                  | NE   | 2.0E+00                                      | 0.058 1  | 0.114 1  | 0.107 1  | 0.105 1  |
| METALS  | Vanadium                                   | 4.8E+01                                  | 0.125               | 0.50        | 3.21E+01                                  | 4.46E+01   | 4.8E+01                                      | 31.700 1 JH  | 29,700 1 JF  | 1 41.000 1   | JH 28,900 1 JH   |
| METALS  | Zinc                                       | 5.9E+03                                  | 0.625               | 2.50        | 6.16E+U1                                  | 2.02E+01   | 5.9E+03                                      | 18.300 1 JH  | 20,000 I JF  | 0.207 1 U  | U 0.204 1 U U  |
| SEMIVOLATILES<br>SEMIVOLATILES  | 1,2,4- I fichlombenzene                    | 1.4E+02<br>5.6E+01                       | 0.0625              | 0.165       | NE  | NE   | 5.65+01                                      | 30,000 5   | 0.247 1  | 0.207 1 U  | Ŭ 0.204 1 Ū Ū  |
| SEMIVOLATILES   | 1.3-Dichloroberizene                       | 5.1E+00                                  | 0.0825              | 0.165       | NE  | NE   | 5.1E+00                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  | U 0.204 1 U U  |
| SEMIVOLATILES   | 1,4-Dichlorobenzene                        | 2.7E+01                                  | 0.0825              | 0.165       | NE  | NE   | 2.7E+01                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  | U 0.204 f U U  |
| SEMIVOLATILES   | 2,4,5-Trichlorophenol                      | 1.6E+03                                  | 0.0825              | 0.165       | NE  | NÉ   | 1.6E+03                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  | 0 0.204 1 0 0  |
| SEMIVOLATILES   | 2,4,6-Trichlorophenol                      | 4.5E+01                                  | 0.0825              | 0.165       | NE  | NE   | 4.5E+U1                                      |  | 0.201 1 0 0  | 0.207 1 1  | Ú 0.204 1 Ú Ú  |
| SEMIVOLATILES   | 2,4-Dimethylphenol                         | 4.7E+01<br>3.1E+02                       | 0.0825              | 0.165       | NE  | NE   | 3.1E+02                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  | Ŭ 0.204 1 Ŭ Ŭ  |
| SEMIVOLATILES   | 2.4-Dinitrophenol                          | 3.1E+01                                  | 0.3300              | 0.825       | NE  | NE   | 3.1E+01                                      | 4.610 5 U U  | 1.010 1 U U  | 1.030 1 U  | U 1.020 1 U U  |
| SEMIVOLATILES   | 2,4-Dinitrotoluene                         | 7.2E-01                                  | 0.0825              | 0.165       | NE  | NE   | 7.2E-01                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  | U 0.204 1 U U  |
| SEMIVOLATILES   | 2,6-Dinitrototuene                         | 7.2E-01                                  | 0.0825              | 0.165       | NE  | NE   | 7.2E-01                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  | 0 0.204 1 0 0  |
| SEMIVOLATILES   | 2-Chloronaphthalene                        | 1.1E+03                                  | 0.0825              | 0.165       |   | NE   | 1.16+03                                      |  | 0.201 1 0 0  | 0.207 1 1  | U 0.204 1 U U  |
| SEMIVOLATILES   | 2-Unidroprience<br>2-Methylinaphthalong    | 5.5E+01                                  | 0.0825              | 0.165       | NE  | NE   | 5.5E+01                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  | Ŭ 0.204 1 U U  |
| SEMIVOLATILES   | 2-Methylohenol                             | 7.7E+02                                  | 0.0825              | 0.165       | NE  | NE   | 7.7E+02                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  | U 0.204 1 U U  |
| SEMIVOLATILES   | 2-Nitroaniline                             | 4.7E+00                                  | 0.3300              | 0.825       | NE  | NË   | 4.7E+00                                      | 4.610 5 U U  | 1.010 1 U U  | 1.030 1 U  | U 1.020 1 U U  |
| SEMIVOLATILES   | 2-Nitrophenol                              | 3.1E+01                                  | 0.0825              | 0.165       | NE  | NE   | 3.1E+01                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 0  |  |
| SEMIVOLATILES   | 3,3'-Dichlorobenzidine                     | 1.1E+00                                  | 0.1650              | 0.330       | NE  | NE   | 1.12+00                                      | 1.840 5 U U  | 10402 1 U U  | 1030 1 U   | 1 1 1 0 1 U U  |
| SEMIVULATILES   | 3-Nitroaniine<br>4 6 Dioitto 2 methylohend | 4.7E+00<br>3.1E+01                       | 0.3300              | 0.625       | NE  | NE   | 3 16+01                                      | 4610 5 U U   | 1.010 1 U U  | 1.030 1 U  | Ú 1.020 1 Ú Ú  |
| SEMIVOLATILES   | 4-8mmonhenvi phenvi etber                  | 3.1E-02                                  | 0.0825              | 0.165       | NE  | NE   | 1.7E-01                                      | 0,467 5 U U  | 0.101 1 U U  | 0.103 1 U  | U 0.103 1 U U  |
| SEMIVOLATILES   | 4-Chioro-3-metinyiphenol                   | 7.7E+01                                  | 0.0825              | 0.165       | NE  | NE   | 7.7E+01                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  | U 0.204 1 U U  |
| SEMIVOLATILES   | 4-Chloroaniline                            | 6.2E+01                                  | 0.0825              | 0.165       | NE  | NE   | 6.2E+01                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  | U 0.204 1 U U  |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether                | 2.8E-02                                  | 0.0825              | 0.165       | NE  | NE   | 1.7E-01                                      | 0.467 5 U U  | 0.101 1 U U  | 0.103 1 0  |  |
| SEMIVOLATILES   | 4-methyiphenol<br>4-Nitroapiline           | 135+01                                   | 0.0825              | 0.100       | NE  | NE   | 1.70+01                                      | 4610 5 11 11   | 1.010 1 U U  | 1.030 1 U  | ŭ <u>1.020 i U U</u>   |
| SEMIVOLATILES   | 4-Nitronhenol                              | 3.1E+01                                  | 0.3300              | 0.825       | NE  | NÉ   | 3.1E+01                                      | 4.610 5 U U  | 1.010 1 U U  | 1.030 1 U  | U 1.020 1 U U  |
| SEMIVOLATILES   | Acenaphthene                               | 8.2E+02                                  | 0.0825              | 0.165       | NE  | NE   | 8.2E+02                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  | U 0.204 1 U U  |
| SEMIVOLATILES   | Acenaphthylene                             | 8.2E+02                                  | 0.0825              | 0.165       | NE  | NE   | 8.2E+02                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  | U 0.204 1 U U  |
| SEMIVOLATILES   | Anthracene                                 | 4.1E+03                                  | 0.0825              | 0.165       | NE<br>A FOF OC                            | NE   | 4.1E+03                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  |  |
| SEMIVOLATILES<br>SEMIVOLATILES  | penzo(a)anmracene<br>Benzo(a)nvrene        | 0.3E-01<br>6.3E-02                       | 0.0825              | 0.165       | 1.532-02                                  | NE   | 1.7F-01                                      | 0.822 5 0 0  | 0.101 1 1  | 0.103 1 1  | Ŭ 0,103 1 U U  |
| SEMIVOLATILES   | Benzo(b)fluoranthene                       | 6.3E-01                                  | 0.0825              | 0.165       | 1.53E-02                                  | NE   | 6.3E-01                                      | 0.922 5 U U  | 0.201 1 U U  | 0.207 1 U  | U 0.204 1 Ú Ú  |

Shaw Environmental, Inc.

## 00066500

| Table 4-49   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |

WRSump-005

| [SUMP] = WRSUMP00<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH | 5  | TCEQ<br>Risk-Based<br>Screening | Method      | Method       | Backo<br>Concentrat<br>(95% UP | round<br>lions in Soil<br>L. mg/kg) | Applicble<br>TCEQ<br>Risk-Based | WRSUMP005-SB01<br>WRSMP005-SB01-01<br>9/22/2006<br>0.0 - 0.5 Ft | WRSUMP005-SB01<br>WRSMP005-SB01-02<br>9/22/2006<br>4 - 5 Ft | WRSUMP005-SB02<br>WRSMP005-SB02-02<br>9/22/2006<br>4 - 5 Ft | WRSUMP005-SB02<br>WRSMP005-SB02-02-QC<br>9/22/2006<br>4 - 5 Ft |
|---|--|---------------------------------|-------------|--------------|--------------------------------|-------------------------------------|---------------------------------|---|---|---|--|
| SAMPLE_PURPOSE  |  | Value                           | Detection   | Quantitation | Surface                        | Subsurface                          | Screening                       | REG   | REG   | REG   | FD   |
| Test Group  | Parameter (Units = mg/kg)                              | (RBSV)*                         | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft                     | 1.5 - 2.5 Ft                        | Value                           | Result DIL LQ_VQ  | Result DIL LO VO  | Result DIL LQ VQ  | Result DIL LQ VQ   |
| SEMIVOLATILES   | Benzo(ghi)perylene<br>Benzo(k)fivoranthane             | 4.1E+02<br>6.3E+00              | 0.0825      | 0.165        | 1.23E-02<br>1.30E-02           | NE                                  | 4.1E+02<br>6.3E+00              | 0.922 5 0 0   | 0.201 1 0 0   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Benzoic Acid   | 6.2E+04                         | 0.3300      | 0.825        | NE                             | NE                                  | 6.2E+04                         | 4.610 5 U UJ  | 1.010 1 U UJ  | 1.030 1 U UJ  | 1.020 1 U UJ   |
| SEMIVOLATILES   | Benzyl Alcohol   | 4.7E+03                         | 0.0825      | 0.165        | NE                             | NÉ                                  | 4.7E+03                         | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | bis(2-Chloroethoxy)methane                             | 2.9E-01                         | 0.0825      | 0.165        | NE                             | NE                                  | 2.9E-01                         | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 0 0   | 0.204 1 0 0  |
| SEMIVOLATILES   | bis(2-Chloroisooropyl)ether                            | 1,3E+01<br>4.8E+00              | 0.0825      | 0.165        | NE                             | NE                                  | 4.85+00                         | 0922 5 U U  | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 Ŭ Ŭ  |
| SEMIVOLATILES   | bis(2-Ethylhexyl)phthalate                             | 1.7E+01                         | 0.0825      | 0.165        | NE                             | NË                                  | 1.7E+01                         | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Butyl benzyl phthalate                                 | 3.1E+03                         | 0.0825      | 0.165        | NÉ                             | NE                                  | 3.1E+03                         | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Chrysene   | 6.3E+01                         | 0.0825      | 0.165        | 1.51E-02                       | NE                                  | 6.3E+01                         | 0.922 5 0 0   | 0.201 1 0 0   | 0.207 1 0 0   | 0.204 1 0 0  |
| SEMIVOLATILES<br>SEMIVOLATILES  | Dibenzof(a,n)anthracene<br>Dibenzof(aran               | 6.2E+01                         | 0.0825      | 0.165        | NE                             | NË                                  | 6.2E+01                         | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Diethyl phthalate                                      | 1.2E+04                         | 0.0825      | 0.165        | NE                             | NË                                  | 1.2E+04                         | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Dimethyl phthalate                                     | 1.2E+04                         | 0.0825      | 0.165        | NE                             | NË                                  | 1.2E+04                         | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | di-n-Butyl phihalate                                   | 1.6E+03                         | 0.0825      | 0.165        | NE                             | NE                                  | 1.6E+03                         | 0.922 5 U U   | 0.201 1 0 0   | 0.207 1 0 0   | 0.204 1 0 0  |
| SEMIVOLATILES   | 6-n-Octyl prinalate<br>Eurocanthene                    | 5.5E+02                         | 0.0825      | 0.165        | 2.29E-02                       | NE                                  | 5.5E+02                         | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Fluorene   | 5.5E+02                         | 0.0825      | 0.165        | NE                             | NE                                  | 5.5E+02                         | 0.922 5 U U   | 0.201 1 Ú Ú   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Hexachlorobenzene                                      | 2.5E-01                         | 0.0825      | 0.165        | NE                             | NÉ                                  | 2.5E-01                         | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Hexachlorobutadiene                                    | 1.6E+00                         | 0.0825      | 0.165        | NE                             | NE                                  | 1.65+00                         | 0.922 5 U U   | 0.201 1 0 0   | 0.207 1 0 0   | 0.204 1 0 0  |
| SEMIVOLATILES<br>SEMIVOLATILES  | Hexachloroethane                                       | 1.0E+00                         | 0.0825      | 0.165        | NE                             | NE                                  | 1.6E+01                         | 0.606 5 J J   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 Ŭ Ŭ  |
| SEMIVOLATILES   | Indeno(1,2,3-cd)pyrene                                 | 6.3E-01                         | 0.0825      | 0.165        | 1.43E-02                       | NE                                  | 6.3E-01                         | 0.922 5 U U   | 0.201 i U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Isophorone   | 5.2E+02                         | 0.0825      | 0.165        | NE                             | NE                                  | 5.2E+02                         | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Naphthalene  | 1.8±+01                         | 0.0825      | 0.165        | NE                             | NE                                  | 1.8E+01<br>6.5E+00              | 0.922 5 0 0   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | n-Nitroso-di-n-propylamine                             | 4.1E-02                         | 0.0825      | 0.165        | NE                             | NE                                  | 1.7E-01                         | 0.467 5 U U   | 0.101 1 U U   | 0.103 1 U U   | 0.103 1 U U  |
| SEMIVOLATILES   | n-Nitrosodiphenylamine                                 | 5.9E+01                         | 0.0825      | 0.165        | NE                             | NE                                  | 5.9E+01                         | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Pentachlorophenol                                      | 3.0E+00                         | 0.3300      | 0.825        | NE                             | NE                                  | 3.0E+00                         | 4.610 5 U U   | 1.010 1 U U   | 1.030 1 U U   | 1.020 1 0 0  |
| SEMIVOLATILES   | Phenanthrene   | 4.1E+02<br>4.7E+03              | 0.0825      | 0.165        | NE                             | NE                                  | 4.1E+02<br>4.7E+03              | 0.922 5 0 0   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SEMIVOLATILES   | Pyrene   | 4.1E+02                         | 0.0825      | 0.165        | 1.94E-02                       | NE                                  | 4.1E+02                         | 0.922 5 U U   | 0.201 1 U U   | 0.207 1 U U   | 0.204 1 U U  |
| SOLIDS  | Percent Solids   | NE                              | NE          | NE           | NE .                           | NE                                  |                                 | 88.400 1  | 81.600 1  | 79.800 1  | 80.000 1   |
| VOLATILES   | 1,1,1,2-Tetrachloroethane                              | 5.2E+00                         | 0.0005      | 0.005        | NE                             | NE                                  | 5.2E+00                         |   | 0.006 1 0 0   | 0.005 1 0 0   | 0.006 1 U U  |
| VOLATILES   | 1.1.2.2-Tetrachlomethane                               | 5.1E-01                         | 0.0005      | 0.005        | NE                             | NE                                  | 5.1E-01                         |   | 0.006 1 0 0   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | 1,1,2-Trichloroethane                                  | 9.7E-01                         | 0.0005      | 0.005        | NE                             | NE                                  | 9.7E-01                         |   | 0.006 1 Ū Ü   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | 1,1-Dichloroethane                                     | 8.9E+01                         | 0.0010      | 0.005        | NE                             | NE                                  | 8.9E+01                         |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | 1,1-Dichloroethene                                     | 2.76+01                         | 0.0005      | 0.005        | NE                             | NE                                  | 2.7E+01                         |   | 0.006 1 0 0   | 0.006 1 0 0   | 0.006 1 10 10  |
| VOLATILES   | 1.2.3-Trichlorobenzene                                 | 4.2E+01                         | 0.0005      | 0.005        | NE                             | NE                                  | 4.2E+01                         |   | 0.006 1 0 0   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | 1,2,3-Trichloropropane                                 | 9.2E-02                         | 0.0010      | 0.005        | NE                             | NE                                  | 9.2E-02                         |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | 1,2,4-Trichlorobenzene                                 | 1.4E+02                         | 0.0005      | 0.005        | NE                             | NE                                  | 1.4E+02                         |   | 0.006 1 U U   | 0.006 1 U U   | 0.005 1 U U  |
| VOLATILES   | 1,2,4-1 rimethylbenzene<br>1,2-Dibromo-3-chloroprogene | 9.65.+00<br>3.55.01             | 0.0005      | 0.005        | NE                             | NE                                  | 9.6E+00<br>3.5E-01              |   | 0.006 1 0 0   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | 1.2-Dibromoethane                                      | 5.3E-02                         | 0.0005      | 0.005        | NE                             | NE                                  | 5.3E-02                         |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | 1,2-Dichlorobenzene                                    | 5.6E+01                         | 0.0005      | 0.005        | NE                             | NE                                  | 5.6E+01                         |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | 1,2-Dichloroethane                                     | 2.7E-01                         | 0.0005      | 0.005        | NE                             | NE                                  | 2.7E-01                         |   | 0.006 1 U U   | 0.006 1 0 0   | 0.006 1 0 0  |
| VOLATILES   | 1.2-Dignoropropane<br>1.2-Dimethylbenzene (o-Xylen)    | 3.3E+03                         | 0.0005      | 0.005        | NE                             | NE                                  | 3.3E+03                         |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | 1,3,5-Trimethylbenzene                                 | 8.3E+00                         | 0.0005      | 0.005        | NE                             | NE                                  | 8.3E+00                         |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | 1,3-Dichlorobenzene                                    | 5.1E+00                         | 0.0005      | 0.005        | NE                             | NE                                  | 5.1E+00                         |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | 1.3-Dichloropropane                                    | 3.0E+00<br>2.7E+01              | 0.0005      | 0.005        | NE                             |                                     | 3.0E+00                         |   | 0.006 1 0 0   | 0.006 1 0 0   | 0.006 1 0 0  |
| VOLATILES   | 2.2-Dichloropropane                                    | 1.7E+00                         | 0.0005      | 0.005        | NE                             | NE                                  | 1.7E+00                         | 1   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | 2-Butanone   | 2.6E+03                         | 0.0025      | 0.010        | NE                             | NE                                  | 2.6E+03                         |   | 0.011 1 U U   | 0.012 1 U U   | 0.012 1 U U  |
| VOLATILES   | 2-Chloroethyl vinyl ether                              | 2.1E-01                         | 0.0020      | 0.010        | NE                             | NE                                  | 2.1E-01                         |   | 0.011 1 U U   | 0.012 1 U U   | 0.032 1 U U  |
| -VOLATILES  | 2-Grierototuene<br>2-Bevanone                          | 1.3E+02<br>6.2E+00              | 0.0005      | 0.005        | NE                             | NE                                  | 6.2E+02                         |   | 0.011 1 U U   | 0.012 1 U U   | 0.012 1 0 0  |
| VOLATILES   | 4-Chlorotoluene  | 3.4E-01                         | 0.0005      | 0.005        | NE                             | NE                                  | 3.4E-01                         |   | 0.006 1 Ŭ Ŭ   | 0.006 î Ŭ Ŭ   | 0.006 1 U U  |
| VOLATILES   | Acetone  | 1.7E+02                         | 0.0050      | 0.010        | NE                             | NE                                  | 1.7E+02                         |   | 0.011 1 U U   | 0.012 1 U U   | 0.012 1 U U  |
|   | Benzene  | 8.8E-01                         | 0.0005      | 0.005        | NE                             | NE                                  | 8.8E-01                         |   | 0.005 1 0 0   | 0.006 1 U U<br>0.006 1 U II                                 | 0.005 1 0 U  |
| VOLATILES   | Bromochloromethane                                     | 2.4E+01                         | 0.0005      | 0.005        | NE                             | NE                                  | 2.4F+01                         |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | Bromodichloromethane                                   | 1.0E+01                         | 0.0005      | 0.005        | NE                             | NE                                  | 1.0E+01                         |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 Ū Ū  |
| VOLATILES   | Bromoform  | 3.4E+01                         | 0.0005      | 0.005        | NE                             | NE                                  | 3,4E+01                         |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | Bromomethane<br>Carbon disultide                       | 3.5E-01<br>1.0E+02              | 0.0010      | 0.010        | NE                             | NE                                  | 3.5E-01<br>1.0E+02              | 1   | 0.011 1 0 0   | 0.012 1 0 0   | 0.012 1 0 0  |
| VOLATILES   | Carbon tetrachloride                                   | 3.5E-01                         | 0.0005      | 0.005        | NE                             | NE                                  | 3.5E-01                         |   | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U  |
| VOLATILES   | Chlorobenzene  | 4.0E+01                         | 0.0005      | 0.005        | NE                             | NE                                  | 4.0E+01                         | 1   | 0.006 1 Ú Ű   | 0.006 1 Ú Ú   | 0.006 1 U Ú  |

Page 5 of 6
Shaw Environmental, Inc.

## 00066501

| Table 4-49   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| WPSump-005   |

|  |   |  |  |   |  |  | coump-ovo  |  |   |   |   |
|--|---|--|--|---|--|--|--|--|---|---|---|
| [SUMP] = WRSUMP00<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE  | 15  | TCEQ<br>Risk-Based<br>Screening<br>Value   | Method<br>Detection  | Metixod -<br>Quantitation   | Backy<br>Concentra<br>(95% UF<br>Surface   | ground<br>tions in Soll<br><u>1, mg/kg}</u><br>Subsurface                                  | Applicble<br>TCEQ<br>Risk-Based<br>Screening   | WRSUMP005-SE01<br>WRSMP005-SB01-01<br>9/22/2006<br>0.0 - 0.5 Ft<br>REG | WRSUMP005-SB01<br>WRSMP005-SB01-02<br>9/22/2006<br>4 - 5 Ft<br>REG  | WRSUMP005-SB02<br>WRSMP005-SB02-02<br>9/22/2006<br>4 - 5 Ft<br>REG  | WRSUMP005-SB02<br>WRSMP005-SB02-02-QC<br>9/22/2006<br>4 - 5 Ft<br>FD  |
| Test Group   | Parameter (Units = mg/kg)   | (RBSV) *   | Limit (MDL)  | Limit (MQL)   | 0 - 0.5 Ft   | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LO VO  | Result DIL LQ VQ  |
| Test Group<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES | Parameter (Units = mg/kg)<br>Chiororethane<br>Chiorororm<br>Chiorororm<br>Chiorororm<br>cis1-2.2-Dichioroethene<br>cis1-2.2-Dichioroethene<br>Dibromonethane<br>Dibromonethane<br>Dibromonethane<br>Ethylbenzene<br>Hexachiorobutsdiene<br>Isopropylbenzene<br>mp-Xylenes<br>Methyl isobutyl ketone<br>Methylene chioride<br>Naphthalene<br>n-BUTYLBENZENE<br>p-ISOPROPYLDUENE<br>sec-BUTYLBENZENE<br>Styrene<br>tert-BUTYLBENZENE<br>Tetrachioroethene | (RBSV)*<br>1.1E+03<br>3.1E-01<br>2.3E-01<br>1.2E+02<br>1.2E+02<br>1.2E+02<br>1.2E+02<br>1.2E+02<br>1.3E+03<br>1.4E+01<br>2.2E+02<br>1.3E+03<br>8.7E+00<br>1.8E+01<br>2.3E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2 | Limit (MDL)<br>0.0010<br>0.0005<br>0.0020<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0 | Limit (MQL)<br>0.010<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005 | 0-0.5 Ft<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE | 1.5 - 2.5 Ft<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE | Value<br>1.1E+03<br>3.1E-01<br>2.3E-01<br>1.2E+02<br>1.2E+02<br>1.2E+02<br>1.8E+01<br>2.2E+02<br>1.8E+01<br>2.2E+02<br>1.8E+00<br>5.4E+02<br>2.3E+02<br>1.8E+01<br>2.7E+00<br>1.8E+01<br>2.7E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+ | Result DIL LQ VQ   | Result         DIL         LQ         VQ           0.011         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U      0.006         1         U | Result         DIL         LQ         VQ           0.012         1         U         U           0.006         1         U         U           0.012         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U      0.006         1         U | Result DIL         LQ.         VQ           0.012         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U         U           0.006         1         U |
| VOLATILES  | trans_1 2-Dictrioroethene   | 1.4E+02  | 0.0005   | 0.005   | NE   | NE   | 1.4E+02  |  | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U   |
| VOLATILES  | trans-1,3-Dichloropropene   | 1.8E+00  | 0.0005   | 0.005   | NE   | NE   | 1.8E+00  |  | 0.006 1 Ū Ū   | 0.006 1 U U   | 0.006 1 U U   |
| VOLATILES  | Trichloroethene   | 3.7E+00  | 0.0005   | 0.005   | NE   | NE   | 3.7E+00  |  | 0.006 1 U U   | 0.006 1 U U   | 0.006 1 U U   |
| VOLATILES  | Trichlorofluoromethane  | 2.6E+02  | 0.0010   | 0.01  | NE   | NE   | 2.6E+02  |  | 0.011 1 U U   | 0.012 1 U U   | 0.012 1 U U   |
| VOLATILES  | Vinyl acetate   | 5.7E+01  | 0.0010   | 0.01  | NE   | NE   | 5.7E+01  |  | 0.011 1 U U   | 0.012 1 U UJ  | 0.012 1 U U   |
| VOLATILES  | Vinyl chloride  | 3.6E-02  | 0.0010   | 0.01  | NE   | NÉ   | 3.6E-02  |  | <u>0.011 1 U U</u>  | 0.012 1 U U   | <u>0.012 1 U U</u>  |

Data Evaluation Report Chemical Concentrations in Soil Associated with 1.HAAP-35/36 Sumps

Shaw Environmental, Inc.

### 00066502

### Table 5-50 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

| WRSump- | 006 |
|---------|-----|
|---------|-----|

| (SUMP) = WRSUMP00<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE | 5  | TCEQ<br>Risk-Based | Applicble<br>TCEQ       | 35SUMP012-SB01<br>35-SMP12-SB01-02<br>9/12/2006 | 35SUMP013-SB01<br>35-SMP13-SB01-01<br>9/12/2006 | 35SUMP013-SB01<br>35-SMP13-SB01-02<br>9/12/2006 | WRS06-SB01<br>WRS06-SB01-01<br>9/25/2006 | WR\$06-\$B01<br>WR\$06-\$B01-02<br>9/25/2006 |
|--|--|--------------------|-------------------------|---|---|---|--|--|
| DEPTH<br>SAMPLE_PURPOSE  |  | Screening<br>Value | Risk-Based<br>Screening | 10 - 11 Ft<br>REG                               | 0.0 - 0.5 Ft<br>REG                             | 9 - 10 Ft<br>REG                                | 0.0 - 0.5 Ft<br>REG                      | 3.5 - 4.5 Ft<br>REG                          |
| Test Group   | Parameter (Units = mg/kg)                        | (R8SV)             | Value                   | Result DiL LQ VQ                                | Result DIL LQ VQ                                | Result DIL_LQ_VQ                                | Result DIL LQ VQ                         | Result DIL LQ VQ                             |
| RANGE_ORGANICS   | Carbon Range C12-C28<br>CARBON RANGE C28-C35     | 4.0E+02<br>4.0E+02 | 4.0E+02<br>4.0E+02      | 59.400 1 U<br>59.400 1 U                        | 62.800 1 U                                      | 60.800 1 U                                      | 56.200 1 U U                             | 38.400 1 J J                                 |
| RANGE ORGANICS   | Carbon Range C6-C12                              | 1.7E+02            | 1.7E+02                 | 59.400 1 U                                      | 62.800 1 U                                      | 60.800 1 U                                      | 56.200 1 U U                             | 61.400 I U U                                 |
| SEMIVOLATILES  | 1,2,4-Trichlorobenzene                           | 1.4E+02            | 1.4E+02                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILE\$   | 1,2-Dichlorobenzene                              | 5.6E+01            | 5.6E+01                 |   |   |   | 1.820 10 0 0                             | 0.205 1 0 0                                  |
| SEMIVOLATILES  | 1,3-Dichlorobenzene<br>1,4-Dichlorobenzene       | 5,1E+00<br>27E+01  | 2.7E+00                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | 2.4.5-Trichlorophenol                            | 1.6E+03            | 1.6E+03                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | 2,4,6-Trichlorophenol                            | 4.5E+01            | 4.5E+01                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | 2,4-Dichlorophenol                               | 4.7E+01            | 4.7E+01                 |   |   |   | 1.820 10 0 0                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | 2,4-Dinternyiphenol                              | 3.1E+02<br>3.1E+01 | 3.1E+02<br>3.1E+01      |   |   |   | 9.120 10 U U                             | 1.030 1 U U                                  |
| SEMIVOLATILES  | 2.4-Dinitrotoluene                               | 7.2E-01            | 7.2E-01                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | 2,6-Dinitrototuene                               | 7.2E-01            | 7.2E-01                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | 2-Chloronaphthalene                              | 1.1E+03            | 1.1E+03                 |   |   |   | 1.820 10 0 0                             | 0.205 1 0 0                                  |
| SEMIVOLATILES  | 2-Chlorophenol                                   | 1.12+02            | 1.1E+02<br>5.5E+01      |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | 2-Methylobenol                                   | 7.7E+02            | 7.7E+02                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | 2-Nitroaniline                                   | 4.7E+00            | 4.7E+00                 |   |   |   | 9.120 10 U U                             | 1.030 1 U U                                  |
| SEMIVOLATILES  | 2-Nitrophenol                                    | 3.1E+01            | 3,1E+01                 |   |   |   | 1.820 10 U U                             | 0.205 1 0 0                                  |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine                           | 1.16+00            | 1.1E+00<br>4.7E+00      |   |   |   | 9.120 10 U U                             | 1.030 1 U U                                  |
| SEMIVOLATILES  | 4.6-Dinitm-2-methylohenol                        | 3.1E+01            | 3.1E+01                 |   |   |   | 9.120 10 U U                             | 1.030 1 U U                                  |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether                       | 3.1E-02            | 1.7E-01                 |   |   |   | 0.938 10 U U                             | 0.103 1 U U                                  |
| SEMIVOLATILES  | 4-Chloro-3-methylphenol                          | 7.7E+01            | 7.7E+01                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | 4-Chloroaniline                                  | 6.2E+01            | 6.2E+01                 |   |   |   | 0998 10 U U                              | 0.103 1 U U                                  |
| SEMIVOLATILES  | 4-Chlorophenyi phenyi eusei<br>4-Methylphenol    | 7.7E+01            | 7.7E+01                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | 4-Nitroaniline                                   | 1.3E+01            | 1.3E+01                 |   |   |   | 9.120 10 U U                             | 1.030 1 U U                                  |
| SEMIVOLATILES  | 4-Nitrophenoi                                    | 3.1E+01            | 3.1E+01                 |   |   |   | 9.120 10 U U                             | 1.030 1 U U                                  |
| SEMIVOLATILES  | Acenaphihene                                     | 8.2E+02            | 8.2E+02                 |   |   |   | 1.820 10 0 0                             | 0.205 1 0 0                                  |
| SEMIVOLATILES  | Acertapitusylene                                 | 4 1E+03            | 4 15+03                 |   |   |   | 1.820 10 U                               | 0.205 1 U U                                  |
| SEMIVOLATILES  | Benzo(a)anthracene                               | 6.3E-01            | 6.3E-01                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Benzo(a)pyrene                                   | 6.3E-02            | 1.7E-01                 |   |   |   | 0.938 10 U U                             | 0.103 1 U U                                  |
| SEMIVOLATILES  | Benzo(b)fluoranthene                             | 6.3E-01            | 6.3E-01                 |   |   |   | 1.820 10 0 0                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Benzo(ghi)peryiene<br>Benzo(k)fluoranthene       | 6.3E+00            | 6.3E+00                 |   |   |   | 1.820 10 U U                             | 0.205 1 Ŭ Ū                                  |
| SEMIVOLATILES  | Benzoic Acid                                     | 6.2E+04            | 6.2E+04                 |   |   |   | 9.120 10 U UJ                            | 1.030 1 U UJ                                 |
| SEMIVOLATILES  | Benzyl Alcohol                                   | 4.7E+03            | 4.7E+03                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane                       | 2.9E-01            | 2.9E-01                 |   |   |   | 0938 10 U U                              | 0.103 1 U U                                  |
| SEMIVOLATILES  | his (2-Chloroisonronyl)ether                     | 4.85+00            | 4.8E+00                 |   |   |   | 1,820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate                       | 1.7E+01            | 1.7E+01                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Butyl benzyl phthalate                           | 3.1E+03            | 3.1E+03                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Chrysene   | 6.3E+01            | 6.3E+01                 |   |   |   | 0.998 10 U U                             | 0.103 1 U U                                  |
| SEMIVOLATILES  | Dibenzofuran                                     | 6.2E+01            | 6.2E+01                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Diethyl phthalate                                | 1.2E+04            | 1.2E+04                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Dimethyl phthalate                               | 1.2E+04            | 1.2E+04                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | di-n-Butyl phthalate                             | 1.6E+03<br>3.1E+02 | 1.6E+03<br>3.1E+02      |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Fluoranthene                                     | 5.5E+02            | 5.5E+02                 |   |   |   | 1.820 10 U U                             | 0.205 1 Ŭ Ū                                  |
| SEMIVOLATILES  | Fluorene   | 5.5E+02            | 5.5E+02                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Hexachlorobenzene                                | 2.5E-01            | 2.5E-01                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Hexachlorobutadiene                              | 1.65+00            | 1.6E+00                 |   |   |   | 1820 10 0 0                              | 0.205 1 0 0                                  |
| SEMIVOLATILES  | Hexachloroethane                                 | 1.6E+01            | 1.6E+01                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene                           | 6.3E-01            | 6.3E-01                 | 1   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Isophorone                                       | 5.2E+02            | 5.2E+02                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Naphthalene                                      | 1.82:+01           | 1.85+01                 |   |   |   | 1.820 10 0 0                             | 0.205 1 0 0                                  |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine                       | 4.1E-02            | 1.7E-01                 |   |   |   | 0938 10 U U                              | 0.103 1 U U                                  |
| SEMIVOLATILES  | n-Nitrosodiphenylamine                           | 5.9E+01            | 5.9E+01                 |   |   |   | 1.820 10 U U                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Pentachlorophenol                                | 3.0E+00            | 3.0E+00                 |   |   |   | 9.120 10 U                               | 1.030 1 U U                                  |
| SEMIVOLATILES  | Phenanthrene                                     | 4.102              | 4.1E+02<br>4.7E+02      |   |   |   | 1.820 10 0 0                             | 0.205 1 U U                                  |
| SEMIVOLATILES  | Pyrene   | 4.12+03            | 4.1E+02                 |   |   |   | 1.820 10 U U                             | 0.205 1 Ū Ŭ                                  |
| SOLIDS   | Percent Solids                                   | NE                 | -                       | 82.700 1  | 79.600 1  | 82.100 1  | 88.000 1                                 | 80.400 1                                     |
| VOLATILES  | 1.1.1.2-Tetrachloroethane                        | 5.2E+00            | 5.2E+00                 | 0.005 1 U                                       |   | 0.005 1 U                                       |  | 0.005 1 U U                                  |
| VOLATILES  | 1,1,1-1 ncnioroemane<br>1,1,2,2-Tetrachlomethane | 2.3E+02<br>5.1F-01 | 2.3E+02<br>5.1F=01      | 0.005 1 0                                       |   | 0.005 1 U                                       |  | 0.006 1 U U                                  |
|  | .,.,_,   | I                  |                         |   |   |   |  |  |

Shaw Environmental, Inc.

00066503

#### Table 5-50 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-006

| [SUMP] = WRSUMP006 | i                                     | ]                  |                    | 200 (NIDALA 2004                   |                  | 25511010042 5504       | WDSOS SPO1       | W/2506-5201      |
|--------------------|---------------------------------------|--------------------|--------------------|------------------------------------|------------------|------------------------|------------------|------------------|
| LOCATION_CODE      |                                       | TCEO               | Applichie          | 3550MP012-5801<br>35-5MP12-5801-02 | 35-SMP13-SB01-01 | 35-SMP13-SB01-02       | WRS06-SB01-01    | WR\$06-SB01-02   |
| SAMPLE_DATE        |                                       | Risk-Based         | TCEQ               | 9/12/2006                          | 9/12/2006        | 9/12/2006              | 9/25/2006        | 9/25/2006        |
| DEPTH              |                                       | Screening          | Risk-Based         | 10 - 11 Ft                         | 0.0 - 0.5 Ft     | 9 - 10 Ft              | 0.0 - 0.5 Ft     | 3.5 - 4.5 Ft     |
| SAMPLE_PURPOSE     |                                       | Value              | Screening          | REG                                | REG              | REG                    | REG              | REG              |
| Test Group         | Parameter (Units = mg/kg)             | (RBSV)             | Value              | Result DIL_LQ_VQ                   | Result DIL LQ VQ | Result DIL LQ VQ       | Result DIL LQ VQ | Result DIL LQ VQ |
| VOLATILES          | 1,1,2-1 nonioroetnane                 | 9.7E-01<br>8.9E+01 | 9.7E-01<br>8.9E+01 | 0.005 1 0                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | 1,1-Dichloroethene                    | 2.7E+01            | 2.7E+01            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | 1,1-Dichloropropene                   | 9.9E-01            | 9.9E-01            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | 1,2,3-Trichlorobenzene                | 4.2E+01<br>0.2E-02 | 4.2E+01            | 0,005 1 0                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | 1.2.4-Trichlorobenzene                | 1.4E+02            | 1.4E+02            | 0.005 1 U                          |                  | 0.005 1 Ŭ              |                  | 0.006 1 U U      |
| VOLATILES          | 1,2,4-Trimethylbenzene                | 9.6E+00            | 9.6E+00            | 0.005 1 U                          |                  | 0.003 1 J              |                  | 0.006 1 U U      |
| VOLATILES          | 1,2-Dibromo-3-chloropropane           | 3.5E-01            | 3.5E-01            | 0.005 1 U                          |                  | 0.005 1 0              |                  | 0.006 1 U U      |
| VOLATILES          | 1.2-Dichlorobenzene                   | 5.6E+01            | 5.6E+01            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | 1,2-Dichloroethane                    | 2.7E-01            | 2.7E-01            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | 1,2-Dichloropropane                   | 1.8E+00            | 1.8E+00            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 0 0      |
| VOLATILES          | 1,2-Dimethylbenzene (0-Xyle           | 3.38+03<br>8.3E+00 | 3.3E+03<br>8.3E+00 | 0.005 1 U                          |                  | 0.002 I J J            |                  | 0.006 1 U U      |
| VOLATILES          | 1,3-Dichlorobenzene                   | 5.1E+00            | 5.1E+00            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 t U U      |
| VOLATILËS          | 1,3-Dichloropropane                   | 3.0E+00            | 3,0E+00            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | 1,4-Dichlorobenzene                   | 2.76+01            | 2.7E+01<br>1.7E+00 | 0.005 1 U                          |                  | 0.005 1 0              |                  | 0.006 1 U U      |
| VOLATILES          | 2-Butanone                            | 2.6E+03            | 2.6E+03            | 0.011 1 U                          |                  | 0.010 1 U              |                  | 0.013 1 U U      |
| VOLATILES          | 2-Chloroethyl vinyl ether             | 2.1E-01            | 2.1E-01            | 0.011 1 U                          |                  | 0.010 1 U              |                  | 0.013 1 U U      |
| VOLATILES          | 2-Chiorotoluene                       | 1.5E+02            | 1.5E+02<br>6.2E+00 | 0.005 1 U                          |                  | 0.005 1 0              |                  | 0.013 1 U U      |
| VOLATILES          | 4-Chiorotoluene                       | 3.4E-01            | 3.4E-01            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | Acetone                               | 1.7E+02            | 1.7E+02            | 0.011 1 U UJ                       |                  | 0.010 1 U UJ           |                  | 0.013 1 U U      |
| VOLATILES          | Benzene                               | 8.8E-01            | 8.8E-01            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 0 0      |
| VOLATILES          | Bromochloromethane                    | 2.4E+01            | 2.4E+01            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | Bromodichloromethane                  | 1.0E+01            | 1.0E+01            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | Bromoform                             | 3.4E+01            | 3.4E+01            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 0 0      |
| VOLATILES          | Bromometnane<br>Carbon disulfide      | 3.5E-01<br>1.0E+02 | 3.5E-01            | 0.011 1 0                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | Carbon tetrachloride                  | 3.5E-01            | 3.5E-01            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | Chlorobenzene                         | 4.0E+01            | 4.0E+01            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | Chloroethane                          | 1.1E+03<br>3.1E-01 | 1.1E+03<br>3.1E-01 | 0.011 1 U                          |                  | 0.010 1 0              |                  | 0.006 1 U U      |
| VOLATILES          | Chloromethane                         | 2.3E-01            | 2.3E-01            | 0.011 1 U                          |                  | 0.010 1 U              |                  | 0.013 1 U U      |
| VOLATILES          | cis-1,2-Dichloroethene                | 1.2E+02            | 1.2E+02            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | cis-1,3-Dichloropropene               | 1.2E+00            | 1.2E+00            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 0 0      |
| VOLATILES          | Dibromomethane                        | 1.9E+01            | 1.9E+01            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | Dichlorodifluoromethane               | 2.2E+02            | 2.2E+02            | 0.011 1 U                          |                  | 0.010 1 U              |                  | 0.013 1 U U      |
| VOLATILES          | Ethylbenzene                          | 4.3E+02            | 4.3E+02            | 0.005 1 U                          |                  | 0.005 1 J J            |                  | 0.006 1 0 0      |
| VOLATILES          | Isonronyibenzene                      | 5.4E+02            | 5.4E+02            | 0.005 1 U                          |                  | 0.001 1 J J            |                  | 0.006 1 U U      |
| VOLATILES          | m,p-Xylenes                           | 2.3E+02            | 2.3E+02            | 0.005 1 U                          |                  | 0.010 1                |                  | 0.006 1 U U      |
| VOLATILES          | Methyl isobutyl ketone                | 1.3E+03            | 1.3E+03            | 0.011 1 U                          |                  | 0.010 1 U              |                  | 0.013 1 0 0      |
| VOLATILES          | Nenyiene chionde                      | 8.7E+00<br>1.8E+01 | 8.7E+00<br>1.8E+01 |                                    |                  | 0.005 1 U              |                  | 0.013 1 U U      |
| VOLATILES          | n-BUTYLBENZENE                        | 2.7E+02            | 2.7E+02            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | n-PROPYLBENZENE                       | 3.2E+02            | 3.2E+02            | 0.005 1 U                          |                  | 0.001 1 J J            |                  | 0.006 1 U U      |
| VOLATILES          | p-ISOPROPYLTOLUENE                    | 4.2E+02            | 4.2E+02            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | Styrene                               | 1.3E+03            | 1.3E+03            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 Ŭ Ŭ      |
| VOLATILES          | tert-BUTYLBENZENE                     | 2.6E+02            | 2.6E+02            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | Tetrachloroethene                     | 6.0E+00            | 6.0E+00            | 0.005 1 U                          |                  | 0.005 1 U<br>0.005 1 U |                  | 0.006 1 U U      |
| VOLATILES          | trans-1.2-Dichlomethene               | 1.4E+02            | 1.4E+02            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | trans-1,3-Dichloropropene             | 1.8E+00            | 1.8E+00            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | Trichloroethene                       | 3.7E+00            | 3.7E+00            | 0.005 1 U                          |                  | 0.005 1 U              |                  | 0.006 1 U U      |
| VOLATILES          | inchiorosuoromethane<br>Vinvl acetate | 2.0H+02<br>5.7E+01 | 2.0E+02<br>5.7E+01 | 0.011 1 U                          |                  | 0.010 1 U              |                  | 0.013 1 U U      |
| VOLATILES          | Vinyi chloride                        | 3.6E-02            | 3.6E-02            | 0.011 1 U                          |                  | 0.010 1 U              |                  | 0.013 1 U U      |

VOLATILES Vinvi chloride Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

00066504

| Table 4-51   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| WRSump-007   |

| [SUMP] = WRSUMP007<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH | ,                                     | TCEQ<br>Risk-Based | Method      | Method       | Backg<br>Concentrati<br>(95% UP) | round<br>ions in Soil<br>ma/ka) | Applicble<br>TCEQ<br>Risk-Based | WRS07-SB01<br>WRS07-SB01-01<br>9/25/2006<br>0.0 - 0.5 Ft | WRS07-SB01<br>WRS07-SB01-02<br>9/25/2006<br>3.5 - 4.5 Ft | WRS07-SB02<br>WRS07-SB02-01<br>9/25/2006<br>0.0 - 0.5 Ft | WR\$07-\$B02<br>WR\$07-\$B02-02<br>9/25/2006<br>3.5 - 4.5 Ft |
|--|---------------------------------------|--------------------|-------------|--------------|----------------------------------|---------------------------------|---------------------------------|--|--|--|--|
| SAMPLE_PURPOSE   |                                       | Value              | Detection   | Quantitation | Surface                          | Subsurface                      | Screening                       | REG  | REG  | REG  | REG  |
| Test Group   | Parameter (Units = mg/kg)             | (RBSV)             | Limit (MDL) | Limit (MQL)  | 0-0.5 Ft                         | 1.5 - 2.5 Ft                    | Value                           | Result DIL LQ VQ   | A640,000 1   | 8470.000 1   | 6820.000 1   |
| METALS   | Antimony                              | 1.65+04            | 10.000      | 20.00        | 9.405-01                         | 2.08E+04                        | 7.95+00                         | 4640.000 1   | 0.055 1 11 1131  | 0.293 1 ./L  | 0.108 1 U UJL  |
| METALO   | Anonyony                              | 2.00+00            | 0.075       | 0.30         | 4.81E+00                         | 5.54E+00                        | 2.0E+01                         | 1.250 1 JL   | 1.250 1 JL   | 0.831 1 JL   | 0.483 1 JL   |
| METALS   | Barium                                | 2.6E+03            | 0.075       | 0.30         | 1.52E+02                         | 8.55E+01                        | 2.6E+03                         | 30.200 1   | 30.200 1   | 40.500 1   | 24.200 1   |
| METALS   | Bervilium                             | 4.6E+00            | 0.012       | 0.50         | 6.45E-01                         | 7.66E-01                        | 4.6E+00                         | 0.208 1 J J  | 0.208 1  | 0.376 1 J J  | 0.2677 1 J J   |
| METALS   | Cadmium                               | 5.2E+00            | 0.025       | 0.10         | 1.40E+00                         | 4.00E-01                        | 5.2E+00                         | 0.039 1 J J  | 0.039 1 J J  | 0.345 1 J J  | 0.414 1 U U  |
| METALS   | Calcium                               | NE                 | NA          | NA           | NA                               | NA                              |                                 | 500.000 1  | 500.000 1  | 1020.000 1   | 406.000 1  |
| METALS   | Chromium                              | 5.9E+03            | 0.100       | 0.40         | 2.66E+01                         | 3.01E+01                        | 5.9E+03                         | 8.410 1  | 8.410 1  | 13.000 1   | 9.480 1  |
| METALS   | Cobalt                                | 1.5E+03            | 0.125       | 0.50         | 7.23E+00                         | 5.61E+00                        | 1.5E+03                         | 1.570 1 U U  | 1.570 1  | 3.630 1  | 4.270 1  |
| METALS   | Copper                                | 1.0E+03            | 0.150       | 0.60         | 5.55E+00                         | 9.25E+00                        | 1.0E+03                         | 1,700 1  | 1.700 1  | 2.740 1  | 2.110 1  |
| METALS   | Iron                                  | NE                 | NA          | NA           | NA                               | NA                              |                                 | 6/10.000 1   | 6/10.000 1   | 13900.000 1  | 4970.000 1   |
| METALS   | Lead                                  | 5.0E+02            | 0.500       | 5.00         | 2.266+01                         | 1.14E+01                        | 3.02+02                         | 5.350 I<br>220.000 4 IH                                  | 229.000 1 IH   | 455.000 1 .04  | 672 000 1 .IH  |
| METALO   | Magnesium                             | 175+03             | 0.050       | 0.20         | 1 25E+03                         | 2 01 =+02                       | 1 7E+03                         | 48 800 1 .1  | 48 800 1 .   | 150.000 1 .1   | 11.700 1 J   |
| METALS   | Mercury                               | 1 15-02            | 0.010       | 0.25         | 8 19E-02                         | 3.60E-01                        | 2.5E-01                         | 0.010 1 J J  | 0.010 1 J J  | 0.022 1 J J  | 0.011 1 U U  |
| METALS   | Nickel                                | 1.9E+02            | 0.200       | 0.80         | 6.98E+00                         | 1.16E+01                        | 1.9E+02                         | 2.270 1 J J  | 2.270 1  | 4.720 1  | 6.170 1  |
| METALS   | Potassium                             | NE                 | NA          | NA           | NA                               | NA                              |                                 | 221.000 1  | 221.000 1  | 257.000 1  | 250.000 1  |
| METALS   | Selenium                              | 1.3E+02            | 0.100       | 0.20         | 3.48E+00                         | 5.57E+00                        | 1.3E+02                         | 0.145 1 J JL   | 0.145 1 J JL   | 0.183 1 J JL   | 0.215 1 U UJL  |
| METALS   | Silver                                | 4.7E+01            | 0.050       | 0.20         | 3.10E-01                         | 3.70E-01                        | 4.7E+01                         | 1.500 1 U U  | 1.500 1 U U  | 1.650 1 U U  | 1.660 1 U U  |
| METALS   | Sodium                                | NE                 | NA          | NA           | NA                               | NA                              | -                               | 91.100 1 J J   | 91.100 1   | 222.000 1  | 153.000 1  |
| METALS   | Thallium                              | 2.0E+00            | 0.010       | 0.02         | 4.70E-01                         | NE                              | 2.0E+00                         | 0.042 1  | 0.042 1  | 0.227 1  | 0.047 1  |
| METALS   | Vanadium                              | 4.8E+01            | 0.125       | 0.50         | 3.21E+01                         | 4.46E+01                        | 4.8E+01                         | 15.600 1   | 15.600 1   | 23,300 1   | 7.780 1  |
| METALS   | Zinc                                  | 5.9E+03            | 0.625       | 2.50         | 6.16E+01                         | 2.02E+01                        | 5.9E+03                         | 5.950 1  | 5.950 1  | 17.900 1   | 12.400 1   |
| SEMIVOLATILES  | 1.2,4-Trichlorobenzene                | 1.4E+02            | 0.083       | 0.17         | NE                               | NE                              | 1.4E+02                         |  | 0.192 1 0 0  | 1.830 10 0 0   | 0.176 1 0 0  |
| SEMIVOLATILES  | 1,2-Dichlorobenzene                   | 5.52+01            | 0.083       | 0.17         | NE                               | NE                              | 5.02+01                         |  | 0.192 1 0 0  | 1.830 10 0 0   | 0.176 1 1 1  |
| SEMIVOLATILES  | 1.4 Dichlorobenzene                   | 2.12+00<br>2.7E+01 | 0.083       | 0.17         | NE                               | NE                              | 2.7E+01                         | 0.189 1 1 1  | 0.192 1 1 1  | 1.830 10 U U   | 0.176 1 U U  |
| SEMIVOLATILES  | 2 4 5-Trichlorophenol                 | 1.6E+03            | 0.083       | 0.17         | NE                               | NE                              | 1.6E+03                         | 0.189 1 U U  | 0.192 1 U U  | 1.830 10 U U   | 0.176 1 U U  |
| SEMIVOLATILES  | 2.4.6-Trichlorophenol                 | 4.5E+01            | 0.083       | 0.17         | NE                               | NE                              | 4.5E+01                         | 0.189 1 U U  | 0.192 1 U U  | 1.830 10 U U   | 0.176 1 U U  |
| SEMIVOLATILES  | 2.4-Dichlorophenol                    | 4.7E+01            | 0.083       | 0.17         | NE                               | NE                              | 4.7E+01                         | 0.189 1 U U  | 0.192 1 U U  | 1.830 10 U U   | 0.176 1 U U  |
| SEMIVOLATILE\$   | 2,4-Dimethylphenol                    | 3.1E+02            | 0,083       | 0.17         | NE                               | NE                              | 3.1E+02                         | 0.189 1 U U  | 0.192 1 U U  | 1.830 10 U U   | 0.176 t U U  |
| SEMIVOLATILES  | 2 4-Dinitrophenol                     | 3.1E+01            | 0.330       | 0.83         | NE                               | NE                              | 3.1E+01                         | 0.947 1 U U  | 0.958 1 U U  | 9.140 10 U U   | 0.881 1 U U  |
| SEMIVOLATILES  | 2,4-Dinitrotoluene                    | 7.2E-01            | 0.083       | 0.17         | NE                               | NE                              | 7.2E-01                         | 0.189 1 U U  | 0.192 1 U U  | 1.830 10 U U   | 0.176 I U U  |
| SEMIVOLATILES  | 2,6-Dinitrotoluene                    | 7.2E-01            | 0.083       | 0.17         | NE                               | NE                              | 7.2E-01                         | 0.189 1 U U  | 0.192 1 U U  | 1.830 10 0 0   | 0.176 1 U U  |
| SEMIVOLATILES  | 2-Chloronaphthalene                   | 1.1E+03            | 0.083       | 0.17         | NE                               | NE                              | 1.1E+03                         |  | 0.192 1 U U  |  |  |
| SEMIVOLATILES  | 2-Chiorophenol                        | 1.1E+02            | 0.083       | 0.17         | NE                               |                                 | 1.1E+02<br>5.5E+01              | 0.189 1 0 0  | 0.192 1 0 0  | 1830 10 0 0  | 0.176 1 0 0  |
| SEMIVOLATILES<br>SEMIVOLATILES   | 2-Methyhaphulaiene<br>2-Methyhaphulai | 7.7E+07            | 0.003       | 0.17         | NE                               | NE                              | 7 7E+02                         | 0.189 1 (1 1)  | 0.192 1 U U  | 1.830 10 U U   | 0.176 1 U U  |
| SEMIVOLATILES  | 2-Metryphenol<br>2-Nitroaniline       | 476+00             | 0.330       | 0.83         | NE                               | NE                              | 4.7E+00                         | 0947 1 U U   | 0.958 1 U U  | 9.140 10 U U   | 0.881 1 U U  |
| SEMIVOLATILES  | 2-Nitrophenol                         | 3.1E+01            | 0.083       | 0.17         | NE                               | NÉ                              | 3.1E+01                         | 0,189 1 U U  | 0.192 1 U U  | 1.830 10 U U   | 0.176 1 U U  |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine                | 1.1E+00            | 0.165       | 0.33         | NE                               | NE                              | 1.1E+00                         | 0.379 1 U U  | 0.383 1 U U  | 3.660 10 U U   | 0.352 1 U U  |
| SEMIVOLATILES  | 3-Nitroaniline                        | 4.7E+00            | 0.330       | 0.83         | NE                               | NE                              | 4.7E+00                         | 0.947 1 U U  | 0.958 1 U U  | 9.140 10 U U   | 0.881 1 U U  |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol            | 3.1E+01            | 0.330       | 0.83         | NE                               | NE                              | 3.1E+01                         | 0.947 1 U U  | 0.958 1 U U  | 9.140 10 U U   | 0.881 1 U U  |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether            | 3.1E-02            | 0.083       | 0.17         | NE                               | NE                              | 1.7E-01                         | 0.086 1 U U  | 0.086 1 U U 🛔  | 0.918 10 U U   | 0.089 1 U U  |
| SEMIVOLATILES  | 4-Chloro-3-methylphenol               | 7.7E+01            | 0.083       | 0.17         | NE                               | NE                              | 7.7E+01                         | 0.189 1 U U  | 0.192 1 U U  | 1.830 10 U U   | 0.176 1 U U  |
| SEMIVOLATILES  | 4-Chloroaniline                       | 6.2E+01            | 0.083       | 0.17         | NE                               | NE                              | 6.2E+01                         | 0.189 1 U U  | 0.192 1 0 0  | 1,830 10 0 0   | 0.176 1 0 0  |
| SEMIVOLATILES  | 4-Chiorophenyi phenyi ether           | 2.85-02            | 0.083       | 0.17         | NE                               | NE                              | 7.75-01                         |  | 0.000 1 0 0 2  | 1830 10 11 11  | 0.035 1 0 0  |
| SEMIVOLATILES  | 4-Metryphenol<br>4 Nitroppiling       | 1.16-101           | 0.003       | 0.07         |                                  | NE                              | 135401                          |  | 0.152 1 0 0  | 9140 10 11 11  | 0.881 1 1 1  |
| SEMIVOLATILES  | 4-Nitronbenol                         | 3 15+01            | 0.330       | 0.83         | NE                               | NE                              | 3 15+01                         | 0.947 1 U U  | 0.958 1 U U  | 9.140 10 U U   | 0.881 1 U U  |
| SEMIVOLATILES  | Acenaphthene                          | 8.2E+02            | 0.083       | 0.17         | NE                               | NE                              | 8.2E+02                         | 0.189 1 U U  | 0.192 I U U  | 1.830 10 U U   | 0.176 1 U U  |
| SEMIVOLATILES  | Acenaphthylene                        | 8.2E+02            | 0.083       | 0.17         | NE                               | NE                              | 8.2E+02                         | 0.189 1 U U  | 0.192 1 U U  | 1.830 10 U U   | 0.176 1 U U  |
| SEMIVOLATILES  | Anthracene                            | 4.1E+03            | 0.0825      | 0.165        | NE                               | NE                              | 4.1E+03                         | 0.189 1 U U  | 0.192 1 U U  | 1.830 10 U U   | 0.176 1 U U  |
| SEMIVOLATILES  | Benzo(a)anthracene                    | 6.3E-01            | 0.0825      | 0.165        | 1.53E-02                         | NE                              | 6.3E-01                         | 0.189 1 U U  | 0.192 1 U U  | 1.830 10 U U   | 0.176 1 U U  |
| SEMIVOLATILES  | Benzo(a)pyrene                        | 6.3E-02            | 0.0825      | 0.165        | 1.54E-02                         | NE                              | 1.7E-01                         | 0.086 1 U U  | 0.086 1 U U  | 0.918 10 U U   | 0.089 1 U U  |
| SEMIVOLATILES  | Benzo(b)fluoranthene                  | 6.3E-01            | 0.0825      | 0.165        | 1.53E-02                         | NE                              | 6.3E-01                         | 0.189 1 U U  | 0.192 1 U U  | 1.830 10 U U   | 0.176 1 U U  |
| SEMIVOLATILES  | Benzo(ghi)perylene                    | 4.1E+02            | 0.0825      | 0.165        | 1.23E-02                         | NE                              | 4.1E+02                         | 0.189 1 U U  | 0.192 1 U U  | 1.830 10 U U   | 0.1/6 1 0 0  |
| SEMIVOLATILES  | penzo(k)nuoranthene<br>Ronzoio Aoid   | 5.32+UU<br>6.32+04 | 0.0825      | 0.165        | 1.30E-02                         | NE                              | 0.3E+00<br>6.3E+00              |  | 0.192 1 0 0  | 1.030 10 U U<br>9.140 10 II III                          | 0.170 1 0 0  |
| SEMIVOLATILES  | Benzvi Alcohol                        | 4 75+04            | 0.3300      | 0.020        | NE                               |                                 | 0.25704<br>1 75+03              | 0.8%7 1 0 00   | 0.192 1 11 11  | 1.830 10 EF LI   | 0.176 1 11 11  |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane            | 2.9E-01            | 0.0825      | 0.165        | NE                               | NE                              | 2.9E-01                         | 0.189 1 U U  | 0,192 1 U U  | 1.830 10 U U   | 0.176 1 U U  |
|  | · · · · · · · · · · · · · · · · · · · |                    |             |              | · ·                              |                                 |                                 | •  |  |  |  |

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066505

| Table 4-51   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| WRSump-007   |

| (SUMP) = WRSUMP00              | 7                            |            |             |              |            |               |                    |                  |                  |                  |                  |
|--------------------------------|------------------------------|------------|-------------|--------------|------------|---------------|--------------------|------------------|------------------|------------------|------------------|
| LOCATION_CODE                  |                              | TOPO       |             |              | Book       | hound         | Appliable          | WRS07-SB01       | WRS07-SB01       | WRS07-SB02       | WRS07-SB02       |
| SAMPLE DATE                    |                              | Risk-Based |             |              | Concentra  | tions in Soil | TCEQ               | 9/25/2006        | 9/25/2006        | 9/25/2006        | 9/25/2006        |
| DEPTH                          |                              | Screening  | Method      | Method       | (95% UF    | ۱٬, mg/kg)    | Risk-Based         | 0.0 - 0.5 Ft     | 3.5 - 4.5 Ft     | 0.0 - 0.5 Ft     | 3.5 - 4.5 Ft     |
| SAMPLE_PURPOSE                 |                              | Value      | Detection   | Quantitation | Surface    | Subsurface    | Screening          | REG              | REG              | REG              | REG              |
| Test Group                     | Parameter (Units = mg/kg)    | (RBSV)*    | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value              | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| SEMIVOLATILES                  | bis(2-Chloroethyl)ether      | 1.5E-01    | 0.0825      | 0.165        | NE         | NE            | 1.7E-01            | 0.086 1 U U      | 0.086 1 U U      | 0.918 10 U U     | 0.089 1 U U      |
| SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether  | 4.8E+00    | 0.0825      | 0.165        | NE         | NE            | 4.8E+00            | 0.189 1 U U      | 0.192 1 U U      | 1.830 10 U U     | 0.176 1 U U      |
| SEMIVOLATILES                  | bis(2-Ethylhexyl)phthalate   | 1.7E+01    | 0.0825      | 0.165        | NE         | NE            | 1.7E+01            | 0.189 1 U U      | 0.192 1 U U      | 1.830 10 U U     | 0.176 1 U U      |
| SEMIVOLATILES                  | Butyl benzyl phthalate       | 3.1E+03    | 0.0825      | 0.165        | NE         | NE            | 3,1E+03            | 0.189 1 U U      | 0.192 1 U U      | 1.830 10 0 0     | 0.176 1 U U      |
| SEMIVOLATILES                  | Chrysene                     | 6.3E+01    | 0.0825      | 0,165        | 1.518-02   | NE            | 6.3E+01            | 0.189 1 0 0      | 0.192 1 0 0      | 1.830 10 0 0     | 0.176 1 0 0      |
| SEMIVOLATILES                  | Dibenzo(a,n)attritacene      | 0.3E-0Z    | 0.0623      | 0.165        | NE         | NE            | 1.7E-01            |                  | 0.086 1 0 0      | 1920 10 11 11    |                  |
| SEMIVOLATILES                  | Diethyl philoslate           | 1.25+04    | 0.0825      | 0.103        | NE         | NE            | 1.20+04            | 0.189 1 0 0      | 0.192 1 0 0      | 1.830 10 0 0     | 0.176 1 1 1      |
| SEMIVOLATILES                  | Dimethyl philalate           | 1 2E+04    | 0.0025      | 0.165        | NE         | NE            | 1.2E+04            | 0.189 1 11 11    | 0.192 1 11 11    | 1830 10 11 11    | 0.176 1 U U      |
| SEMIVOLATILES                  | di-n-Butyl ohthalate         | 1.65+03    | 0.0825      | 0.165        | NE         | NE            | 1.6E+03            | 0189 1 U U       | 0.192 1 U U      | 1830 10 U U      | 0176 1 1 1       |
| SEMIVOLATILES                  | di-n-Octvl ohthalate         | 3.1E+02    | 0.0825      | 0.165        | NE         | NE            | 3.1E+02            | 0.189 1 U U      | 0.192 1 U U      | 1.630 10 U U     | 0.176 1 U U      |
| SEMIVOLATILES                  | Fluoranthene                 | 5.5E+02    | 0.0825      | 0.165        | 2.29E-02   | NE            | 5.5E+02            | 0.189 1 U U      | 0.192 1 U U      | 1,830 10 U U     | 0.176 1 U U      |
| SEMIVOLATILES                  | Fluorene                     | 5.5E+02    | 0.0825      | 0.165        | NE         | NE            | 5.5E+02            | 0.189 1 U U      | 0.192 1 U U      | 1.830 10 U U     | 0.176 1 U U      |
| SEMIVOLATILES                  | Hexachlorobenzene            | 2.5E-01    | 0.0825      | 0.165        | NE         | NE            | 2.5E-01            | 0.189 1 U U      | 0.192 1 U U      | 1.830 10 U U     | 0.176 1 U U      |
| SEMIVOLATILES                  | Hexachlorobutadiene          | 1.6E+00    | 0.0825      | 0.165        | NE         | NE            | 1.6E+00            | 0.189 1 U U      | 0.192 1 U U      | 1.830 10 U U     | 0.176 1 U U      |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene    | 1.0E+00    | 0.0825      | 0.165        | NE         | NE            | 1.0E+00            | 0.189 1 U U      | 0.192 1 U U      | 1.830 10 U U     | 0.176 1 U U      |
| SEMIVOLATILES                  | Hexachloroethane             | 1.6E+01    | 0.0825      | 0.165        | NE         | NE            | 1.6E+01            | 0.189 1 U U      | 0.192 1 U U      | 1.830 10 U U     | 0.176 1 U U      |
| SEMIVOLATILES                  | Indeno(1,2,3-cd)pyrene       | 6.3E-01    | 0.0825      | 0.165        | 1.43E-02   | NE            | 6.3E-01            | 0.189 1 U U      | 0.192 1 U U      | 1.830 10 U U     | 0.176 1 U U      |
| SEMIVOLATILES                  | Isophorone                   | 5.2E+02    | 0.0825      | 0.165        | NE         | NE            | 5.2E+02            | 0.189 1 U U      | 0.192 1 U U      | 1.830 10 U U     | 0.176 1 U U      |
| SEMIVOLATILES                  | Naphrialene                  | 1.86+01    | 0.0825      | 0.165        | NE         | NE            | 1.8E+01            | 0.189 1 U U      | 0.192 1 U U      | 1.830 10 U U     | 0.176 1 U U      |
| SEMIVOLATILES                  | Nitropenzene                 | 0.5E+00    | 0.0825      | 0.165        | NE         | NE            | 6.5E+00            | 0.189 1 0 0      | 0.192 1 0 0      | 1.830 10 0 0     | 0.176 1 U U      |
| SEMIVOLATILES<br>SEMIVOLATILES | n-Nitrosodinhemilamine       | 4.1E+02    | 0.0625      | 0.165        | NE         | NE            | 1./E-01<br>5.0E+01 |                  | 0.080 1 0 0      | 1920 10 11 11    | 0.089 1 0 0      |
| SEMIVOLATILES                  | Pentachioronhenol            | 3.0E+00    | 0.0025      | 0.103        | NE         | NE            | 3.0E+00            |                  | 0.192 1 0 0      | 9140 10 11 11    | 0.881 1 11 11    |
| SEMIVOLATILES                  | Phenanthrene                 | 4 1E+02    | 0.0300      | 0.025        | NE         | NE            | 4 1E+02            | 0189 1 11 11     | 0.192 1 1 1      | 1830 10 11 11    | 0.001 1 0 0      |
| SEMIVOLATILES                  | Phenol                       | 4.7E+03    | 0.0825      | 0.165        | NE         | NE            | 4.7E+03            | 0189 1 U U       | 0.192 1 U U      | 1.830 10 U U     | 0.176 1 U U      |
| SEMIVOLATILES                  | Pyrene                       | 4.1E+02    | 0.0825      | 0.165        | 1.94E-02   | NE            | 4.1E+02            | 0.189 1 U U      | 0.192 1 U U      | 1.830 10 U U     | 0.176 1 U U      |
| SOLIDS                         | Percent Solids               | NE         | NE          | NE           | NE         | NE            |                    | 95.900 1         | 95.900 1         | 89.900 1         | 92.900 1         |
| VOLATILES                      | 1,1,1,2-Tetrachloroethane    | 5.2E+00    | 0.0005      | 0.005        | NE         | NE            | 5.2E+00            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1,1,1-Trichloroethane        | 2.3E+02    | 0.0005      | 0.005        | NE         | NE            | 2.3E+02            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane    | 5.1E-01    | 0.0005      | 0.005        | NE         | NE            | 5.1E-01            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1,1,2-Trichloroethane        | 9.7E-01    | 0.0005      | 0.005        | NE         | NE            | 9.7E-01            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1,1-Dichloroethane           | 8.9E+01    | 0.0010      | 0.005        | NE         | NÉ            | 8.9E+01            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1,1-Dichloroethene           | 2.7E+01    | 0.0005      | 0.005        | NE         | NE            | 2.7E+01            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1.1-Dichloropropene          | 9.95-01    | 0.0005      | 0.005        | NE         | NE            | 9.9E-01            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1,2,3-Trichleropropage       | 4.25+01    | 0.0005      | 0.005        | NE         | NE            | 4.2E+U1            |                  | 0.004 1 U U      |                  |                  |
| VOLATILES                      | 1.2.4-Trichloropenzene       | 9.22-02    | 0.0010      | 0.005        | NE         | NE            | 9.2E-02            |                  | 0.004 1 0 0      |                  |                  |
| VOLATILES                      | 1.2.4-Trimethylhenzene       | 9.65+00    | 0.0005      | 0.005        | NE         | NE            | 9.65+00            |                  | 0.004 1 0 0      |                  |                  |
| VOLATILES                      | 1.2-Dibromo-3-chloropropane  | 3.5E-01    | 0.0020      | 0.005        | NE         | NE            | 3.5E-01            |                  | 0.004 1 U U      |                  | 0006 1 U U       |
| VOLATILES                      | 1,2-Dibromoethane            | 5.3E-02    | 0.0005      | 0.005        | NE         | NE            | 5.3E-02            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1,2-Dichlorobenzene          | 5.6E+01    | 0.0005      | 0.005        | NE         | NE            | 5.6E+01            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1,2-Dichloroethane           | 2.7E-01    | 0.0005      | 0.005        | NE         | NE            | 2.7E-01            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1.2-Dichloropropane          | 1.8E+00    | 0,0005      | 0.005        | NE         | NE            | 1.8E+00            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1,2-Dimethylbenzene (o-Xylen | 3.3E+03    | 0.0005      | 0.005        | NE         | NE            | 3.3E+03            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1,3,5-Trimethylbenzene       | 8.3Ë+00    | 0.0005      | 0.005        | NE         | NE            | 8.3E+00            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1,3-Dichlorobenzene          | 5.1E+00    | 0.0005      | 0.005        | NE         | NE            | 5.1E+00            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 1,3-Dichloropropane          | 3.0E+00    | 0.0005      | 0.005        | NE         | NE            | 3.0E+00            |                  | 0.004 1 U U      |                  | 0.005 1 U U      |
| VOLATILES                      | 1,4-Dichlorobenzene          | 2.78+01    | 0.0005      | 0.005        | NE         | NE            | 2.7E+01            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | 2.2-Dichioropiopane          | 1.15700    | 0.0000      | 0.005        | NE         | NE            | 1./E+00            |                  | 0.004 1 0 0      |                  |                  |
| VOLATILES                      | 2-Chloroethyl vinyl ether    | 2.02703    | 0.0025      | 0.010        | NE         | NE            | 2.02703            |                  | 0.009 1 0 0      |                  | 0.011 1 0 0      |
| VOLATILES                      | 2-Chlorotoluene              | 1.5E+02    | 0.0020      | 0.005        | NE         | NE            | 1.55+02            |                  | 0.000 1 1 11 11  |                  | 0.006 1 11 11    |
| VOLATILES                      | 2-Hexanone                   | 6.2E+00    | 0.0025      | 0.010        | NE         | NE            | 6.2E+00            |                  | 0.009 1 11 12    |                  | 0.011 1 11 11    |
| VOLATILES                      | 4-Chlorotoluene              | 3.4E-01    | 0.0005      | 0.005        | N≓         | NE            | 3.4E-01            |                  | 0.004 1 11 12    |                  | 0.006 4 11 11    |
| VOLATILES                      | Acetone                      | 1.7E+02    | 0.0050      | 0.010        | NE         | NE            | 1.7E+02            |                  | 0.009 1 U U      |                  | 0.011 1 U U      |
| VOLATILES                      | Benzene                      | 8.8E-01    | 0.0005      | 0.005        | NE         | NE            | 8.8E-01            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | Bromobenzene                 | 1.1E+01    | 0.0005      | 0.005        | NE         | NE            | 1.1E+01            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | Bromochloromethane           | 2.4E+01    | 0.0005      | 0.005        | NE         | NE            | 2.4E+01            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILES                      | Bromodichloromethane         | 1.0E+01    | 0.0005      | 0.005        | NE         | NE            | 1.0E+01            |                  | 0.004 1 U U      |                  | 0.006 1 U U      |
| VOLATILEŞ                      | Bremoform                    | 3.4E+01    | 0.0005      | 0.005        | NE         | NE            | 3.4E+01            | · ·              | 0.004 1 U U      |                  | 0.006 1 U U      |

00066506

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

| ·   |   |   | Compa  | urison of Ch  | emical Co                                | Tab   | ole 4-51<br>ns in Soil to F  | Risk-Based Screening  | /alues  |   | 0006   | J |
|---|---|---|--|---|--|---|--|---|---|---|--|---|
|   |   |   | oompa  |   |  | WRS   | ump-007  |   |   |   |  |   |
| [SUMP] = WRSUMP00<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | 7   | TČEQ<br>Risk-Based<br>Screening<br>Value                                  | Method<br>Detection  | Method<br>Quantitation                                      | Backy<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>2L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening   | WRS07-SB01<br>WRS07-SB01-01<br>9/25/2006<br>0.0 - 0.5 Ft<br>REG | WRS07-SB01<br>WRS07-SB01-02<br>9/25/2006<br>3.5 - 4.5 Ft<br>REG                                       | WRS07-SB02<br>WRS07-SB02-01<br>9/25/2006<br>0.0 - 0.5 Ft<br>REG | WRS07-SB02<br>WRS07-SB02-02<br>9/25/2006<br>3.5 - 4.5 Ft<br>REG  |   |
| Test Group  | Parameter (Units = mg/kg)   | (RBSV)*   | Limit (MDL)  | Limit (MQL)   | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ   |   |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES   | Bromomethane<br>Carbon disulfide<br>Carbon tetrachloride<br>Chiorobenzene<br>Chiorobenae<br>Chioroform<br>Chioromethane | 3.5E-01<br>1.0E+02<br>3.5E-01<br>4.0E+01<br>1.1E+03<br>3.1E-01<br>2.3E-01 | 0.0010<br>0.0005<br>0.0005<br>0.0005<br>0.0010<br>0.0005<br>0.0005<br>0.0020 | 0.010<br>0.005<br>0.005<br>0.010<br>0.005<br>0.010<br>0.005 | NE<br>NE<br>NE<br>NE<br>NE<br>NE         | NE<br>NE<br>NE<br>NE<br>NE<br>NE                    | 3.5E-01<br>1.0E+02<br>3.5E-01<br>4.0E+01<br>1.1E+03<br>3.1E-01<br>2.3E-01<br>1.2E-02 |   | 0.009 1 U U<br>0.004 1 U U<br>0.004 1 U U<br>0.004 1 U U<br>0.009 1 U U<br>0.009 1 U U<br>0.009 1 U U |   | 0.011 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.011 1 U U<br>0.011 1 U U<br>0.006 1 U U |   |
| VOLATILES   | cis-1,2-Dichloroethene  | 1.25+02   | 0.0005   | 0.005   | NE                                       |   | 1.2E+02<br>1.2E+00   |   | 0.004 1 U U   |   | 0.006 1 U U  |   |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES  | Dibromochloromethane<br>Dibromomethane<br>Dichlorodifluoromethane   | 7.6E+00<br>1.9E+01<br>2.2E+02<br>4.3E+02                                  | 0.0005<br>0.0005<br>0.0010<br>0.0005   | 0.005<br>0.005<br>0.010<br>0.025                            | NE<br>NE<br>NE                           | NE<br>NE<br>NE                                      | 7.6E+00<br>1.9E+01<br>2.2E+02<br>4.3E+02   |   | 0.004 1 U U<br>0.004 1 U U<br>0.009 1 U U<br>0.009 1 U U  |   | 0.006 1 U U<br>0.006 1 U U<br>0.011 1 U U<br>0.006 1 U U   |   |
| VOLATILES   | Hexachiorobutarliese  | 165+00  | 0.0005   | 0.005   | NE                                       | NE  | 1.6E+00  |   | 0.004 1 U U   |   | 0.006 1 U U  |   |
| VOLATILES   | Isopropylbenzene<br>m,p-Xylenes   | 5.4E+02<br>2.3E+02  | 0.0005   | 0.005   | NE<br>NE                                 | NE<br>NE  | 5.4E+02<br>2.3E+02   |   | 0.004 1 U U<br>0.004 1 U U  |   | 0.006 1 U U<br>0.006 1 U U   |   |
| VOLATILES   | Methyl isobutyl ketone  | 1.3E+03   | 0.0025   | 0.01  | NE                                       | NE  | 1.3E+03  |   |   |   |  |   |
| VOLATILES<br>VOLATILES  | Methylene chloride<br>Naphthalene   | 8.7E+00<br>1.8E+01  | 0.0010   | 0.005   | NE                                       | NE  | 8.7E+00<br>1.8E+01<br>2.7E+02  |   | 0.004 1 0 0<br>0.009 1 U U<br>0.004 1 U U   |   | 0.011 1 U U<br>0.006 1 U U   |   |
| VOLATILES   |   | 2.75+02   | 0.0005   | 0.005   | NE                                       | NE  | 3.25+02  |   | 0.004 1 0 0   |   | 0.006 1 U U  |   |
| VOLATILES   | p-ISOPROPYLTOLUENE  | 3.2E+02<br>4.2E+02  | 0.0005   | 0.005   | NE                                       | NE  | 4.2E+02  |   | 0.004 1 U U   |   | 0.006 1 U U  |   |
| VOLATILES<br>VOLATILES  | sec-BUTYLBENZENE<br>Styrene   | 3.0E+02<br>1.3E+03  | 0.0005   | 0.005   | NE                                       | NE  | 3.0E+02<br>1.3E+03   |   | 0.004 1 0 0<br>0.004 1 U U  |   | 0.006 1 U U  |   |
| VOLATILES<br>VOLATILES  | tert-BUTYLBENZENE<br>Tetrachloroethene  | 2.6E+02<br>6.0E+00  | 0.0005   | 0.005   | NE                                       | NE  | 2.6E+02<br>6.0E+00   |   | 0.004 1 U U<br>0.004 1 U U  |   | 0.006 1 U U  |   |
| VOLATILES   | Toluene   | 1.1E+03   | 0.0005   | 0.005   | NE                                       | NE  | 1.12+03  |   | 0.004 1 0 0   |   |  |   |
| VOLATILES   | trans-1,2-Dichloroethene  | 1.4E+02   | 0.0005   | 0.005   | NE                                       | NE  | 1.46+02  |   |   |   | 0,006 1 11 11  |   |
| VOLATILES   | trans-1,3-Dichloropropene   | 1.85+00   | 0.0005   | 0.005   | NE                                       | NE  | 1.8E+00<br>2.7E+00   |   |   |   | 0.006 1 10 0   |   |
| VOLATILES   | Inchoroemene  | 3.72+00   | 0.0005   | 0.005   | NE                                       | NE  | 3.72400  |   |   |   | 0.011 1 1 1  |   |
| VOLATILES   | Inchlorofluoromethane   | 2.66+02   | 0.0010   | 0.01  | NE                                       | NE  | 2.02+02  |   |   |   | 0.011 1 1 1  |   |
| VOLATILES   | Vinyi aceiale<br>Vinyi chlorida   | 3.7E+01   | 0.0010   | 0.01  | NE                                       | NE  | 3.6E-02  |   | 0.009 1 U U   |   | 0.011 1 U U  |   |
|   |   |   |  |   |  |   |  |   |   |   |  |   |

Shaw Environmental, Inc.

### 00066507

| Table 4-52   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| MPSump 009   |

| Wr.Sump-000  |                            |  |                     |             |  |   |   |   |   |   |   |  |
|--|----------------------------|--|---------------------|-------------|--|---|---|---|---|---|---|--|
| [SUMP] = WRSUMPOO<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE PURPOSE | 08                         | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _    | Back¢<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>'L, mg/kg)<br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | WRS008-SB01<br>WRS008-SB01-01<br>9/14/2006<br>0.0 - 0.5 Ft<br>REG | WRS008-SB01<br>WRS008-SB01-02<br>9/14/2006<br>3 - 4 Ft<br>REG | WRS008-SB02<br>WRS008-SB02-01<br>9/14/2006<br>0.0 - 0.5 Ft<br>REG | WRS008-SB02<br>WRS008-SB02-02<br>9/14/2006<br>3 - 4 Ft<br>REG |  |
| Test Group   | Parameter (Units = mg/kg)  | (RBSV)*                                  | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value   | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  |  |
| EXPLOSIVES   | 1.3.5-Trinitrobenzene      | 4.7E+02                                  | 0.1                 | 0.25        | NE                                       | NE  | 4.7E+02                                       | 0.245 1 U   | 0.238 1 U   | 0.242 1 U   | 0.239 1 0   |  |
| EXPLOSIVES   | 1.3-Dinitrobenzene         | 1.6E+00                                  | 0.1                 | 0.25        | NE                                       | NE  | 1.6E+00                                       | 0.245 1 U   | 0.238 1 U   | 0.242 1 0   | 0.239 1 0   |  |
| EXPLOSIVES   | 2,4,6-Trinitrotoluene      | 7.7E+00                                  | 0,1                 | 0.25        | NE                                       | NE  | 7.7E+00                                       | 0.245 1 U   | 0.238 1 U   | 0.242 1 0   | 0.239 1 U   |  |
| EXPLOSIVES   | 2,4-Dinitrotoluene         | 7.2E-01                                  | 0.1                 | 0.25        | NE                                       | NE  | 7.2E-01                                       | 0.245 1 U   | 0.238 1 U   | 0.242 1 0   | 0.239 1 0   |  |
| EXPLOSIVES   | 2.6-Dinitrotoluene         | 7.2E-01                                  | 0.1                 | 0.26        | NE                                       | NE  | 7.2E-01                                       | 0.255 1 U   | 0.248 1 U   | 0.251 1 0   | 0.249 1 0   |  |
| EXPLOSIVES   | 2-Amino-4,6-dinitrotoluene | 2.6E+00                                  | 0.1                 | 0.26        | NE                                       | NE  | 2.6E+00                                       | 0.255 1 U   | 0.248 1 U   | 0.251 1 U   | 0.249 1 0   |  |
| EXPLOSIVES   | 4-Amino-2.6-dinitrotoluene | 2.6E+00                                  | 0.1                 | 0.26        | NE                                       | NË  | 2.6E+00                                       | 0.255 1 U   | 0.24B 1 U   | 0.251 1 U   | 0.249 1 0   |  |
| EXPLOSIVES   | HMX                        | 2.2E+02                                  | 0.1                 | 2.20        | NE                                       | NE  | 2.2E+02                                       | 2.160 1 U   | 2.100 1 U   | 2.130 1 U   | 2.110 1 0   |  |
| EXPLOSIVES   | m-Nitrotoluene             | 4.4E+01                                  | 0.1                 | 0.25        | NË                                       | NE  | 4.4E+01                                       | 0.245 1 U   | 0.238 1 U   | 0.242 1 U   | 0.239 1 0   |  |
| EXPLOSIVES   | Nitrobenzene               | 6.5E+00                                  | 0.1                 | 0.26        | NE                                       | NE  | 6.5E+00                                       | 0.255 1 U   | 0.248 1 U   | 0.251 1 0   | 0.249 1 0   |  |
| EXPLOSIVES   | o-Nitrotoluene             | 4.7E+01                                  | 0.1                 | 0.25        | NË                                       | NE  | 4.7E+01                                       | 0.245 1 U   | 0.238 1 U   | 0.242 1 0   | 0.239 1 0   |  |
| EXPLOSIVES   | p-Nitrotoluene             | 4.4E+01                                  | 0.1                 | 0.25        | NE                                       | NÉ  | 4.4E+01                                       | 0.245 1 U   | 0.238 1 U   | 0.242 1 U   | 0.239 1 U   |  |
| EXPLOSIVES   | RDX                        | 3.6E+00                                  | 0.1                 | 1.00        | NË                                       | NE  | 3.6E+00                                       | 0.980 1 U   | 0.952 1 U   | 0.966 1 U   | 0.957 1 0   |  |
| EXPLOSIVES   | Tetrvi                     | 1.6E+02                                  | 0.2                 | 0.65        | NE                                       | NE  | 1.6E+02                                       | 0.637 1 U   | 0.619 1 U   | 0.628 1 U   | 0.622 1 0   |  |
| SOLIDS   | Percent Solids             | NE                                       | NE                  | NE          | NE                                       | NE  | -   | 94.400 1  | 86.800 1  | 88,100 1  | 75.000 1  |  |

### 00066508

| Table 4-53   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| WRSump-009   |

|  |                             |  |             |             | wrcaump-                                 | 009  |  |   |   |   |
|--|-----------------------------|--|-------------|-------------|--|--|--|---|---|---|
| [SUMP] = WRSUMP009<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                             | TCEQ<br>Risk-Based<br>Screening<br>Value | Method      | Method      | Backg<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>L. mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WR\$09-\$B01<br>WR\$09-\$B01-01<br>9/15/2006<br>0 - 1 Ft<br>REG | WRS09-SB01<br>WRS09-SB01-02<br>9/15/2006<br>3 - 4 Ft<br>REG | WRS09-SB02<br>WRS09-SB02-01<br>9/15/2006<br>0.0 - 0.5 Ft<br>REG |
| Tool Crown   | Peromotor (Lipite = melke)  | (000)/) *                                | Limit (MDL) | Limit (MOL) | 0.05 Et                                  | 15-25 Et   | Value  | Result Dill LO VO   | Result DIL 1.0 VO   | Result DIL LO VO  |
| METALS   | Aluminum                    | 1.6E+04                                  | 10.000      | 20.00       | 1.63E+04                                 | 2.08E+04   | 1.6E+04                                      | 4640.000 1  | 10800.000 1   | 7420.000 1  |
| METALS   | Antimony                    | 7.3E+00                                  | 0.500       | 0.10        | 9.40E-01                                 | 1.60E+00   | 7.3E+00                                      | 0.055 1 U U   | 0.111 1 U U   | 0.107 1 U U   |
| METALS   | Arsenic                     | 2.0E+01                                  | 0.075       | 0.30        | 4.81E+00                                 | 5.54E+00   | 2.0E+01                                      | 1.250 1   | 1.380 1   | 3.950 1   |
| METALS   | Barium                      | 2.6E+03                                  | 0.075       | 0.30        | 1.52E+02                                 | 8.55E+01   | 2.65+03                                      | 0.200 1   | 014.000 1   | 0362 1 1 1  |
| METALS   | Cadmium                     | 5.2E+00                                  | 0.025       | 0.10        | 1.40E+00                                 | 4.00E-01   | 5.2E+00                                      | 0.039 1 J J   | 0.438 1   | 0.181 1 J J   |
| METALS   | Calcium                     | NE                                       | NA          | NA          | NA                                       | NA   |  | 500.000 1   | 957.000 1   | 1430.000 1  |
| METALS   | Chromium                    | 5.9E+03                                  | 0.100       | 0.40        | 2.66E+01                                 | 3.01E+01   | 5.9E+03                                      | 8.410 1   | 11.100 1  | 17.600 1  |
| METALS   | Cobait                      | 1.5E+03                                  | 0.125       | 0.50        | 7.23E+00                                 | 5.61E+00<br>0.25E+00                               | 1.5E+03<br>1.0E+03                           | 1.570 1   | 5 030 1   | 4 740 1   |
| METALS   | Iron                        | NE                                       | NA          | NA NA       | NA                                       | NA NA  | 1.02.100                                     | 6710.000 t  | 9060.000 1  | 15000.000 1   |
| METALS   | Lead                        | 5.0E+02                                  | 0.500       | 5.00        | 2.26E+01                                 | 1.14E+01   | 5.0E+02                                      | 5.350 1   | 9.450 1   | 11.400 1  |
| METALS   | Magnesium                   | NE                                       | NA          | NA          | NA                                       | NA   |  | 229.000 1   | 1180.000 1  | 513.000 1   |
| METALS   | Manganese                   | 1.75+03                                  | 0.050       | 0.20        | 1.25E+03<br>8 19E-02                     | 2.01E+02<br>3.60E-01                               | 1./E+03<br>2.5E-01                           | 46.800 1  | 0.011 1 U U   | 0.018 1 J J   |
| METALS   | Nickel                      | 1.9E+02                                  | 0.200       | 0.80        | 6.98E+00                                 | 1.16E+01   | 1.9E+02                                      | 2.270 1   | 9.300 1   | 4.240 1   |
| METALS   | Potassium                   | NE                                       | NA          | NA          | NA                                       | NA   | -  | 221.000 1   | 402.000 1   | 254.000 1   |
| METALS   | Selenium                    | 1.3E+02                                  | 0.100       | 0.20        | 3.48E+00                                 | 5.57E+00   | 1.3E+02                                      | 0.145 1   | 0.202 1 J J   | 0.228 1   |
| METALS   | Silver                      | 4./E+01                                  | 0.050       | 0.20        | 3.10E-01                                 | 3.70E-01   | 4.78+01                                      | 91 100 1 0 0  | 568,000 1   | 38,100 1  |
| METALS   | Thallium                    | 2.0E+00                                  | 0.010       | 0.02        | 4.70E-01                                 | NE   | 2.0E+00                                      | 0.042 1   | 0.104 1   | 0.051 1   |
| METALS   | Vanadium                    | 4.8E+01                                  | 0.125       | 0.50        | 3.21E+01                                 | 4.46E+01   | 4.8E+01                                      | 15.600 1  | 13.700 1  | 25.200 1  |
| METALS   | Zinc                        | 5.9E+03                                  | 0.625       | 2.50        | 6.16E+01                                 | 2.02E+01   | 5.9E+03                                      | 5.950 1   | 35.300 1  | 26.000 1  |
| RANGE_ORGANICS   | Carbon Range C12-C28        | 4.0E+02                                  | 25          | 50          | NE                                       | NE   | 4.05+02                                      | 53.200 1 0 0  | 55,400 1 0 0  | 34.300 1 3 3  |
| RANGE_ORGANICS   | CARBON RANGE C28-C35        | 4.UE+02                                  | 25          | 50          | NE                                       | NE   | 4.05+02                                      | 53,200 1 0 0  | 55,400 1 0 0  | 52,700 1 3 3  |
| RANGE_ORGANICS   | Carbon Range C6-C12         | 1./E+02                                  | 25          | 50          | NE                                       | NE   | 1.72+02                                      | 53.200 I U U  | 0170 1 11 15  | 1740 10 11 11   |
| SEMIVOLATILES  | 1,2,4-Linchioropenzene      | 1.4E+02                                  | 0.083       | 0.17        | NE                                       | NE   | 1.48+02                                      |   |   | 1.740 10 0 0  |
| SEMIVOLATILES  | 1,2-Dichlorobenzene         | 5.02+01                                  | 0.083       | 0.17        | NE                                       |  | 5.05+01                                      | 0.180 1 0 0   |   | 1740 10 0 0   |
| SEMIVOLATILES  | 1,3-Dichlorobenzene         | 5.1E+00                                  | 0.083       | 0.17        | NE                                       | NE   | 2.75+01                                      |   | 0.179 1 11 11   | 1740 10 10 10   |
| SEMIVOLATILES  | 2.4.5 Trichlorophanel       | 1.65+02                                  | 0.083       | 0.17        | NE                                       |  | 1.65+03                                      | 0.180 1 1 1   | 0179 1 11 11  | 1740 10 11  |
| SEMIVOLATILES  | 2,4,5-Trichlorophenol       | 1.02+03                                  | 0.083       | 0.17        | NE                                       | NE   | A 5E+01                                      | 0.180 1 11 11   | 0179 1 11 11  | 1740 10 U   |
| SEMIVOLATILES  | 2,4,0-Thenorophenol         | 4.02+01                                  | 0.000       | 0.17        | NE                                       |  | 4.0E+01                                      | 0180 1 1 1  | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | 2.4-Dimethylphenol          | 3 15+02                                  | 0.083       | 0.17        | NE                                       | NE   | 3 1E+02                                      | 0180 1 11 11  | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | 2 4-Dinitrophenol           | 3 15+01                                  | 0.330       | 0.83        | NE                                       | NE   | 3.1E+01                                      | 0.899 1 U U   | 0.895 1 U U   | 8.710 10 U U  |
| SEMIVOLATILES  | 2 4-Dinitratoluene          | 7.2E-01                                  | 0.083       | 0.17        | NE                                       | NÉ   | 7.2E-01                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | 2.6-Dinitrotoluene          | 7.2E-01                                  | 0.083       | 0.17        | NE                                       | NE   | 7.2E-01                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | 2-Chloronaphthalene         | 1.1E+03                                  | 0.083       | 0.17        | NE                                       | NE   | 1.1E+03                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | 2-Chlorophenol              | 1.1E+02                                  | 0.083       | 0.17        | NE                                       | NE   | 1.1E+02                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | 2-Methylnaphthalene         | 5.5E+01                                  | 0.083       | 0.17        | NE                                       | NE   | 5.5E+01                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | 2-Methylphenol              | 7.7E+02                                  | 0.083       | 0.17        | NE                                       | NÉ   | 7.7E+02                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | 2-Nitroaniline              | 4.7E+00                                  | 0.330       | 0.83        | NE                                       | NE   | 4.7E+00                                      | 0.899 1 U U   | 0.895 1 U U   | 8.710 10 U U  |
| SEMIVOLATILES  | 2-Nitrophenol               | 3.1E+01                                  | 0.083       | 0.17        | NÉ                                       | NE   | 3.1E+01                                      | 0.180 1 U U   | 0.179 1 V U   | 1.740 10 U U  |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine      | 1.1E+00                                  | 0.165       | 0.33        | NE                                       | NE   | 1.1E+00                                      | 0.360 1 U U   | 0.358 1 U U   | 3.480 10 U U  |
| SEMIVOLATILES  | 3-Nitroaniline              | 4.7E+00                                  | 0.330       | 0.83        | NE                                       | NE   | 4.7E+00                                      | 0.899 1 U U   | 0.895 1 U U   | 8.710 10 U U  |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol  | 3.1E+01                                  | 0.330       | 0,83        | NÉ                                       | NE   | 3.1E+01                                      | 0.899 1 U U   | 0.895 1 U U   | 8.710 10 U U  |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether  | 3.1E-02                                  | 0.083       | 0.17        | NE                                       | NE   | 1.7E-01                                      | 0.090 1 U U   | 0.093 1 U U   | 0.879 10 U U  |
| SEMIVOLATILES  | 4-Chloro-3-methylphenol     | 7.7E+01                                  | 0.083       | 0.17        | NE                                       | NE   | 7.7E+01                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U  |
| SEMIVOLATILES  | 4-Chioroaniline             | 6.2E+01                                  | 0.083       | 0.17        | NE                                       | NE   | 6.2E+01                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 0 0  |
| SEMIVOLATILES  | 4-Chlorophenyl phenyl ether | 2.8E-02                                  | 0.083       | 0.17        | NE                                       | NE   | 1.7E-01                                      | 0.090 1 U U   | 0.093 1 0 0 g   | 1740 10 0 0   |
| SEMIVOLATILES  | 4-Methylphenol              | 7.7E+01                                  | 0.083       | 0.17        | NE                                       | NE   | 7.7E+01                                      | 0.180 1 U U   | 0.179 1 0 0   | 1.740 10 0 0  |
| SEMIVOLATILES  | 4-Nitroaniline              | 1.3E+01                                  | 0.330       | 0.83        | NE                                       | NE   | 1.3E+U1                                      | 0.899 1 0 0   | 0.693 1 U U   | 5./10 10 0 U  |
| SEMIVOLATILES  | 4-svitrophenol              | 3.1E+01                                  | 0.330       | 0.83        | NE                                       | NE   | 3.12+01                                      |   | 0.030 1 0 0   | 1740 10 U   |
| SEMIVOLATILES  | Acenaphinene                | 0.2E+U2                                  | 0.082       | 0.17        | NE                                       | NE   | 0.22+02                                      |   | 0.178 1 0 0   | 1740 10 0 0   |
| SEMIVOLATILES  | Accomposition               | 8.2E+02                                  | 0.083       | 0.17        |  |  | 0.22+02                                      | 0.100 1 0 0   | 0.178 1 0 0   | 1740 10 0 0   |
| SEMIVOLATILES  | Annracene                   | 4.1E+03                                  | 0.0825      | 0.165       |  |  | 4.10+03                                      |   | 0.179 1 0 0   | 1740 10 0 0   |
| SEMIVOLATILES  | Boota (a) anun acene        | 0.3E-01<br>8 3E 03                       | 0.0823      | 0.100       | 1.535-02                                 | NE   | 170.01                                       |   | 0.0211118   | n.879 10 U U  |
| SEMILYOLATILES   | Bonzo(b)fluozonthono        | 0.3E-02<br>6 3E 04                       | 0.0623      | 0.105       | 1.040-02                                 | NE   | 83E01  |   | 0.035 1 0 0 8   | 1740 10 11  |
| OCIVILY OLDER I ILEQ   | oeuro(n)nonarmene           | 0.35-01                                  | 0.0623      | 0.100       | 1.000-02                                 | 1NE  | 0.00-01                                      |   | 0.110 1 0 0   |   |

### 00066509

| Table 4-53   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| WRSump-009   |

|  |  |  |                     |             | auronumh.                                | .009  |  |   |   |   |
|--|--|--|---------------------|-------------|--|---|--|---|---|---|
| [SUMP] = WRSUMP009<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE PURPOSE |  | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method .    | Backs<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>2., mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WRS09-SB01<br>WRS09-SB01-01<br>9/15/2006<br>0 - 1 Ft<br>REG | WRS09-SB01<br>WRS09-SB01-02<br>9/15/2006<br>3 - 4 Ft<br>REG | WRS09-SB02<br>WRS09-SB02-01<br>9/15/2006<br>0.0 - 0.5 Ft<br>REG |
| Test Group   | Parameter // Joits = mo/kg)                        | (RBSV)                                   | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| SEMIVOLATILES  | Benzo(ghi)perviene                                 | 4.1E+02                                  | 0.0825              | 0.165       | 1.23E-02                                 | NE  | 4.1E+02                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | Benzo(k)fluoranthene                               | 6.3E+00                                  | 0.0825              | 0.165       | 1.30E-02                                 | NE  | 6.3E+00                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | Benzoic Acid                                       | 6.2E+04                                  | 0.3300              | 0.825       | NE                                       | NË  | 6.2E+04                                      | 0.899 1 U U   | 0.895 1 U U   | 8.710 10 U  |
| SEMIVOLATILES  | Benzyl Alcohol                                     | 4.7E+03                                  | 0.0825              | 0.165       | NE                                       | NE  | 4.7E+03                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane                         | 2.9E-01                                  | 0.0825              | 0.165       | NE                                       | NE  | 2.9E-01                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | bis{2-Chloroethyl)ether                            | 1.5E-01                                  | 0.0825              | 0,165       | NE                                       | NE  | 1.7E-01                                      | 0.090 1 U U   | 0.093 1 U U 🖁   | 0.879 10 U U  |
| SEMIVOLATILES  | bis(2-Chioroisopropyl)ether                        | 4.8E+00                                  | 0.0825              | 0.165       | NE                                       | NE  | 4.8E+00                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate                         | 1.7E+01                                  | 0.0825              | 0.165       | NE                                       | NE  | 1.7E+01                                      | 0.180 1 U U   | 0.179 1 V U   | 1.740 10 U U  |
| SEMIVOLATILES  | Butyl benzyl phthalate                             | 3.1E+03                                  | 0.0825              | 0.165       | NE                                       | NE  | 3.1E+03                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | Chrysene   | 6.3E+01                                  | 0.0825              | 0.165       | 1.51E-02                                 | NE  | 6.3E+01                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U  |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene                             | 6.3E-02                                  | 0.0825              | 0.165       | NË                                       | NE  | 1.7E-01                                      | 0.090 1 U U   | 0.093 1 0 0   | 0.879 10 0 0  |
| SEMIVOLATILES  | Dibenzofuran                                       | 6.2E+01                                  | 0.0825              | 0.165       | NE                                       | NE  | 6.2E+01                                      | 0.180 3 0 0   | 0.179 1 U U   | 1.740 10 0 0  |
| SEMIVOLATILES  | Diethyl phthalate                                  | 1.2E+04                                  | 0.0825              | 0.165       | NE                                       | NE  | 1.2E+04                                      | 0.180 1 0 0   | 0.179 1 0 0   | 1.740 10 0 0  |
| SEMIVOLATILES  | Dimethyl phthalate                                 | 1.2E+04                                  | 0.0825              | 0,165       | NE                                       | NE  | 1.2E+04                                      |   | 0.179 1 0 0   | 1.740 10 0 0  |
| SEMIVOLATILES  | di-n-Butyl phthalate                               | 1.6E+03                                  | 0.0825              | 0.165       | NE                                       | NE  | 1.0E+03                                      |   | 0.179 1 0 0   | 1.740 10 0 0  |
| SEMIVOLATILES  | d+n-Octyl phthalate                                | 3.1E+02                                  | 0.0825              | 0.100       |  | NE  | 3.1E+02                                      |   | 0.179 1 U U   | 1740 10 0 0   |
| SEMIVOLATILES  | Fluoraninene                                       | 5.5E+02                                  | 0.0825              | 0,100       | 2.29E-02                                 | NE  | 5.55+02                                      |   | 0.179 1 0 0   | 1740 10 0 0   |
| SEMIVOLATILES  | Huorene  | 3.35+02                                  | 0.0825              | 0.100       | NE                                       | NE  | 2.55-01                                      | 0.180 1 6 8   | 0.179 1 () ()   | 1.740 10 U U  |
| SEMIVOLATILES  | Hexachiorobenzene                                  | 2.5E-01                                  | 0.0825              | 0.103       | NE                                       | NE  | 1.65+00                                      |   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | Hexachiorodulaulene                                | 1.02+00                                  | 0.0025              | 0.105       | NE                                       | NE  | 1.00+00                                      | 0180 1 U U  | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | Hevachtoroethane                                   | 1.6E+01                                  | 0.0825              | 0.165       | NE                                       | NE  | 1.6E+01                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | Indepo(1.2.3-cd)ovrene                             | 6 3E-01                                  | 0.0825              | 0.165       | 1.43E-02                                 | NE  | 6.3E-01                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | Isophorope   | 5.2E+02                                  | 0.0625              | 0.165       | NE                                       | NE  | 5.2E+02                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | Naphthalene  | 1.8E+01                                  | 0.0825              | 0.165       | NE                                       | NE  | 1.8E+01                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | Nitrobenzene                                       | 6.5E+00                                  | 0.0825              | 0.165       | NE                                       | NE  | 6.5E+00                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine                         | 4.1E-02                                  | 0.0825              | 0.165       | NE.                                      | NE  | 1.7E-01                                      | 0.090 t U U   | 0.093 1 U U   | 0.879 10 U U  |
| SEMIVOLATILES  | n-Nitrosodiphenylamine                             | 5.9E+01                                  | 0.0825              | 0.165       | NE                                       | NE  | 5.9E+01                                      | 0.180 t U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | Pentachlorophenol                                  | 3.0E+00                                  | 0.3300              | 0.825       | NE                                       | NE  | 3.0E+00                                      | 0.899 1 U U   | 0.895 1 U U   | 8.710 10 U U  |
| SEMIVOLATILE\$   | Phenanthrene                                       | 4.1E+02                                  | 0.0825              | 0.165       | NE                                       | NE  | 4.1E+02                                      | 0.160 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | Phenol   | 4.7E+03                                  | 0.0825              | 0.165       | NE                                       | NE  | 4.7E+03                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SEMIVOLATILES  | Pyrene   | 4,1E+02                                  | 0.0825              | 0.165       | 1.94E-02                                 | NÉ  | 4.1E+02                                      | 0.180 1 U U   | 0.179 1 U U   | 1.740 10 U U  |
| SOLIDS   | Percent Solids                                     | NE                                       | NE                  | NE          | NE                                       | NE  | F 05.00                                      | 91.500  | 89.100 1  | 93.900 1  |
| VOLATILES  | 1,1,1,2-Tetrachloroethane                          | 5.2E+00                                  | 0.0005              | 0.005       | NE                                       |   | 5.2E+00<br>2.3E+02                           | 1   | 0.005 1 0 0   |   |
| VOLATILES  | 1.1.2.2-Tetrachloroethane                          | 5.1E-01                                  | 0.0005              | 0.005       | NE                                       | NE  | 5,1E-01                                      |   | 0.005 1 U U   |   |
| VOLATILES  | 1,1,2-Trichloroethane                              | 9.7E-01                                  | 0.0005              | 0.005       | NE                                       | NE  | 9.7E-01                                      |   | 0.005 1 U U   |   |
| VOLATILES  | 1,1-Dichloroethane                                 | 8.9E+01                                  | 0.0010              | 0.005       | NE                                       | NE  | 8.95+01                                      |   | 0.005 1 0 0   |   |
| VOLATILES  | 1,1-Dictiorogenene                                 | 2.7E+01<br>9.9E-01                       | 0.0005              | 0.005       | NE                                       | NE  | 9.9E-01                                      |   | 0.005 1 U U   |   |
| VOLATILES  | 1,2,3-Trichlorobenzene                             | 4.2E+01                                  | 0.0005              | 0.005       | NE                                       | NE  | 4.2E+01                                      |   | 0.005 1 U U   |   |
| VOLATILES  | 1,2,3-Trichloropropane                             | 9.2E-02                                  | 0.0010              | 0.005       | NE                                       | NE  | 9.2E-02                                      |   | 0.005 1 U U   |   |
| VOLATILES<br>VOLATILES   | 1,2,4- I noniorobenzene<br>1,2,4- Trimethylbenzene | 1.4±+02<br>9.6E+00                       | 0.0005              | 0.005       | NE                                       | NE  | 9.6E+00                                      |   | 0.005 1 U U   |   |
| VOLATILES  | 1,2-Dibromo-3-chloropropane                        | 3.5E-01                                  | 0.0020              | 0.005       | NE                                       | NE  | 3.5E-01                                      |   | 0.005 1 U U   |   |
| VOLATILES  | 1,2-Dibromoethane                                  | 5.3E-02                                  | 0.0005              | 0.005       | NE                                       | NË  | 5.3E-02                                      |   | 0.005 1 U U   |   |
| VOLATILES  | 1,2-Dichlorobenzene                                | 5.6E+01                                  | 0.0005              | 0.005       | NE                                       | NE  | 5.6E+01<br>2.7E-01                           |   | 0.005 1 0 0   |   |
| VOLATILES  | 1.2-Dichlompropage                                 | 1.8E+00                                  | 0.0005              | 0.005       | NE                                       | NE  | 1.8E+00                                      |   | 0.005 1 U U   |   |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylene)                     | 3.3E+03                                  | 0.0005              | 0.005       | NE                                       | NE  | 3.3E+03                                      |   | 0.005 1 U U   |   |
| VOLATILES  | 1,3,5-Trimethylbenzene                             | 8.3E+00                                  | 0.0005              | 0.005       | NË                                       | NE  | 8.3E+00                                      | ł   | 0.005 1 U U   |   |
| VOLATILES  | 1,3-Dichloropenzene<br>1,3-Dichloropenzene         | 3.0E+00                                  | 0.0005              | 0.005       | NE                                       | NE  | 3.0E+00                                      |   | 0.005 1 U U   |   |
| VOLATILES  | 1,4-Dichlorobenzene                                | 2.7E+01                                  | 0.0005              | 0.005       | NÊ                                       | NE  | 2.7E+01                                      | 1   | 0.005 1 U Ū   |   |
| VOLATILES  | 1,4-Dioxane  | 5.8E+01                                  | · · · · ·           |             | NE                                       | NE  | 5.8E+01                                      | 1   | 0.044 4 11 11   |   |
| VOLATILES  | 2-Butanone<br>2-Chloroethyl vinyl ether            | 2.6E+03                                  | 0.0025              | 0.010       | NE<br>NE                                 |   | 2.66+03<br>2.1E-01                           | 1   | 0.011 1 U U   |   |
| VOLATILES  | 2-Chlorotoluene                                    | 1.5E+02                                  | 0.0005              | 0.005       | NE                                       | NE  | 1.5E+02                                      | 1   | 0.005 1 U U   |   |
| VOLATILES  | 2-Hexanone   | 6.2E+00                                  | 0.0025              | 0.010       | NE                                       | NE  | 6.2E+00                                      | 1   | 0.011 1 U U   |   |
| VOLATILE\$   | 4-Chlorotoluene                                    | 3.4E-01                                  | 0.0005              | 0.005       | NE                                       | NE  | 3.4E-01                                      | i   | 0,005 1 V U   |   |

Shaw Environmental, Inc.

### 00066510

|  |   |  |   |  | WRSump   | -009   | _  | <b></b>   |  |   |
|--|---|--|---|--|--|--|--|---|--|---|
| [SUMP] = WRSUMP009<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE   |   | TCEQ<br>Risk-Based<br>Screening<br>Value   | Method<br>Detection   | Method<br>Quantitation   | Back<br>Concentra<br>(95% Ui<br>Surface  | ground<br>ations in Soil<br>PL, mg/kg)<br>Subsurface                                     | Applicble<br>TCEQ<br>Risk-Based<br>Screening   | WRS09-SB01<br>WRS09-SB01-01<br>9/15/2006<br>0 - 1 Fl<br>REG | WRS09-SB01<br>WRS09-SB01-02<br>9/15/2006<br>3 - 4 Ft<br>REG  | WRS09-SB02<br>WRS09-SB02-01<br>9/15/2006<br>0.0 - 0.5 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg)   | (RBSV)   | Limit (MDL)   | Limit (MQL)  | 0 - 0.5 Ft   | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ  |
| Test Group<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLAT | Parameter (Units = mg/kg)<br>Acetone<br>Benzene<br>Bromobenzene<br>Bromobenzene<br>Bromoichloromethane<br>Bromoichloromethane<br>Bromoichloromethane<br>Carbon disulfide<br>Carbon ertane<br>Chloroform<br>Chloromethane<br>Dibromochloromethane<br>Dibromochloromethane<br>Dibromochloromethane<br>Dibromochloromethane<br>Dibromochlorobutadiene<br>Isopropylbenzene<br>m,p-Xylenes<br>Methylene chloride<br>Naphthalene<br>n-BROPYLBENZENE<br>p-SOPROPYLTOLUENE<br>p-SOPROPYLTOLUENE | (RBSV)*<br>(RBSV)*<br>1.7E+02<br>8.8E-01<br>1.1E+01<br>2.4E+01<br>3.4E+01<br>3.5E-01<br>1.0E+02<br>3.5E-01<br>1.0E+02<br>3.5E-01<br>1.1E+03<br>3.1E-01<br>2.3E+01<br>1.2E+02<br>1.2E+02<br>1.2E+02<br>1.2E+02<br>1.2E+02<br>1.2E+02<br>1.3E+01<br>2.2E+02<br>1.3E+03<br>8.7E+00<br>1.8E+01<br>2.7E+02<br>3.2E+02<br>3.5E+01<br>2.7E+02<br>3.2E+02<br>3.5E+01<br>3.2E+02<br>3.5E+01<br>3.2E+02<br>3.5E+01<br>3.2E+02<br>3.5E+01<br>3.5E+01<br>3.2E+02<br>3.5E+01<br>3.5E+01<br>3.2E+02<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+01<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5E+02<br>3.5 | Limit (MDL)<br>0.0056<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005 | Limit (MGL)<br>0.010<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.0 | 0-0.5 Ft<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE | 1.5-2.5 Ft<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE | Value<br>1.7E+02<br>8.8E-01<br>1.1E+01<br>2.4E+01<br>1.0E+02<br>3.5E-01<br>1.0E+02<br>3.5E-01<br>1.0E+02<br>3.5E-01<br>1.0E+02<br>3.5E-01<br>1.2E+02<br>1.2E+00<br>7.6E+00<br>1.9E+01<br>2.2E+02<br>4.3E+02<br>2.3E-01<br>1.3E+02<br>3.6E+01<br>2.3E+02<br>3.6E+01<br>2.3E+02<br>3.8E+01<br>2.3E+02<br>3.8E+01<br>2.3E+02<br>3.8E+01<br>2.3E+02<br>3.8E+01<br>2.3E+02<br>3.8E+01<br>2.3E+02<br>3.8E+01<br>2.3E+02<br>3.8E+01<br>2.3E+02<br>3.8E+01<br>2.3E+02<br>3.8E+01<br>2.3E+02<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+00<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+01<br>3.8E+ | Result DIL LQ VQ  | Result DIL         LQ         VQ           0.011         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U | Result DiL LO VO  |
| VOLATILES  | Styrene   | 1.3E+03  | 0.0005  | 0.005  | NE   | NE   | 1.3E+03  |   | 0.005 1 U U  |   |
| VOLATILES  | terr-bull YLBENZENE<br>Tetrachloroethene  | 2.6E+02<br>6.0E+00   | 0.0005  | 0.005  | NE   | NE   | 2.65+02  |   | 0.005 1 U U  |   |
| VOLATILES  | Toluene   | 1.1E+03  | 0.0005  | 0.005  | NE   | NE   | 1.1E+03  |   | 0.005 1 1 1  |   |
| VOLATILES  | trans-1,2-Dichloroethene  | 1.4E+02  | 0.0005  | 0.005  | NE   | NE   | 1.4E+02  |   | 0.005 1 U U  |   |
| VOLATILES  | trans-1,3-Dichloropropene   | 1.8E+00  | 0.0005  | 0.005  | NE   | NE   | 1.8E+00  |   | 0.005 1 U U  |   |
| VOLATILES  | Trichloroethene   | 3.7E+00  | 0.0005  | 0.005  | NE   | NE   | 3.7E+00  |   | 0.005 1 Ú Ú  |   |
| VOLATILES  | Trichlorofluoromethane  | 2.6E+02  | 0.0010  | 0.01   | NE   | NE   | 2.6E+02  |   | 0.011 1 U Ú  |   |
| VOLATILES<br>VOLATILES   | Vinyl acetate<br>Vinyl chloride   | 5.7E+01<br>3.6E-02   | 0.0010<br>0.0010  | 0.01<br>0.01   | NE<br>NE   | NÉ<br>NE   | 5.7E+01<br>3.6E-02   |   | 0.011 1 U U<br>0.011 1 U U   |   |

 Table 4-53

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

#### Shaw Environmental, Inc.

00066511

#### Table 4-54 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-010

|  |  |  |                          |                              |   | THU WALL   |  | -  |   |  |   |
|--|--|--|--------------------------|------------------------------|---|--|--|--|---|--|---|
| [SUMP] = WRSUMP010<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE PURPOSE |  | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection      | Method                       | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>2, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 355UMP018-SB02<br>35-SMP18-SB02-02<br>9/11/2006<br>5.5 - 6 Ft<br>REG | 355UMP037-SB01<br>35-SMP37-SB01-02<br>9/9/2006<br>3 - 4 Ft<br>REG | WR\$10-\$802<br>WR\$10-\$802-01<br>9/25/2006<br>0.0 -0.5 Ft<br>REG | WRS10-SB02<br>WRS10-SB02-02<br>9/25/2006<br>3 - 4.5 Ft<br>REG |
| Test Group   | Parameter (Units = mo/ko)  | (RBSV) *                                 | Limit (MDL)              | Limit (MQL)                  | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft                                       | Value  | Result DiL LQ V  | Result DILLQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ  |
| EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES   | 1,3,5-Trinitrobenzene<br>1,3-Dinitrobenzene<br>2,4,6-Trinitrotoluene | 4.7E+02<br>1.6E+00<br>7.7E+00            | 0.1<br>0.1<br>0.1<br>0.1 | 0.25<br>0.25<br>0.25<br>0.25 | NE<br>NE<br>NE                          | NE<br>NE<br>NE                                     | 4.7E+02<br>1.6E+00<br>7.7E+00                | 0.238 1 U<br>0.238 1 U<br>0.238 1 U<br>0.238 1 U                     | 0.246 1 U<br>0.246 1 U<br>0.246 1 U<br>0.246 1 U                  | 0.245 1 U U<br>0.245 1 U U<br>0.245 1 U U<br>0.245 1 U U           | 0.249 1 U U<br>0.249 1 U U<br>0.249 1 U U<br>0.249 1 U U      |
| EXPLOSIVES<br>EXPLOSIVES   | 2,4-Dinitrotoluene<br>2,6-Dinitrotoluene                             | 7.2E-01<br>7.2E-01                       | 0.1<br>0.1               | 0.25                         | NE                                      | NE<br>NE   | 7.2E-01<br>7.2E-01                           | 0.238 1 U<br>0.248 1 U   | 0.246 1 U<br>0.256 1 U  | 0,245 1 U U<br>0.255 1 U U   | 0.249 1 U U<br>0.259 1 U U                                    |
| EXPLOSIVES<br>EXPLOSIVES<br>EXPLOSIVES   | 2-Amino-4,6-dinitrotoiuene<br>4-Amino-2,6-dinitrotoiuene<br>HMX      | 2.6E+00<br>2.6E+00<br>2.2E+02            | 0.1<br>0.1<br>0.1        | 0.26<br>0.26<br>2.20         | NE<br>NE<br>NE                          |  | 2.6E+00<br>2.6E+00<br>2.2E+02                | 0.248 1 U<br>0.248 1 U<br>2.100 1 U                                  | 0.256 1 U<br>0.256 1 U<br>2.170 1 U                               | 0.255 1 U U<br>0.255 1 U U<br>2.160 1 U U                          | 0.259 1 U U<br>0.259 1 U U<br>2.190 1 U U                     |
| EXPLOSIVES<br>EXPLOSIVES   | m-Nitrotoluene<br>Nitrobenzene                                       | 4.4E+01<br>6.5E+00                       | 0.1<br>0.1               | 0.25<br>0.26                 | NE<br>NE                                | NË<br>NË   | 4.4E+01<br>6.5E+00                           | 0.238 1 U<br>0.248 1 U   | 0.246 1 U<br>0.256 1 U  | 0.245 1 U U<br>0.255 1 U U   | 0.249 1 U U<br>0.259 1 U U                                    |
| EXPLOSIVES<br>EXPLOSIVES   | o-Nitrotoluene<br>p-Nitrotoluene                                     | 4.7E+01<br>4.4E+01                       | 0.1<br>0.1               | 0.25<br>0.25                 | NE<br>NE                                | NE<br>NE   | 4.7E+01<br>4.4E+01                           | 0.238 1 U<br>0.238 1 U   | 0.246 1 U<br>0.246 1 U  | 0.245 1 U UJ<br>0.245 1 U U  | 0.249 1 U UJ<br>0.249 1 U U                                   |
| EXPLOSIVES<br>EXPLOSIVES   | RDX<br>Tetrvi  | 3.6E+00<br>1.6E+02                       | 0.1<br>0.2               | 1.00<br>0.65                 | NE<br>NE                                | NE<br>NE   | 3.6E+00<br>1.6E+02                           | 0.952 1 U<br>0.619 1 U   | 0.985 1 U<br>0.640 1 U  | 0.980 1 U U<br>0.637 1 U U   | 0.995 1 U U<br>0.647 1 U U                                    |
| METALS   | Aluminum   | 1.6E+04                                  | 10.000                   | 20.00                        | 16300                                   | 2.08E+04   | 1.6E+04                                      | 15200.000 1  |   | 8760.000 1   | 28700.000 1   |
| METALS   | Arsenic  | 2.0E+01                                  | 0.075                    | 0.30                         | 4.81E+00                                | 5.54E+00   | 2.0E+01                                      | 1.120 1  |   | 1.290 1 JL   | 1.060 1 JL  |
| METALS<br>METALS   | Barlum<br>Beryllium  | 2.6E+03<br>4.6E+00                       | 0.075                    | 0.30                         | 1.52E+02<br>6.45E-01                    | 8.55E+01<br>7.66E-01                               | 2.6E+03<br>4.6E+00                           | 78.400 1<br>0.631 1  |   | 76.500 1<br>0.375 1 J  | 63.300 1<br>0.757 1   |
| METALS   | Cadmium  | 5.2E+00                                  | 0.025                    | 0.10                         | 1.4                                     | 0.4  | 5.2E+00                                      | 0.114 1 J  | J   | 0.369 1 J J  | 0.063 1 J J   |
| METALS   | Calcium<br>Chromium  | NE<br>5.9E+03                            | NA<br>0.100              | NA<br>0.40                   | NA<br>2.66E+01                          | NA<br>3.01E+01                                     | 5.9E+03                                      | 1250.000 1<br>16.100 1   | J   | 24.100 1   | 23.300 1  |
| METALS   | Cobalt   | 1.5E+03                                  | 0.125                    | 0.50                         | 7.23E+00                                | 5.61E+00   | 1.5E+03                                      | 7.290 1  | J   | 2.790 1  | 4,600 1   |
| METALS   | fron   | NE                                       | NA                       | NA NA                        | 0.002400<br>NA                          | 9.25E+00<br>NA                                     |  | 14900.000 1  |   | 21100.000 1  | 21700.000 1   |
| METALS<br>METALS   | Lead<br>Magnesium  | 5.0E+02                                  | 0.500<br>NA              | 5.00                         | 2.26E+01                                | 1.14E+01   | 5.0E+02                                      | 6.170 1<br>1770.000 1  | J   | 9.750 1  | 9.090 1<br>1610.000 1 IH                                      |
| METALS   | Manganese  | 1.7E+03                                  | 0.050                    | 0.20                         | 1.25E+03                                | 2.01E+02   | 1.7E+03                                      | 21.700 1   |   | 134.000 f J  | 21.900 1 J  |
| METALS<br>METALS   | Mercury<br>Nickel  | 1.1E-02<br>1.9E+02                       | 0.010                    | 0.25                         | 8.19E-02<br>6.98E+00                    | 0.36<br>1.16E+01                                   | 2.5E-01<br>1.9E+02                           | 0.018 1 J<br>19.100 1  | J   | 0.029 1 J J<br>6.620 1   | 0.084 1 J J<br>11.500 1                                       |
| METALS   | Potassium  | NE                                       | NA                       | NA                           | NA                                      | NA   | -  | 766.000 1  |   | 346.000 1  | 772.000 1   |
| METALS<br>METALS   | Selenium<br>Silver   | 1.3E+02<br>4.7E+01                       | 0.100                    | 0.20<br>0.20                 | 3.48E+00<br>0.31                        | 5.57E+00<br>0.37                                   | 1.3E+02<br>4.7E+01                           | 0.218 1 U<br>1.700 1 U   |   | 0.142 1 J JL<br>1.680 1 U U  | 0.128 1 J JL<br>1.870 1 U U                                   |
| METALS   | Sodium   | NE                                       | NA                       | NA                           | NA                                      | NA   |  | 322.000 1  |   | 54.300 1   | 218.000 1   |
| METALS   | Vanadium   | 2.0E+00<br>4.8E+01                       | 0.010                    | 0.02                         | 0.47<br>3.21E+01                        | NE<br>4.46E+01                                     | 2.0E+00<br>4.8E+01                           | 23.200 1   |   | 34,400 1   | 40.200 1  |
| METALS   | Zinc<br>Company Report C12 C28                                       | 5.9E+03                                  | 0.625                    | 2.50                         | 61.6                                    | 2.02E+01   | 5.9E+03                                      | 41.400 1   |   | 31.600 1   | 32.900 1  |
| RANGE_ORGANICS   | Carbon Range C12-C28<br>Carbon Range C28-C35                         | 4.0E+02<br>4.0E+02                       | 2.5E+01                  | 5.0E+01                      | NE                                      | NE   | 4.0E+02<br>4.0E+02                           | 54.600 1 U   |   |  |   |
| SEMIVOLATILES  | 1,2,4-Trichlorobenzene   | 1.4E+02                                  | 0.083                    | 0.17                         | NE                                      | NE   | 1.4E+02                                      | 54,000 ( 0   |   | 1.870 10 U U   | 0.201 1 U U   |
| SEMIVOLATILES  | 1,2-Dichloroberizene   | 5.1E+00                                  | 0.083                    | 0.17                         | NE                                      | NE   | 5.6E+01<br>5.1E+00                           |  |   | 1.870 10 0 U<br>1.870 10 U U                                       | 0.201 1 U U   |
| SEMIVOLATILES  | 1,4-Dichlorobenzene<br>2,4,5-Trichlorophenol                         | 2.7E+01<br>1.6E+03                       | 0.083<br>0.083           | 0.17<br>0.17                 | NE                                      | NE   | 2.7E+01<br>1.6E+03                           |  |   | 1.870 10 U U<br>1.870 10 U U                                       | 0.201 1 0 0   |
| SEMIVOLATILES  | 2,4,6-Trichlorophenol<br>2,4-Dichlorophenol                          | 4.5E+01<br>4.7E+01                       | 0.083<br>0.083           | 0.17<br>0.17                 | NE<br>NE                                | NE<br>NE   | 4.5E+01<br>4.7E+01                           |  |   | 1.870 10 U U<br>1.870 10 U U                                       | 0.201 1 U U<br>0.201 1 U U                                    |
| SEMIVOLATILES<br>SEMIVOLATILES   | 2,4-Dimethylphenol<br>2,4-Dinitrophenol                              | 3.1E+02<br>3.1E+01                       | 0.083<br>0.330           | 0.17<br>0.83                 | NE                                      | NE<br>NE   | 3.1E+02<br>3.1E+01                           |  |   | 1.870 10 U U<br>9.330 10 U U                                       | 0.201 1 U U<br>1.000 1 U U                                    |
| SEMIVOLATILES<br>SEMIVOLATILES   | 2,4-Dinitrotoluene<br>2,6-Dinitrotoluene                             | 7.2E-01<br>7.2E-01                       | 0.083                    | 0.17<br>0.17                 | NE<br>NE                                | NE<br>NE   | 7.2E-01<br>7.2E-01                           |  |   | 1.870 10 U U<br>1.870 10 U U                                       | 0.201 1 U U<br>0.201 1 U U                                    |
| SEMIVOLATILES<br>SEMIVOLATILES   | 2-Chloronaphthalene<br>2-Chlorophenol                                | 1.1E+03<br>1.1E+02                       | 0.083                    | 0.17<br>0.17                 | NE                                      | NE<br>NE   | 1.1E+03<br>1.1E+02                           |  |   | 1.870 10 Ú Ú<br>1.870 10 U Ú                                       | 0.201 1 U U<br>0.201 1 U U                                    |
| SEMIVOLATILES  | 2-Methylnaphthalene<br>2-Methylohenol                                | 5.5E+01<br>7.7E+02                       | 0.083                    | 0.17                         | NE                                      | NE   | 5.5E+01<br>7.7E+02                           |  |   | 1.870 10 U U<br>1.870 10 U U                                       | 0.201 1 U U<br>0.201 1 U U                                    |
| SEMIVOLATILES  | 2-Nitroaniline<br>2-Nitropheno!                                      | 4.7E+00                                  | 0.330                    | 0.63                         | NE                                      | NE   | 4.7E+00<br>3.1E+01                           |  |   | 9.330 10 U U   | 1.000 1 U U   |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine   | 1.1E+00                                  | 0.165                    | 0.33                         | NE                                      | NE   | 1.1E+00                                      |  |   | 3.730 10 U U   | 0.401 1 U U   |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol   | 3.1E+01                                  | 0.330                    | 0.83                         | NE                                      | NE   | 3.1E+01                                      |  | 3   | 9.330 10 U U   | 1.000 1 U U   |
| SEMIVOLATILES  | 4-biomophenyi phenyi ether<br>4-Chloro-3-methylphenol                | 3.1E-02<br>7.7E+01                       | 0.083                    | 0.17                         | NE                                      | NE   | 7.7E+01                                      |  | 1   | 1.870 10 U U   | 0.201 1 U U   |
| SEMIVOLATILES  | 4-Chlorophenyl phenyl ether  | 6.2E+01<br>2.8E-02                       | 0.083<br>0.083           | 0.17<br>0.17                 | NE<br>NE                                | NE<br>NE   | 6.2E+01<br>1.7E-01                           |  |   | 1.870 10 U U<br>0.938 10 U U                                       | 0.201 1 U U<br>0.102 1 U U                                    |

#### Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

### 00066512

#### Table 4-54 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-010

| [SUMP] = WRSUMP010<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |   | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method      | Sack<br>Concentra<br>(95% UF<br>Surface | ground<br>ations in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP018-SB02<br>35-SMP18-SB02-02<br>9/11/2006<br>5.5 - 6 Ft<br>REG | 35SUMP037-SB01<br>35-SMP37-SB01-02<br>9/9/2006<br>3 - 4 Ft<br>REG | WR\$10-\$802<br>WR\$10-\$802-01<br>9/25/2006<br>0.0 - 0.5 Ft<br>REG | WR\$10-SB02<br>WR\$10-SB02-02<br>9/25/2006<br>3 - 4.5 Ft<br>REG |
|--|---|--|---------------------|-------------|---|--|--|--|---|---|---|
| Test Group   | Parameter (Units = mg/kg)                   | (RBSV) 4                                 | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DiL LQ VQ  | Result DIL LO VQ  |
| SEMIVOLATILES  | 4-Nitroaniline                              | 1.3E+01                                  | 0.330               | 0.83        | NE                                      | NE   | 1.3E+01                                      |  |   | 9.330 10 U U  | 1.000 1 1 U   |
| SEMIVOLATILES  | 4-Nitrophenol                               | 3.1E+01                                  | 0.330               | 0.83        | NE                                      | NE   | 3.1E+01                                      |  |   | 9.330 10 U U  | 1.000 1 U U   |
| SEMIVOLATILES<br>SEMIVOLATILES   | Acenaphthene                                | 8.2E+02                                  | 0.083               | 0.17        | NE                                      | NË   | 8.2E+02                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | Anthracene                                  | 4.1E+03                                  | 0.0825              | 0.165       | NE                                      | NE   | 6.2C+02<br>4.1E+03                           |  |   | 1.870 10 0 0  | 0.201 1 0 0   |
| SEMIVOLATILES  | Benzo(a)anthracene                          | 6.3E-01                                  | 0.0825              | 0.165       | 0.02                                    | NE   | 6.3E-01                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | Benzo(a)pyrene                              | 6.3E-02                                  | 0.0825              | 0.165       | 0.02                                    | NE   | 1.7E-01                                      |  |   | 0.938 10 U U  | 0.102 1 U U   |
| SEMIVOLATILES  | Benzo(ofii)nerviene                         | 0.3E-01<br>4 1E+02                       | 0.0825              | 0.165       | 0.02                                    | NE   | 6.3E-01<br>4.1E+02                           |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | Benzo(k)fluorantinene                       | 6.3E+00                                  | 0.0825              | 0.165       | 0.01                                    | NE   | 6.3E+00                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | Benzoic Acid                                | 6.2E+04                                  | 0.3300              | 0.825       | NE                                      | NE   | 6.2E+04                                      |  |   | 9.330 10 U UJ   | 1.000 1 U UJ  |
| SEMIVOLATILES  | Benzyl Alcohol<br>bis(2-Chlomethonu)methone | 4.7E+03                                  | 0.0825              | 0.165       | NE                                      | NE   | 4.7E+03                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | bis(2-Chloroethyl)ether                     | 1.5E-01                                  | 0.0825              | 0.165       | NE                                      | NE   | 1.7E-01                                      | 1  |   |   | 0.201 1 0 0   |
| SEMIVOLATILES  | bis(2-Chlorolsopropyl)ether                 | 4.8E+00                                  | 0.0825              | 0.165       | NE                                      | NE   | 4.8E+00                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate                  | 1.7E+01                                  | 0.0825              | 0.165       | NE                                      | NE   | 1.7E+01                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | Chrysene                                    | 3.1E+03<br>6.3E+01                       | 0.0825              | 0.165       | NE<br>0.02                              | NE   | 3.1E+03<br>6.3E+01                           |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene                      | 6.3E-02                                  | 0.0825              | 0.165       | NE                                      | NE   | 1.7E-01                                      |  |   | 0.938 10 0 0  | 0.102 1 U U   |
| SEMIVOLATILES  | Dibenzofuran                                | 6.2E+01                                  | 0.0825              | 0.165       | NE                                      | NE   | 6.2E+01                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES<br>SEMIVOLATILES   | Diretnyl phthalate                          | 1.28+04                                  | 0,0825              | 0.165       | NE                                      | NE   | 1.2E+04                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | di-n-Butyt phthalate                        | 1.6E+03                                  | 0.0825              | 0.165       | NE                                      | NE   | 1.6E+03                                      |  |   | 1870 10 0 0   | 0.201 1 0 0   |
| SEMIVOLATILES  | di-n-Octyl phthalate                        | 3.1E+02                                  | 0.0825              | 0.165       | NE                                      | NE   | 3.1E+02                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES<br>SEMIVOLATILES   | Fluoranthene                                | 5.58+02                                  | 0.0825              | 0.165       | 0.02                                    | NË   | 5.5E+02                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | Hexachlorobenzene                           | 2.5E+02                                  | 0.0825              | 0.165       | NE                                      | NE   | 5.5E+02<br>2.5E-01                           |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | Hexachlorobutadiene                         | 1.6E+00                                  | 0.0825              | 0.165       | NE                                      | NE   | 1.6E+00                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | Hexachlorocyclopentadiene                   | 1.0E+00                                  | 0.0825              | 0.165       | NE                                      | NE   | 1.0E+00                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | Hexachioroethane                            | 1.6E+01<br>6.3E.01                       | 0.0825              | 0.165       | NE                                      | NE   | 1.6E+01                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | Isophorone                                  | 5.2E+02                                  | 0.0825              | 0.165       | NE                                      | NE   | 5 2E+02                                      |  |   | 1,870 10 0 0  | 0.201 1 0 0   |
| SEMIVOLATILES  | Naphthalene                                 | 1.8E+01                                  | 0.0825              | 0.165       | NE                                      | NE   | 1.8E+01                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES<br>SEMIVOLATILES   | Nitrobenzene                                | 6.5E+00                                  | 0.0825              | 0.165       | NE                                      | NË   | 6.5E+00                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | n-Nitrosodiphenvlamine                      | 4.12-02<br>5.9E+01                       | 0.0825              | 0.165       | NE                                      | NE   | 1.7E-01<br>5.9E+01                           |  |   | 0.938 10 U U  | 0.102 1 U U   |
| SEMIVOLATILES  | Pentachiorophenol                           | 3.0E+00                                  | 0.3300              | 0.825       | NE                                      | NE   | 3.0E+00                                      |  |   | 9.330 10 U U  | 1.000 1 U U   |
| SEMIVOLATILES  | Phenanthrene                                | 4.1E+02                                  | 0.0825              | 0.165       | NE                                      | NË   | 4.1E+02                                      | 95.900 1   |   | 1.870 10 U U  | 0.201 1 U U   |
| SEMIVOLATILES  | Pyrene                                      | 4.7E+03<br>4 1E+02                       | 0.0825              | 0.165       | NE<br>0.02                              | NE   | 4.7E+03                                      |  |   | 1.870 10 U U  | 0.201 1 U U   |
| SOLIDS   | Percent Solids                              | NE                                       | NË                  | NE          | NE                                      | NE   | 4.16+02                                      |  | 92.800 1  | 88,000 1  | 81 100 1  |
| VOLATILES  | 1,1,1,2-Tetrachloroethane                   | 5.2E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 5.2E+00                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES  | 1,1,1-Trichloroethane                       | 2.3E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.3E+02                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES  | 1.1.2-Trichloroethane                       | 9.7E-01                                  | 0.0005              | 0.005       |   | NE   | 9.1E-01<br>9.7E-01                           | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES  | 1,1-Dichloroethane                          | 8.9E+01                                  | 0.0010              | 0.005       | NË                                      | NE   | 8.9E+01                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES  | 1.1-Dichloroethene                          | 2.7E+01                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.7E+01                                      | 0.005 1 Ú  |   |   | 0.006 1 U U   |
| VOLATILES  | 1,1-D/CINOropropene<br>123-Trichlorobenzene | 9.95-01                                  | 0.0005              | 0.005       | NE                                      | NE   | 9.9E-01                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES  | 1,2,3-Trichloropropane                      | 9.2E-02                                  | 0.0010              | 0.005       | NE                                      | NE   | 9.2E-02                                      | 0.005 1 U  |   |   | 0.006 1 0 0   |
| VOLATILES  | 1,2,4-Trichlorobenzene                      | 1.4E+02                                  | 0.0005              | 0.005       | NĘ                                      | NE   | 1.4E+02                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES<br>VOLATILES   | 1,2,4-Trimethylbenzene                      | 9.6E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 9.6E+00                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES  | 1.2-Dibromoethane                           | 5.3E-01                                  | 0.0020              | 0.005       | NE                                      | NE   | 3.5E-01<br>5.3E-02                           | 0.005 1 0  |   |   | 0.006 1 U U   |
| VOLATILES  | 1,2-Dichlorobenzene                         | 5.6E+01                                  | 0.0005              | 0.005       | NE                                      | NE   | 5.6E+01                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES  | 1,2-Dichloroethane                          | 2.7E-01                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.7E-01                                      | 0.005 1 Ū  |   |   | 0.006 1 U U   |
| VOLATILES  | 1.2-Dichloropropane                         | 1.8E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.8E+00                                      | 0.005 t U  |   |   | 0.006 1 U U   |
| VOLATILES  | 1.2-Dimethylbenzene (o-Xylene)              | 3.3E+03                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.3E+03                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES  | 1,3,3-1 rimeiny/benzene                     | 8.3E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 8.3E+00                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES  | 1.3-Dichloropenzene                         | 5.12+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 5.1E+00                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES  | 1 A Dichlershenzer                          | 3.0E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.0E+00                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES  | 2.2 Dichloropenzene                         | 2.76+01                                  | 0.0005              | 0.005       | NĘ                                      | NE   | 2.7E+01                                      | 0.005 1 U  |   |   | 0.006 1 U U   |
| VOLATILES  | 2-Butanone                                  | 1.75+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.7E+00                                      | 0.005 1 U  | ,   |   | 0.006 1 U U   |
| VOLATILES  | 2-Chlomethyl vinyl ather                    | 2.02703                                  | 0.0020              | 0.010       |   | NE   | 2.6E+U3                                      | 0.010 1 U UJ   |   |   | 0.012 1 U U   |
| VOLATILES  | 2-Chlorotoluene                             | 1.55+02                                  | 0.0020              | 0.010       |   | NE   | 2.16-01                                      |  |   |   | 0.012 1 U U   |
|  |   | 1.00,004                                 | 0.0000              | 0.000       | NC.                                     | NE   | 1.06402                                      | 0.000 1 0  |   |   | 0.005 1 0 0   |

Shaw Environmental, Inc.

#### Table 4-54 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-010

|  |                                    |  |                     |             |   |  |  | •  |                                      |   |                            |   |   |                                      |      |
|--|------------------------------------|--|---------------------|-------------|---|--|--|--|--------------------------------------|---|----------------------------|---|---|--------------------------------------|------|
| [SUMP] = WRSUMP010<br>LOCATION_CODE<br>SAMPLE_NÖ<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                                    | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _    | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>ations in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP018-SB02<br>35-SMP18-SB02-02<br>9/11/2006<br>5.5 - 6 Ft<br>REG | 35SUMI<br>35-SMP:<br>9/9<br>3 -<br>F | P037-SB01<br>37-SB01-02<br>/2006<br>• 4 Ft<br>REG | WRS1<br>WRS1<br>9/2<br>0.0 | :10-\$802<br>0-\$802-01<br>5/2006<br>-0.5 Ft<br>REG | WRS10<br>WRS10-S<br>9/25/2<br>3 - 4.:<br>RE | -SB02<br>802-02<br>9006<br>5 Ft<br>G |      |
| Test Group   | Parameter (Units = mg/kg)          | (RBSV)*                                  | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ   | Result                               | dil lq vq   | Result                     | DIL LQ VQ   | Result                                      | DIL LQ                               | I VQ |
| VOLATILES  | 2-Hexanone                         | 6.2E+00                                  | 0.0025              | 0.010       | NE                                      | NE   | 6.2E+00                                      | 0.010 1 U UJ   |                                      |   |                            |   | 0.012                                       | t U                                  | υ    |
| VOLATILES  | 4-Chlorotoluene                    | 3.4E-01                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.4E-01                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | t U                                  | U    |
| VOLATILES  | Acetone                            | 1.7E+02                                  | 0.0050              | 0.010       | NE                                      | NĘ   | 1.7E+02                                      | 0.010 t U  |                                      |   |                            |   | 0.012                                       | 1 U                                  | U    |
| VOLATILES  | Benzene                            | 8.8E-01                                  | 0.0005              | 0.005       | NE                                      | NE   | 8.8E-01                                      | 0.005 t U  |                                      |   |                            |   | 0.006                                       | 1 U                                  | υ    |
| VOLATILES  | Bromobenzene                       | 1.1E+01                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.1E+01                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | 1 U                                  | U    |
| VOLATILES  | Bromochloromethane                 | 2.4E+01                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.4E+01                                      | 0.005 1 1  |                                      |   |                            |   | 0.006                                       | 1 U                                  | Ū    |
| VOLATILES  | Bromodichloromethane               | 1.0E+01                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.0E+01                                      | 0.005 1 1  |                                      |   |                            |   | 0.006                                       | 1 0                                  | Ū    |
| VOLATILES  | Bromoform                          | 3 4E+01                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.4E+01                                      | 0.005 1 11   |                                      |   |                            |   | 0.006                                       | 1 1                                  | Ū    |
| VOLATILES  | Bromomethane                       | 3.55.01                                  | 0.0000              | 0.010       | NE                                      | NE   | 3.5E-01                                      | 0.010 1 11   |                                      |   |                            |   | 0.012                                       | 1 11                                 | ū    |
| VOLATILES  | Carbon disulfide                   | 1.05+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 1 05+02                                      | 0.005 1 11   |                                      |   |                            |   | 0.006                                       | 3 11                                 | . ŭ  |
| VOLATILES  | Carbon tatrachiarida               | 2.55.04                                  | 0.0005              | 0.005       | NC                                      | NC   | 3.65.04                                      | 0.005 1 0  |                                      |   |                            |   | 0.006                                       | 1 11                                 | 11   |
| VOLATILES  | Chlorohopropo                      | 4.05+01                                  | 0.0005              | 0.005       | NE                                      | NE   | 4.05+01                                      | 0.005 1 1  |                                      |   |                            |   | 0.000                                       | 1 11                                 | ŭ    |
| VOLATILES  | Chloroothono                       | 4.02701                                  | 0.0005              | 0.000       | NE                                      | NE   | 4.00701                                      | 0.003 1 0  |                                      |   |                            |   | 0.000                                       | 4 11                                 |      |
| VOLATILES  | Chiorofemane                       | 1.12703                                  | 0.0010              | 0.010       | NE                                      | INE NE   | 1.12703                                      | 0.010 1 0  |                                      |   |                            |   | 0.012                                       | 1 0                                  |      |
| VOLATILES  | Chiorodorm                         | 3,12-01                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.1E-01                                      | 0.005 1 0  |                                      |   |                            |   | 0.000                                       | 1 0                                  |      |
| VULATILES  | Choromethane                       | 2.3E-01                                  | 0.0020              | 0.010       | NE                                      | NE   | 2.3E-01                                      | 0.010 1 0  |                                      |   |                            |   | 0.012                                       | 1 0                                  |      |
| VOLATILES  | cis-1,2-Dichloroethene             | 1.28+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.2E+02                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | 1 0                                  | U    |
| VOLATILES  | cis-1,3-Dichloropropene            | 1.2E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.2E+00                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | 1 0                                  | U    |
| VOLATILES  | Dibromochloromethane               | 7.6E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 7.6E+00                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | 1 U                                  | U    |
| VOLATILES  | Dibromomethane                     | 1.9E+01                                  | 0.0005              | 0.005       | NË                                      | NÉ   | 1.9E+01                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | 1 0                                  | U    |
| VOLATILES  | Dichlorodifluoromethane            | 2.2E+02                                  | 0.0010              | 0.010       | NE                                      | NE   | 2.2E+02                                      | 0.010 1 U  |                                      |   |                            |   | 0.012                                       | 1 U                                  | U.   |
| VOLATILES  | Ethylbenzene                       | 4.3E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 4.3E+02                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | 1 0                                  | . N  |
| VOLATILES  | Isopopylberzene                    | 5.45+02                                  | 0.0005              | 0.005       |   | NE   | 5.4E+02                                      | 0.005 1 U  |                                      |   |                            |   | 0.000                                       | i ŭ                                  | ŭ    |
| VOLATILES  | m.p-Xvlenes                        | 2.3E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.3E+02                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | ίŬ                                   | Ũ    |
| VOLATILES  | Methyl isobutyl ketone             | 1.3E+03                                  | 0.0025              | 0.01        | NE                                      | NE   | 1.3E+03                                      | 0.010 1 U  |                                      |   |                            |   | 0.012                                       | 1 U                                  | U    |
| VOLATILES  | Methylene chloride                 | 8.7E+00                                  | 0.0010              | 0.005       | NE                                      | NE   | 8.7E+00                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | 1 U                                  | U    |
| VOLATILES  | Naphthalene                        | 1.8E+01                                  | 0.0005              | 0.01        | NE                                      | NE   | 1.8E+01                                      | 0.010 1 U  |                                      |   |                            |   | 0.012                                       | 1 1                                  | U.   |
| VOLATILES  | D DOOVI SENZENE                    | 2.75+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.7E+02                                      | 0.005 1 U  |                                      |   |                            |   | 0.000                                       | 1 0                                  | ň    |
| VOLATILES  | n-isopropyltoluene                 | 4 2F+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 4 2E+02                                      | 0.005 1 11   |                                      |   |                            |   | 0.006                                       | ίŭ                                   | ŭ    |
| VOLATILES  | sec-BUTYLBENZENE                   | 3.0E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.0E+02                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | ίŬ                                   | Ŭ    |
| VOLATILES  | Styrene                            | 1.3E+03                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.3E+03                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | 1 Ú                                  | Ú    |
| VOLATILES  | tert-BUTYLBENZENE                  | 2.6E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.6E+02                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | 1 U                                  | U    |
| VOLATILES  | Tetrachloroethene                  | 6.0E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 6.0E+00                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | 1 0                                  | U.   |
| VOLATILES<br>VOLATILES   | rouene<br>trans-1 2-Dichloroethere | 1.16+03                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.1E+03<br>1.4E+02                           | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | 1 1                                  | ü    |
| VOLATILES  | trans-1.3-Dichloropropene          | 1.8E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.8E+00                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | 1 1                                  | ŭ    |
| VOLATILES  | Trichloroethene                    | 3.7E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.7E+00                                      | 0.005 1 U  |                                      |   |                            |   | 0.006                                       | ίŬ                                   | ũ    |
| VOLATILES  | Trichlorofluoromethane             | 2.6E+02                                  | 0.0010              | 0.01        | NE                                      | NE   | 2.6E+02                                      | 0.010 1 Ū  |                                      |   |                            |   | 0.012                                       | 1 U                                  | U    |
| VOLATILES  | Vinyl acetate                      | 5.7E+01                                  | 0.0010              | 0.01        | NE                                      | NE   | 5.7E+01                                      | 0.010 1 U  |                                      |   |                            |   | 0.012                                       | 1 0                                  | U.   |
| VULATILES  | Vinyi chloride                     | 3.6E-02                                  | 0.0010              | 0.01        | NE                                      | NE   | 3.6E-02                                      | 0.010 1 U  |                                      |   |                            |   | 0.012                                       | 1 U                                  | U    |

Shaw Environmental, Inc.

### 00066514

# Table 4-55 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-011

| [SUMP] = WRSUMPO<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | 911                         | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backç<br>Concentral<br>(95% UP<br>Surface | iround<br>ions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WRS011-SB01<br>WRS011-SB01-01<br>9/26/2006<br>0.0 - 0.5 Ft<br>REG | WRS011-SB01<br>WRS011-SB01-02<br>9/26/2006<br>3.5 - 4.5 Ft<br>REG | WRS011-SB02<br>WRS011-SB02-01<br>9/26/2006<br>0.0 - 0.5 Ft<br>REG | WRS011-SB02<br>WRS011-SB02-02<br>9/26/2006<br>3.5 - 4.5 Ft<br>REG |
|--|-----------------------------|--|---------------------|------------------------|---|---|--|---|---|---|---|
| Test Group   | Parameter (Units = mg/kg)   | (RB\$V) *                                | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft                                      | Value  | Result DIL LQ VQ  |
| METALS   | Aluminum                    | 1.6E+04                                  | 10.000              | 20.00                  | 16300                                     | 2.08E+04  | 1.6E+04                                      | 4640.000 1  | 15400.000 1   | 7890.000 1  | 18400.000 1   |
| METALS   | Antimony                    | 7.3E+00                                  | 0.500               | 0.10                   | 0.94                                      | 1.6   | 7.3E+00                                      | 0.055 1 U U   | 0.059 1 J J   | 0.153 1   | 0.120 1 U U   |
| METALS   | Arsenic                     | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                  | 5.54E+00  | 2.0E+01                                      | 1.250 1   | 1.990 1   | 2.710 1   | 0.783 1   |
| METALS   | Banum                       | 2.62+03                                  | 0.075               | 0.30                   | 1.52E+U2                                  | 8.55E+01  | 2.6E+03                                      | 30.200 1  | 32.400 1  | 76.100 1  | 48.700 1  |
| METALS   | Beryalum                    | 4.02+00                                  | 0.012               | 0.50                   | 0.400-01                                  | 7.002-01  | 4.02+00                                      |   | 0.290 1 J J   | 0.300 1 3 3   | 0.403 1   |
| METALS   | Calcium                     | 5.2E+00                                  | 0.025<br>NA         | NA                     | 1.4<br>NA                                 | V.4<br>NA   | 0.22700                                      | 500.000 1   | 399.000 1   | 1790.000 1  | 531.000 1   |
| METALS   | Chromium                    | 5 9E+03                                  | 0 100               | 0.40                   | 2 66 5+01                                 | 3.01E+01  | 5 9E+03                                      | 8 4 10 1  | 15 600 1  | 11 700 1  | 15.200 1  |
| METALS   | Cobalt                      | 1.5E+03                                  | 0.125               | 0.50                   | 7.23E+00                                  | 5.61E+00  | 1.5E+03                                      | 1.570 1   | 2.080 1   | 4.310 1   | 4.720 1   |
| METALS   | Copper                      | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                                  | 9.25E+00  | 1.0E+03                                      | 1.700 1   | 4.050 1   | 10.900 1  | 5.760 1   |
| METALS   | Iron                        | NE                                       | NA                  | NA                     | NA  | NA  |  | 6710.000 1  | 19900.000 1   | 16300.000 1   | 21200.000 1   |
| METALS   | Lead                        | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                  | 1.14E+01  | 5.0E+02                                      | 5.350 1   | 8.340 1   | t6.600 t  | 7.840 1   |
| METALS   | Magnesium                   | NE                                       | NA                  | NA                     | NA  | NA  |  | 229.000 1   | 602.000 1   | 545.000 1   | 897,000 1   |
| METALS   | Manganese                   | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                  | 2.01E+02  | 1.7E+03                                      | 48.800 1  | 36.800 1  | 166.000 1   | 41.000 1  |
| METALS   | Mercury                     | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                  | 0,36  | 2,5E-01                                      | 0.010 1 J J   | 0.066 1 J J   | 0.038 1 J J   | 0.012 1 J J   |
| METALS   | Nickei                      | 1.9E+02                                  | 0.200               | 0.80                   | 0.98E+00                                  | 1.162+01  | 1.9E+02                                      | 2.270 1   | 5.020 1   | 274.000 1   | 6.200 1   |
| METALO   | Selenium                    | 136+02                                   | 0.100               | 0.20                   | NA<br>3.48E±00                            | 5.575±00  | 1 3E±02                                      |   | 0 171 1 1   | 0.320 1   | 0.240 1 11 11   |
| METALS   | Silver                      | 475+01                                   | 0.050               | 0.20                   | 0.402+00                                  | 0.37  | 4 7E+01                                      | 1500 1 U U  | 1750 1 11 11  | 1760 1 U U  | 1850 1 U U  |
| METALS   | Sodium                      | NE                                       | NA                  | NA                     | NA  | NA  |  | 91.100 1 J J  | 35.900 1  | 27,800 1  | 62,800 1  |
| METALS   | Thallium                    | 2.0E+00                                  | 0.010               | 0.02                   | 0.47                                      | NE  | 2.0E+00                                      | 0.042 1   | 0.070 1   | 0.037 1   | 0.081 1   |
| METALS   | Vanadium                    | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01                                  | 4.46E+01  | 4.8Ë+01                                      | 15.600 1  | 29.200 1  | 22,100 1  | 23.800 1  |
| METALS   | Zinc                        | 5.9E+03                                  | 0.625               | 2.50                   | 61.6                                      | 2.02E+01  | 5.9E+03                                      | 5.950 1   | 27.600 1  | 131.000 1   | 23.000 1  |
| SEMIVOLATILES  | 1,2,4-Trichlorobenzene      | 1.4E+02                                  | 0.083               | 0.17                   | NE  | NE  | 1.4E+02                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | 1,2-Dichlorobenzene         | 5.6E+01                                  | 0.083               | 0.17                   | NE  | NE  | 5.6E+01                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | 1,3-Dichlorobenzene         | 5.1E+00                                  | 0.083               | 0.17                   | NE  | NE  | 5.1E+00                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | 1,4-Dichlorobenzene         | 2.75+01                                  | 0.083               | 0.17                   | NE  | NE  | 2.78+01                                      | 1.840 10 U U  | 0.190 1 0 0   | 1.990 10 0 0  | 0.194 1 U U   |
| SEMIVOLATILES  | 2,4,5-Trichlorophenol       | 1.02+03                                  | 0.063               | 0.17                   | NE  | NE  | 1.0E+03                                      | 1.840 10 0 0  | 0.190 1 0 0   |   |   |
| SEMIVOLATILES  | 2 4-Dichloronhenol          | 4.3E+01                                  | 0.083               | 0.17                   | NE  | NE  | 4.3C+01                                      | 1.840 10 0 0  | 0.190 1 0 0   | 1,990 10 U U  | 0.194 1 (1 1)   |
| SEMIVOLATILES  | 2.4-Dimethylphenol          | 3.1E+02                                  | 0.083               | 0.17                   | NE  | NE  | 3.1E+02                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | 2,4-Dinitrophenol           | 3.1E+01                                  | 0.330               | 0.83                   | NE  | NE  | 3.1E+01                                      | 9,210 10 U U  | 0.952 1 U U   | 9.960 10 U U  | 0.968 1 U U   |
| SEMIVOLATILES  | 2,4-Dinitrotoluene          | 7.2E-01                                  | 0.083               | 0.17                   | NE  | NE  | 7.2E-01                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | 2,6-Dinitrotoluene          | 7.2E-01                                  | 0.083               | 0.17                   | NE  | NE  | 7.2E-01                                      | 1.840 10 U U  | 0.190 t U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | 2-Chloronaphthatene         | 1.1E+03                                  | 0.083               | 0.17                   | NE  | NE  | 1.1E+03                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | 2-Chiorophenol              | 1.1E+02                                  | 0.083               | 0.17                   | NE  | NE  | 1.1E+02                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | 2-Methylaphinalene          | 3.3E+01<br>7 7E+02                       | 0.063               | 0.17                   |   | NE  | 7 75+02                                      | 1.840 10 0 0  | 0.190 1 0 0   | 1,990 10 0 0  | 0.194 1 0 0   |
| SEMIVOLATILES  | 2-Nitroaniline              | 476+00                                   | 0.000               | 0.83                   |   | NE  | 4.7E+00                                      | 9.210 10 11 11  | 0.190 1 0 0   | 9960 10 11 11   | 0.068 1 11 11   |
| SEMIVOLATILES  | 2-Nitrophenol               | 3.1E+01                                  | 0.083               | 0.17                   | NE  | NE  | 3.1E+01                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine      | 1.1E+00                                  | 0.165               | 0.33                   | NE  | NE  | 1.1E+00                                      | 3.680 10 U U  | 0.381 1 U U   | 3.980 10 U U  | 0.387 1 U U   |
| SEMIVOLATILES  | 3-Nitroaniline              | 4.7E+00                                  | 0.330               | 0.83                   | NE  | NE  | 4.7E+00                                      | 9.210 10 U U  | 0.952 1 U U   | 9.960 10 U U  | 0.968 1 U U   |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol  | 3.1E+01                                  | 0.330               | 0.83                   | NE  | NE  | 3.1E+01                                      | 9.210 10 U U  | 0.952 1 U U   | 9.960 10 U U  | 0.968 1 U U   |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether  | 3.1E-02                                  | 0.083               | 0.17                   | NE  | NE  | 1.7E-01                                      | 0.860 10 U U  | 0.097 1 U U 🖩   | 1.010 10 U U  | 0.099 1 U U   |
| SEMIVOLATILES  | 4-Chloro-3-methylphenol     | 7.7E+01                                  | 0.083               | 0.17                   | NE  | NE  | 7.7E+01                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | 4-Chlorophiline             | 6.2E+01                                  | 0.083               | 0.17                   | NE  | NE  | 6.2E+01                                      |   |   | 1.990 10 U U  | 0.194 1 0 0   |
| SEMIVOLATILES  | 4-Chlorophenyl phenyl ealer | 2.00-02                                  | 0.063               | 0.17                   | NE  |   | 7.75+01                                      |   | 0.097 1 0 0 🔤   |   | 0.099 1 0 0   |
| SEMIVOLATILES  | 4-Metryphenor               | 1.3E+01                                  | 0.003               | 0.83                   | NE  | NE  | 135+01                                       | 9,210,10,11,11  | 0.150 1 0 0   | 9960 10 11 11   | 0.154 1 0 0   |
| SEMIVOLATILES  | 4-Nitrophenol               | 3.1E+01                                  | 0.330               | 0.83                   | NE  | NE  | 3.1E+01                                      | 9.210 10 U U  | 0.952 1 U U   | 9.960 10 U U  | 0.968 1 U U   |
| SEMIVOLATILES  | Acenaphthene                | 8.2E+02                                  | 0.083               | 0.17                   | NE  | NE  | 8.2E+02                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Acenaphthylene              | 8.2E+02                                  | 0.083               | 0.17                   | NE  | NE  | 8.2E+02                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Anthracene                  | 4.1E+03                                  | 0.0825              | 0.165                  | NE  | NE  | 4.1E+03                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Benzo(a)anthracene          | 6.3E-01                                  | 0.0825              | 0.165                  | 0.02                                      | NË  | 6.3E-01                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Benzo(a)pyrene              | 6.3E-02                                  | 0.0825              | 0.165                  | 0.02                                      | NE  | 1.7E-01                                      | 0.860 10 U U  | 0.097 1 U U   | 1010 10 U U   | 0.099 1 U U   |
| SEMIVOLATILES  | Senzo(D)nuoranthene         | 6.3E-01                                  | 0.0825              | 0.165                  | 0.02                                      | NE  | 6.3E-01                                      | 1.840 10 U U  | 0.190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Benzo(k)fluoranthana        | 4.1E+U2<br>6.3E±00                       | 0.0825              | 0.165                  | 0.01                                      | NE  | 4.12+02                                      | 1.840 10 U U  | 0.190 1 0 0   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Benzoic Acid                | 8 2F+04                                  | 0.0025              | 0.105                  | NF  | NE  | 6 2 =+04                                     | 9.210 10 0 0  | 0.150 1 0 0   | 9960 10 0 0   | 0.194 1 0 0   |
| SEMIVOLATILES  | Benzyl Alcohol              | 4.7E+03                                  | 0,0825              | 0,165                  | NE  | NE  | 4.7E+03                                      | 1.840 10 11 11  | 0.190 1 U U   | 1.990 10 U U  | 0,194 1 11 11   |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane  | 2.9E-01                                  | 0.0825              | 0.165                  | NE  | NE  | 2.9E-01                                      | 1.640 10 U U  | 0,190 1 U U   | 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | bis(2-Chloroethyl)ether     | 1.5E-01                                  | 0.0825              | 0.165                  | NE  | NE  | 1.7E-01                                      | 0.860 10 U U  | 0.097 1 U U   | 1,010 10 U U  | 0.099 1 Ū Ū   |

#### Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066515

### Table 4-55

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

WRSump-011

| [SUMP] = WRSUMP(<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | 211                               | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _    | Backg<br>Concentrat<br>(95% UP<br>Surface | ground<br>tions in Soil<br>'L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WR\$011-\$B01<br>WR\$011-\$B01-01<br>9/26/2006<br>0.0 - 0.5 Ft<br>REG | WRS011-SB01<br>WRS011-SB01-02<br>9/26/2006<br>3.5 - 4.5 Ft<br>REG | WRS011-SB02<br>WRS011-SB02-01<br>9/26/2006<br>0.0 - 0.5 Ft<br>REG | WRS011-SB02<br>WRS011-SB02-02<br>9/26/2006<br>3.5 - 4.5 Ft<br>REG |
|--|-----------------------------------|--|---------------------|-------------|---|---|--|---|---|---|---|
| Test Group   | Parameter (Units = mg/kg)         | (RBSV)*                                  | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DIL LQ V   | Q Result DIL LQ VQ  | Result DIL LQ VQ  |
| SEMIVOLATILES  | bis(2-Chloroisopropyl)ether       | 4.8E+00                                  | 0.0825              | 0.165       | NE  | NË  | 4.8E+00                                      | 1.840 10 U U  | 0.190 1 U   | U 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate        | 1.7E+01                                  | 0.0825              | 0.165       | NE  | NE  | 1.7E+01                                      | 1.840 10 U U  | 0.190 1 U I   | U 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Butyl benzyl phthalate            | 3.1E+03                                  | 0.0825              | 0.165       | NE  | NE  | 3.1E+03                                      | 1.840 10 U U  | 0.190 1 U   | U 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Chrysene                          | 6.3E+01                                  | 0.0825              | 0.165       | 0.02                                      | NE  | 6.3E+01                                      | 1.840 10 U U  | 0.190 1 U   | U 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene            | 6.3E-02                                  | 0.0825              | 0.165       | NE  | NE  | 1.7E-01                                      | 0.860 10 U U  | 0.097 1 U U   | U 10 U U  | 0.099 1 U U   |
| SEMIVOLATILES  | Didenzoturan<br>Didthyf ohtholoto | 0.2E+01                                  | 0.0825              | 0.165       |   | NE  | 6.2E+01                                      |   | 0.190 1 0 0   |   | 0.194 1 0 0   |
| SEMIVOLATILES  | Directly philalate                | 1 2 - + 04                               | 0.0825              | 0.165       | NE  | NE  | 1.20+04                                      | 1840 10 10 10   | 0.190 1 0 0   |   | 0.194 1 U U   |
| SEMIVOLATILES  | di-n-Butvi ohthalate              | 1.6E+03                                  | 0.0825              | 0.165       | NË  | NE  | 1.6E+03                                      | 1.840 10 U U  | 0.190 1 U   | U 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | di-n-Octyl phthalate              | 3.1E+02                                  | 0.0825              | 0.165       | NE  | NE  | 3.1E+02                                      | 1.840 10 U U  | 0.190 1 U   | U 1.990 10 Ŭ Ŭ  | 0.194 1 U U   |
| SEMIVOLATILES  | Fluoranthene                      | 5.5E+02                                  | 0.0825              | 0.165       | 0.02                                      | NE  | 5.5E+02                                      | 1.840 10 U U  | 0.190 1 U U   | U 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Fluorene                          | 5.5E+02                                  | 0.0825              | 0,165       | NE  | NE  | 5.5E+02                                      | 1.840 10 U U  | 0.190 1 U   | U 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Hexachlorobenzene                 | 2.5E-01                                  | 0.0825              | 0.165       | NE  | NE  | 2.5E-01                                      | 1.840 10 U U  | 0.190 t U   | U 1,990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Hexachlorobutadiene               | 1.6E+00                                  | 0.0825              | 0.165       | NE  | NE  | 1.6E+00                                      | 1.840 10 U U  | 0.190 1 U   | U 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Hexachlorocyclopentaclene         | 1.02+00                                  | 0.0825              | 0.105       | NE  | NE  | 1.02+00                                      | 1.840 10 0 0  | 0.190 1 0 4   |   | 0.194 1 0 0   |
| SEMIVOLATILES  | Indenn(1.2.3-cd)pyrene            | 6 3E-01                                  | 0.0025              | 0.165       | 0.01                                      | NE  | 636-01                                       | 1840 10 0 0   | 0.190 1 1 1   |   | 0.194 1 U U   |
| SEMIVOLATILES  | Isophorone                        | 5.2E+02                                  | 0.0825              | 0.165       | NE  | NE  | 5.2E+02                                      | 1.840 10 U U  | 0.190 1 U   | U 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Naphthalene                       | 1.8E+01                                  | 0.0825              | 0.165       | NE  | NE  | 1.8E+01                                      | 1.840 10 U U  | 0.190 1 U   | U 1,990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Nitrobenzene                      | 6.5E+00                                  | 0,0825              | 0.165       | NE  | NE  | 6.5E+00                                      | 1.840 10 U U  | 0.190 1 U   | U 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine        | 4.1E-02                                  | 0.0825              | 0.165       | NE  | NE  | 1.7E-01                                      | 0.860 10 U U  | 0.097 1 U   | U 1,010 10 U U  | 0.099 1 U U   |
| SEMIVOLATILES  | n-Nitrosociphenylamine            | 5.9E+01                                  | 0.0825              | 0.165       | NE  | NE  | 5.9E+01                                      | 1.840 10 U U  | 0.190 1 U   | U 1.990 10 U U  | 0.194 1 U U   |
| SEMIVOLATILES  | Pentachlorophenol                 | 3.0E+00                                  | 0.3300              | 0,825       | NE  | NE  | 3.02+00                                      | 9.210 10 U U  | 0.952 1 U   | U 9.960 10 U U  | 0.968 1 0 0   |
| SEMIVOLATILES  | Phenanthreae                      | 4.10+02                                  | 0.0625              | 0.105       | NE  |   | 4.10+02                                      | 1.840 10 0 0  | 0.190 1 0 1   |   | 0.194 1 0 0   |
| SEMIVOLATILES  | Pyrene                            | 4 1E+02                                  | 0.0825              | 0.165       | 0.0194                                    | NE  | 4.72+03                                      | 1.840 10 0 0  | 0.190 1 0   | 1 1990 10 10 10   | 0.194 1 U U   |
| SOLIDS   | Percent Solids                    | NE                                       | NE                  | NE          | NE  | NE  |  | 95.900 1  | 84.700 1  | 81,700 1  | 83.200 1  |
| VOLATILES  | 1,1,1,2-Tetrachloroethane         | 5.2E+00                                  | 0.0005              | 0.005       | NE  | NE  | 5.2E+00                                      |   | 0.007 1 U   | U   | 0.006 1 U U   |
| VOLATILES  | 1,1,1-Trichloroethane             | 2.3E+02                                  | 0.0005              | 0.005       | NE  | NE  | 2.3E+02                                      |   | 0.007 1 U   | U   | 0.006 1 V U   |
| VOLATILES  | 1,1,2,2-Tetrachloroethane         | 5.1E-01                                  | 0.0005              | 0.005       | NË  | NE  | 5.1E-01                                      |   | 0.007 <b>1</b> U 1  | U   | 0.006 1 U U   |
| VOLATILES  | 1,1,2-Trichloroethane             | 9.7E-01                                  | 0.0005              | 0.005       | NE  | NE  | 9.7E-01                                      |   | 0.007 1 U   | U   | 0.006 1 U U   |
| VOLATILES  | 1,1-Dichloroethane                | 8.9E+01                                  | 0.0010              | 0.005       | NE  | NE  | 8.9E+01                                      |   | 0.007 1 U   | U   | 0.006 1 0 0   |
| VOLATILES  | 1,1-Dichloropropene               | 2.7 2+01                                 | 0.0005              | 0.005       | NE  | NE  | 2.78+01                                      |   | 0.007 1 0   |   |   |
| VOLATILES  | 1.2.3-Trichlorobenzene            | 4.2E+01                                  | 0.0005              | 0.005       | NE  | NE  | 4.2E+01                                      |   | 0.007 1 U   | 5   | 0.006 1 U U   |
| VOLATILES  | 1,2,3-Trichloropropane            | 9.2E-02                                  | 0.0010              | 0.005       | NE  | NE  | 9.2E-02                                      |   | 0.007 1 U   | Ŭ   | 0.006 1 U U   |
| VOLATILES  | 1,2,4-Trichlorobenzene            | 1.4E+02                                  | 0.0005              | 0.005       | NË  | NE  | 1.4E+02                                      |   | 0.007 1 U i   | υ   | 0.006 1 U U   |
| VOLATILES  | 1,2,4-Trimethylbenzene            | 9.6E+00                                  | 0.0005              | 0.005       | NE  | NE  | 9.6E+00                                      |   | 0.007 1 U   | U   | 0.006 1 U U   |
| VOLATILES  | 1,2-Dibromo-3-chloropropane       | 3.5E-01                                  | 0.0020              | 0.005       | NE  | NE  | 3.5E-01                                      |   | 0.007 1 U   | U   | 0.006 1 U U   |
| VOLATILES  | 1,2-Dibromoethane                 | 5.3E-02                                  | 0.0005              | 0.005       | NE  | NE  | 5.3E-02                                      |   | 0.007 1 U 1   | U   | 0.006 1 U U   |
| VOLATILES  | 1,2-Dichloroethane                | 2.02+01                                  | 0.0005              | 0.005       | NE  | NE  | 2.75-01                                      |   | 0.007 1 0   |   |   |
| VOLATILES  | 1.2-Dichloropropane               | 1.8E+00                                  | 0.0005              | 0.005       | NE  | NE  | 1.8E+00                                      |   | 0.007 1 U   | E<br>U  | 0.006 1 U U   |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylene     | 3.3E+03                                  | 0.0005              | 0.005       | NE  | NE  | 3.3E+03                                      |   | 0.007 1 U   | ŭ   | 0.006 1 U U   |
| VOLATILES  | 1,3,5-Trimethylbenzene            | 8.3E+00                                  | 0.0005              | 0.005       | ΝE  | NE  | 8.3E+00                                      |   | 0.007 1 U   | U   | 0.006 1 U U   |
| VOLATILES  | 1,3-Dichtorobenzene               | 5.1E+00                                  | 0.0005              | 0.005       | NE  | NE  | 5.1E+00                                      |   | 0.007 1 U   | U   | 0,006 1 U U   |
| VOLATILES  | 1,3-Dichloropropane               | 3.0E+00                                  | 0.0005              | 0.005       | NE  | NE  | 3.0E+00                                      |   | 0.007 1 U   | U .   | 0.006 1 U U   |
| VOLATILES  | 1,4-Dichlorobenzene               | 2.7E+01                                  | 0.0005              | 0.005       | NE  | NE  | 2.7E+01                                      |   | 0.007 1 U   | U   | 0.006 1 U U   |
| VOLATILES  | 2,2-Dichoropropane<br>2-Butanone  | 2.65+03                                  | 0.0005              | 0.005       |   | NE  | 1.75+00                                      |   | 0.007 1 0   |   | 0.000 1 0 0   |
| VOLATILES  | 2-Chloroethyl visyl ether         | 2.02+03                                  | 0.0025              | 0.010       | NE  | NE  | 2.02+03                                      |   | 0.013 1 0   |   | 0.013 1 1 1   |
| VOLATILES  | 2-Chlorotoluene                   | 1.5E+02                                  | 0.0025              | 0.005       | NE  | NE  | 1.5E+02                                      |   | 0.010 1 0   | 5<br>1  | 0.006 1 U U   |
| VOLATILES  | 2-Hexanone                        | 6.2E+00                                  | 0.0025              | 0.010       | NE  | NE  | 6.2E+00                                      |   | 0.013 1 U   | Ŭ   | 0.013. 1 U U  |
| VOLATILES  | 4-Chlorotoluene                   | 3.4E-01                                  | 0.0005              | 0.005       | NE  | NE  | 3.4E-01                                      |   | 0.007 1 U   | Ū   | 0.006 1 U U   |
| VOLATILES  | Acetone                           | 1.7E+02                                  | 0.0050              | 0.010       | NE  | NE  | 1.7£+02                                      |   | 0.013 1 J   | J   | 0.007 1 J J   |
| VOLATILES  | Benzene                           | 8.8E-01                                  | 0.0005              | 0.005       | NE  | NE  | 8.8E-01                                      |   | 0.007 1 U   | u .   | 0.006 1 U U   |
| VOLATILES  | Bromobenzene                      | 1.1E+01                                  | 0.0005              | 0.005       | NE  | NE  | 1.18+01                                      |   | 0.007 1 U   | U .   | 0.006 1 U U   |
| VOLATILES  | Bromodichloromethane              | 2.42+01                                  | 0.0005              | 0.005       | NE  | NE<br>NE  | 2.4=+01                                      |   | 0.007 1 U   |   | 0.005 1 0 0   |
| VOLATILES  | Bromotorm                         | 3.4E+01                                  | 0.0005              | 0.005       | NE  |   | 3.4E+01                                      |   | 0.007 1 0   |   |   |
| VOLATILES  | Bromomethane                      | 3.5E-01                                  | 0.0010              | 0.010       | NE  | NE  | 3.5E-01                                      |   | 0.013 1 U   | u<br>U  | 0.013 1 U U   |
| VOLATILES  | Carbon disulfide                  | 1.0E+02                                  | 0.0005              | 0.005       | NE  | NE  | 1.0E+02                                      | 1   | 0.007 1 U   | Ū   | 0.006 1 U U   |

Shaw Environmental, Inc.

### 00066516

### Table 4-55 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

| WR | Sur | np-( | 31' |  |
|----|-----|------|-----|--|
|----|-----|------|-----|--|

| [SUMP] = WRSUMP(<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | 211                       | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _    | Back<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WRS011-SB01<br>WRS011-SB01-01<br>9/26/2006<br>0.0 - 0.5 Ft<br>REG | WRS011-SB01<br>WRS011-SB01-02<br>9/26/2006<br>3.5 - 4.5 Ft<br>REG | WR\$011-\$B02<br>WR\$011-\$B02-01<br>9/26/2006<br>0.0 - 0.5 Ft<br>REG | WRS011-SB02<br>WRS011-SB02-02<br>9/26/2006<br>3.5 - 4.5 Ft<br>REG |
|---|---------------------------|--|---------------------|-------------|---|---|--|---|---|---|---|
| Test Group  | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| VOLATILES   | Carbon tetrachloride      | 3.5E-01                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.5E-01                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Chlorobenzene             | 4.0E+01                                  | 0.0005              | 0.005       | NE                                      | NE  | 4.0E+01                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Chloroethane              | 1.1E+03                                  | 0.0010              | 0.010       | NE                                      | NE  | 1.1E+03                                      |   | 0.013 1 U U   |   | 0.013 1 U U   |
| VOLATILES   | Chloroform                | 3.1E-01                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.1E-01                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010       | NE                                      | NE  | 2.3E-01                                      |   | 0.013 1 U U   |   | 0.013 1 U U   |
| VOLATILES   | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.2E+02                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | cis-1,3-Dichtoropropene   | 1.2E+00                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.2E+00                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005       | NE                                      | NE  | 7.6E+00                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.9E+01                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010       | NE                                      | NE  | 2.2E+02                                      |   | 0.013 1 U U   |   | 0.013 1 U U   |
| VOLATILES   | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 4.3E+02                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.6E+00                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 5.4E+02                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | m,p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 2.3E+02                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01        | NE                                      | NE  | 1.3E+03                                      |   | 0.013 1 U U   |   | 0.013 1 Ų Ų   |
| VOLATILES   | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005       | NE                                      | NE  | 8.7E+00                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01        | NE                                      | NĘ  | 1.8E+01                                      |   | 0.013 1 U U   |   | 0.013 1 U U   |
| VOLATILES   | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 2.7E+02                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.2E+02                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005       | NE                                      | NĘ  | 4.2E+02                                      |   | 0.007 1 U U   |   | 0.001 1 J J   |
| VOLATILES   | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.0E+02                                      |   | 0.007 1 U U   |   | 0.006 1 Ų U   |
| VOLATILES   | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.3E+03                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 2.6E+02                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005       | NE                                      | NE  | 6.0E+00                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.1E+03                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | trans-1,2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.4E+02                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | trans-1,3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.8E+00                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.7E+00                                      |   | 0.007 1 U U   |   | 0.006 1 U U   |
| VOLATILES   | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01        | NE                                      | NE  | 2.6E+02                                      |   | 0.013 1 U U   |   | 0.013 1 U U   |
| VOLATILES   | Vinyl acetate             | 5.7E+01                                  | 0.0010              | 0.01        | NE                                      | NE  | 5.7E+01                                      |   | 0.013 1 U U   |   | 0.013 1 U U   |
| VOLATILES   | Vinyi chloride            | 3.6E-02                                  | 0.0010              | 0.01        | NE                                      | NE  | 3.6E-02                                      |   | 0.013 1 U U   |   | 0.013 1 U U   |

Shaw Environmental, Inc.

00066517

#### Table 4-56 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-012

| [SUMP] = WRSUMP012<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                            | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backę<br>Concentrai<br>(95% UP<br>Surface | round<br>ions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WRS12-SB01<br>WRS12-SB01-02<br>9/25/2006<br>4.5 - 5 Ft<br>REG | WR\$12-\$802<br>WR\$12-\$802-02<br>9/25/2006<br>4.5 - 5 Ft<br>REG |
|--|----------------------------|--|---------------------|------------------------|---|--|--|---|---|
| Test Group   | Parameter (Units = mg/kg)  | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft                                     | Value  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| EXPLOSIVES   | 1,3,5-Trinitrobenzene      | 4.7E+02                                  | 0.1                 | 0.25                   | NE  | NE   | 4.7E+02                                      | 0.249 1 U U   | 0.245 1 U U   |
| EXPLOSIVES   | 1.3-Dinitrobenzene         | 1.6E+00                                  | 0.1                 | 0.25                   | NE  | NE   | 1.6E+00                                      | 0.249 1 U U   | 0.245 t U U   |
| EXPLOSIVES   | 2,4,6-Trinitrotoluene      | 7.7E+00                                  | 0.1                 | 0.25                   | NE  | NE   | 7.7E+00                                      | 0.249 1 U U   | 0.245 1 U U   |
| EXPLOSIVES   | 2.4-Dinitrotoluene         | 7.2E-01                                  | 0.1                 | 0.25                   | NE  | NE   | 7.2E-01                                      | 0.249 1 U U   | 0.245 1 U U   |
| EXPLOSIVES   | 2.6-Dinitrotoluene         | 7.2E-01                                  | 0.1                 | 0.26                   | NE  | NE   | 7.2E-01                                      | 0.259 1 U U   | 0.255 1 U U   |
| EXPLOSIVES   | 2-Amino-4,6-dinitrotoluene | 2.6E+00                                  | 0.1                 | 0.26                   | NE  | NE   | 2.6E+00                                      | 0.259 1 U U   | 0.255 1 U U   |
| EXPLOSIVES   | 4-Amino-2.6-dinitrotoluene | 2.6E+00                                  | 0.1                 | 0.26                   | NË  | NE   | 2.6E+00                                      | 0.259 1 U U   | 0.255 1 U U   |
| EXPLOSIVES   | HMX                        | 2.2E+02                                  | 0.1                 | 2.20                   | NE  | NE   | 2.2E+02                                      | 2.190 1 U U   | 2.160 1 U U   |
| EXPLOSIVES   | m-Nitrotoluene             | 4.4E+01                                  | 0.1                 | 0.25                   | NE  | NE   | 4.4E+01                                      | 0.249 1 U U   | 0.245 1 U U   |
| EXPLOSIVES   | Nitrobenzene               | 6.5E+00                                  | 0.1                 | 0.26                   | NE  | NE   | 6.5E+00                                      | 0.259 1 U U   | 0.255 1 U U   |
| EXPLOSIVES   | o-Nitrotoluene             | 4.7E+01                                  | 0.1                 | 0.25                   | NE  | NE   | 4.7E+01                                      | 0.249 1 U UJ  | 0.245 1 U UJ  |
| EXPLOSIVES   | n-Nitrotoluene             | 4.4E+01                                  | 0.1                 | 0.25                   | NE  | NE   | 4.4E+01                                      | 0.249 1 U U   | 0.245 1 U U   |
| EXPLOSIVES   | BDX                        | 3.6E+00                                  | 0.1                 | 1.00                   | NE  | NE   | 3.6E+00                                      | 0.995 1 U U   | 0.980 1 U U   |
| EXPLOSIVES   | Tetryl                     | 1.6E+02                                  | 0.2                 | 0.65                   | NE  | NE   | 1.6E+02                                      | 0.647 1 U U   | 0.637 1 U U   |
| METALS   | Aluminum                   | 1.6E+04                                  | 10 000              | 20.00                  | 16300                                     | 2.08E+04   | 1.6E+04                                      | 4640.000 1  | 12200.000 1   |
| METALS   | Antimony                   | 7 3E+00                                  | 0.500               | 0.10                   | 0.94                                      | 1.6  | 7.3E+00                                      | 0.055 1 U UJI   | 0.115 1 U UJL   |
| METALS   | Arsonic                    | 2.05+01                                  | 0.075               | 0.30                   | 4.81E+00                                  | 5.54E+00   | 2.0E+01                                      | 1.250 1 JL  | 1.590 1 JL  |
| METALS   | Barium                     | 2.65+03                                  | 0.075               | 0.30                   | 1 52E+02                                  | 8 55E+01   | 2.6E+03                                      | 30 200 1  | 38.300 1  |
| METALS   | Bendlium                   | 4 65+00                                  | 0.012               | 0.50                   | 6 45E-01                                  | 7 66E-01   | 4 6E+00                                      | 0.208 1   | 0.767 1   |
| METALS   | Codmium                    | 5 25+00                                  | 0.025               | 0.00                   | 14  | 0.4  | 52E+00                                       | 0.039 1 .1 .1   | 0.413 1 U U   |
| METALO   | Calcium                    | 5.22+00                                  | NA                  | NA NA                  | NA<br>NA                                  | NA NA  | 0.22.00                                      | 500,000, 1  | 622,000 1   |
| METALO   | Chromium                   | 5 05103                                  | 0.100               | 0.40                   | 2 665-01                                  | 3.015+01   | 5.95+03                                      | 8410 1  | 14 900 1  |
|  | Cobolt                     | 1 55402                                  | 0.100               | 0.50                   | 7.235+00                                  | 5.61E+00   | 1.55+03                                      | 1 570 1   | 6,000 1   |
| METALO   | Cooan                      | 1.00+03                                  | 0.120               | 0.00                   | 5.555+00                                  | 0.255+00   | 1.05+03                                      | 1 700 1   | 4 780 1   |
| METALO   | Copper                     |  | 0.150               | 0,00                   | 0.00E+00                                  | 3.20ET00   | 1.02+03                                      | 6710.000 1  | 19400.000 1   |
| METALS   | Iron                       |  | 0.500               | 5.00                   | 2 265+01                                  | 1 1/5+01   | 5 05+02                                      | 5 350 1   | 20.000 1  |
| METALS   | Lead                       | 5.0E+02                                  | 0.500               | 5.00                   | 2.205-01                                  | 1.146701   | 5.0E+02                                      | 229.000 1   | 958,000 1 14  |
| METALS   | Magnesium                  | 175.02                                   | NA<br>0.0E0         | NA<br>0.00             | 1 255+02                                  | 2.015±02   | 175+02                                       | 48 800 1  | 50 200 1 1  |
| METALS   | Manganese                  | 1.7 5 103                                | 0.050               | 0.20                   | 1.202100                                  | 2.012402   | 2.55.04                                      | 40.000 1 5  | 0.012 1 1 1   |
| METALS   | Mercury                    | 1.1E-02                                  | 0.010               | 0.25                   | 0.195-02                                  | 4.465.04   | 2.00-01                                      | 0.010 1 3 3   | 9640 1  |
| METALS   | NICKEI                     | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                  | 1.102+01   | 1.96702                                      | 2.270   | 250,000 1   |
| METALS   | Potassium                  | NE                                       | NA                  | ANI<br>A DO            |   |  | 4 05 00                                      |   | 0.049 1 1 1   |
| METALS   | Selenium                   | 1.3E+02                                  | 0.100               | 0.20                   | 3.485+00                                  | 5.57 =+00  | 1.3E+02                                      | 0.145 J J JL  | 1.650 1 U U   |
| METALS   | Silver                     | 4.7E+01                                  | 0.050               | 0.20                   | 0.31                                      | 0,37   | 4.7E+01                                      |   | 1.000 1 0 0   |
| METALS   | Sodium                     | NE                                       | NA                  | NA                     | NA  | NA   |  | 91.100 1  | 140.000 1   |
| METALS   | l hallium                  | 2.0E+00                                  | 0.010               | 0.02                   | 0.47                                      | NE   | 2.0E+00                                      | 0.042 1   | 0.072 1   |
| METALS   | Vanadium                   | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01                                  | 4.46E+01   | 4.82+01                                      | 15.600 1  | 33.200 1  |
| METALS   | Zinc                       | 5.9E+03                                  | 0.625               | 2.50                   | 61.6                                      | 2.02E+01   | 5,9E+03                                      | 5.950 1   | 22.900 1  |
| SOLIDS   | Percent Solids             | NE                                       | NE                  | NE                     | NE  | NE   |  | 79.700  | 86.500 1  |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps Table 4-57

#### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-015

|  |   |                     |             |                        |                      |                         |                         |                                   | •                     |                               |                             | WRS                               | iump-015                 |                                 |                          |                                 |                              |                                 |                             |  |                            |   |                  | 00                                      | 06                    | 651                                    | 8                             |
|--|---|---------------------|-------------|------------------------|----------------------|-------------------------|-------------------------|-----------------------------------|-----------------------|-------------------------------|-----------------------------|-----------------------------------|--------------------------|---------------------------------|--------------------------|---------------------------------|------------------------------|---------------------------------|-----------------------------|--|----------------------------|---|------------------|---|-----------------------|--|-------------------------------|
| (SUMP) = WRSUMPOT<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE | 5   | TCEQ<br>Risk-Based  |             |                        | Back<br>Concentra    | ground<br>tions in Soil | Applichie<br>TCEQ       | 35SUMP03<br>35-SMP33-8<br>9/11/20 | -SB01<br>601-01<br>06 | 35SUMP0<br>35-SMP33<br>9/11/2 | 33-5801<br>-5801-02<br>2006 | 35SUMP03<br>35-SMP034-<br>9/20/20 | 4-SB01<br>SB01-02<br>X06 | 35SUMP03<br>35-SMP34-<br>9/11/2 | 4-SB01<br>SB01-01<br>006 | 35SUMP0<br>35-SMP34-S<br>9/11/2 | 34-SB01<br>801-01-QC<br>2005 | 35SUMP03<br>35-SMP034<br>9/20/2 | 34-SB02<br>-SB02-02<br>2006 | WRS015-<br>WRS-015-S<br>9/15/2           | SB01<br>6801-01<br>006     | WRS015-S<br>WRS-015-SB<br>9/15/200<br>2 - 4 E | B01<br>101-02    | WRS015-<br>WRS-15-S<br>9/15/20<br>0 - 1 | 8802<br>802-01<br>106 | WRS015-<br>WRS-15-S<br>9/15/2<br>3 - 4 | -SB02<br>6802-02<br>606<br>Ft |
| DEPTH  |   | Screening<br>Vietue | Method      | Method<br>Quantitation | (95% UF<br>Surface   | L, mg/kg)<br>Subsurface | Risk-Based<br>Screening | 0 -0.5<br>REG                     | FL                    | 4.5 - I<br>RE                 | 5 Ft<br>G                   | 3-4<br>REG                        | FL                       | 0+0.8<br>RE0                    | 3 Ft<br>3                | 0 - 0.:<br>FC                   | 5 FL<br>3                    | 3-4<br>RE                       | G                           | REG                                      | 5                          | RÉG   |                  | REG                                     | 1                     | REC                                    | 3                             |
| Test Group   | Parameter (Units ≃ mg/kg)                                 | (RBSV)*             | Umit (MDL)  | Gmit (MOL)             | 0 - 0.5 Ft           | 1.5 - 2.5 FL            | Value                   | Result DIL                        | LO VO                 | Result C                      | NL LO VO                    | Result C                          | IL LO VO                 | Result D                        | IL LO VO                 | Result D                        | DIL LO VO                    | Result D                        | NL LO VO                    | Result_D                                 | LLQVQ                      | Result DI                                     | L LO VO          | Result Di                               | L LO VO               | Result D                               | IL LO VO                      |
| EXPLOSIVES   | 1,3,5-Trinitrobanzene                                     | 4.7E+02             | 0.1         | 0.25                   | NE                   | NE                      | 4.7E+02<br>1.6E+00      |                                   |                       |                               |                             | 0.249                             | 1 U<br>1 U               | 0.238                           | 1 10                     | 0.239                           | 1 U<br>1 V                   | 0.248                           | 1 U                         |  |                            |   |                  |   |                       |  |                               |
| EXPLOSIVES   | 2,4,6-Trinitrotoluene                                     | 7.7E+00             | 0.1         | 0.25                   | NE                   | NE                      | 7.7E+00                 |                                   |                       |                               |                             | 0.249                             | 1 U                      | 0.238                           | 1 11                     | 0.239                           | 1 0                          | 0.248                           | 1 U                         |  |                            |   |                  |   |                       |  |                               |
| EXPLOSIVES<br>EXPLOSIVES                                       | 2,4-Dinitrololuene<br>2 6-Dinitrololuene                  | 7.2E-01<br>7.2E-01  | 0.1         | 0.25                   | NE                   | NE                      | 7.2E-01<br>7.2E-01      |                                   |                       |                               |                             | 0.249                             | 1 0                      | 0.236                           | ŭ                        | 0.239                           | iŭ                           | 0.257                           | 1 0                         |  |                            |   |                  |   |                       |  |                               |
| EXPLOSIVES   | 2-Amino-4,6-dinitrotoiuene                                | 2.6E+00             | 0.1         | 0.26                   | NE                   | NE                      | 2.6E+00                 |                                   |                       |                               |                             | 0.259                             | 1 U<br>1 U               | 0.248                           | 1 U                      | 0.249                           | 1 U<br>1 U                   | 0.257                           | 1 U<br>1 U                  |  |                            |   |                  |   |                       |  |                               |
| EXPLOSIVES   | 4-Amino-2,5-dinitrotoiuene<br>HMX                         | 2.2E+00             | 0.1         | 2.20                   | NE.                  | NE                      | 2.2E+02                 |                                   |                       |                               |                             | 2.190                             | iŭ                       | 2.100                           | Ū                        | 2.110                           | 1 1                          | 2,160                           | 1 0                         |  |                            |   |                  |   |                       |  |                               |
| EXPLOSIVES   | m-Nitroloiuene  | 4.4E+01             | 0.1         | 0.25                   | NE<br>NE             | NE                      | 4.4E+01<br>6.5E+00      |                                   |                       |                               |                             | 0.249                             | 1 U<br>1 U               | 0.238                           | 1 U<br>1 U               | 0.239                           | 1 U                          | 0.248                           | 1 0                         |  |                            |   |                  |   |                       |  |                               |
| EXPLOSIVES   | o-Nitrotoluene  | 4.7E+01             | 0.1         | 0.25                   | NE                   | NE                      | 4.7E+01                 |                                   |                       |                               |                             | 0.249                             | 1 U                      | 0.238                           | 1 0                      | 0.239                           | 1 U                          | 0.248                           | 1 U<br>1 U                  |  |                            |   |                  |   |                       |  |                               |
| EXPLOSIVES   | p-Nitrololuene<br>RDX                                     | 4.4E+01<br>3.6E+00  | 0.1         | 1.00                   | NE                   | NE                      | 3.6E+00                 |                                   |                       |                               |                             | 0.995                             | i ŭ                      | 0.952                           | i ŭ                      | 0.957                           | i Ü                          | 0.990                           | i Ü                         |  |                            |   |                  |   |                       |  |                               |
| EXPLOSIVES   | Tetryl  | 1.6E+02             | 0.2         | 0.65                   | NE<br>16300          | NE<br>2 08E+04          | 1.6E+02<br>1.6E+04      | 6020.000 1                        |                       | 12100.000                     | 1                           | 0.647                             | 1 U<br>1                 | 0.619                           | 1 U<br>1                 | 0.622<br>9410.000               | 1                            | 10700.000                       | 1 0                         | 6240.000 1                               | · C                        | 22200.000 1                                   |                  | 6340.000 1                              |                       | 13500.000                              | 1                             |
| METALS   | Алётопу   | 7.3E+00             | 0.500       | 0.10                   | 0.94                 | 1.6                     | 7.3E+00                 | 0.010 1                           | υ.                    | 0.115                         | i U                         | 0.122                             | 1 U                      | 0.106                           | 1 U                      | 0.105                           | 1 U                          | 0.118                           | 1 U<br>1                    | 0.105 1<br>5.940 1                       | ųυ                         | 0.116 1                                       | ųυ               | 0.099 1<br>5.510 1                      | 1 1                   | 0.110                                  | 1 0 0                         |
| METALS<br>METALS   | Arsenic<br>Barium   | 2.0E+01<br>2.6E+03  | 0.075       | 0.30                   | 4.81E+00<br>1.52E+02 | 5.54E+00<br>8.55E+01    | 2.0E+01<br>2.6E+03      | 63.300 1                          | J                     | 67,400                        | 1 3                         | 88.800                            | 1                        | 225.000                         | 1                        | 201.000                         | 1                            | 716.000                         | i                           | 61.000                                   |                            | 64.600  |                  | 48.000 1                                |                       | 42,200                                 | 1                             |
| METALS   | Seryllium<br>Seryllium                                    | 4.6E+00             | 0.012       | 0.50                   | 6.45E-01             | 7.66E-01                | 4.6E+00                 | 0.314 1                           | 5 J                   | 0.970                         | 1                           | 0.826                             | 1<br>1 J J               | 0.468                           | 1<br>1                   | 0.421                           | 1                            | 0.512<br>0.941                  | 1                           | 0.466 1                                  | 1 1                        | 0.661 1                                       | JJ               | 0,917 1                                 |                       | 0.047                                  | ,<br>1 J J                    |
| METALS   | Calcium   | NE                  | NA          | NA                     | NA                   | NA                      | -                       | 620,000 1                         |                       | 915.000                       | 1                           | 1890.000                          | 1                        | 5140,000                        | 1                        | 8500.000                        | 1                            | 3420.000                        | 1                           | 44100.000 1                              | 0                          | 2020.000 1                                    |                  | 7080.000 1                              |                       | 289.000                                | 1                             |
| METALS<br>METALS   | Chromium<br>Cobelt  | 5.9E+03<br>1.5E+03  | 0.100       | 0.40<br>0.50           | 2.66E+01<br>7.23E+00 | 3.01E+01<br>5.61E+00    | 5.9E+03<br>1.5E+03      | 11.800 1<br>3.160 1               |                       | 13.000<br>6.430               | 1                           | 24.200                            | 1                        | 3.310                           | 1                        | 3.380                           | 1                            | 4.050                           | ł                           | 3,420 1                                  |                            | 4.270 1                                       |                  | 3.010 1                                 |                       | 1.730                                  | į                             |
| METALS   | Copper  | 1.0E+03             | 0.150       | 0.60                   | 5.55E+00             | 9.25E+00                | 1.0E+03                 | 2,500 1                           |                       | 9.050                         | 1                           | 10,700<br>33100,000               | 1                        | 16.700<br>22100.000             | 1                        | 20.200<br>17900-000             | 1                            | 11.900<br>21500.000             | 1                           | 5.110 1 29900.000 1                      |                            | 6.560 1<br>27700.000 1                        |                  | 5.740 1<br>27400.000 1                  |                       | 3.350                                  | 1                             |
| METALS   | Lead  | 5.0E+02             | 0.500       | 5.00                   | 2.26E+01             | 1.14E+01                | 5.0E+02                 | 8.630 1                           | J                     | 7.370                         | i J                         | 9.230                             | 1                        | 293.000 1                       | 00 J                     | 124.000 1                       | 100 J                        | 76.800                          | 5                           | 20.300                                   |                            | 16,400 1                                      |                  | 19.200 1                                |                       | 7.590                                  | 1                             |
| METALS<br>METALS   | Magnesium<br>Manganese                                    | NÉ<br>1.7E+03       | NA<br>0.050 | NA<br>0.20             | NA<br>1.25E+03       | NA<br>2.01E+02          | 1.7E+03                 | 2.930 1 170.000 1                 |                       | 1890.000<br>20.500            | 1                           | 1710.000                          | 1                        | 131.000                         | 1                        | 144.000                         | i                            | 135.000                         | i                           | 251,000                                  |                            | 57,100 1                                      |                  | 153.000 1                               |                       | 30.500                                 | 1                             |
| METALS   | Marcury   | 1.1E-02             | 0.010       | 0.25                   | 8.19E-02             | 0.36                    | 2.5E-01                 | 0.027 1                           | 1 J                   | 0.020                         | 1 J J                       | 0.032                             | 1 J J<br>1               | 0.080                           | 1 J<br>1                 | 0.078                           | 1 1 1                        | 0.231                           | 1 J J<br>1                  | 0,046<br>5,390                           | 1 ] ]                      | 0.047 1<br>8.540 1                            | JJ               | 0.030 1<br>5.660 1                      | 11                    | 4.450                                  | 1 1                           |
| METALS   | Potassium   | NE                  | NA NA       | NA                     | NA NA                | NA                      | 1.32402                 | 196.000 1                         |                       | 360.000                       | 1                           | 694.000                           | i                        | 461.000                         | 1                        | 434.000                         | i                            | 453.000                         | 1                           | 222.000                                  |                            | 554.000 1                                     |                  | 336.000 1                               |                       | 360.000                                | 1                             |
| METALS<br>METALS   | Selenium<br>Silver  | 1.3E+02<br>4.7E+01  | 0.100       | 0.20                   | 3.48E+00<br>0.31     | 5.57E+00<br>0.37        | 1.3E+02<br>4.7E+01      | 0,350 1                           | U                     | 0.268                         | 1<br>1 U                    | 0.307                             | 1<br>1 U                 | 1.660                           | 1 U                      | 0.353                           | 1 J J                        | 1.650                           | าย                          | 1.500                                    |                            | 1.570 1                                       | บบ               | 0.233                                   | JJ                    | 1.590                                  | 1 U U                         |
| METALS   | Sodium  | NE                  | NA          | NA                     | NA                   | NA                      |                         | 19,900 1                          |                       | 478.000                       | 1                           | 29.000                            | 1                        | 45.200                          | 1                        | 42.000                          | 1                            | 45.900                          | 1                           | 40.400 *                                 | 1                          | 64.200 1<br>0.170 1                           |                  | 21.700 1<br>0.043 1                     |                       | 24.000<br>0.281                        | 1                             |
| METALS   | Vanadium  | 2.0E+00<br>4.8E+01  | 0.125       | 0.50                   | 3,21E+01             | 4.46E+01                | 4.8E+01                 | 19.300 1                          |                       | 22,700                        | \$                          | 41.100                            | i                        | 31.200                          | i                        | 27.700                          | i                            | 35.900                          | į                           | 32.900                                   | j C                        | 49.100 1                                      |                  | 41.500 1                                |                       | 30,500                                 | 1                             |
| METALS<br>BANGE OFGANICS                                       | Zinc<br>Carbon Bance C12-C28                              | 5.9E+03<br>4.0E+02  | 0.625<br>25 | 2_50<br>50             | 61.6<br>NE           | 2.02E+01<br>NE          | 5.9E+03<br>4.0E+02      | 10.300 1 51.500 1                 | U                     | 31.000<br>35.800              | 1<br>1 J B                  | 45.500                            | 1                        | 226.000                         | 1                        | 258.000                         | 1                            | 200.000                         | 1                           | 31.300                                   | i a a                      | 34,900 1                                      | ب ب              | 56.000                                  |                       | 55.000                                 | ែបប                           |
| RANGE_ORGANICS   | Carbon Range C28-C35                                      | 4.0E+02             | 25          | 50                     | NE                   | NE                      | 4.0E+02                 | 51.500 1                          | U<br>II               | 57,300<br>57,300              | 1 U                         |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 33.500<br>51.700                         | 1 1 1                      | 33.900 1<br>57.800 1                          | 1 J J            | 56.000 1<br>52.400 1                    | υυ                    | 55.000<br>55.000                       | 1 0 0                         |
| SEMIVOLATILES  | 1,2,4-Trichlorobenzene                                    | 1.4E+02             | 0.083       | 0.17                   | NE                   | NE                      | 1.42+02                 | 51.500                            | Ũ                     | 57.000                        |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700 1                                  | ο Ū U                      | 0.187 1                                       |                  | 3.460 2                                 |                       | 0,160                                  | 1 1 1                         |
| SEMIVOLATILES  | 1,2-Dichlorobenzone<br>1,3-Dichlorobenzone                | 5.5E+01<br>5.1E+00  | 0.083       | 0.17<br>0.17           | NE.                  | NE                      | 5.6E+01<br>5.1E+00      |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700 1                                  | õ ŭ ŭ                      | 0.187   | ΰŭ               | 3,460 2                                 | งบับ                  | 0.180                                  | įūū                           |
| SEMIVOLATILES  | 1.4-Dichlorobenzene                                       | 2.7E+01             | 0.083       | 0.17                   | NE                   | NE                      | 2.7E+01                 |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700 1                                  | 0 U U<br>0 U U             | 0.187 1<br>0.187 1                            | ្រែប             | 3.460 2<br>3,460 2                      | 0 1 0                 | 0.180                                  | 1 U U<br>1 U U                |
| SEMIVOLATILES  | 2,4,6-Trichlorophenol                                     | 4.5E+03             | 0.083       | 0.17                   | NE                   | NE                      | 4.5E+01                 |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700 1                                  | ο Ū Ū                      | 0.167   |                  | 3,460 2                                 | 0 0 0                 | 0.180                                  | 1 0 0                         |
| SEMIVOLATILES  | 2,4-Dichlorophenol<br>2.4-Dimethylopenol                  | 4.7E+01<br>3.1E+02  | 0.063       | 0.17                   | NE                   | NË                      | 4.7E+01<br>3.1E+02      |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700 1                                  | តំបំ ដំ                    | 0.187   | i ŭ ŭ            | 3.460 2                                 | ουŭ                   | 0.180                                  | របីបី                         |
| SEMIVOLATILES  | 2.4-Dinitrophenol   | 3.1E+01             | 0.330       | 0.83                   | NE                   | NE                      | 3.1E+01                 |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 8.500 1                                  |                            | 0.937 1                                       | 1 U U<br>1 U U   | 17,300 2                                | 0 U U<br>0 U U        | 0.899<br>0.180                         | 1 0 0                         |
| SEMIVOLATILES  | 2,5-Dinitrololuene  | 7.2E-01<br>7,2E-01  | 0.063       | 0.17                   | NE                   | NE                      | 7.2E-01                 |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700 1                                  | ο Ū Ū                      | 0.187   | 1 0 0            | 3.460 2                                 | 0 0 0                 | 0.180                                  | 1 0 0                         |
| SEMIVOLATILES  | 2-Chloronaphthalene<br>2-Chloronbenol                     | 1.1E+03<br>1.1E+02  | 0,083       | 0.17                   | NE                   | NE                      | 1.1E+03<br>1.1E+02      |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700 1                                  | 0 U U                      | 0.157   | របរ              | 3.460 2                                 | ο ŭ ŭ                 | 0.160                                  | ίŬŬ                           |
| SEMIVOLATILES  | 2-Melhyinaphthalene                                       | 5.5E+01             | 0.083       | 0.17                   | NE                   | NE                      | 5.5E+01                 |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700 1                                  | 8 U U<br>16 U U            | 0.187   | 1 0 0            | 3.460 2<br>3.460 2                      | 0 U U<br>0 U U        | 0.150                                  | 1 1 1                         |
| SEMIVOLATILES  | 2-Methylphenol<br>2-Nitroaniline                          | 4.7E+02             | 0.083       | 0.17                   | NE                   | NE                      | 4.7E+02                 |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 8.500                                    | ด้ นี้ นี่                 | 0.937   | ŪŪ               | 17.300 2                                | 0 0 0                 | 0.899                                  | 1 0 0                         |
| SEMIVOLATILES  | 2-Nitrophenol<br>3.2'-Dichlerohenvidine                   | 3.1E+01             | 0.083       | 0.17                   | NE                   | NE                      | 3.1E+01<br>1.1E+00      |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 3.400 1                                  | 0 U U                      | 0.187   | ្រែប             | 6.920 2                                 | 0 0 0                 | 0.359                                  | 1 0 0                         |
| SEMIVOLATILES  | 3-Nitroaniline  | 4.7E+00             | 0.330       | 0.83                   | NE                   | NE                      | 4.7E+00                 | 1                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 8.500 1<br>8.500 1                       | р<br>U<br>U<br>U<br>U<br>U | 0.937   | ្រែប             | 17.300 2<br>17.300 2                    | 0 U U<br>0 U U        | 0.899<br>0.899                         | 1 U U<br>1 U U                |
| SEMIVOLATILES<br>SEMIVOLATILES                                 | 4,o-Distro-2-methylphenol<br>4-Bromophenyl phonyl ether   | 3.1E+01<br>3.1E-02  | 0.330       | 0.63                   | NE                   | NE                      | 1.7E-01                 | 1                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 0.868                                    | οŪŪ                        | 0.096   | 1 Ū Ŭ            | 1750 2                                  | 0 U Ū                 | 0.091                                  | 1 Ŭ Ū<br>1 D II               |
| SEMIVOLATILES<br>SEMIVOLATILES                                 | 4-Chloro-3-methylphenol<br>4-Chloropalline                | 7.7E+01<br>6.2E+01  | 0.083       | 0.17<br>0.17           | NE<br>NE             | NE<br>NE                | 7.7E+01<br>6.2E+01      | 1                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700 1                                  |                            | 0.187   | 1 0 0            | 3,460 2                                 | õ ŭ ŭ                 | 0.180                                  | រប័រ                          |
| SEMIVOLATILES  | 4-Chlorophenyl phenyl ether                               | 2.8E-02             | 0.083       | 0.17                   | NE                   | NE                      | 1.7E-01                 | 1                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 0.868 1                                  |                            | 0.096   | 1 U U<br>1 U U   | 1,759 2<br>3,460 2                      | 0 U U<br>0 U U        | 0.091<br>0.150                         | 1 0 0                         |
| SEMIVOLATILES  | 4-Meutytphenol<br>4-Nitroaniline                          | 1.3E+01             | 0.003       | 0.83                   | NE                   | NE                      | 1.3E+01                 |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 8.500                                    | 0 Ū Ū                      | 0.937   | 1 បំ បំ<br>1 ព អ | 17,300 2                                | ου<br>υν              | 0.899                                  | 1 0 0                         |
| SEMIVOLATILES<br>SEMIVOLATILES                                 | 4-Nitrophenoi<br>Azenaphthene                             | 3.1E+01<br>8.2E+02  | 0.330       | 0.63<br>0.17           | NE<br>NE             | NE<br>NE                | 3.1E+01<br>8.2E+02      | 1                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700                                    | ΰυυ                        | 0.187   | iŭŭ              | 3.460 2                                 | ត៍ បី បី              | 0.150                                  | iŭŭ                           |
| SEMIVOLATILES  | Acenaphthylene  | 8.2E+02             | 0.083       | 0,17                   | NE                   | NE                      | 8.2E+02                 | 1                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700 1<br>1.700 1                       | លប្រ<br>លេបប               | 0.187<br>0.187                                | 1 U U<br>1 U U   | 3,460 2<br>3,460 2                      | υυα                   | 0.180<br>0.180                         | 1 0 0                         |
| SEMIVOLATILES  | Benzo(a)anthracene  | 6.3E-01             | 0.0825      | 0.165                  | 0.02                 | NE                      | 6.3E-01                 |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700                                    | α ὑ ὑ<br>ω υ υ             | 0.187   | 1 U Ŭ<br>1 U Ŭ   | 3,460 2                                 | งบบ                   | 0,180                                  | 1 11 U                        |
| SEMIVOLATILES<br>SEMIVOLATILES                                 | Benzo(a)pyrene<br>Benzo(b)fiuoranihene                    | 6.3E-02<br>6.3E-01  | 0.0825      | 0.165<br>0.165         | 0.02<br>0.02         | NE                      | 1.7E-01<br>6.3E-01      | 1                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700                                    | เงิบับ                     | 0.187   | ίŭΰ              | 3,460 2                                 | จับ บ                 | 0.180                                  | 1 1 1                         |
| SEMIVOLATILES  | Berizo(ghi)perylene                                       | 4.1E+02             | 0.0825      | 0.165                  | 0,01                 | NE                      | 4.1E+02                 | 1                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700 <sup>-</sup><br>1.700 <sup>-</sup> | 0 U U<br>0 U U             | 0.187<br>0.187                                | 1 0 0            | 3.460 2<br>3.460 2                      | . U U 0               | 0.180<br>0.180                         | 1 U U<br>1 U U                |
| SEMIVOLATILES  | Benzolk)suoraninene<br>Benzolc Acid                       | 6.2E+00             | 0.0825      | 0.825                  | NE                   | NE                      | 6.2E+04                 |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 8.500                                    | ឲ្រប៉                      | 0.937   | 1 0 0            | 17.300 2                                | ייטמ                  | 0.899                                  | 1 1 1                         |
| SEMIVOLATILES<br>SEMIVOLATILES                                 | Benzyl Alcohol<br>bis/2-Chiccosthory/methane              | 4.7E+03<br>2.9E-01  | 0.0825      | 0.165<br>0.165         | NE                   | NE                      | 4.7E+03<br>2.9E-01      |                                   |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700                                    |                            | 0.187   | 1 0 0            | 3.460 2                                 |                       | 0.180                                  | 1 0 0                         |
| SEMIVOLATILES  | bis(2-Chioroethyl)ether                                   | 1.5E-01             | 0.0825      | 0.165                  | NE                   | NE                      | 1.7E-01                 | 1                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1 700                                    | ២ ២ ២<br>២ ២ ៕             | 0.096   | មេបុ<br>មេបូប    | 1.759 2<br>3.460 2                      | 0 U U<br>0 U U        | 0.091<br>0.180                         | 1 U U                         |
| SEMIVOLATILES<br>SEMIVOLATILES                                 | bis(2-Chiorolsopropyl)ether<br>bis(2-Elhylhexyl)phthalate | 4.8E+00<br>1.7E+01  | 0.0825      | 0.165                  | NE                   | NE                      | 4.0E+00<br>1.7E+01      | 1                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700                                    | 0 0 0                      | 0.167   | េរិប័            | 3,460                                   | ខ្លុំរើខ្ល            | 0.180                                  | 1 0 0                         |
| SEMIVOLATILES  | Butyl benzyl phiha/ale<br>Chrysena                        | 3.1E+03<br>6.3E+01  | 0.0825      | 0.165                  | NE<br>0.02           | NE                      | 3.1E+03<br>6.3E+01      | I                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1,700                                    | 0 0 U                      | 0,187<br>0.187                                | <br>             | 3.450 2<br>3.450 2                      | ະ<br>ເບັບ             | 0.180                                  | 1 V U                         |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene                                    | 6.3E-02             | 0.0825      | 0.165                  | NE                   | NE                      | 1.7E-01                 | 1                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1 700                                    |                            | 0.096   | ៖ ប្រដ<br>ប្រដ   | 3,450 2                                 | 0 U U<br>0 U U        | 0.091<br>0.180                         | 1 0 0                         |
| SEMIVOLATILES  | Diethyl phihaiste   | 6.2E+01<br>1.2E+04  | 0.0825      | 0,165                  | NE                   | NE                      | 1.2E+01                 | 1                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700                                    | i u u                      | 0.187   | ιŭŬ              | 3.460 2                                 | ចំរើម                 | 0.180                                  | i ŭ ŭ                         |
| SEMIVOLATILES<br>SEMIVOLATILES                                 | Dimelhyl phthalate<br>di-n-Butyl ohthalate                | 1.2E+04<br>1.6E+03  | 0.0825      | 0.165                  | NE<br>NE             | NE<br>NE                | 1.2E+04<br>1.6E+03      | ł                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700 ·<br>1.700 ·                       | 0 0 0                      | 0.167   | 1 U U<br>1 U U   | 3.460 a                                 |                       | 0.180                                  | 1 0 0                         |
| SEMIVOLATILES  | di-n-Octy/ phthalate                                      | 3.1E+02             | 0.0825      | 0.165                  | NE                   | NE                      | 3.1E+02                 | 1                                 | •                     |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             | 1.700 <sup>-</sup>                       | น U 0<br>ย U 0             | 0,167<br>0.187                                | 1 U U<br>1 U U   | 3.460 â<br>3.460 â                      | 8 U U<br>8 U U        | 0.180                                  | 1 U U<br>1 U U                |
| OCMINULATILES  | E INVESTIGATIONS  | 0.02702             | 0.0020      | V.100                  | W. 44                | 1444                    | 4.45.744                | 4                                 |                       |                               |                             |                                   |                          |                                 |                          |                                 |                              |                                 |                             |  |                            |   |                  |   |                       |  |                               |

## Table 4-57 Comparison of Chemical Concentrations In Soil to Risk-Based Screening Values WRSump-015

· · · ·

. .

Shaw Environmental, Inc. 00066519

| (SUMP) = WRSUMP01<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>DEPTH<br>SAMPLE_PURPOSE | 5   | TCEQ<br>Risk-Based<br>Screening<br>Value | Melhod<br>Detection | Method      | Backg<br>Concentral<br>(95% UPI<br>Surface | round<br>lions in Soll<br>L. mg/kg)<br>Subsurface | Applicible<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP033-SB01<br>35-SMP33-SB01-01<br>9/11/2006<br>0 -0.5 Ft<br>REG | 35SUMP033-SB01<br>35-SMP33-SB01-02<br>9/11/2006<br>4.5 - 5 Fl<br>REG | 35SUMP034-SB01<br>35-SMP034-SB01-02<br>9/20/2006<br>3 - 4 FI<br>REG | 35SUMP034-SB01<br>35-SMP34-SB01-01<br>9/11/2006<br>0 - 0.5 Ft<br>REG | 35SUMP034-SB01<br>35-SMP34-SB01-01-QC<br>9/11/2006<br>0 - 0.5 Ft<br>FD | 355UMP034-SB02<br>35-SMP034-SB02-02<br>9/20/2006<br>3 - 4 Ft<br>REG | WRS015-SB01<br>WRS-015-SB01-01<br>9/15/2006<br>0 - 0.5 Ft<br>REG | WRS015-8801<br>WRS-015-8801-02<br>9/15/2005<br>3 - 4 Ft<br>REG | WRS015-SB02<br>WRS-15-SB02-01<br>9/15/2006<br>0 - 1 Fl<br>REG | WRS015-SB02<br>WRS-15-SB02-02<br>9/15/2006<br>3 • 4 Ft<br>REG |
|--|---|--|---------------------|-------------|--|---|---|---|--|---|--|--|---|--|--|---|---|
| Test Group   | Paramelos (Linite = ma/ka)                      | (899)6*                                  | imit (MDL)          | Limit (MOL) | 0.05 Ft                                    | 15.25 Ft  | Value   | Result DILLO VO   | Result DIL LO VO   | Result DIL LO VO  | Result DIL LO VO   | Result DIL LO VO   | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LO VO   | Result DIL LO VQ  | Result DIL LO VO  |
| SEMIVOLATILES  | Fluorene  | 5.5E+02                                  | 0.0825              | 0.165       | NE   | NE  | 5.5E+02                                       |   |  |   |  |  |   | 1.700 10 U U   | 0.187 1 U U  | 3.460 20 U U  | 0.180 1 U U   |
| SEMIVOLATILES  | Hexachlorobenzane                               | 2.5E-01                                  | 0.0825              | 0.165       | NE   | NE  | 2.58-01                                       |   |  |   |  |  |   | 1.700 10 U U   | 0.167 1 U U  | 3.460 20 U U  | 0.180 1 U U   |
| SEMIVOLATILES  | Hexachlorobuladiene                             | 1.6E+00                                  | 0.0825              | 0.165       | NE   | NE  | 1.6E+00                                       |   |  |   |  |  |   | 1.700 10 U U   | 0.167 1 U U  | 3,450 20 U U<br>3,460 20 U U                                  | 0.120 1 0 0   |
| SEMIVOLATILES  | Hexachlorocyclopentaciane                       | 1.0E+00                                  | 0.0825              | 0.165       | NE   | NE  | 1.0E+00                                       |   |  |   |  |  |   | 1700 10 0 0  | 0.167 1 1 1  | 3.460 20 U U  | 0.180 1 U U   |
| SEMIVOLATILES  | hexectionenerse                                 | 5.0ETU1                                  | 0.0025              | 0.165       | 0.01                                       | NE  | 635-01  |   |  |   |  |  |   | 1.700 10 U U   | 0.167 1 U U  | 3.460 20 U U  | 0,180 1 U U   |
| SEMIVOLATILES  | Isochoroca                                      | 5.2E+02                                  | 0.0825              | 0.165       | NE   | NE  | 5.2E+02                                       |   |  |   |  |  |   | 1.700 10 U U   | 0.187 1 U ป  | 3.460 20 U U  | 0.180 1 U U   |
| SEMIVOLATILES  | Nephthalene                                     | 1.6E+01                                  | 0.0825              | 0.165       | NE   | NE  | 1.8E+01                                       |   |  |   |  |  |   | 1.700 10 U U   | 0.187 1 U U  | 3.460 20 U U  | 0.180 1 U U   |
| SEMIVOLATILES  | Nitrobenzene                                    | 6.5E+00                                  | 0.0825              | 0.165       | NE   | NE  | 6.5E+00                                       |   |  |   |  |  |   | 1,700 10 0 0   | 0.187 1 U U  | 3,460 20 0 0  | 0.001 1 0 0   |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamina                      | 4.1E-02                                  | 0.0825              | 0.165       | NE   | NE  | 1.7E-01<br>5 95401                            |   |  |   |  |  |   | 1.700 10 U U   | 0.187 1 U U  | 3.460 20 U U  | 0.180 1 U U   |
| SEMIVOLATILES  | Pentachlorpohenol                               | 3.0E+00                                  | 0.3300              | 0.825       | NE   | NE  | 3.0E+00                                       |   |  |   |  |  |   | 8.500 10 U U   | 0.937 1 U U  | 17.300 20 U U   | 0.899 1 U U   |
| SEMIVOLATILES  | Phonanthrene                                    | 4.1E+02                                  | 0.0825              | 0,165       | NE   | NE  | 4.1E+02                                       |   |  |   |  |  |   | 1.700 t0 U U   | 0.187 1 U U  | 3.460 20 U U  | 0.160 t U U   |
| SEMIVOLATILES  | Phenol  | 4.7E+03                                  | 0.0825              | 0.165       | NE   | NE  | 4.7E+03                                       |   |  |   |  |  |   | 1.700 10 U U   | 0.187 1 U U  | 3.460 20 0 0  | 0,150 1 0 0   |
| SEMIVOLATILES  | Pyrana  | 4.1E+02                                  | 0.0825              | 0.165       | 0.02                                       | NE.   | 4.1E+02                                       | 05 000 1  | 87.000 (   | 81.000 1  | 91.400 1   | 92 500 1   | 64,600 1  | 95300 1  | 86,000 1   | 93,800 1  | 90.300 1  |
| SOUDS<br>VOLATILES   | 1 1 1 2 Telraphoroethene                        | 5 2E+00                                  | 0.0005              | 0.005       | NE   | NE  | 5 2E+00                                       | 80.800 f  | 0.005 1 U  | 0.007 1 U   | 31.400 1   |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | 1,1,1-Trichkorgelhane                           | 2.3E+02                                  | 0.0005              | 0.005       | NE   | NE  | 2.3E+02                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | 1,1,2,2-Tetrachlorpethene                       | 5.1E-01                                  | 0.0005              | 0.005       | NE   | NE  | 5.1E-01                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | 1,1,2-Trichloroethane                           | 9.7E-01                                  | 0.0005              | 0.005       | NE   | NE  | 9.7E-01                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 0   |  | 0.007 1 1 1  |   | 0.005 1 1 1   |
| VOLATILES  | 1,1-Dichloroethane                              | 5.9E+01<br>2.7E+01                       | 0.0010              | 0.005       | NE   | NE  | 2.9E+01<br>2.7E+01                            |   | 0.005 1 U  | 0.007 1 1   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | 1.1-Dichloropropene                             | 9.9E-01                                  | 0,0005              | 0.005       | NE   | NE  | 9.9E-01                                       |   | 0.005 t U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 \$ U U   |   | 0.005 1 U U   |
| VOLATILES  | 1,2,3-Trichlorobenzene                          | 4.2E+01                                  | 0.0005              | 0.005       | NE   | NE  | 4.2E+01                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | 1,2,3-Trichloroptopane                          | 9.2E-02                                  | 0.0010              | 0.005       | NE.  | NE  | 9.2E-02                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.005 1 U   |  | 0.007 1 0 0  |   | 0.005 1 12 11   |
| VOLATILES<br>VOLATILES   | 1,2,4-Trichlorobenzene<br>1,2,4-Trimelbehanzene | 1.45+02                                  | 0.0005              | 0.005       | NE   | NE  | 9.65+00                                       |   | 0.005 1 1  | 0.007 1 1   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | 1,2-Dibromo-3-chioropropane                     | 3.5E-01                                  | 0.0020              | 0.005       | NE   | NE  | 3.55-01                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.005 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | 1,2-Dibromoethane                               | 5.3E-02                                  | 0.0005              | 0.005       | NE   | NE  | 5.3E-02                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | 1,2-Dichlorobenzene                             | 5.6E+01                                  | 0.0005              | 0.005       | NE   | NE  | 5.6E+01                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.005 1 U   |  | 0.007 1 0 0  |   | 0.005 1 0 0   |
| VOLATILES  | 1,2-Dichloroelhene                              | 2.7E-01                                  | 0.0005              | 0.005       | NE   | NE  | 2.75-01                                       |   | 0.005 1 U  | 0.007 3 0   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | 1.2-Dimethylbenzena (o-Xy)                      | 3 35+03                                  | 0.0005              | 0.005       | NE   | NË  | 3.3E+03                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | 1,3,5-Trimethylbenzane                          | 8.35+00                                  | 0.0005              | 0.005       | NE   | NE  | 8.3E+00                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 t U   |  | 0,007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | 1,3-Dichlorobenzene                             | 5.1E+00                                  | 0.0005              | 0.005       | NE   | NE  | 5.1E+00                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | 1,3-Dichloropropane                             | 3.0E+00                                  | 0.0005              | 0.005       | NE   | NE  | 3.0E+00                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 0 0  |   | 0.005 1 1 1   |
| VOLATILES  | 2.2-Dichloropenzene                             | 1.7E+00                                  | 0.0005              | 0.005       | NE   | NE  | 1.7E+00                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | 2-Bulanone                                      | 2.6E+03                                  | 0,0025              | 0.010       | NE   | NE  | 2.6E+03                                       |   | 0.011 1 U  | 0.014 1 U   |  |  | 0.012 1 U   |  | 0.013 1 U U  |   | 0.010 1 U U   |
| VOLATILES  | 2-Chloroelhyl vinyl elher                       | 2.1E-01                                  | 0.0020              | 0.010       | NE   | NE  | 2.1E+01                                       |   | 0.011 1 U  | 0.014 1 U   |  |  | 0.012 1 U   |  | 0.013 1 U U  |   | 0.010 1 0 0   |
| VOLATILES  | 2-Chlorololuene                                 | 1.5E+02                                  | 0,0005              | 0.005       | NE   | NE 1  | 1.5E+02                                       |   | 0.005 1 0  | 0.007 1 0   |  |  | 0.008 1 0   |  | 0.013 1 0 0  |   | 0.010 1 U U   |
| VOLATILES  | 2-nexarione<br>4-Chlorololuane                  | 345-01                                   | 0.00025             | 0.005       | NE   | NE  | 3.4E-01                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.005 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | Acetone   | 1.7E+02                                  | 0.0050              | 0.010       | NE   | NE  | 1.7E+02                                       |   | 0.011 1 U  | 0.014 1 U   |  |  | 0.012 1 U   |  | 0.013 1 U U  |   | 0.010 1 U U   |
| VOLATILES  | Benzene   | 8.8E-01                                  | 0.0005              | 0.005       | NE   | NE  | 8.8E+01                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 0 0  |   | 0.005 1 U U   |
| VOLATILES  | Bromobenzene                                    | 1,1E+01                                  | 0.0005              | 0.005       | NE   | NE  | 1.1E+01                                       |   | 0,005 1 U  | 0.007 1 1   |  |  | 0.005 1 0   |  | 0.007 1 11 U   |   | 0.005 1 U U   |
| VOLATILES  | Bromochioromethane                              | 1.05+01                                  | 0.0005              | 0.005       | NE   | NE  | 1.0E+01                                       |   | 0.005 1 1  | 0.007 1 U   |  |  | 0.005 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | Bromoform                                       | 3.4E+01                                  | 0,0005              | 0.005       | NΕ   | NE  | 3.4E+01                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.005 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | Bromomelihane                                   | 3.5E-01                                  | 0.0010              | 0.010       | NE   | NE  | 3.5E-01                                       |   | 0.011 1 U  | 0.014 1 U   |  |  | 0.012 1 U   |  | 0.013 1 U U  |   | 0.010 1 U U   |
| VOLATILES  | Carbon disulfide                                | 1.0E+02                                  | 0.0005              | 0.005       | NE   | NE.   | 1.0E+02                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 0   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | Caroon tetrachionoe<br>Chiorobeozene            | 3.5E-01<br>4.0E+01                       | 0.0005              | 0.005       | NE   | NE  | 4.0E+01                                       |   | 0.005 1 1/   | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | Chloroethane                                    | 1.1E+03                                  | 0.0010              | 0.010       | NE   | NE  | 1.1E+03                                       |   | 0.011 1 U  | 0.014 1 U   |  |  | 0,012 1 U   |  | 0.013 1 U U  |   | 0.010 I U U   |
| VOLATILES  | Chloraform                                      | 3.1E-01                                  | 0.0005              | 0.005       | NE   | NË  | 3.1E-01                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 t U   |  | 0,007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | Chloromelhane                                   | 2.3E-01                                  | 0.0020              | 0.010       | NE   | NE  | 2.3E-01                                       |   | 0.011 1 U  | 0.014 1 U   |  |  | 0.012 1 U   |  | 0,013 1 0 0  |   | 0.005 1 U U   |
| VOLATILES  | cis-1,2-Dichloroeinene                          | 1.2E+02                                  | 0.0005              | 0.005       | NE   | NE  | 1.25+02                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | Dibromochloromethane                            | 7.6E+00                                  | 0.0005              | 0.005       | NE   | NE  | 7.6E+00                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.005 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | Olbromomelhane                                  | 1.9E+01                                  | 0.0005              | 0.005       | NE   | NE,   | 1.9E+01                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.005 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | Dichlorodifiuoromelhane                         | 2.2E+02                                  | 0.0010              | 0.010       | NE   | NE  | 2.25+02                                       |   | 0.011 1 U  | 0.014 1 U   |  |  | 0.012 1 1   |  | 0.013 1 0 0  |   | 0.005 1 11 11   |
| VOLATILES  | zinyibénzené<br>Havachlorobulatiene             | 4.5E+02                                  | 0.0005              | 0.005       | NE   | NE  | 4.36+02                                       |   | 0.005 1 0  | 0.007 1 0   |  |  | 0.005 1 1   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | IsoprocylbenZene                                | 5.4E+02                                  | 0.0005              | 0.005       | NE   | NE  | 5.4E+02                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.005 I U   |  | 0.007 1 U U  |   | 0.005 1 U Ū   |
| VOLATILES  | m p-Xvlenes <sup>g</sup>                        | 23E+02                                   | 0.0005              | 0.005       | NF   | NE  | 2.3E+02                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.005 1 U   |  | 0.007 1 U U  |   | 0.005 1 Ư U   |
| VOLATILES  | Methyl isobulyl ketone                          | 1.3E+03                                  | 0.0025              | 0.01        | NE   | NE  | 1.3E+03                                       |   | 0.011 1 U  | 0,014 1 U   |  |  | 0.012 1 U   |  | 0.013 1 U U  |   | 0.010 1 U U   |
| VOLATILES  | Methylene chloride                              | 8.7E+00                                  | 0.0010              | 0.005       | NE   | NE  | 8.7E+00                                       |   | 0.005 1 U  | 0.004 1 J B   |  |  | 0.002 1 J B   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | Nachthalene                                     | 1.8E+01                                  | 0.0005              | 0.01        | NE   | NE  | 1.8E+01                                       |   | 0.011 1 U  | 0.014 1 U   |  |  | 0.012 1 0   |  | 0.013 1 0 0  |   | 0.005 1 U U   |
| VOLATILES  | A-DUTYLBENZENE<br>A-DROPYLBENZENE               | 2.7E+02<br>3.2E+02                       | 0.0005              | 0.005       | NE   | NE  | 3.2E+02                                       |   | 0.005 1 0  | 0.007 1 1   |  |  | 0.006 1 1   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | PISOPROPYLTOLUENE                               | 4.2E+02                                  | 0.0005              | 0.005       | NE   | NE  | 4.2E+02                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | SEC-BUTYLBENZENE                                | 3.0E+02                                  | 0.0005              | 0.005       | NE   | NE  | 3.0E+02                                       |   | 0,005 1 U  | 0.007 1 U   |  |  | 0.005 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | Styrene   | 1.3E+03                                  | 0.0005              | 0.005       | NE   | NE  | 1.3E+03                                       |   | 0,005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 0 0  |   | 0.005 1 0 0   |
| VOLATILES  | 1911-BUTYLBENZENE                               | 2.6E+02<br>6.0E+00                       | 0.0005              | 0.005       | NE   | NE  | 2.6E+02<br>6.0E+00                            |   | 0.005 1 1  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | Toluene   | 1.12+03                                  | 0.0005              | 0.005       | NE   | NE  | 1.1E+03                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | trans-1,2-Dichloroethene                        | 1.4E+02                                  | 0.0005              | 0.005       | NE   | NE  | 1.4E+02                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 U U  |   | 0.005 1 U U   |
| VOLATILES  | Irans-1,3-Dichloropropene                       | 1.8E+00                                  | 0.0005              | 0.005       | NE   | NE  | 1.8E+00                                       |   | 0.005 1 U  | 0.007 1 U   |  |  | 0.006 1 U   |  | 0.007 1 0 0  |   | 0.005 1 0 0   |
| VOLATILES  | rinchioroethene<br>Trichlorofluoromethane       | 3./C+00<br>2.6E+02                       | 0.0005              | 0.005       | NE   | NE  | 2.6E+02                                       |   | 0.011 1 1  | 0.007 1 0   |  |  | 0.012 1 U   |  | 0.013 1 0 0  |   | 0.010 1 U U   |
| VOLATILES  | Vinvi acetate                                   | 5.7E+01                                  | 0.0010              | 0.01        | NE   | NE  | 5.7E+01                                       |   | 0.011 1 U  | 0.014 1 U UJ  |  |  | 0.012 i U UJ  |  | 0.013 1 U U  |   | 0.010 1 U U   |
| VOLATILES  | Vinvl chloride                                  | 3.6E-02                                  | 0.0010              | 0.01        | NE   | NE  | 3.6E-02                                       |   | 0.011 1 U  | 0.014 1 U   |  |  | 0.012 1 U   |  | 0.013 1 U U  |   | 0.010 1 U U   |

VOLATILES Vinvi chloride : Footnotes are shown on cover page to Tables Section.

-

00066520

#### Table 4-58 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-016

| [SUMP] = WRSL<br>LOCATION_CO<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURP | JMP016<br>DDE<br>POSE      | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>12, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP10<br>35-SMP107-<br>9/14/20<br>0 - 0.5<br>REG | 7-SB01<br>SB01-01<br>X06<br>Ft | 35SUM<br>35-SMP1<br>9/1<br>2.5<br>F | 107-SB0<br>07-SB01-<br>/2006<br>- 3 Ft<br>EG | 01<br>-02 | 35SUMP1<br>35-SMP10<br>9/14/<br>0.0 -C<br>RE | 107-SB02<br>7-SB02-01<br>2006<br>).5 Ft<br>EG | 35SUMP<br>35-SMP10<br>9/14/<br>2.5 -<br>RE | 07-\$802<br>7-\$802-02<br>2006<br>3 Ft<br>:G | 35\$UMF<br>35-SMP107<br>9/14<br>2.5 | -107-SB02<br>7-SB02-02-1<br>1/2006<br>3 Ft<br>FD | oc | WRS016-SB01<br>WRS016-SB01-01<br>9/14/2006<br>0.5 - 1.5 Ft<br>REG | WRS016-SB02<br>WRS016-SB02-01<br>9/14/2005<br>0.5 - 1.5 Ft<br>REG |
|--|----------------------------|--|---------------------|------------------------|---|---|--|---|--------------------------------|-------------------------------------|--|-----------|--|---|--|--|-------------------------------------|--|----|---|---|
| Test Group   | Parameter (Linits = mo/kg) | (RBSV)*                                  | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DI   | L LQ VO                        | Result                              | DIL LQ                                       | VQ        | Result C                                     | DIL LO V                                      | /Q Result D                                | IL LO V                                      | Q Result D                          | <u>nL LO </u>                                    | VQ | Result DIL LQ VC  | Result DIL LO VO  |
| FYDLOSIVES   | 135 Trinitrobenzene        | 4.65E+02                                 | 0.1                 | 0.25                   | NE                                      | NÊ  | 4.7E+02                                      | 0.243 1   | Ų                              | 0.245                               | 1 U  |           | 0.239  | 1 U   | 0.242                                      | 1 U  | 0.245                               | 1 U  |    |   |   |
| EXPLOSIVES   | 1.3-Dinitmberzene          | 1.555+00                                 | 0.1                 | 0.25                   | NE                                      | NE  | 1.6E+00                                      | 0.243 1   | υ                              | 0.245                               | 1 U  |           | 0.239  | 1 U   | 0.242                                      | 1 U  | 0.245                               | 1 U  |    |   |   |
| EXPLOSIVES   | 2 A 6-Trinitrotoluege      | 7.745+00                                 | 0.1                 | 0.25                   | NE                                      | NE  | 7.7E+00                                      | 0.243 1   | υ                              | 0.245                               | 1 U  |           | 0.239  | 1 U   | 0.242                                      | 1 U  | 0.245                               | 1 0  |    |   |   |
| EXPLOSIVES   | 2 A-Dinitratoluene         | 7 205-01                                 | 0.1                 | 0.25                   | NE                                      | NE  | 7.2E-01                                      | 0.243 1   | U                              | 0.245                               | 1 U  |           | 0.239  | 1 U   | 0.242                                      | 1 0  | 0.245                               | 1 0  |    |   |   |
| EXPLOSIVES   | 2.6-Dinitrotoluene         | 7.20E-01                                 | 0.1                 | 0.26                   | NE                                      | NE  | 7.2E-01                                      | 0.252 1   | U                              | 0.255                               | 1 U  |           | 0.249  | 1 U   | 0.251                                      | t U  | 0.255                               | 1 0  |    |   |   |
| EXPLOSIVES   | 2.4 mino.4 6-dinitmtoluene | 2.58E+00                                 | 0.1                 | 0.26                   | NE                                      | NE  | 2.6E+00                                      | 0.252 1   | Ų                              | 0.255                               | 1 U  |           | 0.249  | 1 U   | 0.251                                      | 1 U  | 0.255                               | 1 U  |    |   |   |
| EXPLOSIVES   | 4-Amino-2 6-dinitrotoluene | 2 58E+00                                 | 0.1                 | 0.26                   | NE                                      | NE  | 2.6E+00                                      | 0.252 1   | U                              | 0.255                               | 1 U  |           | 0.249  | 1 U   | 0.251                                      | 1 U  | 0.255                               | 1 U  |    |   |   |
| EXPLOSIVES   | HMY                        | 2.23E+02                                 | 0.1                 | 2.20                   | NE                                      | NE  | 2.2E+02                                      | 2.140 1   | υ                              | 2.160                               | 1 U  |           | 2.110  | 1 U   | 2.130                                      | 1 U  | 2.160                               | 1 U  |    |   |   |
| EXPLOSIVES   | m-Nitrololuene             | 4 4017+01                                | 0.1                 | 0.25                   | NE                                      | NE  | 4.4E+01                                      | 0.243 1   | U                              | 0.245                               | 1 U  |           | 0.239  | 1 U   | 0.242                                      | 1 U  | 0.245                               | 1 U  |    |   |   |
| EXPLOSIVES   | Nitrobenzene               | 6.49E+00                                 | 0.1                 | 0.26                   | NE                                      | NE  | 6.5E+00                                      | 0.252 1   | U                              | 0.255                               | 1 U  |           | 0.249  | 1 U   | 0.251                                      | 1 0  | 0.255                               | 1 U  |    |   |   |
| EXPLOSIVES   | n-Nitrotolisene            | 4.67E+01                                 | 0.1                 | 0.25                   | NE                                      | NE  | 4.7E+01                                      | 0.243 1   | U U                            | 0.245                               | 1 U  |           | 0.239  | 1 U   | 0.242                                      | 1 U  | 0.245                               | 1 U  |    |   |   |
| EXPLOSIVES   | n-Nitrataluene             | 4 37E+01                                 | 0.1                 | 0.25                   | NE                                      | NE  | 4,4E+01                                      | 0.243 1   | U                              | 0.245                               | 1 0  |           | 0.239  | 1 U   | 2.920                                      | 1  | 0.245                               | 1 U  |    |   |   |
| EXPLOSIVES   | PDX                        | 3.59E+00                                 | 0.1                 | 1.00                   | NE                                      | NE  | 3.6E+00                                      | 0.971 1   | U                              | 0.980                               | 1 U  |           | 0.957  | 1 U   | 0.966                                      | 1 0  | 0.980                               | 1 0  |    |   |   |
| EXPLOSIVES   | Tetrol                     | 1.55E+02                                 | 0.2                 | 0.65                   | NE                                      | NE  | 1.6E+02                                      | 0.631 1   | U U                            | 0.637                               | 1 U  |           | 0.622  | 1 U   | 0,628                                      | 1 U  | 0.637                               | 1 0  |    |   | 5000 000 A  |
| METALS   | Alumicum                   | 1.55E+04                                 | 10.000              | 20.00                  | 16300                                   | 2.08E+04  | 1.6E+04                                      | 4640.000 1  |                                | 4900.000                            | 1  |           | 7690.000                                     | 1   | 10100.000                                  | 1  | 8460.000                            | 1  |    | 7340.000 1  | 8630.000 1  |
| METALS   | Antimony                   | 7.25E+00                                 | 0.500               | 0.10                   | 0.94                                    | 1.6   | 7.3E+00                                      | 0.055 1   | U U                            | 0.106                               | 1 U  |           | 0.074  | 1 J   | J 0.108                                    | 1 U  | 0.112                               | 1 U  |    | 0.059 1 J JL  | 0.105 1 0 0.00  |
| METALS   | Arsenic                    | 2 00E+01                                 | 0.075               | 0.30                   | 4.81E+00                                | 5.54E+00  | 2.0E+01                                      | 1.250 1   |                                | 0.376                               | i  |           | 1.040  | 1   | 0,948                                      | 1  | 0.532                               | 1  |    | 0.886 1 JL  | 0.954 1 JL  |
| METALS   | Barium                     | 2.61E+03                                 | 0.075               | 0.30                   | 1.52E+02                                | 8.55E+01  | 2.6E+03                                      | 30.200  | J                              | 37.000                              | 1  | J         | 111.000                                      | 1   | J 86.100                                   | 1  | J 216.000                           | 1  | J  | 39,100 1 JH   | 75.900 1 JR   |
| METALS   | Bendlium                   | 4.56E+00                                 | 0.012               | 0.50                   | 6.45E-D1                                | 7.66E-01  | 4.6E+00                                      | 0.208   | L J J                          | 0.324                               | 1 J  | 1         | 0.349  | 1 J   | J 0.809                                    | 1  | 1.230                               | 1  |    | 0.458 1   | 0.043   |
| METALS   | Codmium                    | 5 20E+00                                 | 0.025               | 0.10                   | 1.4                                     | 0.4   | 5.2E+00                                      | 0.039   | JJ                             | 0.063                               | 1 J  | J         | 0.451  | 1   | 0.090                                      | 1 J  | J 0,163                             | 1 J  | J  | 0.060 1 J J   | 0.320 1 J J   |
| METALS   | Calcium                    | NE                                       | NA                  | NA                     | NA                                      | NA  |  | 500.000 1   | i                              | 425.000                             | 1  |           | \$890.000                                    | 1   | 1080.000                                   | 1  | 1140.000                            | 1  |    | 429.000 1   | 610.000 1   |
| METALS   | Chromium                   | 5 938+03                                 | 0.100               | 0.40                   | 2.66E+01                                | 3.01E+01  | 5,9E+03                                      | 8.410   | 1                              | 13.200                              | 1  |           | 14.100                                       | 1   | 13.000                                     | 1  | 13.100                              | 1  |    | 93.600 1 JL   | 43.300 1 JL   |
| METALS   | Cobalt                     | 1.53E+03                                 | 0 125               | 0.50                   | 7.23E+00                                | 5.61E+00  | 1.5E+03                                      | 1.570 1   |                                | 1.940                               | 1  |           | 3.090  | 1   | 4.840                                      | 1  | 6.040                               | 1  |    | 0.742 1 0   | U,841 1 JH  |
| METALS   | Copper                     | 1.02E+03                                 | 0 150               | 0.60                   | 5.55E+00                                | 9.25E+00  | 1.0E+03                                      | 1,700   | I                              | 1.220                               | 1  |           | 7.590  | 1   | 2.130                                      | 1  | 1.440                               | 1  |    | 1.170 1   | 2.230 1   |
| METALS   | Iron                       | NE                                       | NA                  | NA                     | NA                                      | NA  |  | 6710.000  | I J                            | 10800.000                           | 1  | J         | 11200.000                                    | 1   | 11300.000                                  | 1  | J 21900.000                         | 1  |    | 79000.000 5   | 61600.000 10  |
| METALS   | lead                       | 5 00E+02                                 | 0.500               | 5.00                   | 2.26E+01                                | 1.14E+01  | 5.0E+02                                      | 5,350   | I                              | 34,300                              | 1  |           | 27.400                                       | 1   | J 8.220                                    | 1  | 6.790                               | 1  | J  | 8.200 1   | 4.5/0 1   |
| METALS   | Mannasium                  | NF                                       | NA                  | NA                     | NA                                      | NA  |  | 229.000   |                                | 412.000                             | 1  |           | 856.000                                      | 1   | 938.000                                    | 1  | 829.000                             | 1  |    | 292.000 1 JF  | 693.000 1 JA  |
| METALS   | Mannanese                  | 1.68E+03                                 | 0.050               | 0.20                   | 1.25E+03                                | 2.01E+02  | 1.7E+03                                      | 48.800  | I J                            | 53.200                              | 1  | J         | 126.000                                      | 1   | J 96.000                                   | 1  | J 460.000                           | 1  | ì  | 48,600 1 J  | 12,600 1 J  |
| METALS   | Mercury                    | 1.08E-02                                 | 0.010               | 0.25                   | 8.19E-02                                | 0.36  | 2.5E-01                                      | 0.010   | I J J                          | 0.022                               | 1 J  | 1         | 0.034  | 1 J   | J 0.015                                    | 1 J  | J 0.014                             | 1 J  | J  | 0.022 1 J J   | 0.026 1 J J   |
| METALS   | Nickel                     | 1.87E+02                                 | 0.200               | 0.80                   | 6.98E+00                                | 1.16E+01  | 1.9E+02                                      | 2.270   | L                              | 3.520                               | 1  |           | 5.900  | 1   | 6.150                                      | 1  | 5.790                               | 1  |    | 1,950 1 JF  | 100,000 1 JH  |
| METALS   | Potassium                  | NE                                       | NA                  | NA                     | NA                                      | NA  |  | 221.000   | 1                              | 147.000                             | 1  |           | 258.000                                      | 1   | 251.000                                    | 1  | 184.000                             | 1  |    | 101.000 1   | 182.000 1   |
| METALS   | Selenium                   | 1.27E+02                                 | 0.100               | 0.20                   | 3.48E+00                                | 5.57E+00  | 1.3E+02                                      | 0.145   | i                              | 0.213                               | 1 U  |           | 0.319  | 1   | 0.342                                      | 1  | 0.198                               | 1 J  | J  | 0.175 1 J JL  | 0.125 1 3 36  |
| METALS   | Silver                     | 4.68E+01                                 | 0.050               | 0.20                   | 0.31                                    | 0.37  | 4.7E+01                                      | 1.500   | I U                            | 1.610                               | 1 U  |           | 1.630  | 1 U   | 1.560                                      | 1 U  | 1.660                               | 1 0  |    | 1.480 1 0   | 1,440 1 U   |
| METALS   | Sodium                     | NE                                       | NA                  | NA                     | NA                                      | NA  | - ·  | 91.100  | 1                              | 76,100                              | 1  |           | 35.800                                       | 1   | 66.800                                     | 1  | 59.500                              | 1  |    | 23.300 1  | 28.000 1  |
| METALS   | Thallhum                   | 2.05+00                                  | 0.010               | 0.02                   | 0.47                                    | NE  | 2.0E+00                                      | 0.042   | 1                              | 0.027                               | 1  |           | 0.035  | 1   | 0.041                                      | 1  | 0.043                               | 1  |    | 0.039 1   | 0.044 1   |
| METALS   | Vanadium                   | 4.84E+01                                 | 0.125               | 0.50                   | 3.21E+01                                | 4.46E+01  | 4.8E+01                                      | 15.600  | 1                              | 19.900                              | 1  |           | 20.400                                       | 1   | 22.600                                     | 1  | 30.300                              | 1  | Ŀ  | 105.000 1   |   |
| METALS   | Zinc                       | 5.94E+03                                 | 0.625               | 2.50                   | 61.6                                    | 2.02E+01  | 5.9E+03                                      | 5.950   | 1                              | 11.600                              | 1  |           | 132.000                                      | 1   | 13,500                                     | 1  | 14,200                              | 1  |    | 9.780 1 JH  | 1 34.600 7 JH   |
| SOLIDS   | Percent Solids             | NE                                       | NE                  | NE                     | NE                                      | NE  |  | 95.900  | ۱                              | 92.600                              | 1  |           | 92.400                                       | 1   | 91.200                                     | 1  | 69.400                              | 1  |    | 96.300 1  | 94.400  |

SOLIDS Percent Solids N Footnotes are shown on cover page to Tables Section.

00066521

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

#### Table 4-59

### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

WRSump-019

| [SUMP] = WRSUMP<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH | 019                        | TCEQ<br>Risk-Based | Method      | Method       | Backç<br>Concentra<br>(95% UP | round<br>tions in Soil | Applicble<br>TCEQ<br>Risk-Based | WRS019-5<br>WRS019-5E<br>9/14/20<br>0.5 - 1.5 | 5801<br>301-01<br>56<br>Ft | WRS019-<br>WRS019-SB0<br>9/14/20<br>0.5 - 1.5 | SB01<br>)1-01-Q<br>106<br>5 Ft | c        | WRS019-<br>WRS019-S<br>9/14/20<br>0.5 - 1_ | SB02<br>B02-0<br>06<br>5 Ft | 1           |
|--|----------------------------|--------------------|-------------|--------------|-------------------------------|------------------------|---------------------------------|---|----------------------------|---|--------------------------------|----------|--|-----------------------------|-------------|
| SAMPLE_PURPOSE   | <b>E</b>                   | Value              | Detection   | Quantitation | Surface                       | Subsurface             | Screening                       | REG   |                            | FD  |                                |          | REG  |                             |             |
| Test Group   | Parameter (Units = mg/kg)  | (RBSV) *           | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft                    | 1.5 - 2.5 Ft           | Value                           | Result D                                      | IL LO VO                   | 2 Result                                      | <u>DIL LQ</u>                  | VQ       | Result /                                   | <u> SIL L</u>               | <u>a va</u> |
| EXPLOSIVES   | 1,3,5-Trinitrobenzene      | 4.7E+02            | 0.1         | 0.25         | NE                            | NE                     | 4.7E+02                         | 0.249   | 1 U                        | 0.246   | 1 0                            |          | 0.240                                      | 1 1                         | 1           |
| EXPLOSIVES   | 1,3-Dinitrobenzene         | 1.6E+00            | 0.1         | 0.25         |                               | NE                     | 7.75+00                         | 0.249   | 1 11                       | 0.240   | ίŭ                             |          | 0.240                                      | ič                          | í í         |
| EXPLOSIVES   | 2,4,6-mail.coulerie        | 7.7E+00            | 0.1         | 0.25         | NE                            | NE                     | 7.2E-01                         | 0.249   | i ŭ                        | 0.246   | i Ŭ                            |          | 0.240                                      | 1 Ú                         | ,           |
| EXPLOSIVES   | 2.6-Dinitrotoluene         | 7.2E-01            | 0.1         | 0.26         | NE                            | NÉ                     | 7.2E-01                         | 0.259   | 1 U                        | 0.256   | 1 U                            |          | 0.250                                      | 1 L                         | 1           |
| EXPLOSIVES   | 2-Amino-4,6-dinitrotoluene | 2.6E+00            | 0.1         | 0.26         | NE                            | NE                     | 2.6E+00                         | 0.259   | 1 U                        | 0.256   | 1 0                            |          | 0.250                                      | 1 1                         | ł           |
| EXPLOSIVES   | 4-Amino-2,6-dinitrotoluene | 2.6E+00            | 0.1         | 0.26         | NE                            | NE                     | 2.6E+00                         | 0.259   | 1 U                        | 0.256   | 1 0                            |          | 2 120                                      | 1 L<br>1 I                  | i           |
| EXPLOSIVES   | HMX<br>m blittotokuotto    | 2.2E+02            | 0.1         | 2.20         | NE                            | NE                     | 2.2E+02<br>4.4E+01              | 0.249   | iŭ                         | 0.246   | ίŭ                             |          | 0.240                                      | ίĩ                          | j j         |
| EXPLOSIVES<br>EXPLOSIVES   | Nitrohenzene               | 6.5E+00            | 0.1         | 0.26         | NE                            | NE                     | 6.5E+00                         | 0.259   | i Ū                        | 0.256   | 1Ū                             |          | 0.250                                      | 1 L                         | J           |
| EXPLOSIVES   | o-Nitrotoluene             | 4.7E+01            | 0.1         | 0.25         | NË                            | NE                     | 4.7E+01                         | 0.249   | 1 U                        | 0.246   | 1 U                            |          | 0.240                                      | 1 1                         | i           |
| EXPLOSIVES   | p-Nitrotoluene             | 4.4E+01            | 0.1         | 0.25         | NE                            | NE                     | 4.4E+01                         | 0.249   | 1 1                        | 0.246   | 1 1                            |          | 0.240                                      | 1 1                         | ļ           |
| EXPLOSIVES   | RDX                        | 3.6E+00            | 0,1         | 1.00         |                               | NE<br>NE               | 3.65+00                         | 0.995   | 1 0                        | 0,900   | 1 11                           | 111      | 0.602                                      | 1 1                         | ί μ         |
| METALS   | ieryi<br>Aluminum          | 1.0E+02            | 10,000      | 20.00        | 16300                         | 2.08E+04               | 1.6E+04                         | 4640.000                                      | 1                          | 6600.000                                      | iĭ                             | 00       | 11800.000                                  | i `                         |             |
| METALS   | Antimony                   | 7.3E+00            | 0.500       | 0.10         | 0.94                          | 1.6                    | 7.3E+00                         | 0.055   | i JJI                      | 0.106   | 1 U                            |          | 0.060                                      | 1 .                         | 1 1         |
| METALS   | Arsenic                    | 2.0E+01            | 0.075       | 0.30         | 4.81E+00                      | 5.54E+00               | 2.0E+01                         | 1.250   | 1 JI                       | 7.660   | 1                              | J        | 1.330                                      | 1                           | J           |
| METALS   | Barium                     | 2.6E+03            | 0.075       | 0.30         | 1.52E+02                      | 8.55E+01               | 2.6E+03                         | 30.200  | 1 ររ                       | 44.800  | 1                              | зн       | 57.800<br>n.720                            | 1                           | JH          |
| METALS   | Beryllium<br>Codmium       | 4.6E+00<br>5.2E+00 | 0.012       | 0.50         | 6.45E-01                      | 7.66E-01               | 4,5E+00<br>5 2E+00              | 0.206   | 1.1.1                      | 0.499   | 1.1                            | J.       | 0.106                                      | i.                          | JJ          |
| METALS   | Calcium                    | J.ZETUU<br>N≓      | NA          | NA           | NA                            | NA                     |                                 | 500,000                                       | 1 0                        | 1010.000                                      | 1                              | •        | 1550.000                                   | 1                           |             |
| METALS   | Chromium                   | 5.9E+03            | 0.100       | 0.40         | 2,66E+01                      | 3.01E+01               | 5.9E+03                         | 8.410   | 1 Ji                       | 20.700  | 1                              | JL       | 31.000                                     | 1                           | ٦Ľ          |
| METALS   | Cobalt                     | 1.5E+03            | 0.125       | 0.50         | 7.23E+00                      | 5.61E+00               | 1.5E+03                         | 1.570   | 1                          | 2.990   | 1                              | JH       | 3.200                                      | 1                           | JH          |
| METALS   | Copper                     | 1.0E+03            | 0.150       | 0.60         | 5.55E+00                      | 9.25E+00               | 1.0E+03                         | 6710,000                                      | 1                          | 2.210   | 10                             |          | 4.320                                      | 10                          |             |
| METALS   | Iron                       | 5 0E±02            | 0.500       | 5.00         | 2 26E+01                      | 1 14E+01               | 5.0E+02                         | 5 350   | 1                          | 9,100   | ĩ                              | 5        | 14.200                                     | 1                           | J           |
| METALS   | Magnesium                  | NE                 | NA          | NA           | NA                            | NA                     |                                 | 229,000                                       | i Ji                       | 302.000                                       | 1                              | JH       | 489,000                                    | 1                           | JH          |
| METALS   | Manganese                  | 1.7E+03            | 0.050       | 0.20         | 1.25E+03                      | 2.01E+02               | 1.7E+03                         | 48.800  | 1 J                        | 159.000                                       | 1 .                            | ſ        | 108.000                                    | 1                           |             |
| METALS   | Mercury                    | 1.1E-02            | 0.010       | 0.25         | 8.19E-02                      | 0.36                   | 2.5E-01                         | 0.010   | 1 J J                      | 0.026   | 1 J                            | цц.<br>Г | 0.066                                      | 1 .                         | / J<br>IH   |
| METALS   | Nickel                     | 1.9E+02            | 0.200       | 0.80         | 0.90E+00                      | 1. IDE#01              | 1.82702                         | 221 000                                       | 1 J                        | 187,000                                       | 1                              | JI 1     | 290,000                                    | i                           | 211         |
| METALS   | Selenium                   | 1.3E+02            | 0.100       | 0.20         | 3.48E+00                      | 5.57E+00               | 1.3E+02                         | 0.145   | i J JI                     | . 0.466                                       | 1                              |          | 0.164                                      | 1.                          | JJ          |
| METALS   | Silver                     | 4.7E+01            | 0.050       | 0.20         | 0.31                          | 0.37                   | 4.7Ë+01                         | 1,500   | 1 U                        | 1.540   | 1 U                            |          | 1.470                                      | 1 (                         | . ر         |
| METALS   | Sodium                     | NE                 | NA          | NA           | NA                            | NA                     |                                 | 91.100  | 1 J J                      | 15,700  | 1 J                            | J        | 17,900                                     | 1.                          | ) ]         |
| METALS   | Thallium                   | 2.0E+00            | 0.010       | 0.02         | 0.47                          |                        | 2.05+00                         | 0.042   | 1                          | 43,000  | 1                              | лнГ      | 72,200                                     | ł                           |             |
| METALS   | Vanadium<br>Zioc           | 4.0ETU1<br>5.9E+03 | 0.125       | 2.50         | 61.6                          | 2 02E+01               | 5.9E+03                         | 5,950   | i J                        | H 25.800                                      | i                              |          | 28.100                                     | i                           | JH          |
| RANGE ORGANICS   | Carbon Range C12-C28       | 4 0E+02            | 25          | 50           | NE                            | NE                     | 4.0E+02                         | 35,700  | 1 ] ]                      | 52.800  | 1 U                            |          | 36,100                                     | 1.                          | JJ          |
| RANGE ORGANICS   | CARBON RANGE C28-C35       | 4.0E+02            | 25          | 50           | NE                            | NË                     | 4.0E+02                         | 34.000  | 1 3 3                      | 30.600  | 1 J                            |          | 33.300                                     | 1.                          | JJ          |
| RANGE ORGANICS   | Carbon Ranne C6-C12        | 1.7E+02            | 25          | 50           | NE                            | NE                     | 1.7E+02                         | 52.400  | 1 U                        | 52.800  | 1 0                            |          | 53.800                                     | 1 1                         | J           |
| SEMIVOLATILES  | 124-Tricblorohenzeze       | 1.4E+02            | 0.083       | 0.17         | NE                            | NE                     | 1.4E+02                         | 0.853   | 5 U                        | 0.868   | 5 U                            |          | 0.865                                      | 5 L                         | J           |
| SEMIVOLATILES  | 1.2. Dichlorobenzene       | 5 6E+01            | 0.083       | 0.17         | NE                            | NE                     | 5.6E+01                         | 0.853   | 5 U                        | 0.868   | 5 U                            |          | 0.865                                      | 5 L                         | J           |
| SEMIVOLATIVES  | 1.3-Dichlorobenzene        | 5 1E+00            | 0.083       | 0.17         | NF                            | NE                     | 5 1E+00                         | 0.853   | 5 U                        | 0.868   | 5 U                            |          | 0.865                                      | 5 (                         | J           |
| SEMIVOLATILES  | 1 4-Dichlorobenzene        | 2 7E+01            | 0.083       | 0.17         | NE                            | NË                     | 2.7E+01                         | 0.853   | 5 U                        | 0.868   | 5 U                            |          | 0.865                                      | 5 (                         | J           |
| SEMIVOLATILES  | 2 4 5-Trichlorophengi      | 1.6E+03            | 0.083       | 0.17         | NÉ                            | NE                     | 1.6E+03                         | 0.853   | 5 U                        | 0.868   | 5 U                            |          | 0.865                                      | 5 1                         | J           |
| SEMIVOLATILES  | 2 4 6-Trichlomphenol       | 4 5E+01            | 0.083       | 0.17         | NE                            | NE                     | 4.5E+01                         | 0.853   | 5 U                        | 0.868   | 5 U                            |          | 0.865                                      | 5 (                         | U D         |
| SEMIVOLATILES  | 2 4-Dicbloronhenol         | 4.7E+01            | 0.083       | 0.17         | NE                            | NÉ                     | 4.7E+01                         | 0.853   | 5 U                        | 0.868   | 5 U                            |          | 0.865                                      | 5 1                         | J           |
| SEMINOLATILES  | 2 4 Dimethylohenol         | 3 15+02            | 0.083       | 0.17         | NE                            | NE                     | 3.1E+02                         | 0.853   | 5 U                        | 0.868   | 5 U                            |          | 0.865                                      | 5 1                         | J           |
| SEMIVOLATILES  | 2 4-Digitrophenol          | 3 15+01            | 0.330       | 0.83         | NE                            | NE                     | 3.1E+01                         | 4,260   | 5 U                        | 4.340   | 5 U                            |          | 4.320                                      | 5 I                         | U.          |
| SEMIVOLATILES  | 2.4-Dinitrotoluene         | 7 2E-01            | 0.083       | 0.00         | NE                            | NE                     | 7.2E-01                         | 0.853   | 5 0                        | 0.868   | 5 U                            |          | 0.865                                      | 5 1                         | Ú           |
| SEMIVOLATILES  | 2.6-Dinitrotokiene         | 7.25-01            | 0.083       | 0.17         | NE                            | NE                     | 7 2E-01                         | 0.853   | 5 0                        | 0.868   | 5 U                            |          | 0.865                                      | 5 1                         | Ű           |
| SEMIVOLATILES  | 2 Chloropophthalene        | 1 15+03            | 0.000       | 0.17         | NE                            | NE                     | 1 15+03                         | 0.853   | 5 0                        | 0.868   | 5 U                            |          | 0.865                                      | 5 1                         | Ű           |
| CEMBIOLATILES  | 2 Chlorophopol             | 1 16+02            | 0.000       | 0.17         | NE                            |                        | 1 15+02                         | 0.853   | 5 11                       | 0.868   | 5 0                            |          | 0.865                                      | 5                           | U           |
| SEMIVOLATILES  | 2 Mathidaeabthalana        | 5 55+01            | 0.003       | 0.17         | NE                            | NE                     | 5.5E+01                         | 0.853   | 5 11                       | 0.868   | 5 0                            |          | 0.865                                      | 5 1                         | -<br>U      |
| SEMMYOLATILES  | 2 Mathylabanal             | 776-02             | 0.000       | 0.17         | NE                            | NE                     | 7 75+02                         | 0.853   | 5 14                       | 0.868   | 5 0                            |          | 0.865                                      | 5 1                         | ů.          |
| SEMIVOLATILES  | 2-Meanyphenol              | 1.7ETU2            | 0.005       | 0.17         |                               | NE                     | 4.75+00                         | 4 260   | 5 11                       | 4 340   | 5 11                           |          | 4 320                                      | 5 1                         | Ű.          |
| SEMIVOLATILES  |                            | 4.72+00            | 0.000       | 0.03         | NE                            | 1VC<br>510             | 3.15+01                         | 4.200   | 5 11                       |   | 5 0                            |          | 0.865                                      | 5 1                         | U           |
| SEMIVOLATILES  | 2-INDUODINEINOI            | 3.18+01            | 0.003       | 0.17         | NE                            |                        | 1 15+00                         | 4 740   | 5 11                       | 1 7/0   | 5 11                           |          | 1 730                                      | 5 1                         |             |
| SEMIVOLATILES  | 3,3-DICHIOFODERZIGINE      | 1.12+00            | 0.105       | 0.33         | NE                            | NE                     | 4 75+00                         | 1.710   | 5 11                       | 1.140   | 5 11                           |          | 4 320                                      | 5 1                         |             |
| SEMIVOLATILES  | 3-riveroaniline            | 4./ =+00           | 0.330       | 0.83         | NE                            |                        | 4.701                           | 4.200   | 5 U                        | 4.340   | 5 0                            |          | 4 320                                      | 5 1                         | í.          |
| SEMIVULATILES  | 4.0-Dinito-2-methylphenol  | 3.1E+01            | 0.330       | 0.83         |                               | NE                     | 3.12+01                         | 4.200   | 5 U<br>6 II                | 4.340   | 5 11                           | RE       | 4.32U                                      | 5 1                         |             |
| SEMIVOLATILES  | 4-bromopnenyi pnenyi ether | 3.12-02            | 0.083       | 0.17         | NE                            | NE                     | 7.75+04                         | 0.050   | 5 11                       | D.44U   | 5 0                            | 83       | 0.855                                      | 6 1                         | ñ           |
| SEMIVOLATILES  | 4-Unioro-3-methylphenol    | 7.7E+01            | 0.083       | 0.17         | NE                            | NE                     | 1.12+01                         | 0.853   | a U                        | 0.668   | 5 0                            |          | 0.000                                      | 5 1                         | П           |
| SEMIVULATILES  | 4-Chioroaniline            | 6.2E+01            | 0,083       | 0.17         | NC                            | NC:                    | 0.20101                         | 0.653   | υŪ                         | 0.606   | ່ັບ                            |          | 0.000                                      | 0 1                         |             |

00066522

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

.

#### Table 4-59

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

WRSump-019

| SUMP} = WRSUMP<br>OCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE | 2019                           | TCEQ<br>Risk-Based |                     |              | Backg      | round<br>tions in Soil | Applicble<br>TCEQ | WRS01<br>WRS019<br>9/14/ | 9-SB0<br>SB01-<br>2006 | 11<br>-01 | WRS019<br>WRS019-SE<br>9/14/2 | -SB0<br>01-01<br>006<br>5 Et | 1<br>I-QC | WRS019-5<br>WRS019-SE<br>9/14/20<br>0.5 • 1.5 | 802<br>302-01<br>06 | •           |
|---|--------------------------------|--------------------|---------------------|--------------|------------|------------------------|-------------------|--------------------------|------------------------|-----------|-------------------------------|------------------------------|-----------|---|---------------------|-------------|
| DEPTH<br>SAMPLE PURPOSI                                     | F                              | Screening<br>Value | Method<br>Detection | Quantitation | Surface    | Subsurface             | Screening         | RE                       | G                      |           | FC                            | i i                          |           | REG   |                     |             |
| Test Group  | -<br>Parameter (Units ≃ mα/kα) | (RBSV)*            | Limit (MDL)         | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft           | Value             | Result                   | DIL                    | LQ V      | /Q Result                     | DIL                          | LQ VC     | Result C                                      |                     | <u>2 VQ</u> |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether    | 2.8E-02            | 0.083               | 0.17         | . NE       | NE                     | 1.7E-01           | 0.430                    | 5                      | U         | 0.440                         | 5                            | U         | 0.995   | 5 U<br>5 U          | ,           |
| SEMIVOLATILES   | 4-Methylphenoi                 | 7.7E+01            | 0.083               | 0.17         | NË         | NE                     | 7.7E+01           | 0.853                    | 5                      |           | 0.868                         | 5                            | ii ii     | 4.320   | 5 U                 | ,<br>i      |
| SEMIVOLATILES   | 4-Nitroaniline                 | 1.3E+01            | 0.330               | 0.83         | NE         | NE                     | 1.3E+01           | 4.200                    | ç<br>2                 | ů.        | 4.340                         | 5                            | ň         | 4.320   | 5 U                 | j           |
| SEMIVOLATILES   | 4-Nitrophenol                  | 3.1E+01            | 0.330               | 0,83         | NE         | NE                     | 3.12+01           | 4.200                    | 5<br>5                 |           | 4.540                         | 5                            | ü         | 0.865   | 5 U                 | j           |
| SEMIVOLATILES   | Acenaphthene                   | 8.2E+02            | 0.083               | 0.17         | NE         |                        | 9.25+02           | 0.653                    | 5                      | ŭ         | 0.868                         | 5                            | ŭ         | 0.865   | 5 U                 | ,           |
| SEMIVOLATILES   | Acenaphthylene                 | 8.2E+02            | 0.083               | 0.17         | NE         | NE                     | 4 15+03           | 0.853                    | 5                      | ŭ         | 0.868                         | 5                            | Ū         | 0.865   | 5 U                 | j i         |
| SEMIVOLATILES   | Anthracene                     | 4.12703            | 0.0825              | 0.165        | 0.02       | NE                     | 6.3E-01           | 0.853                    | 5                      | Ū         | 0.868                         | 5                            | U         | 0.865   | 5 U                 | J           |
| SEMIVOLATILES   | Benzo(a)anuracene              | 635-07             | 0.0025              | 0.165        | 0.02       | NE                     | 1.7E-01           | 0,430                    | 5                      | U         | 0.440                         | 5                            | Ų         | 0,446   | 5 U                 | ł           |
| SEMIVULATILES   | Benzo(b)fivoranthene           | 63E-01             | 0.0825              | 0.165        | 0.02       | NE                     | 6.3E-01           | 0.853                    | ° 5                    | ປ         | 0.868                         | 5                            | U         | 0.865   | 5 U                 | J           |
| SEMINOLATILES   | Benzo(obi)nerviere             | 4.1E+02            | 0.0825              | 0.165        | 0.01       | NE                     | 4.1E+02           | 0.853                    | 5                      | U         | 0.868                         | 5                            | U         | 0.865   | 5 L                 | J           |
| SEMIVOLATILES   | Benzo(k)fluoraniheae           | 6.3E+00            | 0.0825              | 0.165        | 0.01       | NÉ                     | 6.3E+00           | 0.853                    | 5                      | U         | 0.868                         | 5                            | υ         | 0.865   | 5 L                 | J           |
| SEMIVOLATILES   | Benzeic Acid                   | 6.2E+04            | 0.3300              | 0.825        | NE         | NE                     | 6.2E+04           | 4.260                    | 5                      | υ         | 4.340                         | 5                            | U         | 4.320   | 5 L                 | ì           |
| SEMIVOLATILES   | Benzvi Alcohol                 | 4.7E+03            | 0.0825              | 0.165        | NE         | NE                     | 4.7E+03           | 0.853                    | 5                      | υ         | 0.868                         | 5                            | U         | 0.865   | 5 L                 |             |
| SEMIVOLATILES   | bis(2-Chloroethoxy)methane     | 2.9E-01            | 0.0825              | 0.165        | NE         | NE                     | 2.9E-01           | 0.853                    | 5                      | U         | 0.868                         | 5                            | U         | 0.865   | 5 L                 |             |
| SEMIVOLATILES   | bis(2-Chloroethyl)ether        | 1.5E-01            | 0.0825              | 0.165        | NE         | NĘ                     | 1.7E-01           | Q.430                    | 5                      | U         | 0,440                         | 5                            | 0         | 0,445   | 5 L                 | J           |
| SEMIVOLATILES   | bis(2-Chloroisopropyl)ether    | 4.8E+00            | 0.0825              | 0.165        | NE         | NÉ                     | 4.8E+00           | 0.853                    | 5                      | U         | 0.868                         | 5                            | 0         | 0.000   | 0 L<br>5 I          |             |
| SEMIVOLATILES   | bis(2-Ethylhexyl)phthalate     | 1.7E+01            | 0.0825              | 0.165        | NE         | NE                     | 1.7E+01           | 0.853                    | 5                      | 0         | 0.868                         | 5                            |           | 0.000   | 5 1                 | J<br>I      |
| SEMIVOLATILES   | Butyl benzyl phthalate         | 3.1E+03            | 0.0825              | 0.165        | NE         | NE                     | 3.1E+03           | 0,85                     | 5                      | 0         | 0.000                         | 5                            |           | 0.865   | 5 C                 |             |
| SEMIVOLATILES   | Chrysene                       | 6.3E+01            | 0.0825              | 0.165        | 0.02       | NE                     | 6.38.401          | 0,85.                    | 0                      |           | 000,0                         | 5                            | ii ii     | 0.446   | 5 1                 | J           |
| SEMIVOLATILES   | Dibenzo(a,h)anthracene         | 6.3E-02            | 0.0825              | 0.165        | NE         | NE                     | 1.76-01           | 0.43                     | 6 9<br>1 5             | ü         | 0.868                         | 5                            | ŭ         | 0.865   | 5 1                 | Ŭ.          |
| SEMIVOLATILES   | Dibenzofuran                   | 6.2E+01            | 0.0825              | 0.165        | NE         | NE                     | 1 25+01           | 0.005                    | 15                     | ü         | 0.868                         | 5                            | Ū         | 0.865   | 5 L                 | Ļ.          |
| SEMIVOLATILES   | Diethyl phthalate              | 1.2E+04            | 0.0825              | 0.165        | NE         | NE                     | 1.2E+04           | 0.85                     | 5                      | ŭ         | 0.868                         | 5                            | Ū         | 0.865   | 5 L                 | U           |
| SEMIVOLATILES   | Dimethyl phthalate             | 1.2E+04            | 0.0825              | 0.165        |            | NE                     | 1.65+03           | 0.85                     | . S                    | Ŭ         | 0.868                         | 5                            | Ū         | 0.865   | 5 L                 | U           |
| SEMIVOLATILES   | di-n-Butyi phthalate           | 1.05+03            | 0.0825              | 0.165        | NE         | NE                     | 3.1E+02           | 0.85                     | 5                      | Ū         | 0.868                         | 5                            | U         | 0.865   | 5 t                 | U           |
| SEMIVOLATILES   | di-n-Octyl phthalate           | 5.10+02            | 0.0825              | 0.165        | 0.02       | NE                     | 5.5E+02           | 0.85                     | 3 5                    | Ŭ         | 0.868                         | 5                            | U         | 0.865   | 5 L                 | U           |
| SEMIVOLATILES   | Fluorance                      | 6.5E+02            | 0.0825              | 0.165        | NE         | NE                     | 5.5E+02           | 0.85                     | 35                     | U         | 0.868                         | 5                            | U         | 0.865   | 5 l                 | U           |
| SEMINOLATILES   | Hevachlorobenzene              | 2.5E-01            | 0.0825              | 0.165        | NE         | NE                     | 2.5E-01           | 0.85                     | 35                     | U         | 0.868                         | 5                            | U         | 0.865   | 5 L                 | U           |
| SEMIVOLATILES   | Hexachlorobutadiene            | 1.6E+00            | 0.0825              | 0.165        | NE         | NÉ                     | 1.6E+00           | 0.85                     | 35                     | U         | 0.868                         | 5                            | U         | 0.865   | 5 L                 | U           |
| SEMIVOLATILES   | Hexachlorocyclopentadiene      | 1.0E+00            | 0.0825              | 0.165        | NE         | NE                     | 1.0E+00           | 0.85                     | 35                     | υ         | 0.868                         | 5                            | U         | 0.865   | 5 L                 | U           |
| SEMIVOLATILES   | Hexachioroethane               | 1.6E+01            | 0.0825              | 0.165        | NE         | NE                     | 1.6E+01           | 0.85                     | 35                     | υ         | 0.868                         | 5                            | Ų         | 0.865   | 5 1                 | U           |
| SEMIVOLATILES   | Indeno(1,2,3-cd)pyrene         | 6.3E-01            | 0.0825              | 0.165        | 0.01       | NE                     | 6.3E-01           | 0.85                     | 35                     | U         | 0,868                         | 5                            | U         | 0.865   | 5 1                 | U           |
| SEMIVOLATILES   | Isophorone                     | 5.2E+02            | 0.0825              | 0.165        | NË         | NE                     | 5.2E+02           | 0.85                     | 35                     | U         | 0.868                         | 5                            | U         | Q.865   | 0 1                 | U .         |
| SEMIVOLATILES   | Naphthalene                    | 1.8E+01            | 0.0825              | 0.165        | NE         | NE                     | 1.8E+01           | 0.85                     | 35                     | U         | 0.868                         | 5                            | 0         | 0.803   | 5 1                 | U<br>11     |
| SEMIVOLATILES   | Nitrobenzene                   | 6.5E+00            | 0.0825              | 0.165        | NE         | NE                     | 6.5E+00           | 0.85                     | 35                     | U         | 0.800                         |                              | U.        | 0.000   | 5 1                 |             |
| SEMIVOLATILES   | n-Nitroso-di-n-propylamine     | 4.1E-02            | 0.0825              | 0.165        | NE         | NE                     | 1.7E-01           | 0,43                     | 10                     | 0         | 0.969                         | 9 D<br>5                     | ü         | 0.865   | 5 1                 | ŭ           |
| SEMIVOLATILES   | n-Nitrosodiphenylamine         | 5.9E+01            | 0.0825              | 0.165        | NE         | NE                     | 5.92+01           | 0.65                     | 3 J<br>7 E             | ň         | 4 340                         | 5                            | ŭ         | 4.320   | 5 1                 | ັ້          |
| SEMIVOLATILES   | Pentachlorophenol              | 3.0E+00            | 0.3300              | 0.825        | NE         | NE                     | 3.0E+00           | 4.20                     | 1 0<br>1 5             | ü         | 0.868                         | 5                            | ŭ         | 0.865   | 5                   | Ŭ           |
| SEMIVOLATILES   | Phenanthrene                   | 4.1E+02            | 0.0825              | 0.165        |            | NE                     | 4.12+02           | 0.05                     | 3 5                    | ŭ         | 0.868                         | 5                            | ŭ         | 0,865   | 5                   | U           |
| SEMIVOLATILES   | Phenol                         | 4.76+03            | 0.0825              | 0.165        | 0.02       | NE                     | 4.1E+02           | 0.85                     | 3 5                    | Ŭ         | 0.868                         | 5                            | Ū         | 0.865   | 5                   | U           |
| SEMIVOLATILES   | Pyrene<br>Researt Solide       | 4.1C+U2            | 0.0625<br>NF        | NE           | NE         | NE                     |                   | 95.90                    | 0 1                    | -         | 93.800                        | 1                            |           | 92,500  | 1                   |             |
| VOLATILES   | 1.1.1.2-Tetrachtoroethane      | 5.2E+00            | 0.0005              | 0.005        | NE         | NE                     | 5.2E+00           | 0.00                     | 41                     | U         | 0.005                         | 1                            | ų         | 0.006   | 1                   | U           |
| VOLATILES   | 1.1.1-Trichloroethane          | 2.3E+02            | 0.0005              | 0.005        | NE         | NE                     | 2.3E+02           | 0.00                     | 41                     | U         | 0.005                         | 1                            | U         | 0.006   | 1                   | U           |
| VOLATILES   | 1,1,2,2-Tetrachloroethane      | 5.1E-01            | 0.0005              | 0.005        | NE         | NE                     | 5.1E-01           | 0.00                     | 41                     | U         | 0.005                         | 1.                           | U         | 0.006   | 1                   | U           |
| VOLATILES   | 1,1,2-Trichloroethane          | 9.7E-01            | 0.0005              | 0.005        | NE         | NE                     | 9.7E-01           | 0.00                     | 4 1                    | U         | 0.005                         | 1                            | 0         | 0.006   | 1                   | U           |
| VOLATILES   | 1,1-Dichloroethane             | 8.9E+01            | 0.0010              | 0.005        | NE         | NE                     | 8.9E+01           | 0.00                     | 4 1                    | U         | 0.005                         | 1                            | U         | 0.006   | 1                   | U<br>Li     |
| VOLATILES   | 1.1-Dichloroethene             | 2.7E+01            | 0.0005              | 0.005        | NE         | NE                     | 2.7E+01           | 0.00                     | 4 1                    | U         | 0.005                         |                              | U         | 0.006   | 4                   |             |
| VOLATILES   | 1,1-Dichloropropene            | 9.9E-01            | 0.0005              | 0.005        | NE         | NE                     | 9.9E-01           | 0.00                     | 4 1                    | U.        | 0.000                         | ) 1<br>: 4                   | U U       | 0.000   |                     | ů.          |
| VOLATILES   | 1,2,3-Trichlorobenzene         | 4.2E+01            | 0.0005              | 0.005        | NE         | NE                     | 4.22+01           | 0.00                     | 41<br>44               |           | 0.000                         |                              | U<br>H    | 800.0<br>800.0                                | 1                   | ŭ           |
| VOLATILES   | 1,2,3-Trichloropropane         | 9.2E-02            | 0.0010              | 0.005        | NE         | NE                     | 9.26-02           | 0.00                     | н 1<br>д 4             |           | 0.000                         | 1                            | ŭ         | 0.006   | 1                   | Ũ           |
| VOLATILES   | 1,2,4-Trichlorobenzene         | 1.4E+02            | 0.0005              | 0.005        | NE         | NE                     | 1.46702           | 1 0.00                   |                        | 11        | 0.00                          | 5 1                          | Ŭ         | 0.006   | 1                   | Ū           |
| VOLATILES   | 1,2,4-Trimethylbenzene         | 9.62+00            | 0.0005              | 0.005        |            | NE                     | 3.5E-01           | 1 0.00                   | 4 1                    | ŭ         | 0.005                         | . 1                          | Ū         | 0.006   | 1                   | U           |
| VOLATILES   | 1,2-Dibromo-3-chioropropane    | 3.55-01            | 0.0020              | 0.005        |            | NE                     | 5.3E-02           | 0.00                     | 4 1                    | ŭ         | 0.00                          | ; 1                          | ΰ         | 0.006   | 1                   | U           |
| VULAIILES   | 1,Z-Dibromoethane              | 0.3⊑-02            | 0.0005              | 0.000        | INC.       |                        | 0.06-06           |                          |                        | -         |                               | ·                            | -         |   |                     |             |

Shaw Environmental, Inc.

00066523

#### Table 4-59 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-019

.

.

| [SUMP] = WRSUMP | 019                                |                     |             |              |            |              |                    | WRS019-\$801     | WR\$019-SB01      | WRS019-SB02         |
|-----------------|------------------------------------|---------------------|-------------|--------------|------------|--------------|--------------------|------------------|-------------------|---------------------|
| SAMPLE NO       |                                    | TCEO                |             |              | Backo      | round        | Applicble          | WRS019-SB01-01   | WRS019-SB01-01-QC | WRS019-SB02-01      |
| SAMPLE DATE     |                                    | Risk-Based          |             |              | Concentrat | ions in Soil | TCEQ               | 9/14/2006        | 9/14/2006         | 9/14/2006           |
| DEPTH           |                                    | Screening           | Method      | Method       | (95% UP    | L mg/kg)     | Risk-Based         | 0.5 - 1.5 Ft     | 0.5 - 1.5 Ft      | 0.5 - 1_5 Ft<br>PEC |
| SAMPLE_PURPOSE  | 5                                  | Value               | Detection   | Quantitation | Surface    | Subsurface   | Screening          | REG              |                   |                     |
| Test Group      | Parameter (Units = mg/kg)          | (RBSV)              | Limit (MDL) | Limit (MQL)  | 0-0.5 Ft   | 1,5 - 2.5 Ft | Value<br>E CE+01   | Result DIL LO VO |                   |                     |
| VOLATILES       | 1,2-Dichlorobenzene                | 5.6E+01             | 0.0005      | 0.005        | NE         | NE           | 3,00701            | 0.004 1 U        | 0.005 1 11        | 0.006 1 11          |
| VOLATILES       | 1,2-Dichloroethane                 | 2.7E-01             | 0.0005      | 0.005        | NE         | NE           | 2.7E-01            | 0.004 1 U        | 0.005 1 1         | 0.006 1 1           |
| VOLATILES       | 1,2-Dichloropropane                | 1.8E+00             | 0.0005      | 0.005        | NE         | NE           | 1.85+00            | 0.004 1 0        | 0.005 1 0         | 0.006 1 U           |
| VOLATILES       | 1,2-Dimethylbenzene (o-Xylene)     | 3.3E+03             | 0.0005      | 0.005        | NE         | NE           | 3.36403            | 0.004 1 0        | 0.005 1 1         | 0.006 1 1           |
| VOLATILES       | 1,3,5-Trimethylbenzene             | 8.3E+00             | 0.0005      | 0.005        | NE         | NE           | 0.3E+00            | 0.004 1 0        | 0.005 1 0         | 0.006 1 11          |
| VOLATILES       | 1,3-Dichlorobenzene                | 5.1E+00             | 0.0005      | 0,005        | NE         |              | 0.1E+00            | 0.004 1 0        | 0.005 1 1         | 0.006 1 11          |
| VOLATILES       | 1,3-Dichtoropropane                | 3.0E+00             | 0.0005      | 0.005        |            | NE           | 3.02+00            |                  | 0.003 1 3         | 0.001 1             |
| VOLATILES       | 1,4-Dichlorobenzene                | 2.7E+01             | 0.0005      | 0.005        | NE         | NE           | 4.75+00            |                  | 0.005 1 1         | 0.006 1 11          |
| VOLATILES       | 2,2-Dichloropropane                | 1.7E+00             | 0.0005      | 0.005        | NE         | NE           | 1.72700            | 0.004 1 0        | 0.000 1 0         | 0.012 1 11          |
| VOLATILES       | 2-Butanone                         | 2.6E+03             | 0.0025      | 0.010        | NE         |              | 2.02703            | 0.009 1 0        | 0.011 1 1         | 0.012 1 1           |
| VOLATILES       | 2-Chloroethyl vinyl ether          | 2.1E-01             | 0.0020      | 0.010        |            | NE           | 2.10-01            | 0.009 1 0        | 0.005 1 11        | 0.006 1 11          |
| VOLATILES       | 2-Chlorotoluene                    | 1.52+02             | 0.0005      | C00.0        | NE         | NE           | 1,3ETU2            | 0.000 1 11       | 0.011 1 11        | 0.012 1 1           |
| VOLATILES       | 2-Hexanone                         | 6.26+00             | 0.0025      | 0.010        | NE         | NE           | 3 45 04            | 0.003 1 0        | 0.005 1 1         | 0.006 1 U           |
| VOLATILES       | 4-Chiorotoluene                    | 3,4E-01             | 0.0005      | 0.005        | NE         | NE           | 3.40-01            | 1.080 50 11 111  | 0.000 1 0         | 0.012 1 11 11       |
| VOLATILES       | Acetone                            | 1.7E+02             | 0.0050      | 0.010        | NE         |              | 0.95.01            |                  | 0.005 1 11        | 0.006 1 U           |
| VOLATILES       | Benzene                            | 8.8E-01             | 0,0005      | 0.005        | NE         | . NE         | 6.6E-01            | 0.004 1 0        | 0.005 1 1         | 0.005 1 U           |
| VOLATILES       | Bromobenzene                       | 1.16+01             | 0.0005      | 0.005        |            | NE           | 2.45+01            | 0.004 1 0        | 0.005 1 11        | 0.006 1 11          |
| VOLATILES       | Bromochloromethane                 | 2.4E+01             | 0.0005      | 0.005        | NE         | NE           | 2.4ET01            | 0.004 1 0        | 0.005 1 11        | 0.006 1 1           |
| VOLATILES       | Bromodichloromethane               | 1.0E+01             | 0.0005      | 0.005        | NE         | NE           | 1.02+01            | 0.004 1 0        | 0.005 1 1         | 0.006 1 1           |
| VOLATILES       | Bromoform                          | 3.4E+01             | 0.0005      | 0.005        | NE         | NE           | 3.4E+01            | 0.004 1 0        | 0.000 1 0         | 0.012 1 11          |
| VOLATILES       | Bromomethane                       | 3.5E-01             | 0.0010      | 0.010        | NE         | NE           | 3.00-01            | 0.009 1 0        | 0.005 1 11        | 0.006 1 11          |
| VOLATILES       | Carbon disulfide                   | 1.0E+02             | 0.0005      | 0.005        | NE         | NE           |                    | 0.004 1 0        | 0,005 1 1         | 0.006 1 11          |
| VOLATILES       | Carbon tetrachloride               | 3.5E-01             | 0.0005      | 0.005        | NE         | NE           | 3.5E-01            | 0.004 1 0        | 0.005 1 0         | 0.006 1 11          |
| VOLATILES       | Chlorobenzene                      | 4.0E+01             | 0.0005      | 0.005        | NE         |              | 4.05+01            | 0.004 1 0        | 0.000 1 0         | 0.012 1 11          |
| VOLATILES       | Chloroethane                       | 1.1E+03             | 0.0010      | 0.010        | NE         | NE           | 2.45.04            |                  | 0.005 1 1         | 0.006 1 1           |
| VOLATILES       | Chloroform                         | 3.12-01             | 0.0005      | 0.005        | NE         | INE          | 3.12-01            | 0.004 1 0        | 0.000 1 0         | 0.012 1 11          |
| VOLATILES       | Chloromethane                      | 2.3E-01             | 0.0020      | 0.010        | NE         |              | 2.35-01            | 0.009 1 0        | 0.005 1 11        | 0.006 1 1           |
| VOLATILES       | cis-1,2-Dichloroethene             | 1.2E+02             | 0.0005      | 0.005        | 145        | NE           | 1.25+00            | 0.004 1 0        | 0.005 1 1         | 0.006 1 1           |
| VOLATILES       | cis-1,3-Dichloropropene            | 1.2E+00             | 0.0005      | 0.005        | NE         | NE           | 745+00             | 0.004 1 0        | 0.005 1 1         | 0.006 1 1           |
| VOLATILES       | Dibromochloromethane               | 7.6E+00             | 0.0005      | 0.005        | NE         |              | 1.00+01            | 0.004 1 0        | 0.005 1 11        | 0.006 1 1           |
| VOLATILES       | Dipromomethane                     | 1.95+01             | 0.0005      | 0.000        |            | NE           | 2 25+02            | 0.009 1 11       | 0.011 1 U         | 0.012 1 U           |
| VOLATILES       | Dichlorodinuoromethane             | 2.20+02             | 0.0010      | 0.010        | NE         |              | 4 35+02            |                  | 0.005 1 11        | 0.006 1 11          |
| VOLATILES       | Lanyipenzene                       | 4.35102             | 0.0005      | 0.005        | NE         | NE           | 1.65+00            | 0.004 1 11       | 0.005 1 U         | 0.006 1 1           |
| VOLATILES       | Hexachiorobutadiene                | 1.62+00             | 0.0005      | 0.005        | NE         |              | 5.45±02            |                  | 0.005 1 11        | 0.006 1 U           |
| VOLATILES       | Isopropyidenzene                   | 3.45+02             | 0,0005      | 0.005        | NE         |              | 0.4E+02<br>2.3E±02 | 0.004 1 U        | 0.005 1 1         | 0.006 1 LI          |
| VOLATILES       | m,p-Aylenes                        | 2.36702             | 0.0005      | 0.000        |            |              | 1 35+03            | 0.000 1 11       | 0.011 1 1         | 0.012 1 U           |
| VOLATILES       | Methyl isobulyi kelone             | 1.32+03             | 0.0025      | 0.005        |            | NE           | 8.75+00            | 0.004 1 11       | 0.005 1 U         | 0.006 1 U           |
| VOLATILES       | Menyiene calonde                   | 4 95+04             | 0.0010      | 0.005        |            | NE           | 1.95+01            | 0.000 1 1 1H     | 0.011 1 U         | 0.012 1 U           |
| VOLATILES       |                                    | 1.05701             | 0.0005      | 0.01         | NE         | NE           | 275+02             | 0.004 1 11       | 0.005 1 11        | 0.006 1 U           |
| VOLATILES       | - BOOM DENZENE                     | 2.75702             | 0.0005      | 0.000        | NE         | NE           | 3 25+02            | 0.004 1 11       | 0.005 1 U         | 0.006 1 U           |
| VOLATILES       |                                    | 3.25102             | 0.0005      | 0.005        | NE         | NE           | 4 2E±02            | 0.008 1 1H       | 0.005 1 U U       | 0.006 1 U UJ        |
| VOLATILES       | PISOPROPILIOLUENE                  | 4.20702             | 0.0005      | 0.005        | NE         | ME           | 3.05+02            | 0.004 1 11       | 0.005 1 U         | 0.006 1 U           |
| VOLATILES       | SEC-BUTTLBENZENE                   | 3.0ET02             | 0.0005      | 0.005        | NE         | NE           | 1 35+03            | 0.004 1 U        | 0.005 1 U         | 0.006 1 11          |
| VOLATILES       |                                    | 1.35703             | 0.0005      | 0.005        | NE         | NE           | 2 6E+02            | 0.004 1 11       | 0.005 1 U         | 0.006 1 U           |
| VOLATILES       |                                    | 2.05+02             | 0.0005      | 0.005        | NE         |              | 6.05+00            | 0.004 1 11       | 0.005 1 U         | 0.006 1 U           |
| VOLATILES       | Teluano                            | 0.0ET00             | 0.0005      | 0.005        | NE         |              | 1 1E+03            | 0.004 1 11       | 0.005 1 U         | 0.006 1 U           |
| VOLATILES       | trong 4.2 Dichlara-there           | 1.15103             | 0.0000      | 0.005        |            | NE           | 145+02             | 0.004 1 11       | 0.005 1 11        | 0.006 1 U           |
| VOLATILES       | trans-1,2-Dictioroculene           | 1.4ETUZ             | 0.0005      | 0.005        |            |              | 185+00             | 0.004 1 11       | 0.005 1 11        | 0.006 1 U           |
| VOLATILES       | uans-1,3-orchoropropene            | 3.75+00             | 0.0005      | 0.000        |            | NE           | 3.75+00            | 0.004 1 11       | 0.005 1 11        | 0.006 1 U           |
| VOLATILES       | Trichloroflycromethane             | 3.7 ETUU<br>2 EE+02 | 0.0000      | 0.003        | NE         |              | 2 65+02            | 0.009 1 11       | 0.011 1 11        | 0.012 1 U           |
| VOLATILES       | Ancalorometrical<br>Violal esotete | 576+02              | 0.0010      | 0.01         | NE         | NE           | 575+01             | 0.009 1 11       | 0.011 1 1         | 0.012 1 U           |
| VOLATILES       | Vinyl chloride                     | 3.6E-02             | 0.0010      | 0.01         | NE         | NE           | 3.6E-02            | 0.009 1 U        | 0.011 1 U         | 0.012 1 U           |

#### Shaw Environmental, Inc.

00066524

#### Table 4-60 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-021

| [SUMP] = WRSUMP021<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |  | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method      | Backg<br>Concentrati<br>(95% UPI<br>Surface | round<br>ions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WRS021-SB01<br>WRS021-SB01-01<br>9/26/2006<br>0 - 0.5 Ft<br>REG | WRS021-SE<br>WRS021-SB0<br>9/26/2006<br>3.5 + 4.5 F<br>REG | 01<br>1-02<br>t | WRS021-SB02<br>WRS021-SB02-01<br>9/26/2006<br>0 - 0.5 Ft<br>REG<br>Bestit DIL LO VO | WRS021-<br>WRS021-S<br>9/26/20<br>4 - 5 I<br>REG<br>Result DII | \$802<br>802-02<br>106<br>Ft<br>; |
|---|--|--|---------------------|-------------|---|--|--|---|--|-----------------|---|--|-----------------------------------|
| Test Group  | Parameter (Units = mg/kg)                  | (R8SV)                                   | Limit (MDL)         | Limit (MQL) | 0-0.5 Ft                                    | 1.5 - 2.5 Ft                                     | Value<br>47E+02                              |   | 0.249 1  |                 | 0.248 1 U Ú   | 0.243 1  | U U                               |
| EXPLOSIVES  | 1,3,5-Trinkrobenzene<br>1,3-Dipitrobenzene | 4.7E+02<br>1.6E+00                       | 0.1                 | 0.25        | NE  | NE   | 1.6E+00                                      | 0.240 1 U U   | 0.249 1  | ΰÜ              | 0.248 1 U U   | 0.243 1  | U U                               |
| EXPLOSIVES  | 2.4.6-Trinitrotoluene                      | 7.7E+00                                  | 0.1                 | 0.25        | NE  | NE   | 7.7E+00                                      | 0.240 1 U U   | 0.249 1  | UU              | 0.248 1 U U   | 0.243  |                                   |
| EXPLOSIVES  | 2,4-Dinitrotoluene                         | 7.2E-01                                  | 0.1                 | 0.25        | NE  | NE   | 7.2E-01                                      | 0.240 1 U U   | 0.249 1  | йü              | 0.246 100   | 0.252 1  | ιŭŭ                               |
| EXPLOSIVES  | 2,6-Dinitrotoluene                         | 7.2E-01                                  | 0.1                 | 0,26        | NE  | NE   | 7.2E-01<br>2.6E+00                           | 0.250 1 0 0   | 0.259 1  | ŭŭ              | 0.257 1 U U   | 0.252 1  | LÚ ÚL                             |
| EXPLOSIVES  | 2-Amino-4,6-dinitrotoluene                 | 2.65+00                                  | 0.1                 | 0.26        | NE  | NE   | 2.6E+00                                      | 0.250 1 U UJ  | 0.259 1  | ŪŪJL            | 0.257 1 U UJ  | 0.252  | U U                               |
| EXPLUSIVES<br>EXPLOSIVES  | HMX  | 2.2E+02                                  | 0.1                 | 2.20        | NE  | NE   | 2.2E+02                                      | 2.120 1 U U   | 2.190 1  | U U             | 2.180 1 U U   | 2.140  |                                   |
| EXPLOSIVES  | m-Nitrotoluene                             | 4.4E+01                                  | 0.1                 | 0.25        | NE  | NE   | 4.4E+01                                      | 0.240 1 U U   | 0.249 1  |                 | 0.248 1 U U   | 0.243  |                                   |
| EXPLOSIVES  | Nitrobenzene                               | 6.5E+00                                  | 0.1                 | 0.26        | NE  | NE   | 6.5E+00                                      | 0.250 1 0 0   | 0.209 1  | U UL            | 0.248 1 U UJ  | 0.243  | ເບັ້ນ                             |
| EXPLOSIVES  | o-Nitrotoluene                             | 4.7E+01                                  | 0.1                 | 0.25        | NE  | NE   | 4.7E+01<br>4.4E+01                           | 0.240 1 U UJ  | 0.249 1  | ັບັບມີ          | 0.248 1 U UJ  | 0.243  | i u uj                            |
| EXPLOSIVES  | p-Nitrotoluene                             | 3.65+00                                  | 0.1                 | 1.00        | NE  | NË   | 3.6E+00                                      | 0.962 1 U U   | 0,995 1  | υυ              | 0.990 1 U U   | 0.971  | U U                               |
| EXPLOSIVES<br>EXPLOSIVES  | Tetrvi                                     | 1.6E+02                                  | 0.2                 | 0.65        | NE  | NE   | 1.6E+02                                      | 0.625 1 U U   | 0.647 1  | υυ              | 0.644 1 U U   | 0.631  |                                   |
| METALS  | Aluminum                                   | 1.6E+04                                  | 10.000              | 20.00       | 16300                                       | 2.08E+04   | 1.6E+04                                      | 4640.000 1  | 16200.000 1  | 11 11           | 0.094 1 .1 .1   | 0.118  | ែបប                               |
| METALS  | Antimony                                   | 7.3E+00                                  | 0.500               | 0.10        | 0.94  | 1.6  | 2.05+01                                      | 1 250 1   | 2.740 1  | 00              | 4.470 1   | 1.620  | 1                                 |
| METALS  | Arsenic                                    | 2.0E+01<br>2.6E+03                       | 0.075               | 0.30        | 1.52E+02                                    | 8.55E+01   | 2.6E+03                                      | 30.200 1  | 43,700 1   |                 | 176.000 1   | 36.700   | 1                                 |
| METALS  | Bervillum                                  | 4.6E+00                                  | 0.012               | 0,50        | 6.45E-01                                    | 7.66E-01   | 4.6E+00                                      | 0.208 1 J J   | 0.318 1  | 1 1             | 0.235 1 J J   | 0.246  |                                   |
| METALS  | Cadmium                                    | 5.2E+00                                  | 0.025               | 0.10        | 1.4   | 0.4  | 5.2E+00                                      | 0.039 1   | 0.057 1  | JJ              | 4.700 1   | 379.000  | 1 5 5                             |
| METALS  | Calcium                                    | NE                                       | NA                  | NA<br>0.40  | NA<br>2 COLLOI                              | NA<br>2 016+01                                   | 5 0E+03                                      | 8410 1  | 15,400 1   | J               | 46.000 1  | 12.300   | 1                                 |
| METALS  | Chromium                                   | 3.9E+03                                  | 0.100               | 0.40        | 7.23E+00                                    | 5.61E+00   | 1.5E+03                                      | 1.570 1   | 2.050 1  | J               | 1.340 1   | 1.770  | Į.                                |
| METALS  | Copper                                     | 1.0E+03                                  | 0.150               | 0.60        | 5.55E+00                                    | 9.25E+00   | 1.0E+03                                      | 1,700 1   | 4.070 1  |                 | 29.900 1  | 4.080  | 1                                 |
| METALS  | Iron                                       | NË                                       | NA                  | NA          | NA  | NA   | F 05.00                                      | 6710.000 1  | 15300.000 1  | J               | 109.000 10  | 7.460  | 1                                 |
| METALS  | Lead                                       | 5.0E+02                                  | 0.500               | 5.00        | 2.26E+01                                    | 1.14E+U1<br>NA                                   | 5.0E+02                                      | 229.000 1   | 680.000 1  | j               | 501.000 1   | 571.000  | 1                                 |
| METALS  | Magnesium                                  | 17E+03                                   | 0.050               | 0.20        | 1,25E+03                                    | 2.01E+02   | 1.7E+03                                      | 48.800 1  | 18.700 1   | J               | 129.000 1   | 36.600   | 1                                 |
| METALS  | Mercury                                    | 1.1E-02                                  | 0.010               | 0.25        | 8.19E-02                                    | 0.36   | 2.5E-01                                      | 0.010 1 J J   | 0.020 1  | ιj              | 0.089 1 J J   | 0.023  | 1 J J                             |
| METALS  | Nickel                                     | 1,9E+02                                  | 0.200               | 0.80        | 6.98E+00                                    | 1,16E+01   | 1.9E+02                                      | 2.270 1   | 582,000 1  | J               | 248,000 1   | 562.000  | 1                                 |
| METALS  | Potassium                                  | NE                                       | NA<br>0.100         | NA<br>0.20  | NA<br>3.48E+00                              | NA<br>5.575+00                                   | 135+02                                       | 0.145 1 J J   | 0.231 1  |                 | 0.282 1   | 0.236  | i บ บ                             |
| METALS  | Selenium                                   | 4.7E+02                                  | 0.050               | 0.20        | 0.31  | 0.37   | 4.7E+01                                      | 1.500 1 U U   | 1.720 1  | ບບ              | 1.720 1 U U   | 1.690  | 1 U U                             |
| METALS  | Sodium                                     | NE                                       | NA                  | NA          | NA  | NA   |  | 91.100 1 J J  | 23,700 1   |                 | 125.000 1   | 20.900   | 1 3 3                             |
| METALS  | Thallium                                   | 2.0E+00                                  | 0.010               | 0.02        | 0.47  | NE   | 2.0E+00                                      | 0.042 1   | 20,001 1   |                 | 25 300 1  | 24.300   | i                                 |
| METALS  | Vanadium                                   | 4.8E+01                                  | 0.125               | 0.50        | 3.216+01                                    | 4.40E+UI<br>2.02E+01                             | 4.6E+01                                      | 5,950 1   | 19.400 1   |                 | 1140,000 10   | 27.200   | 1                                 |
| METALS  | ZIRC<br>Cortes Baras C12 C28               | 0.9E+03                                  | 25                  | 50          | NE  | NE   | 4.0E+02                                      | 37.000 1 J B  | 60.800 1   | υu              | 135.000 1 B   | 39.200   | 1 J B                             |
| RANGE_ORGANICS  | CARRON RANGE C28-C35                       | 4.0E+02                                  | 25                  | 50          | NE  | NE   | 4.0E+02                                      | 63.600 1  | 60,800 1   | υυ              | 85.200 1  | 58.600   | 1                                 |
| DANCE ORGANICS  | Carbon Ranne C6-C12                        | 1 7E+02                                  | 25                  | 50          | NE  | NE   | 1.7E+02                                      | 58.100 1 U U  | 60.800 1   | υυ              | 60.000 1 U U  | 58.600   | 1 U U                             |
| CEMINOL ATILES  | 1.2.4.Trichlorobarzene                     | 1.4E+02                                  | 0.083               | 0.17        | NE  | NE   | 1.4E+02                                      | 1.910 10 U U  | 0.212 1  | υU              | 3.950 20 U U  | 0.195  | 1 U U                             |
| SEMIVOLATILES   | 1 2-Dichlorobenzene                        | 5.6E+01                                  | 0.083               | 0.17        | NE  | NE   | 5.6E+01                                      | 1.910 10 U U  | 0.212 1  | υU              | 3.950 20 U U  | 0.195  | 1 U U                             |
| SEMINOLATIVES   | 1 3 Dichlorobenzene                        | 5 1E+00                                  | 0.083               | 0.17        | NE  | NE   | 5.1E+00                                      | 1,910 10 U U  | 0.212 1  | υu              | 3.950 20 U U  | 0.195  | 1 U U                             |
| SEMIVOLATILES   | 1 4-Dichlorobenzene                        | 2.7E+01                                  | 0.083               | 0.17        | NE  | NE   | 2.7E+01                                      | 1.910 10 U U  | 0.212 1  | υu              | 3.950 20 U U  | 0.195  | 1 U U                             |
| SEMIVOLATILES   | 2 4 5-Trichloronhenol                      | 1.6E+03                                  | 0.083               | 0.17        | NE  | NE   | 1.6E+03                                      | 1.910 10 U U  | 0.212 1  | υυ              | 3,950 20 U U  | 0.195  | 1 U U                             |
| SEMIVOLATILES   | 2.4.6-Tricolorophenol                      | 4.5E+01                                  | 0.083               | 0.17        | NE  | NE   | 4.5E+01                                      | 1.910 10 U U  | 0.212 1  | Uυ              | 3,950 20 U U  | 0.195  | 1 U U                             |
| SEMIVOLATILES   | 2.4-Dichlorophenol                         | 4.7E+01                                  | 0.083               | 0.17        | NE  | NE   | 4.7E+01                                      | 1.910 10 U U  | 0.212 1  | υu              | 3.950 20 U U  | 0.195  | 1 0 0                             |
| SEMIVOLATILES   | 2.4-Dimethylphenol                         | 3.1E+02                                  | 0.083               | 0.17        | NE  | NE   | 3.1E+02                                      | 1.910 10 U U  | 0.212 1  | υu              | 3.950 20 U U  | 0.195  | 100                               |
| SEMIVOLATILES   | 2,4-Dinitrophenol                          | 3.1E+01                                  | 0.330               | 0.83        | NE  | NE   | 3.1E+01                                      | 9.570 10 U U  | 1.060 1  | ψu              | 19.700 20 U U   | 0.974  | 1 0 0                             |
| SEMIVOLATILES   | 2,4-Dinitrotoluene                         | 7.2E-01                                  | 0.083               | 0.17        | NE  | NË   | 7.2E-01                                      | 1.910 10 U U  | 0.212 1  | 00              | 3.950 20 0 0  | 0.195  | 1 0 0                             |
| SEMIVOLATILES   | 2,6-Dinitrotoluene                         | 7.2E-01                                  | 0.083               | 0.17        | NE  | NE   | 7.2E-01                                      | 1.910 10 U U  | 0.212 1  | υυ              | 3,950 20 0 0  | 0.195  |                                   |
| SEMIVOLATILES   | 2-Chloronaphthalene                        | 1.1E+03                                  | 0.083               | 0.17        | NË  | NĘ   | 1.1E+03                                      | 1.910 10 U U  | 0.212 1  | 00              | 3.950 20 0 0  | 0.195  | 1 0 0                             |
| SEMIVOLATILES   | 2-Chlorophenol                             | 1.1E+02                                  | 0.083               | 0.17        | NE  | NÉ   | 1.1E+02                                      | 1,910 10 U U  | 0.212 1  | U U             | 3.950 20 0 0  | 0.190  | 1 0 0                             |
| SEMIVOLATILES   | 2-Methylnaphthalene                        | 5.5E+01                                  | 0.083               | 0.17        | NE  | NÉ   | 5.5E+01                                      | 1,910 10 U U  | 0.212 1  |                 | 3.950 20 0 0  | 0.195  | 1 0 0                             |
| SEMIVOLATILES   | 2-Methylphenol                             | 7.7E+02                                  | 0.083               | 0.17        | NE  | NE   | 7.7E+02                                      | 1.910 10 U U  | 0.212  | 00              | 3.950 20 0 0  | 0.195  | 1 0 0                             |
| SEMIVOLATILES   | 2-Nitroaniline                             | 4.7E+00                                  | 0.330               | 0.83        | NE  | NE   | 4.7E+00                                      | 9.570 10 U U  | 1.060  | 00              | 19.700 20 0 0   | 0.974  | 1 0 0                             |
| SEMIVOLATILES   | 2-Nitrophenol                              | 3.1E+01                                  | 0.083               | 0.17        | NE  | NE   | 3.1E+01                                      | 1.910 10 U U  | 0.212  |                 | 3,950 20 0 0  | 0.190  | 1 0 0                             |
| SEMIVOLATILES   | 3,3'-Dichlorobenzidine                     | 1.1E+00                                  | 0.165               | 0.33        | NE  | NE   | 1.1E+00                                      | 3.830 10 U U  | 0.424 1  |                 | 7,8%U 20 U U  | 0.390  | 1 11 11                           |
| SEMIVOLATILES   | 3-Nitroaniline                             | 4.7E+00                                  | 0.330               | 0.83        | NE  | NE   | 4.7E+00                                      | 9.570 10 U U  | 1.060 1  |                 | 19,700 ZO U U   | 0.9/4  | 4 11 11                           |
| SEMIVOLATILES   | 4,6-Dinitro-2-methylphenol                 | 3.1E+01                                  | 0.330               | 0.83        | NE  | NE   | 3.1E+01                                      | 9.570 10 U U  | 1.060 1  |                 | 19,700 20 U U   | 0.9/4  |                                   |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether                 | 3.1E-02                                  | 0.083               | 0.17        | NE  | NË   | 1.7E-01                                      | 0.860 10 U U  | 0.101  |                 | 2000 20 U U   | 0.080  |                                   |
| SEMIVOLATILES   | 4-Chloro-3-methylphenol                    | 7.7E+01                                  | 0.083               | 0.17        | NE  | NE   | 7.7E+01                                      | 1.910 10 U U  | 0.212  |                 | 3.950 20 0 0  | 0.193  | 1 11 11                           |
| SEMIVOLATILES   | 4-Chloroanišine                            | 6.2E+01                                  | 0.083               | 0.17        | NE  | NE   | 6.2E+01                                      | 1.910 10 U U  | 0.212  |                 | 3.830 20 Q U  | 0.193  | 1 11 13                           |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether                | 2.8E-02                                  | 0.083               | 0.17        | NÉ  | NE   | 1.7E-01                                      | 0.660 10 U  | 0.101  |                 | 2,000 20 0 0  | 0.035  | 1 11 11                           |
| SEMIVOLATILES   | 4-Methylphenol                             | 7.7E+01                                  | 0.083               | 0.17        | NE  | NE   | 7.7E+01                                      | 1 1.910 10 U U  | 0.212  |                 | 3.930 ZV U U  | 0.150  |                                   |

#### Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066525

#### Table 4-60 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-021

| [SUMP] = WRSUMP02<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | 1  | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>L. mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WRS021-SB01<br>WRS021-SB01-01<br>9/26/2008<br>0 - 0.5 Ft<br>REG | WRS021-S801<br>WRS021-S801-02<br>9/26/2006<br>3.5 - 4.5 Ft<br>REG | WRS021-SB02<br>WRS021-SB02-01<br>9/26/2006<br>0 - 0.5 Ft<br>REG | WRS021-SB02<br>WRS021-SB02-02<br>9/26/2006<br>4 - 5 Ft<br>REG |
|---|--|--|---------------------|------------------------|---|--|--|---|---|---|---|
| Test Group  | Parameter (Units = mg/kg)                  | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft                                       | Value  | Result DIL LQ VQ  | Result DIL LQ_VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| SEMIVOLATILES   | 4-Nitroaniline                             | 1.3E+01                                  | 0.330               | 0.83                   | NE                                      | NE   | 1.3E+01                                      | 9.570 10 U U  | 1.060 1 U U   | 19.700 20 U U   | 0.974 1 U U   |
| SEMIVOLATILES   | 4-Nitrophenol                              | 3.1E+01                                  | 0.330               | 0.83                   | NE                                      | NE   | 3.1E+01                                      | 9.570 10 U U  | 1.060 1 U U   | 19.700 20 U U   | 0.974 1 U U   |
| SEMIVOLATILE\$  | Acenaphthene                               | 8.2E+02                                  | 0.083               | 0.17                   | NE                                      | NE   | 8.28+02                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Acenaphthylene                             | 8.2E+02                                  | 0.083               | 0.17                   | NE                                      | NE   | 8.2E+02                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Anthracene                                 | 4.1E+03                                  | 0.0825              | 0.165                  | NE                                      | NE   | 4.1E+03                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Benzo(a)anthracene                         | 6.3E-01                                  | 0.0825              | 0.165                  | 0.02                                    | NE   | 6.3E-01                                      | 1,910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Benzo(a)pyrene                             | 6.3E-02                                  | 0.0825              | 0.165                  | 0.02                                    | NE   | 1.7E-01                                      | 0.860 10 U U  | 0.101 1 U U   | 2:000 20 U U  | 0.098 1 U U   |
| SEMIVOLATILES   | Benzo(b)fluoranthene                       | 6.3E-01                                  | 0.0825              | 0.165                  | 0.02                                    | NE   | 6.3E-01                                      | 1.910 10 0 0  | 0.212 1 0 0   | 3.950 20 0 0  | 0.195 1 U U   |
| SEMIVOLATILES   | Benzo(ghi)perylene                         | 4.1E+02                                  | 0.0825              | 0.165                  | 0.01                                    | NE   | 4.12+02                                      | 1.910 10 0 0  | 0.212 1 0 0   | 3.950 20 0 0  | 0.195 1 0 0   |
| SEMIVULATILES   | Benzo(K)iiUorantnene                       | 6.32+00                                  | 0.0825              | 0.100                  | 0.01                                    | NE   | 0.35+00                                      |   | 1060 1 11 11  | 10 700 20 0 0   | 0.135 1 0 0<br>0.974 t 11 111                                 |
| SEMIVOLATILES   | Benzoic Acid                               | 6.2E+04                                  | 0.3300              | 0.620                  | NE                                      |  | 0.2E704                                      | 9.570 10 0 03   |   | 3 950 20 11 11  | 0.374 1 0 03  |
| SEMIVULATILES   | Benzyi Alkorki                             | 4.72703                                  | 0.0625              | 0.105                  | NE                                      |  | 4.7 ET03                                     | 1,910 10 0 0  | 0.212 1 0 0   | 3 950 20 11 11  | 0.195 1 1 1   |
| SEMINOLATILES   | bis(2-Chioroethd)ether                     | 1.5E-01                                  | 0.0025              | 0.165                  | NE                                      | NE   | 1.7E-01                                      | 0.850 10 U U  | 0.101 1 1 1   | 2000 20 11 11   | 0.098 1 U U   |
| SEMIVOLATILES   | bis(2-Chloroisopropul)ether                | 4 8E+00                                  | 0.0825              | 0.165                  | NE                                      | NE   | 4 8E+00                                      | 1 910 10 11 11  | 0.212 1 11 11   | 3 950 20 11 11  | 0.195 1 U U   |
| SEMIVOLATILES   | his(2-Ethydhavod) http://eulei             | 176+01                                   | 0.0025              | 0.165                  | NE                                      | NE   | 1 7E+01                                      | 1 020 10 J B  | 0.212 1 U U   | 8.860 20 B  | 0.195 1 U U   |
| SEMIVOLATILES   | Butyl benzyl obthalate                     | 3.1E+03                                  | 0.0825              | 0.165                  | NE                                      | NE   | 3.1E+03                                      | 1.910 10 U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Chrysene                                   | 6.3E+01                                  | 0.0825              | 0.165                  | 0.02                                    | NE   | 6.3E+01                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Dibenzo(a.h)anthracene                     | 6.3E-02                                  | 0.0825              | 0.165                  | NE                                      | NE   | 1.7E-01                                      | 0.860 10 U U  | 0.101 1 U U   | 2.000 20 U U  | 0.098 1 U U   |
| SEMIVOLATILES   | Dibenzofuran                               | 6.2E+01                                  | 0.0825              | 0.165                  | NE                                      | NE   | 6.2E+01                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Diethyl phthalate                          | 1.2E+04                                  | 0.0825              | 0.165                  | NE                                      | NE   | 1.2E+04                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Dimethyl phthalate                         | 1.2E+04                                  | 0.0825              | 0.165                  | NE                                      | NË   | 1.2E+04                                      | 2.700 10  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | di-n-Butyl phthalate                       | 1.6E+03                                  | 0.0825              | 0.165                  | NE                                      | N€   | 1.6E+03                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | di-n-Octyl phthalate                       | 3.1E+02                                  | 0.0825              | 0.165                  | NE                                      | NE   | 3.1E+02                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Fluoranthene                               | 5.5E+02                                  | 0.0825              | 0.165                  | 0.02                                    | NE   | 5.5E+02                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Fluorene                                   | 5.5E+02                                  | 0.0825              | 0.165                  | NË                                      | NE   | 5.5E+02                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Hexachlorobenzene                          | 2.5E-01                                  | 0.0825              | 0.165                  | NE                                      | NE   | 2.5E-01                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILE\$  | Hexachlorobutadiene                        | 1.6E+00                                  | 0.0825              | 0.165                  | NE                                      | NE   | 1.6E+00                                      | 1.910 10 U U  | 0.212 I U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Hexachlorocyclopentadiene                  | 1.0E+00                                  | 0.0825              | 0.165                  | NE                                      | NE   | 1.0E+00                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Hexachloroethane                           | 1.6E+01                                  | 0.0825              | 0.165                  | NE                                      | NE   | 1.6E+01                                      | 1,910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Indeno(1,2,3-cd)pyrene                     | 6.3E-01                                  | 0.0825              | 0.165                  | 0.01                                    | NE   | 6.3E-01                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 0 0   |
| SEMIVOLATILES   | Isophorone                                 | 5.2E+02                                  | 0.0825              | 0.165                  | NE                                      | NE   | 5.2E+02                                      | 1.910 10 U  | 0.212 1 0 0   | 3.950 20 0 0  | 0.195 1 0 0   |
| SEMIVOLATILES   | Naphthalene                                | 1.86+01                                  | 0.0825              | 0.165                  | NE                                      | NE   | 1.8E+01                                      | 1.910 10 0 0  | 0.212 1 0 0   | 3.950 20 0 0  | 0.195 1 0 0   |
| SEMIVOLATILES   | Nitropenzene                               | 6.512+00                                 | 0.0825              | 0.165                  | NE                                      | NE   | 6.5E+00                                      |   | 0.212 1 0 0   | 3.50 20 0 U   | 0.160 1 0 0   |
| SEMIVOLATILES   | n-INtroso-Gi-n-propylamine                 | 4.10-02                                  | 0.0625              | 0.105                  | NE                                      |  | 1.75-01                                      |   | 0.101 1 0 0   | 3950 20 11 11   | 0.195 1 11 11   |
| SEMIVOLATILES   | Pontachlorophonol                          | 3.95401                                  | 0.0620              | 0.105                  | ME                                      |  | 3.00+00                                      | 9.570 10 11 11  | 1060 1 11 11  | 19700 20 11 11  | 0.974 1 11 11   |
| SEMIVOLATILES   | Phenanthrana                               | 3.0E+00                                  | 0.0000              | 0.185                  | NE                                      | NE   | 4 15+02                                      | 1 910 10 10 10  | 0.212 1 11 11   | 3950 20 U U   | 0.195 1 U U   |
| SEMIVOLATILES   | Phenol                                     | 47E+03                                   | 0.0825              | 0.165                  | NE                                      | NE   | 4.75+03                                      | 1 910 10 U U  | 0.212 1 1 1   | 3.950 20 U U  | 0.195 1 U U   |
| SEMIVOLATILES   | Pyzene                                     | 4.1E+02                                  | 0.0825              | 0.165                  | 0.02                                    | NE   | 4.1E+02                                      | 1.910 10 U U  | 0.212 1 U U   | 3.950 20 U U  | 0.195 1 U U   |
| SOLIDS  | Percent Solids                             | NE                                       | NE                  | NE                     | NE                                      | NE   |  | 95.900 1  | 81.300 1  | 82.500 1  | 84.400 1  |
| VOLATILES   | 1,1,1,2-Tetrachloroethane                  | 5.2E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 5.2E+00                                      |   | 0.006 1 U U   |   | 0.005 1 U U   |
| VOLATILES   | 1,1,1-Trichloroethane                      | 2.3E+02                                  | 0.0005              | 0.005                  |   | NE   | 2.3E+02<br>5.1E-01                           |   | 0.006 1 0 0   |   | 0.005 1 0 0   |
| VOLATILES   | 1.1.2-Trichloroethane                      | 9,7E-01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 9.7E-01                                      |   | 0.006 1 U U   |   | 0.005 1 U U   |
| VOLATILES   | 1,1-Dichloroethane                         | 8.9E+01                                  | 0.0010              | 0.005                  | NE                                      | NE   | 8.9E+01                                      |   | 0.006 1 U U   |   | 0.005 1 U U   |
| VOLATILES   | 1,1-Dichloroethene                         | 2.7E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.7E+01                                      |   | 0,006 1 U U   |   | 0.005 1 U U   |
| VOLATILES   | 1.2.3-Trichlorobenzene                     | 4.2E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.2E+01                                      |   | 0.006 1 U U   |   | 0.005 1 U U   |
| VOLATILES   | 1,2,3-Trichloropropane                     | 9.2E-02                                  | 0.0010              | 0.005                  | NE                                      | NE   | 9.2E-02                                      |   | 0.006 1 U U   |   | 0.005 1 U U   |
| VOLATILES   | 1,2,4-Trichlorobenzene                     | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1,4E+02                                      |   | 0.006 1 U U   |   | 0.005 1 0 0   |
| VOLATILES   | 1.2-Dibromo-3-chloropropane                | 3.5E-01                                  | 0.0020              | 0.005                  | NË                                      | NË   | 3.5E-01                                      |   | 0.006 1 U U   |   | 0.005 1 U U   |
| VOLATILES   | 1,2-Dibromoethane                          | 5.3E-02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 5.3E-02                                      |   | 0.006 1 Ū Ū   |   | 0.005 1 U U   |
| VOLATILES   | 1,2-Dichlorobenzene                        | 5.6E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 5.6E+01                                      |   | 0.006 1 U U   |   | 0.005 1 U U   |
| VOLATILES   | 1,2-Dichloropronane                        | 2.7E-01<br>1.8E+00                       | 0.0005              | 0.005                  | NE                                      | NE   | 2.7E-01<br>1.8E+00                           |   | 0.006 1 U U   |   | 0.005 1 U U   |
| VOLATILES   | 1,2-Dimethylbenzene (o-Xylene)             | 3.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.3E+03                                      |   | 0.006 1 U U   |   | 0.005 1 U U   |
| VOLATILES   | 1,3,5-Trimethylbenzene                     | 8.3E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 8.3E+00                                      |   | 0.006 1 U U   |   | 0.005 1 U U   |
| VOLATILES<br>VOLATILES  | 1,3-Dichloropenzene<br>1,3-Dichloropronane | 5.1E+00<br>3.0E+00                       | 0.0005              | 0.005                  | NE                                      | NE   | 5.1E+00<br>3.0E+00                           |   | 0.006 1 0 0   |   | 0.005 1 U U   |
| VOLATILES   | 1,4-Dichlorobenzene                        | 2.7E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.7E+01                                      |   | 0.006 1 U U   |   | 0.005 1 Ŭ Ŭ   |

Shaw Environmental, Inc.

00066526

#### Table 4-60 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-021

|   |                           |            |             |              |          |              |            |  | •  |  |  |
|---|---------------------------|------------|-------------|--------------|----------|--------------|------------|--|--|--|--|
| [SUMP] = WRSUMP02:<br>LOCATION _CODE<br>SAMPLE_NO | I                         | TCEQ       |             |              | Back     | ground       | Applicble  | WR\$021-SB01<br>WR\$021-SB01-01<br>9/26/2006 | WRS021-SB01<br>WRS021-SB01-02<br>9/26/2006 | WRS021-SB02<br>WRS021-SB02-01<br>9/26/2006 | WR\$021-SB02<br>WR\$021-SB02-02<br>9/26/2006 |
| SAMPLE_DATE                                       |                           | Risk-based | Mathed      | Mathod       | (05% LIE |              | Rick-Racod | 0-05 Ft                                      | 3.5 - 4.5 Ft                               | 0 - 0.5 Ft                                 | 4 - 5 Ft                                     |
| DEPTH   |                           | Screening  | Detection   | Overtitation | Surface  | Subsurface   | Screening  | REG  | REG  | REG  | REG  |
| SAMPLE_PURPOSE                                    |                           | value      | Detection   | Quantitation | Sunace   | Juusunace    | ociesting  |  |  | Bosult DIL LO VO                           | Regult DIL 10 VO                             |
| Test Group  | Parameter (Units = mg/kg) | (RBSV)     | Limit (MDL) | Limit (MQL)  | 0-0.5 Ft | 1.5 - 2.5 Ft | Value      | Result DIL LQ VQ                             | 0,008 1 11 U                               | Result DIE La Va                           | 0.005 1 11 U                                 |
| VOLATILES   | 2,2-Dichloropropane       | 1.7E+00    | 0.0005      | 0.005        | NE       | NE           | 1./E+00    |  | 0.000 1 0 0                                |  | 0.010 1 1 1                                  |
| VOLATILES   | 2-Butanone                | 2.6E+03    | 0.0025      | 0.010        | NE       | NE           | 2.02+03    |  | 0.011 1 0 0                                |  | 0.010 1 11 11                                |
| VOLATILES   | 2-Chloroethyl vinyl ether | 2.1E-01    | 0.0020      | 0.010        | NE       | NE           | 2.1E-01    |  |  |  | 0005 1 1 1                                   |
| VOLATILES   | 2-Chlorotoluene           | 1.5E+02    | 0.0005      | 0.005        | INC.     | NE           | 2.45.04    |  | 0.000 1 0 0                                |  | 0.005 1 U U                                  |
| VOLATILES   | 4-Chlorotoluene           | 3.4E-01    | 0.0005      | 0.005        | NE.      | NE           | 175402     |  | 0.011 1 1 1                                |  | 0.019 1 O J                                  |
| VOLATILES   | Acetone                   | 1.7E+02    | 0.0050      | 0.010        |          | NE           | 9 PE 01    |  | 0.006 1 11 11                              |  | 0.005 1 U U                                  |
| VOLATILES   | Benzene                   | 8.85-01    | 0.0005      | 0.005        |          | NE           | 1 15+01    |  | 0.006 1 1 1                                |  | 0.005 1 U U                                  |
| VOLATILES   | Bromobenzene              | 1,1E+01    | 0.0005      | 0.005        | NE       | NE           | 2.45401    |  | 0.006 1 0 0                                |  | 0.005 1 U U                                  |
| VOLATILES   | Bromochioromeinane        | 2.4E+01    | 0,0005      | 0.005        |          | NE           | 1.05+01    |  | 0.005 1 1 1                                |  | 0.005 1 U U                                  |
| VOLATILES   | Bromodichioromethane      | 1.02+01    | 0.0005      | 0.005        | NE       | NE           | 2.45404    |  | 0.006 1 11 U                               |  | 0.005 1 U U                                  |
| VOLATILES   | Bromotorm                 | 3.45+01    | 0.0005      | 0.000        | NE       | NE           | 3.467.01   |  | 0.011 1 1 1                                |  | 0.010 1 U U                                  |
| VOLATILES   | Bromomethane              | 3.32-01    | 0.0010      | 0.010        | NE       | NG           | 1.0=+02    |  | 0006 1 1 10                                |  | 0.005 1 U U                                  |
| VOLATILES   | Carbon disunde            | 1.0E±02    | 0,0005      | 0.005        | 240      | NE           | 3.55-01    |  | 0.006 1 1 1                                |  | 0.005 1 U U                                  |
| VOLATILES   | Carbon tetrachionoe       | 3,35+01    | 0.0005      | 0.005        | 116      | NE           | 4 0E+01    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | Chlorobenzene             | 4.00701    | 0.0000      | 0.000        | NE       | NE           | 1.1E+03    |  | 0011 1 U U                                 |  | 0.010 1 U U                                  |
| VOLATILES   | Chloroeunane              | 1.12703    | 0.0010      | 0.010        | NE       | NE           | 3.1E-01    |  | 0.006 1 1 1                                |  | 0.005 1 U U                                  |
| VOLATILES   | Chioronom                 | 3.12-01    | 0.0000      | 0.000        | NE       | NE           | 2 3E-01    |  | 0.011 1 1 1                                |  | 0.010 1 U U                                  |
| VOLATILES   | Chloromethane             | 4.35-01    | 0.0020      | 0.010        | NE       | NE           | 1.25+02    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | cis-1,2-Dickoroediene     | 1 25+00    | 0.0005      | 0.005        | NE       | NE           | 1.2E+00    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | Disconcelloroproperte     | 765-00     | 0,0005      | 0.005        | NE       | NE           | 7.6E+00    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | Dipromomolhano            | 1 05+01    | 0.0005      | 0.000        | NE       | NE           | 1.9E+01    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | Distionadifusementance    | 2.25+02    | 0.0000      | 0.000        | NE       | NE           | 2.2E+02    |  | 0.011 1 U U                                |  | 0.010 1 U U                                  |
| VOLATILES   | Ethyloozago               | 2.2C+02    | 0.0010      | 0.005        | NE       | NE           | 4.3E+02    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | Hovesblorobutadiene       | 1.65+00    | 0.0005      | 0.005        | NE       | NE           | 1.6E+00    |  | 0.006 1 U U                                |  | 0,005 1 U U                                  |
| VOLATILES   | leonronythenzerie         | 545+02     | 0.0005      | 0.005        | NE       | NE           | 5.4E+02    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATIES  | m n-Yulenee               | 2 3E+02    | 0.0005      | 0.005        | NE       | NE           | 2.3E+02    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | Methyl isobutyl ketone    | 1 3E+03    | 0.0025      | 0.01         | NE       | NE           | 1.3E+03    |  | 0.011 1 U U                                |  | 0.010 1 U U                                  |
| VOLATRES  | Methylene chloride        | 87E+00     | 0.0010      | 0.005        | NE       | NE           | 8.7E+00    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | Nanhthalene               | 1.8E+01    | 0.0005      | 0.01         | NÉ       | NE           | 1.8E+01    |  | 0.011 1 U U                                |  | 0.010 1 U U                                  |
| VOLATILES   | n-BUTYI BENZENE           | 2.7E+02    | 0.0005      | 0.005        | NE       | NE           | 2.7E+02    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | n-PROPYLSENZENE           | 3.2E+02    | 0.0005      | 0.005        | NE       | NE           | 3.2E+02    | 1  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | p-ISOPROPYLTOLUENE        | 4.2E+02    | 0.0005      | 0.005        | NE       | NE           | 4.2E+02    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | Sec-BUTYLBENZENE          | 3.0E+02    | 0.0005      | 0.005        | NE       | NE           | 3.0E+02    |  | 0,006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | Styrene                   | 1.3E+03    | 0.0005      | 0.005        | NE       | NE           | 1.3E+03    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | tert-BUTYLBENZENE         | 2.6E+02    | 0.0005      | 0.005        | NE       | NE           | 2.6E+02    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | Tetrachloroethene         | 6.0E+00    | 0.0005      | 0.005        | NE       | NE           | 6.0E+00    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | Toluene                   | 1.1E+03    | 0.0005      | 0.005        | NE       | NE           | 1.1E+03    |  | 0.006 1 U U                                |  | 0.005 1 0 0                                  |
| VOLATILES   | trans-1,2-Dichloroethene  | 1.4E+02    | 0.0005      | 0.005        | NE       | NE           | 1.4E+02    |  | 0.006 1 U U                                |  | 0.005 1 U U                                  |
| VOLATILES   | trans-1,3-Dichloropropene | 1.8E+00    | 0.0005      | 0.005        | NE       | NE           | 1.8E+00    | 1  | 0.006 1 U U                                |  | 0.005 1 0 0                                  |
| VOLATILES   | Trichloroethene           | 3.7E+00    | 0.0005      | 0.005        | NE       | NE           | 3.7E+00    |  | 0.006 1 U U                                |  |  |
| VOLATILES   | Trichlorofluoromethane    | 2.6E+02    | 0.0010      | 0.01         | NE       | NÉ           | 2.6E+02    |  | 0.011 1 0 0                                |  |  |
| VOLATILES   | Vinyl acetate             | 5.7E+01    | 0.0010      | 0.01         | NE       | NE           | 5.7E+01    | ]  | 0.011 1 0 0                                |  |  |
| VOLATILES   | Vind chloride             | 3.6E-02    | 0.0010      | 0.01         | NE       | NE           | 3.6E-02    | 1  | 0.011 1 0 0                                |  |  |

VOLATILES Vinvl chloride Footnotes are shown on cover page to Tables Section.

Page 3 of 3

## 00066527

#### Table 4-61 Upper Confidence Limits of Mean Concentrations in Soil at LHAAP-46 Locations Where One or More Values Exceed Risk-Based Screening Values Samples Collected After 2003

| Sample Number         Aluminum         Arsenic         Mercury           35-SMP01-SB01-01         4640         1.250         0.010           35-SMP01-SB01-02         5460         0.752         0.265           35-SMP01-SB02-01         7060         2.590         0.026   | Vanadium<br>15.600<br>9.210<br>61.100<br>19.900<br>46.700<br>13.900 |
|--|---|
| 35-SMP01-SB01-01         4640         1.250         0.010           35-SMP01-SB01-02         5460         0.752         0.265           35-SMP01-SB02-01         7060         2.590         0.026  | 15.600<br>9.210<br>61.100<br>19.900<br>46.700<br>13.900             |
| 35-SMP01-SB01-02         5460         0.752         0.265           35-SMP01-SB02-01         7060         2.590         0.026           35-SMP01-SB02-02         6510         0.832         0.273           WRS04-SB01-01         7500         1.050         0.021           WRS04-SB01-02         10200         0.386         0.011 | 9.210<br>61.100<br>19.900<br>46.700<br>13.900                       |
| 35-SMP01-SB02-01         7060         2.590         0.026  | 61.100<br>19.900<br>46.700<br>13.900                                |
| 35-SMP01-SB02-01         7060         2.350         0.020         L           35-SMP01-SB02-02         6510         0.832         0.273           WRS04-SB01-01         7500         1.050         0.021           WRS04-SB01-02         10200         0.386         0.011   | 19.900<br>46.700<br>13.900  |
| 35-SMP01-SB02-02         6510         0.632         0.213           WRS04-SB01-01         7500         1.050         0.021           WRS04-SB01-02         10200         0.386         0.011   | 46.700<br>13.900  |
| WRS04-SB01-01         7500         1.050         0.021           WRS04-SB01-02         10200         0.386         0.011   | 13.900  |
| WRS04-SB01-02 10200 0.386 0.011  | 13.900  |
|  |   |
| 35_SMP02_SB01-01 13600 1./40 0.013   | 32.000  |
| 55_SMP02_SB01_02 10000 2.090 0.282   | 18.300  |
| A110 2.210 0.031   | 24.100  |
| 9780 2850 0 0270   | 18,700  |
| 35-5MP02-5B02-02   | 28 500  |
| 35-SMP03-SB01-01   | 27 300  |
| 35-SMP03-SB01-01-QC 11500 2.330 0.046  | 27.500  |
| 35-SMP03-SB01-02 8160 1.190 0.024  | 16.900  |
| 35-SMP04-SB01-01 15900 3.030 0.080   | 58.500  |
| 35-SMP04-SB01-02 8840 1.530 0.282  | 13.400  |
| 35_SMP05_SB01_01 11000 1.710 0.025   | 26.600  |
| 25 SMD05 SB01 02 12400 2.240 0.032   | 25.300  |
| 50-504F07 50-01-02 7800 6 130 0.026  | 44.800  |
| 35-5MP0/-5801-01 0276  | 30,000  |
| 35-SMP07-SB01-02   | 28 100  |
| 35-SMP07-SB02-01 11300 2.420 0.042   | 26.100  |
| 35-SMP07-SB02-01-QC 12400 4.030 0.005  | 26.000  |
| 35-SMP07-SB02-02 10600 0.449 0.296   | 14.400  |
| 35-SMP08-SB01-02 8220 3.460 0.015  | 18.800  |
| 35_SMP09_SB01_02 12300 0.490 0.276   | 16.500  |
| 9100 4,260 0.015   | 31.700  |
| WIGWIF005 501 02 18800 1 330 0.297   | 29,700  |
| VVRSVIP-0053B01-02 70000 1770 0.063  | 41 000  |
| WRSMP005-SB02-02   | 28 900  |
| WRSMP005-SB02-02-QC 10000 1.730 0.042  | 19 700  |
| 35-SMP17-SB01-01 /240 2.270 0.023  | 19,700  |
| 35-SMP17-SB01-02 28400 1.120 0.029   | 30,900  |
| 35-SMP18-SB02-02 15200 1.12 0.0184   | 23.200  |
| WRS10-SB02-01 8760 1.290 0.029   | 34.400  |
| WBS10_SB02-02 28700 1.060 0.084  | 40.200  |
| 25 SMD21 SD01 02 27500 1.410 0.036   | 35.300  |
| 26500721500702 2530 0.021  | 42.600  |
| 35-50/F21-50/2-02 7240 25 800 0.031  | 26,600  |
| 35-SMP22-SB01-01 1240 2300 0.023   | 60.000  |
| 35-SMP22-SB01-02 0.000 0.020   | 38,000  |
| 35-SMP24-SB01-02   | 48.000  |
| 35-SMP24-SB02-02 7430 0.776 0.268  | 18.000  |
| LH-S24-01-BERA-SS01 (mercury not analyzed) 10100 8.300   | 27.300  |
| 35-SMP25-SB01-02 12700 0.959 0.276   | 16.800  |
| 35-SMP25-SB02-02 12600 1.210 0.282   | 22.000  |
| 35 SMP26 SP01-02 2.320 0.117   | 48.300  |
| 26 SNP20 SP01 02 12000 2.660 0.035   | 48.000  |
| 35-500-5050-501-02 12000 1600 0 105  | 40.000  |
| 33-SMP30-SB02-02   | 41 700  |
| 35-SMP31-SB01-02 5.500 0.100   | 32 200  |
| 35-SMP32-SB01-01 6700 5.500 0.709  | 40,300  |
| 35-SMP33-SB01-01 6020 1.540 0.027  | 19.300  |
| 35-SMP33-SB01-02 12100 2.130 0.020   | 22.700  |
| WRS-015-SB01-01 6240 5.940 0.046   | 32.900  |
| 35-SMP034-SB01-02 16800 1.540 0.032  | 41.100  |
| 25 SM 24 SB01.01 11500 8.230 0.080   | 31.200  |
| 35 SMP 34 SD01 01 OC 9410 4 310 0.078  | 27.700  |
| 35-51/1734-5001-01-0C  | 35.900  |
| 35-SMP034-SB02-02  | 63 600  |
| 35-SMP34-SB02-01 0.077   | 40.400  |
| WRS-015-SB01-02 22200 4.360 0.047 L  | 49.100  |
| WRS-15-SB02-01 6340 5.510 0.030  | 41.500  |
| WRS-15-SB02-02 13500 2.310 0.019   | 30.500  |
| 35-SMP35-S801-01 6090 6.230 0.110  | 18.000  |
| 35 SMD35 SB01.02 3050 1.870 0.016  | 12.400  |
| 25 SMD25 SD0101 6430 7 100 0.750   | 35.800  |
| 0-01/01-02-02-02 4/200 2710 0.032  | 40,700  |
| 35-5MP35-5B02-02 14200 2.110 0.022   | 24 800  |
| 35-SMP42-SB01-01 7890 5.000 0.002  | 24.000  |
| 35-SMP42-SB01-02 19200 1.340 0.124   | 01.000  |
| 35-SMP42-SB01-02-QC 18200 2.220 0.115  | 33,600  |
| WRS011-SB01-01 4640 1.250 0.0101   | 15.600  |

## 00066528

#### Table 4-61 Upper Confidence Limits of Mean Concentrations in Soil at LHAAP-46 Locations Where One or More Values Exceed Risk-Based Screening Values Samples Collected After 2003

|   |          | Soil Concen | tration (mg/kg) |          |
|---|----------|-------------|-----------------|----------|
| Sample Number                           | Aluminum | Arsenic     | Mercury         | Vanadium |
| WRS011-SB01-02                          | 15400    | 1.990       | 0.0655          | 29.200   |
| WRS011-SB02-01                          | 7890     | 2.710       | 0.0379          | 22.100   |
| WRS011-SB02-02                          | 18400    | 0,783       | 0.0121          | 23.800   |
| 35-SMP107-SB01-01                       | 4640     | 1.250       | 0.010           | 15.600   |
| 35-SMP107-SB01-02                       | 4900     | 0.376       | 0.022           | 19.900   |
| 35-SMP107-SB02-01                       | 7690     | 1.040       | 0.034           | 20.400   |
| 35-SMP107-SB02-02                       | 10100    | 0.948       | 0.015           | 22.600   |
| 35-SMP107-SB02-02-OC                    | 8460     | 0.532       | 0.014           | 30.300   |
| NRS016-SB01-01                          | 7340     | 0.888       | 0.022           | 105.000  |
| NRS016-SB02-01                          | 8830     | 0.954       | 0.028           | 83.700   |
| NRS019-SB01-01                          | 4640     | 1.250       | 0.010           | 15.600   |
| NRS019-SB01-01-0C                       | 6600     | 7,660       | 0.026           | 43.000   |
| WRS019-SB02-01                          | 11800    | 1.330       | 0.066           | 72.200   |
| Vean (mg/kg)                            | 1.2E+04  | 2.9E+00     | 8.9E-02         | 3.2E+01  |
| Std Dev. (ma/ka)                        | 6.6E+03  | 3.3E+00     | 1.2E-01         | 1.7E+01  |
| Sample size (N)                         | 79       | 79          | 78              | 79       |
| 95% UCL EPC (mg/kg) Post-2003 Samples * | 1.2E+04  | 2.9E+00     | 9,4E-02         | 3.0E+01  |
| Applicable RBSV                         | 1.6E+04  | 2.0E+01     | 2.5E-01         | 4.8E+01  |

Notes:

<sup>a</sup> 95% upper confidence limit (UCL) determined using bootstrapping (2000 replications).

## 00066529

| Table 4-62a   |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| Incremental Lifetime Cancer Risk (ILCR) for Potential Ingestion Exposure of Future Maintenance Workers to |  |  |  |  |  |  |  |
| Chemicals in Soil Associated with Sumps at the LHAAP-46 Site  |  |  |  |  |  |  |  |

### CARCINOGENIC EFFECTS

| ASSUMPTIONS:                       |                                 |                           | EQ             | UATIONS             |                                     |
|------------------------------------|---------------------------------|---------------------------|----------------|---------------------|-------------------------------------|
| Soil Ingestion Rate, IRsoil (mg/d) | 50                              |                           |                |                     | -                                   |
| Exposure Frequency, EF (d/yr)      | 250                             |                           | EPC            | * IRsoil * MCF * ED | * EF                                |
| Exposure Duration, ED (yr)         | 25                              |                           | [D =           |                     |                                     |
| Body Weight, BW (kg)               | 70                              |                           |                | BW * ATc * TCF      |                                     |
| Averaging Time, ATc (yr)           | 70                              |                           |                |                     |                                     |
| Conversion Factors                 |                                 |                           | ILCR = ID * SF | 0                   |                                     |
| Mass, MCF (kg/mg)                  | 1.00E-06                        |                           |                |                     |                                     |
| Time, TCF (d/yr)                   | 365                             |                           |                |                     |                                     |
|                                    | Exposure Point<br>Concentration | Oral Slope<br>Factor, SFo | Weight<br>of   | Intake Dose<br>ID   | Incremental Lifetime<br>Cancer Risk |
| Chemical Name                      | EPC (mg/kg)                     | 1/(mg/kg/d)               | Evidence       | (mg/kg/d)           | ILCR                                |
| Arsenic                            | 2.90E+00                        | 1.50E+00                  | A              | 5.07E-07            | 7.60E-07                            |
|                                    |                                 |                           |                |                     |                                     |

PATHWAY CANCER RISK

### 7.60E-07



### 00066530

| Table 4-62b   |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| Hazard Index (HI) for Potential Ingestion Exposure of Future Maintenance Workers to |  |  |  |  |  |  |  |
| Chemicals in Soil Associated with Sumps at the LHAAP-46 Site                        |  |  |  |  |  |  |  |

#### NON-CARCINOGENIC EFFECTS ASSUMPTIONS: EQUATIONS Soil Ingestion Rate, IRsoil (mg/d) 50 Exposure Frequency, EF (d/yr) 250 EPC \* IRsoil \* MCF \* ED \* EF Exposure Duration, ED (yr) 250 ID = BW \* ATn \* TCF Body Weight, BW (kg) 70 Averaging Time, ATn (yr) 25 **Conversion Factors** ID HQ = -----Mass, MCF (kg/mg) 1.00E-06 Time, TCF (d/yr) 365 RfDo Exposure Point Oral Intake Dose RfDo ID Hazard Quotient Concentration EPC (mg/kg) (mg/kg/d) HQ **Chemical Name** (mg/kg/d) 4.73E-02 2.90E+00 3.00E-04 1.42E-05 Arsenic

TOTAL PATHWAY HAZARD INDEX

4.73E-02

00066531

Table 4-63a Incremental Lifetime Cancer Risk (ILCR) for Potential Inhalation Exposure of Future Maintenance Workers to Airborne Chemicals from Soil at the LHAAP-46 Site

| CARCINOGENIC EFFECTS  |                                 |                            |              |                              |                            |  |                           |   |         |  |                              |                      |                                     |
|---|---------------------------------|----------------------------|--------------|------------------------------|----------------------------|--|---------------------------|---|---------|--|------------------------------|----------------------|-------------------------------------|
| ASSUMPTIONS:  | -                               |                            |              |                              |                            | EQUATIONS                                |                           |   |         | -                                      |                              |                      |                                     |
| Particulate Emissions Factor, PEF (m3/kg)<br>Exposure Frequency, EF (d/yr)  | 4.63E+08<br>250                 |                            |              |                              | EPC * MCF * (1/V           | F+1/PEF) * EF * ED                       |                           |   |         |  |                              |                      |                                     |
| Exposure Duration, ED (yr)<br>Averaging Time, ATc (yr)<br>Conversion Factor | 25<br>70                        |                            |              | Air Concentration (ugh       | m*)=AT                     | c * TCF                                  |                           |   |         |  |                              |                      |                                     |
| Time, TCF (dlyr)<br>Mass, MCF (microglmg)                                   | 365<br>1090                     |                            |              | ILCR = Air concentration     | on * URF                   |  |                           |   |         |  |                              |                      |                                     |
| SITE DATA / DEFAULT FACTORS:  | -                               |                            |              |                              |                            |  |                           |   |         |  |                              |                      |                                     |
| Length of contaminated area, LS (m)<br>True soil porosity, E (unitiess)     | 1.72E+03<br>0.35                | LHAAP-46 specifi           | ic           | (LS*V*DH)<br>VF =            | (3.14*a<br>X               | ≞*T) <sup>1/2</sup>                      |                           | Dei*E<br>a =                            |         |  |                              |                      |                                     |
| Wind speed in mixing zone, V (m/s)  | 2.25                            |                            |              | A                            | (2 * Dej * E * !           | Kaa * 10 <sup>-3</sup> kg/g)             |                           | E + (ps) * (1-E) /                      | Kas     |  |                              |                      |                                     |
| True soil density, ps (g/cm³)<br>Diffusion height, DH (m)                   | 2.65<br>2                       |                            |              |                              |                            |  |                           |   |         |  |                              |                      |                                     |
| Exposure interval, T (s)  | 7.90E+08                        |                            |              | Dei = Di * E <sup>6.33</sup> |                            |  |                           |   |         |  |                              |                      |                                     |
| Area of contamination, A (cm²)<br>Organic carbon content, OC (unitiess)     | 9.19E+09<br>0.02                | LHAAP-46 specifi           | ic           | Kd = Koc * 0C                |                            | Kas = (H / Kd) * 41                      |                           |   |         |  |                              |                      |                                     |
|   | Exposure Point<br>Concentration | Unit Risk<br>Factor, URF   | Weight<br>of | Molecular<br>Diffusivity, Di | Hanry's Law<br>Constant, H | Organic Carbon<br>Partition Coefficient, | Effective<br>Diffusivity, | Soil-Water Partition<br>Coefficient, Kd | a       | Soil/air Partition<br>Coefficient, Kas | Volatilization<br>factor, VF | Air Concentration    | Incremental Lifetime<br>Cancer Risk |
| Chemical Name   | EPC (mg/kg)                     | 1J{microgIm <sup>3</sup> } | Evidence     | (cm²ls)                      | (atm-m <sup>3</sup> imol)  | Koc (cm <sup>3</sup> /g)                 | Dei (cm²is)               | (cm <sup>3</sup> lg)                    | (cm²/s) | (cm <sup>3</sup> lg)                   | (m <sup>3</sup> /kg)         | (ugim <sup>3</sup> ) | ILCR                                |
| Arsenic   | 2.90E+00                        | 4.3E-03                    | A            | NA                           | 0.00E+00                   | NA                                       | NA                        | NA                                      | NA      | NA                                     | NA                           | 1.53E-07             | 6.59E-10                            |

TOTAL PATHWAY CANCER RISK

6.59E-10

### 00066532

#### Table 4-63b Hazard Index (HI) for Potential Inhalation Exposure of Future maintenance Workers to Airborne Chemicais from Soli at the LHAAP-46 Site

| ASSUMPTIONS:  |  |   |   |   | EQUATIONS  |  |   |              | -  |  |   |                       |
|---|--|---|---|---|--|--|---|--------------|--|--|---|-----------------------|
| Particulate Emissions Factor, PEF (m <sup>3</sup> lkg)<br>Exposure Frequency, EF (diyr)<br>Exposure Duration, ED (yr)<br>Averaging Time, ATn (yr)<br>Conversion Factors<br>Time, TCF (diyr) | 4.63E+09<br>250<br>25<br>25<br>25<br>365       |   | Air Concentration (mgi                  | EPC*(1NF+<br>im**3) =ATn '                              | 1/PEF) * EF * ED<br>• TCF  |  | Air Concentrat<br>HQ =<br>RfC                                   | ion          |  |  |   |                       |
| SITE DATA / DEFAULT FACTORS:  | <u> </u>                                       |   |   |   |  |  |   |              |  |  |   |                       |
| Length of contaminated area, LS (m)<br>True soil porosity. E (unitless)   | 1.72E+03 LHAAP-46 specifi<br>0.35              | Ċ.  | (LS * V * DH)<br>VF =                   | (3.14*a<br>X  | *T) <sup>1/2</sup>   |  | Dei*E   |              |  |  |   |                       |
| Wind speed in mixing zone, V (m/s)  | 2.25   |   | A                                       | (2 * Dei * E * K  | (as * 10 <sup>-3</sup> kg/g)   |  | E + (ps) * (1-E) / {  | as           |  |  |   |                       |
| True soil density, ps (g/cm <sup>3</sup> )<br>Diffusion height, DH (m)  | 2.65<br>2                                      |   |   |   |  |  |   |              |  |  |   |                       |
| Exposure interval, T (s)  | 7.90E+08                                       |   | Dei = Di * E <sup>9.33</sup>            |   |  |  |   |              |  |  |   |                       |
| Area of contamination, A (cm²)<br>Organic carbon content, OC (unitless)   | 9.19E+09 LHAAP-46 specifi<br>0.02              | c   | Kd = Koc * OC                           |   | Kas = (H / Kd) * 41  |  |   |              |  |  |   |                       |
| Chemical Name   | Exposure Point<br>Concentration<br>EPC (malka) | Reference<br>Conc., RfC<br>(maim <sup>3</sup> ) | Molecular<br>Diffusivity, Di<br>(cm²/s) | Henry's Law<br>Constant, H<br>(atm-m <sup>3</sup> /mol) | Organic Carbon<br>Partition Coefficient,<br>Koc (cm <sup>3</sup> /g) | Effective<br>Diffusivity,<br>Dei (cm²/s) | Soil-Water Partition<br>Coefficient, Kd<br>(cm <sup>3</sup> /g) | a<br>(cm²is) | Soil/alr Partition<br>Coefficient, Kas<br>(cm <sup>3</sup> /g) | Volatilization<br>factor, VF<br>m <sup>3</sup> lkg | Air Concentration .<br>(mg/m <sup>3</sup> ) | Hazard Quotient<br>HQ |
| Arsenic   | 2.90E+00                                       | NA  | NA                                      | 0.00E+00  | NA   | NA                                       | NA  | NA           | NA   | NA   | 4.29E-10                                    | 0.00E+00              |

TOTAL PATHWAY HAZARD INDEX 0.00E+00

### 00066533

| Table 4-64a  |
|--|
| Incremental Lifetime Cancer Risk (ILCR) for Potential Dermal Exposure of Future Maintenance Workers to |
| Chemicals in Soil Associated with Sumps at the LHAAP-46 Site   |

|   |                |                   |                           |                   | TOTAL PATHWAY | CANCER RISK | 4               | 2.28E-07             |
|---|----------------|-------------------|---------------------------|-------------------|---------------|-------------|-----------------|----------------------|
| Arsenic   | 2.90E+00       | 1.50E+00          | 9.50E-01                  | 1.50E+00          | 3.00E-02      | A           | 1.52E-07        | 2.28E-07             |
| Chemical Name                                   | EPC (mg/kg)    | 1/(mg/kg/d)       | (unitless)                | 1/(mg/kg/d)       | (unitless)    | Evidence    | (mg/kg/d)       | ILCR                 |
|   | Concentration  | Slope factor, SF  | Factor, ABS <sub>GI</sub> | Slope factor, SFd | Factor, ABSd  | of          | Dose, DAD       | Cancer Risk          |
|   | Exposure Point | Oral              | Absorption                | Dermal            | Absorption    | Weight      | Dermal Absorbed | Incremental Lifetime |
|   |                |                   | Gastrointestinal          |                   |               |             |                 |                      |
| Time, TCF (d/yr)                                | 365            |                   |                           |                   |               |             |                 |                      |
| Mass, MCF (kg/mg)                               | 1.00E-06       | DERMAL SF = ORAL  | L SF / ABS <sub>GI</sub>  |                   |               |             |                 |                      |
| Conversion Factors                              |                | ILCR = DAD * DERM | ALSF                      |                   |               |             | · ·             |                      |
| Averaging Time, AT (yr)                         | 70             |                   |                           |                   |               |             |                 |                      |
| Body Weight, BW (kg)                            | 70             | B                 | W * ATc * TCF             |                   |               |             |                 |                      |
| Exposure Duration, ED (yr)                      | 25             | DAD =             |                           |                   |               |             |                 |                      |
| Exposure ( requercy, cr (myr)                   | 200            | EPC * MCF *       | ED*EF*SA*AF*              | ABSd              |               |             |                 |                      |
| Exposure Frequency, EF (dbr)                    | 250            |                   |                           |                   |               |             |                 |                      |
| Adherence Eactor AE (md/cm <sup>2</sup> -avent) | n.,            |                   |                           |                   |               |             |                 |                      |
| Evposed Skin Surface Area, SA (cm2) - Adult     | 2 500          |                   |                           |                   |               |             |                 |                      |
| ASSUMPTIONS:                                    |                |                   | EQUA                      | rions             | -             |             | •               |                      |
| CARCINOGENIC EFFECTS                            |                |                   |                           |                   |               |             |                 |                      |
|   |                |                   |                           |                   |               |             |                 |                      |

TOTAL PATHWAY CANCER RISK

ĸ,

τ.

s,

÷.

## 00066534

#### Table 4-64b Hazard Index (HI) for Potential Dermal Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-46 Site

| NON-CARCINOGENIC EFFECTS                   |                |                 |                            |               |              |                 |                 |
|--|----------------|-----------------|----------------------------|---------------|--------------|-----------------|-----------------|
| ASSUMPTIONS:                               |                |                 | EQUATIO                    | ONS           |              |                 |                 |
| Skin Surface Area, SA (cm <sup>2</sup> )   | 2,500          | EPC *           | MCF * ED * EF * SA * AF    | * ABSd        |              |                 |                 |
| Adherence Factor, AF (mg/cm <sup>2</sup> ) | 0.2            | DAD =           |                            |               |              |                 |                 |
| Exposure Frequency, EF (d/yr)              | 250            |                 | BW * ATn * TCF             |               |              |                 |                 |
| Exposure Duration, ED (yr)                 | 25             |                 |                            |               |              |                 |                 |
| Body Weight-adult, BW (kg)                 | 70             | DAD             |                            |               |              |                 |                 |
| Averaging Time-adult, ATn (yr)             | 25             | HQ =            |                            |               |              |                 |                 |
| Conversion Factors                         |                | DERMALI         | RfD                        |               |              |                 |                 |
| Mass, MCF (kg/mg)                          | 1.00E-06       |                 |                            |               |              |                 |                 |
| Time, TCF (d/yr)                           | 365            | DERMAL RfD = OR | AL RID x ABS <sub>GI</sub> |               |              |                 |                 |
|  |                |                 | Gastrointestinal           |               |              |                 |                 |
|  | Exposure Point | Oral            | Absorption                 | Dermal        | Absorption   | Dermal Absorbed |                 |
|  | Concentration  | RfD             | Factor, ABS <sub>GI</sub>  | RfD           | Factor, ABSd | Dose, DAD       | Hazard Quotient |
| Chemical Name                              | EPC (mg/kg)    | (mg/kg/d)       | (unitless)                 | (mg/kg/d)     | (unitless)   | (mg/kg/d)       | HQ              |
| Arsenic                                    | 2.90E+00       | 3.00E-04        | 9.50E-01                   | 3.00E-04      | 3.00E-02     | 4.26E-07        | 1.42E-03        |
|  |                |                 | 1                          | TOTAL PATHWAY | HAZARD INDEX |                 | 1.42E-03        |

| Table 4-65a  |      |
|--|------|
| Exposures and Incremental Lifetime Cancer Risks for Potential Expoure of Future Maintenance Worker | s to |
| Soil at the LHAAP-46 Site  |      |

|                            |               | Soil Ingestion | Soil Inhalation | Dermal  |
|----------------------------|---------------|----------------|-----------------|---------|
|                            | Source Term   | Cancer         | Cancer          | Cancer  |
|                            | Concentration | Risk           | Risk            | Risk    |
| Chemical                   | (mg/kg)       | (ILCR)         | (ILCR)          | (ILCR)  |
| Arsenic                    | 2.90E+00      | 7.6E-07        | 6.6E-10         | 2.3E-07 |
| Pathway Cancer Risk (ILCR) |               | 7.6E-07        | 6.6E-10         | 2.3E-07 |
| Total ILCR                 |               |                |                 | 9.9E-07 |

 
 Table 4-65b

 Exposures and Noncancer Hazards for Potential Expoure of Future Future Maintenance Workers to Soil at the LHAAP-46 Site

| Chemical                  | Source Term<br>Concentration<br>(mg/kg) | Soil Ingestion<br>HQ | Soil Inhalation<br>HQ | Dermal<br>HQ |
|---------------------------|---|----------------------|-----------------------|--------------|
| Arsenic                   | 2.90E+00                                | 4.7E-02              | 0.0E+00               | 1.4E-03      |
| Pathway Hazard Index (HI) |   | 4.7E-02              | 0.0E+00               | 1.4E-03      |
| Total HI                  |   |                      |                       | 4.9E-02      |

## 00066536

| Table 4-66a   |
|---|
| Revision of Cancer Risk Estimates Based on Pre-2003 Measurements of Metals in Soil by |
| Using Post-2003 Soil Analysis Results   |
| LHAAP-46  |
|   |

| -        | Jacobs (2003)    | "Jacobs (2003)           | Jacobs Total    |                      | Post-2003                |               |
|----------|------------------|--------------------------|-----------------|----------------------|--------------------------|---------------|
|          | Exposure Point   | Incremental              | Soil            |                      | Incremental              | Revised Total |
|          | Concentration    | Lifetime Cancer          | Incremental     | Post-2003 EPC        | Lifetime Cancer          | Soil Cancer   |
| Chemical | (EPC) (mg/kg) ab | Risk (ILCR) <sup>c</sup> | Lifetime Cancer | (mg/kg) <sup>e</sup> | Risk (ILCR) <sup>f</sup> | Risk (ILCR) 9 |
| Aluminum | 8.07E+03         | NA                       | 1.7E-05         | 1.17E+04             | NA                       | 1.8E-05       |
| Arsenic  | NE               | NE                       |                 | 2.90E+00             | 9.9E-07                  |               |
| Mercury  | 5.60E-01         | NA                       |                 | 9.39E-02             | NA                       |               |
| Vanadium | 2.89E+01         | NA                       |                 | 3.03E+01             | NA                       |               |

# Table 4-66b Revision of Noncancer Hazard Estimates Based on Pre-2003 Measurements of Metals in Soil by Using Post-2003 Soil Analysis Results LHAAP-46

| Chemical                                   | Jacobs (2003)<br>Exposure Point<br>Concentration<br>(EPC) (mg/kg) <sup>b</sup> | Jacobs (2003)<br>Hazard Index<br>(HI) <sup>h</sup> | Jacobs (2003)<br>Total Soil<br>Hazard Index<br>(HI) <sup>i</sup> | Post-2003 EPC<br>(mg/kg) <sup>e</sup>        | Post-2003<br>Hazard Index<br>(HI) <sup>i</sup> | Net Increase in<br>Hazard Index<br>(Hi) <sup>k</sup> | Revised Total<br>Soil Hazard<br>Index (HI) <sup>1</sup> |
|--|--|--|--|--|--|--|---|
| Aluminum<br>Arsenic<br>Mercury<br>Vanadium | 8.07E+03<br>NE<br>5.60E-01<br>2.89E+01   | 1.30É-02<br>NA<br>3.50E-03<br>1.40E-02             | 1.2E-01  | 1.17E+04<br>2.90E+00<br>9.39E-02<br>3.03E+01 | 1.9E-02<br>4.9E-02<br>NC<br>1.5E-02            | 5.9E-03<br>4.9E-02<br>NA<br>6.7E-04                  | 1.8E-01   |

#### Notes:

a Jacobs Engineering Group, Inc., Final Baseline Human Health and Screening Ecological Risk Assessment for the Group 4 Sites, Sites 04, 08,

35A, 35B, 35C, 46, 47, 48, 50, 60, 67, Goose Prairie Creek, Saunder's Branch, and Caddo Lake, Volume 1, Longhorn Army Ammunition Plant,

Kamack, Texas, Oak Ridge, Tennessee, June 2003.

b Table 3-43 of Jacobs (2003) risk assessment.

c ILCR calculated for exposures to the metal in soil by all pathways evaluated, Table C-107 of Jacobs (2003) risk assessment.

d ILCR calcutated for exposures to all chemicals in soil by all pathways evaluated, Table C-107 of Jacobs (2003) risk assessment.

e Value based on samples collected since 2003, Table 4-61

f Value based on samples collected since 2003 (Table 4-65).

g Value equals sum of Jacobs (2003) value and result of calculations summarized in Table 4-65.

h HI calculated for exposures to the metal in soil by all pathways evaluated, Table C-104 of Jacobs (2003) risk assessment.

i HI calculated for exposures to all chemicals in soil by all pathways evaluated, Table C-104 of Jacobs (2003) risk assessment.

i Values for aluminum and vanadium Post-2003 HI = Jacobs HI x (Post-2003 EPC/Jacobs-2003 EPC).

k Net increase in HI for aluminum and vanadium = Post-2003 HI - Jacobs-2003 HI. Calculated value for arsenic is shown in Table 4-65.

I Revised HI = Jacobs-2003 Total HI + Sum of Net Increases in HI associated with aluminum, arsenic, and vanadium

NA - not applicable

NC - not calculated, Post 2003 EPC is less than Jacobs (2003) EPC.

NE - not evaluated, chemical was not evaluated in Jacobs (2003) risk assessment
00066537

#### Table 4-67

### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-044

| [SUMP] = SUMP044<br>LOCATION _CODE |                           |                    |                     |                        |                    |                         |                         | 35SUM        | /P044-SB01             |
|------------------------------------|---------------------------|--------------------|---------------------|------------------------|--------------------|-------------------------|-------------------------|--------------|------------------------|
| SAMPLE_NO<br>SAMPLE_DATE           |                           | TCEQ<br>Risk-Based |                     |                        | Back<br>Concentra  | ground<br>tions in Soil | Applicble<br>TCEO       | 35-SMF<br>9/ | P44-SB01-02<br>15/2006 |
| DEPTH<br>SAMPLE_PURPOSE            |                           | Screening<br>Value | Method<br>Detection | Method<br>Quantitation | (95% UP<br>Surface | L, mg/kg)<br>Subsurface | Risk-Based<br>Screening | 5            | S - 5 Ft<br>REG        |
| Test Group                         | Parameter (Units = mg/kg) | (RBSV) *           | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft         | 1.5 - 2.5 Ft            | Value                   | Result       | DIL LQ VQ              |
| PERC                               | Perchlorate               | 1.4E+01            | 0.005               | 0.010                  | NE                 | NE                      | 1.39E+01                | 0.02         | 20 2 U                 |
| SOLIDS                             | Percent Solids            | NE                 | NE                  | NE                     | NE                 | NE                      | _                       | 89.40        | 0 1                    |

00066538

#### Table 4-68

#### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-046

| [SUMP] = SU<br>LOCATION _<br>SAMPLE_NO<br>SAMPLE_DA<br>DEPTH<br>SAMPLE_PU | MP046<br>CODE<br>TE<br>RPOSE | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backo<br>Concentrat<br>(95% UP<br>Surface | ground<br>tions in Soil<br>'L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMF<br>35-SMP4<br>9/13<br>0.5 -<br>F | 046-S<br>6-SB0<br>/2006<br>0.5 Fl | 8801<br>01-01<br>t | 35SUM<br>35-SMP<br>9/1:<br>10<br>F | P046-SI<br>46-SB0<br>3/2006<br>- 10 Ft<br>REG | 801<br>1-02 | 35SUMF<br>35-SMP4<br>9/13<br>0.5 -<br>F | 2046-S<br>6-SB0<br>9/2006<br>0.5 Fi<br>EG | 802<br>12-01 | 35SUMF<br>35-SMP4<br>9/13<br>10 -<br>R | 046-S<br>6-SB0<br>/2006<br>10 Ft<br>EG | B02<br>2-02 |
|---|------------------------------|--|---------------------|------------------------|---|---|--|---|-----------------------------------|--------------------|------------------------------------|---|-------------|---|---|--------------|--|--|-------------|
| Test Group  | Parameter (Units = mo/kg)    | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0,5 Ft                                | 1.5 - 2.5 Ft  | Value  | Result                                  | DIL                               | LQ VQ              | Result                             | DIL   | LQ VQ       | Result                                  | DIL                                       | LQ VQ        | Result                                 | DIL                                    | LQ VQ       |
| PERC  | Perchlorate                  | 1.4E+01                                  | 5.000E-03           | 1.000E-02              | NE  | NÉ  | 1.4E+01                                      | 0.7450                                  | 1                                 |                    | 3,7100                             | 10  |             | 0.0284                                  | - 1                                       |              | 0.0100                                 | 1                                      | U           |
| SOLIDS  | Percent Solids               | NE                                       | NE                  | NE                     | NE  | NE  | -  | 82.2                                    | 1                                 |                    | 87.3                               | 1   |             | 93,4                                    | 1   |              | 85.8                                   | 1                                      |             |

Footnotes are shown on cover page to Tables Section.

Page 1 of 1

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

### 00066539

|  |   |   |  |   |  |  |  | Sump-047  |  |  |   |  |   |
|--|---|---|--|---|--|--|--|---|--|--|---|--|---|
| [SUMP] = SUMP<br>LOCATION_CO<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURP   | P047<br>DDE<br>E<br>POSE  | TCEQ<br>Risk-Based<br>Screening<br>Value  | Method<br>Detection  | Method<br>Quantitation  | Back<br>Concentra<br>(95% UF<br>Surface  | jround<br>tions in Soil<br><u>'L, mg/kg)</u><br>Subsurface   | Applicble<br>TCEQ<br>Risk-Based<br>Screening   | 35SUMP047-SB01<br>35-SMP47-SB01-01<br>9/15/2006<br>.55 Ft<br>REG  | 35SUMP047-SB01<br>35-SMP47-SB01-02<br>9/15/2006<br>2.5 - 2.5 Ft<br>REG   | 35SUMP047-SB02<br>35-SMP47-SB02-01<br>9/15/2006<br>.55 Ft<br>REG   | 35SUMP047-SB02<br>35-SMP47-SB02-02<br>9/15/2006<br>2.5 - 2.5 Ft<br>REG  | 47\$B04<br>47\$B04(0-0_5)<br>5/30/2000<br>05 Ft<br>REG | 47SB04<br>47SB04(1-2)<br>5/30/2000<br>1 - 2 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg)   | (RBSV) *  | Limit (MDL)  | Limit (MQL)   | 0 - 0.5 Ft   | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ   | <u>Result</u> DIL LQ VQ   | Result DIL LQ VQ                                       | Result DIL LQ VQ                                      |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS | Auminum<br>Antimony<br>Arsenic<br>Baryllium<br>Calcium<br>Calcium<br>Chromium<br>Copper<br>Iron<br>Lead<br>Magnesium<br>Manganese<br>Mercury<br>Nickel<br>Potassium<br>Selenium<br>Silver<br>Sodium<br>Thallium | 1.6E+04<br>2.0E+01<br>2.0E+01<br>2.6E+03<br>4.6E+00<br>5.2E+00<br>5.9E+03<br>1.6E+03<br>1.0E+03<br>NE<br>5.0E+02<br>NE<br>1.7E+03<br>1.1E-02<br>1.9E+02<br>4.7E+01<br>NE<br>1.3E+02<br>4.7E+01<br>NE<br>2.0E+00<br>0 KE | 10.000<br>0.500<br>0.075<br>0.075<br>0.075<br>0.012<br>0.025<br>NA<br>0.100<br>0.125<br>0.150<br>NA<br>0.500<br>NA<br>0.500<br>NA<br>0.050<br>0.010<br>0.050<br>NA<br>0.100<br>0.050<br>NA<br>0.100<br>0.050<br>NA | 20.00<br>0.10<br>0.30<br>0.50<br>0.50<br>0.50<br>0.50<br>0.50<br>0.50<br>NA<br>0.20<br>0.25<br>0.80<br>NA<br>0.20<br>0.25<br>0.20<br>0.20<br>0.20<br>0.20<br>0.20<br>0.20 | 1.63E+04<br>9.40E-01<br>4.81E+00<br>1.52E+02<br>6.45E-01<br>1.40E+00<br>NA<br>2.66E+01<br>7.23E+00<br>5.55E+00<br>NA<br>2.26E+01<br>8.19E-02<br>8.89E+00<br>NA<br>3.48E+00<br>3.10E-01<br>NA<br>4.70E-01<br>NA | 2.08E+04<br>1.60E+00<br>5.54E+00<br>8.55E+01<br>7.66E-01<br>4.00E-01<br>NA<br>3.01E+01<br>5.61E+00<br>9.25E+00<br>NA<br>1.14E+01<br>1.16E+01<br>1.16E+01<br>1.16E+01<br>NA<br>5.57E+00<br>3.70E-01<br>NA<br>NE<br>4.46E+01 | 1.6E+04<br>7.3E+00<br>2.0E+01<br>2.6E+03<br>4.6E+00<br>5.2E+00<br>5.9E+03<br>1.5E+03<br>1.5E+03<br>1.0E+02<br>-<br>-<br>7.7E+03<br>2.5E-01<br>1.9E+02<br>4.7E+01<br>2.5E+01<br>4.8E+01 | 10100.000 1<br>0.246 1<br>14.600 1<br>128.000 1<br>0.622 1<br>0.132 1 J J<br>969.000 1<br>12.700 1<br>7.370 1<br>7.370 1<br>13300.000 1<br>22.600 1<br>0.029 1 J J<br>7.890 1<br>681.000 1<br>0.325 1<br>1.620 U U U<br>31.400 1<br>0.061 1<br>24.100 1 | 8820.000         i           0.116         i           1.330         i           69.100         i           0.608         i           0.074         i           1100.000         i           21.100         i           9.970         i           3.580         i           15100.000         i           6.020         i           445.000         i           0.026         i         J           6.170         i           326.000         i           0.186         i         J           1.5300         i         U           72.600         i         J           27.500         i         i | 9680.000 1<br>0.230 1<br>4.110 1<br>54.000 1<br>0.452 1<br>0.452 1<br>0.421 1<br>860.000 1<br>10.400 1<br>4.580 1<br>3.220 1<br>12900.000 1<br>7.240 1<br>647.000 1<br>0.024 1<br>J J<br>5.550 1<br>383.000 1<br>0.151 1 J J<br>1.680 1<br>0.069 1<br>0.1069 1<br>20.100 1 | 9560.000         1           0.275         1           4.140         1           36.700         1           0.223         1         J           0.424         1         U           1080.000         1         1           7.600         1         2.350           11000.000         1         1           5.740         1         441.000           15.740         1         358.000           0.035         1         J           358.000         1         0.222           0.222         1         U           0.222         1         J           33.000         1         2.3600           0.058         1         J           33.000         1         2.0600 |  |   |
| METALS   | Zinc  | 5.9E+03   | 0.625  | 2.50  | 6.16E+01   | 2.02E+01   | 5.9E+03  | 63.500 1  | 16.300 1   | 16.900 1   | 10.900 1  |  |   |
| PERC   | Perchlorate<br>Percent Solids   | 1.4E+01<br>NE   | 0.005<br>NE  | 0.010<br>NE   | NE   | NE<br>NE   | 1.4E+01  | 0.040 4 U U<br>95.900 1   | 0.050 5 U U<br>91.600 1  | 0.181 1<br>91.300 1  | 1.400 2<br>90.100 1   | 0.049 1<br>100.000                                     | 0.006 1 < U<br>100.000                                |

Table 4-69 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas

Shaw Environmental, Inc.

### 00066540

| Table 4-70   |      |
|--|------|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Va | lues |

|  |  |  | •           |   |  | Sum  | o-048  |  |  |   |                  |
|--|--|--|-------------|---|--|--|--|--|--|---|------------------|
| [SUMP] = SUMP048<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |  | TCEQ<br>Risk-Based Con<br>Screening Method <u>(9</u><br>Value Detection Quantifation Surfa<br>value Detection Quantifation Surfa |             | Back<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soit<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP048-SB01<br>35-SMP48-SB01-01<br>9/13/2006<br>.55 Ft<br>REG | 35SUMP048-SB01<br>35-SMP48-SB01-02<br>9/13/2006<br>10 - 10 Ft<br>REG | 47SB06<br>47SB06(0-0_5)<br>5/31/2000<br>05 Ft<br>REG | 47SB06<br>47SB06(1-2)<br>5/31/2000<br>1 - 2 Ft<br>REG |                  |
| Test Group   | Parameter (Units ≃ mg/kg)                              | (RBSV) *   | Limit (MDL) | Limit (MQL)                             | 0 - 0.5 Ft   | 1.5 - 2.5 Ft                                 | Value  | Result DIL LQ VQ   | Result DIL LQ VQ                                     | Result DIL LQ VQ                                      | Result DIL LQ VQ |
| METALS   | Aluminum   | 1.6E+04  | 10.000      | 20.00                                   | 1.63E+04   | 2.08E+04                                     | 1.6E+04  | 6890.000 1   | 10500.000 1  |   |                  |
| METALS   | Antimony   | 7.3E+00  | 0.500       | 0.10                                    | 9.40E-01   | 1.60E+00                                     | 7.3E+00  | 0.107 1 U  | 0.125 1 U  |   |                  |
| METALS   | Barium   | 2.0E+01<br>2.6E+03   | 0.075       | 0.30                                    | 4.612+00   | 5.54E+00<br>8.55E+01                         | 2.0E+01<br>2.6E+03   | 5.940 T  | 125,000 1  |   |                  |
| METALS   | Beryllium  | 4.6E+00  | 0.012       | 0.50                                    | 6.45E-01   | 7.66E-01                                     | 4.6E+00  | 0.573 1  | 0.950 1  |   |                  |
| METALS   | Cadmium  | 5.2E+00  | 0.025       | 0.10                                    | 1.40E+00   | 4.00E-01                                     | 5.2E+00  | 0.397 1  | 0.144 1 J J  |   |                  |
| METALS   | Calcium  | NE   | NA          | NA                                      | NA   | NA   |  | 989.000 1  | 2140.000 1   |   |                  |
| METALS   | Cobalt   | 5.92+03  | 0.100       | 0.40                                    | 2.66E+01<br>7.23E+00                               | 3.01E+01<br>5.61E+00                         | 5.9E+03  | 21.500 1 J   | 13.600 1 J   |   |                  |
| METALS   | Copper   | 1.0E+03  | 0.150       | 0.60                                    | 5.55E+00   | 9.25E+00                                     | 1.0E+03  | 5.710 1  | 12.000 1   |   |                  |
| METALS   | Iron   | NE   | NA          | NA                                      | NA   | NA   | -  | 19000.000 1  | 15600.000 1  |   |                  |
| METALS   | Lead   | 5.0E+02  | 0.500       | 5.00                                    | 2.26E+01   | 1.14E+01                                     | 5.0E+02  | 14.500 1   | 10.200 1   |   |                  |
| METALS   | Magnesium  | NE<br>175+03   | NA<br>0.050 | NA<br>0.20                              | NA<br>1.255+02                                     | NA<br>2.01E+02                               | 1 75+02  | 308.000 1 J  | 3990.000 1 J   |   |                  |
| METALS   | Mercury  | 1.1E-02  | 0.010       | 0.25                                    | 8.19E-02   | 3.60E-01                                     | 2.5E-01  | 0.342 1  | 0.013 1 U  |   |                  |
| METALS   | Nickel   | 1,9E+02  | 0.200       | 0,80                                    | 6.98E+00   | 1.16E+01                                     | 1.9E+02  | 4.630 1  | 21.700 1   |   |                  |
| METALS   | Potassium  | NE   | NA          | NA                                      | NA   | NA   | -  | 230.000 1  | 525.000 1  |   |                  |
| METALS   | Selenium   | 1.3E+02  | 0.100       | 0.20                                    | 3.48E+00   | 5.57E+00                                     | 1.3E+02  | 0.359 1  | 0.164 1 J J  |   |                  |
| METALS   | Sodium   | NE   | NA NA       | NA                                      | NA   | 3.702-01<br>NA                               | 4./2701  | 19.300 1 J   | 742.000 1  |   |                  |
| METALS   | Thallium   | 2.0E+00  | 0.010       | 0.02                                    | 4.70E-01   | NE   | 2.0E+00  | 0.056 t  | 0.137 1  |   |                  |
| METALS   | Vanadium   | 4.8E+01  | 0.125       | 0.50                                    | 3.21E+01   | 4.46E+01                                     | 4.8E+01  | 33.500 1 J   | 16.400 1 J   |   |                  |
| METALS   | Zinc   | 5.9E+03  | 0.625       | 2,50                                    | 6.16E+01   | 2.02E+01                                     | 5.9E+03  | 74.900 1 J   | 50.000 1 J   |   | 0.074 4          |
| RANGE ORGANICS   | Carbon Ranne C12-C28                                   | 1.4E+01<br>4.0E+03   | 25          | 50                                      | NE   | NE   | 1,4E+01<br>4.0E+03   | 0.040 4 U<br>39.600 1 J J  | 0.000 D U<br>63.600 1 U                              | 0.006 1 < 0   | 0.071 1          |
| RANGE_ORGANICS   | Carbon Range C28-C35                                   | 4.0E+03  | 25          | 50                                      | NE   | NE   | 4.0E+03  | 34.000 1 J J   | 63.600 1 U   |   |                  |
| RANGE_ORGANICS   | Carbon Range C6-C12                                    | 1.7E+03  | 25          | 50                                      | NE   | NE   | 1.7E+03  | 53.000 1 U   | 63.600 1 U   |   |                  |
| SOLIDS   | Percent Solids   | NE   | NÉ          | NE                                      | NE   | NE   |  | 93.100 1   | 78.600 1   |   |                  |
| VOLATILES  | 1,1,1,2-1etrachioroethane                              | 5.2E+00<br>2.3E+02   | 0.0005      | 0.005                                   | NE<br>NÉ   | NE   | 5.2E+00<br>2.3E+02   |  | 0.005 1 0  |   |                  |
| VOLATILES  | 1,1,2,2-Tetrachloroethane                              | 5.1E-01  | 0.0005      | 0.005                                   | NE   | NE   | 5.1E-01  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 1,1,2-Trichloroethane                                  | 9.7E-01  | 0.0005      | 0.005                                   | NE   | NE   | 9.7E-01  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 1,1-Dichloroethane                                     | 8.9E+01  | 0.0010      | 0.005                                   | NË   | NE   | 8.9E+01  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 1,1-Dichloropropene                                    | 2.7E+01<br>9.9E-01   | 0.0005      | 0.005                                   | NE   | NE   | 2.7E+01<br>9.95-01   |  | 0.002 1 J J<br>0.006 1 U                             |   |                  |
| VOLATILES  | 1.2.3-Trichlorobenzene                                 | 4.2E+01  | 0.0005      | 0.005                                   | NE   | NE   | 4.2E+01  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 1,2,3-Trichloropropane                                 | 9.2E-02  | 0.0010      | 0.005                                   | NE   | NE   | 9.2E-02  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 1,2,4-Trichlorobenzene                                 | 1.4E+02  | 0.0005      | 0.005                                   | NE   | NE   | 1.4E+02  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 1,2,4-1 nmethylbenzene<br>1,2,Dibroma,3, chloropropapa | 9.65+00  | 0.0005      | 0.005                                   | NE   | NE   | 9.6E+00  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 1.2-Dibromoethane                                      | 5.3E-02  | 0.0005      | 0.005                                   | NE   | NE   | 5.3E-02  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 1,2-Dichlorobenzene                                    | 5.6E+01  | 0.0005      | 0.005                                   | NE   | NE   | 5.6E+01  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 1,2-Dichloroethane                                     | 2.7E-01  | 0.0005      | 0.005                                   | NE   | NE   | 2.7E-01  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 1,2-Dichloropropane                                    | 1.8E+00  | 0.0005      | 0.005                                   | NE   | NE   | 1.8E+00  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 1 3 5-Trimethylbenzene                                 | 3.3E+03<br>8.3E+00   | 0.0005      | 0.005                                   | NE   | NE   | 3.3E+03<br>8.3E+00   |  | 0.006 1 1  |   |                  |
| VOLATILES  | 1,3-Dichlorobenzene                                    | 5.1E+00  | 0.0005      | 0.005                                   | NE   | NE   | 5.1E+00  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 1,3-Dichloropropane                                    | 3.0E+00  | 0.0005      | 0.005                                   | NE   | NE   | 3.0E+00  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 1.4-Dichlorobenzene                                    | 2.7E+01  | 0.0005      | 0.005                                   | NE   | NE   | 2.7E+01  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 2,2-Dichioropropane<br>2-Butanone                      | 1.7E+00<br>2.6E+03   | 0.0005      | 0.005                                   | NE   | NE   | 1.7E+00<br>2.6E+03   |  | 0.005 1 U  |   |                  |
| VOLATILES  | 2-Chloroethyl vinyl ether                              | 2.1E-01  | 0.0020      | 0.010                                   | NE   | NE   | 2.1E-01  |  | 0.012 1 U  |   |                  |
| VOLATILES  | 2-Chlorotoluene  | 1.5E+02  | 0.0005      | 0.005                                   | NE   | NE   | 1.5E+02  |  | 0.006 1 U  |   |                  |
| VOLATILES  | 2-Hexanone   | 6.2E+00  | 0,0025      | 0.010                                   | NE   | NE   | 6.2E+00  |  | 0.012 1 U  |   |                  |
| VOLATILES<br>VOLATILES   | 4-Unidrotoluene<br>Acetone                             | 3.4E-01<br>1.7E+02   | 0.0005      | 0.005                                   | NE   | NE   | 3.4E-01  |  | 0.005 1 U  |   |                  |
| VOLATILES  | Benzene  | 8.8E-01  | 0.0005      | 0,005                                   | NE   | NE   | 8.8E-01  |  | 0.006 1 1  |   |                  |
| VOLATILES  | Bromobenzene   | 1.1E+01  | 0.0005      | 0.005                                   | NE   | NE   | 1.1E+01  |  | 0.006 1 U  |   |                  |
| VOLATILES  | Bromochloromethane                                     | 2.4E+01  | 0.0005      | 0.005                                   | NE   | NE   | 2.4E+01  |  | 0.006 1 U  |   |                  |
| VOLATILES  | Bromodichlörömethane<br>Bromoform                      | 1.0E+01  | 0.0005      | 0.005                                   | NE   | NE   | 1.0E+01  |  | 0.006 1 U  |   |                  |
| VOLATILEO  | BIOHOIDHI  | 3.4C+V1  | 0.0005      | CUU.0                                   | NE   | NE   | 3.4E+01  |  | 0.000 1 0  |   |                  |

### 00066541

## Table 4-70 Comparison of Chemical Concentrations in Soll to Risk-Based Screening Values

|  |                                  |  |                     |                        |   | Sump   | o-048  |  |  |  |   |
|--|----------------------------------|--|---------------------|------------------------|---|--|--|--|--|--|---|
| [SUMP] = SUMP048<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                                  | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UI<br>Surface | ground<br>ations in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 355UMP048-SB01<br>35-SMP48-SB01-01<br>9/13/2006<br>.55 Ft<br>REG | 35SUMP048-SB01<br>35-SMP48-SB01-02<br>9/13/2006<br>10 - 10 Ft<br>REG | 47SB06<br>47SB06(0-0_5)<br>5/31/2000<br>05 Ft<br>REG | 47SB06<br>47SB06(1-2)<br>5/31/2000<br>1 - 2 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg)        | (R8SV)*                                  | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ                                     | Result DIL LQ VQ                                      |
| VOLATILES<br>VOLATILES   | Bromomethane<br>Carbon disulfide | 3.5E-01<br>1.0E+02                       | 0.0010<br>0.0005    | 0.010<br>0.005         | NË<br>NE                                | NË<br>NE   | 3.5E-01<br>1.0E+02                           |  | 0.012 1 U<br>0.006 1 U   |  |   |
| VOLATILES  | Carbon tetrachloride             | 3.5E-01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.5E-01                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | Chlorobenzene                    | 4.0E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.0E+01                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | Chloroethane                     | 1.1E+03                                  | 0.0010              | 0.010                  | NE                                      | NE   | 1.1E+03                                      |  | 0.012 1 U  |  |   |
| VOLATILES  | Chloroform                       | 3.1E-01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.1E-01                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | Chloromethane                    | 2.3E-01                                  | 0.0020              | 0.010                  | NE                                      | NE   | 2.3E-01                                      |  | 0.012 1 U  |  |   |
| VOLATILES  | cis-1,2-Dichloroethene           | 1.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.2E+02                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | cis-1,3-Dichloropropene          | 1.2E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.2E+00                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | Dibromochloromethane             | 7.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 7.6E+00                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | Dibromomethane                   | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.9E+01                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | Dichlorodifluoromethane          | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                      | NE   | 2.2E+02                                      |  | 0.012 1 U  |  |   |
| VOLATILES  | Ethylbenzene                     | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.3E+02                                      |  | 0.006 1 Ų  |  |   |
| VOLATILES  | Hexachlorobutadiene              | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.6E+00                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | Isopropylbenzene                 | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 5.4E+02                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | m,p-Xylenes                      | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.3E+02                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | Methyl isobutyl ketone           | 1.3E+03                                  | 0.0025              | 0.01                   | NE                                      | NE   | 1.3E+03                                      |  | 0.012 1 U  |  |   |
| VOLATILES  | Methylene chloride               | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                      | NE   | 8.7E+00                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | Naphthalene                      | 1.8E+01                                  | 0,0005              | 0.01                   | NE                                      | NE   | 1.8E+01                                      |  | 0.012 1 U  |  |   |
| VOLATILES  | n-BUTYLBENZENE                   | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.7E+02                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | n-PROPYLBENZENE                  | 3.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NË   | 3.2E+02                                      |  | 0.005 1 U  |  |   |
| VOLATILES  | p-ISOPROPYLTOLUENE               | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.2E+02                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | sec-BUTYLBENZENE                 | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.0E+02                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | Styrene                          | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.3E+03                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | tert-BUTYLBENZENE                | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.6E+02                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | Tetrachloroethene                | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 6.0E+00                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | Toluene                          | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                      | NÉ   | 1.1E+03                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | trans-1,2-Dichloroethene         | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.4E+02                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | trans-1,3-Dichloropropene        | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.8E+00                                      |  | 0.006 1 U  |  |   |
| VOLATILES  | Trichloroethene                  | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.7E+00                                      |  | 0.003 1 J J  |  |   |
| VOLATILES  | Trichlorofluoromethane           | 2.6E+02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 2.6E+02                                      |  | 0.012 1 U  |  |   |
| VOLATILES  | Vinyl acetate                    | 5.7E+01                                  | 0.0010              | 0.01                   | NE                                      | NE   | 5.7E+01                                      |  | 0.012 1 U  |  |   |
|  | Vinul chloride                   | 3 65-02                                  | 0.0010              | 0.01                   | ME                                      | NE   | 3.65.02                                      |  | 0.012 1 11   |  |   |

### 00066542

#### Table 4-71 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-049

| [SUMP] = SUMP049<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                                | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Bac<br>Concent<br>(95% L<br>Surface | kground<br>rations in Soil<br>JPL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP04<br>35-SMP049-<br>9/19/20<br>4 - 4 I<br>REG | 9-SB01<br>SB01-02<br>106<br>Ft |
|---|--------------------------------|--|---------------------|------------------------|-------------------------------------|---|--|---|--------------------------------|
| Test Group  | Parameter (Units = mo/kg)      | (RBSV) *                                 | Elmit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                          | 1.5 - 2.5 Ft  | Value  | Result D  | IL LQ VQ                       |
| METALS  | Aluminum                       | 1.6E+04                                  | 10.000              | 20.00                  | 1.6E+04                             | 2.1E+04   | 1.6E+04                                      | 13700   | 1                              |
| METALS  | Antimony                       | 7.3E+00                                  | 0.500               | 0.10                   | 9.4E-01                             | 1.6E+00   | 7.3E+00                                      | 0.118   | ιυ                             |
| METALS  | Arsenic                        | 2.0E+01                                  | 0.075               | 0.30                   | 4.8E+00                             | 5.5E+00   | 2.0E+01                                      | 1.140   | l I                            |
| METALS  | Barium                         | 2.6E+03                                  | 0.075               | 0.30                   | 1.5E+02                             | 8.5E+01   | 2.6E+03                                      | 60 <sup>-</sup>                                     | ŧ                              |
| METALS  | Beryllium                      | 4.6E+00                                  | 0.012               | 0.50                   | 6.5E-01                             | 7.7E-01   | 4.6E+00                                      | 0.439   | 1                              |
| METALS  | Cadmium                        | 5.2E+00                                  | 0.025               | 0.10                   | 1.4E+00                             | 4.0E-01   | 5.2E+00                                      | 0.081   | iJJ                            |
| METALS  | Calcium                        | NE                                       | NA                  | NA                     | NA                                  | NA  | -  | 514   | 1                              |
| METALS  | Chromium                       | 5.9E+03                                  | 0.100               | 0.40                   | 2.7E+01                             | 3.0E+01   | 5.9E+03                                      | 12.000  | 1                              |
| METALS  | Cobalt                         | 1.5E+03                                  | 0.125               | 0.50                   | 7.2E+00                             | 5.6E+00   | 1.5E+03                                      | 2.350   | 1                              |
| METALS  | Copper                         | 1.0E+03                                  | 0.150               | 0.60                   | 5.5E+00                             | 9.2E+00   | 1.0E+03                                      | 2.380   | 1                              |
| METALS  | Iron                           | NE                                       | NA                  | NA                     | NA                                  | NA  | -  | 13200.000   | 1                              |
| METALS  | Lead                           | 5.0E+02                                  | 0.500               | 5.00                   | 2.3E+01                             | 1.1E+01   | 5.0E+02                                      | 8.49  | 1                              |
| METALS  | Magnesium                      | NE                                       | NA                  | NA                     | NA                                  | NA  | -  | 590.000   | 1                              |
| METALS  | Manganese                      | 1.7E+03                                  | 0.050               | 0.20                   | 1.3E+03                             | 2.0E+02   | 1.7E+03                                      | 19  | 1                              |
| METALS  | Mercury                        | 1.1E-02                                  | 0.010               | 0.25                   | 8.2E-02                             | 3.6E-01   | 2.5E-01                                      | 0.019   | 1 J J                          |
| METALS  | Nickel                         | 1.9E+02                                  | 0.200               | 0.80                   | 7.0E+00                             | 1.2E+01   | 1.9E+02                                      | 4.240   | 1                              |
| METALS  | Potassium                      | NE                                       | NA                  | NA                     | NA                                  | NA  | -  | 329,000   | 1                              |
| METALS  | Selenium                       | 1.3E+02                                  | 0.100               | 0.20                   | 3.55+00                             | 5.6E+00   | 1.3E+02                                      | 0.356   | 1                              |
| METALS  | Silver                         | 4.7E+01                                  | 0.050               | 0.20                   | 3.1E-01                             | 3.7E-01   | 4.7E+01                                      | 1.670   | I U                            |
| METALS  | Sodium                         | NE                                       | NA                  | NA                     | NA                                  | NA .  |  | 35.300  | 1                              |
| METALS  | Thallium                       | 2.0E+00                                  | 0.010               | 0.02                   | 4.7E-01                             | NE  | 2.0E+00                                      | 0.113   | 1                              |
| METALS  | Vanadium                       | 4.8E+01                                  | 0.125               | 0.50                   | 3.2E+01                             | 4.5E+01   | 4.8E+01                                      | 32,700  | 1                              |
| METALS  | Zinc                           | 5.96+03                                  | 0.625               | 2.50                   | 6.2E+01                             | 2.02+01   | 5.92+03                                      | 15.100  | 1                              |
| PERC DEPARTMENT   | Perchiorate                    | 1.4E+U1                                  | 0.005               | 0.030                  | NE                                  | NE  | 3.0E+01                                      | 51 600  | 1 0                            |
| RANGE_ORGANICS  | Carbon Range C12-C28           | 4.0E+03                                  | 25                  | 50                     | NE                                  | NE  | 4.02+03                                      | 50,000  | 1 3 8                          |
| RANGE_ORGANICS  | CARBUN RANGE C20-C35           | 4.05+03                                  | 20                  | 50                     | NE                                  |   | #DEEL  | 59,700  | ,<br>1                         |
| RANGE_URGANICS  | Carbon Range Co-C12            | 1.7E+03                                  | 20                  | JU<br>ME               | NE                                  | NE  | #FNEL :                                      | 82 700  | 1                              |
| VOLATILES   | 1 1 1 2 Tetrachlomethane       | 5 2E+00                                  | 0 0005              | 0.005                  | NE                                  | NE  | 5.2E+00                                      | 0.005   | ίυ                             |
| VOLATILES   | 1 1 1-Trichloroethane          | 2 3E+02                                  | 0.0005              | 0.005                  | NE                                  | NE  | 2.3E+02                                      | 0.005   | Í Ū                            |
| VOLATILES   | 1 1 2 2-Tetrachioroethane      | 5 1E-01                                  | 0.0005              | 0.005                  | NE                                  | NE  | 5.1E-01                                      | 0.005   | 1 Ü                            |
| VOLATILES   | 1.1.2-Tricbloroethane          | 9.7E-01                                  | 0.0005              | 0.005                  | NE                                  | NE  | 9.7E-01                                      | 0.005   | 1 U                            |
| VOLATILES   | 1.1-Dichloroethane             | 8.9E+01                                  | 0.0010              | 0.005                  | NE                                  | NE  | 8.9E+01                                      | 0.005   | 1 U                            |
| VOLATILES   | 1,1-Dichlorgethene             | 2.7E+01                                  | 0,0005              | 0.005                  | NE                                  | NE  | 2.7E+01                                      | 0.005   | 1 U                            |
| VOLATILES   | 1,1-Dichloropropene            | 9.9E-01                                  | 0.0005              | 0.005                  | NE                                  | NE  | 9.9E-01                                      | 0.005   | 1 U                            |
| VOLATILES   | 1,2,3-Trichlorobenzene         | 4.2E+01                                  | 0.0005              | 0.005                  | NE                                  | NE  | 4.2E+01                                      | 0.005   | 1 U                            |
| VOLATILES   | 1,2,3-Trichloropropane         | 9.2E-02                                  | 0.0010              | 0.005                  | NE                                  | NE  | 9.2E-02                                      | 0.005   | 1 U                            |
| VOLATILES   | 1,2,4-Trichlorobenzene         | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                  | NE  | 1.4E+02                                      | 0.005   | 1 U                            |
| VOLATILES   | 1,2,4-Trimethylbenzene         | 9.6E+00                                  | 0.0005              | 0,005                  | NE                                  | NE  | 9.6E+00                                      | 0.005   | 1 U                            |
| VOLATILES   | 1,2-Dibromo-3-chloropropane    | 3.5E-01                                  | 0.0020              | 0.005                  | NE                                  | NE  | 3.5E-01                                      | 0.005   | 1 U                            |
| VOLATILES   | 1,2-Dibromoethane              | 5.3E-02                                  | 0.0005              | 0.005                  | NE                                  | NE  | 5.3E-02                                      | 0.005   |                                |
| VOLATILES   | 1,2-Dichloropenzene            | 5.6E+01                                  | 0.0005              | 0.005                  | NE                                  | NE  | 0.00+01                                      | 0.005   | 1 1                            |
| VOLATILES   | 1,2-Dichloroeinane             | 2.7E-01                                  | 0.0005              | 0.005                  | NE                                  |   | 195400                                       | 0.005   | 1 1                            |
| VOLATILES   | 1.2-Dimethylbenzene (o-Xylene) | 3 35+03                                  | 0.0005              | 0.005                  | NE                                  | NE  | 3 35+03                                      | 0.005   | 1 11                           |
| VOLATILES   | 1.3.5 Trimethylbenzene         | 8.3E+00                                  | 0.0005              | 0.005                  | NE                                  | NE  | 8 3E+00                                      | 0.005   | า บั                           |
| VOLATILES   | 1.3-Dichlorobenzene            | 5 1E+00                                  | 0.0005              | 0.005                  | NE                                  | NE  | 5.1E+00                                      | 0.005   | i ŭ                            |
| VOLATILES   | 1.3-Dichloropropane            | 3.0E+00                                  | 0.0005              | 0.005                  | NE                                  | NE  | 3.0E+00                                      | 0.005   | i Ū                            |
| VOLATILES   | 1.4-Dichlorobenzene            | 2.7E+01                                  | 0.0005              | 0.005                  | NE                                  | NE  | 2.7E+01                                      | 0.005   | 1 U                            |
| VOLATILES   | 2.2-Dichloropropane            | 1.7E+00                                  | 0,0005              | 0.005                  | NE                                  | NE  | 1.7E+00                                      | 0.005   | 1 U                            |
| VOLATILES   | 2-Butanone                     | 2.6E+03                                  | 0.0025              | 0.010                  | NE                                  | NE  | 2.6E+03                                      | 0.011   | 1 U                            |
| VOLATILES   | 2-Chloroethyl vinyl ether      | 2.1E-01                                  | 0.0020              | 0.010                  | NE                                  | NE  | 2.1E-01                                      | 0.011   | 1 U                            |
| VOLATILES   | 2-Chtorotoluene                | 1.5E+02                                  | 0.0005              | 0.005                  | NE                                  | NE  | 1.5E+02                                      | 0.005   | 1 U                            |
| VOLATILES   | 2-Hexanone                     | 6.2E+00                                  | 0.0025              | 0.010                  | NE                                  | NE  | 6.2E+00                                      | 0.011   | 1 U                            |
| VOLATILES   | 4-Chlorotoluene                | 3.4E-01                                  | 0.0005              | 0.005                  | NE                                  | NE  | 3.4E-01                                      | 0.005   | 1 U                            |
| VOLATILES   | Acetone                        | 1.7E+02                                  | 0.0050              | 0.010                  | NE                                  | NE  | 1.7E+02                                      | 0.011   | 1 U                            |
| VOLATILES   | Benzene                        | 8.8E-01                                  | 0.0005              | 0.005                  | NE                                  | NE  | 8.85-01                                      | 0.005   | 1 U                            |
| VOLATILES   | Bioritobenzene                 | 1,16+01                                  | 0.0005              | 0.005                  | NE                                  |   | 1.12+01                                      | 0.005   | 1 11                           |
| VOLATILES   | Bromodichloromothono           | 2.46+01                                  | 0.0005              | 0.003                  | NE                                  | NE  | 1.05+01                                      | 0.005   | 1 11                           |
| VOLATILES   | Bromoform                      | 345+01                                   | 0.0005              | 0.005                  | NE                                  | NE  | 3.45+01                                      | 0.005   | 1 ŭ                            |
| VOLATILES   | Bromomethane                   | 3.5E-01                                  | 0.0010              | 0.010                  | NE                                  | NE  | 3.5E-01                                      | 0.011   | i Ū                            |
| VOLATILES   | Carbon disulfide               | 1.0E+02                                  | 0.0005              | 0.005                  | NE                                  | NE  | 1.0E+02                                      | 0.005   | 1 U                            |

### 00066543

Table 4-71 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-049

| SUMP) = SUMP049<br>.OCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Bac<br>Concentr<br>(95% L<br>Surface | kground<br>rations in Soil<br>JPL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP049-SB01<br>35-SMP049-SB01-02<br>9/19/2006<br>4 - 4 Ft<br>REG |
|--|---------------------------|--|---------------------|------------------------|--------------------------------------|---|--|---|
| Fest Group   | Parameter (Units = mg/kg) | (RB\$V)*                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                           | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  |
| /OLATILES  | Carbon tetrachloride      | 3.5E-01                                  | 0.0005              | 0.005                  | NE                                   | NE  | 3.5E-01                                      | 0.005 1 U   |
| /OLATILES  | Chlorobenzene             | 4.0E+01                                  | 0.0005              | 0.005                  | NE                                   | NE  | 4.0E+01                                      | 0.005 1 U   |
| /OLATILES  | Chloroethane              | 1.1E+03                                  | 0.0010              | 0.010                  | NE                                   | NË  | 1.1E+03                                      | 0.011 1 U   |
| /QLATILES  | Chloroform                | 3.1E-01                                  | 0.0005              | 0.005                  | NË                                   | NE  | 3.1E-01                                      | 0.005 1 U   |
| /OLATILËS  | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NE                                   | NE  | 2,3E-01                                      | 0.011 1 U   |
| /OLATILES  | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NE                                   | NE  | 1.2E+02                                      | 0.005 1 U   |
| /OLATILES  | cis-1,3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                  | NE                                   | NE  | 1.2E+00                                      | 0.005 1 U   |
| /OLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NE                                   | NE  | 7.6E+00                                      | 0.005 1 U   |
| /OLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                   | NE  | 1.9E+01                                      | 0.005 1 U   |
| /OLATILES  | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                   | NE  | 2.2E+02                                      | 0.011 1 U   |
| /OLATILE\$   | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                   | NE  | 4.3E+02                                      | 0.005 t U   |
| <b>VOLATILES</b>   | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                   | NE  | 1.6E+00                                      | 0.005 1 U   |
| VOLATILES  | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                   | NË  | 5.4E+02                                      | 0.005 1 U   |
| <b>VOLATILES</b>   | m,p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                   | NE  | 2.3E+02                                      | 0.005 1 U   |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NE                                   | NE  | 1.3E+03                                      | 0.011 1 U   |
| VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                   | NE  | 8.7E+00                                      | 0.005 1 U   |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NE                                   | NE  | 1,8E+01                                      | 0.011 1 U   |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                   | NE  | 2.7E+02                                      | 0.005 1 U   |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NE                                   | NE  | 3.2E+02                                      | 0.005 1 U   |
| VOLATILES  | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                   | NE  | 4.2E+02                                      | 0.005 1 U   |
| VOLATILES  | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NË                                   | NE  | 3.0E+02                                      | 0.005 1 U   |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                   | NE  | 1.3E+03                                      | 0.005 1 U   |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                   | NE  | 2.6E+02                                      | 0.005 1 U   |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                   | NÉ  | 6.0E+00                                      | 0.005 1 U   |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                   | NE  | 1.1E+03                                      | 0.005 1 U   |
| VOLATILES  | trans-1.2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                   | NE  | 1.4E+02                                      | 0.005 1 U   |
| VOLATILES  | trans-1.3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                   | NE  | 1.8E+00                                      | 0.005 1 U   |
| VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                   | NE  | 3.7E+00                                      | 0.009 1   |
| VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01                   | NE                                   | NE  | 2.6E+02                                      | 0.011 1 U   |
| VOLATILES  | Vinyl acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NE                                   | NE  | 5.7E+01                                      | 0.011 1 U   |
| VOLATILES  | Vinvl chloride            | 3.6E-02                                  | 0.0010              | 0.01                   | NE                                   | NE  | 3.6E-02                                      | 0.011 1 U   |

Shaw Environmental, Inc.

### 00066544

Table 4-72 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|  |   |                    |             |              |  | Sump-usu       |  |   |   |   |                                |   |   |
|--|---|--------------------|-------------|--------------|--|----------------|--|---|---|---|--------------------------------|---|---|
| [SUMP] = SUMP050<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH | = \$UMP050<br>CN_CODE<br>=_NO<br>=_DATE<br>=_DATE |                    | Method      | Method       | Background<br>Concentrations in Soil<br>(95% UPL, mg/kg)<br>Surface Subsurface |                | Applicble<br>TCEQ<br>Risk-Based<br>Soreaplag | 35SUMP05<br>35-SMP050-<br>9/22/20<br>0.5 - 0. | 60-SB01<br>-SB01-01<br>506<br>5 Ft            | 35SUMP05<br>35-SMP050-<br>9/22/20<br>5 - 5  <br>8FG | 0-SB01<br>SB01-02<br>006<br>Ft | 47SB09<br>47SB09(0-0_5)<br>5/31/2000<br>0 - 0.5 Ft<br>REG | 47SB09<br>47SB09(1-2)<br>5/31/2000<br>1 - 2 Ft<br>REG |
| SAMPLE_PURPOSE   |   | value              | Detection   | Quantitation | Sunace   | Subsullace     | Juleening                                    | Decuit D                                      |   | Booult D  |                                |   | Result Dif LO VO                                      |
| Test Group   | Parameter (Units = mg/kg)                         | (RBSV)             | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft   | 2.085±04       | 1 6E+04                                      | 10300   | <u>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </u> | 13700 1   |                                | Result DIL LO VOL   | Result Die Ewing                                      |
| METALS<br>METALS   | Antimony  | 7.3E+00            | 0.500       | 0.10         | 9.40E-01   | 1.60E+00       | 7,3E+00                                      | 0.118   | 1 U UJL                                       | 0.118   | I U UJL                        |   |   |
| METALS   | Arsenic   | 2.0E+01            | 0.075       | 0.30         | 4.81E+00   | 5.54E+00       | 2.0E+01                                      | 2.660   | 1   | 1.490   | 1                              |   |   |
| METALS   | Barium  | 2.6E+03            | 0.075       | 0.30         | 1.52E+02   | 8.55E+01       | 2.6E+03                                      | 36.5  | 1 JH  | 56.5  | I JH                           |   |   |
| METALS   | Beryllium   | 4.6E+00            | 0.012       | 0.50         | 6.45E-01   | 7.66E-01       | 4.6E+00                                      | 0.491   | 1   | 0.643   |                                |   |   |
| METALS   | Cadmium   | 5.2E+00            | 0.025       | 0.10         | 1.40E+00   | 4.00E-01       | 5.26+00                                      | 0.000   | 1 J J<br>1                                    | 1000  | 1 3 3                          |   |   |
| METALS   | Chromium  | 5 9E+03            | 0 100       | 0.40         | 2.66E+01   | 3.01E+01       | 5.9E+03                                      | 35,100  | 1 JH  | 11.300  | I .3H                          |   |   |
| METALS   | Cobalt  | 1.5E+03            | 0.125       | 0.50         | 7.23E+00   | 5.61E+00       | 1.5E+03                                      | 3.300   | 1   | 6.680   | ŧ                              |   |   |
| METALS   | Copper  | 1.0E+03            | 0.150       | 0.60         | 5.55E+00   | 9.25E+00       | 1.0E+03                                      | 6.270   | 1   | 4.050   | 1                              |   |   |
| METALS   | Iron  | NE                 | NA          | NA           | NA   | NA             |  | 23500.000                                     | 1 J   | 13100.000   | J                              |   |   |
| METALS   | Lead  | 5.0E+02            | 0.500       | 5.00<br>NA   | 2.265+01   | 1.14E+01<br>NA | 5.0E+02                                      | 518,000                                       | 1   | 1490 000  | 1                              |   |   |
| METALS   | Magnesium   | 1 7E+03            | 0.050       | 0.20         | 1 25E+03   | 2 015+02       | 1 7E+03                                      | 55.60   | ,<br>1 J                                      | 24.40   | 1 J                            |   |   |
| METALS   | Mercury   | 1.1E-02            | 0.010       | 0.25         | 8.19E-02   | 3.60E-01       | 2.5E-01                                      | 0.023   | ŧ J Ĵ   | 0.282   | 1 U U                          |   |   |
| METALS   | Nickel  | 1.9E+02            | 0.200       | 0.80         | 6.98E+00   | 1.16E+01       | 1.9E+02                                      | 8.470   | 1 JH  | 10.700  | 1 រអ                           |   |   |
| METALS   | Potassium   | NE                 | NA          | NA           | NA   | NA             |  | 432.000                                       | i JH  | 539.000   | 1 JH                           |   |   |
| METALS   | Selenium  | 1.3E+02            | 0.100       | 0.20         | 3.48E+00   | 5.57E+00       | 1.3E+02                                      | 0.365   | 1   | 1 820   | 1 12 1                         |   |   |
| METALS   | Silver  | 4.7E+01            | 0,050       | 0.20<br>NA   | 3.10E-01   | 3.70E-01       | 4.72701                                      | 19 600  | 1 3 3   | 46.100  | t 0 0                          |   |   |
| METALS   | Thallium  | 2.0E+00            | 0.010       | 0.02         | 4.70E-01   | NE             | 2.0E+00                                      | 0.068   | 1   | 0.107   | 1                              |   |   |
| METALS   | Vanadium  | 4.8E+01            | 0,125       | 0.50         | 3.21E+01   | 4.46E+01       | 4.8E+01                                      | 59.000  | 1 JH  | 17,000  | 1 JH                           |   |   |
| METALS   | Zinc  | 5.9E+03            | 0.625       | 2.50         | 6.16E+01   | 2.02E+01       | 5.9E+03                                      | 33.300  | 1 JH  | 27.200  | 1 JH                           | 0.000 4 4 11  | 0.002 4 4 11  |
| PERC   | Perchlorate                                       | 1.4E+01            | 0.005       | 0.010        | NE   | NE             | 1.4E+01                                      | 0.010   | 1 0 0   | 0.010<br>58.000                                     | 1 0 0                          | 0.006 1 4 0   | 0.000 1 4 0   |
| RANGE_ORGANICS   | Carbon Range C12-C28                              | 4.0E+03            | 25          | 50           | NE   | NE             | 4.02+03                                      | 50,300  | 1   | 32,100  | 1 1 1                          |   |   |
| RANGE_ORGANICS   | Carbon Range C6-C12                               | 1.7E+03            | 25          | 50           | NE   | NE             | 1.7E+03                                      | 59.500  | ίŬŬ   | 58.900  | ίŬŪ                            |   |   |
| SOLIDS   | Percent Solids                                    | NE                 | NE          | NE           | NE   | NE             | - 1  | 83,600  | 1   | 84.600  | 1                              |   |   |
| VOLATILES  | 1,1,1,2-Tetrachloroethane                         | 5.2E+00            | 0.0005      | 0.005        | NE   | NË             | 5.2E+00                                      |   |   | 0.005   | 1 U U                          |   |   |
| VOLATILES  | 1,1,1-Trichloroethane                             | 2.3E+02            | 0.0005      | 0.005        | NE   | NE             | 2.3E+02                                      |   |   | 0.005   | 1 0 0                          |   |   |
| VOLATILES  | 1,1,2,2-1etracnioroetnane                         | 9.10-01            | 0.0005      | 0.005        | NE   | NE             | 9.7E-01                                      |   |   | 0.005   | ่ บับ                          |   |   |
| VOLATILES  | 1 1-Dichloroethane                                | 8.9E+01            | 0.0010      | 0.005        | NE   | NE             | 8.9E+01                                      |   |   | 0.005   | i Ū Ū                          |   |   |
| VOLATILES  | 1,1-Dichloroethene                                | 2.7E+01            | 0.0005      | 0.005        | NE   | NE             | 2.7E+01                                      |   |   | 0.005   | 1 U U                          |   |   |
| VOLATILES  | 1.1-Dichloropropene                               | 9.9E-01            | 0.0005      | 0.005        | NE   | NE             | 9.9E-01                                      |   |   | 0.005   | 1 U U                          |   |   |
| VOLATILES  | 1,2,3-Trichlorobenzene                            | 4.2E+01            | 0,0005      | 0.005        | NE   | NE             | 4.2E+01                                      |   |   | 0.005   | 1 0 0                          |   |   |
| VOLATILES  | 1,2,3- Inchloropropane                            | 9.25-02            | 0.0010      | 0.005        | NE   | NE             | 9.25-02                                      |   |   | 0.005   | 1 U U                          |   |   |
| VOLATILES  | 1.2.4-Trimethylbenzene                            | 9.6E+00            | 0.0005      | 0.005        | NE   | NE             | 9.6E+00                                      |   |   | 0.005   | i ũ ũ                          |   |   |
| VOLATILES  | 1,2-Dibromo-3-chloropropane                       | 3.5E-01            | 0.0020      | 0.005        | NE   | NE             | 3.5E-01                                      |   |   | 0.005   | 1 U U                          |   |   |
| VOLATILES  | 1,2-Dibromoethane                                 | 5.3E-02            | 0.0005      | 0.005        | NE   | NE             | 5.3E-02                                      |   |   | 0.005   | 1 U U                          |   |   |
| VOLATILES  | 1,2-Dichlorobenzene                               | 5.6E+01            | 0.0005      | 0.005        | NE   | NE             | 5.6E+01                                      |   |   | 0.005   |                                |   |   |
| VOLATILES  | 1.2-Dichloropropage                               | 2.7E-01<br>1.9E+00 | 0.0005      | 0.005        | NE   | NE             | 1.8E+00                                      |   |   | 0.005   | ่มับ                           |   |   |
| VOLATILES  | 1.2-Dimethylbenzene (o-Xylene)                    | 3.3E+03            | 0.0005      | 0.005        | NE   | NE             | 3.3E+03                                      | 1   |   | 0.005   | ่า บิบิ                        |   |   |
| VOLATILES  | 1,3,5-Trimethylbenzene                            | 8.3E+00            | 0.0005      | 0.005        | NE   | NE             | 8.3E+00                                      |   |   | 0.005   | 1 U U                          |   |   |
| VOLATILES  | 1,3-Dichlorobenzene                               | 5.1E+00            | 0.0005      | 0.005        | NE   | NÉ             | 5.1E+00                                      |   |   | 0.005   | 1 U U                          |   |   |
| VOLATILES  | 1,3-Dichloropropane                               | 3.0E+00            | 0.0005      | 0.005        | NE   | NE             | 3,0E+00                                      |   |   | 0.005   | 1 U U                          |   |   |
| VOLATILES  | 1,4-uichiorobenzene<br>2,2-Dichloropropape        | 2.7E+01<br>1.7E+00 | 0.0005      | 0.005        | NE   | NE             | 176+00                                       |   |   | 0.005   | 1 U U                          |   |   |
| VOLATILES  | 2-Butanone  | 2.6E+03            | 0.0025      | 0.010        | NE   | NE             | 2.6E+03                                      |   |   | 0.010   | Î Û Û                          |   |   |
| VOLATILES  | 2-Chloroethyl vinyl ether                         | 2.1E-01            | 0.0020      | 0.010        | NE   | NE             | 2.1E-01                                      |   |   | 0.010   | 1 U U                          |   |   |
| VOLATILES  | 2-Chlorotoluene                                   | 1.5E+02            | 0.0005      | 0.005        | NE   | NE             | 1.5E+02                                      |   |   | 0.005   | 1 0 0                          |   |   |
| VOLATILES  | 2-Hexanone  | 6.2E+00            | 0.0025      | 0.010        | NE   | NE             | 6.28+00                                      |   |   | 0.010   | 1 0 0                          |   |   |
| VOLATILES<br>VOLATILES   |   | 3.4E-01<br>1.7E+02 | 0.0005      | 0.005        | NE   | NE             | 1.75+02                                      | 1   |   | 0.010   | 1 0 0                          |   |   |
| VOLATILES  | Benzene   | 8.8E-01            | 0.0005      | 0.005        | NE   | NE             | 8.8E-01                                      |   |   | 0.005   | ่ บี บี                        |   |   |
| VOLATILES  | Bromobenzene                                      | 1.1E+01            | 0.0005      | 0.005        | NE   | NE             | 1.1E+01                                      | 1   |   | 0.005   | 1 U U                          |   |   |
| VOLATILES  | Bromochloromethane                                | 2.4E+01            | 0.0005      | 0.005        | NE   | NE             | 2.4E+01                                      | 1   |   | 0.005   | 1 U U                          |   |   |
| VOLATILES  | Bromodichloromethane                              | 1.0E+01            | 0.0005      | 0.005        | NE   | NE             | 1.0E+01                                      |   |   | 0.005   | 1 0 0                          |   |   |
| VOLATILES  | Bromonothane                                      | 3.4E+01<br>3.6E-01 | 0.0005      | 0.005        | NE   | NE             | 3.46+01                                      |   | 1   | 0.005   | 1 1 1                          |   |   |
| VOLATILES  | Carbon disulfide                                  | 1.0E+02            | 0.0005      | 0.005        | NE   | NE             | 1.0E+02                                      | 1   |   | 0.005   | า บิ บิ                        |   |   |
| VOLATILES  | Carbon tetrachloride                              | 3.5E-01            | 0.0005      | 0.005        | NE   | NE             | 3.5E-01                                      | l   |   | 0.005   | 1 U U                          |   |   |

Shaw Environmental, Inc.

### 00066545

#### Table 4-72 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|  |   |   | •   |   |  | Sump-050   |  | •   |  |   |   |
|--|---|---|---|---|--|--|--|---|--|---|---|
| [SUMP] = SUMP050<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE   |   | TCEQ<br>Risk-Based<br>Screening<br>Value  | Method<br>Detection   | Method<br>Quantitation  | Back<br>Concentra<br>(95% UF<br>Surface  | ground<br>tions in Soil<br>PL, mg/kg)<br>Subsurface  | Applicble<br>TCEQ<br>Risk-Based<br>Screening   | 35SUMP050-SB01<br>35-SMP050-SB01-01<br>9/22/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP050-SB01<br>35-SMP050-SB01-02<br>9/22/2006<br>5 - 5 Ft<br>REG  | 47\$B09<br>47\$B09(0-0_5)<br>5/31/2000<br>0 - 0.5 Ft<br>REG | 47SB09<br>47SB09(1-2)<br>5/31/2000<br>1 - 2 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg)   | (RBSV)  | Limit (MDL)   | Limit (MQL)   | 0 - 0.5 Ft   | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VQ                                      |
| Test Group           VOLATILES           r (Units = mg/kg)<br>Chiorobenzene<br>Chiorobenzene<br>Chiorothane<br>Chioroform<br>Chioroform<br>Chioroform<br>Chioromochioromethane<br>cis-1,2-Dichloroptropene<br>Dibrormochioromethane<br>Dibrormomethane<br>Dibrorhorobutadiene<br>Isopropylbenzene<br>m,p-Xylenes<br>Methyl isobutyl ketone<br>Methyl isobutyl ketone<br>Methylene chioride<br>Naphthalene<br>n-BUTYLBENZENE<br>n-PROPYLBENZENE<br>NESSEN | (RBSV) *<br>4.0E+01<br>1.1E+03<br>3.1E-01<br>2.3E+01<br>1.2E+00<br>7.6E+00<br>1.0E+01<br>2.2E+02<br>4.3E+02<br>1.6E+00<br>5.4E+02<br>2.3E+02<br>1.3E+03<br>8.7E+00<br>1.8E+01<br>2.7E+02<br>3.2E+02<br>4.3E+01<br>2.7E+02<br>3.2E+02<br>4.3E+02<br>4.3E+02<br>2.3E+02<br>4.3E+02<br>3.2E+02<br>4.3E+02<br>4.3E+02<br>3.2E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+01<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02<br>4.3E+02044.3E+02044.3E+02044.3E+02044.3E+02044.3E+02044.3E+02044.3E+0 | Limit (MDL)<br>0.0005<br>0.0010<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005 | Limit (MQL)<br>0.005<br>0.010<br>0.005<br>0.010<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.011<br>0.005<br>0.011<br>0.005<br>0.011 | 0 - 0.5 Ft<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE | 1.5 - 2.5 Ft<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE | Value<br>4.0E+01<br>1.1E+03<br>3.1E-01<br>2.3E-01<br>1.2E+02<br>1.2E+02<br>1.2E+02<br>1.2E+02<br>4.3E+02<br>1.6E+00<br>5.4E+02<br>2.3E+03<br>8.7E+00<br>1.8E+01<br>2.7E+02<br>3.2E+02<br>2.3E+03<br>8.7E+00<br>2.7E+02<br>3.2E+02<br>2.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+02<br>3.2E+ | <u>Resut</u> DIL LQ VQ  | Result         DIL         LQ         VQ           0.005         1         U         U           0.010         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1 | <u>Reşuit DIL LQ VQ</u>                                     | <u>Result DIL LQ VQ</u>                               |
| VOLATILES  | P-ISOPROPYLIOLUENE  | 4.2E+02<br>3.0E+02  | 0.0005  | 0.005   | NE   |  | 4.22+02  |   | 0.005 1 0 0  |   |   |
| VOLATILES<br>VOLATILES   | Styrene<br>tert-BUTYLBENZENE  | 1.3E+02<br>2.6E+02  | 0.0005  | 0.005   | NE   | NE   | 1.3E+03<br>2.6E+02   |   | 0.005 1 U U<br>0.005 1 U U   |   |   |
| VOLATILES  | Tokuene   | 6.0E+00<br>1 1E+03  | 0.0005  | 0.005   | NE   | NE   | 5.0E+00<br>1.1E+03   |   | 0.005 1 0 0  |   |   |
| VOLATILES  | trans-1,2-Dichloroethene  | 1.4E+02   | 0.0005  | 0.005   | NE   | NE   | 1.4E+02  |   | 0.005 1 U U  |   |   |
| VOLATILES  | trans-1,3-Dichloropropene   | 1.8E+00   | 0.0005  | 0.005   | NE   | NE   | 1.8E+00  |   | 0.005 1 U U  |   |   |
| VOLATILES  | Trichloroethene   | 3.7E+00   | 0.0005  | 0.005   | NE   | NE   | 3.7E+00  |   | 0.005 1 U U  |   |   |
| VOLATILES  | Trichlorofluoromethane  | 2.6E+02   | 0.0010  | 0.01  | NE   | NE   | 2.6E+02  |   | 0.010 1 U U  |   |   |
| VOLATILES<br>VOLATILES   | Vinyl acetate<br>Vinyl chloride   | 5.7E+01<br>3.6E-02  | 0.0010  | 0.01  | NE   | NE   | 5.7E+01<br>3.6E-02   |   | 0.010 1 U U<br>0.010 1 U U   |   |   |

VOLATILES Vinyl chloride Footnotes are shown on cover page to Tables Section.

#### Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/38 Sumps

00066546

### Table 4-73

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-051

| [SUMP] = SUMP051<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE |  | TCEQ<br>Risk-Based | Method                | Method               | Backg<br>Concentral<br>(95% UP | round<br>tions in Soil<br>L. mo/ka) | Applichle<br>TCEQ<br>Risk-Based | 35SUMP051-SB01<br>35-SMP51-SB01-01<br>9/13/2006<br>0.5 - 0.5 Ft | 35SUMP051-SB01<br>35-SMP51-SB01-01-QC<br>9/13/2006<br>0.5 - 0.5 Ft | 35SUMP051-SB01<br>35-SMP51-SB01-02<br>9/13/2006<br>7 - 7 Ft | 35\$UMP061-SB01<br>35-SMP51-SB01-02-QC<br>9/13/2006<br>7 - 7 Ft | 47SB08<br>47SB08 (0-0_5)<br>5/31/2000<br>0 - 0.5 Ft | 475B08<br>475B08 (1-2)<br>5/31/2000<br>1 - 2 Ft |
|--|--|--------------------|-----------------------|----------------------|--------------------------------|-------------------------------------|---------------------------------|---|--|---|---|---|---|
| SAMPLE_PURPOSE   |  | Value              | Detection             | Quantitation         | Surface                        | Subsurface                          | Screening                       | REG   | FD   | REG<br>Beautt Dil LO VO                                     | FD<br>Result DB LO VO   | REG<br>Result DILLOVO                               | REG<br>Result DIL LO VO                         |
| Test Group   | Parameter (Units = mg/kg)                        | (RBSV)*            | Limit (MDL)<br>10.000 | Limit (MQL)<br>20.00 | 0-0.5 Ft<br>1.63E+04           | 1.5 - 2.5 Ft<br>2.08E+04            | Value<br>1.6E+04                | Result DIL_LQ_VQ<br>7690.000 1                                  | 11300.000 1  | 7690.000 1  | 19009.900 1   |   | Noon Die Da IS                                  |
| METALS   | Antimony   | 7.3E+00            | 0.500                 | 0.10                 | 9.40E-01                       | 1.60E+00                            | 7.3E+00                         | 0.109 1 U   | 0.116 1 U  | 0.081 1 J J   | 0.116 1 U<br>0.172 1 J  |   |   |
| METALS   | Arsenic  | 2.0E+01            | 0.075                 | 0.30                 | 4.81E+00<br>1.52E+02           | 5.54E+00<br>8.55E+01                | 2.0E+01<br>2.6P+03              | 1.920 1 J<br>66.800 1 J   | 34.400 1   | 24.600 1 J  | 32.000 1 J  |   |   |
| METALS   | Beryllium  | 4.6E+00            | 0.012                 | 0.50                 | 6.45E-01                       | 7.66E-01                            | 4.6E+00                         | 0.853 1 J   | 0.315 1 J J  | 0.344 1 J J   | 0.276 1 J J   |   |   |
| METALS   | Cadmium  | 5.2E+00            | 0.025                 | 0.10                 | 1.40E+00                       | 4.00E-01                            | 5.2E+00                         | 0.104 1 J J   | 0.063 1 J J<br>217.000 1   | 0,442 1 U<br>255.000 1                                      | 0.046 1 J J<br>250.000 1  |   |   |
| METALS   | Calcium  | NE<br>5 05 - 03    | NA<br>0.100           | 0.40                 | NA<br>2.66E+01                 | NA<br>3.01E+01                      | 5.9E+03                         | 24.200 1 J  | 9.170 1  | 9,390 1 J   | 7.680 1   |   |   |
| METALS   | Cobalt   | 1.5E+03            | 0.125                 | 0.50                 | 7.23E+00                       | 5.61E+00                            | 1.5E+03                         | 7,740 1 J   | 3.460 1  | 4.910 1   | 3.180 1   |   |   |
| METALS   | Copper   | 1.0E+03            | 0.150                 | 0.60                 | 5.55E+00                       | 9.25E+00                            | 1.0E+03                         | 2.450 1   | 2.800 1  | 3.310 1   | 2.490 1   |   |   |
| METALS   | Inord  | NE<br>5.0E+02      | NA<br>0.500           | NA<br>5.00           | NA<br>2 26F+01                 | NA 1.14€+01                         | 5.0E+02                         | 7.780 1   | 5.790 1  | 8.930 1 J   | 5.000 1   |   |   |
| METALS   | Magnesium  | NE                 | NA                    | NA                   | NA                             | NA                                  | _                               | 365.000 1 J   | 642.000 1  | 619.000 1 J   | 616.000 1   |   |   |
| METALS   | Manganese  | 1.7E+03            | 0.050                 | 0.20                 | 1.25E+03                       | 2.01E+02                            | 1.7E+03                         | 395.000 5 J   | 28.700 1   | 78.900 1 J  | 12.000 1  |   |   |
| METALS   | Mercury  | 1.1E-02            | 0.010                 | 0.25                 | 8.19E-02<br>6.98E+00           | 3.60E-01                            | 2,5E-01<br>1.9E+02              | 4.780 1   | 3.870 1  | 3.920 1   | 3.740 1   |   |   |
| METALS   | Potassium  | NE                 | NA                    | NA                   | NA                             | NA                                  | _                               | 253.000 1   | 297.000 1  | 264.000 1   | 285.000 1   |   |   |
| METALS   | Selenium   | 1.3E+02            | 0.100                 | 0.20                 | 3.48E+00                       | 5.57E+00                            | 1.3E+02                         | 0.198 1 J J   | 0.232 1 U  | 0.248 1   | 0.231 1 U<br>1.580 1 U  |   |   |
| METALS   | Silver   | 4.7E+01            | 0.050                 | 0.20<br>NA           | 3.10E-01                       | 3.70E-01<br>NA                      | 4.7E+01                         | 1.700 1 10<br>22,300 1 J  | 108.000 1  | 116,000 t   | 119.000 1   |   |   |
| METALS   | Thalisum   | 2.0E+00            | 0.010                 | 0.02                 | 4.70E-01                       | NE                                  | 2.0E+00                         | 0.070 1   | 0.085 1  | 0.082 1   | 0.075 1   |   |   |
| METALS   | Vanadium   | 4.8E+01            | 0.125                 | 0.50                 | 3.21E+01                       | 4.46E+01                            | 4.8E+01                         | 30.200 1 J  | 16.400 1   | 25.500 1 J  | 8.270 1   |   |   |
| METALS   | Zinc   | 5.9E+03            | 0.625                 | 2.50                 | 6,16E+01                       | 2.02E+01                            | 5.9E+03<br>1.4E+05              | 29.000 1 J  | 0.050 5 LI   | 0.100 10 U  | 0.100 10 U  | 0.020 1   | 0.006 1.000 < U                                 |
| PERC<br>RANGE ORGANICS   | Carbon Bange C12-C28                             | 4.0E+03            | 25                    | 50                   | NE                             | NE                                  | 4.02+03                         | 55.100 1 U  | 57.100 1 U   | 56.400 1 U  | 57.100 1 U  |   |   |
| RANGE_ORGANICS   | CARBON RANGE C28-C35                             | 4.0E+03            | 25                    | 50                   | NE                             | NE                                  | 4.0E+03                         | 55.100 1 U  | 57.100 1 U   | 56.400 1 U  | 57.100 1 U  |   |   |
| RANGE_ORGANICS   | Carbon Range C6-C12                              | 1.7E+03            | 25                    | 50<br>NE             | NE                             | NE                                  | 1.7£+03                         | 90.400 1 U  | 57.100 1 U<br>86.100 1   | 86.400 1 0  | 85.900 1  |   |   |
| VOLATILES  | 1.1.1.2-Tetrachloroethane                        | 5.2E+00            | 0.0005                | 0.005                | NE                             | NE                                  | 5.2E+00                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 1.1.1-Trichloroethane                            | 2.3E+02            | 0.0005                | 0.005                | NE                             | NE                                  | 2.3E+02                         |   |  | 0,006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 1,1,2,2-Tetrachloroethane                        | 5.1E-01            | 0.0005                | 0.005                | NE                             | NE                                  | 5.1E-03<br>9.7E-01              |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 1,1,2-1 nonkroethane                             | 8.9E+01            | 0.0010                | 0.005                | NÉ                             | NE                                  | 8.9E+01                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 1,1-Dichloroethene                               | 2.7E+01            | 0.0005                | 0.005                | NE                             | NE                                  | 2.7E+01                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 1,1-Dichloropropene                              | 9.9E-01            | 0.0005                | 0.005                | NE                             | NE                                  | 9.9E-01                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES<br>VOLATILES   | 1,2,3+1 nonioropenzene<br>1,2,3-Trichloropropage | 9.2E-02            | 0.0000                | 0.005                | NE                             | NE                                  | 9.2E-02                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 1,2,4-Trichlorobenzene                           | 1.4E+02            | 0.0005                | 0.005                | NE                             | NE                                  | 1.4E+02                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 1.2.4-Trimethylbenzene                           | 9.6E+00            | 0.0005                | 0.005                | NE                             | NE                                  | 9,6E+00<br>3 5E-01              |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES<br>VOLATILES   | 1,2-Dibromo-3-Chioropropane                      | 5.3E-02            | 0.0020                | 0.005                | NE                             | NE                                  | 5.3E-02                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 1,2-Dichlorobenzene                              | 5.6E+01            | 0.0005                | 0.005                | NE                             | NE                                  | 5.6E+01                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 1,2-Dichloroethane                               | 2.7E-01            | 0.0005                | 0.005                | NE                             | NE                                  | 2.7E-01<br>1.8E+00              |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 1,2-Dimethylbenzena (o-Xvlene)                   | 3.3E+03            | 0.0005                | 0.005                | NE                             | NE                                  | 3,3E+03                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 1,3,5-Trimethylbenzene                           | 8.3E+00            | 0.0005                | 0.005                | NE                             | NE                                  | 8.3E+00                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 1,3-Dichlorobenzene                              | 5.1E+00            | 0,0005                | 0.005                | NE                             | NE                                  | 5.1E+00                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 1,3-Dichlorobenzene                              | 2.7E+01            | 0.0005                | 0.005                | NE                             | NE                                  | 2.7E+01                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 2,2-Dichloropropane                              | 1.7E+00            | 0.0005                | 0.005                | NÉ                             | NE                                  | 1.7E+00                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 2-Butanone                                       | 2.6E+03            | 0.0025                | 0.010                | NE                             | NE                                  | 2.6E+03                         |   |  | 0.012 1 U   | 0.010 1 U   |   |   |
| VOLATILES  | 2-Chlorotoluene                                  | 1.5E+02            | 0.0020                | 0.005                | NE                             | NĚ                                  | 1.5E+02                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | 2-Hexanone                                       | 6.2E+00            | 0.0025                | 0.010                | NE                             | NE                                  | 6.2E+00                         |   |  | 0.012 1 U   | 0.010 1 U   |   |   |
| VOLATILES  | 4-Chlorotoluene                                  | 3,4E-01            | 0.0005                | 0.005                | NE                             | NE                                  | 3.4E-01                         |   |  | 0.000 1 U   | 0.010 1 U   |   |   |
| VOLATILES  | Benzene  | 8.8E-01            | 0.0005                | 0.005                | NE                             | NE                                  | 8.8E-01                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | Bromobenzene                                     | 1.1E+01            | 0.0005                | 0.005                | NE                             | NE                                  | 1.1E+01                         | 1   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | Bromochloromethane                               | 2.4E+01            | 0.0005                | 0.005                | NE                             | NE                                  | 2.4E+01<br>1.0E+01              |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | Bromotecnoromethane                              | 3.4E+01            | 0.0005                | 0.005                | NE                             | NE                                  | 3.4E+01                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | Bromomethane                                     | 3.5E-01            | 0.0010                | 0.010                | NE                             | NE                                  | 3.5E-01                         |   |  | 0.012 1 U   | 0.010 1 U   |   |   |
| VOLATILES  | Carbon disulfide                                 | 1.0E+02<br>3.5E-01 | 0.0005                | 0.005                | NE                             | NE                                  | 1.0E+02<br>3.5E-01              |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | Chlombenzene                                     | 4.0E+01            | 0.0005                | 0.005                | NE                             | NE                                  | 4.0E+01                         |   |  | 0.006 1 Ū   | 0.005 1 U   |   |   |
| VOLATILES  | Chloroethane                                     | 1.1E+03            | 0.0010                | 0.010                | NE                             | NE                                  | 1.1E+03                         |   |  | 0.012 1 U   | 0.010 1 U   |   |   |
| VOLATILE\$   | Chioroform                                       | 3.1E-01            | 0.0005                | 0.005                | NE                             | NE                                  | 3.1E-01<br>2.3E-01              |   |  | 0.006 i U   | 0.010 1 U   |   |   |
| VOLATILES  | cis-1.2-Dichloroethene                           | 1.2E+02            | 0.00020               | 0.005                | NE                             | NE                                  | 1.2E+02                         |   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | cis-1,3-Dichloropropene                          | 1.2E+00            | 0.0005                | 0.005                | NE                             | NE                                  | 1.2E+00                         | 1   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | Dibromochloromethane                             | 7.6E+00            | 0.0005                | 0.005                | NE<br>N≅                       | NE                                  | 7.6E+00                         | 1   |  | 0.006 1 U   | 0.005 1 U   |   |   |
| VOLATILES  | Dichlorodifluoromethane                          | 2.2E+02            | 0.0010                | 0.010                | NE                             | NE                                  | 2.2E+02                         | 1   |  | 0.012 1 U   | 0.010 1 U   |   |   |
| VOLATILES  | Ethylbenzene                                     | 4.3E+02            | 0.0005                | 0.005                | NĘ                             | NE                                  | 4.3E+02                         | 1   |  | 0.006 1 U   | 0.005 1 U   |   |   |

Shaw Environmental, inc.

00066547

#### Table 4-73 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-051

|   |                           |  |                     |                        |                                       |  |  | •  |  |   |  |  |  |
|---|---------------------------|--|---------------------|------------------------|---------------------------------------|--|--|--|--|---|--|--|--|
| [SUMP] = SUMP051<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Baci<br>Concentr<br>(95% U<br>Surface | ground<br>ations in Soil<br>PL, mg/kg}<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP051-SB01<br>36-SMP51-SB01-01<br>9/13/2006<br>0.5 - 0.5 Ft<br>REG | 35\$UMP051-\$801<br>35-\$MP51-\$801-01-QC<br>9/13/2006<br>0.5 - 0.5 Ft<br>FD | 3551JMP051-SB01<br>35-SMP51-SB01-02<br>9/13/2006<br>7 - 7 Ft<br>REG | 35SUMP051-SB01<br>35-SMP51-SB01-02-QC<br>9/13/2006<br>7 - 7 Ft<br>FD | 47\$808<br>47\$808 (0-0_5)<br>5/31/2000<br>0 - 0.5 Ft<br>REG | 47\$808<br>47\$808 (1-2)<br>5/31/2000<br>1 - 2 Ft<br>REG |
| Test Group  | Parameter (Units = mo/kg) | (RBSV)"                                  | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                            | 1.5 - 2.5 Ft   | Value  | Result DIL LO VO   | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL_LO_VO   |
| VOLATILES   | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                    | NE   | 1.6E+00                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATILES   | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                    | NE   | 5.4E+02                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATILES   | m.p-Xvlenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                    | NE   | 2.3E+02                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATILES   | Methyl Isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NE                                    | NE   | 1.3E+03                                      |  |  | 0,012 1 U   | 0.010 1 0  |  |  |
| VOLATILES   | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                    | NE   | 8.7E+00                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATILES   | Nanhthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NE                                    | NE   | 1.8E+01                                      |  |  | 0.012 1 U   | 0.010 1 U  |  |  |
| VOLATILES   | p-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                    | NE   | 2.7E+02                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATILES   | 0-PROPYI BENZENE          | 3.2E+02                                  | 0.0005              | 0.005                  | NE                                    | NE   | 3.2E+02                                      |  |  | 0,006 1 U   | 0.005 1 U  |  |  |
| VOLATILES   | p-1SOPROPYLTO! LIENE      | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                    | NE   | 4.2E+02                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATIES  | sec-BUTYI BENZENE         | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                    | NE   | 3.0E+02                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATIES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                    | NË   | 1.3E+03                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATILES   | ted-BLITYL BENZENE        | 2 6F+02                                  | 0.0005              | 0.005                  | NE                                    | NE   | 2.6E+02                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATILES   | Tetrachloroethene         | 6 0E+00                                  | 0.0005              | 0.005                  | NE                                    | NE   | 6.0E+00                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATILES   | Tohene                    | 1 1E+03                                  | 0.0005              | 0.005                  | NE                                    | NE   | 1.1E+03                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATILES   | trans_1 2-Dichloroethene  | 1 4E+02                                  | 0 0005              | 0.005                  | NE                                    | NE   | 1.4E+02                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATILES   | trapp-1.2.Dichlomomosoa   | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                    | NE   | 1.85+00                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATILES   | Trichlomathana            | 375400                                   | 0.0005              | 0.005                  | NE                                    | NE   | 3.7E+00                                      |  |  | 0.006 1 U   | 0.005 1 U  |  |  |
| VOLATILES   | Trichloroftworomethane    | 265+02                                   | 0.0010              | 0.01                   | NE                                    | NE   | 2.6E+02                                      |  |  | 0.012 1 U   | 0.010 1 U  |  |  |
| VOLATILES   | Vind acotate              | 5.7E+01                                  | 0.0010              | 0.01                   | NE                                    | NE   | 577+01                                       |  |  | 0.012 1 U   | 0.010 1 U  |  |  |
| VOLATILES   | Vient chloride            | 3.65-02                                  | 0.0010              | 0.01                   | NE                                    | NE   | 3.6E+02                                      |  |  | 0.012 1 U   | 0.010 1 U  |  |  |
| VULATILEO   | A MANA CHINGING           | 3.0E-02                                  | 0.0010              | 0.01                   |                                       |  | ····· ···                                    |  |  |   |  |  |  |

Shaw Environmental, Inc.

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

### 00066548

Table 4-74 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

| Su  | mn | .05 | 2 |
|-----|----|-----|---|
| ~ ~ |    |     |   |

| [SUMP] = SUMP052<br>LOCATION_CODE<br>SAMPLE_NO |   | TCEQ               |             |              | Back           | around        | Applicble          | 35SUMP052-SB01<br>35-SMP052-SB01-01 | 35SUMP052-SB01<br>35-SMP052-SB01-02 | 47\$B29<br>47\$B29(0-0 5) | 47SB29<br>47SB29(1-2) |
|--|---|--------------------|-------------|--------------|----------------|---------------|--------------------|-------------------------------------|-------------------------------------|---------------------------|-----------------------|
| SAMPLE_DATE                                    |   | Risk-Based         | Mathad      | Mothod       | Concentra      | tions in Soil | TCEQ               | 9/19/2006                           | 9/19/2006                           | 6/4/2000                  | 6/4/2000              |
| SAMPLE_PURPOSE                                 |   | Value              | Detection   | Quantitation | Surface        | Subsurface    | Screening          | REG                                 | REG                                 | REG                       | REG                   |
| Test Group                                     | Parameter (Units = mg/kg)               | (RB\$V)            | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft     | 1.5 - 2.5 Ft  | Value              | Result DIL LQ VQ                    | Result DIL LQ VQ                    | Result DIL LQ VQ          | Result DIL LQ VQ      |
| SEMIVOLATILES                                  | Perchlorate<br>1.2.4-Trichlornbenzene   | 1.4E+01<br>1.4E+02 | 0.005       | 0.010        | NE             | NE            | 1.4E+01<br>1.4E+02 | 4640 1 1                            | 0.174 1 U                           | 0.00588 1 < 0             | $0.00586 \ 1 \ < \ 0$ |
| SEMIVOLATILES                                  | 1,2-Dichlorobenzene                     | 5.6E+01            | 0.0825      | 0.165        | NE             | NE            | 5.6E+01            | 0.055 1 U                           | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 1 3-Dichlorobenzene                     | 5.1E+00            | 0.0825      | 0.165        | NE             | NE            | 5.1E+00            | 1.25 1 U                            | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 1,4-Dichlorobenzene                     | 2.7E+01            | 0.0825      | 0.165        | NE             | NE            | 2.7E+01            | 30.2 1 U                            | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 2,4,5-1 nchiorophenol                   | 1.02+03            | 0.0825      | 0.165        | NE             | NE            | 1.6E+03            | 0.208 1 0                           | 0.1/4 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 2.4-Dichlorophenol                      | 4.7E+01            | 0.0825      | 0.165        | NE             | NE            | 4.5E+01            | 500 1 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 2,4-Dimethylphenol                      | 3.1E+02            | 0.0825      | 0.165        | NE             | NE            | 3.1E+02            | 8.410 1 U                           | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 2,4-Dinitrophenol                       | 3.1E+01            | 0.3300      | 0.825        | NE             | NE            | 3.1E+01            | 1.570 1 U                           | 0.871 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 2.4-Dinitrotoluene                      | 7.2E-01            | 0.0825      | 0.165        | NE             | NE            | 7.2E-01            | 1.700 1 U                           | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES<br>SEMIVOLATILES                 | 2,5-Dinitrotokiene                      | 1.2E-01            | 0.0825      | 0.165        | NE             | NE            | 7.2E-01            | 6710.000 1 U                        | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 2-Chlorophenol                          | 1 15+02            | 0.0825      | 0.165        | NE             | NE            | 1.1E+03            | 229,000 1 U                         | 0.174 1 0                           |                           |                       |
| SEMIVOLATILES                                  | 2-Methylnaphthalene                     | 5.5E+01            | 0.0825      | 0.165        | NE             | NE            | 5.5E+01            | 48.8 1 U                            | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 2-Methylphenol                          | 7.7E+02            | 0.0825      | 0.165        | NE             | NE            | #REF!              | 0.010 1 U                           | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 2-Nitroaniline                          | 4.7E+00            | 0.0825      | 0.165        | NE             | NE            | 4.7E+00            | 2.270 1 U                           | 0.871 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 2-Nitrophenot                           | 3.1E+01            | 0.0825      | 0.165        | NE             | NE            | 3.1E+01            | 221.000 1 U                         | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 3,3*Dichlorobenziolne<br>3-Nitrophiline | 4.75+00            | 0.1000      | 0.330        | NE             | NE            | 1.1E+00            | 1.500 1 11                          | 0.349 1 0                           |                           |                       |
| SEMIVOLATILES                                  | 4.6-Dinitro-2-methylphenol              | 3.1E+01            | 0.3300      | 0.825        | NE             | NE            | 3.1E+01            | 91,100 1 U                          | 0.871 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 4-Bromophenyl phenyl ether              | 3.1E-02            | 0.0825      | 0.165        | NE             | NE            | 1.7E-01            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 4-Chloro-3-methylphenol                 | 7.7E+01            | 0.0825      | 0.165        | NE             | NE            | 7.7E+01            | 0.042 1 U                           | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 4-Chloroaniline                         | 6.2E+01            | 0.0825      | 0.165        | NE             | NE            | 6.2E+01            | 15.600 1 U                          | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 4-Chlorophenyl phenyl ether             | 2.8=-02            | 0.0825      | 0.165        | NE             | NE .          | 1.7E-01            | 5.950 1 U                           | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 4-Nitroaniline                          | 1.3E+01            | 0.3300      | 0.825        | NE             | NE            | 1.3E+01            | 1.890 U                             | 0.871 1 U                           |                           |                       |
| SEMIVOLATILES                                  | 4-Nitrophenol                           | 3.1E+01            | 0.3300      | 0.825        | NE             | NE            | 3.1E+01            | 1.890 U                             | 0.871 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Acenaphthene                            | 8.2E+02            | 0.0825      | 0.165        | NE             | NE            | 8.2E+02            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Acenaphthylene                          | 8.2E+02            | 0.0825      | 0.165        | NE             | NE            | 8.2E+02            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES<br>SEMIVOLATILES                 | Anthracene<br>Roszo(s)asthracene        | 4.16+03            | 0.0825      | 0.165        | NE<br>1 FRE AR | NE            | 4.1E+03            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Benzo(a)ovrene                          | 6.35-02            | 0.0825      | 0.165        | 1.532-02       | NE            | 1.7E-01            | 0.378 U                             | 0.174 1 0                           |                           |                       |
| SEMIVOLATILES                                  | Benzo(b)fluoranthene                    | 6.3E-01            | 0.0825      | 0.165        | 1.53E-02       | NE            | 6.3E-01            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Benzo(ghi)perylene                      | 4.1E+02            | 0.0825      | 0.165        | 1.23E-02       | NE            | 4.1E+02            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Benzo(k)fluoranthene                    | 6.3E+00            | 0.0825      | 0.165        | 1.30E-02       | NE            | 6.3E+00            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Benzoic Acid<br>Bearul Aleshal          | 6.2E+04            | 0.3300      | 0.825        | NE             | NE            | 6.2E+04            | 1.890 U                             | 0.871 1 U                           |                           |                       |
| SEMIVOLATILES                                  | his(2-Chlomethoxy)methane               | 2 9E-01            | 0.0825      | 0.165        | NE             | NE            | 4.7E+03<br>2.9E-01 | 0.378 U                             | 0.174 1 0                           |                           |                       |
| SEMIVOLATILES                                  | bis{2-Chloroethyl)ether                 | 1.5E-01            | 0.0825      | 0.165        | NE             | NE            | 1.7E-01            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | bis(2-Chloroisopropyl)ether             | 4.8E+00            | 0.0825      | 0.165        | NE             | NE            | 4.8E+00            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | bis(2-Ethylhexyt)phthalate              | 1.7E+01            | 0.0825      | 0.165        | NE             | NE            | 1.7E+01            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Butyl benzyl phthalate                  | 3.1E+03            | 0.0825      | 0.165        | NE             | NE            | 3.1E+03            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Dibenzo(a b)anthracene                  | 6.3E-02            | 0.0825      | 0.165        | 1.51E-02       | NE            | 1.7E-01            | 0.378 U                             | 0.174 1 0                           |                           |                       |
| SEMIVOLATILES                                  | Dibenzofuran                            | 6.2E+01            | 0.0825      | 0.165        | NE             | NE            | 6.2E+01            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Diethyl phthalate                       | 1.2E+04            | 0.0825      | 0.165        | NE             | NE            | 1.2E+04            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Dimethyl phthalate                      | 1.2E+04            | 0.0825      | 0.165        | NE             | NE            | 1.2E+04            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | di-n-Butyl phthalate                    | 1.6E+03            | 0.0825      | 0.165        | NE             | NE            | 1.6E+03            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Eluoranthene                            | 5.5E+02            | 0.0825      | 0.165        | 2 29E-02       | NE            | 5 5E+02            | 0.378 U                             | 0.174 1 0                           |                           |                       |
| SEMIVOLATILES                                  | Fluorene                                | 5.5E+02            | 0.0825      | 0.165        | NE             | NE            | 5.5E+02            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Hexachlorobenzene                       | 2.5E-01            | 0.0825      | 0.165        | NE             | NE            | 2.5E-01            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Hexachlorobutadiene                     | 1.6E+00            | 0.0825      | 0.165        | NE             | NE            | 1.6E+00            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Hexachlorocyclopentadiene               | 1.0E+00            | 0.0825      | 0.165        | NE             | NE            | 1.0E+00            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Indeno(1.2.3-cd)ovrene                  | 1.0E+U1<br>6.3E-01 | 0.0825      | 0.165        | 143E-02        |               | 1.0E+01<br>6.3E-01 | 0.378 0                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Isophorone                              | 5.2E+02            | 0.0825      | 0.165        | NE             | NE            | 5.2E+02            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Naphthalene                             | 1.8E+01            | 0.0825      | 0.165        | NE             | NE            | 1.8E+01            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | Nitrobenzene                            | 6.5E+00            | 0.0825      | 0.165        | NE             | NE            | 6.5E+00            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVOLATILES                                  | n-Nitroso-di-n-propylamine              | 4.1E-02            | 0.0825      | 0.165        | NE             | NE            | 1.7E-01            | 0.378 U                             | 0.174 1 U                           |                           |                       |
| SEMIVULATILES                                  | n-www.soupnenylamine                    | 5.9E+01            | 0.0825      | U.165        | NE             | NE            | 5.9E+01            | 0.378 U                             | U.1/4 1 U                           |                           |                       |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

### 00066549

| Ta | ble 4 | -74 |  |
|----|-------|-----|--|
|----|-------|-----|--|

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-052

| [SUMP] = SUMP052<br>LOCATION CODE |                                   |                    |                     |             |                    | -                       |                         | 35SUMP052-SB01    | 35SUMP052-SB01    | 47SB29           | 47SB29           |
|-----------------------------------|-----------------------------------|--------------------|---------------------|-------------|--------------------|-------------------------|-------------------------|-------------------|-------------------|------------------|------------------|
| SAMPLE_NO                         |                                   | TCEQ               |                     |             | Backg              | jround                  | Applicale               | 35-SMP052-SB01-01 | 35-SMP052-SB01-02 | 47SB29(0-0_5)    | 47SB29(1-2)      |
| SAMPLE_DATE                       |                                   | Risk-Based         |                     |             | Concentrat         | tions in Soil           | TCEQ                    | 9/19/2006         | 9/19/2006         | 6/4/2000         | 6/4/2000         |
| SAMPLE PURPOSE                    |                                   | Value              | Method<br>Detection | Method      | (95% UP<br>Surface | L, mg/kg)<br>Subsurface | Risk-Based<br>Screeping | .55 Ft<br>REG     | 3-3Ft<br>REG      | 05 Ft<br>BEG     | 1 - 2 Ft<br>REG  |
| Test Group                        | Parameter (Units = mg/kg)         | (RB\$V) *          | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft         | 1.5 - 2.5 Ft            | Value                   | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ |
| SEMIVOLATILES                     | Pentachlorophenol                 | 3.0E+00            | 0.3300              | 0.825       | NE                 | NE                      | 3.0E+00                 | 1.890 U           | 0.871 1 U         |                  |                  |
| SEMIVOLATILES                     | Phenanthrene                      | 4.1E+02            | 0.0825              | 0.165       | NE                 | NE                      | 4.1E+02                 | 0.378 U           | 0.174 1 U         |                  |                  |
| SEMIVOLATILES<br>SEMIVOLATILES    | Phenoi                            | 4.76+03            | 0.0825              | 0.165       | NE 101E 00         | NE                      | 4.7E+03                 | 0.378 U           | 0.174 1 U         |                  |                  |
| SOUDS                             | Percent Solids                    | 4.1E+02            | U.0825              | 0.105<br>NE | 1.94E-02           |                         | 4.1E+02                 | 0.378 U           | 0.174 1 U         |                  |                  |
| VOLATILES                         | 1.1.1.2-Tetrachlomethane          | 5.25+00            | 0.0005              | 0.005       | NE                 | ine.<br>N⊏              | 5 2E+00                 |                   | 0.006 1 18        |                  |                  |
| VOLATILES                         | 1,1,1-Trichloroethane             | 2.3E+02            | 0.0005              | 0.005       | NE                 | NE                      | 2.3E+02                 |                   | 0.006 1 1         |                  |                  |
| VOLATILES                         | 1,1,2,2-Tetrachloroethane         | 5.1E-01            | 0.0005              | 0.005       | NE                 | NE                      | 5.1E-01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | 1,1,2-Trichloroethane             | 9.7E-01            | 0.0005              | 0.005       | NE                 | NE                      | 9.7E-01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | 1,1-Dichloroethane                | 8.9E+01            | 0.0010              | 0.005       | NE                 | NE                      | 8.9E+01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | 1,1-Dichloroethene                | 2.7E+01            | 0.0005              | 0.005       | NE                 | NE                      | 2.7E+01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | 1,1-Dichloroproperie              | 9.9E-01            | 0.0005              | 0.005       | NE                 | ŅE                      | 9.9E-01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | 1,2,3-Inchloropropage             | 4.28+01            | 0.0005              | 0.005       | NE                 | NE                      | 4.2E+01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | 1.2.4-Trichlorobenzene            | 146+02             | 0.0010              | 0.005       |                    | ME                      | 9.2E-02                 |                   | 0.006 1 0         |                  |                  |
| VOLATILES                         | 1.2.4-Trimethylbenzene            | 9.6E+00            | 0.0005              | 0.005       | NE                 | NE                      | 9.65+00                 |                   | 0.006 1 11        |                  |                  |
| VOLATILES                         | 1,2-Dibromo-3-chloropropane       | 3.5E-01            | 0.0020              | 0.005       | NE                 | NE                      | 3.5E-01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | 1,2-Dibromoethane                 | 5.3E-02            | 0.0005              | 0.005       | NE                 | NE                      | 5.3E-02                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | 1,2-Dichlorobenzene               | 5.6E+01            | 0.0005              | 0.005       | NE                 | NE                      | 5.6E+01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | 1,2-Dichloroethane                | 2.7E-01            | 0.0005              | 0.005       | NE                 | NE                      | 2.7E-01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | 1,2-Dichloropropane               | 1.8E+00            | 0.0005              | 0.005       | NE                 | NE                      | 1.8E+00                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | 1.3 5-Trimethylbenzene (0-Aylene) | 3.3E+03            | 0.0005              | 0.005       | NE                 | NE                      | 3.3E+03                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | 1.3-Dichlombenzene                | 5 15+00            | 0.0005              | 0.005       | NE                 |                         | 8.3E+00<br>5.1E+00      |                   | 0.006 1 11        |                  |                  |
| VOLATILES                         | 1.3-Dichloropropane               | 3.0E+00            | 0.0005              | 0.005       | NE                 | NE                      | 3.1E+00                 |                   | 0.006 1 1         |                  |                  |
| VOLATILES                         | 1 4-Dichlorobenzene               | 2.7E+01            | 0.0005              | 0.005       | NE                 | NE                      | 2.7E+01                 |                   | 0.006 1 1         |                  |                  |
| VOLATILES                         | 2,2-Dichloropropane               | 1.7E+00            | 0.0005              | 0.005       | NE                 | NE                      | 1.7E+00                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | 2-Butanone                        | 2.6E+03            | 0.0025              | 0.010       | NE                 | NE                      | 2.6E+03                 | 95.900 1          | 0.011 1 U         |                  |                  |
| VOLATILES                         | 2-Chloroethyl vinyl ether         | 2.1E-01            | 0.0020              | 0.010       | NE                 | NE                      | 2.1E-01                 |                   | 0.011 1 U         |                  |                  |
| VOLATILES                         | 2-Chlorotoluerie                  | 1.5E+02            | 0.0005              | 0.005       | NE                 | NE                      | 1.5E+02                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | A-Chlorotoluone                   | 3 45 01            | 0.0025              | 0.010       | NE                 | NE                      | 6.2E+00                 |                   | 0.011 1 U         |                  |                  |
| VOLATILES                         | Acetone                           | 1 7E+02            | 0.0005              | 0.005       | NE                 | NE                      | 3.4E-01<br>1.75±02      |                   | 0.006 1 0         |                  |                  |
| VOLATILES                         | Benzene                           | 8.8E-01            | 0.0005              | 0.015       | NE                 | NE                      | 8.8E-01                 |                   | 0.007 1 3 3       |                  |                  |
| VOLATILES                         | Bromobenzene                      | 1.1E+01            | 0.0005              | 0.005       | NE                 | NE                      | 1.1E+01                 |                   | 0.006 1 1         |                  |                  |
| VOLATILES                         | Bromochloromethane                | 2.4E+01            | 0.0005              | 0.005       | NE                 | NE                      | 2.4E+01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | Bromodichloromethane              | 1.0E+01            | 0.0005              | 0.005       | NE                 | NE                      | 1.0E+01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | Bromoform                         | 3.4E+01            | 0.0005              | 0.005       | NE                 | NE                      | 3.4E+01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | Bromomethane                      | 3.5E-01            | 0.0010              | 0.010       | NE                 | NE                      | 3.5E-01                 |                   | 0.011 1 U         |                  |                  |
| VOLATILES                         | Carbon tetracharide               | 1.0E+02<br>2.5E-04 | 0.0005              | 0.005       | NE                 | NE                      | 1.0E+02                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | Chlorobenzene                     | 4 0E+01            | 0.0005              | 0.005       | NE                 | NE                      | 3.5E-01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | Chloroethane                      | 1.1E+03            | 0.0010              | 0.010       | NE                 | NE                      | 1 1E+03                 |                   | 0.011 1 1         |                  |                  |
| VOLATILES                         | Chloroform                        | 3.1E-01            | 0.0005              | 0.005       | NE                 | NE                      | 3.1E-01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | Chloromethane                     | 2.3E-01            | 0.0020              | 0.010       | NE                 | NE                      | 2.3E-01                 |                   | 0.011 I U         |                  |                  |
| VOLATILES                         | cis-1,2-Dichloroethene            | 1.2E+02            | 0.0005              | 0.005       | NE                 | NE                      | 1.2E+02                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | cis-1,3-Dichloropropene           | 1.2E+00            | 0.0005              | 0.005       | NE                 | NE                      | 1.2E+00                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | Dipromocniorometnane              | 7.6E+00            | 0.0005              | 0.005       | NE                 | NE                      | 7.6E+00                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | Dichlorodifluoromethane           | 2.25+02            | 0.0005              | 0.005       | NE                 |                         | 1.9E+01                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | Ethylbenzene                      | 4.3E+02            | 0.0005              | 0.010       | NE                 |                         | 4 35+02                 |                   | 0.006 1 11        | •                |                  |
| VOLATILES                         | Hexachlorobutadiene               | 1.6E+00            | 0.0005              | 0.005       | NE                 | NE                      | 1.6E+00                 |                   | 0.006 1 1         |                  |                  |
| VOLATILES                         | Isopropylbenzene                  | 5.4E+02            | 0.0005              | 0.005       | NE                 | NE                      | 5.4E+02                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | m,p-Xylenes                       | 2.3E+02            | 0.0005              | 0.005       | NE                 | NE                      | 2.3E+02                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | Methyl isobutyl ketone            | 1.3E+03            | 0.0025              | 0.01        | NE                 | NE                      | 1.3E+03                 |                   | 0.011 1 U         |                  |                  |
| VOLATILES                         | Memyléné chloride                 | 8.7E+00            | 0.0010              | 0.005       | NE                 | NE                      | 8.7E+00                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | Naphulaiene<br>n-Ri iTVI BENIZENE | 1.8E+01            | 0.0005              | 0.01        | NE                 | NE                      | 1.8E+01                 |                   | 0.011 1 U         |                  |                  |
| VOLATILES                         | n-PROPYLBENZENE                   | 3.7ETU2            | 0.0005              | 0.005       | NE:                |                         | 2.76+02                 |                   | 0.006 1 U         |                  |                  |
| VOLATILES                         | D-ISOPROPYLTOLUENE                | 4.2E+02            | 0.0005              | 0.005       | NE                 |                         | 3.2C+02<br>4.2E+02      |                   | 0.000 1 0         |                  |                  |
| VOLATILES                         | sec-BUTYLBENZENE                  | 3.0E+02            | 0.0005              | 0.005       | NË                 | NE                      | 3.0E+02                 |                   | 0.006 1 11        |                  |                  |
| VOLATILES                         | Styrene                           | 1.3E+03            | 0.0005              | 0.005       | NE                 | NE                      | 1.3E+03                 |                   | 0.006 1 U         |                  |                  |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066550

# Table 4-74 Comparison of Chemical Concentrations In Soil to Risk-Based Screening Values Sump 052

|  |                           |  |                     |                        |   | Sump-052   |  |  |           |                              |   |   |           |                      |  |
|--|---------------------------|--|---------------------|------------------------|---|--|--|--|-----------|------------------------------|---|---|-----------|----------------------|--|
| [SUMP] = SUMP052<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Methad<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>Itions in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP052-SB01 35SU<br>35-SMP052-SB01-01 35-SMF<br>9/19/2006 9/<br>.55 Ft<br>REG |           | 35SUM<br>35-SMP0<br>9/1<br>3 | P052-SB01<br>152-SB01-02<br>9/2006<br>- 3 Ft<br>REG | 47SB29<br>47SB29(0-0_5)<br>6/4/2000<br>05 Ft<br>REG |           | 4:<br>47S<br>6/<br>1 | 7SB29<br>B29(1-2)<br>4/2000<br>- 2 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg) | (R8\$V) *                                | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  | Result   | DIL LQ VQ | Result                       | DIL LQ VQ   | Result  | DIL LQ VQ | Result               | DIL LQ VQ                                    |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NÉ                                      | NE   | 2.6E+02                                      |  |           | 0.00                         | 61U   |   |           |                      |  |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NÉ   | 6.0E+00                                      |  |           | 0.00                         | 51U   |   |           |                      |  |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.1E+03                                      |  |           | 0.00                         | â 1 U   |   |           |                      |  |
| VOLATILES  | trans-1,2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.4E+02                                      |  |           | 0.00                         | 31U   |   |           |                      |  |
| VOLATILES  | trans-1,3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0,005                  | NE                                      | NE   | 1.8E+00                                      |  |           | 0.00                         | 6 I U   |   |           |                      |  |
| VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.7E+00                                      |  |           | 0.02                         | 81  |   |           |                      |  |
| VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 2.6E+02                                      |  |           | 0.01                         | 110   |   |           |                      |  |
| VOLATILES  | Vinyl acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NE                                      | NE   | 5.7E+01                                      |  |           | 0.01                         | 11UUJ   |   |           |                      |  |
| VOLATILES  | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 3.6E-02                                      |  |           | 0.01                         | <u>1 1 U</u>  |   |           |                      |  |
|  |                           |  |                     |                        |   |  |  |  |           |                              |   |   |           |                      |  |

### 00066551

### Table 4-75 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|  |                                |  |                     |                        |   | Sump-0  | 53   |  |   |           |  |                                      |                                |   |                        |  |
|--|--------------------------------|--|---------------------|------------------------|---|---|--|--|---|-----------|--|--------------------------------------|--------------------------------|---|------------------------|--|
| [SUMP] = SUMP053<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                                | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35\$UMP<br>35-SMP5<br>9/13/<br>0.5 -<br>RI | 053-SB<br>3-SB01<br>/2006<br>0.5 Ft<br>EG | 01<br>-01 | 35SUMP0<br>35-SMP53<br>9/13/2<br>8 - 8<br>RE | 53-SB01<br>SB01-02<br>006<br>Ft<br>G | 47<br>47SB1<br>5/3<br>0 -<br>F | \$B10<br>10(0-0_5)<br>1/2000<br>0.5 Ft<br>REG | 47<br>47SI<br>5/3<br>1 | 'SB10<br>310(1-2)<br>1/2000<br>- 2 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg)      | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result                                     | DIL L                                     | Q VQ      | Result                                       | DIL LQ VQ                            | Result                         | DIL LQ VQ                                     | Result                 | dil la va                                    |
| METALS   | Aluminum                       | 1.6E+04                                  | 10.000              | 20.00                  | 1.63E+04                                | 2.08E+04  | 1.6E+04                                      | 8250                                       | 2   |           | 7110   | 1                                    |                                |   |                        |  |
| METALS   | Antimony                       | 7.3E+00                                  | 0.500               | 0.10                   | 9.40E-01                                | 1.60E+00  | 7.3E+00                                      | 0.107                                      | 1   | U         | 0.110  | 1 U                                  |                                |   |                        |  |
| METALS   | Arsenic                        | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                | 5.54E+00  | 2.0E+01                                      | 5.670                                      | 1   |           | 1.450  | 1                                    |                                |   |                        |  |
| METALS   | Banum                          | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                | 8.55E+01  | 2.6E+03                                      | 59   | 2   | J         | 191  | 1 J                                  |                                |   |                        |  |
| METALS   | Beryllium                      | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                | 7.66E-01  | 4.6E+00                                      | 0.659                                      | 2   | 1 J       | 0.932  | 1                                    |                                |   |                        |  |
| METALS   | Cadmium                        | 5.2E+00                                  | 0.025               | 0.10                   | 1.40E+00                                | 4.00E-01  | 5.2E+00                                      | 0.241                                      | 2   | JJ        | 0.158  | 1 J J                                |                                |   |                        |  |
| METALS   | Calcium                        | NE                                       | NA                  | NA                     | NA                                      | NA  |  | 1420                                       | 2   |           | 815  | 1                                    |                                |   |                        |  |
| METALS   | Chromium                       | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                                | 3.01E+01  | 5.9E+03                                      | 35.200                                     | 2   | J         | 10.000                                       | 1 J                                  |                                |   |                        |  |
| METALS   | Cobalt                         | 1.5E+03                                  | 0.125               | 0.50                   | 7.23E+00                                | 5.61E+00  | 1.5E+03                                      | 4.330                                      | 2   |           | 19.100                                       | 1                                    |                                |   |                        |  |
| METALS   | Copper                         | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                                | 9.25E+00  | 1.0E+03                                      | 24.100                                     | 2   |           | 5.680  | 1                                    |                                |   |                        |  |
| METALS   | Iron                           | NE                                       | NA                  | NA                     | NA                                      | NA  | -  | 107000.000                                 | 10  |           | 17400.000                                    | 1                                    |                                |   |                        |  |
| METALS   | Lead                           | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                | 1.14E+01  | 5.0E+02                                      | 16   | 1   |           | 2  | 1                                    |                                |   |                        |  |
| METALS   | Magnesium                      | NE                                       | NA                  | NA                     | NA                                      | NA  | -  | 372.000                                    | 2   | J         | 1370.000                                     | 1 J                                  |                                |   |                        |  |
| METALS   | Manganese                      | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                | 2.01E+02  | 1.7E+03                                      | 219  | 2   |           | 485  | 1                                    |                                |   |                        |  |
| METALS   | Mercury                        | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                | 3.60E-01  | 2.5E-01                                      | 0.04                                       | 1   | L L       | 0.28   | 1 U                                  |                                |   |                        |  |
| METALS   | Nickel                         | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                | 1.16E+01  | 1.9E+02                                      | 11.000                                     | 2   |           | 13.800                                       | 1                                    |                                |   |                        |  |
| METALS   | Potassium                      | NE                                       | NA                  | NA                     | NA                                      | NA  |  | 186.000                                    | 2   |           | 441.000                                      | 1                                    |                                |   |                        |  |
| METALS   | Selenium                       | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                | 5.57E+00  | 1.3E+02                                      | 0.27                                       | 1   |           | 0,11   | 1 J J                                |                                |   |                        |  |
| METALS   | Silver                         | 4.7E+01                                  | 0.050               | 0.20                   | 3.10E-01                                | 3.70E-01  | 4.7E+01                                      | 3.250                                      | 2   | u         | 1.720  | 1 U                                  |                                |   |                        |  |
| METALS   | Sodium                         | NE                                       | NA                  | NA                     | NA                                      | NA  |  | 12.100                                     | 2   | lΓ        | 199.000                                      | 1                                    |                                |   |                        |  |
| METALS   | Thallium                       | 2.0E+00                                  | 0.010               | 0.02                   | 4.70E-01                                | NE  | 2.0E+00                                      | 0.056                                      | 1   |           | 0.079  | 1                                    |                                |   |                        |  |
| METALS   | Vanadium                       | 4.8E+01                                  | 0.125               | 0.50                   | 3.21E+01                                | 4.46E+01  | 4.8E+01                                      | 63,500                                     | 2   | J         | 22.700                                       | 1 J                                  |                                |   |                        |  |
| METALS   | Zinc                           | 5.9E+03                                  | 0.625               | 2.50                   | 6.16E+01                                | 2.02E+01  | 5.9E+03                                      | 156.000                                    | 2   | J         | 30,000                                       | 1 Ĵ                                  |                                |   |                        |  |
| PERC   | Perchlorate                    | 1.4E+01                                  | 0.005               | 0.010                  | NE                                      | NE  | 1.4E+01                                      | 0.036                                      | 4   | JĴ        | 0.597  | 20                                   | 0.104                          | 1   | 0.158                  | 31   |
| SOLIDS   | Percent Solids                 | NE                                       | NË                  | NE                     | NE                                      | NE  |  | 93.100                                     | 1   |           | 89.300                                       | 1                                    |                                |   |                        |  |
| Fredrichten  | serves and the Tables Ocealing |  |                     |                        |   |   |  |  |   |           |  |                                      |                                |   |                        | ·····  |

Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas

Shaw Environmental, Inc.

### 00066552

#### Table 4-76

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-054

|  |                           |   |             | ÷           |            |  | _  |  |     |    |    |  |     |    |    |
|--|---------------------------|---|-------------|-------------|------------|--|--|--|-----|----|----|--|-----|----|----|
| [SUMP] = SUMP054<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening Method Method<br>Vatue Detection Quantitation |             |             |            | ground<br>tions in Soil<br><u>PL, mg/kg)</u><br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP054-SB01<br>35-SMP54-SB01-02<br>9/15/2006<br>6 - 6 Ft<br>REG |     |    |    | 35SUMP054-SB02<br>35-SMP54-SB02-02<br>9/15/2006<br>6 - 6 Ft<br>REG |     |    | 2  |
| Test Group   | Parameter (Units = mg/kg) | (RBSV) *  | Limit (MDL) | Limit (MQL) | 0 - 0.5 Ft | 1.5 - 2.5 Ft   | Value  | Result   | DIL | LQ | VQ | Result   | DIL | LQ | VQ |
| METALS   | Aluminum                  | 1.6E+04   | 10.000      | 20.00       | 1.63E+04   | 2.08E+04   | 1.6E+04                                      | 12100  | 1   |    |    | 6970   | 1   |    |    |
| METALS   | Antimony                  | 7.3E+00   | 0.500       | 0.10        | 9.40E-01   | 1.60E+00   | 7.3E+00                                      | 0.117  | 1   | U  |    | 0.112  | 1   | U  |    |
| METALS   | Arsenic                   | 2.0E+01   | 0.075       | 0.30        | 4.81E+00   | 5.54E+00   | 2.0E+01                                      | 0.312  | 1   | J  | J  | 0.431  | 1   |    |    |
| METALS   | Barium                    | 2.6E+03   | 0.075       | 0.30        | 1.52E+02   | 8.55E+01   | 2.6E+03                                      | 67   | 1   |    |    | 52   | 1   |    |    |
| METALS   | Beryllium                 | 4.6E+00   | 0.012       | 0.50        | 6.45E-01   | 7.66E-01   | 4.6E+00                                      | 0.346  | 1   | J  | J  | 0.330  | 1   | J  | J  |
| METALS   | Cadmium                   | 5.2E+00   | 0.025       | 0.10        | 1.40E+00   | 4.00E-01   | 5.2E+00                                      | 0.078  | 1   | J  | J  | 0.057  | 1   | J  | J  |
| METALS   | Calcium                   | NE  | NA          | NA          | NA         | NA   | -  | 590  | 1   |    |    | 480  | 1   |    |    |
| METALS   | Chromium                  | 5.9E+03   | 0.100       | 0.40        | 2.66E+01   | 3.01E+01   | 5.9E+03                                      | 10.000   | 1   |    |    | 6.660  | 1   |    |    |
| METALS   | Cobalt                    | 1.5E+03   | 0.125       | 0.50        | 7.23E+00   | 5.61E+00   | 1.5E+03                                      | 5.710  | 1   |    |    | 6.410  | 1   |    |    |
| METALS   | Copper                    | 1.0E+03   | 0.150       | 0.60        | 5.55E+00   | 9.25E+00   | 1.0E+03                                      | 4,330  | 1   |    |    | 3.870  | 1   |    |    |
| METALS   | Iron                      | NE  | NA          | NA          | NA         | NA   |  | 9780   | 1   |    |    | 9600   | 1   |    |    |
| METALS   | Lead                      | 5.0E+02   | 0.500       | 5.00        | 2.26E+01   | 1.14E+01   | 5.0E+02                                      | 4.950  | 1   |    |    | 5.160  | 1   |    |    |
| METALS   | Magnesium                 | NE  | NA          | NA          | NA         | NA   |  | 980  | 1   |    |    | 882  | 1   |    |    |
| METALS   | Manganese                 | 1.7E+03   | 0.050       | 0.20        | 1.25E+03   | 2.01E+02   | 1.7E+03                                      | 32   | 1   |    |    | 48   | 1   |    |    |
| METALS   | Mercury                   | 1.1E-02   | 0.010       | 0.25        | 8.19E-02   | 3.60E-01   | 2.5E-01                                      | 0.018  | 1   | J  | J  | 0.282  | 1   | U  |    |
| METALS   | Nickel                    | 1.9E+02   | 0.200       | 0.80        | 6.98E+00   | 1.16E+01   | 1.9E+02                                      | 7.370  | 1   |    |    | 7.840  | 1   |    |    |
| METALS   | Potassium                 | NE  | NA          | NA          | NA         | NA   |  | 414  | 1   |    |    | 380  | 1   |    |    |
| METALS   | Selenium                  | 1.3E+02   | 0.100       | 0.20        | 3.48E+00   | 5.57E+00   | 1.3E+02                                      | 0.233  | 1   | U  |    | 0.225  | 1   | U  |    |
| METALS   | Silver                    | 4.7E+01   | 0.050       | 0.20        | 3.10E-01   | 3.70E-01   | 4.7E+01                                      | 1.690  | 1   | U  |    | 1.590  | 1   | U  |    |
| METALS   | Sodium                    | NE  | NA          | NA          | NA         | NA   |  | 197  | 1   |    |    | 161  | 1   |    |    |
| METALS   | Thallium                  | 2.0E+00   | 0.010       | 0.02        | 4.70E-01   | NE   | 2.0E+00                                      | 0.056  | 1   |    |    | 0.047  | 1   |    |    |
| METALS   | Vanadium                  | 4.8E+01   | 0.125       | 0,50        | 3.21E+01   | 4.46E+01   | 4.8E+01                                      | 14.800   | 1   |    |    | 13.900   | 1   |    |    |
| METALS   | Zinc                      | 5.9E+03   | 0.625       | 2.50        | 6.16E+01   | 2.02E+01   | 5.9E+03                                      | 23.200   | 1   |    |    | 22.300   | 1   |    |    |
| SOLIDS   | Percent Solids            | NE  | NE          | NE          | NE         | NE   |  | 85.200   | 1   |    |    | 85,900   | 1   |    |    |

| Shaw Environmental, In | ¢. |
|------------------------|----|
|------------------------|----|

### 00066553

|   |                           |                    |                     | Sump                     | -055                 |                           |                         |   |   |
|---|---------------------------|--------------------|---------------------|--------------------------|----------------------|---------------------------|-------------------------|---|---|
| [SUMP] = SUMP055<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE |                           | TCEQ<br>Risk-Based |                     |                          | Back<br>Concentra    | ground<br>tions in Soil   | Applicble<br>TCEQ       | 35SUMP054-SB01<br>35-SMP54-SB01-02<br>9/15/2006 | 35SUMP054-SB02<br>35-SMP54-SB02-02<br>9/15/2006 |
| DEPTH<br>SAMPLE_PURPOSE                                       |                           | Screening<br>Value | Method<br>Detection | Method _<br>Quantitation | (95% UP<br>Surface   | L, mg/kg) °<br>Subsurface | Risk-Based<br>Screening | 6 - 6 Ft<br>REG                                 | 6 - 6 Ft<br>REG                                 |
| Test Group  | Parameter (Units = mg/kg) | (RBSV)*            | Limit (MDL)         | Limit (MQL)              | 0 - 0.5 Ft           | 1.5 - 2.5 Ft              | Value                   | Result DIL LQ VQ                                | Result DIL LQ VQ                                |
| METALS<br>METALS  | Aluminum<br>Antimony      | 1.6E+04<br>7.3E+00 | 10.000<br>0.500     | 20.00<br>0.10            | 1.63E+04<br>9.40E-01 | 2.08E+04<br>1.60E+00      | 1.6E+04<br>7.3E+00      | 12100 1<br>0.117 1 U                            | 6970 1<br>0.112 1 U                             |
| METALS<br>METALS  | Arsenic<br>Barium         | 2.0E+01<br>2.6E+03 | 0.075               | 0.30<br>0.30             | 4.81E+00<br>1.52E+02 | 5.54E+00<br>8.55E+01      | 2.0E+01<br>2.6E+03      | 0.312 1 J J<br>67.4 1                           | 0.431 1<br>52.1 1                               |
| METALS  | Beryllium<br>Cadmium      | 4.6E+00<br>5.2E+00 | 0.012<br>0.025      | 0.50                     | 6.45E-01<br>1.40E+00 | 7.66E-01<br>4.00E-01      | 4.6E+00<br>5.2E+00      | 0.346 1 J J<br>0.078 1 J J                      | 0.330 1 J J<br>0.057 1 J J                      |
| METALS  | Calcium<br>Chromium       | NE<br>5.9E+03      | NA<br>0.100         | NA<br>0.40               | NA<br>2.66E+01       | NA<br>3.01E+01            | 5.9E+03                 | 590 1<br>10.000 1                               | 480 1<br>6.660 1                                |
| METALS  | Copper                    | 1.5E+03<br>1.0E+03 | 0.125               | 0.60                     | 7.23E+00<br>5.55E+00 | 9.25E+00                  | 1.6E+03<br>1.0E+03      | 5.710 1<br>4.330 1                              | 6.410 1<br>3.870 1                              |
| METALS  | Lead                      | 5.0E+02            | 0.500               | 5.00                     | 2.26E+01             | 1.14E+01                  | 5.0E+02                 | 4.950 1   | 5.160 1   |
| METALS  | Manganese                 | 1.7E+03            | 0.050               | 0.20                     | 1.25E+03             | 2.01E+02                  | 1.7E+03                 | 31.7 1  | 47.9 1  |
| METALS  | Nickel                    | 1.9E+02            | 0.200               | 0.80                     | 6.98E+00             | 1.16E+01                  | 1.9E+02                 | 7.370 1   | 7.840 1   |
| METALS  | Selenium                  | 1.3E+02            | 0.100               | 0.20                     | 3.48E+00             | 5.57E+00                  | 1.3E+02                 | 0.233 1 U                                       | 0.225 1 U                                       |
| METALS  | Sodium<br>Thatlium        | 4.72+01<br>NE      | NA                  | NA<br>NA                 | NA                   | NA                        | 4.75101                 | 197 1   | 161 1   |
| METALS  | Vanadium                  | 4.8E+01            | 0.125               | 0.50                     | 4.70E-01<br>3.21E+01 | 4.46E+01                  | 4.8E+01                 | 14.800 1  | 13.900 1  |
| SOLIDS  | Percent Solids            | 5.9E+03            | 0.625<br>NE         | 2.50<br>NE               | 0.10E+01             | 2.02E+01<br>NE            | 5.9E+03<br>-            | 23.200 1<br>85.200 1                            | 22.300 1<br>85.900 1                            |

Table 4-77 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Shaw Environmental, Inc.

### 00066554

| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values | Table 4-78   |
|--|--|
|  | Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |

| Sum | p-056 |
|-----|-------|
|-----|-------|

| [SUMP] = SUMP056<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                                   | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>ations in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP056-SB01<br>35-SMP056-SB01-01<br>9/22/2006<br>.5 - 5 Ft<br>REG | 36SUMP056-SB01<br>35-SMP056-SB01-02<br>9/22/2006<br>3 - 3 Ft<br>REG |
|--|-----------------------------------|--|---------------------|------------------------|---|--|--|--|---|
| Test Group   | Parameter (Units = mg/kg)         | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ   | Result DIL LQ VQ  |
| SEMIVOLATILES  | 1,2,4-Trichlorobenzene            | 1.4E+02                                  | 0.083               | 0.17                   | NE                                      | NE   | 1.4E+02                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | 1,2-Dichlorobenzene               | 5.02+01                                  | 0.083               | 0.17                   | NE                                      | NE   | 5.0E+01<br>5.1E+00                           | 2.150 10 0 0   | 0.130 1 J J   |
| SEMIVOLATILES  | 1.4-Dichlombenzene                | 2.7E+01                                  | 0.003               | 0.17                   | NE                                      | NE   | 2.7E+01                                      | 2 150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | 2,4,5-Trichlorophenol             | 1.6E+03                                  | 0.083               | 0.17                   | NE                                      | NE   | 1.6E+03                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | 2,4,6-Trichlorophenol             | 4.5E+01                                  | 0.083               | 0.17                   | NE                                      | NE   | 4.5E+01                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | 2,4-Dichlorophenol                | 4.7E+01                                  | 0.083               | 0.17                   | NE                                      | NE   | 4.7E+01                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | 2,4-Dimethylphenol                | 3.1E+02                                  | 0.083               | 0.17                   | NE                                      | NE   | 3.1E+02                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | 2,4-Dinitrotoluone                | 3.12+01                                  | 0.330               | 0.83                   |   | NE   | 3.12+01                                      | 2 150 10 10 10   | 0.214 1 11 11   |
| SEMIVOLATILES  | 2.6-Dinitrotoluene                | 7.2E-01                                  | 0.083               | 0.17                   | NE                                      | NE   | 7.2E-01                                      | 2.150 10 0 0   | 0.214 1 13 10   |
| SEMIVOLATILES  | 2-Chloronaphthalene               | 1.1E+03                                  | 0.083               | 0.17                   | NE                                      | NË   | 1.1E+03                                      | 2,150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | 2-Chlorophenol                    | 1.1E+02                                  | 0.083               | 0.17                   | NE                                      | NE   | 1.1E+02                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | 2-Methylnaphthalene               | 5.5E+01                                  | 0.083               | 0.17                   | NE                                      | NE   | 5.6E+01                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | 2-Methylphenol                    | 7.7E+02                                  | 0.083               | 0.17                   | NE                                      | NE   | 7.7E+02                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | ∠-Nitrophonol                     | 4.7E+00<br>3.1E+01                       | 0.330               | 0.83                   | NE                                      |  | 4.7E+00<br>3.1E+01                           | 2150 10 0 0  | 1,070 1 0 0   |
| SEMIVOLATILES  | 3.3'-Dicblorobeozidine            | 1 1E+00                                  | 0.165               | 0.33                   | NE                                      | NE   | 1 1E+00                                      | 4 290 10 U U   | 0.428 1 U U   |
| SEMIVOLATILES  | 3-Nitroaniline                    | 4.7E+00                                  | 0.330               | 0.83                   | NE                                      | NE   | 4.7E+00                                      | 10.700 10 U U  | 1.070 1 U U   |
| SEMIVOLATILES  | 4,6-Dinitro-2-methylphenol        | 3.1E+01                                  | 0.330               | 0.83                   | NE                                      | NE   | 3.1E+01                                      | 10.700 10 U U  | 1.070 1 U U   |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether        | 3.1E-02                                  | 0.083               | 0.17                   | NE                                      | NE   | 1.7E-01                                      | 1.078 10 U U   | 0.109 1 U U   |
| SEMIVOLATILES  | 4-Chloro-3-methylphenol           | 7.7E+01                                  | 0.083               | 0.17                   | NE                                      | NE   | 7.7E+01                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | 4-Chlorophonyl phonyl other       | 0.2E+01                                  | 0.083               | 0.17                   | NE                                      | NE   | 6.2E+01<br>1.7E-01                           | 2.150 10 0 0   | 0.234 1 0 0   |
| SEMIVOLATILES  | 4-Methylohenol                    | 7 7E+01                                  | 0.083               | 0.17                   | NE                                      | NE   | 7 7E+01                                      | 2 150 10 U U   | 0.214 1 1 1   |
| SEMIVOLATILES  | 4-Nitroaniline                    | 1.3E+01                                  | 0.330               | 0.83                   | NE                                      | NE   | 1.3E+01                                      | 10.700 10 U U  | 1.070 1 U U   |
| SEMIVOLATILES  | 4-Nitrophenol                     | 3.1E+01                                  | 0.330               | 0.83                   | NE                                      | NE   | 3.1E+01                                      | 10.700 10 U U  | 1.070 1 U U   |
| SEMIVOLATILES  | Acenaphthene                      | 8.2E+02                                  | 0.083               | 0.17                   | NE                                      | NE   | 8.2E+02                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Acenaphthylene                    | 8.2E+02                                  | 0.083               | 0.17                   | NE                                      | NE   | 8.2E+02                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Anthracene                        | 4.1E+03                                  | 0.0825              | 0.165                  | NE<br>4 535 00                          | NE   | 4.16+03                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Benzo(a)miracene                  | 0.3E-01<br>6.3E-02                       | 0.0825              | 0.105                  | 1.535-02                                | NE   | 0.3E-01<br>1.7E-01                           | 2.150 10 0 0   | 0.214 1 0 0   |
| SEMIVOLATILES  | Benzo(b)fluoranthene              | 6.3E-01                                  | 0.0825              | 0.165                  | 1.53E-02                                | NE   | 6.3E-01                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Benzo(ghi)perviene                | 4.1E+02                                  | 0.0825              | 0.165                  | 1.23E-02                                | NE   | 4.1E+02                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Benzo(k)fluoranthene              | 6.3E+00                                  | 0.0825              | 0.165                  | 1.30E-02                                | NE   | 6.3E+00                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Benzoic Acid                      | 6.2E+04                                  | 0.3300              | 0.825                  | NE                                      | NE   | 6.2E+04                                      | 10.700 10 U UJ   | 1.070 1 U UJ  |
| SEMIVOLATILES  | Benzyl Alconol                    | 4,7E+03                                  | 0,0825              | 0.165                  | NE                                      | NE   | 4.7E+03                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane        | 2.92-01                                  | 0.0825              | 0.105                  | NE                                      | NE   | 2.95-01                                      | 2.150 10 0 0   | 0.214 1 0 0   |
| SEMIVOLATILES  | bis(2-Chlomisopropy)ether         | 4.8E+00                                  | 0.0025              | 0.105                  | NE                                      | NE   | 4.8E+00                                      | 2 150 10 U U   | 0214 1 11 11  |
| SEMIVOLATILES  | bis(2-Ethylhexyl)phthalate        | 1.7E+01                                  | 0.00000             | 0.100                  | NE                                      | NE   | 1.7E+01                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Butyl benzyl phthalate            | 3.1E+03                                  | 0.0825              | 0.165                  | NE                                      | NE   | 3.1E+03                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Chrysene                          | 6.3E+01                                  | 0.0825              | 0.165                  | 1.51E-02                                | NE   | 6.3E+01                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene            | 6.3E-02                                  | 0.0825              | 0,165                  | NE                                      | NE   | 1.7E-01                                      | 1076 10 U U  | 0.109 1 U U   |
| SEMIVOLATILES  | Dipenzoruran<br>Diethyd ohthalato | 0.22+01                                  | 0.0825              | 0.105                  | NE                                      | NE   | 1.20+01                                      | 2.150 10 0 0   | 0.214 1 0 0   |
| SEMIVOLATILES  | Dimethyl phthalate                | 1.2E+04                                  | 0.0825              | 0.165                  | NE                                      | NE   | 1.2E+04                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | di-n-Butyl phthalate              | 1.6E+03                                  | 0.0825              | 0.165                  | NE                                      | NE   | 1.6E+03                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | di-n-Octyl phthalate              | 3.1E+02                                  | 0.0825              | 0.165                  | NE                                      | NE   | 3.1E+02                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Fluoranthene                      | 5.5至+02                                  | 0.0825              | 0.165                  | 2.29E-02                                | NE   | 5.5E+02                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Fluorene                          | 5.5E+02                                  | 0.0825              | 0.165                  | NE                                      | NE   | 5.5E+02                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Hexachlorobutadiene               | 2.52-01                                  | 0.0825              | 0.165                  |   | NE   | 2,50-01                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Hexachlorocyclopentadiene         | 100+00                                   | 0.0825              | 0.165                  | NE                                      | NE   | 1.0=+00                                      | 2 150 10 0 0   | 0.214 1 1 1   |
| SEMIVOLATILES  | Hexachloroethane                  | 1.6E+01                                  | 0.0825              | 0.165                  | NE                                      | NE   | 1.6E+01                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene            | 6.3E-01                                  | 0.0825              | 0.165                  | 1.43E-02                                | NE   | 6.3E-01                                      | 2.150 10 U U   | 0.214 1 Ū Ū   |
| SEMIVOLATILES  | Isophorone                        | 5.2E+02                                  | 0.0825              | 0.165                  | NE                                      | NE   | 5.2E+02                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | Naphthalene                       | 1.8E+01                                  | 0.0825              | 0.165                  | NE                                      | NE   | 1.8E+01                                      | 2.150 10 U U   | 0.214 1 U U   |
| SEMIVOLATILES  | n-Nitroso-di-n-propylamine        | 4.1E-02                                  | 0.0825              | 0.165                  | NE                                      | NE   | 1.7E-01                                      | 1.078 10 U U   | 0.109 1 U U   |

### 00066555

 Table 4-78

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-056

| [SUMP] = SUMP056<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                                | TCEQ<br>Risk-Based<br>Screening | Method      | Method       | Background<br>Concentrations in Soil<br>(95% UPL, mg/kg) |              | Applicble<br>TCEQ<br>Risk-Based | 35SUMP056-SB01<br>35-SMP056-SB01-01<br>9/22/2006<br>.55 Ft | 35SUMP056-SB01<br>35-SMP056-SB01-02<br>9/22/2006<br>3 - 3 Ft |
|--|--------------------------------|---------------------------------|-------------|--------------|--|--------------|---------------------------------|--|--|
| SAMPLE PURPOSE   |                                | Value                           | Detection   | Quantitation | Surface  | Subsurface   | Screening                       | REG  | REG  |
| Test Group   | Parameter (Units = mo/kg)      | (RBSV)*                         | Limit (MDL) | Limit (MOL)  | 0 - 0.5 Ft   | 1.5 - 2.5 Ft | Value                           | Result DIL LQ VQ   | Result DIL LQ VQ   |
| SEMIVOLATILES  | n-Nitrosodiphenylamine         | 5.9E+01                         | 0.0825      | 0.165        | NE   | NE           | 5.9E+01                         | 2.150 10 U U   | 0.214 1 U U  |
| SEMIVOLATILES  | Pentachlorophenol              | 3.0E+00                         | 0.3300      | 0.825        | NE   | NE           | 3.0E+00                         | 10.700 10 U U  | 1.070 1 U U  |
| SEMIVOLATILES  | Phenanthrene                   | 4.1E+02                         | 0.0825      | 0.165        | NE   | NE           | 4.1E+02                         | 2.150 10 U U   | 0.214 1 U U  |
| SEMIVOLATILES  | Phenol                         | 4.7E+03                         | 0.0825      | 0.165        | NE   | NE           | 4.7E+03                         | 2.150 10 U U   | 0.214 1 U U  |
| SEMIVOLATILES  | Pyrene                         | 4.1E+02                         | 0.0825      | 0.165        | 1.94E-02   | NE           | 4.1E+02                         | 2.150 10 U U   | 0.214 1 U U  |
| SOLIDS   | Percent Solids                 | NE                              | NE          | NE           | NE   | NE           |                                 | 76.500 1   | 75.600 1   |
| VOLATILES  | 1,1,1,2-Tetrachtoroethane      | 5.2E+00                         | 0.0005      | 0.005        | NE   | NE           | 6.2E+00                         |  | 0.007 1 U U  |
| VOLATILES  | 1,1,1-Trichloroethane          | 2.3E+02                         | 0.0005      | 0.005        | NE   | NE           | 2.3E+02                         |  | 0.007 1 0 0  |
| VOLATILES  | 1,1,2,2-1 etrachioroethane     | 5.1E-01                         | 0.0005      | 0.005        | NE   | NE           | 0.7E.01                         |  | 0.007 1 U U  |
| VOLATILES  | 1,1,2-monoroemane              | 9.75-01                         | 0.0005      | 0,005        | NE   | NE           | 8 9E+01                         |  | 0.007 1 U U  |
| VOLATILES  | 1 1-Dichloroethene             | 275+01                          | 0.0010      | 0.005        | NE   | NE           | 275+01                          |  | 0.007 1 U U  |
| VOLATILES  | 1 1-Dichloropropene            | 9.9E-01                         | 0.0005      | 0.005        | NE   | NE           | 9.9E-01                         |  | 0.007 1 U U  |
| VOLATILES  | 1.2.3-Trichlorobenzene         | 4.2E+01                         | 0.0005      | 0.005        | NE   | NE           | 4.2E+01                         |  | 0.007 1 U U  |
| VOLATILES  | 1.2.3-Trichloropropane         | 9.2E-02                         | 0.0010      | 0.005        | NE   | NE           | 9.2E-02                         |  | 0.007 1 U U  |
| VOLATILES  | 1,2,4-Trichlorobenzene         | 1.4E+02                         | 0.0005      | 0.005        | NE   | NE           | 1.4E+02                         |  | 0.007 1 U.U  |
| VOLATILES  | 1,2,4-Trimethylbenzene         | 9.6E+00                         | 0.0005      | 0.005        | NË   | NE           | 9.6£+00                         |  | 0.007 1 U U  |
| VOLATILES  | 1,2-Dibromo-3-chloropropane    | 3.5E-01                         | 0.0020      | 0.005        | NE   | NE           | 3.5E-01                         |  | 0.007 1 U U  |
| VOLATILES  | 1,2-Dibromoethane              | 5.3E-02                         | 0.0005      | 0.005        | NE   | NE           | 5.3E-02                         |  | 0.007 1 U U  |
| VOLATILES  | 1,2-Dichlorobenzene            | 5.6E+01                         | 0.0005      | 0.005        | NE   | NE           | 5.6E+01                         |  | 0.007 1 U U  |
| VOLATILES  | 1.2-Dichloroethane             | 2.7E-01                         | 0.0005      | 0.005        | NE   | NE           | 2.7E-01                         |  |  |
| VOLATILES  | 1,2-Dichloropropane            | 1.8E+00                         | 0.0005      | 0.005        | NE   | NE           | 1.8E+00                         |  |  |
| VOLATILES  | 1,2-Dimethylbenzene (0-Xylene) | 3.35+03                         | 0.0005      | 0.005        |  | NE           | 3.3E+03<br>8.3E+00              |  | 0.007 1 1 1  |
| VOLATILES  | 1,3,0-mmemyidenzene            | 5 15+00                         | 0.0005      | 0.005        | NE   | NE           | 5 1E+00                         |  | 0.007 1 U U  |
| VOLATILES  | 1.3-Dichloropropane            | 3 0E+00                         | 0,0005      | 0.005        | NE   | NE           | 3.0E+00                         |  | 0.007 1 U U  |
| VOLATILES  | 1.4-Dichlorobenzene            | 2.7E+01                         | 0.0005      | 0.005        | NE   | NE           | 2.7E+01                         |  | 0.007 1 U U  |
| VOLATILES  | 2.2-Dichloropropane            | 1.7E+00                         | 0.0005      | 0.005        | NE   | NE           | 1.7E+00                         |  | 0.007 1 U U  |
| VOLATILES  | 2-Butanone                     | 2.6E+03                         | 0.0025      | 0.010        | NE   | NE           | 2.6E+03                         |  | 0.013 1 U U  |
| VOLATILES  | 2-Chloroethyl vinyl ether      | 2.1E-01                         | 0.0020      | 0.010        | NE   | NE           | 2.1E-01                         |  | 0.013 1 U U  |
| VOLATILES  | 2-Chlorotoluene                | 1.5E+02                         | 0.0005      | 0.005        | NE   | NE           | 1.5E+02                         |  | 0.007 1 U U  |
| VOLATILES  | 2-Hexanone                     | 6.2E+00                         | 0.0025      | 0.010        | NE   | NE           | 6.2E+00                         |  | 0.013 1 U U  |
| VOLATILES  | 4-Chlorotoluene                | 3.4E-01                         | 0.0005      | 0.005        | NE   | NE           | 3.4E-01                         |  | 0.007 1 0 0  |
| VOLATILES  | Acetone                        | 1.76+02                         | 0.0050      | 0.010        | NE   | NE           | 1.7E+02                         |  |  |
| VOLATILES  | Bemehaarana                    | 0.0E-U1                         | 0.0005      | 0.005        |  |              | 1 16+01                         |  | 0.007 1 11 11  |
| VOLATILES  | Bromochloromethane             | 2 45+01                         | 0.0005      | 0.005        | NE   | NE           | 24E+01                          |  | 0.007 1 1 1  |
| VOLATILES  | Bromodichloromethane           | 105+01                          | 0.0005      | 0.005        | NE   | NE           | 1.0E+01                         |  | 0.007 1 U U  |
| VOLATILES  | Bromoform                      | 3.4E+01                         | 0.0005      | 0.005        | NE   | NE           | 3.4E+01                         |  | 0.007 1 U U  |
| VOLATILES  | Bromomethane                   | 3.5E-01                         | 0.0010      | 0.010        | NE   | NE           | 3.5E-01                         |  | 0.013 1 U U  |
| VOLATILES  | Carbon disulfide               | 1.0E+02                         | 0.0005      | 0.005        | NE   | NE           | 1.0E+02                         |  | 0.007 1 U U  |
| VOLATILES  | Carbon tetrachloride           | 3.5E-01                         | 0.0005      | 0.005        | NE   | NE           | 3.5E-01                         |  | 0.007 1 U U  |
| VOLATILES  | Chlorobenzene                  | 4.0E+01                         | 0.0005      | 0.005        | NE   | NE           | 4.0E+01                         | 1  | 0.007 1 U U  |
| VOLATILES  | Chloroethane                   | 1.1E+03                         | 0.0010      | 0.010        | NE   | NE           | 1.1E+03                         |  | 0.013 1 U U  |
| VOLATILES  | Chloroform                     | 3.1E-01                         | 0.0005      | 0.005        | NE   | NE           | 3.1E-01                         | 1  | 0.007 1 U U  |
| VOLATILES  | Chloromethane                  | 2,3E-01                         | 0.0020      | 0.010        | NE   | NE           | 2.3E-01                         | ]  |  |
| VOLATILES  | cis-1,2-Dichloroethene         | 1.20+02                         | 0.0005      | 0.005        | NE   | ME           | 1.25+00                         | 1  | 0.007 1 1 1  |
| VOLATILES  | Dibromochlommethane            | 7.65+00                         | 0.0005      | 0.005        | NE   | NE           | 7.6E+00                         |  | 0.007 1 1 1  |
| VOLATILES  | Dibromomethane                 | 1.9E+01                         | 0.0005      | 0.005        | NE   | NE           | 1.9E+01                         |  | 0.007 1 U U  |
| VOLATILES  | Dichlorodifluoromethane        | 2.2E+02                         | 0.0010      | 0.010        | NE   | NE           | 2.2E+02                         |  | 0.013 1 U U  |
| VOLATILES  | Ethylbenzene                   | 4.3E+02                         | 0.0005      | 0.005        | NE   | NE           | 4.3E+02                         |  | 0.007 1 U U  |
| VOLATILES  | Hexachlorobutadiene            | 1.6E+00                         | 0.0005      | 0.005        | NE   | NE           | 1.6E+00                         |  | 0.007 1 U U  |
| VOLATILES  | Isopropylbenzene               | 5.4E+02                         | 0.0005      | 0.005        | NE   | NE           | 5.4E+02                         |  | 0.007 1 U U  |
| VOLATILES  | m,p-Xylenes                    | 2.3E+02                         | 0.0005      | 0.005        | NE   | NE           | 2.3E+02                         | 1  | 0.007 1 U U  |
| VOLATILES  | Methyl isobutyl ketone         | 1.3E+03                         | 0.0025      | 0.01         | NE   | NE           | 1.3E+03                         |  | 0.013 1 U U  |
| VOLATILES  | Methylene chloride             | 8.7E+00                         | 0.0010      | 0.005        | NE   | NE           | 8.7E+00                         |  | 0.007 1 0 0  |
| VOLATILES  | Naphinalene                    | 1.86+01                         | 0.0005      | 0.01         |  |              | 1.85+01                         |  |  |
| VOLATILES  |                                | 2.1 5702                        | 0,0005      | 0.005        | NE   | NE           | 3.2E+02                         |  | 0.007 1 1 1  |
|  |                                | Q.4.C. V2                       | 0.0000      | 0.000        |  |              | E 0.22.02                       |  |  |

Page 2 of 3

Shaw Environmental, Inc.

00066556

|  | Compa                     | rison of Chemi                           | ical Conce          | ntrations in<br>Sump-0 | i Soil to Ri<br>56                      | sk-Based S   | Screening Val                                | ues                                |  |                                       |   |                       |          |
|--|---------------------------|--|---------------------|------------------------|---|--|--|------------------------------------|--|---------------------------------------|---|-----------------------|----------|
| SUMP] = SUMP056<br>OCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>1. mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUM<br>35-SMP0<br>9/2<br>.5<br>F | 2056-SB01<br>56-SB01-01<br>2/2006<br>5 Ft<br>REG | 35SUMF<br>35-SMP0<br>9/22<br>3 -<br>F | 2056-S<br>56-SB<br>2/2006<br>3 Ft<br>EG | 3 <b>B01</b><br>01-02 | 2        |
| est Group  | Parameter (Units = mo/kg) | (RBSV)*                                  | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft                                       | Value  | Result                             | DIL LQ VQ  | Result                                | DIL                                     | LQ                    | VO       |
| OLATILES   | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NË   | 4.2E+02                                      |                                    |  | 0.007                                 | 1                                       | U                     | U        |
| OLATILES   | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.0E+02                                      |                                    |  | 0.007                                 | 1                                       | U                     | U        |
| OLATILES   | Styrene                   | 1.3E+03                                  | 0,0005              | 0.005                  | NE                                      | NE   | 1.3E+03                                      |                                    |  | 0.007                                 | 1                                       | U                     | U        |
| OLATILES   | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.6E+02                                      |                                    |  | 0.007                                 | 1                                       | U.                    | U.       |
| OLATILES   | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 6.0E+00                                      |                                    |  | 0.007                                 | 1                                       | U.                    | U        |
| OLATILES   | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.1E+03                                      |                                    |  | 0.007                                 | 1                                       | 0                     | U        |
| OLATILES   | trans-1,2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.4E+02                                      |                                    |  | 0.007                                 | 1                                       | U                     | U        |
| OLATILES   | trans-1,3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.8E+00                                      |                                    |  | 0.007                                 | 1                                       | U                     | U        |
| /OLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.7E+00                                      |                                    |  | 0.007                                 | 1                                       | U                     | U        |
| OLATILES   | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 2.6E+02                                      |                                    |  | 0.013                                 | 1                                       | U                     | U        |
| OLATILES   | Vinvl acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NE                                      | NÉ   | 5.7E+01                                      |                                    |  | 0.013                                 | 1                                       | U                     | U        |
| OLATILES   | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.01                   | NE                                      | NË   | 3.6E-02                                      |                                    |  | 0.013                                 | 1_                                      | U                     | <u>v</u> |

Table 4-78

Footnotes are shown on cover page to Tables Section.

### MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas

#### Shaw Environmental, Inc.

### 00066557

| Table 4-79   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump-057   |

|                  |                                |                    |             | oump o       | V1         |                |                    |                  |                  |
|------------------|--------------------------------|--------------------|-------------|--------------|------------|----------------|--------------------|------------------|------------------|
| [SUMP] = SUMP057 |                                |                    |             |              |            |                |                    | 35SUMP057_SR01   | 35SUMP057-S801   |
| LOCATION _CODE   |                                | TOEO               |             |              | Back       | oround         | Applichle          | 35-SMP57-SB01-01 | 35-SMP57-SB01-02 |
| SAMPLE_NO        |                                | Risk-Based         |             |              | Concentra  | ations in Soil | TCEQ               | 9/13/2006        | 9/13/2006        |
| DEPTH            |                                | Screening          | Method      | Method       | (95% UF    | PL, mg/kg)     | Risk-Based         | 0.5 - 0.5 Ft     | 7 - 7 Ft         |
| SAMPLE_PURPOSE   |                                | Value              | Detection   | Quantitation | Surface    | Subsurface     | Screening          | REG              | REG              |
| Test Group       | Parameter (Units = mg/kg)      | (RBSV) "           | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft   | Value              | Result DIL LQ VQ | Result DIL LQ VQ |
| PERC             | Perchlorate                    | 1.4E+01            | 0.005       | 0.010        | NE         | NE             | 1.4E+01            | 0.040 4 U        | 0.200 20 U       |
| SOLIDS           | Percent Solids                 | NE                 | NE          | NE           | NE         | NE             | E 0E 100           | 93.8 1           | 89.1 1           |
| VOLATILES        | 1,1,1,2-Tetrachloroethane      | 5.2E+00            | 0.0005      | 0,005        |            |                | 5.22+00            |                  | 0.005 1 0        |
| VOLATILES        | 1,1,1-1nchtoroethane           | 2.3E+02<br>5 1E-01 | 0.0005      | 0.005        | NE         | NE             | 5.1E-01            |                  | 0.005 1 U        |
| VOLATILES        | 1.1.2-Trichloroethane          | 9.7E-01            | 0.0005      | 0.005        | NE         | NE             | 9.7E-01            |                  | 0.005 1 U        |
| VOLATILES        | 1,1-Dichloroethane             | 8.9E+01            | 0.0010      | 0.005        | NĘ         | NE             | 8.9E+01            |                  | 0.005 1 U        |
| VOLATILES        | 1,1-Dichloroethene             | 2.7E+01            | 0.0005      | 0.005        | NE         | NE             | 2.7E+01            |                  | 0.005 1 U        |
| VOLATILES        | 1,1-Dichloropropene            | 9.9E-01            | 0.0005      | 0.005        | NE         | NE             | 9.9E-01            |                  | 0.005 1 U        |
| VOLATILES        | 1,2,3-Trichlorobenzene         | 4.2E+01            | 0.0005      | 0.005        | NE         | NE             | 4.25+01            |                  | 0.005 1 0        |
| VOLATILES        | 1,2,3-I nonioropropane         | 9.25-02            | 0,0010      | 0.005        | NE         | NE             | 9.2E-02<br>1.4E+02 |                  | 0.005 1 U        |
| VOLATILES        | 1.2.4 ThomotoDenzene           | 9.6E+00            | 0.0005      | 0.005        | NE         | NE             | 9.6E+00            |                  | 0.005 1 U        |
| VOLATILES        | 1.2-Dibromo-3-chloropropane    | 3.5E-01            | 0.0020      | 0.005        | NE         | NE             | 3.5E-01            |                  | 0.005 1 U        |
| VOLATILES        | 1.2-Dibromoethane              | 5.3E-02            | 0.0005      | 0.005        | NE         | NE             | 5.3E-02            |                  | 0.005 1 U        |
| VOLATILES        | 1,2-Dichlorobenzene            | 5.6E+01            | 0.0005      | 0.005        | NE         | NE             | 5.6E+01            |                  | 0,005 1 U        |
| VOLATILES        | 1,2-Dichloroethane             | 2.7E-01            | 0.0005      | 0.005        | NE         | NE             | 2.7E-01            |                  | 0.005 1 U        |
| VOLATILES        | 1,2-Dichloropropane            | 1.8E+00            | 0.0005      | 0.005        | NE         | NE             | 1.85+00            |                  | 0.005 1 0        |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) | 3.35+03            | 0.0005      | 0.005        |            | NE             | 3.3E+03<br>8.3E+00 |                  | 0.005 t U        |
| VOLATILES        | 1 3-Dichlorobenzene            | 5 1E+00            | 0.0005      | 0.005        | NE         | NE             | 5.1E+00            |                  | 0.005 1 U        |
| VOLATILES        | 1.3-Dichloropropane            | 3.0E+00            | 0.0005      | 0.005        | NE         | NE             | 3.0E+00            |                  | 0,005 1 U        |
| VOLATILES        | 1,4-Dichlorobenzene            | 2.7E+01            | 0.0005      | 0.005        | NE         | NE             | 2.7E+01            |                  | 0.005 1 U        |
| VOLATILES        | 2.2-Dichloropropane            | 1.7E+00            | 0.0005      | 0.005        | NE         | NE             | 1.7E+00            |                  | 0.005 1 U        |
| VOLATILES        | 2-Butanone                     | 2.6E+03            | 0.0025      | 0.010        | NE         | NE             | 2.6E+03            |                  | 0.010 1 U        |
| VOLATILES        | 2-Chloroethyl vinyl ether      | 2.16-01            | 0.0020      | 0.010        |            | NE             | 2.16-01            |                  | 0.010 1 0        |
| VOLATILES        | 2-Chiorololuene                | 6.25+02            | 0.0005      | 0.005        | NE         | NE             | 6.2E+00            |                  | 0.010 1 1        |
| VOLATILES        | 4-Chlorotokiene                | 3.4E-01            | 0.0005      | 0.005        | NE         | NE             | 3.4E-01            |                  | 0.005 1 U        |
| VOLATILES        | Aceione                        | 1.7E+02            | 0.0050      | 0.010        | NE         | NE             | 1.7E+02            |                  | 0.010 1 U        |
| VOLATILES        | Benzene                        | 8.8E-01            | 0.0005      | 0.005        | NE         | NE             | 8.8E-01            |                  | 0.005 1 U        |
| VOLATILES        | Bromobenzene                   | 1.1E+01            | 0.0005      | 0.005        | NE         | NE             | 1.1E+01            |                  | 0.005 1 0        |
| VOLATILES        | Bromochloromethane             | 2.4E+01            | 0.0005      | 0.005        | NE         |                | 2.4E+01            |                  | 0.005 1 11       |
| VOLATILES        | Bromoform                      | 3.45+01            | 0.0005      | 0.005        | NE         | NE             | 3.4E+01            |                  | 0.005 1 U        |
| VOLATILES        | Bromomethane                   | 3.5E-01            | 0.0010      | 0.010        | NË         | NE             | 3.5E-01            |                  | 0.010 1 U        |
| VOLATILES        | Carbon disulfide               | 1.0E+02            | 0.0005      | 0.005        | NE         | NE             | 1.0E+02            |                  | 0.005 t U        |
| VOLATILES        | Carbon tetrachloride           | 3.5E-01            | 0.0005      | 0.005        | NE         | NE             | 3.5E-01            |                  | 0.005 1 U        |
| VOLATILES        | Chlorobenzene                  | 4.0E+01            | 0.0005      | 0.005        | NE         | NE             | 4.0E+01            |                  | 0.005 1 U        |
| VOLATILES        | Chloroelhane                   | 1.1E+03            | 0.0010      | 0.010        | NE         | NE             | 1,1E+03            |                  | 0.010 1 0        |
| VOLATILES        | Chloroform                     | 3.1E-01            | 0.0005      | 0.005        | NE         | NE             | 3.1E-01<br>2.3E-01 |                  | 0.003 1 0        |
| VOLATILES        | cite-1 2-Dichlomethene         | 2.3E-01<br>1.2E+02 | 0.0020      | 0.010        | NE         | NE             | 1.2E+02            |                  | 0.005 1 U        |
| VOLATILES        | cis-1.3-Dichloropropene        | 1.2E+00            | 0.0005      | 0.005        | NE         | NE             | 1.2E+00            |                  | 0.005 1 U        |
| VOLATILES        | Dibromochloromethane           | 7.6E+00            | 0.0005      | 0.005        | NE         | NE             | 7.6E+00            |                  | 0.005 1 U        |
| VOLATILES        | Dibromomethane                 | 1.9E+01            | 0.0005      | 0.005        | NE         | NE             | 1.9E+01            |                  | 0.005 1 U        |
| VOLATILES        | Dichlorodifluoromethane        | 2.2E+02            | 0.0010      | 0.010        | NE         | NE             | 2.2E+02            |                  | 0.010 1 U        |
| VOLATILES        | Ethylbenzene                   | 4.3E+02            | 0.0005      | 0.005        | NE         | NE             | 4.3E+02            |                  | 0.005 1 0        |
| VOLATILES        | Rexachiorobuladiene            | 1.0E+00<br>5.4E+02 | 0.0005      | 0.005        | NE         | NE             | 5.4E+02            |                  | 0.005 1 U        |
| VOLATILES        | m n-Xvlenes                    | 2.3E+02            | 0.0005      | 0.005        | NE         | NE             | 2.3E+02            |                  | 0.005 1 U        |
| VOLATILES        | Methyl isobutyl ketone         | 1.3E+03            | 0.0025      | 0,01         | NE         | NE             | 1.3E+03            |                  | 0.010 t U        |
| VOLATILES        | Methylene chloride             | 8.7E+00            | 0.0010      | 0.005        | NE         | NE             | 8.7E+00            |                  | 0.005 1 U        |
| VOLATILES        | Naphthalene                    | 1.8E+01            | 0.0005      | 0.01         | NE         | NE             | 1.8E+01            |                  | 0.010 1 U        |
| VOLATILES        | n-BUTYLBENZENE                 | 2.7E+02            | 0.0005      | 0.005        | NE         | NE             | 2.7E+02            |                  | 0.005 1 0        |
| VULATILES        |                                | 3.26+02            | 0.0005      | 0.005        | NE         | NE             | 3.2E+02<br>4.2E+02 |                  | 0.005 ( U        |
| VOLATILES        | Sec-BUTYLBENZENE               | 3.00+02            | 0.0005      | 0.005        | NE         | NE             | 3.0E+02            |                  | 0.005 1 U        |
| VOLATILES        | Styrene                        | 1.3E+03            | 0.0005      | 0.005        | NE         | NE             | 1.3E+03            |                  | 0.005 1 J J      |
|                  |                                |                    |             |              |            |                |                    |                  |                  |

Shaw Environmental, Inc.

## 00066558

 Table 4-79

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-057

-

| [SUMP] = SUMP057<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>itions in Soll<br>PL., mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP057-SB01<br>35-SMP57-SB01-01<br>9/13/2006<br>0.5 - 0.5 Ft<br>REG |           | 35SUMP<br>35-SMP5<br>9/13<br>7 -<br>RI | 057-\$<br>7-SB(<br>2006<br>7 Ft<br>EG | 801<br>)1-02 |
|--|---------------------------|--|---------------------|------------------------|---|---|--|--|-----------|--|---------------------------------------|--------------|
| Test Group   | Parameter (Units = mg/kg) | (RBSV)*                                  | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result   | DIL LQ VQ | Result                                 | DIL                                   | LQ VQ        |
| VOLATILES  | tert-BUTYLSENZENE         | 2.6E+02                                  | 0,0005              | 0.005                  | NE                                      | NE  | 2.6E+02                                      |  |           | 0.005                                  | 1                                     | U            |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NË                                      | NE  | 6.0E+00                                      |  |           | 0.005                                  | 1                                     | U            |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.1E+03                                      |  |           | 0.005                                  | 1                                     | U            |
| VOLATILES  | trans-1.2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.4E+02                                      |  |           | 0.005                                  | 1                                     | U            |
| VOLATILES  | trans-1.3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.8E+00                                      |  |           | 0.005                                  | 1                                     | U            |
| VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.7E+00                                      |  |           | 0.005                                  | 1                                     | U            |
| VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01                   | NË                                      | NE  | 2.6E+02                                      |  |           | 0.010                                  | 1                                     | U            |
| VOLATILES  | Vinvl acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NE                                      | NE  | 5.7€+01                                      |  |           | 0.010                                  | 1                                     | U            |
| VOLATILES  | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.01                   | NE                                      | NE  | 3.6E-02                                      |  |           | 0.010                                  | 1                                     | <u>U</u>     |

### 00066559

| Table 4-80   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump-058   |

| [SUMP] = SUMP058 |                           |            |             |              |            |               |            |                  |                     |                  |
|------------------|---------------------------|------------|-------------|--------------|------------|---------------|------------|------------------|---------------------|------------------|
| LOCATION _CODE   |                           |            |             |              |            |               |            | 35SUMP058-SB01   | 35SUMP058-SB01      | 35SUMP058-SB02   |
| SAMPLE_NO        |                           | TCEQ       |             |              | Back       | ground        | Applicble  | 35-SMP58-SB01-01 | 35-SMP58-SB01-02    | 35-SMP58-SB02-01 |
| SAMPLE_DATE      |                           | Risk-Based |             |              | Concentra  | tions in Soil | TCEQ       | 9/13/2006        | 9/13/2006           | 9/13/2006        |
| DEPTH            |                           | Screening  | Method      | Method       | (95% UF    | PL, mg/kg)    | Risk-Based | 0.5 - 0.5 Ft     | 10 - 10 Ft          | 0.5 - 0.5 Ft     |
| SAMPLE_PURPOSE   |                           | Value      | Detection   | Quantitation | Surface    | Subsurface    | Screening  | REG              | REG                 | REG              |
| Test Group       | Parameter (Units = mg/kg) | (RBSV)     | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value      | Result DIL LQ    | VQ Result DIL LQ VQ | Result DIL LQ VQ |
| PERC             | Perchlorate               | 1.39E+01   | 0.005       | 0.010        | NE         | NE            | 1.4E+01    | 0.037 1          | 0.497 10            | 0.111 2          |
| SOLIDS           | Percent Solids            | NE         | NE          | NE           | NE         | NE            |            | 90.800 1         | 84.900 1            | 94.700 1         |
|                  |                           |            |             |              |            |               |            |                  |                     |                  |

Footnotes are shown on cover page to Tables Section.

1

#### Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

| Table 4-81   |        |
|--|--------|
| Comparison of Concentrations in Soil to Risk-Based Screening | /alues |
| Sump-059   |        |

| [SUMP] = SUMP059<br>LOCATION_CODE |                           |            |             |              |            |               |            | 35SUN   | 1P059  | -SB01        |
|-----------------------------------|---------------------------|------------|-------------|--------------|------------|---------------|------------|---------|--------|--------------|
| SAMPLE NO                         |                           | TCEQ       |             |              | Back       | ground        | Applicble  | 35-SMF  | 259-S  | B01-01       |
| SAMPLE DATE                       |                           | Risk-Based |             |              | Concentra  | tions in Soil | TCEQ       | 9/1     | 15/200 | 06           |
| DEPTH                             |                           | Screening  | Method      | Method       | (95% UF    | 'L, mg/kg)    | Risk-Based | 0.5     | - 0,5  | Ft           |
| SAMPLE PURPOSE                    |                           | Value      | Detection   | Quantitation | Surface    | Subsurface    | Screening  |         | REG    |              |
| [SUMP] = SUMP060                  | Parameter (Units = mg/kg) | (RBSV) *   | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value      | Result  | DIL    | <u>LQ VQ</u> |
| PERC                              | Perchlorate               | 1.4E+01    | 0.005       | 0.010        | NE         | NE            | 1.4E+01    | 0.00985 | 1      | ų            |
| SOLIDS                            | Percent Solids            | NE         | NE          | NE           | NE         | NE            |            | 90      | 1      |              |

Shaw Environmental, Inc.

00066561

## Table 4-82

| Comparison of Chemical | Concentrations in Soil to Risk-Based Screening Values |  |
|------------------------|---|--|
|                        | Sump-60   |  |

| [SUMP] = SUMP060<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantilation | Back<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>PL, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP060-SB01<br>35-SMP60-SB01-01<br>9/26/2006<br>0.5 Ft<br>REG | 35SUMP060-SB01<br>35-SMP60-SB01-02<br>9/26/2006<br>6 - 6 Ft<br>REG | 47SB14<br>47SB14(0-0_5)<br>6/2/2000<br>0 - 0.5 Ft<br>REG | 47SB14<br>47SB14(1-2)<br>6/2/2000<br>1 - 2 Ft<br>REG |
|--|---------------------------|--|---------------------|------------------------|---|---|--|--|--|--|--|
| Test Group   | Parameter (Units = mg/kg) | (R8SV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LO VO   | Result DIL LO VO   | Result DIL LO VO   | Result DIL LO VO                                     |
| PERC   | Perchlorate               | 1.4E+01                                  | 0.005               | 0.010                  | NE                                      | NE  | 1.4E+01                                      | 0.100 10 U U   | 0.201 20 U U   | 0.006 1 < U  | 0.007 1 < U  |
| SOLIDS   | Percent Solids            | NE                                       | NÉ                  | NE                     | NE                                      | NE  | _  | 83.500 1   | 84.800 1   |  |  |

00066562

| Table 4-83  |                                 |  |                     |                        |   |   |  |  |  |  |  |  |  |
|---|---------------------------------|--|---------------------|------------------------|---|---|--|--|--|--|--|--|--|
|   |                                 |  | Comparis            | son of Che             | nical Con                               | centrations   | s in Soil to Ri                              | sk-Based Screening   | g Values   |  |  |  |  |
| Sump-61   |                                 |  |                     |                        |   |   |  |  |  |  |  |  |  |
| [SUMP] = SUMP061<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                                 | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>2L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP061-SB01<br>35-SMP61-SB01-01<br>9/14/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP061-SB01<br>35-SMP61-SB01-02<br>9/14/2006<br>7 - 7 Ft<br>REG | 47SB15<br>47SB15(0-0_5)<br>6/3/2000<br>0 - 0.5 Ft<br>REG | 47SB15<br>47SB15(1-2)<br>6/3/2000<br>1 - 2 Ft<br>REG |  |  |
| Test Group  | Parameter (Units = mo/kg)       | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ                                     |  |  |
| PERC  | Perchlorate<br>Percent Solids   | 1.4E+01<br>NE                            | 0.050<br>NE         | 0.010<br>NE            | NE<br>NE                                | NE<br>NE  | 1.4E+01                                      | 0.050 5 U<br>92. <u>000 1</u>  | 0.400 40 U<br>83.600 1   | 0.189 1  | 0.074 1  |  |  |
| Footnotes are shown   | on cover page to Tables Section | on.                                      |                     |                        |   |   |  |  |  |  |  |  |  |

Shaw Environmental, Inc.

00066563

#### Table 4-84

### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|                  |                             |                    |             |              |            |               |                    | Sump-64           |                   |                  |                  |                  |                  |             |
|------------------|-----------------------------|--------------------|-------------|--------------|------------|---------------|--------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|-------------|
| [SUMP] = SUMP064 |                             |                    |             |              |            |               |                    | 3501 MADOGA 5004  | 35SHM2064_SB01    | 475817           | 47SB17           | 47SB18           | 47SB33           | 47\$833     |
| LOCATION_CODE    |                             | 7050               |             |              | Poet       | around        | Applichie          | 35_SMP064-SB01-01 | 35-SMP064-SB01-02 | 475817(0-0 5)    | 47SB17(0-0_5)QC  | 47SB18(0-0_5)    | 47SB33(0-0_5)    | 47SB33(1-2) |
| SAMPLE_NO        |                             | Rick-Based         |             |              | Concentra  | tions in Soil | TCEQ               | 9/20/2006         | 9/20/2006         | 6/3/2000         | 6/3/2000         | 6/3/2000         | 6/3/2000         | 6/3/2000    |
| DEPTH            |                             | Screening          | Method      | Method       | (95% UF    | L, mg/kg)     | Risk-Based         | 1-1Ft             | 5 - 5 Ft          | 0 - 0.5 Ft       | 0 - 0.5 Ft       | 0 - 0.5 Ft       | 0-0.5 Ft         | 1-2FC       |
| SAMPLE PURPOSE   |                             | Value              | Detection   | Quantitation | Surface    | Subsurface    | Screening          | REG               | REG               | REG              | FD               | REG              | REG              |             |
| Test Group       | Parameter (Units = mo/kg)   | (RBSV) *           | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value              | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | A DOG 1 < 1 |
| PERC             | Perchlorate                 | 1.4E+01            | 0.005       | 0.010        | NE         | NE            | 1.4E+01            | 0.039 4 U         | 0.100 10 U        | 0.040 1 J        | 0.005 1 < UJ     | 0,008 1 4 0      | 0.000 1 4 0      | 0,000 1 4 0 |
| SEMIVOLATILES    | 1,2,4-Trichlorobenzene      | 1.4E+02            | 0.083       | 0.17         | NE         | NE            | 1.4E+02            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 1,2-Dichlorobenzene         | 5.6E+01            | 0.083       | 0.17         | NE         | NE            | 5.15+01            | 0.895 5 0         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 1,3-Dichlorobenzene         | 2.1E+00            | 0.063       | 0.17         | NE         | NE            | 2.7E+01            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 2.4.5-Trichlorophenol       | 1.65+03            | 0.083       | 0.17         | NE         | NE            | 1.6E+03            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 2.4.6-Trichlorophenol       | 4.5E+01            | 0.083       | 0.17         | NE         | NË            | 4.5E+01            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 2.4-Dichlorophenol          | 4.7E+01            | 0.083       | 0.17         | NE         | NE            | 4.7E+01            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 2,4-Dimethylphenol          | 3.1E+02            | 0.083       | 0.17         | NE         | NE            | 3.1E+02            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 2,4-Dinitrophenol           | 3.1E+01            | 0.330       | 0.83         | NE         | NE            | 3.10+01<br>7.2E-01 | 0.895 5 11        | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 2,4-Dinitrotoluene          | 7.2E-01<br>7.2E-01 | 0.083       | 0.17         | NE         | NE            | 7 2E-01            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 2,6-Dinitrotoluene          | 1 15+03            | 0.065       | 0.17         | NÊ         | NE            | 1.1E+03            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 2-Chloronbenol              | 1.1E+02            | 0.083       | 0.17         | NE         | NE            | 1.1E+02            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 2-Methylnanhthalene         | 5.5E+01            | 0.083       | 0.17         | NE         | NÉ            | 5,5E+01            | 0.895 5 U         | 0,193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 2-Methylphenol              | 7.7E+02            | 0.083       | 0.17         | NE         | NE            | 7.7E+02            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 2-Nitroaniline              | 4.7E+00            | 0.330       | 0.83         | NE         | NE            | 4.7E+00            | 4.470 5 U         | 0.953 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 2-Nitrophenol               | 3.1E+01            | 0.083       | 0.17         | NE         | NE            | 3.16+01            | 0.895 5 U         | 0,193 1 0         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 3,3-Dichlorobenzidine       | 1.1E+00            | 0.165       | 0.33         |            | NE            | 475+00             | 4.470 5 11        | 0.963 1 11        |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 3-Nitroaniline              | 4.7E+00            | 0.330       | 0.03         | NE         | NE            | 3 1E+01            | 4 470 5 U         | 0.963 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 4,6-Olimo-2-meanyphenol     | 3.15-02            | 0.330       | 0.03         | NE         | NE            | 1.7E-01            | 0.463 5 U         | 0.101 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 4-Storrophenyr phenyr etter | 7.75+01            | 0.083       | 0.17         | NE         | NE            | 7.7E+01            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 4-Chloroaniline             | 6.2E+01            | 0.083       | 0.17         | NE         | NE            | 6.2E+01            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether | 2.8E-02            | 0.083       | 0.17         | NE         | NE            | 1.7E-01            | 0.463 5 U         | 0.101 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 4-Methylphenol              | 7.7E+01            | 0.083       | 0.17         | NE         | NE            | 7.7E+01            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 4-Nitroaniline              | 1.3E+01            | 0.330       | 0.83         | NE         | NE            | 1.3E+01            | 4.470 5 U         | 0.903 1 0         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | 4-Nitrophenol               | 3.1E+01            | 0.330       | 0.83         | NE         | NE            | 3.12-01            | 0.895 5 11        | 0.303 1 0         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Acenaphthene                | 8.2E+02            | 0.063       | 0.17         | NE         | NE            | 825+02             | 0.895 5 0         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Acetaphinylene              | 4 15+03            | 0.0825      | 0.165        | NE         | NE            | 4.1E+03            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Benzo(a)anthracene          | 6.3E-01            | 0.0825      | 0.165        | 1.53E-02   | NE            | 6.3E-01            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Benzo(a)pvrene              | 6.3E-02            | 0.0825      | 0.165        | 1.54E-02   | NE            | 1.75-01            | 0.463, 5 U        | 0.101 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Benzo(b)fluoranthene        | 6.3E-01            | 0.0825      | 0.165        | 1.53E-02   | NE            | 6.3E-01            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Benzo(ghi)perylene          | 4.1E+02            | 0.0825      | 0.165        | 1.23E-02   | NE            | 4.1E+02            | 0.895 5 U         | 0.193 1 0         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Benzo(k)fluoranthene        | 6.3E+00            | 0.0825      | 0.165        | 1.30E-02   | NE            | 6.3E+00            | 4 470 5 H         | 0.165 1 1         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Benzoic Acld                | 6.2E+04            | 0.3300      | 0.620        | NE         | NE            | 4 7E+03            | 0.895 5 0         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | bis/2.Chlomethox/methane    | 4.7ET03            | 0.0825      | 0.165        | NE         | NE            | 2.9E-01            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether     | 1.5E-01            | 0.0825      | 0.165        | NE         | NE            | 1.7E-01            | 0.463 5 U         | 0.101 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether | 4.8E+00            | 0.0825      | 0.165        | NE         | NE            | 4.8E+00            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate  | 1.7E+01            | 0.0825      | 0.165        | NE         | NE            | 1.7E+01            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Butyl benzyl phthalate      | 3.1E+03            | 0.0825      | 0.165        | NE         | NE            | 3.1E+03            | 0.895 5 U         | 0,193 1 0         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Chrysene                    | 6.3E+01            | 0.0825      | 0.165        | 1.51E-02   | NE            | 6.3E+01            | 0.693 3 0         | 0.193 1 0         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene      | 6.3E-02            | 0.0825      | 0.165        |            | NC            | 6.25+01            | 0.895 5 1         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Diothyl obthalate           | 122+04             | 0.0825      | 0.165        | NE         | NE            | 1.2E+04            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Dimethyl phthalate          | 1.2E+04            | 0.0825      | 0.165        | NE         | NE            | 1.2E+04            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | di-n-Butyl phthalate        | 1.6E+03            | 0.0825      | 0.165        | NE         | NÉ            | 1.6E+03            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | di-n-Octyl phthalate        | 3.1E+02            | 0.0825      | 0.165        | NE         | NE            | 3.1E+02            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Fluoranthene                | 5.5E+02            | 0.0825      | 0.165        | 2.29E-02   | NE            | 5.5E+02            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Fluorene                    | 5.5E+02            | 0.0825      | 0.165        | NE         | NE            | 5.52+02            | 0.695 5 0         | 0.183 1 0         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Hexachlorobenzene           | 2.5E-01            | 0.0825      | 0.165        | NE         | NE            | 1.65+00            | 0.895 5 1         | 0193 1 U          |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Hexachioroputadiene         | 1.05+00            | 0.0625      | 0.165        | NE         | NE            | 1.0E+00            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Hexachlomethane             | 1.6E+01            | 0.0825      | 0.165        | NE         | NË            | 1.6E+01            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Indeno(1.2.3-cd)pyrene      | 6.3E-01            | 0.0825      | 0.165        | 1.43E-02   | NE            | 6.3E-01            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Isophorone                  | 5.2E+02            | 0.0825      | 0.165        | NE         | NE            | 5.2E+02            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Naphthalene                 | 1.8E+01            | 0.0825      | 0.165        | NE         | NE            | 1.8E+01            | 0.895 5 U         | 0.193 1 0         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Nitrobenzene                | 6.5E+00            | 0.0825      | 0.165        | NE         | NE            | 6.5E+00            | 0.895 5 0         | 0.193 1 0         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  | 4.1E-02            | 0.0825      | 0.165        |            |               | 500+01             | 0.895 5 11        | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Pantachiorophenol           | 3.95+00            | 0.0829      | 0.105        | NE         | NE            | 3.0E+00            | 4.470 5 U         | 0.963 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Phenanthrene                | 4.1E+02            | 0.0825      | 0.165        | NE         | NE            | 4,1E+02            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Phenol                      | 4.7E+03            | 0.0825      | 0.165        | NE         | NE            | 4.7E+03            | 0.895 5 Ū         | 0.193 1 U         |                  |                  |                  |                  |             |
| SEMIVOLATILES    | Pyrene                      | 4,1E+02            | 0.0825      | 0.165        | 1.94E-02   | NE            | 4.1E+02            | 0.895 5 U         | 0.193 1 U         |                  |                  |                  |                  |             |
| SOLIDS           | Percent Solids              | NE                 | NE          | NE           | NE         | NE            |                    | 89.100 1          | 82.000 1          |                  |                  |                  |                  |             |
| VOLATILES        | 1,1,1,2-Tetrachloroethane   | 5.2E+00            | 0.0005      | 0.005        | NE         | NE            | 5.2E+00            |                   | 0.005 1 0         |                  |                  |                  |                  |             |
| VOLATILES        | 1,1,1-Trichloroethane       | 2.3E+02            | 0.0005      | U.005        | NE         | NE            | 2.30+02            |                   | 0.005 1 U         |                  |                  |                  |                  |             |
| VOLATILES        | 1,1,2,2-1 etrachioroethane  | 5.1E-U1<br>6.7E-04 | 0.0005      | 200.0        | NE         | NE            | 9.7E-01            |                   | 0.005 1 U         |                  |                  |                  |                  |             |
| VULATILES        | 1, 1,2-THOMOLOGISLAGE       | 5.7E-VI            | 0.0000      | 0.000        | 116        |               | a v.r              | •                 |                   |                  |                  |                  |                  |             |

Shaw Environmental, Inc.

00066564

#### Table 4-84 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|                        |                               |                    |             |              |            |                         |                    | Sump-64          |                  |                          |                  |                  |                  |                  |
|------------------------|-------------------------------|--------------------|-------------|--------------|------------|-------------------------|--------------------|------------------|------------------|--------------------------|------------------|------------------|------------------|------------------|
| [SUMP] = SUMP064       |                               |                    |             |              |            |                         |                    |                  |                  | 470047                   | 470047           | 476049           | 478833           | 47SB33           |
| LOCATION_CODE          |                               |                    |             |              | Deale      |                         |                    | 355UMP064-5801   | 335UMP004-5801   | 4/ 501/<br>475017(0.0 5) | 475B17(0-0-5)OC  | 475818(0-0-5)    | 47SB33(0-0 5)    | 47SB33(1-2)      |
| SAMPLE_NO              |                               | ICEQ<br>Disk-Based |             |              | Concentra  | grouna<br>fions in Soil | TCEO               | 9/20/2006        | 9/20/2006        | 6/3/2000                 | 6/3/2000         | 6/3/2000         | 6/3/2000         | 6/3/2000         |
| DEPTH                  |                               | Screening          | Method      | Method       | (95% UF    | L. ma/ka)               | Risk-Based         | 1 - 1 Ft         | 5 - 5 Ft         | 0 - 0.5 Ft               | 0 - 0.5 Ft       | 0 - 0.5 Ft       | 0 - 0.5 Ft       | 1-2 Ft           |
| SAMPLE PURPOSE         |                               | Value              | Detection   | Quantitation | Surface    | Subsurface              | Screening          | REG              | REG              | REG                      | FD               | REG              | REG              | REG              |
| Test Group             | Parameter (Units = mg/kg)     | (RBSV) *           | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft            | Value              | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ         | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DiL LQ VQ |
| VOLATILES              | 1,1-Dichloroethane            | 8.9E+01            | 0.0010      | 0.005        | NE         | NE                      | 8.9E+01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 1,1-Dichloroethene            | 2.7E+01            | 0.0005      | 0.005        | NE         | NE                      | 2.7E+01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 1,1-Dichloropropene           | 9.9E-01            | 0.0005      | 0.005        | NE         |                         | 9.9E-01            |                  | 0.005 1 0        |                          |                  |                  |                  |                  |
| VOLATILES              | 1,2,3-1 nchloroconane         | 4.2E+01<br>9.2E+02 | 0.0005      | 0.005        | NE         | NE                      | 9.2E-02            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 1,2,4-Trichlorobenzene        | 1.4E+02            | 0.0005      | 0.005        | NE         | NE                      | 1.4E+02            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 1,2,4-Trimethylbenzene        | 9.6E+00            | 0.0005      | 0.005        | NE         | NE                      | 9.6E+00            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 1,2-Dibromo-3-chloropropane   | 3.5E-01            | 0.0020      | 0.005        | NE         | NE                      | 3.5E-01            |                  | 0.005 1 0        |                          |                  |                  |                  |                  |
| VOLATILES              | 1,2-Diblombenzene             | 5.3E-02<br>5.6E+01 | 0.0005      | 0.005        | NE         | NE                      | 5.6E+01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 1.2-Dichloroethane            | 2.7E-01            | 0.0005      | 0.005        | NE         | NE                      | 2.7E-01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 1,2-Dichloropropane           | 1.8E+00            | 0.0005      | 0.005        | NE         | NE                      | 1.8E+00            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 1,2-Dimethylbanzene (o-Xylene | 3.3E+03            | 0.0005      | 0.005        | NE         | NE                      | 3.3E+03            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 1,3,5-Trimethylbenzene        | 8.3E+00            | 0.0005      | 0.005        | NE         | NE                      | 8.3E+00<br>5.1E+00 |                  | 0.005 1 1        |                          |                  |                  |                  |                  |
| VOLATILES              | 1,3-Dichloropenzene           | 3.0E+00            | 0.0005      | 0.005        | NE         | NE                      | 3.0E+00            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 1.4-Dichlorobenzene           | 2.7E+01            | 0.0005      | 0.005        | NE         | NE                      | 2.7E+01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 2,2-Dichloroproparte          | 1.7E+00            | 0.0005      | 0.005        | NE         | NE                      | 1.7E+00            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 2-Butanone                    | 2.6E+03            | 0.0025      | 0.010        | NE         | NE                      | 2.6E+03            |                  | 0.010 1 0        |                          |                  |                  |                  |                  |
| VOLATILES              | 2-Chloroethyl vinyt ether     | 2.1E-01            | 0.0020      | 0.010        | NE         | NE                      | 2.16-01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 2-Chiofololdene<br>2-Hexanone | 6.2E+00            | 0.0025      | 0.010        | NE         | NE                      | 6.2E+00            |                  | 0.010 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | 4-Chlorotoluene               | 3.4E-01            | 0.0005      | 0.005        | NE         | NE                      | 3.4E-01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Acetone                       | 1.7E+02            | 0.0050      | 0.010        | NE         | NE                      | 1.7E+02            |                  | 0.010 t U        |                          |                  |                  |                  |                  |
| VOLATILES              | Benzene                       | 8.8E-01            | 0.0005      | 0.005        | NE         | NE                      | 8.8E-01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Bromobenzene                  | 2 4E+01            | 0.0005      | 0.005        | NE         | NE                      | 2.4E+01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Bromodichloromethane          | 1.0E+01            | 0.0005      | 0.005        | NË         | NE                      | 1.0E+01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Bromoform                     | 3.4E+01            | 0.0005      | 0.005        | NE         | NE                      | 3.4E+01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Bromomethane                  | 3.5E-01            | 0.0010      | 0.010        | NE         | NE                      | 3.5E-01            |                  | 0.010 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Carbon disultide              | 1.0E+02<br>3.5E-01 | 0.0005      | 0,005        | NE         | NE                      | 3.5E-01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Chlorobenzene                 | 4.0E+01            | 0.0005      | 0.005        | NE         | NE                      | 4.0E+01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Chloroethane                  | 1.1E+03            | 0.0010      | 0.010        | NE         | NE                      | 1.1E+03            |                  | 0.010 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Chloroform                    | 3.1E-01            | 0.0005      | 0.005        | NE         | NE                      | 3.1E-01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Chioromethane                 | 2.35-01            | 0.0020      | 0.010        |            | NE                      | 2.3E+01<br>1.2E+02 |                  | 0.005 1 11       |                          |                  |                  |                  |                  |
| VOLATILES              | cis-1,3-Dichloropropene       | 1.2E+00            | 0.0005      | 0.005        | NE         | NE                      | 1.2E+00            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Dibromochloromethane          | 7.6E+00            | 0.0005      | 0.005        | NE         | NE                      | 7.6E+00            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Dibromomethane                | 1.9E+01            | 0.0005      | 0.005        | NÉ         | NE                      | 1.9E+01            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Dichtorodifluoromethane       | 2.2E+02            | 0.0010      | 0.010        | NE         | NE                      | 2.2E+02            |                  | 0.010 1 0        |                          |                  |                  |                  |                  |
| VOLATILES              | Hevachlombutadiene            | 4.3E+02            | 0.0005      | 0.005        | NE         | NE                      | 1.6E+00            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Isopropylbenzene              | 5.4E+02            | 0.0005      | 0.005        | NE         | NE                      | 5.4E+02            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | m,p-Xylenes                   | 2.3E+02            | 0.0005      | 0.005        | NE         | NE                      | 2.3E+02            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Methyl isobutyl ketone        | 1.3E+03            | 0.0025      | 0.01         | NE         | NE                      | 1.3E+03            |                  | 0.010 1 0        |                          |                  |                  |                  |                  |
| VOLATILES              | Methylene chlonde             | 8.7E+00<br>4.8E+01 | 0.0010      | 0.005        | NE         |                         | 1.8E+01            |                  | 0.010 1 U        |                          |                  |                  |                  |                  |
| VOLATILES<br>VOLATILES | n-BUTYLBENZENE                | 2.7E+02            | 0.0005      | 0.005        | NE         | NE                      | 2.7E+02            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | n-PROPYLBENZENE               | 3.2E+02            | 0.0005      | 0.005        | NË         | NE                      | 3.2E+02            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | p-ISOPROPYLTOLUENE            | 4.2E+02            | 0.0005      | 0.005        | NE         | NE                      | 4.2E+02            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Sec-BUTYLBENZENE              | 3.0E+02            | 0.0005      | 0.005        | NE         | NE                      | 3.0E+02            |                  | 0.005 1 0        |                          |                  |                  |                  |                  |
| VOLATILES              | SUFFICE                       | 2.86+02            | 0.0005      | 0.005        | NE         | NE                      | 2.6E+02            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Tetrachioroethene             | 6.0E+00            | 0.0005      | 0.005        | NE         | NE                      | 6.0E+00            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Toluene                       | 1.1E+03            | 0.0005      | 0.005        | NE         | NE                      | 1.1E+03            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | trans-1,2-Dichloroethene      | 1.4E+02            | 0.0005      | 0.005        | NE         | NE                      | 1.4E+02            |                  | 0.005 1 U        |                          |                  |                  |                  |                  |
| VULATILES              | trans-1,3-Dichloropropene     | 1.85+00            | 0.0005      | 0.005        | NE         |                         | 3.75+00            |                  | 0.003 1 J -      |                          |                  |                  |                  |                  |
| VOLATILES              | Trichlorofluoromethane        | 2.6E+02            | 0,0010      | 0.01         | NE         | NE                      | 2.6E+02            |                  | 0.010 1 U        |                          |                  |                  |                  |                  |
| VOLATILES              | Vinyl acetate                 | 5.7E+01            | 0.0010      | 0.01         | NE         | NE                      | 5.7E+01            | 1                | 0.010 1 U UJ     |                          |                  |                  |                  |                  |
| VOLATILES              | Vinyl chloride                | 3.6E-02            | 0.0010      | 0.01         | NE         | NE                      | 3.6E-02            | 1                | 0.010 1 U        |                          |                  |                  |                  |                  |

VOLATILES Vinyl acetate VOLATILES Vinyl acetate VOLATILES Vinyl chloride Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

### 00066565

Table 4-85 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-65

|                                |   |                    |             |              |            |              |                    | Sump-05               |                       |                  |                  |                  |                  |                  |
|--------------------------------|---|--------------------|-------------|--------------|------------|--------------|--------------------|-----------------------|-----------------------|------------------|------------------|------------------|------------------|------------------|
| [SUMP] = SUMP065               |   |                    |             |              |            |              |                    | 35SUMP064_SB01        | 35SUMP064-SB01        | 475817           | 47SB17           | 47SB18           | 47\$B33          | 47SB33           |
| LOCATION_CODE                  |   | TCEO               |             |              | Back       | round        | Applichle          | 35-SMP064-SB01-01     | 35-SMP064-SB01-02     | 47SB17(0-0 5)    | 47SB17(0-0 5)QC  | 47SB18(0-0_5)    | 47SB33(0-0_5)    | 47SB33(1-2)      |
| SAMPLE_NO                      |   | Risk-Based         |             |              | Concentra  | ions in Soil | TCEQ               | 9/20/2006             | 9/20/2006             | 6/3/2000         | 6/3/2000         | 6/3/2000         | 6/3/2000         | 6/3/2000         |
| DEPTH                          |   | Screening          | Method      | Method       | (95% UP    | L. ma/ka)    | Risk-Based         | 1-1Ft                 | 5 - 5 Ft              | 0 - 0.5 Ft       | 0 - 0.5 Ft       | 0 - 0.5 Ft       | 0 - 0.5 Ft       | 1-2 Ft           |
| SAMPLE PURPOSE                 |   | Value              | Detection   | Quantitation | Surface    | Subsurface   | Screening          | REG                   | REG                   | REG              | FD               | REG              | REG              | REG              |
| Test Group                     | Parameter (Units = mo/ko)                             | (RBSV)*            | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft | Value              | Result DIL LQ VQ      | Result DIL LQ VQ      | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ | Result DIL LQ VQ |
| PERC                           | Perchlorate   | 1.4E+01            | 0.005       | 0.010        | NE         | NE           | 1.4E+01            | 0.039 4 U             | 0.100 10 U            | 0.040 1 J        | 0.005 1 < UJ     | 0.0055 1 < U     | 0.0061 1 < U     | 0,0060 1 < 0     |
| SEMIVOLATILES                  | 1,2,4-Trichlorobenzene                                | 1.4E+02            | 0.083       | 0.17         | NE         | NE           | 1.4E+02            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 1,2-Dichlorobenzene                                   | 5.6E+01            | 0.083       | 0.17         | NE         | NE           | 5.6E+01            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 1.3-Dichlorobenzene                                   | 5.1E+00            | 0.083       | 0.17         | NE         | NE           | 5.1E+00            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 1,4-Dichlorobenzene                                   | 2.7E+01            | 0.083       | 0.17         | NE         | NE           | 2.7E+01            | 0,895 5 U             | 0.193 1 0             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 2,4,5-Trichlorophenol                                 | 1.6E+03            | 0.083       | 0.17         | NE         | NE           | 1.65+03            | 0.895 5 0             | 0.193 1 0             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 2 4,6-Trichlorophenol                                 | 4.5E+01            | 0.083       | 0.17         | NE         | NE           | 4.02+01            | 0.895 5 0             | 0.193 1 0             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 2,4-Dichlorophenol                                    | 4./E+01            | 0.003       | 0.17         | NE         |              | 4.7ET01<br>3.1E±02 | 0.895 5 11            | 0.193 1 11            |                  |                  |                  |                  |                  |
| SEMIVULATILES                  | 2.4-Dimension   | 3.16-102           | 0.000       | 0.17         | NE         | NE           | 3 15+01            | 4470 5 U              | 0.963 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 2 4 Distrotoluene                                     | 7.2E-01            | 0.083       | 0.17         | NÊ         | NE           | 7.2E-01            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 2.6-Distrotoluseae                                    | 7.2E-01            | 0.083       | 0.17         | NE         | NE           | 7.2E-01            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 2-Chloronaphthalene                                   | 1.1E+03            | 0.083       | 0.17         | NE         | NE           | 1.1E+03            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 2-Chlorophenol  | 1.1E+02            | 0.083       | 0.17         | NE         | NE           | 1.1E+02            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 2-Methyinaphthalene                                   | 5.5E+01            | 0.083       | 0.17         | NË         | NE           | 5.5E+01            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 2-Methylphenol  | 7.7E+02            | 0.083       | 0.17         | NE         | NE           | 7.7E+02            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 2-Nitroanitine  | 4.7E+00            | 0.330       | 0.83         | NE         | NE           | 4.7E+00            | 4.470 5 U             | 0.953 1 0             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 2-Nitrophenol   | 3.16+01            | 0.083       | 0.17         |            |              | 1 15+00            | 1700 5 11             | 0.385 1 11            |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 3,3'-Dichlorobenzigine                                | 1.10+00            | 0.100       | 0.33         |            |              | 4.75+00            | 4470 5 U              | 0.963 1 11            |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 4 6 Dinitro 2 methylohenot                            | 3 15+01            | 0.330       | 0.83         | NE         | NE           | 3 1E+01            | 4.470 5 U             | 0.963 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 4-Bromonbenyl phenyl ether                            | 3 1E-02            | 0.083       | 0.17         | NE         | NE           | 1.7E-01            | 0.463 5 U             | 0.101 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 4-Chloro-3-methylphenol                               | 7.7E+01            | 0.083       | 0.17         | NE         | NE           | 7.7E+01            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 4-Chloroaniline                                       | 6.2E+01            | 0.083       | 0.17         | NE         | NE           | 6.2E+01            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 4-Chiorophenyl phenyl ether                           | 2.8E-02            | 0.083       | 0.17         | NE         | NE           | 1.7E-01            | 0,463 5 U             | 0.101 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 4-Methylphenol  | 7.7E+01            | 0.083       | 0.17         | NE         | NE           | 7.7E+01            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 4-Nitroaniline  | 1.3E+01            | 0.330       | 0.83         | NE         | NE           | 1,3E+01            | 4.470 5 U             | 0.963 1 0             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | 4-Nitrophenol   | 3.1E+01            | 0.330       | 0.83         | NE         | NE           | 3.32+01            | 4.470 5 U             | 0.903 1 0             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Acenaphinene  | 8.25+02            | 0.083       | 0.17         |            | NE           | 8.2E+02            | 0.895 5 0             | 0.193 1 11            |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | AcenaphinyJene  | 0.2E+02<br>4 1E+03 | 0.0825      | 0.165        | NE         | NE           | 4 1E+03            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Renzo(a)anthracene                                    | 6.3E-01            | 0.0825      | 0.165        | 1.53E-02   | NE           | 6.3E-01            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Benzo(a)pyrene  | 6.3E-02            | 0.0825      | 0.165        | 1.54E-02   | NE           | 1.7E-01            | 0,463 5 U             | 0.101 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Benzo(b)fluoranthene                                  | 6.3E-01            | 0.0825      | 0.165        | 1.53E-02   | NE           | 6.3E-01            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Benzo(ghi)perylene                                    | 4.1E+02            | 0.0825      | 0.165        | 1.23E-02   | NE           | 4.1E+02            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Benzo(k)fluoranthene                                  | 6.3E+00            | 0.0825      | 0.165        | 1.30E-02   | NE           | 6.3E+00            | 0.895 5 U             | 0,193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Benzoic Acid  | 6.2E+04            | 0.3300      | 0.825        | NE         | NE           | 6.2E+04            | 4.470 5 U             | 0.963 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Benzyl Alcohol  | 4.7E+03            | 0,0825      | 0.165        | NE         | NE           | 4.7E+03            | 0.895 5 U             | 0.193 1 0             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | bis[2-Chloroethoxy]methane                            | 2.98-01            | 0.0625      | 0.105        | NE         |              | 1.75-01            | 0463 5 1              | 0.101 1 1             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | his(2-Chloroisonronyl)ether                           | 4 8E+00            | 0.0825      | 0.165        | NE         | NE           | 4.8E+00            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | his(2-Ethylhexyl)phthalate                            | 1.7E+01            | 0.0825      | 0.165        | NE         | NE           | 1.7E+01            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Butyl benzyl phthalate                                | 3.1E+03            | 0.0825      | 0.165        | NE         | NĘ           | 3.1E+03            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Chrysene  | 6.3E+01            | 0.0825      | 0.165        | 1.51E-02   | NE           | 6.3E+01            | 0.895 6 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Dibenzo(a,h)anthracene                                | 6.3E-02            | 0.0825      | 0.165        | NE         | NE           | 1.7E-01            | 0,463 5 U             | 0.101 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Dibenzofuran  | 6.2E+01            | 0.0825      | 0.165        | NE         | NE           | 6.2E+01            | 0.895 5 0             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Diethyl phthatate                                     | 1.26+04            | 0.0825      | 0.165        | NE         | NE           | 1.20+04            | 0.095 5 0             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Dimethyl phthalate                                    | 1.20+04            | 0.0825      | 0.100        | NE         | NE           | 1.6E+03            | 0.895 5 U             | 0 193 1 1             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | di-n-Ochi obthalate                                   | 3 15+02            | 0.0825      | 0.165        | NE         | NE           | 3.1E+02            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Eluoranthene  | 5.5E+02            | 0.0825      | 0.165        | 2.295-02   | NE           | 5.5E+02            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Fluorene  | 5.5E+02            | 0.0825      | 0.165        | NE         | NE           | 5.5E+02            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Hexachlorobenzene                                     | 2.5E-01            | 0.0825      | 0.165        | NE         | NE           | 2.5E-01            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILE\$                 | Hexachtorobutadiene                                   | 1.6E+00            | 0.0825      | 0.165        | NĘ         | NÉ           | 1.6E+00            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Hexachlorocyclopentadiene                             | 1.0E+00            | 0.0825      | 0.165        | NE         | NE           | 1.0E+00            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Hexachloroethane                                      | 1.6E+01            | 0.0825      | 0.165        | NE         | NE           | 1.6E+01            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Indeno(1,2,3-cd)pyrene                                | 6.3E-01            | 0.0825      | 0.165        | 1.43E-02   | NE           | 6.3E-01            | 0.095 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Isophorone  | 1 95+01            | 0.0825      | 0.165        |            | NE           | 1.8E+01            | 0.895 5 11            | 0.183 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES<br>SEMIVOLATILES | Nitrobazana   | 6.55+00            | 0.0025      | 0.165        | NE         | NE           | 6.5E+00            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | n-Nitoso-dl-n-pmpylamine                              | 4 1E-02            | 0.0825      | 0.165        | NE         | NE           | 1.7E-01            | 0.463 5 U             | 0.101 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | n-Nitrosodiphenvlamine                                | 5.9E+01            | 0.0825      | 0.165        | NE         | NE           | 5.9E+01            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Pentachlorophenol                                     | 3.0E+00            | 0.3300      | 0.825        | NE         | NE           | 3.0E+00            | 4.470 5 U             | 0.963 1 U             |                  |                  | +                |                  |                  |
| SEMIVOLATILES                  | Phenanthrene  | 4.1E+02            | 0.0825      | 0.165        | NE         | NE           | 4.1E+02            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Phenol  | 4.7E+03            | 0.0825      | 0.165        | NE         | NE           | 4.7E+03            | 0.895 5 U             | 0.193 1 U             |                  |                  |                  |                  |                  |
| SEMIVOLATILES                  | Pyrene<br>Remember Callida                            | 4.1E+02            | 0.0825      | U.165        | 1.94E-02   | NE           | 4.1E+02            | 0.895 5 U<br>90.100 4 | 0.195 1 U<br>82.000 4 |                  |                  |                  |                  |                  |
| SULIUS<br>VOLATILES            | 1 1 1 2 Tetrachloroethere                             | NC<br>5 75+00      | 0.0005      | 0.005        | NE         |              | 5 25+00            | 08.100                | 0.005 1 U             |                  |                  |                  |                  |                  |
|                                | 1,1,1,2*1 eu autilioroethane<br>1 1 1-Trichloroethane | 235+02             | 0.0005      | 0.005        | NE         | NE           | 2.3E+02            |                       | 0.005 1 U             |                  |                  |                  |                  |                  |
| VOLATILES                      | 1,1,2,2-Tetrachloroethane                             | 5.1E-01            | 0.0005      | 0.005        | NE         | NE           | 5.1E-01            | 1                     | 0.005 1 U             |                  |                  |                  |                  |                  |

Shaw Environmental, Inc.

### 00066566

#### Table 4-85 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|                  |                                     |                    |             |              |            |                |                    | Sump-65           |                   |                  |                  |                  |                   |                      |
|------------------|-------------------------------------|--------------------|-------------|--------------|------------|----------------|--------------------|-------------------|-------------------|------------------|------------------|------------------|-------------------|----------------------|
| [SUMP] = SUMP065 |                                     |                    |             |              |            |                |                    | 36SUMP064_SB01    | 35SUMP064-SB01    | 475B17           | 47SB17           | 47SB18           | 47\$B33           | 47SB33               |
| LOCATION_CODE    |                                     | TOPO               |             |              | Back       | herom          | Applichle          | 35-SMP064-SB01-01 | 35-SMP064-SB01-02 | 47SB17(0-0_5)    | 47SB17(0-0_5)QC  | 47SB18(0-0_5)    | 47SB33(0-0_5)     | 47SB33(1-2)          |
| SAMPLE_NU        |                                     | Risk-Based         |             |              | Concentr   | ations In Soil | TCEQ               | 9/20/2006         | 9/20/2006         | 6/3/2000         | 6/3/2000         | 6/3/2000         | 6/3/2000          | 6/3/2000<br>1 - 2 Ft |
| DEPTH            |                                     | Screening          | Method      | Method       | (95% U     | PL, mg/kg)     | Risk-Based         | 1-1Ft             | 5-5 Ft            | 0-0.5 Ft         | 0-0.5 M          | REG              | REG               | REG                  |
| SAMPLE_PURPOSE   |                                     | Value              | Detection   | Quantitation | Surface    | Subsurface     | Screening          | REG               | REG               |                  |                  | Beault DIL 10 VO | Regult Dill LO VO | Result DIL LO VO     |
| Test Group       | Parameter (Units = mg/kg)           | (RBSV) *           | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft   | Value              | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ | Result OIL LO VO | Result DIC LO VO | Result Die co vo  | 100000 010 000.10    |
| VOLATILES        | 1,1,2-Trichloroethane               | 9.7E-01            | 0.0005      | 0.005        | NE         | NE             | 9.7E-01            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 1,1-Dichloroethane                  | 8.9E+01            | 0.0010      | 0.005        | NE         | NE             | 2.7E+01            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 1 1-Dichloropropege                 | 9.9E-01            | 0.0005      | 0.005        | NE         | NE             | 9.9E-01            | 1                 | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 1,2,3-Trichlorobenzene              | 4.2E+01            | 0.0005      | 0.005        | NE         | NE             | 4.2E+01            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 1,2,3-Trichloropropane              | 9.2E-02            | 0.0010      | 0.005        | NE         | NE             | 9.2E-02            |                   | 0.005 1 0         |                  |                  |                  |                   |                      |
| VOLATILES        | 1,2,4-Trichlorobenzene              | 1.4E+02            | 0.0005      | 0,005        | NE         | NE             | 9.65+00            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 1,2,4-Tritheurybenzene              | 3.5E-01            | 0.0020      | 0.005        | NE         | NE             | 3.5E-01            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 1.2-Dibromoethane                   | 5.3E-02            | 0.0005      | 0.005        | NE         | NE             | 5.3E-02            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 1,2-Dichlorobenzene                 | 5.62+01            | 0.0005      | 0.005        | NE         | NE             | 5.6E+01            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 1,2-Dichloroethane                  | 2.7E-01            | 0,0005      | 0.005        | NE         | NE             | 2.7E-01<br>1.8E+00 |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 1,2-Dicnioropropane                 | 3.3E+03            | 0.0005      | 0.005        | NE         | NE             | 3.3E+03            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 1.3.5-Trimethylbenzene              | 8.3E+00            | 0.0005      | 0.005        | NE         | NE             | 8.3E+00            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 1.3-Dichlorobenzene                 | 5.1E+00            | 0.0005      | 0.005        | NE         | NE             | 5.1E+00            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 1,3-Dichloropropane                 | 3.0E+00            | 0.0005      | 0.005        | NE         | NE             | 3.0E+00            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 1,4-Dichloroberizene                | 2.7E+01            | 0.0005      | 0.005        | NE         | NÉ             | 1 7E+00            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 2.2-Dichloropropane                 | 1.7E+00<br>2.6E+03 | 0.0025      | 0.000        | NE         | NE             | 2.6E+03            |                   | 0.010 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 2-Chloroethyl vinyl ether           | 2.1E-01            | 0.0020      | 0.010        | NE         | NE             | 2.1E-01            |                   | 0.010 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 2-Chlorotoluene                     | 1.5E+02            | 0.0005      | 0.005        | NE         | NE             | 1.5E+02            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | 2-Hexanone                          | 6.2E+00            | 0.0025      | 0.010        | NE         | NE             | 6.2E+00            |                   | 0.005 1 11        |                  |                  |                  |                   |                      |
| VOLATILES        | 4-Chlorotoluene                     | 3.4E-01            | 0.0005      | 0.005        | NE         | NE             | 1.7E+02            |                   | 0.010 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Benzene                             | 8.8E-01            | 0.0005      | 0.005        | NE         | NE             | 8.8E-01            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Bromobenzene                        | 1.1E+01            | 0.0005      | 0.005        | NE         | NE             | 1.1E+01            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Bromochloromethane                  | 2.4E+01            | 0.0005      | 0.005        | NE         | NE             | 2.4E+01            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Bromodichloromethane                | 1.0E+01            | 0.0005      | 0.005        | NE         | NE             | 3.45+01            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Bromotorm                           | 3.4E+01<br>3.5E-01 | 0.0005      | 0.000        | NE         | NE             | 3.5E-01            |                   | 0.010 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Carbon disulfide                    | 1.0E+02            | 0.0005      | 0.005        | NË         | NE             | 1.0E+02            | 1                 | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Carbon tetrachloride                | 3.5E-01            | 0.0005      | 0.005        | NE         | NË             | 3.5E-01            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Chlorobenzene                       | 4.0E+01            | 0.0005      | 0.005        | NE         | NE             | 4.02+01            |                   | 0.005 1 0         |                  |                  |                  |                   |                      |
| VOLATILES        | Chloroethane                        | 1.1E+03<br>3.1E-01 | 0.0010      | 0.010        | NE         | NE             | 3.1E-01            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Chloromethane                       | 2 3E-01            | 0.0020      | 0.010        | NE         | NE             | 2.3E-01            |                   | 0.010 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | cis-1,2-Dichloroethene              | 1.2E+02            | 0.0005      | 0.005        | NE         | NE             | 1.2E+02            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILE\$       | cis-1,3-Dichloropropene             | 1.2E+00            | 0,0005      | 0.005        | NE         | NE             | 1.2E+00            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Dibromochloromethane                | 7.6E+00            | 0.0005      | 0.005        | NE         | NE             | 1.95+01            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Dipromomethane                      | 2 2E+02            | 0.0000      | 0.010        | NE         | NE             | 2.2E+02            |                   | 0.010 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Ethylbenzene                        | 4.3E+02            | 0.0005      | 0.005        | NE         | NE             | 4.3E+02            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Hexachiorobutadiene                 | 1.6E+00            | 0.0005      | 0.005        | NE         | NE             | 1.6E+00            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Isopropylbenzene                    | 5.4E+02            | 0.0005      | 0.005        | NE         | NE             | 5.4E+02            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | m,p-Xylenes                         | 2.32+02            | 0.0005      | 0.005        | NË         | NE             | 1.3E+02            |                   | 0.010 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Methylene chloride                  | 8.7E+00            | 0.0010      | 0.005        | NE         | NE             | 8.7E+00            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Naphthalene                         | 1.8E+01            | 0.0005      | 0.01         | NE         | NE             | 1.8E+01            |                   | 0.010 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | n-BUTYLBENZENE                      | 2.7E+02            | 0.0005      | 0.005        | NE         | NE             | 2.7E+02            |                   | 0.005 1 0         |                  |                  |                  |                   |                      |
| VOLATILES        | n-PROPYLBENZENE                     | 3.2E+02            | 0.0005      | 0.005        | NE         | NE             | 3.2E+02            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | COC-BUTYLBENZENE                    | 4.2E+02<br>3.0E+02 | 0.0005      | 0.005        | NE         | NE             | 3.0E+02            |                   | 0.005 1 U         |                  | •                |                  |                   |                      |
| VOLATILES        | Styrene                             | 1.3E+03            | 0.0005      | 0.005        | NE         | NE             | 1.3E+03            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | tert-BUTYLBENZENE                   | 2.6E+02            | 0.0005      | 0.005        | NE         | NE             | 2.6E+02            |                   | 0.005 1 0         |                  |                  |                  |                   |                      |
| VOLATILES        | Tetrachloroethene                   | 6.0E+00            | 0.0005      | 0.005        | NE         | NE             | 6.0E+00            |                   | 0.005 1 11        |                  |                  |                  |                   |                      |
|                  | Iolucite<br>trans_1.2-Dichlomethene | 1.1E+03            | 0,0005      | 0.005        | NE         | NE             | 1.4E+02            |                   | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | trans-1,3-Dichloropropene           | 1.8E+00            | 0.0005      | 0.005        | NE         | NE             | 1.8E+00            | 1                 | 0.005 1 U         |                  |                  |                  |                   |                      |
| VOLATILES        | Trichloroethene                     | 3.7E+00            | 0.0005      | 0.005        | NE         | NE             | 3.7E+00            |                   | 0.003 1 J J       |                  |                  |                  |                   |                      |
| VOLATILES        | Trichlorofluoromethane              | 2.6E+02            | 0.0010      | 0.01         | NE         | NE             | 2.65+02            |                   | 0.010 1 0         |                  |                  |                  |                   |                      |
| VOLATILES        | Vinyl acetate<br>Vinyl chloride     | 5.7≿≁01<br>3.6⊑₊02 | 0.0010      | 0.01         | NE         | NE             | 3.6E-02            | · · · · · ·       | 0.010 1 U         |                  |                  |                  |                   |                      |
| VULATILEO        | VILLEL CHINDING                     | 0.00-04            | 0.00.0      |              |            |                |                    |                   |                   |                  |                  |                  |                   |                      |

 VOLATILES
 Vinyl acetate

 VOLATILES
 Vinyl chloride

 Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.

### 00066567

#### Table 4-86 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

| e  | - | ~ 6 | 2  |  |
|----|---|-----|----|--|
| ъu |   | U=U | 10 |  |

|                   |  |   |             |              |            |               |            | •                 |                   |                   |                 |                   |
|-------------------|--|---|-------------|--------------|------------|---------------|------------|-------------------|-------------------|-------------------|-----------------|-------------------|
| [SUMP] = \$UMP066 |  |   |             |              |            |               |            |                   | 476840            | 479840            | 475820          | 475820            |
| LOCATION CODE     |  |   |             |              |            | . 1           | A          | 25 CHOOSE CR01 02 | 470019            | 475B19(1-2)       | 475B20(0-0 5)   | 47SB20(1-2)       |
| SAMPLE_NO         |  | TÇEQ                                    |             |              | Backg      | round         | Applicole  | 33-SMP000-3B01-02 | 473819(0-0_3)     | 6/2/2000          | 6/2/2000        | 6/2/2000          |
| SAMPLE_DATE       |  | Risk-Based                              |             |              | Concentrat | tions in Soil | ICEQ       | 9/20/2006         | 0-0554            | 1-2 Ft            | 0-05 Ft         | 1-2 Ft            |
| DEPTH             |  | Screening                               | Method      | Method       | (95% UP    | L, mg/kg)     | RISK-Based |                   | PEG               | REG               | REG             | REG               |
| SAMPLE_PURPOSE    |  | Value                                   | Detection   | Quantitation | Surface    | Subsurrace    | Screening  |                   | Baselt Bill 10 VO | Bostilt DIL LO VO | Result DILLO VO | Result DII, LO VO |
| Test Group        | Parameter (Units = mg/kg)                  | (RBSV) *                                | Limit (MDL) | Limit (MQL)  | 0-0.5 Ft   | 1.5 - 2.5 Ft  | Value      | Result OLL LQ VQ  | Result Dic Lo Vo  |                   | 0.008 1 < 11    | 0.222 1           |
| PERC              | Perchlorate                                | 1.4E+01                                 | 0.005       | 0.010        | NE         | NE            | 1.42+01    |                   | 0.130             | 0.000             | 0.000 1 4 0     |                   |
| SOLIDS            | Percent Solids                             | NE                                      | NE          | NE           | NE         | NE            | E 0E (00)  |                   |                   |                   |                 |                   |
| VOLATILES         | 1,1,1,2-Tetrachloroethane                  | 5.2E+00                                 | 0.0005      | 0.005        | NE         | NE            | 5.20+00    |                   |                   |                   |                 |                   |
| VOLATILËS         | 1,1,1-Trichloroethane                      | 2.3E+02                                 | 0.0005      | 0.005        | NE         | NE            | 2.3E+02    |                   |                   |                   |                 |                   |
| VOLATILES         | 1,1,2,2-Tetrachloroethane                  | 5.1E-01                                 | 0.0005      | 0.005        | NE         | NE            | 5.1E-01    |                   |                   |                   |                 |                   |
| VOLATILES         | 1,1,2-Trichloroethane                      | 9.7E-01                                 | 0.0005      | 0.005        | NE         |               | 8.7 E-01   | 0.005 1 0         |                   |                   |                 |                   |
| VOLATILES         | 1.1-Dichloroethane                         | 8.9E+01                                 | 0.0010      | 0.005        | NE         | NE            | 0.95+01    |                   |                   |                   |                 |                   |
| VOLATILES         | 1,1-Dichloroethene                         | 2.7E+01                                 | 0.0005      | 0.005        | NE         | NE            | 2.75701    |                   |                   |                   |                 |                   |
| VOLATILES         | 1,1-Dichloropropene                        | 9.9E-01                                 | 0.0005      | 0,005        | NE         | NE            | 9.9E-01    |                   |                   |                   |                 |                   |
| VOLATILES         | 1,2,3-Trichlorobenzene                     | 4.2E+01                                 | 0.0005      | 0.005        | NE         | NE            | 4.2E+01    |                   |                   |                   |                 |                   |
| VOLATILES         | 1,2,3-Trichloropropane                     | 9.2E-02                                 | 0.0010      | 0.005        | NE         | NC            | 9.20-02    | 0.005 1 0         |                   |                   |                 |                   |
| VOLATILES         | 1,2,4-Trichlorobenzene                     | 1.4E+02                                 | 0.0005      | 0.005        | NE         |               | 1.46+04    | 0.005 1 0         |                   |                   |                 |                   |
| VOLATILES         | 1,2,4-Trimethylbenzene                     | 9.6E+00                                 | 0.0005      | 0.005        | NE         | NE            | 9.02700    | 0,005 1 0         |                   |                   |                 |                   |
| VOLATILES         | 1.2-Dibromo-3-chloropropane                | 3.5E-01                                 | 0.0020      | 0.005        | NE         | NE            | 5.02-01    | 0.005 1 11        |                   |                   |                 |                   |
| VOLATILES         | 1,2-Dibromoethane                          | 5.3E-02                                 | 0.0005      | 0.005        | NE         | NE            | 5.32-02    |                   |                   |                   |                 |                   |
| VOLATILES         | 1,2-Dichlorobenzene                        | 5.6E+01                                 | 0.0005      | 0.005        |            | NE            | 2.75-04    | 0.005 1 11        |                   |                   |                 |                   |
| VOLATILES         | 1,2-Dichloroethane                         | 2.7E-01                                 | 0.0005      | 0.005        |            |               | 195+00     | 0.005 1 11        |                   |                   |                 |                   |
| VOLATILES         | 1,2-Dichloropropane                        | 1.8E+00                                 | 0.0005      | 0.005        | NE         | NE            | 3.35+02    | 0.005 1 11        |                   |                   |                 |                   |
| VOLATILES         | 1,2-Dimethylbenzene (o-Xylené)             | 3.3E+03                                 | 0.0005      | 0.005        | NE         | NE            | 835+00     | 0.005 1 11        |                   |                   |                 |                   |
| VOLATILES         | 1,3,5-Trimethylbenzene                     | 8,3=+00                                 | 0.0005      | 0.005        |            | NE            | 5 15+00    | 0.005 1 11        |                   |                   |                 |                   |
| VOLATILES         | 1,3-Dichlorobenzene                        | 5.1E+00                                 | 0.0005      | 0.005        | NE         | NE            | 3.0E+00    | 0.005 1 1         |                   |                   |                 |                   |
| VOLATILES         | 1,3-Dichloropropane                        | 3.0E+00                                 | 0.0005      | 0.005        | NE         | NE            | 276+01     | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | 1,4-Dichlorobenzene                        | 4.70,00                                 | 0.0005      | 0.005        |            | NE            | 175+00     | 0.005 1 11        |                   |                   |                 |                   |
| VOLATILES         | 2,2 Dichloropropane                        | 1.7 ET-00                               | 0.0005      | 0.000        |            | NE            | 2 6E+03    | 0.010 i ŭ         |                   |                   |                 |                   |
| VOLATILES         | 2-Bucanone<br>2 Oblass attack sized attack | 2.00-103                                | 0.0020      | 0.010        | NE         | NE            | 2 1E-01    | 0.010 1 U         |                   |                   |                 |                   |
| VOLATILES         | 2-Chloroemyl vinyl ealer                   | 1 65-00                                 | 0.0020      | 0.005        | NË         | NE            | 1.5E+02    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | 2-Chloroboldene                            | 6.25+00                                 | 0.0005      | 0.000        | NE         | NE            | 6.2E+00    | 0.010 1 U UJ      |                   |                   |                 |                   |
| VOLATILES         | 4 Objectskano                              | 3 45-01                                 | 0.0005      | 0.005        | NE         | NE            | 3.4E-01    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | Asstance                                   | 4 75+02                                 | 0.0050      | 0.010        | NE         | NÊ            | 1.7E+02    | 0.010 1 U         |                   |                   |                 |                   |
| VOLATILES         | Reasone                                    | 8.85-01                                 | 0.0005      | 0.015        | NE         | NE            | 8.8E-01    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | Benzene                                    | 1 15+01                                 | 0.0005      | 0.005        | NE         | NE            | 1.1E+01    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | Bromochloromathana                         | 2.4E+01                                 | 0,0005      | 0.005        | NE         | NE            | 2.4E+01    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | Bromodichloromethane                       | 1.0E+01                                 | 0.0005      | 0.005        | NE         | NE            | 1.0E+01    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | Bromoform                                  | 3.4E+01                                 | 0.0005      | 0.005        | NE         | NE            | 3.4E+01    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | Bromomethane                               | 3.5E-01                                 | 0.0010      | 0.010        | NE         | NE            | 3.5E-01    | 0.010 1 U         |                   |                   |                 |                   |
| VOLATILES         | Carbon disulfide                           | 1.0E+02                                 | 0.0005      | 0.005        | NE         | NE            | 1.0E+02    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | Carbon tetrachloride                       | 3.5E-01                                 | 0.0005      | 0.005        | NE         | NE            | 3.5E-01    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | Chlorobenzeze                              | 4.0E+01                                 | 0.0005      | 0.005        | NE         | NE            | 4.0E+01    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | Chloroethane                               | 1.1E+03                                 | 0.0010      | 0.010        | NE         | NE            | 1.1E+03    | 0.010 1 U         |                   |                   |                 |                   |
| VOLATILES         | Chloroform                                 | 3.1E-01                                 | 0.0005      | 0.005        | NE         | NE            | 3.1E-01    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | Chloromethane                              | 2.3E-01                                 | 0.0020      | 0.010        | NE         | NE            | 2.3E-01    | 0.010 1 U         |                   |                   |                 |                   |
| VOLATILES         | cis-1,2-Dichloroethene                     | 1.2E+02                                 | 0.0005      | 0.005        | NE         | NE            | 1.2E+02    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | cis-1,3-Dichloropropene                    | 1.2E+00                                 | 0.0005      | 0.005        | NE         | NE            | 1.2E+00    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | Dibromochloromethane                       | 7.6E+00                                 | 0.0005      | 0.005        | NE         | NE            | 7.6E+00    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | Dibromomethane                             | 1.9E+01                                 | 0.0005      | 0.005        | NE         | NE            | 1.9E+01    | 0.005 1 0         |                   |                   |                 |                   |
| VOLATILES         | Dichlorodifluoromethane                    | 2,2E+02                                 | 0.0010      | 0.010        | NE         | NE            | 2.2E+02    | 0.010 1 0         |                   |                   |                 |                   |
| VOLATILES         | Ethylbenzene                               | 4.3E+02                                 | 0.0005      | 0.005        | NE         | NE            | 4.3E+02    | 0.005 1 0         |                   |                   |                 |                   |
| VOLATILES         | Hexachlorobutadiene                        | 1.6E+00                                 | 0.0005      | 0.005        | NE         | NE            | 1.62+00    | 0.005 1 0         |                   |                   |                 |                   |
| VOLATILES         | Isopropylbenzene                           | 5.4E+02                                 | 0.0005      | 0.005        | NE         | · NE          | 5.42+02    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | m,p-Xylenes                                | 2.3E+02                                 | 0.0005      | 0.005        | NE         | NE            | 2.30+02    |                   |                   |                   |                 |                   |
| VOLATILES         | Methyl isobutyl ketone                     | 1.3E+03                                 | 0.0025      | 0.01         | NE         | NE            | 1.32+03    | 0.000 1 0         |                   |                   |                 |                   |
| VOLATILES         | Methylene chloride                         | 8.7E+00                                 | 0.0010      | 0.005        | NE         | NE            | 1 95+01    | 0.002 1 3 5       |                   |                   |                 |                   |
| VOLATILES         | Naphthalene                                | 1.8E+01                                 | 0.0005      | 0.01         | NE         | INE           | 2.75+02    | 0.005 1 11        |                   |                   |                 |                   |
| VOLATILES         | n-BUTYLBENZENE                             | 2./E+UZ                                 | 0.0005      | 0.005        | INE        |               | 2.7 5+02   | 0.005 1 0         |                   |                   |                 |                   |
| VOLATILES         | n-PROPYLBENZENE                            | 3.26+02                                 | 0.0005      | 0.005        | INE<br>NE  |               | 3.2E+02    | 0.005 1 11        |                   |                   |                 |                   |
| VOLATILES         |  | 4.2ETU2                                 | 0.0000      | 0.005        | NE         | NE            | 305+02     | 1005 1 1          |                   |                   |                 |                   |
| VOLATILES         | Sec-BUTTLBENZENE                           | 3.0ET02                                 | 0.0005      | 0.005        | NE         | NE            | 1.3E+03    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         |  | 1.3ETU3<br>2.6E±00                      | 0,0003      | 0.000        |            | NE            | 2.6F+02    | 1 0.005 1 1       |                   |                   |                 |                   |
| VOLATILES         | Tetrashiaroothan                           | 2.02702                                 | 0.0005      | 0.003        |            | NE            | 6.0E+00    | 0.005 1 11        |                   |                   |                 |                   |
|                   | Teluano                                    | 1 | 0.0005      | 0.005        | NE         | NE            | 1 1E+03    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILEO         | trans 1 2 Dichlorosthene                   | 1 46+02                                 | 0.0005      | 0.005        | NE         | NE            | 1.4E+02    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | trans_13_Dichloropropene                   | 1.8E+00                                 | 0.0005      | 0.005        | NE         | NE            | 1.8E+00    | 0.005 1 U         |                   |                   |                 |                   |
|                   | Trichinnethene                             | 3.7 =+00                                | 0.0005      | 0.005        | NE         | NE            | 3.7E+00    | 0.005 1 U         |                   |                   |                 |                   |
| VOLATILES         | Trichlomfuoromethane                       | 2.6E+02                                 | 0.0010      | 0.01         | NE         | NE            | 2.6E+02    | 0,010 1 U         |                   |                   |                 |                   |
| VOLATILES         | Vinvl acetate                              | 5.7E+01                                 | 0.0010      | 0.01         | NE         | NE            | 5.7E+01    | 0.010 1 U UJ      |                   |                   |                 |                   |
| VOLATILES         | Vinyl chloride                             | 3.6E-02                                 | 0.0010      | 0.01         | NE         | NE            | 3.6E-02    | 0.010 1 U         |                   |                   |                 |                   |

VOLATILES Vinyl accele VOLATILES Vinyl chloride Footnotes are shown on cover page to Tables Section.

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066568

#### Table 4-87

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|                         |   |                    |                                  |              |            | 5                   | ump-67             | _                     |                        |                      |                  |                  |
|-------------------------|---|--------------------|----------------------------------|--------------|------------|---------------------|--------------------|-----------------------|------------------------|----------------------|------------------|------------------|
| [SUMP] = SUMP067        |   |                    |                                  |              |            |                     |                    | 35SUMP066-SB01        | 47\$B19                | 47SB19               | 47SB20           | 47SB20           |
| SAMPLE NO               |   | TCEQ               |                                  |              | Back       | ground              | Applicble          | 35-SMP066-SB01-02     | 47SB19(0-0_5)          | 47SB19(1-2)          | 47SB20(0-0_5)    | 47SB20(1-2)      |
| SAMPLE_DATE             |   | Risk-Based         | <b>b a</b> - <b>c</b> - <b>a</b> | La-Maria     | Concentra  | tions in Soil       | TCEQ<br>Bick Based | 9/20/2006<br>5 - 5 Ft | 6/2/2000<br>0 - 0 5 Ft | 6/2/2000<br>1 - 2 Ft | 0-0.5 Ft         | 1-2 Ft           |
| Depth<br>Sample purpose |   | Value              | Detection                        | Quantitation | Surface    | Subsurface          | Screening          | REG                   | REG                    | REG                  | REG              | REG              |
| Test Group              | Parameter (Units = mg/kg)                             | (RBSV) *           | Limit (MDL)                      | Limit (MQL)  | 0 - 0.5 Ft | 1.6 - 2.5 <u>Ft</u> | Value              | Result DIL LQ VQ      | Result DIL LQ VQ       | Result DIL LQ VQ     | Result DIL LQ VQ | Result DIL LQ VQ |
| PERC                    | Perchlorate   | 1.4E+01            | 0.005                            | 0.010        | NE         | NE                  | 1.4E+01            | 0.010 1 U             | 0.135 1                | 0.00591 1 < 0        | 0.00587 1 < 0    | 0.222            |
| VOLATILES               | 1.1.1.2-Tetrachloroethane                             | 5.2Ë+00            | 0.0005                           | 0.005        | NE         | NE                  | 5.2E+00            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 1,1,1-Trichloroethane                                 | 2.3E+02            | 0.0005                           | 0.005        | NE         | NE                  | 2.3E+02            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 1,1,2,2-Tetrachloroethane                             | 5.1E-01            | 0.0005                           | 0.005        | NE         | NE                  | 9.7E-01            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 1.1-Dichloroethane                                    | 8.9E+01            | 0.0010                           | 0.005        | NE         | NE                  | 8.9E+01            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 1,1-Dichloroethene                                    | 2.7E+01            | 0.0005                           | 0.005        | NE         | NE                  | 2.7E+01            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 1,1-Dichloropropene<br>1,2,3-Tricbloropenzene         | 9,9E-01<br>4 2E+01 | 0.0005                           | 0.005        | NE         | NE                  | 9.9E-01<br>4.2E+01 | 0.005 1 0             |                        |                      |                  |                  |
| VOLATILES               | 1,2,3-Trichloropropane                                | 9.2E-02            | 0.0010                           | 0.005        | NE         | NE                  | 9.2E-02            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 1,2,4-Trichlorobenzene                                | 1.4E+02            | 0.0005                           | 0.005        | NE         | NE                  | 1.4E+02            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 1,2,4-Trimethylbenzene<br>1,2-Dibtomo-3-chloropropane | 9.6E+00<br>3.5E-01 | 0.0005                           | 0.005        | NE         | NE                  | 3.5E-01            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 1,2-Dibromoethane                                     | 5.3E-02            | 0.0005                           | 0.005        | NE         | NE                  | 5.3E-02            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 1.2-Dichlorobenzene                                   | 5.6E+01            | 0.0005                           | 0.005        | NE         | NE                  | 5.6E+01            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 1,2-Dichloropronane                                   | 2.7E-01<br>1.8E+00 | 0.0005                           | 0.005        | NE         | NE                  | 1.8E+00            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 1,2-Dimethylbenzene (o-Xylene)                        | 3.3E+03            | 0.0005                           | 0.005        | NE         | NE                  | 3.3E+03            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 1,3,5-Trimethylbenzene                                | 8.3E+00            | 0.0005                           | 0.005        | NE         | NE                  | 8.3E+00<br>5.1E+00 | 0.005 1 U             |                        |                      |                  |                  |
|                         | 1,3-Dichloropenzene                                   | 3.0E+00            | 0.0005                           | 0.005        | NE         | NE                  | 3.0E+00            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 1,4-Dichlorobenzene                                   | 2.7E+01            | 0.0005                           | 0.005        | NE         | NE                  | 2.7E+01            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 2,2-Dichloropropane                                   | 1.7E+00            | 0.0005                           | 0.005        | NE         | NE                  | 1.7E+00<br>2.6E+03 | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 2-Butanone<br>2-Chloroetbyl vinyl ether               | 2.1E-01            | 0.0020                           | 0.010        | NE         | NE                  | 2.1E-01            | 0.010 1 U             |                        |                      |                  |                  |
| VOLATILES               | 2-Chlorotoluene                                       | 1.5E+02            | 0.0005                           | 0.005        | NE         | NE                  | 1.5E+02            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | 2-Hexanone  | 6.2E+00            | 0.0025                           | 0.010        | NE         | NE<br>NE            | 6.2E+00<br>3.4E-01 | 0.010 1 0 00          |                        |                      |                  |                  |
| VOLATILES               | Acetone   | 1.7E+02            | 0.0050                           | 0.010        | NE         | NE                  | 1.7£+02            | 0.010 1 U             |                        |                      |                  |                  |
| VOLATILES               | Benzene   | 8.8E-01            | 0.0005                           | 0.005        | NE         | NE                  | 8.8E-01            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILE\$              | Bromobenzene  | 1.1E+01            | 0.0005                           | 0.005        | NE         | NE                  | 1.1E+01<br>2.4E+01 | 0.005 1 0             |                        |                      |                  |                  |
| VOLATILES               | Bromodichloromethane                                  | 1.0E+01            | 0.0005                           | 0.005        | NE         | NE                  | 1.0E+01            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | Bromoform   | 3.4E+01            | 0.0005                           | 0.005        | NE         | NE                  | 3.4E+01            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | Bromomethane<br>Corbon disulfido                      | 3.5E-01<br>1.0E+02 | 0.0010                           | 0.010        | NE         | NE                  | 3.5E-01<br>1.0E+02 | 0.010 1 0             |                        |                      |                  |                  |
| VOLATILES               | Carbon tetrachloride                                  | 3.5E-01            | 0.0005                           | 0.005        | NE         | NE                  | 3.5E-01            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | Chlorobenzene   | 4.0E+01            | 0.0005                           | 0.005        | NE         | NE                  | 4.0E+01            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | Chloroethane  | 1.1E+03<br>3.1E-01 | 0.0010                           | 0.010        | NE         | NE                  | 1.1E+03<br>3.1E-01 | 0.010 1 U             |                        |                      |                  |                  |
| VOLATILES               | Chloromethane   | 2.3E-01            | 0.0020                           | 0.010        | NE         | NE                  | 2.3E-01            | 0.010 1 U             |                        |                      |                  |                  |
| VOLATILES               | cis-1,2-Dichloroethene                                | 1.2E+02            | 0.0005                           | 0.005        | NE         | NE                  | 1.2E+02            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | cis-1,3-Dichloropropene<br>Dibromochloromethane       | 1.2E+00<br>7.6E+00 | 0.0005                           | 0.005        | NE         | NE                  | 7.6E+00            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | Dibromomethane  | 1.9E+01            | 0.0005                           | 0.005        | NE         | NE                  | 1.9E+01            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | Dichlorodifluoromethane                               | 2.2E+02            | 0.0010                           | 0.010        | NE         | NE                  | 2.2E+02            | 0.010 1 U             |                        |                      |                  |                  |
| VOLATILES               | Enylbenzene<br>Hexachlorobutadiene                    | 4.3E+02<br>1.6E+00 | 0.0005                           | 0.005        | NE         | NE                  | 4.3E+02<br>1.6E+00 | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | Isopropylbenzene                                      | 5.4E+02            | 0.0005                           | 0.005        | NE         | NE                  | 5.4E+02            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | m,p-Xylenes   | 2.3E+02            | 0.0005                           | 0.005        | NE         | NE                  | 2.3E+02            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | Methyl isobutyl kelbrie<br>Methylene chloride         | 1.3E+U3<br>8.7E+00 | 0.0025                           | 0.005        | NE         | NE                  | 8.7E+00            | 0.002 1 J B           |                        |                      |                  |                  |
| VOLATILES               | Naphthalene   | 1.8E+01            | 0.0005                           | 0.01         | NE         | NE                  | 1.8E+01            | 0.010 1 U             |                        |                      |                  |                  |
| VOLATILES               |   | 2.7E+02            | 0.0005                           | 0.005        | NE         | NE                  | 2.7E+02            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | AISOPROPYLIENZENE                                     | 3.26+02<br>4.2E+02 | 0.0005                           | 0.005        | NE         | NE                  | 4.2E+02            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | sec-BUTYLBENZENE                                      | 3.0E+02            | 0.0005                           | 0.005        | NE         | NE                  | 3.0E+02            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | Styrene   | 1.3E+03            | 0.0005                           | 0.005        | NE         | NE                  | 1.3E+03<br>2.6E±02 | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | Tetrachloroethene                                     | 6.0E+00            | 0.0005                           | 0.005        | NE         | NE                  | 6.0E+00            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | Toluene   | 1.1E+03            | 0.0005                           | 0.005        | NE         | NE                  | 1.1E+03            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | trans-1,2-Dichloroethene                              | 1.4E+02            | 0.0005                           | 0.005        | NE         | NE                  | 1.4E+02<br>1.8E+00 | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | Trichloroethene                                       | 3.7E+00            | 0.0005                           | 0.005        | NE         | NE                  | 3.7E+00            | 0.005 1 U             |                        |                      |                  |                  |
| VOLATILES               | Trichlorofluoromethane                                | 2.6E+02            | 0.0010                           | 0.01         | NE         | NE                  | 2.6E+02            | 0.010 1 U             |                        |                      |                  |                  |
| VOLATILES<br>VOLATILES  | Vinyi acetate<br>Vinyi chloride                       | 5.7E+01<br>3.6E-02 | 0.0010                           | 0.01         |            | NE                  | 3.6E-02            | 0.010 1 U UJ          |                        |                      |                  |                  |

VOLATILES Vinyl chloride Footnotes are shown on cover page to Tables Section.

Shaw Environmental, Inc.



# Table 4-88 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-069

|                  |                                |                    |             | oump         |            |                |            |                   |                   |
|------------------|--------------------------------|--------------------|-------------|--------------|------------|----------------|------------|-------------------|-------------------|
| [SUMP] = SUMP069 |                                |                    |             |              |            |                |            | 35SUMP069-SB01    | 35SUMP069-SB01    |
| LOCATION_CODE    |                                | TOFO               |             |              | Back       | hauono         | Applicible | 35-SMP069-SB01-01 | 35-SMP069-SB01-02 |
| SAMPLE_NU        |                                | Rick-Based         |             |              | Concentra  | ations in Soil | TCEQ       | 9/21/2006         | 9/21/2006         |
| DEPTH            |                                | Screening          | Method      | Method       | (95% UF    | PL, mg/kg)     | Risk-Based | 0.5 - 0.5 Ft      | 6.5 - 6.5 Ft      |
| SAMPLE PURPOSE   |                                | Value              | Detection   | Quantitation | Surface    | Subsurface     | Screening  | REG               | REG               |
| Test Group       | Parameter (Units = mg/kg)      | (RBSV)"            | Limít (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft   | Value      | Result DIL LQ VQ  | Result DIL LQ VQ  |
| PERC             | Perchlorate                    | 1.4E+01            | 0.005       | 0.010        | NE         | NE             | 1.4E+01    | 0,050 5 U U       | 0.040 4 U U       |
| SOLIDS           | Percent Solids                 | NE                 | NE          | NE           | NE         | NE             |            | 89.9 1            | 85.9 1            |
| VOLATILES        | 1,1,1,2-Tetrachloroethane      | 5.2E+00            | 0.0005      | 0.005        | NE         | NE             | 5.22+00    |                   |                   |
| VOLATILES        | 1,1,1-Trichloroethane          | 2.36+02            | 0.0005      | 0.005        | NE         | NE             | 2.35+02    |                   | 0.000 1 U U       |
| VOLATILES        | 1,1,2,2-1 etrachioroethane     | 0.75.01            | 0.0005      | 0.005        | NE         |                | 9.7E-01    |                   | 0.006 1 U U       |
| VOLATILES        | 1,1,2- Inchioroethane          | 8 9E+01            | 0.0000      | 0.005        | NE         | NE             | 8.9E+01    |                   | 0.006 1 U U       |
| VOLATILES        | 1 1-Dichloroethene             | 2.7E+01            | 0.0005      | 0.005        | NE         | NE             | 2.7E+01    |                   | 0.006 1 U U       |
| VOLATILES        | 1.1-Dichloropropene            | 9.9E-01            | 0.0005      | 0.005        | NE         | NE             | 9.9E-01    |                   | 0.006 1 U U       |
| VOLATILES        | 1,2,3-Trichtorobenzene         | 4.2E+01            | 0.0005      | 0.005        | NE         | NE             | 4.2E+01    |                   | 0.006 t U U       |
| VOLATILES        | 1,2,3-Trichloropropane         | 9.2E-02            | 0.0010      | 0.005        | NE         | NE             | 9.2E-02    |                   | 0.006 1 U U       |
| VOLATILES        | 1,2,4-Trichlorobenzene         | 1.4E+02            | 0.0005      | 0.005        | NE         | NE             | 1.4E+02    |                   | 0.006 1 0 0       |
| VOLATILES        | 1,2,4-Trimethylbenzene         | 9.6E+00            | 0.0005      | 0.005        | NE         | NE             | 9.6E+00    |                   |                   |
| VOLATILES        | 1,2-Dibromo-3-chloropropane    | 3.5E-01            | 0.0020      | 0.005        | NE         | NE             | 3.52-01    |                   |                   |
| VOLATILES        | 1.2-Dibromoethane              | 5.3E-02            | 0.0005      | 0.005        | NE         | NE             | 5.35-02    |                   | 0.000 1 0 0       |
| VOLATILES        | 1,2-Dichlorobenzene            | 5.6E+01            | 0.0005      | 0.005        | NE         |                | 275-01     |                   | 0.006 1 U U       |
| VOLATILES        | 1,2-Dichloroestane             | 1.85+00            | 0.0005      | 0.005        | NE         | NE             | 1.8E+00    |                   | 0.006 1 U U       |
| VOLATILES        | 1,2-Dimethylberzene (o.Xylene) | 336+03             | 0.0005      | 0.005        | NE         | NE             | 3.3E+03    |                   | 0.006 1 U U       |
| VOLATILES        | 1.3.5-Tomethylbenzene          | 8.3E+00            | 0.0005      | 0.005        | NE         | NË             | 8.3E+00    |                   | 0.006 1 U U       |
| VOLATILES        | 1.3-Dichlorobenzene            | 5.1E+00            | 0.0005      | 0.005        | NE         | NE             | 5.1E+00    |                   | 0.006 1 U U       |
| VOLATILES        | 1.3-Dichloropropane            | 3.0E+00            | 0.0005      | 0.005        | NE         | NE             | 3.0E+00    |                   | 0.006 1 U U       |
| VOLATILES        | 1,4-Dichlorobenzene            | 2.7E+01            | 0.0005      | 0.005        | NE         | NE             | 2.7E+01    |                   | 0.006 1 U U       |
| VOLATILES        | 2,2-Dichloropropane            | 1.7E+00            | 0.0005      | 0.005        | NE         | NE             | 1.7E+00    |                   | 0.006 1 U U       |
| VOLATILES        | 2-Butanone                     | 2.6E+03            | 0.0025      | 0.010        | NE         | NE             | 2.6E+03    |                   |                   |
| VOLATILES        | 2-Chloroethyl vinyl ether      | 2.1E-01            | 0.0020      | 0.010        | NE         | NE             | 2.16-01    |                   |                   |
| VOLATILES        | 2-Chlorotoluene                | 1.5E+02            | 0.0005      | 0.005        | NE         | NE             | 1.02+02    |                   | 0.000 1 0 0       |
| VOLATILES        | 2-Rexanone                     | 2 45 61            | 0.0025      | 0.010        | NE         |                | 345-01     |                   | 0,006 1 0 0       |
| VOLATILES        | Acetone                        | 175+02             | 0.0050      | 0.010        | NE         | NE             | 1.7E+02    |                   | 0.011 1 U U       |
| VOLATILES        | Benzene                        | 8.8E-01            | 0.0005      | 0.005        | NE         | NE             | 8.8E-01    |                   | 0.006 1 U U       |
| VOLATILES        | Bromobenzene                   | 1.1E+01            | 0.0005      | 0.005        | NE         | NE             | 1.1E+01    |                   | 0.006 1 U U       |
| VOLATILES        | Bromochloromethane             | 2.4E+01            | 0.0005      | 0.005        | NE         | NE             | 2.4E+01    |                   | 0.006 1 U U       |
| VOLATILES        | Bromodichloromethane           | 1.0E+01            | 0.0005      | 0.005        | NE         | NE             | 1.0E+01    |                   | 0.006 1 U U       |
| VOLATILES        | Bromoform                      | 3.4E+01            | 0.0005      | 0.005        | NE         | NE             | 3.4E+01    | 1                 | 0.006 1 0 0       |
| VOLATILES        | Bromomethane                   | 3.5E-01            | 0.0010      | 0.010        | NE         | NE             | 3.5E-01    |                   |                   |
| VOLATILES        | Carbon disulfide               | 1.UE+U2            | 0.0005      | 0.005        | NE         | NE             | 3.55-01    |                   | 0.000 1 0 0       |
| VOLATILES        | Carbon tetrachionde            | 3.50-01            | 0.0005      | 0.005        | NE         | NE             | 4.05+01    |                   | 0.006 1 U U       |
| VOLATILES        | Chloroothang                   | 1 16+03            | 0.0003      | 0.000        | NE         | NE             | 1.15+03    |                   | 0.011 1 U U       |
| VOLATILES        | Chloroform                     | 3 1E-01            | 0.0005      | 0.005        | NE         | NE             | 3.1E-01    |                   | 0.006 1 U U       |
| VOLATILES        | Chloromethane                  | 2.3E-01            | 0.0020      | 0.010        | NE         | NE             | 2.3E-01    |                   | 0.011 1 U U       |
| VOLATILES        | cis-1,2-Dichloroethene         | 1.2E+02            | 0.0005      | 0.005        | NE         | NE             | 1.2E+02    |                   | 0.006 1 U U       |
| VOLATILES        | cis-1,3-Dichloropropene        | 1.2E+00            | 0.0005      | 0.005        | NE         | NE             | 1.2E+00    |                   | 0.006 1 U U       |
| VOLATILES        | Dibromochloromethane           | 7.6E+00            | 0.0005      | 0.005        | NE         | NE             | 7.6E+00    |                   | 0.006 1 U U       |
| VOLATILES        | Dibromomethane                 | 1.9E+01            | 0.0005      | 0.005        | NE         | NE             | 1.9E+01    | 1                 | 0.005 1 0 0       |
| VOLATILES        | Dichlorodifluoromethane        | 2.2E+02            | 0.0010      | 0.010        | NE         | NE             | 2.2E+02    |                   |                   |
| VOLATILES        | Ethylbenzene                   | 4.3E+02            | 0.0005      | 0.005        | NE         | NE             | 4.3E+02    | {                 | 0.006 1 U U       |
| VOLATILES        | hexactiorobulaciene            | 1.0E+00<br>6.4E+02 | 0.0005      | 0.005        |            |                | 5.4E+02    | 1                 | 0.006 1 U U       |
| VOLATILES        | m p.Xvenes                     | 2.35+02            | 0.0005      | 0.005        | NE         | NE             | 2.3E+02    |                   | 0.006 1 U U       |
| VOLATILES        | Methyl isobutyl ketone         | 1,3E+03            | 0.0025      | 0.01         | NE         | NÉ             | 1.3E+03    | 1                 | 0.011 1 U U       |
| VOLATILES        | Methylene chloride             | 8.7E+00            | 0.0010      | 0.005        | NE         | NE             | 8.7E+00    | 1                 | 0.006 1 U U       |
| VOLATILES        | Naphthalene                    | 1.8E+01            | 0.0005      | 0.01         | NE         | NE             | 1.8E+01    | · ·               | 0.011 1 U U       |
| VOLATILES        | n-BUTYLBENZENE                 | 2.7E+02            | 0.0005      | 0.005        | NE         | NE             | 2.7E+02    |                   | 0.006 1 U U       |
| VOLATILES        | n-PROPYLBENZENE                | 3.2E+02            | 0.0005      | 0.005        | NE         | NE             | 3.2E+02    | 1                 | 0.006 1 U U       |
| VOLATILES        | p-ISOPROPYLTOLUENE             | 4.2E+02            | 0.0005      | 0.005        | NE         | NE             | 4.2E+02    | 1                 |                   |
| VOLATILES        | SEC-BUIYLBENZENE               | 3.05+02            | 0.0005      | 0.005        | NE         | NE             | 1 35+02    | 1                 |                   |
|                  |                                | 1.32+03            | 0.0005      | 0.000        |            |                | 2 65+02    | 1                 | 0.006 1 U U       |
| VULATILES        | IEIPOUTTEDENZEINE              | 2.00702            | 0.0003      | 0.000        | 144        | INC            | 1 2.02.02  | 1                 | 0.000 1 0 0       |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Nach is An an an Article and A

| 000665 | 70 |
|--------|----|
|--------|----|

| Table 4-88   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump-069   |

| [SUMP] = SUMP069<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                            | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backg<br>Concentra<br>(95% UP<br>Surface | rround<br>tions in Soil<br><u>L, mg/kg)</u><br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP069-SB01<br>35-SMP069-SB01-01<br>9/21/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP069-SB01<br>35-SMP069-SB01-02<br>9/21/2006<br>6.5 - 6.5 Ft<br>REG |
|--|----------------------------|--|---------------------|------------------------|--|---|--|---|---|
| Test Group   | Parameter (Units = mg/kg)  | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DIL LO VO  |
| VOLATILES  | Tetrachloroethene          | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 6.0E+00                                      |   |   |
| VOLATILES  | Toluene                    | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.1E+03                                      |   | 0.006 1 0 0   |
| VOLATILES  | trans-1 2-Dichloroethene   | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.4E+02                                      |   | 0.006 1 U U   |
| VOLATILES  | trans-1.3. Dichloropropene | 1 8E+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.8E+00                                      |   | 0.006 1 U U   |
| VOLATILES  | Trablomethana              | 3 7E+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 3.7E+00                                      |   | 0.006 1 U U   |
| VOLATILES  | Trichlorofluoromothano     | 2.65+02                                  | 0.0010              | 0.01                   | NE                                       | NE  | 2.6E+02                                      |   | 0.011 1 U U   |
| VULATILES  | Incinorandoromethane       | 675+01                                   | 0.0010              | 0.01                   | NE                                       | NE  | 5.7E+01                                      |   | 0.011 1 U UJ  |
| VOLATILES  | vinyi acetate              | 3.7 - 101                                | 0.0010              | 0.01                   | NE                                       | NE  | 3.6E-02                                      |   | 0.011 1 U U   |
| VOLATILES  | Vinyl chlonde              | 3.02-02                                  | 0.0010              | 0.01                   |  |   | 0.02.04                                      |   |   |

Shaw Environmental, Inc.

00066571

#### Table 4-89

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|  |   |  |   |   |  |  | Sump   | 70   |   |  |  |                  |
|--|---|--|---|---|--|--|--|--|---|--|--|------------------|
| [SUMP] = SUMP070<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE   |   | TCEQ<br>Risk-Based<br>Screening Method Method<br>Value Detection Quantitation  |   | Background<br>Concentrations in Soit<br>(95% UPL, mg/kg)<br>Surface Subsurface    |  | Applicble<br>TCEQ<br>Risk-Based<br>Screening   | 35SUMP070-SB01<br>35-SMP70-SB01-02<br>9/14/2006<br>8 - 8 Ft<br>REG | 35SUMP070-SB02<br>35-SMP70-SB02-01<br>9/14/2006<br>0.5 - 0.5 Ft<br>REG   | 355UMP070-SB02<br>35-SMP70-SB02-02<br>9/14/2006<br>8 - 8 Ft<br>REG  | 47SB23<br>47SB23(0-0_5)<br>6/3/2000<br>0 - 0.5 Ft<br>REG   | 47SB23<br>47SB23(1-2)<br>6/3/2000<br>1 - 2 Ft<br>REG |                  |
| Test Gmup  | Parameter (Units = mo/kc  | (RBSV)*  | Limit (MDL)   | Limit (MQL)   | 0 - 0.5 Ft   | 1.5 - 2.5 Ft   | Value  | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ                                     | Result DIL LQ VQ |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS | Aluminum<br>Aluminum<br>Arsenic<br>Barlum<br>Beryllium<br>Cadmium<br>Cadmium<br>Calcium<br>Chromium<br>Cobalt<br>Cobalt<br>Copper<br>Iron | 1.6E+04<br>7.3E+00<br>2.0E+01<br>2.6E+03<br>4.6E+00<br>5.2E+00<br>NE<br>5.9E+03<br>1.5E+03<br>1.0E+03<br>NE<br>5.0E+02 | 10.000<br>0.500<br>0.075<br>0.075<br>0.012<br>0.025<br>NA<br>0.100<br>0.125<br>0.150<br>NA<br>0.500 | 20.00<br>0.10<br>0.30<br>0.50<br>0.10<br>NA<br>0.40<br>0.50<br>0.60<br>NA<br>5.00 | 1.6E+04<br>9.4E-01<br>4.8E+00<br>1.5E+02<br>6.5E-01<br>1.4E+00<br>NA<br>2.7E+01<br>7.2E+00<br>5.5E+00<br>NA<br>2.3E+01 | 2.1E+04<br>1.6E+00<br>5.5E+00<br>8.5E+01<br>7.7E-01<br>4.0E-01<br>NA<br>3.0E+01<br>5.6E+00<br>9.2E+00<br>NA<br>1.1E+01 | 1.6E+04<br>7.3E+00<br>2.0E+01<br>2.6E+03<br>4.6E+00<br>5.2E+00<br> | 7520 1<br>0.107 1 U<br>0.320 1 U<br>35.1 1<br>0.789 1<br>0.126 1 J J<br>1190 1<br>9.420 1<br>23.600 1<br>4.700 1<br>6990.000 1<br>4.45 1 | 5700 1<br>0.106 f U<br>1.120 1<br>74.2 1<br>0.387 1<br>0.174 1 J J<br>928 1<br>10.100 1<br>4.960 1<br>5.070 1<br>8130.000 1<br>17 1 | 6620         1           0.107         1         U           0.322         1         U           35.1         1         0.073           0.073         1         J         J           1040         1         1           7.770         1         4.740         1           2.490         1         4720.000         1           1.61         1         1         1 |  |                  |
| METALS   | Magnesium   | NE   | NA  | NA  | NA   | NA   |  | 1710.000 1   | 421.000 1   | 1070.000 1   |  |                  |
| METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS<br>METALS   | Manganese<br>Mercury<br>Nickel<br>Potassium<br>Selenium<br>Silver<br>Sodium<br>Thallium<br>Vanadium<br>Zinc                               | 1.7E+03<br>1.1E-02<br>1.9E+02<br>NE<br>1.3E+02<br>4.7E+01<br>NE<br>2.0E+00<br>4.8E+01<br>5.9E+03                       | 0.050<br>0.010<br>0.200<br>NA<br>0.100<br>0.050<br>NA<br>0.010<br>0.125<br>0.625                    | 0.20<br>0.25<br>0.80<br>NA<br>0.20<br>0.20<br>NA<br>0.02<br>0.50<br>2.50          | 1.3E+03<br>8.2E-02<br>7.0E+00<br>NA<br>3.5E+00<br>3.1E-01<br>NA<br>4.7E-01<br>3.2E+01<br>6.2E+01                       | 2.0E+02<br>3.6E-01<br>1.2E+01<br>NA<br>5.6E+00<br>3.7E-01<br>NA<br>NE<br>4.5E+01<br>2.0E+01                            | 1.7E+03<br>2.5E-01<br>1.9E+02<br>                                  | 146 1<br>0.0119 1 J J<br>18.600 1<br>529.000 1<br>1.690 1<br>813.000 1<br>0.057 1<br>9.250 1<br>68.600 1                                 | 320 1<br>0.0236 1 J J<br>3.940 1<br>224.000 1<br>1.540 1 U<br>16.800 1 J J<br>0.050 1<br>17.900 1<br>24.600 1                       | 104 1<br>0.249 1 U<br>13.000 1<br>331.000 1<br>0.215 1 U<br>1.590 1 U<br>667.000 1<br>0.045 1<br>4.980 1<br>29.400 1   |  |                  |
| PERC   | Perchlorate   | 1.4E+01  | 0.005   | 0.010   | NE   | NE   | 1.4E+01  | I  |   |  | 0.020 1  | 0.006 1 < U      |

Shaw Environmental, Inc.

### 00066572

Table 4-90

### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-71

|   |   |          |             | oun  | ih-i i     |  |  |  |                  |
|---|---|----------|-------------|--|------------|--|--|--|------------------|
| [SUMP] = SUMP071<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE                        | TCEQ<br>Risk-Based<br>Screening Method Method<br>Value Detection Quantilation |          |             | Background<br>Concentrations in Soil<br>(95% UPL, mg/kg)<br>Surface Subsurface |            | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP071-SB01<br>35-SMP71-SB01-01<br>9/14/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP071-SB01<br>35-SMP71-SB01-02<br>9/14/2006<br>7 - 7 Ft<br>REG |                  |
| Test Groun  | Parameter (Units = mo/kg)   | (RBSV) * | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft                                 | Value  | Result DIL LQ VQ   | Result DIL LQ VQ |
| PERC  | Perchlorate   | 1.4E+01  | 0.005       | 0.010  | NE         | NË   | 1.4E+01  | 0.050 5 U  | 0.200 20 U       |
| SOLIDS  | Percent Solids  | NE       | NE          | NE   | NE         | NË   |  | 92,300 1   | 84.200 1         |
| the second second second second second second second second second second second second second second second se |   |          |             |  |            |  |  |  |                  |
Shaw Environmental, Inc.

# 00066573

| Table 4-91   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump-72  |

| [SUMP] = SUMP072<br>SLOCATION<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backy<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>1., mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP072-SB01<br>35-SMP72-SB01-01<br>9/14/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP072-SB01<br>35-SMP72-SB01-02<br>9/14/2006<br>7 - 7 Ft<br>REG |
|--|---------------------------|--|---------------------|------------------------|--|---|--|--|--|
| Test Group   | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ   | Result DIL LQ_VQ   |
| PERC   | Perchlorate               | 1.4E+01                                  | 0.500               | 0.010                  | NE                                       | NE  | 1.4E+01                                      | 0.040 4 U  | 0.010 1 U  |
| SOLIDS   | Percent Solids            | NE                                       | NE                  | NE                     | NE                                       | NE  | -  | 86,100 1   | 85.500 1   |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066574

## Table 4-92 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Value

| Sump-73 |  |
|---------|--|
|         |  |

| SLOCATION        |   |                    |             |              |                        |               |                    | 35SUMP073-SB01          | 35SUMP073-SB01    | 35SUMP073-SB02    | 35SUMP073-SB02    |
|------------------|---|--------------------|-------------|--------------|------------------------|---------------|--------------------|-------------------------|-------------------|-------------------|-------------------|
| SAMPLE_NO        |   | TCEQ               |             |              | Backg                  | ground        | Applicble          | 35-SMP073-SB01-01       | 35-SMP073-SB01-02 | 35-SMP073-SB02-01 | 35-SMP073-SB02-02 |
| SAMPLE_DATE      |   | Risk-Based         | Method      | Method       | Concentration (05% LIP | tions in Soil | ICEQ<br>Risk-Based | 9/21/2006<br>0.5-0.5.Ft | 3-3 Ft            | 0.5 - 0.5 Ft      | 3.5 - 3.5 Ft      |
| SAMPLE PURPOSE   |   | Value              | Detection   | Quantitation | Surface                | Subsurface    | Screening          | REG                     | REG               | REG               | REG               |
| Test Group       | Parameter (Units = mg/kg)                             | (RBSV) *           | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft             | 1.5 - 2.5 Ft  | Value              | Result DIL LQ VQ        | Result DIL LQ VC  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| METALS           | Atuminum  | 1.6E+04            | 10.000      | 20.00        | 1.63E+04               | 2.08E+04      | 1.6E+04            | 13100.000 1             | 9520.000          | 10000.000 1       | 9980.000 1        |
| METALS           | Antimony  | 7.3E+00            | 0.500       | 0.10         | 9.40E-01               | 1.602+00      | 7.3E+00<br>2.0E+01 | 2.020 1                 | 2 200 1           | 6.480 1           | 2300 1            |
| METALS           | Barium  | 2.02+01            | 0.075       | 0.30         | 1.52E+02               | 8.55E+01      | 2.6E+03            | 177.000 1               | 84.400 1          | 115.000 1         | 59.700 1          |
| METALS           | Bervilium   | 4.6E+00            | 0.012       | 0.50         | 6.45E-01               | 7.66E-01      | 4.6E+00            | 0,798 1                 | 0.533 1           | 0.643 1           | 0.756 1           |
| METALS           | Cadmium   | 5.2E+00            | 0.025       | 0.10         | 1.40E+00               | 4.00E-01      | 5.2E+00            | 0.217 1 J J             | 0.160 1 J J       | 0.379 1 J J       | 0.063 1 J J       |
| METALS           | Calcium   | NE                 | NA          | NA           | NA                     | NA            |                    | 898.000 1               | 2570.000 1        | 2390.000 1        | 1610.000 1        |
| METALS           | Chromium  | 5.9E+03            | 0.100       | 0.40         | 2.66E+01               | 3.01E+01      | 5.9E+03            | 12.600 1                | 11.600 1          | 13.500 1          | 5 500 1           |
| METALS           | Copper  | 1.02+03            | 0.125       | 0.50         | 5.55E+00               | 9.25E+00      | 1.0E+03            | 4 470 1                 | 5.080 1           | 50,400 1          | 3.850 1           |
| METALS           | Iron  | NE                 | NA          | NA           | NA                     | NA            |                    | 12900.000 1             | 11900.000 1       | 13900.000 1       | 25500.000 1       |
| METALS           | Lead  | 5.0E+02            | 0.500       | 5.00         | 2.26E+01               | 1.14E+01      | 5.0E+02            | 9.210 1                 | 15.400 1          | 17.700 1          | 7.450 1           |
| METALS           | Magnesium   | NE                 | NA          | NA           | NA                     | NA            |                    | 1290.000 1              | 773.000 1         | 904.000 1         | 539.000 1         |
| METALS           | Manganese   | 1.7E+03            | 0.050       | 0.20         | 1.25E+03<br>9.19E-02   | 2.018+02      | 1.72+03            | 173,000 1               | 114.000 1         | 0.273 1 .1 .1     | 0.044 1           |
| METALS           | Nickel  | 1.1E-02            | 0.200       | 0.80         | 6.98E+00               | 1.16E+01      | 1.9E+02            | 13.200 1                | 8,260 1           | 9.310 1           | 5.780 1           |
| METALS           | Potassium   | NE                 | NA          | NA           | NA                     | NA            |                    | 505.000 1               | 421.000 1         | 644.000 1         | 331.000 1         |
| METALS           | Selenium  | 1.3E+02            | 0.100       | 0.20         | 3.48E+00               | 5.57E+00      | 1.3E+02            | 0.320 1                 | 0.239 1           | 0.470 1           | 0.265 1           |
| METALS           | Silver  | 4.7E+01            | 0.050       | 0.20         | 3.10E-01               | 3.70E-01      | 4.7E+01            | 1,690 1 U               | 1.710 1 U         | 1.780 1 U         | 1.700 1 U         |
| METALS           | Sodium  |                    | NA<br>0.010 | NA<br>0.00   | NA<br>4 70E 04         | NA            | 2 05+00            | 269.000 1               | 90.100 1          | 40.700 1          | 0.062 1           |
| METALS<br>METALS | Vanadium  | 2.0E+00<br>4.8E+01 | 0.010       | 0.02         | 3.21E+01               | 4 46F+01      | 4 8E+01            | 22.400 1                | 19,100 1          | 22,700 1          | 44,700 1          |
| METALS           | Zinc  | 5.9E+03            | 0.625       | 2.50         | 6.16E+01               | 2.02E+01      | 5.9E+03            | 45.800 1                | 45.800 1          | 90.800 1          | 17.000 1          |
| PERC             | Perchlorate   | 1.4E+01            | 0.600       | 0.010        | NE                     | NE            | 1.4E+01            | 0.272 4                 | 0.009 1 J J       | 0.040 4 U         | 0.039 4 U         |
| RANGE_ORGANICS   | Carbon Range C12-C28                                  | 4.0E+02            | 25          | 50           | NE                     | NE            | 4.0E+02            | 58.100 1 U              | 55.900 1 U        | 60.200 1 U        | 58.900 1 U        |
| RANGE_ORGANICS   | CARBON RANGE C28-C35                                  | 4.0E+02            | 25          | 50           | NE                     | NE            | 4.0E+02            | 31.200 1 J B            | 29.700 1 J E      | 60,200 1 0        | 58,900 1 1        |
|                  | Carbon Range Co-C12<br>Percent Solids                 | NE                 | NE<br>NE    | NE           | NE                     | NÉ            | 1.76+02            | 85.000 1                | 89.400 1          | 81,800 1          | 84.700 1          |
| VOLATILES        | 1,1,1,2-Tetrachloroethane                             | 5,2E+00            | 0.0005      | 0.005        | NE                     | NE            | 5.2E+00            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 1.1.1-Trichtoroethane                                 | 2.3E+02            | 0.0005      | 0.005        | NE                     | NE            | 2.3E+02            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 1,1,2,2-Tetrachloroethane                             | 5.1E-01            | 0.0005      | 0.005        | NE                     | NE            | 5,1E-01            |                         | 0.005 1 U         |                   | 0.005 1 0         |
| VOLATILES        | 1,1,2-Enchioroethane                                  | 9.75-01            | 0.0005      | 0.005        | NE                     | NE            | 9.75-01            |                         | 0.005 1 0         |                   | 0.005 1 U         |
| VOLATILES        | 1.2-Dichloroetheae                                    | 1.2E+02            | 0.0005      | 0.005        | NE                     | NE            | 1.2E+02            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 1,1-Dichloropropene                                   | 9.9E-01            | 0.0005      | 0.005        | NE                     | NE            | 9.9E-01            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 1,2,3-Trichlorobenzene                                | 4.2E+01            | 0.0005      | 0.005        | NE                     | NE            | 4.2E+01            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 1,2,3-Trichloropropane                                | 9.2E-02            | 0.0010      | 0.005        | NE                     | NE            | 9.2E-02            |                         | 0.005 1 U         |                   | 0.005 1 0         |
| VOLATILES        | 1,2,4-Trimethydhenzene                                | 1.46+02            | 0.0005      | 0.005        | NE                     | NE            | 9.65+00            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 1.2-Dibromo-3-chloropropane                           | 3.5E-01            | 0.0020      | 0.005        | NE                     | NE            | 3.5E-01            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 1,2-Dibromoethane                                     | 5.3E-02            | 0.0005      | 0.005        | NE                     | NE            | 5.3E-02            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 1,2-Dichlorobenzene                                   | 5.6E+01            | 0.0005      | 0.005        | NE                     | NE            | 5.6E+01            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 1,2-Dichloroethane                                    | 2.7E-01            | 0.0005      | 0.005        | NE                     | NE            | 2.7E-01            |                         | 0.005 1 U         |                   | 0.005 1 0         |
| VOLATILES        | 1,2-Dicnioropropane<br>1,2-Dimethylbenzene (o-Xylene) | 1.8E+00<br>3.3E+03 | 0.0005      | 0.005        | NE                     |               | 3.35+03            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 1.3.5-Trimethylbenzene                                | 8.3E+00            | 0.0005      | 0.005        | NE                     | NE            | 8.3E+00            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 1,3-Dichtorobenzene                                   | 5.1E+00            | 0.0005      | 0.005        | NE                     | NE            | 5.1E+00            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 1,3-Dichloropropane                                   | 3.0E+00            | 0.0005      | 0.005        | NE                     | NE            | 3.0E+00            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 1.4-Dichlorobenzene                                   | 2.7E+01            | 0.0005      | 0.005        | NE                     | NE            | 2.7E+01            |                         | 0.005 1 0         |                   | 0.005 1 0         |
| VOLATILES        | 2,2-Dichloroproparte<br>2-Butanone                    | 2.6E+03            | 0.0005      | 0.003        | NE                     | NE            | 2.6E+03            |                         | 0.010 1 1         |                   | 0.010 1 U         |
| VOLATILES        | 2-Chloroethyl vinyl ether                             | 2.1E-01            | 0.0020      | 0.010        | NE                     | NE            | 2.1E-01            |                         | 0.010 1 U         |                   | 0.010 1 U         |
| VOLATILES        | 2-Chlorotoluene                                       | 1.5E+02            | 0.0005      | 0.005        | NÉ                     | NE            | 1.5E+02            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | 2-Hexanone  | 6.2E+00            | 0.0025      | 0.010        | NE                     | NE            | 6.2E+00            |                         | 0.010 1 U U       | 1                 | 0.010 1 U UJ      |
| VOLATILES        | 4-Chlorotoluene                                       | 3.4E-01            | 0.0005      | 0.005        |                        | NE            | 3.4E-01            |                         | 0.005 1 U         |                   | 0.005 1 1         |
| VOLATILES        | Renzene   | 1.7E+02<br>8.8E-01 | 0.0050      | 0.010        | NE                     | NE            | 8.8E-01            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | Bromobenzene  | 1.1E+01            | 0.0005      | 0.005        | NE                     | NE            | 1.1E+01            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | Bromochloromethane                                    | 2.4E+01            | 0.0005      | 0.005        | NE                     | NE            | 2.4E+01            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | Bromodichloromethane                                  | 1.0E+01            | 0.0005      | 0.005        | NE                     | NE            | 1.0E+01            |                         | 0.005 1 U         |                   | 0.005 1 U         |
| VOLATILES        | Bromomothana  | 3.4E+01            | 0.0005      | 0.005        | NE                     | NE            | 3.4E+01<br>3.5E-04 |                         | 0.005 1 0         |                   | 0.000 1 0         |
| VOLATILES        | Carbon disulfide                                      | 3.3E-01<br>1.0E+02 | 0.0010      | 0.005        | NE                     | NE            | 1.0E+02            |                         | 0.005 1 1         |                   | 0.005 1 U         |
| VOLATILES        | Carbon tetrachloride                                  | 3.5E-01            | 0.0005      | 0.005        | NE                     | NE            | 3.5E-01            |                         | 0.005 1 U         |                   | 0.005 1 U         |

;

### Shaw Environmental, inc.

# 00066575

# Table 4-92 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Value

|   | Sump-73   |   |   |  |   |   |  |   |  |   |   |  |  |
|---|---|---|---|--|---|---|--|---|--|---|---|--|--|
| [SUMP] = SUMP073<br>SLOCATION<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_DURPOSE  |   | TCEQ<br>Risk-Based<br>Screening<br>Value  | Method<br>Detection   | Method   | Backg<br>Concentra<br>(95% UP<br>Surface  | ground<br>tions in Soil<br><u>L. mg/kg)</u><br>Subsurface                             | Applicble<br>TCEQ<br>Risk-Based<br>Screening   | 35SUMP073-SB01<br>35-SMP073-SB01-01<br>9/21/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP073-SB01<br>35-SMP073-SB01-02<br>9/21/2006<br>3 - 3 Ft<br>REG  | 35SUMP073-SB02<br>35-SMP073-SB02-01<br>9/21/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP073-SB02<br>35-SMP073-SB02-02<br>9/21/2006<br>3.5 - 3.5 Ft<br>REG   |  |  |
| Test Group  | Parameter (Units = mg/kg)   | (RBSV) *  | Limit (MDL)   | Limit (MQL)  | 0 - 0.5 Ft  | 1.5 - 2.5 Ft  | Value  | Result Dit LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ  | Result Dil, LQ VQ   |  |  |
| Test Group<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES | Parameter (Luits = mg/kg)<br>Chlorobenzene<br>Chloroform<br>Chloroform<br>Chloroform<br>Chloromethane<br>cis-1,2-Dichloropene<br>Dibromochloromethane<br>Dibromomethane<br>Dibromomethane<br>Ethylbenzene<br>Hexachlorobutadiene<br>Isopropylbenzene<br>m,p-Xylenes<br>Methyl isobutyl ketone<br>Methylene chloride<br>Narbthylene chloride | (RBSV)*<br>4.0E+01<br>1.1E+03<br>3.1E-01<br>2.3E-01<br>1.2E+02<br>1.2E+00<br>7.6E+00<br>1.9E+01<br>2.2E+02<br>4.3E+02<br>1.6E+00<br>5.4E+00<br>2.3E+02<br>1.3E+03<br>6.7E+00<br>1.8E+01 | Limit (MDL)<br>0.0005<br>0.0010<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005 | Limit (MGL)<br>0.005<br>0.010<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.010<br>0.005<br>0.005<br>0.010<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.001 0.005<br>0.001 0.005<br>0.001 0.005 0.005 0. | 0-0.5 FT<br>-0.5 FT<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE | 1.5.25H<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE | Value<br>4.0E+01<br>1.1E+03<br>3.1E-01<br>1.2E+02<br>1.2E+02<br>1.2E+00<br>7.6E+00<br>1.9E+01<br>2.2E+02<br>4.3E+02<br>4.3E+02<br>1.6E+00<br>5.4E+02<br>2.3E+02<br>1.3E+03<br>8.7E+00<br>1.8E+01 | Respir Diz LQ VQ  | Nessin         Dic         Dic         Dic           0.005         1         U           0.010         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.005         1         U           0.010         1         U           0.010         1         U | resuit Die Co. vo   | 0.005 1 U<br>0.005 1 U<br>0.010 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U |  |  |
| VOLATILES   | n-BUTYLBENZENE  | 2.7E+02   | 0.0005  | 0.005  | NE  | NE  | 2.7E+02  |   | 0.005 1 U  |   | 0.005 1 U<br>0.005 1 U  |  |  |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES  | n-PROPYLBENZENE<br>p-ISOPROPYLTOLUENE<br>sc-BUTYLBENZENE<br>Styreme<br>tert-BUTYLBENZENE<br>Tetrachloroethene<br>Toluene<br>trans-1,2-Dichloroethene<br>trans-1,3-Dichloropropene<br>Trichloroethene<br>Trichlorofluoromethane  | 3.2E+02<br>4.2E+02<br>3.0E+02<br>1.3E+03<br>2.6E+02<br>6.0E+00<br>1.1E+03<br>1.4E+02<br>1.8E+00<br>3.7E+00<br>2.6E+02   | 0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005  | 0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005  | NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE                        | <sup>2</sup> N N N N N N N N N N N N N N N N N N N                                    | 3.22+02<br>4.22+02<br>3.0E+02<br>1.3E+03<br>2.6E+02<br>6.0E+00<br>1.1E+03<br>1.4E+02<br>1.8E+00<br>3.7E+00<br>2.6E+02<br>5.7E+00   |   | 0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U  |   | 0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U  |  |  |
| VOLATILES   | Vinyl acetate<br>Vinyl chloride   | 5.7E+01<br>3.6E-02  | 0.0010  | 0.01   | NE  | NE  | 5.7E+01<br>3.6E-02   |   | 0.010 1 0 00   |   | 0.010 1 U   |  |  |

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

# 00066576

### Table 4-93 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|  |                                |   |                    |             | •            |                      |                      | Sump-74            |                  |                    | -                                   |                                       |                                       |   |
|--|--------------------------------|---|--------------------|-------------|--------------|----------------------|----------------------|--------------------|------------------|--------------------|-------------------------------------|---------------------------------------|---------------------------------------|---|
| Display         TGC         Display         TGC         Display         Displa   | [SUMP] = SUMP074               |   |                    |             |              |                      |                      | 1                  | }                |                    |                                     |                                       |                                       | 000000000000000000000000000000000000000 |
| Sindred Column         Descentions <thdescentions< th=""></thdescentions<>   | SLOCATION<br>SAMPLE NO         |   | TCEO               |             |              | Back                 | around               | Applichla          | 35SUMP074        | 4-5801<br>\$801-01 | 35SUMP074-SB01<br>35-SMP074-SB01-02 | 35SUMP074-SB01<br>35-SMP074-SB01-02-0 | 35SUMP074-SB02<br>C 35-SMP074-SB02-01 | 355UMP074-SB02<br>35-SMP074-SB02-02     |
| DDT III.<br>monote   | SAMPLE DATE                    |   | Risk-Based         |             |              | Concentra            | ations in Soil       | TCEQ               | 9/21/20          | 06                 | 9/21/2006                           | 9/21/2006                             | 9/21/2006                             | 9/21/2006                               |
| Durch Product (Junk myka)         Desk         Hermin         Ferderal         Hermin         Ferderal         Hermin         Ferderal         Hermin         Ferderal         Hermin         Ferderal         Hermin         Ferderal         Hermin         Ferderal         Hermin         Ferderal         Hermin         Ferderal         Hermin         Ferderal         Hermin         Ferderal         Hermin         Ferderal         Hermin  | DEPTH                          |   | Screening          | Method      | Method       | (95% UF              | L, mg/kg)            | Risk-Based         | 0.5 0.5          | i. Ft              | 4.5 - 4.5 Ft                        | 4.5 - 4.5 Ft                          | 0.5 0.5. Ft                           | 4.5 - 4.5 Ft                            |
| Light Age         Australian         Light Age <thlight age<="" th=""> <thlight age<="" th=""> <t< th=""><th>SAMPLE_PURPOSE</th><th>Demonster (Lisite – mailus)</th><th>Value</th><th>Detection</th><th>Quantitation</th><th>Surface</th><th>Subsurface</th><th>Screening</th><th>REG<br/>Basult Di</th><th></th><th>REG<br/>Desuit Dil 10.14</th><th></th><th></th><th>REG<br/>Recult DK LO VO</th></t<></thlight></thlight>  | SAMPLE_PURPOSE                 | Demonster (Lisite – mailus)                             | Value              | Detection   | Quantitation | Surface              | Subsurface           | Screening          | REG<br>Basult Di |                    | REG<br>Desuit Dil 10.14             |                                       |                                       | REG<br>Recult DK LO VO                  |
| METAG         Admeny         7.56-0         0.50         0.50         0.56         0         0.00         1         3         0.00         1         0         0.00         0         0.00         0         0.00         0         0         0.00         0         0         0.00         0        0         0         0 <th>METALS</th> <th>Aluminum</th> <th>1.6E+04</th> <th>10.000</th> <th>20.00</th> <th>1.63E+04</th> <th>2.08E+04</th> <th>1.6E+04</th> <th>7340.000 1</th> <th></th> <th>11900.000 1</th> <th>8930.000 1</th> <th>9730.000 1</th> <th>8810.000 1</th>   | METALS                         | Aluminum  | 1.6E+04            | 10.000      | 20.00        | 1.63E+04             | 2.08E+04             | 1.6E+04            | 7340.000 1       |                    | 11900.000 1                         | 8930.000 1                            | 9730.000 1                            | 8810.000 1                              |
| METAG       Astric       2.25-01       0.260       0.250       1       J       3.200       1       J       1.200       1       J       0.200       J       J       0.200       J       J       0.200       J       J       0.200       J       J       0.200       J       J       0.200       J       J       0.200       J       J       0.200       J       J       0.200       J       J       0.200       J       J       0.200       J       J       0.200       J       J       0.200       J       J       0.200       J       J       0.200       J       J       0.200       J       J       0.2   | METALS                         | Antimony  | 7.3E+00            | 0.500       | 0.10         | 9.40E-01             | 1.60E+00             | 7.3E+00            | 0.113 1          | U                  | 0.102 1 J J                         | . 0.114 1 U                           | 0.110 t U                             | 0.117 1 U                               |
| METAG         Desylim         4.48-00         0.00         C.26-01         2.48-00         0.00         1         2         0.000         1         2         0.000         1         1         0.000         1         1         0.000         1         1         0.000         1         1         0.000         0.000  | METALS                         | Arsenic   | 2.0E+01            | 0.075       | 0.30         | 4.81E+00             | 5.54E+00             | 2.0E+01            | 1.600 1          |                    | 1.510 1                             | 2.500 1                               | 1.410 1                               | 0.750 1                                 |
| Litz Lag         Capitanin         Litz Coo   | METALS                         | Bendlium  | 2.0E+03<br>4.6E+00 | 0.075       | 0.30         | 1.52E+02<br>6.45E-01 | 6.55E+01<br>7.66E-01 | 2.0E+03<br>4.6E+00 | 0.531 1          | J                  | 0.568 1                             | 0440 1                                | 0.545 1 .1 .1                         | 0718 1                                  |
| LET VA:         Calcum         HE         Mo         MA  | METALS                         | Cadmium   | 5,2E+00            | 0.025       | 0.10         | 1.40E+00             | 4.00E-01             | 5.2E+00            | 0.158 1          | JJ                 | 0.507 1 J                           | _ 0.103 1 J J                         | 0.161 1 J J                           | 0.559 1                                 |
| METAG         Constant         1.95-03         0.10         0.95-03         0.95-04         0.95-04         0.95-05 <th0.95-05< th=""> <th0.95-05< th=""> <th0.95-< td=""><td>METALS</td><td>Calcium</td><td>NË</td><td>NA</td><td>NA</td><td>NA</td><td>NA</td><td>-</td><td>2010.000 1</td><td>I</td><td>548.000 1</td><td>768.000 1</td><td>1330.000 1</td><td>1100.000 1</td></th0.95-<></th0.95-05<></th0.95-05<>   | METALS                         | Calcium   | NË                 | NA          | NA           | NA                   | NA                   | -                  | 2010.000 1       | I                  | 548.000 1                           | 768.000 1                             | 1330.000 1                            | 1100.000 1                              |
| Vierna         Coper         108-10         0.00         1         0.00   | METALS                         | Chromium  | 5.9E+03            | 0.100       | 0.40         | 2.66E+01             | 3.01E+01             | 5.9E+03            | 11.500           |                    | 13.900 1 J                          | -1 11,900 .1                          | 11.500 1                              | 7.200 1                                 |
| Inff         Inff         NA         NA         NA         NA         Inff<         Inff<         Inff<         Inff<         Inff         Inff<         Inff<         I  | METALS                         | Copper  | 1.0E+03            | 0.150       | 0.60         | 5.55E+00             | 9.25E+00             | 1.0E+03            | 3.690            |                    | 3.670 1                             | 4.860 1                               | 3.460 1                               | 3,080 1                                 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$  | METALS                         | Iron  | NE                 | NA          | NA           | NA                   | NA                   |                    | 8900.000         | i J                | 18600.000 1                         | 9850.000 1                            | 9140.000 1 J                          | 7220.000 1 J                            |
| Name         Nome         ""><td>METALS</td><td>Lead</td><td>5.0E+02</td><td>0.500</td><td>5.00</td><td>2.26E+01</td><td>1.14E+01</td><td>5.0E+02</td><td>8.980</td><td>J</td><td>8.420 5</td><td>14.500 1</td><td>9.050 1 J</td><td>7.350 1 J</td></th<>  | METALS                         | Lead  | 5.0E+02            | 0.500       | 5.00         | 2.26E+01             | 1.14E+01             | 5.0E+02            | 8.980            | J                  | 8.420 5                             | 14.500 1                              | 9.050 1 J                             | 7.350 1 J                               |
| NETVAS         Metrol         Difference   | METALS                         | Magnesium   | 1 7E+03            | 0.050       | NA<br>0.20   | NA<br>1.25E+03       | 01E+02               | 1 7E+03            | 236,000 1        |                    | 3650,000 1                          | 241.000 1                             | 237.000 1                             | 80.300 1                                |
| META_S         Nicela         1.8E-02         0.200         0.30         6.56E+00         1.5E-02         0.70         1         0.200 </td <td>METALS</td> <td>Mercury</td> <td>1.1E-02</td> <td>0.010</td> <td>0.25</td> <td>8.19E-02</td> <td>3.60E-01</td> <td>2.5E-01</td> <td>0.016 1</td> <td>i J J L</td> <td>0.011 1 U</td> <td>0.011 1 U</td> <td>0.022 1 J J</td> <td>0.012 1 U</td>  | METALS                         | Mercury   | 1.1E-02            | 0.010       | 0.25         | 8.19E-02             | 3.60E-01             | 2.5E-01            | 0.016 1          | i J J L            | 0.011 1 U                           | 0.011 1 U                             | 0.022 1 J J                           | 0.012 1 U                               |
| META3         Postaurin         TEC         NA         MA         MA         MA         MA         MA         Table  | METALS                         | Nickel  | 1.9E+02            | 0.200       | 0.80         | 6.98E+00             | 1.16E+01             | 1.9E+02            | 6.770            |                    | 6.220 1 J                           | H 7,300 1                             | 6.420 1                               | 9.140 1                                 |
| INETALS       Shortim       ATE-01       COU       TATO       I       I       TATO       I       I       TATO       I       I       TATO       I       I       TATO       I       I       TATO       I       I       TATO       I       I       TATO       I   | METALS                         | Potassium   | 1 3E±02            | NA<br>0.100 | NA<br>0.20   | NA<br>3 49E±00       | NA<br>5 575+00       | 1 25+02            | 267.000 1        |                    | 312.000 1                           | 282.000 1                             | 329.000 1                             | 256.000 1                               |
| METAS       Solim       NG       NA  | METALS                         | Silver  | 4.7E+01            | 0.050       | 0.20         | 3.10E-01             | 3.70E-01             | 4.7E+01            | 1.740            | บ้                 | 1.690 1 U                           | 1.590 1 U                             | 2.240 1 U                             | 1.690 1 U                               |
| METALS         Thallum         2.0E+03         0.070         6         J         0.070         6         J         0.080         1         0.080         0.080         0.010   | METAL\$                        | Sodium  | NE                 | NA          | NA           | NA                   | NA                   | -                  | 191.000          |                    | 330.000 1                           | 242.000 1                             | 325.000 1                             | 470.000 1                               |
| Norm         0.02*0         Line         2.02*0         Line         2.00*0         Line         Line         2.00*0         Line         Line         2.00*0         Line <thline< th=""> <thline< th="">         Line</thline<></thline<>  | METALS                         | Thallium  | 2.0E+00            | 0.010       | 0.02         | 4.70E-01             | NE                   | 2.0E+00            | 0.067 1          |                    | 0.075 5 J .                         | 0.068 1                               | 0.069 1                               | 0.066 1                                 |
| PÉRC       Pérdorate       1.4.6-01       0.301       20       0.008       10       0.201       20       0.008       10  | METALS                         | Zinc  | 5.9E+03            | 0.625       | 2.50         | 6.16E+01             | 4.40E+01<br>2.02E+01 | 4.0E+01<br>5.9E+03 | 18,100           | J                  | 15.500 1 .                          | 21.000 1 .                            | 16,800 1 3                            | 13.400 1                                |
| RANCE_ORGANUCS       Cachon Renge Cl2/C28       4/EF422       25       50       NE       HE       4/EF42       56.00       1       U       55.400       1       U       56.400       1       U<  | PERC                           | Perchlorate   | 1.4E+01            | 0.500       | 0.010        | NE                   | NE                   | 1.4E+01            | 0.101 1          | ου                 | 0.201 20 U                          | 0.195 20 U                            | 0.096 10 U                            | 0.201 20 U                              |
| CANCE_ORDAMING         Control Priority CD-C12-UD         1.4FeC2         2.6         0         1.0         1.10         P         62.400         1         U         2.84.400         1         U         0.868         1         U         0.868         1         U         0.868         1         U         0.868         1         U         0.868         1         U         0.868         1         U         0.868         1         U         0.868         1         U         0.868         1         U         0.868         1         U         0.868         1         U         0.868         1         U         0.868         1         U         0.868         1         U         0.868         1         U         0.868         U         0.868         U  | RANGE_ORGANICS                 | Carbon Range C12-C28                                    | 4.0E+02            | 25          | 50           | NE                   | NE                   | 4.0E+02            | 56.600 1         | U                  | 55.900 1 U                          | 56.400 1 U                            | 55.400 1 U                            | 58.800 1 U                              |
| SEMUQATILES       12.47tristocherzene       1.4E-02       0.088       1       0.088       1       0.088       1       0.088       1       0.018       1  | RANGE_ORGANICS                 | Carbon Range C6-C12                                     | 4.0E+02<br>1.7E+02 | 25          | 50<br>50     | NE                   | NE                   | 4.0E+02<br>1.7E+02 | 56,600 1         | 0                  | 31.000 1 J L                        | 56400 1 U                             | 55.400 1 U                            | 58.800 1 0                              |
| SEMUCATILES       12-Debinoberare       56E-01       0.068       1       0       0.168       1       0       0       0       0       0       <   | SEMIVOLATILES                  | 1,2,4-Trichlorobenzene                                  | 1.4E+02            | 0.083       | 0.17         | NE                   | NE                   | 1.4E+02            | 0.186            | Ŭ                  | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMPLOATLES         1-butchonobenzene         5,1+400         0.013         0.17         NE         NE         5,1+400         0.018         1         0         0.185         1         0         0.185         1         0         0.185         1         0         0.185         1         0         0.185         1         0         0.018         1         0   | SEMIVOLATILES                  | 1,2-Dichlorobenzene                                     | 5.6E+01            | 0.083       | 0.17         | NE                   | NE                   | 5.6E+01            | 0.186            | U                  | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMUCATLES       2.4.5-Trichtorophenol       1.45E-03       0.085       0.17       NE       NE       1.4.5E-03       0.186       1       0       0.186       1       0       0.186       1       0       0.186       1       0       0.186       1       0       0.186       1       0       0.186       1       0       0.186       1       0       0.185   | SEMIVOLATILES                  | 1,3-Dichlorobenzene                                     | 5.1E+00<br>2.7E+01 | 0.083       | 0.17         | NE                   | NE                   | 5.1E+00<br>2.7E+01 | 0.186 1          | U<br>U             | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMWOLATILES       2.4.6-Trichsophenol       4.5E-01       0.083       0.17       NE       NE       4.7E-01       0.186       1       0       0.186  | SEMIVOLATILES                  | 2.4.5-Trichlorophenol                                   | 1.6E+03            | 0.083       | 0.17         | NE                   | NE                   | 1.6E+03            | 0.186            | บั                 | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMUCATLES       2.4-Dicktorophenol       4.7E-01       0.085       1       0       0.185       1       0       0  | SEMIVOLATILES                  | 2,4,6-Trichlorophenol                                   | 4.5E+01            | 0.083       | 0.17         | NE                   | NE                   | 4.5E+01            | 0.186 1          | Ŭ                  | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMUNIATIES         2-Dimitrophendi         3:E-01         0.33         0         0         0.33         1         0         0.033         0         0.033         0         0.033         0         0.033         0         0.033         0         0.033         0         0.033         0         0.033         0         0.033         0         0.033         0         0.033         0         0.033         0.033         0.033         0.033         0.033         0.033         0.033         0.033         0.033   | SEMIVOLATILES                  | 2,4-Dichlorophenol                                      | 4.7E+01            | 0.083       | 0.17         | NE                   | NE                   | 4.7E+01            | 0.186 1          | 0                  | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMMOLATLES         2-Dintrodulane         7.2E-01         0.08         0.17         NE         NE         7.2E-01         0.186         1         0         0.185         0         0 <t< td=""><td>SEMIVOLATILES</td><td>2.4-Dinitrophenol</td><td>3.1E+02</td><td>0.330</td><td>0.83</td><td>NE</td><td>NE</td><td>3.1E+02</td><td>0.160</td><td>ย่</td><td>0.186 I U</td><td>0.923 1 U</td><td>4.590 5 U</td><td>0.966 1 U</td></t<>   | SEMIVOLATILES                  | 2.4-Dinitrophenol                                       | 3.1E+02            | 0.330       | 0.83         | NE                   | NE                   | 3.1E+02            | 0.160            | ย่                 | 0.186 I U                           | 0.923 1 U                             | 4.590 5 U                             | 0.966 1 U                               |
| SEM.VOLATLES       2-Constructionene       7.2E-01       0.083       0.17       NE       NE       7.2E-01       0.186       1       0       0.185       1       0       0.183       1       0       0.183       1       0       0.183       1       0       0.183       1       0       0.183       1       0       0.183       1       0       0.185       1       0       0 <td< td=""><td>SEMIVOLATILES</td><td>2,4-Dinitrotoluene</td><td>7.2E-01</td><td>0.083</td><td>0.17</td><td>NÉ</td><td>NE</td><td>7.2E-01</td><td>0.186 1</td><td>Ū</td><td>0.186 1 U</td><td>0.185 1 U</td><td>0.918 5 U</td><td>0.193 1 U</td></td<>  | SEMIVOLATILES                  | 2,4-Dinitrotoluene                                      | 7.2E-01            | 0.083       | 0.17         | NÉ                   | NE                   | 7.2E-01            | 0.186 1          | Ū                  | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SemivolATLES       2-CH00Maphaberle       1.E-03       0.003       0.17       NE       NE       1.E-03       0.008       1       0       0.186 <t< td=""><td>SEMIVOLATILES</td><td>2,6-Dinitrotoluene</td><td>7.2E-01</td><td>0.083</td><td>0.17</td><td>NE</td><td>NE</td><td>7.2E-01</td><td>0.186 1</td><td></td><td>0.186 1 U</td><td>0.185 1 U</td><td>0.918 5 U</td><td>0.193 1 U</td></t<>  | SEMIVOLATILES                  | 2,6-Dinitrotoluene                                      | 7.2E-01            | 0.083       | 0.17         | NE                   | NE                   | 7.2E-01            | 0.186 1          |                    | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEM/VOLATLES         2-Metry/naphrhalene         5.5E-07         0.185         1         0         0.185         1 <t< td=""><td>SEMIVOLATILES</td><td>2-Chtorophenol</td><td>1.1E+02</td><td>0.083</td><td>0.17</td><td>NE</td><td>NE</td><td>1.1E+03</td><td>0.166</td><td>11</td><td>0.186 1 U</td><td>0.165 1 U</td><td>0.918 5 U</td><td>0.193 1 U</td></t<>  | SEMIVOLATILES                  | 2-Chtorophenol  | 1.1E+02            | 0.083       | 0.17         | NE                   | NE                   | 1.1E+03            | 0.166            | 11                 | 0.186 1 U                           | 0.165 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMIVOLATLES       2-Methydphenol       7,7E+02       0.083       0.17       NE       NE       NE       7,7E+02       0.186       1       U       0.186       1       U       0.185       1       U       0.185       1       U       0.185       1       U       0.185       1       U       0.185       1       U       0.185       1       U       0.185       1       U       0.185       1       U       0.185       1       U       0.185       U       0.186       1       U       0.185       1       U       0.185       U       0.186       1       U       0.185       1       U       0.185       U       0.1  | SEMIVOLATILES                  | 2-Methylnaphthalene                                     | 5.5E+01            | 0.083       | 0.17         | NE                   | NE                   | 5.5E+01            | 0.186            | Ū                  | 0.186 1 U                           | 0,185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMIVOLATILES       2-Mitrophinol       3.1E-01       0.033       V       NE       NE       4.7E-01       0.033       V       0.035       V       0.456       V       0.456  | SEMIVOLATILES                  | 2-Methylphenol  | 7.7E+02            | 0.083       | 0.17         | NE                   | NE                   | 7.7E+02            | 0.186 1          | U                  | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMIVOLATILES         3.3*Dicheroberadine         11E+00         0.185         0.33         NE         NE         11E+00         0.372         1         U         0.383         I         U         0.480         I         U         0.480         I         U         0.480         I         U         0.383         I         U         0.372         I         U         0.381         I         U         0.383         I         U         0.372         I         U         0.381         I         U         0.383         I         U         0.372         I         U         0.381         I         U         0.383         I         U         0.372         I         U         0.381         I         U         0.372         I         U         0.373         I         U         0.373         I         U         0.373         I         U         0.373         I         U         0.373         I         U         0.373         I         U         0.373         I         U         0.373         I         U         0.373         I         U         0.373         I         U         0.373         I         U         0.373         I         U   | SEMIVOLATILES<br>SEMIVOLATILES | 2-Nitronhenol   | 4./E+00<br>3.1E+01 | 0.330       | 0.83         | NE                   | NE                   | 4.7E+00<br>3.1E+01 | 0.931 1          | 0                  | 0.931 1 U                           | 0.923 1 U<br>0.185 1 U                | 4.590 5 U<br>0.918 5 U                | 0.900 1 U                               |
| SEMIVOLATILES       3-Nitroaniline       4/TE+00       0.83       NE       NE       4/TE+00       0.931       1       U       0.923       1       U       4.500       5       U       0.966       1       U         SEMIVOLATILES       4-50nitro-2-methylphend       3.1E+01       0.330       0.83       NE       NE       1.7E-01       0.093       1       U       0.934       1       U       0.936       1       U   | SEMIVOLATILES                  | 3,3'-Dichlorobenzidine                                  | 1.1E+00            | 0.165       | 0.33         | NE                   | NE                   | 1.1E+00            | 0.372            | Ŭ                  | 0.373 1 U                           | 0.369 1 U                             | 1.840 5 U                             | 0.387 1 U                               |
| Stem VOLATILES       4.6-Dintro-2-metry/phenol       3.1E+01       0.331       0       0.931       1       0       0.923       1       0       0.930       5       0       0.986       1       0         SEMIVOLATILES       4-Shomophenyl henyl effer       3.1E+01       0.033       0.17       NE       NE       1       0       0.486       1       0       0.986       5       0       0.098       1       0       0.931       1       0       0.936       5       0       0.098       1       0       0.931       1       0       0.936       1       0       0.936       5       0       0.098       1       0       0.931       1       0       0.936       1       0       0.936       5       0       0.098       1       0       0.931       1       0       0.936       5       0       0.198       1       0       0.931       1       0       0.936       1       0       0.936       1       0       0.931       1       0       0.931       1       0       0.931       1       0       0.931       1       0       0.931       1       0       0.931       1       0       0.931  | SEMIVOLATILES                  | 3-Nitroaniline  | 4.7E+00            | 0.330       | 0.83         | NE                   | NE                   | 4.7E+00            | 0.931 1          | U                  | 0.931 1 U                           | 0.923 1 U                             | 4.690 5 U                             | 0.966 1 U                               |
| SEMIVOLATLES       4-Chioros-methylphenol       7.7E+01       0.083       0.17       NE       NE       7.7E+01       0.186       1       U       0.186       U       0.186       U   | SEMIVOLATILES<br>SEMIVOLATILES | 4,6-Dinkto-2-methylphenol<br>4-Bromonhenyl obenyl ether | 3.1E+01<br>3.1E-02 | 0.330       | 0.83         | NE                   | NE                   | 3.1E+01<br>1.7E-01 | 0.931 1          |                    | 0.931 1 0                           | 0.923 1 U<br>0.094 1 H                | 4.590 5 U                             | 0.956 1 U                               |
| SEMIVOLATLES       4-Chicopeniline       6.2E+01       0.083       0.17       NE       NE       6.2E+01       0.186       1       U       0.186       1       U       0.186       1       U       0.0185       1       U       0.0185       5       U       0.018       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       1       U       0.0185       U       0.0185       U       0.0185       1       U       0.0185       1       U       0.0185       U       0.0185       U       0.0185       U       0.0185       U       0.0185       U       0.0185       U       0.0185       U       0.0185       U  | SEMIVOLATILES                  | 4-Chloro-3-methylphenol                                 | 7.7E+01            | 0.083       | 0.17         | NE                   | NE                   | 7.7E+01            | 0.186 1          | Ŭ                  | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMIVOLATILES       4-Chiropheny petny | SEMIVOLATILES                  | 4-Chloroaniline   | 6.2E+01            | 0.083       | 0.17         | NE                   | NE                   | 6.2E+01            | 0.186            | U                  | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| Deminiolarities         Finite finite         Finite finite         Finite finite         Finite finite         Finite finite         Finite finite         Finite finite         Finite finite         Finite finite         Finite finite         Finite <thfini< th="">         Fin</thfini<>   | SEMIVOLATILES                  | 4-Chlorophenyl phenyl ether<br>4-Methylophenol          | 2.8E-02<br>7.7E+01 | 0.083       | 0.17         | NE                   | NE                   | 1.7E-01            | 0.093 1          | 0                  | 0.094 1 U                           | 0.094 1 U                             | 0.463 5 U                             | 0.098 1 U                               |
| SEMIVOLATILES       4-Nitrophenol       3.1E+01       0.30       0.83       NE       NE       3.1E+01       0.931       1       U       0.931       1       U       0.923       1       U       4.500       5       U       0.936       1       U         SEMIVOLATILES       Acenaphthene       8.2E+02       0.083       0.17       NE       NE       8.2E+02       0.186       1       U       0.185       1       U       0.918       5       U       0.903       1       U       0.916       1       U       0.918       5       U       0.901       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U       0.918       1       U </td <td>SEMIVOLATILES</td> <td>4-Nitroaniline</td> <td>1.3E+01</td> <td>0.330</td> <td>0.83</td> <td>NÊ</td> <td>NE</td> <td>1.3E+01</td> <td>0.931 1</td> <td>บั</td> <td>0.931 1 U</td> <td>0.923 1 U</td> <td>4.590 5 U</td> <td>0.966 1 U</td>  | SEMIVOLATILES                  | 4-Nitroaniline  | 1.3E+01            | 0.330       | 0.83         | NÊ                   | NE                   | 1.3E+01            | 0.931 1          | บั                 | 0.931 1 U                           | 0.923 1 U                             | 4.590 5 U                             | 0.966 1 U                               |
| SEMIVOLATILES       Accenaphthylene       8.2E+02       0.083       0.17       NE       NE       8.2E+02       0.186       1       U       0.186       1       U       0.186       1       U       0.185       1       U       0.991       5       U       0.193       1       U         SEMIVOLATILES       Accenaphthylene       8.2E+02       0.083       0.17       NE       NE       8.2E+02       0.186       1       U       0.185       1       <  | SEMIVOLATILES                  | 4-Nitrophenol   | 3.1E+01            | 0.330       | 0.83         | NE                   | NE                   | 3.1E+01            | 0.931 1          | บ                  | 0.931 1 U                           | 0.923 1 U                             | 4.590 5 U                             | 0.966 1 U                               |
| SEMIVOLATILES         Actingation         Construction  | SEMIVOLATILES                  | Acenaphthene  | 8.2E+02<br>8.2E+02 | 0.083       | 0.17         | NE                   | NE                   | 8.2E+02<br>8.2E+02 | 0.186 1          | 0                  | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMIVOLATILES         Benzo(a)ambracene         6.3E-01         0.0825         0.165         1.53E-02         NE         6.3E-01         0.088         1         U         0.186         1         U         0.185         1         U         0.018         1         U </td <td>SEMIVOLATILES</td> <td>Anthracene</td> <td>4.1E+03</td> <td>0.0825</td> <td>0.165</td> <td>NE</td> <td>NE</td> <td>4.1E+02</td> <td>0.186</td> <td>Ŭ</td> <td>0.186 1 U</td> <td>0.185 1 U</td> <td>0.918 5 U</td> <td>0.193 1 U</td>  | SEMIVOLATILES                  | Anthracene  | 4.1E+03            | 0.0825      | 0.165        | NE                   | NE                   | 4.1E+02            | 0.186            | Ŭ                  | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMIVOLATILES       Benzolshymorathene       6.3E-02       0.025       0.165       1.54E-02       NE       1.7E-01       0.093       1       U       0.094       1       U       0.094       1       U       0.094       1       U       0.094       1       U       0.094       1       U       0.094       1       U       0.094       1       U       0.094       1       U       0.094       1       U       0.094       1       U       0.096       1       U       0.098       1       U       0.098       1       U       0.098       1       U       0.098       1       U       0.098       1       U       0.098       1       U       0.098       1       U       0.098       1       U       0.098       1       U       0.098       1       U       0.098       1       U       0.098       1       U       0.098       1       U       0.098       1       U       0.098       1       U       0.098       U       0.0185       1       U       0.0185       1       U       0.0185       U       0.0185       U       0.0185       U       0.0185       U       0.0185       U  | SEMIVOLATILES                  | Benzo(a)anthracene                                      | 6.3E-01            | 0.0825      | 0.165        | 1.53E-02             | NË                   | 6.3E-01            | 0,186 1          | Ū.                 | 0.186 1 Ū                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMIVOLATILES         Berzo(ph)operitene         C.1.501         C.0.502         NE         C.1.501         C.0.501         C.0.1851         C         C.1.531         C   | SEMIVOLATILES                  | Benzo(a)pyrene  | 6.3E-02            | 0.0825      | 0.165        | 1.54E-02             | NE                   | 1.7E-01            | 0.093            | U U                | 0.094 1 U                           | 0.094 1 U                             | 0,463 5 U                             | 0.098 1 U                               |
| SEMIVOLATILES         Benzolk)fluoranthene         6.3E+00         0.0825         0.165         1.30E-02         NE         6.3E+00         0.186         1         U         0.185         1         U         0.185         1         U         0.185         1         U         0.185         1         U         0.193         1         U           SEMIVOLATILES         Benzolk)fluoranthene         6.2E+04         0.3300         0.825         NE         NE         6.2E+04         0.931         1         U         0.931         1         U         0.923         1         U         0.455         1         0.090         1         U         0.931         1         U         0.923         1         U         0.931         1         U         0.931         1         U         0.931         1         U         0.931         1         U         0.931         1         U         0.931         1         U         0.931         1         U         0.931         1         U         0.931         1         U         0.931         1         U         0.931         1         U         0.931         1         U         0.931         U         0.931         1  | SEMIVOLATILES                  | Benzo(ghi)pervtene                                      | 4.1E+02            | 0.0825      | 0.165        | 1.23E-02             | NE                   | 4.1E+02            | 0.186 1          | Ŭ                  | 0.186 1 U                           | 0.185 1 1                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMIVOLATILES         Benzyl Alcohol         6.2E+04         0.3030         0.825         NE         NE         6.2E+04         0.931         1         U         U         0.923         1         U         0.923         1         U         0.923         1         U         0.923         1         U         0.923         1         U         0.923         1         U         0.923         1         U         0.923         1         U         0.923         1         U         0.923         1         U         0.923         1         U         0.923         1         U         0.918         5         U         0.906         1         U         0.918         1         U         0.918         1         U         0.918         5         U         0.908         1         U         0.918         1         U         0.918         1         U         0.918         1         U         0.918         1         U         0.918         1         U         0.918         1         U         0.918         1         U         0.918         1         U         0.918         1         U         0.918         1         U         0.918         1  | SEMIVOLATILES                  | Benzo(k)fluoranthene                                    | 6.3E+00            | 0.0825      | 0.165        | 1.30E-02             | NE                   | 6.3E+00            | 0.186 1          | Ū                  | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMIVOLATILES         bis/2-Chioroschoxy)methane         2.95-01         0.0825         0.165         NE         NE         4.7E+03         0.086 1         U         0.186 1         U         0.185 1         U         0.183 1         U           SEMIVOLATILES         bis/2-Chioroschoxy)methane         2.95-01         0.0825         0.165         NE         NE         2.92-01         0.186 1         U         0.185 1         U         0.183 1         U         0.185 1         U         0.183 1         U         0.185 1         U         0.183 1         U         0.185 1         U         0.183 1         U         0.185 1         U         0.185 1         U         0.038 1         U         0.034 1         U         0.034 1         U         0.034 1         U         0.038 1         U         0.038 1         U         0.034 1         U         0.034 1         U         0.038 1         U         0.038 1         U         0.034 1         U         0.038 1         U         0.038 1         U         0.038 1         U         0.038 1         U         0.038 1         U         0.038 1         U         0.038 1         U         0.038 1         U         0.038 1         U         0.038 1         U  | SEMIVOLATILES                  | Benzoic Acid  | 6.2E+04            | 0.3300      | 0.825        | NE                   | NE                   | 6.2E+04            | 0.931 1          | មួយ                | 0.931 1 U U                         | J 0.923 1 U U                         | J 4.590 5 U UJ                        | 0.966 1 U UJ                            |
| SEMIVOLATILES         bis(2-Chloroethyl)ether         1.5E-01         0.0825         0.165         NE         NE         1.7E-01         0.0934         1         0.034         1         0.034         1         0.034         1         0.034         1         0.034         1         0.034         1         0.034         1         0.034         1         0.034         1         0.034         1         0.036         1         0.036         1         0.034         1         0.034         1         0.034         1         0.034         1         0.034         1         0.036         1         0.036         1         0.034         1         0.034         1         0.034         1         0.034         1         0.034         1         0.036         1         0.036         1         0.034         1         0.036         1         0.034         1         0.036         1         0.034         1         0.036         1         0.034         1         0.036         1         0.034         1         0.036         1         0.034         1         0.036         1         0.036         1         0.036         1         0.036         1         0.036         1         0.036 </td <td>SEMIVOLATILES</td> <td>bis(2-Chloroethoxy)methage</td> <td>4.7E+03<br/>2.9E-01</td> <td>0.0825</td> <td>0.165</td> <td>NE</td> <td>ᄡᆂ</td> <td>4.7E+03<br/>2.9E-01</td> <td>0.186</td> <td></td> <td>0.186 1 U</td> <td>0.185 1 U<br/>0.185 1 U</td> <td>0.918 5 U<br/>0.918 5 U</td> <td>0.193 1 0</td>  | SEMIVOLATILES                  | bis(2-Chloroethoxy)methage                              | 4.7E+03<br>2.9E-01 | 0.0825      | 0.165        | NE                   | ᄡᆂ                   | 4.7E+03<br>2.9E-01 | 0.186            |                    | 0.186 1 U                           | 0.185 1 U<br>0.185 1 U                | 0.918 5 U<br>0.918 5 U                | 0.193 1 0                               |
| SEMIVOLATILES         bis(2-Chlorolsopropyl)ether         4.8E+00         0.085         1         0.0193         0.0193         0.0193         1         0.0193         1         0.0193         1         0.0193         0.0193         1         0.0193         0.0193         0.0193         0.0193         0.0193         0.0193         0.0193         0.0193   | SEMIVOLATILES                  | bis(2-Chloroethyl)ether                                 | 1.5E-01            | 0.0825      | 0.165        | NE                   | NE                   | 1.7E-01            | 0.093 1          | ŭ                  | 0.094 1 U                           | 0.094 1 U                             | 0.463 5 U                             | 0.098 1 U                               |
| SEMINYULATILES UNA-EUNIMIEXANDINE 1.72+01 U.0820 U.160 NE NE 1.72+01 0.186 1 U 0.185 1 U 0.918 5 U 0.193 1 U   | SEMIVOLATILES                  | bis(2-Chloroisopropyl)ether                             | 4.8E+00            | 0.0825      | 0.165        | NE                   | NE                   | 4.8E+00            | 0.186 1          | U                  | 0.186 1 U                           | 0.185 1 U                             | 0.918 5 U                             | 0.193 1 U                               |
| SEMIVOLATILES Butyl benzyl phthalate 3,15+03 0,0825 0,165 NE NE 3 1F+03 0 186 1 U 0 186 1 U 0 185 1 U 0 187 5 U 0 193 1 11   | SEMIVOLATILES                  | Butyl benzyl phthalate                                  | 3,12+01            | 0.0825      | 0.165        | NE                   | NE                   | 3.1E+03            | 0.186 1          | Ŭ                  | 0.186 1 U<br>0.186 1 U              | 0.185 1 U<br>0.185 1 U                | 0.918 5 U<br>0.918 5 U                | 0.193 1 0                               |

Shaw Environmental, Inc.

00066577

# Table 4-93

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|                  |                                |            |             |              |           |               | South-14   |                  |                   |                  |                  |                   |
|------------------|--------------------------------|------------|-------------|--------------|-----------|---------------|------------|------------------|-------------------|------------------|------------------|-------------------|
| [SUMP] = SUMP074 |                                |            |             |              |           |               |            |                  | 350104D074 0D04   | 2551 N D074 CD04 | 255UM0074 6800   | 355UM0074 6000    |
| SLUCATION        |                                | TOFO       |             |              | Book      |               | Annilahin  | 3550MP074-5801   | 25 SMD074 SD01 02 | 3550MF074-3001   | 3550MF074-3602   | 35 CMD074 CB02 02 |
|                  |                                | Disk Based |             |              | Concentra | fione in Soil | TOFO       | 0/21/2006        | 0/21/2006         | 0/21/20/08       | 0/21/2006        | 9/21/2006         |
| DEDTH            |                                | Foregaine  | Mathad      | Uothod       |           |               | Blak Basad | 05 05 5          | 55 45 CH          | 5-45 Et          | 05 - 05 Et       | 45-455            |
|                  |                                | Scieening  | Detection   | Aneurou      | 190% UF   | L, INU/KU)    | Risk-Daseu | 950              | 4.0-4.0 FL        | 4.3 4.3 FL       | 0.0.4 0.0.1 (    | PEC               |
| SAMPLE_PURPOSE   | <b>D</b> (1(1(1R)              | value      | Detection   | Quantitation | Sunace    | Subsurface    | Screening  |                  |                   |                  |                  |                   |
| lest Group       | Parameter (Units = mg/kg)      | (RBSV) -   | LIMIT (MDL) |              | 0-0.5 Ft  | 1.5 - 2.5 Ft  | Value      | Result DIL LQ VQ | Result DIL LQ VQ  | Result DIL LU VQ | Result DIL LQ VQ | Result DIL LO VO  |
| SEMIVOLATILES    | Chrysene                       | 6.3E+01    | 0.0825      | 0.165        | 1.51E-02  | NE            | 6.3E+01    | 0.186 1 U        | 0.186 1 U         | 0.185 1 0        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | Dibenzo(a,h)anthracené         | 6.3E-02    | 0.0825      | 0.165        | NE        | NE            | 1.7E-01    | 0.093 1 U        | 0.094 1 U         | 0.094 1 U 👔      | 0463 5 U         | 0.098 1 U         |
| SEMIVOLATILES    | Dibenzoturan                   | 6.2E+01    | 0.0825      | 0.165        | NE        | NE            | 6.2E+01    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 0        | 0.193 1 U         |
| SEMIVOLATILES    | Diethyl phthalate              | 1.2E+04    | 0.0825      | 0.165        | NE        | NE            | 1.2E+04    | 0.186 1 U        | 0.186 1 U         | 0.185 1 0        | 0.918 5 0        | 0.193 1 U         |
| SEMIVOLATILES    | Dimethyl phthalate             | 1.2E+04    | 0.0825      | 0.165        | NE        | NE            | 1.2E+04    | 0.186 1 U        | 0.186 t U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | di-n-Butyl onthalate           | 1.6E+03    | 0.0825      | 0.165        | NĘ        | NE            | 1.6E+03    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | di-n-Octyl phthalate           | 3.1E+02    | 0.0825      | 0.165        | NË        | NE            | 3.1E+02    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | Fluoranthene                   | 5.5E+02    | 0.0825      | 0.165        | 2.29E-02  | NE            | 5.5E+02    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | Fluorene                       | 5.5E+02    | 0.0825      | 0.165        | NE        | NE            | 5.5E+02    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | Hexachlorobenzene              | 2.5E-01    | 0.0825      | 0.165        | NE        | NE            | 2.5E-01    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | Hexachlorobutadiene            | 1.6E+00    | 0.0825      | 0.165        | NE        | NE            | 1.6E+00    | 0.186 1 U        | 0.186 1 Ų         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | Hexachlorocyclopentadiene      | 1.0E+00    | 0.0825      | 0.165        | NE        | NE            | 1.0E+00    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | Hexachloroethane               | 1.6E+01    | 0.0825      | 0.165        | NE        | NE            | 1.6E+01    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene         | 6.3E-01    | 0.0825      | 0.165        | 1.43E-02  | NĘ            | 6.3E-01    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | Isophorone                     | 5.2E+02    | 0.0825      | 0.165        | NE        | NE            | 5.2E+02    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | Naphthalene                    | 1.8E+01    | 0.0825      | 0.165        | NE        | NE            | 1.8E+01    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | Nitrobenzene                   | 6.5E+00    | 0.0825      | 0.165        | NE        | NE            | 6.5E+00    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine     | 4.1E-02    | 0.0825      | 0.165        | NE        | NE            | 1.7E-01    | 0.093 1 U        | 0.094 1 U         | 0.094 1 U 🕯      | 0.463 5 U        | 0.098 1 U         |
| SEMIVOLATILES    | n-Nitrosodiphenvlamine         | 5.9E+01    | 0.0825      | 0.165        | NE        | NE            | 5.9E+01    | 0.186 1 U        | 0.186 1 U         | 0.185 1 Ú        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | Pentachlorophenol              | 3.0E+00    | 0.3300      | 0.825        | NE        | NE            | 3.0E+00    | 0.931 1 U        | 0.931 1 U         | 0.923 1 U        | 4.590 5 U        | 0.966 1 U         |
| SEMIVOLATILES    | Phenanthrene                   | 4.1E+02    | 0.0825      | 0.165        | NE        | NE            | 4.1E+02    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 U         |
| SEMIVOLATILES    | Phenol                         | 4.7E+03    | 0.0825      | 0.165        | NE        | NE            | 4.7E+03    | 0.186 1 U        | 0.186 1 U         | 0.185 1 U        | 0.918 5 U        | 0.193 1 1         |
| SEMIVOLATILES    | Pyrene                         | 4.15+02    | 0.0825      | 0.165        | 1.94E-02  | NE            | 4.1E+02    | 0.186 1 U        | 0.186 1 1         | 0.185 1 U        | 0.918 5 U        | 0.193 1 1         |
| SOLIDS           | Percent Solids                 | NE         | NE          | NE           | NE        | NE            |            | 88 300 1         | 87,800 1          | 88.000 1         | 89,100 1         | 84,400 1          |
| VOLATILES        | 1.1.1.2-Tetrachtoroethane      | 5.2E+00    | 0.0005      | 0.005        | NE        | NE            | 5.2E+00    |                  | 0.005 1 U         | 0.005 1 U        |                  | 0.005 1 U         |
| VOLATILES        | 1.1.1-Trichlomethane           | 2.3E+02    | 0.0005      | 0.005        | NE        | NE            | 2.3E+02    |                  | 0.005 1 U         | 0.005 1 U        |                  | 0.005 1 U         |
| VOLATILES        | 1.1.2.2-Tetrachloroethane      | 5.1E-01    | 0.0005      | 0.005        | NE        | NE            | 5 1E-01    |                  | 0.005 1 11        | 0.005 1 U        |                  | 0.005 1 U         |
| VOLATILES        | 1.1.2-Trichlomethane           | 9.7E-01    | 0.0005      | 0.005        | NE        | NE            | 9.7E-01    |                  | 0.005 1 11        | 0.005 1 11       |                  | 0.005 1 1         |
| VOLATILES        | 1.1-Dichlomethane              | 8.9E+01    | 0.0010      | 0.005        | NE        | NE            | 8.9E+01    |                  | 0.005 1 1         | 0.005 .1 11      |                  | 0.005 1 1         |
| VOLATILES        | 1.1-Dichloroethene             | 2 7E+01    | 0.0005      | 0.005        | NE        | NE            | 2 7E+01    |                  | 0.005 1 0         | 0.005 1 11       |                  | 0.005 1 1         |
| VOLATILES        | 1 1-Dichloropropene            | 9.9E-01    | 0.0005      | 0.005        | NE        | NE            | 0.05.01    |                  | 0.005 1 U         | 0.005 1 11       |                  | 0.005 1 1         |
| VOLATILES        | 1.2.3-Tricklorobenzene         | 4 2E+01    | 0.0005      | 0.005        | NE        | NE            | 4 2E+01    |                  | 0.005 1 1         | 0.005 1 U        |                  | 0.005 1 1         |
| VOLATILES        | 123 Trichlorononane            | 9.2E-02    | 0.0010      | 0.005        | NE        | NE            | 0.2E-02    |                  | 0.005 1 1         | 0.005 1 1        |                  | 0.005 1 1         |
| VOLATILES        | 124-Trichlorobenzene           | 1 4E+02    | 0.0005      | 0.005        | NE        | NE            | 1 45+02    |                  | 0.005 1 11        | 0.005 1 U        |                  | 0.005 1 11        |
| VOLATILES        | 1.2.4-Trimethylbonzone         | 9.65+00    | 0.0005      | 0.005        | NE        | NE            | 0.65+00    |                  | 0.005 1 1         | 0.005 1 11       |                  | 0.005 1 1         |
| VOLATILES        | 12-Dibromo-3-chloronronane     | 3.5E-01    | 0.0000      | 0.005        | NE        | NE            | 3.55-01    |                  | 0.005 1 1         | 0.005 1 1        |                  | 0.005 1 1         |
| VOLATILES        | 1.2-Dibromoethane              | 5 35-02    | 0.0005      | 0.000        | NE        | NE            | 535-02     |                  | 0.005 1 0         | 0.005 1 11       |                  | 0.005 1 U         |
| VOLATILES        | 1.2 Dichlorobanzono            | 5.56-101   | 0.0005      | 0.005        | NE        |               | 5.52-02    |                  | 0.005 1 0         | 0.005 1 1        |                  | 0.005 1 1         |
| VOLATILES        | 1.2 Dichloroothano             | 275.01     | 0.0005      | 0.005        | NE        | NE            | 275 01     |                  | 0.005 1 0         | 0.000 1 0        |                  | 0.005 1 1         |
| VOLATILES        | 1.2 Dichloropropage            | 1 95400    | 0.0003      | 0.000        | NE        | NE            | 4 05+00    |                  | 0.005 1 0         | 0.005 1 0        |                  | 0.000 1 0         |
| VOLATILES        | 4.2 Dimethylaste               | 1.000      | 0.0005      | 0.000        |           | NE            | 1.85+00    |                  | 0.005 1 0         | 0.005 1 0        |                  | 0.005 1 0         |
| VOLATILES        | 1,2-Dimeulyidenzene (d-Ayiene) | 3.32703    | 0.0005      | 0.005        |           | NE            | 3.30+03    |                  | 0.005 1 0         | 0.005 1 0        |                  | 0.005 1 0         |
| VOLATILES        | 1,3,3-1 nmenybenzene           | 0.3E+00    | 0.0005      | 0.005        | NE        | NE            | 8.3E+00    |                  | 0.005 1 0         | 0.000 1 0        |                  | 0.000 1 U         |
| VULATILES        | 1,3-Dichlorobenzene            | 5.1E+00    | 0.0005      | 0.005        | NE        | NE            | 5.1E+00    |                  | 0.005 1 U         | 0.005 1 0        |                  | 0.005 1 0         |
| VOLATILES        | 1,3-Dichloropropane            | 3.0E+00    | 0.0005      | 0.005        | NE        | NE            | 3.0E+00    |                  | 0.005 1 U         | 0.005 1 0        |                  | 0.005 1 U         |
| VOLATILES        | 1,4-Dichlorobenzene            | 2.78+01    | 0.0005      | 0.005        | NE        | NE.           | 2.76+01    |                  | 0.005 1 0         | 0.005 1 0        |                  | 0.005 1 U         |
| VOLATILES        | 2,2-Dichloropropane            | 1.76+00    | 0.0005      | 0.005        | NE        | NE            | 1./E+00    |                  | 0.005 1 0         | 0.005 1 0        |                  | 0.005 1 U         |
| VOLATILES        | 2-Sutanone                     | 2.6E+U3    | 0.0025      | 0.010        | NE        | NE            | 2.6E+03    |                  | 0.011 1 0         | 0.011 1 0        |                  | 0.011 1 0         |
| VOLATILES        | 2-Gridodetnyi Vinyi etner      | Z.1E-U1    | 0.0020      | 0.010        |           | NE            | 2.1E-01    |                  | 0.011 1 U         | 0.011 1 0        |                  | 0.011 1 0         |
| VULATILES        | 2-Chiorotoluene                | 1.56+02    | 0.0005      | 0.005        | NE        | NE            | 1.56+02    |                  | 0.005 1 U         | 0.005 1 0        |                  | 0.005 1 U         |
| VULATILES        | 2-Hexanone                     | 6.2E+00    | 0.0025      | 0.010        | NE        | NE            | 6.2E+00    |                  | 0.011 1 U UJ      | 0.011 1 0 03     |                  | 0.011 1 U UJ      |
| VOLATILES        | 4-Chlorotoluene                | 3.4E-01    | 0.0005      | 0.005        | NE        | NE            | 3.4E-01    |                  | 0.005 1 U         | 0.005 1 U        |                  | 0.005 1 U         |
| VOLATILES        | Acetone                        | 1./E+02    | 0.0050      | 0.010        | NE        | NE            | 1.7E+02    |                  | 0.011 1 U         | 0.011 1 U        |                  | 0.011 1 U         |
| VOLATILES        | Benzene                        | 8.8E-01    | 0.0005      | 0.005        | NE        | NE            | 8.8E-01    |                  | 0.005 1 U         | 0.005 1 U        |                  | 0.005 1 U         |
| VOLATILES        | Bromobenzene                   | 1.1E+01    | 0.0005      | 0.005        | NE        | NE            | 1.1E+01    |                  | 0.005 1 U         | 0.005 1 U        |                  | 0.005 1 U         |
| VOLATILES        | Bromochloromethane             | 2.4E+01    | 0.0005      | 0.005        | NE        | NE            | 2.4E+01    |                  | 0.005 1 U         | 0.005 1 U        |                  | 0.005 1 U         |
| VOLATILES        | Bromodichloromethane           | 1.0E+01    | 0.0005      | 0.005        | NE        | NE            | 1.0E+01    |                  | 0.005 1 U         | 0.005 1 U        |                  | 0.005 1 U         |
| VOLATILES        | Bromoform                      | 3.4E+01    | 0.0005      | 0.005        | NE        | NE            | 3.4E+01    |                  | 0.005 1 U         | 0.005 1 U        |                  | 0.005 1 U         |
| VOLATILES        | Bromomethane                   | 3.5E-01    | 0.0010      | 0.010        | NE        | NE            | 3.5E-01    | 1                | 0.011 1 U         | 0.011 1 U        |                  | 0.011 1 U         |
| VOLATILES        | Carbon disulfide               | 1.0E+02    | 0.0005      | 0.005        | NE        | NE            | 1.0E+02    |                  | 0.005 1 U         | 0.005 1 U        |                  | 0.005 1 U         |
| VOLATILES        | Carbon tetrachloride           | 3.5E-01    | 0.0005      | 0.005        | NE        | NÉ            | 3.5E-01    |                  | 0.005 1 U         | 0.005 1 Ų        |                  | 0.005 1 U         |
| VOLATILE\$       | Chlorobenzene                  | 4.0E+01    | 0.0005      | 0.005        | NE        | NE            | 4.0E+01    | ł                | 0.005 1 U         | 0.005 1 U        |                  | 0.005 1 U         |
| VOLATILES        | Chloroethane                   | 1.1E+03    | 0.0010      | 0.010        | NE        | NE            | 1.1E+03    | 1                | 0.011 1 U         | 0.011 1 U        |                  | 0.011 1 U         |
| VOLATILES        | Chloroform                     | 3.1E-01    | 0.0005      | 0.005        | NE        | NÉ            | 3.1E-01    | 1                | 0.005 1 U         | 0.005 t U        |                  | 0.005 1 U         |
| VOLATILES        | Chloromethane                  | 2.3E-01    | 0.0020      | 0.010        | NE        | NE            | 2.3E-01    | 1                | 0.011 1 U         | 0.011 1 U        |                  | 0.011 i U         |
| VOLATILES        | cis-1,2-Dichloroethene         | 1.2E+02    | 0.0005      | 0.005        | NE        | NE            | 1.2E+02    | 1                | 0.005 1 Ū         | 0.005 1 Ŭ        |                  | 0.005 Î Ü         |
| VOLATILES        | cis-1,3-Dichloropropene        | 1.28+00    | 0.0005      | 0.005        | NÉ        | NE            | 1.2E+00    |                  | 0.005 1 Ū         | 0.005 1 U        |                  | 0.005 1 U         |
| VOLATILES        | Dibromochloromethane           | 7.6E+00    | 0.0005      | 0.005        | NE        | NE            | 7.6E+00    | 1                | 0.005 1 U         | 0.005 1 U        |                  | 0.005 1 Ū         |
| VOLATILES        | Dibromomethane                 | 1.9E+01    | 0.0005      | 0.005        | NE        | NE            | 1.9E+01    |                  | 0.005 1 U         | 0.005 1 U        |                  | 0.005 1 Ū         |
| VOLATILES        | Dichlorodifluoromethane        | 2.2E+02    | 0.0010      | 0.010        | NE        | NE            | 2.2E+02    | 1                | 0.011 1 Ū         | 0.011 1 Ú        |                  | 0.011 1 U         |

00066578

## Table 4-93 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|  |                            |  |                     |                        |   | _                                      | Sump-74                                      |   |  |  |  |   |
|--|----------------------------|--|---------------------|------------------------|---|--|--|---|--|--|--|---|
| (SUMP) ≈ SUMP074<br>SLOCATION<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                            | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>itions in Soil<br>PL, mg/kg) | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP074-SB01<br>35-SMP074-SB01-01<br>9/21/2006<br>0.5 0.5. Ft<br>REG<br>Berrit DILLO VO | 355UMP074-SB01<br>35-SMP074-SB01-02<br>9/21/2006<br>4.5 - 4.5 Ft<br>REG<br>Recut DIL LO VO | 35SUMP074-SB01<br>35-SMP074-SB01-02-QC<br>9/21/2006<br>4.5 - 4.5 Ft<br>FD<br>Result DILLO VO | 355UMP074-SB02<br>35-SMP074-SB02-01<br>9/21/2006<br>0.5 0.5. Ft<br>REG<br>Result DIL LO VQ | 355UMP074-SB02<br>35-SMP074-SB02-02<br>9/21/2006<br>4,5 - 4,5 Ft<br>REG<br>Result DIL LQ VQ |
| Test Group   | Parameter (Units = mg/kg)  | (RBSV)*                                  | Limit (MDL)         |                        | 0-0.5 m                                 | <u>1.5-2.5 FL</u>                      | Value  | Result DIL LQ VQ  | 0.005 1 11   | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  | Ethylbenzene               | 4,3±+02                                  | 0.0005              | 0.005                  | NE                                      |  | 4.36+02                                      |   | 0.005 1 1  | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  | Hexachlorobutadiene        | 1.6E+00                                  | 0.0005              | 0.005                  |   |  | 5.45+02                                      |   | 0005 1 1   | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  | Isopropyibenzene           | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE                                     | 235+02                                       |   | 0.005 1 U  | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  | m,p-Xylenes                | 2.3E+02                                  | 0.0005              | 0.005                  |   | NE                                     | 135+03                                       |   | 0.011 1 U  | 0.011 1 Ŭ  |  | 0.011 1 U   |
| VOLATILES  | Methyl isobutyl ketone     | 1.32703                                  | 0.0020              | 0.01                   | NE                                      | NE                                     | 87E+00                                       |   | 0.001 1 J B  | 0.002 1 J B  |  | 0.005 1 U   |
| VOLATILES  | Methylene chloride         | 0./ETW                                   | 0.0010              | 0.005                  | NE                                      | NE                                     | 1.8E+01                                      |   | 0.011 1 U  | 0.011 i U  |  | 0.011 1 U   |
| VOLATILES  | Naphthatene                | 7.00+01                                  | 0.0005              | 0.01                   |   | ME                                     | 276+02                                       |   | 0.005 1 U  | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  | A-BUTYLBENZENE             | 2.7 5 102                                | 0.0000              | 0.005                  | NE                                      | NE                                     | 3 2E+02                                      |   | 0.005 1 U  | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  |                            | J.ZETVZ                                  | 0.0005              | 0.005                  | NE                                      | NE                                     | 4 2E+02                                      |   | 0.005 1 U  | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  | PISOPROPILI OLUANE         | 9,20702                                  | 0.0005              | 0.005                  | NE                                      | NF                                     | 3 0E+02                                      |   | 0.005 1 U  | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  | Sec-BUTYLBENZENE           | 3.00+02                                  | 0,0005              | 0.005                  | NE                                      | NE                                     | 1.3E+03                                      |   | 0.005 1 U  | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  | Styrene                    | 1.3ET03                                  | 0.0005              | 0.005                  | NE                                      | NE                                     | 2.65+02                                      |   | 0.005 1 U  | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  | TER-BUTYLBENZENE           | 2.00+02                                  | 0.0000              | 0.000                  | NE                                      | NE                                     | 6 0E+00                                      | [   | 0.005 1 U  | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  | Teluconoroemene            | 1 15+03                                  | 0.0005              | 0.005                  | NE                                      | NE                                     | 1 1E+03                                      |   | 0.005 1 U  | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  | Louene                     | 1.16+03                                  | 0.0005              | 0.005                  | NE                                      | NE                                     | 1 4E+02                                      |   | 0.005 1 U  | 0.005 1 U  |  | 0.005 t U   |
| VOLATILES  | trans-1,2-Dickoroethene    | 1.90-102                                 | 0.0005              | 0.000                  | NE                                      | NE                                     | 18#+00                                       |   | 0.005 t U  | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  | trans-1,3-Dichloroproperie | 2.75+00                                  | 0.0005              | 0.005                  | NE                                      | NE                                     | 3 7E+00                                      |   | 0.005 1 U  | 0.005 1 U  |  | 0.005 1 U   |
| VOLATILES  | I ICRIOROBULENE            | 3.75700                                  | 0.0000              | 0.000                  | NE                                      | NE                                     | 2.6E+02                                      | 1   | 0.011 1 U  | 0.011 1 U  |  | 0.011 1 U   |
| VOLATILES  | 1 richioromotiomethane     | 2.02+02                                  | 0.0010              | 0.01                   | NE                                      | NE                                     | 5.7E+01                                      |   | 0.011 1 1 1 1  | 0.011 1 U UJ   |  | 0,011 1 U UJ  |
| VULATILES  | vinyi acetate              | 3.72+01                                  | 0.0010              | 0.01                   |   | NE                                     | 3.6E-02                                      |   | 0.011 1 0  | 0.011 1 U  |  | 0.011 1 U   |
| VOLATILES  | Vinvi chiogde              | 3.02-02                                  | 0.0010              | 0.01                   | INC                                     | INE                                    | 0.02-02                                      | 1   |  |  |  |   |

Shaw Environmental, Inc.



 Table 4-94

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-75

| [SUMP] = SUMP075 |   |                    |             |              |              |                         |                    | 2001110275 0004                |                                |
|------------------|---|--------------------|-------------|--------------|--------------|-------------------------|--------------------|--------------------------------|--------------------------------|
| SLOCATION        |   | 7050               |             |              | <b>D</b> ( . |                         | Annitable          | 35SUMP075-SB01                 | 35SUMP075-SB01                 |
| SAMPLE_NO        |   | ICEQ<br>Dick Dacad |             |              | Concentre    | ground<br>tions in Soil | Applicble          | 30-SMP075-SB01-01<br>9/21/2006 | 30-SMP075-5601-02<br>9/21/2006 |
| DEDTH            |   | Screening          | Method      | Method       | (05% 1 D     |                         | Pick-Based         | 05-0551                        | 45-45 Ft                       |
| SAMPLE PURPOSE   |   | Value              | Detection   | Quantitation | Surface      | Subsurface              | Screening          | REG                            | REG                            |
| Test Group       | Parameter (Units = mo/kg)                             | (RBSV)             | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft   | 1.5 - 2.5 Ft            | Value              | Resutt DIL LQ VQ               | Result DIL LQ VQ               |
| METALS           | Aluminum  | 1.6E+04            | 10.000      | 20.00        | 1.63E+04     | 2.08E+04                | 1.6E+04            | 5760.000 1                     | 9670.000 1                     |
| METALS           | Antimony  | 7.3E+00            | 0.500       | 0.10         | 9.40E-01     | 1.60E+00                | 7.3E+00            | 0.059 1 J J                    | 0.118 1 U                      |
| METALS           | Arsenic   | 2.0E+01            | 0.075       | 0.30         | 4.81E+00     | 5.54E+00                | 2.0E+01            | 2.350 1                        | 0.571 1                        |
| METALS           | Barlum  | 2.6E+03            | 0.075       | 0.30         | 1.52E+02     | 8.55E+01                | 2.6E+03            | 78.700 1                       | 69,000 1                       |
| METALS           | Servinum  | 4.0E+00            | 0.012       | 0.50         | 0.45E-01     | 7.000-01                | 4.6E+00            | 0.541 1                        | 0.490 1                        |
| METALS           | Calcium   | 5.2E+00            | 0.025<br>NA | 0.10<br>NA   | 1.40E+00     | 4.00E+01                | 5.25+00            | 1700.000 1                     | 401.000 1                      |
| METALS           | Chromium  | 5.9E+03            | 0.100       | 0.40         | 2.66E+01     | 3.01E+01                | 5.9E+03            | 23.400 1                       | 9.530 1                        |
| METALS           | Cobalt  | 1.5E+03            | 0.125       | 0.50         | 7.23E+00     | 5.61E+00                | 1.5E+03            | 6.240 1                        | 3.610 1                        |
| METALS           | Copper  | 1.0E+03            | 0.150       | 0.60         | 5.55E+00     | 9.25E+00                | 1.0E+03            | 35.300 1                       | 4.430 1                        |
| METALS           | Iron  | NE                 | NA          | NA           | NA           | NA                      |                    | 16200.000 1                    | 6110.000 1                     |
| METALS           | Lead  | 5.0E+02            | 0.500       | 5.00         | 2.26E+01     | 1.14E+01                | 5.0E+02            | 86.300 10                      | 7.370 1                        |
| METALS           | Magnesium   | NE<br>4 75 JOD     | NA          | NA<br>0.00   | NA           | NA<br>D 01 T 100        | 4 75 (00)          | 629.000 1                      | 491.000 1                      |
| METALS           | Manganese   | 1.75+03            | 0.050       | 0.20         | 1,200+03     | 2.01E+02<br>2.60E-01    | 2.55-01            | 0.011 1 11                     | 0.162 1                        |
| METALS           | Nickel  | 1.1E-02            | 0.010       | 0.25         | 6 98E+00     | 1.16E+01                | 1.95+02            | 7 340 1                        | 4.970 1                        |
| METALS           | Potassium   | NE                 | NA          | NA           | NA           | NA                      |                    | 227,000 1                      | 286,000 1                      |
| METALS           | Selenium  | 1.3E+02            | 0.100       | 0.20         | 3.48E+00     | 5.57E+00                | 1.3E+02            | 0.262 1                        | 0.265 1                        |
| METALS           | Silver  | 4.7E+01            | 0.050       | 0.20         | 3.10E-01     | 3.70E-01                | 4.7E+01            | 1.630 1 U                      | 1.630 1 U                      |
| METALS           | Sodium  | NE                 | NA          | NA           | NA           | NA                      | ••                 | 106.000 1                      | 221.000 1                      |
| METALS           | Thallium  | 2.0E+00            | 0.010       | 0.02         | NA           | NA                      | 2.0E+00            | 0.056 1                        | 0.068 1                        |
| METALS           | Vanadium  | 4.8E+01            | 0.125       | 0.50         | 3.21E+01     | 4.46E+01                | 4.8E+01            | 24.700 1                       | 11.300 1                       |
| PERC             | Zinc<br>Perchlarate                                   | 3.9E+03            | 0.025       | 2.50         | 0.10E+01     | 2.022701                | 5.92+03<br>1.4E+01 | 0.048 5 11                     | 0.492 20 11                    |
| RANGE ORGANICS   | Carbon Range C12-C28                                  | 4.0E+02            | 25          | 50           | NE           | NE                      | 4 0E+02            | 56 100 1 U                     | 58,500 1 U                     |
| RANGE ORGANICS   | CARBON RANGE C28-C35                                  | 4.0E+02            | 25          | 50           | NE           | NE                      | 4.0E+02            | 56.100 1 U                     | 32.900 1 J B                   |
| RANGE_ORGANICS   | Carbon Range C6-C12                                   | 1.7E+02            | 25          | 50           | NE           | NE                      | 1.7E+02            | 56.100 1 U                     | 58.500 1 U                     |
| SOLIDS           | Percent Solids  | NE                 | NE          | NE           | NE           | NE                      |                    | 88.400 1                       | 84.600 1                       |
| VOLATILES        | 1,1,1,2-Tetrachloroethane                             | 5.2E+00            | 0.0005      | 0.005        | NE           | NE                      | 5.2E+00            |                                | 0.006 1 U                      |
| VOLATILES        | 1,1,1-1 richloroethane                                | 2.3E+02            | 0.0005      | 0.005        | NE           | NE                      | 2.3E+02            |                                | 0.006 1 U                      |
| VOLATILES        | 1,1,2,2-Tetrachioroethane                             | 0.75.01            | 0.0005      | 0.005        | NE           | NE                      | 5.1E-01            |                                | 0.006 1 0                      |
| VOLATILES        | 1 1-Dicharoethane                                     | 8.9E+01            | 0.0000      | 0.005        | NE           | NE                      | 8.9E+01            |                                | 0.006 1 U                      |
| VOLATILES        | 1,1-Dichloroethene                                    | 2.7E+01            | 0.0005      | 0.005        | NE           | NE                      | 2.7E+01            |                                | 0.006 1 U                      |
| VOLATILES        | 1,1-Dichloropropene                                   | 9.9E-01            | 0.0005      | 0.005        | NE           | NE                      | 9.9E-01            |                                | 0.006 1 U                      |
| VOLATILES        | 1,2,3-Trichlorobenzene                                | 4.2E+01            | 0.0005      | 0.005        | NE           | NE                      | 4.2E+01            |                                | 0.006 1 U                      |
| VOLATILES        | 1,2,3-Trichloropropane                                | 9.2E-02            | 0.0010      | 0.005        | NE           | NE                      | 9.2E-02            |                                | 0.006 1 U                      |
| VOLATILES        | 1,2,4-Trichlorobenzene                                | 1.4E+02            | 0.0005      | 0.005        | NE           | NE                      | 1.4E+02            |                                | 0.006 1 U                      |
| VOLATILES        | 1,2,4+1 nmethylbenzene<br>1,2 Dibromo 3 chloroproposo | 9.0E+00            | 0.0005      | 0.005        | NE           |                         | 9.62+00            |                                | 0.006 1 0                      |
| VOLATILES        | 1.2-Dibromoethane                                     | 5.3E-01            | 0.0020      | 0.005        | NË           | NE                      | 5.35-02            |                                | 0.000 1 0                      |
| VOLATILES        | 1.2-Dichlorobenzene                                   | 5.6Ë+01            | 0.0005      | 0.005        | NE           | NE                      | 5.6E+01            |                                | 0.006 1 U                      |
| VOLATILES        | 1,2-Dichloroethane                                    | 2.7E-01            | 0.0005      | 0.005        | NE           | NE                      | 2.7E-01            |                                | 0.006 1 U                      |
| VOLATILES        | 1,2-Dichloropropane                                   | 1.8E+00            | 0.0005      | 0.005        | NE           | NE                      | 1.8E+00            |                                | 0.006 1 U                      |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene)                        | 3.3E+03            | 0.0005      | 0.005        | NE           | NE                      | 3.3E+03            |                                | 0.006 1 U                      |
| VOLATILES        | 1,3,5-Trimethylbenzene                                | 8.3E+00            | 0.0005      | 0.005        | NE           | NE                      | 8.3E+00            |                                | 0.006 1 U                      |
| VOLATILES        | 1,3-Dichlorobenzene                                   | 5.1E+00            | 0.0005      | 0.005        | NE           | NE                      | 5.1E+00            |                                | 0.006 1 U                      |
| VOLATILES        | 1.4-Dichlorobenzene                                   | 275+01             | 0.0005      | 0.005        | NE           |                         | 2.75+01            |                                | 0.006 1 U                      |
| VOLATILES        | 2.2-Dichloropropane                                   | 1.70+00            | 0.0005      | 0.005        | NE           | NE                      | 1.7E+00            |                                | 0.006 1 1                      |
| VOLATILES        | 2-Butanone  | 2.6E+03            | 0.0025      | 0.010        | NE           | NE                      | 2.6E+03            |                                | 0.012 1 U                      |
| VOLATILES        | 2-Chloroethyl vinyl ether                             | 2.1E-01            | 0.0020      | 0.010        | NE           | NE                      | 2.1E-01            |                                | 0.012 1 U                      |
| VOLATILES        | 2-Chlorotoluene                                       | 1,5E+02            | 0.0005      | 0.005        | NE           | NE                      | 1.5E+02            |                                | 0.006 1 U                      |
| VOLATILES        | 2-Hexanone  | 6.2E+00            | 0.0025      | 0.010        | NE           | NE                      | 6.2E+00            |                                | 0.012 1 U                      |
| VOLATILES        | 4-Chiprotoluene                                       | 3.4E-01            | 0.0005      | 0.005        | NE           | NE                      | 3.4E-01            |                                | 0.006 1 U                      |
| VOLATILES        | Acetone<br>Benzene                                    | 1.75+02            | 0.0050      | 0.010        |              | NE                      | 1.7E+02<br>8.8E 04 |                                | 0.012 1 U                      |
| VOLATILES        | Bromobenzene  | 1.1E+01            | 0.0005      | 0.005        | NE           | NE                      | 1.1E+01            |                                | 0.006 1 1                      |
| VOLATILES        | Bromochloromethane                                    | 2.4E+01            | 0.0005      | 0.005        | NE           | NE                      | 2.4E+01            | · · · ·                        | 0.006 1 U                      |
| VOLATILES        | Bromodichloromethane                                  | 1.0E+01            | 0.0005      | 0.005        | NE           | NE                      | 1.0E+01            | · · ·                          | 0.006 1 U                      |
| VOLATILES        | Bromoform   | 3.4E+01            | 0.0005      | 0.005        | NE           | NE                      | 3.4E+01            |                                | 0.006 1 U                      |
| VOLATILES        | Bromomethane  | 3.5E-01            | 0.0010      | 0.010        | NE           | NE                      | 3.5E-01            |                                | 0.012 1 U                      |
| VULATILES        | Carpon disultide                                      | 1 0E+02            | 0.0005      | 0.005        | NF           | NE 1                    | 1 0F+02            |                                | 0 00 <del>6</del> 1 11         |

Shaw Environmental, Inc.



 Table 4-94

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-75

|                               |                           |            |             |              | -          |                |            |                   |                   |
|-------------------------------|---------------------------|------------|-------------|--------------|------------|----------------|------------|-------------------|-------------------|
| [SUMP] = SUMP075<br>SLOCATION |                           |            |             |              |            |                |            | 35SUMP075-SB01    | 35SUMP075-SB01    |
| SAMPLE NO                     |                           | TCEQ       |             |              | Back       | ground         | Applicble  | 35-SMP075-SB01-01 | 35-SMP075-SB01-02 |
| SAMPLE DATE                   |                           | Risk-Based |             |              | Concentra  | itions in Soil | TCEQ       | 9/21/2006         | 9/21/2006         |
| DEPTH                         |                           | Screening  | Method      | Method       | (95% UI    | PL, mg/kg)     | Risk-Based | 0.5 - 0.5 Ft      | 4.5 - 4.5 Ft      |
| SAMPLE PURPOSE                |                           | Value      | Detection   | Quantitation | Surface    | Subsurface     | Screening  | REG               | REG               |
| Test Group                    | Parameter (Units = mg/kg) | (RBSV)     | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft   | Value      | Result DIL LQ VQ  | Result DIL LQ VQ  |
| VOLATILES                     | Carbon tetrachloride      | 3.5E-01    | 0.0005      | 0,005        | NE         | NE             | 3.5E-01    |                   | 0.006 1 U         |
| VOLATILES                     | Chlorobenzene             | 4.0E+01    | 0.0005      | 0.005        | NE         | NE             | 4.0E+01    |                   | 0.006 1 U         |
| VOLATILES                     | Chloroethane              | 1.1E+03    | 0.0010      | 0.010        | NE         | NE             | 1.1E+03    |                   | 0.012 1 U         |
| VOLATILES                     | Chloroform                | 3.1E-01    | 0.0005      | 0.005        | NE         | NE             | 3.1E-01    |                   | 0.006 1 U         |
| VOLATILES                     | Chloromethane             | 2.3E-01    | 0.0020      | 0.010        | NE         | NE             | 2.3E-01    |                   | 0.012 1 U         |
| VOLATILES                     | cis-1.2-Dichloroethene    | 1.2E+02    | 0.0005      | 0.005        | NE         | NE             | 1.2E+02    |                   | 0.006 1 U         |
| VOLATILES                     | cis-1.3-Dichloropropene   | 1.2E+00    | 0.0005      | 0.005        | NE         | NE             | 1.2E+00    |                   | 0.00B 1 U         |
| VOLATILES                     | Dibromochloromethane      | 7.6E+00    | 0.0005      | 0.005        | NE         | NE             | 7.6E+00    |                   | 0.006 1 U         |
| VOLATILES                     | Dibromomethane            | 1.9E+01    | 0.0005      | 0.005        | NE         | NE             | 1.9E+01    |                   | 0.006 1 U         |
| VOLATILES                     | Dichtorodifluoromethane   | 2.2E+02    | 0.0010      | 0.010        | NE         | NE             | 2.2E+02    |                   | 0.012 1 U         |
| VOLATILES                     | Ethylbenzene              | 4.3E+02    | 0.0005      | 0.005        | NE         | NE             | 4.3E+02    |                   | 0.006 1 U         |
| VOLATILES                     | Hexachlorobutadiene       | 1.6E+00    | 0.0005      | 0.005        | NE         | NE             | 1.6E+00    |                   | 0.006 1 U         |
| VOLATILES                     | Isopropyibenzene          | 5.4E+02    | 0.0005      | 0.005        | NE         | NE             | 5.4E+02    |                   | 0.006 1 U         |
| VOLATILES                     | m.o-Xvlenes               | 2.3E+02    | 0.0005      | 0.005        | NE         | NE             | 2.3E+02    |                   | 0.006 1 U         |
| VOLATILES                     | Methyl isobutyl ketone    | 1.3E+03    | 0.0025      | 0.01         | NE         | NE             | 1.3E+03    |                   | 0.012 1 U         |
| VOLATILES                     | Methylene chloride        | 8.7E+00    | 0.0010      | 0.005        | NE         | NE             | 8.7E+00    |                   | 0.003 1 J B       |
| VOLATILES                     | Naphthateae               | 1.8E+01    | 0.0005      | 0.01         | NE         | NE             | 1.8E+01    |                   | 0.012 1 U         |
| VOLATE ES                     | n-BUTYLBENZENE            | 2.7E+02    | 0.0005      | 0.005        | NE         | NE             | 2.7E+02    |                   | 0.006 1 U         |
| VOLATILES                     | n-PROPYLBENZENE           | 3.2E+02    | 0.0005      | 0.005        | NE         | NE             | 3.2E+02    |                   | 0.006 1 U         |
| VOLATILES                     | n-ISOPROPYLTOLUENE        | 4.2E+02    | 0.0005      | 0.005        | NË         | NE             | 4.2E+02    |                   | 0.006 1 U         |
| VOLATILES                     | SEC-BUTYLBENZENE          | 3.0E+02    | 0.0005      | 0.005        | NE         | NE             | 3.0E+02    |                   | 0.006 1 U         |
| VOLATILES                     | Styrene                   | 1.3E+03    | 0.0005      | 0.005        | NE         | NE             | 1.3E+03    |                   | 0.006 1 U         |
| VOLATILES                     | tert-BUTYLBENZENE         | 2.6E+02    | 0.0005      | 0.005        | NĘ         | NE             | 2.6E+02    |                   | 0.006 1 U         |
| VOLATILES                     | Tetrachlorgethene         | 6.0E+00    | 0.0005      | 0.005        | NE         | NE             | 6.0E+00    |                   | 0.006 1 U         |
| VOLATILES                     | Toluene                   | 1.1E+03    | 0.0005      | 0.005        | NE         | NE             | 1.1E+03    |                   | 0.006 1 U         |
| VOLATILES                     | trans-1.2-Dichloroethene  | 1.4E+02    | 0.0005      | 0.005        | NE         | NE             | 1.4E+02    |                   | 0.006 1 U         |
| VOLATILES                     | trans-1.3-Dichloropropene | 1.8E+00    | 0.0005      | 0.005        | NE         | NE             | 1.8E+00    |                   | 0.006 1 U         |
| VOLATILES                     | Trichlorgethene           | 3,7E+00    | 0.0005      | 0.005        | NE         | NE             | 3.7E+00    |                   | 0.006 1 U         |
| VOLATILES                     | Trichlorofluoromethane    | 2.6E+02    | 0.0010      | 0.01         | NE         | NE             | 2.6E+02    |                   | 0.012 1 U         |
| VOLATILES                     | Vinvl acetate             | 5.7E+01    | 0.0010      | 0.01         | NE         | NE             | 5.7E+01    |                   | 0.012 1 U UJ      |
| VOLATILES                     | Vinyl chloride            | 3.6E-02    | 0.0010      | 0.01         | NE         | NE             | 3.6E-02    | l                 | <u>0.012 1 U</u>  |

Footnotes are shown on cover page to Tables Section.

Page 2 of 2

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

# 00066581

## Table 4-95 Comparison of Chemical Concentrations In Soil to Risk-Based Screening Values

| Su | mp - | 07 | 6 |
|----|------|----|---|
|----|------|----|---|

| [SUMP] = SUMP076       |                                       |                    |             |              |                      |              |                    |                                     |                                     | 170000                  |                           |                       |
|------------------------|---------------------------------------|--------------------|-------------|--------------|----------------------|--------------|--------------------|-------------------------------------|-------------------------------------|-------------------------|---------------------------|-----------------------|
| SAMPLE NO              |                                       | TCEO               |             |              | Back                 | houon        | Annlicable         | 35SUMP076-SB01<br>35-SMP076-SB01-01 | 35SUMP076-SB01<br>35-SMP076-SB01-02 | 475830<br>475830/0-0-5) | 475830<br>475830(0-0-5\OC | 47SB30<br>47SB30(1-2) |
| SAMPLE_DATE            |                                       | Risk-Based         |             |              | Concentra            | ions in Soil | TCEQ               | 9/14/2006                           | 9/14/2006                           | 6/5/2000                | 6/5/2000                  | 6/5/2000              |
| DEPTH                  |                                       | Screening          | Method      | Method       | (95% UP              | L, mg/kg)    | Risk-Based         | 0.5 - 0.5 Ft                        | 7 - 7 Ft                            | 0 - 0.5 Ft              | 0 - 0.5 Ft                | 1 - 2 Ft              |
| SAMPLE_PURPOSE         |                                       | Value              | Detection   | Quantitation | Surface              | Subsurface   | Screening          | REG                                 | REG                                 | REG                     | FD                        | REG                   |
| Test Group             | Parameter (Units = mg/kg)             | (RBSV) *           | Limit (MDL) | Limit (MQL)  | 0-0.5 Ft             | 1.5 - 2.5 Ft | Value              | Result DIL LQ VQ                    | Result DIL LO VO                    | Result DIL LQ VQ        | Result DIL LQ VQ          | Result DIL LQ VQ      |
| METALS                 | Antimony                              | 7.3E+00            | 0.000       | 20.00        | 1.63E+04<br>9.40E-01 | 2.082+04     | 1.6E+04<br>7.3E+00 |                                     | 13000.000 1                         |                         |                           |                       |
| METALS                 | Arsenic                               | 2.0E+01            | 0.075       | 0.30         | 4.81E+00             | 5.54E+00     | 2.0E+01            | 10.6 1                              | 1.810 1                             |                         |                           |                       |
| METALS                 | Bañum                                 | 2.6E+03            | 0.075       | 0.30         | 1.52E+02             | 8.55E+01     | 2.6E+03            | 132 1                               | 54.600 1                            |                         |                           |                       |
| METALS                 | Beryllium                             | 4.6E+00            | 0.012       | 0.50         | 6.45E-01             | 7.66E-01     | 4.6E+00            | 0.641 1                             | 0.786 1                             |                         |                           |                       |
| METALS                 | Calcium                               | 5.2E+00            | 0.025<br>NA | 0.10         | 1.40±+00             | 4.000-01     | 5.2E+00            | 0.104 1 J J                         | 0.046 1 J J                         |                         |                           |                       |
| METALS                 | Chromium                              | 5.9E+03            | 0,100       | 0.40         | 2.66E+01             | 3.012+01     | 5.9E+03            | 13.9 1                              | 14 700 1                            |                         |                           |                       |
| METALS                 | Cobalt                                | 1.5E+03            | 0.125       | 0.50         | 7.23E+00             | 5.61E+00     | 1.5E+03            | 7.010 1                             | 7.260 1                             |                         |                           |                       |
| METALS                 | Copper                                | 1.0E+03            | 0.150       | 0.60         | 5.55E+00             | 9.25E+00     | 1.0E+03            | 4.120 1                             | 5.850 1                             |                         |                           |                       |
| METALS                 | เกายา                                 | NE<br>5 OE+02      | NA<br>0.500 | NA<br>5.00   | NA<br>D DEEL01       | NA           |                    | 13200 1                             | 14300.000 1                         |                         |                           |                       |
| METALS                 | Magnesium                             | NE                 | NA          | NA           | Z.ZULTUI<br>NA       | NA           | 0.0E+02            | 947 1                               | 1020.000 1                          |                         |                           |                       |
| METALS                 | Manganese                             | 1.7E+03            | 0.050       | 0.20         | 1.25E+03             | 2.01E+02     | 1.7E+03            | 181 1                               | 48.400 1                            |                         |                           |                       |
| METALS                 | Mercury                               | 1.1E-02            | 0.010       | 0.25         | 8.19E-02             | 3.60E-01     | 2.5E-01            | 0.027 1 J J                         | 0.275 1 U U                         |                         |                           |                       |
| METALS                 | Nickel                                | 1.9E+02            | 0.200       | 0.80         | 6.98E+00             | 1.16E+01     | 1.9E+02            | 7.9 1                               | 9,580 1                             |                         |                           |                       |
| METALS                 | Selenium                              | 1 3E+02            | 0 100       | 0.20         | 3.485+00             | 5 57E+00     | 135+02             | 0.362 1                             | 0.226 1 1                           |                         |                           |                       |
| METALS                 | Silver                                | 4.7E+01            | 0.050       | 0.20         | 3.10E-01             | 3.70E-01     | 4.7E+01            | 1.640 1 U U                         | 1.710 1 U U                         |                         |                           |                       |
| METALS                 | Sodium                                | NE                 | NA          | NA           | NA                   | NA           |                    | 34.4 1                              | 319.000 1                           |                         |                           |                       |
| METALS                 | Thallium                              | 2.0E+00            | 0.010       | 0.02         | 4.70E-01             | NE           | 2.0E+00            | 0.076 1                             | 0.126 1                             |                         |                           |                       |
| METALS                 | Zinc                                  | 4.8E+01<br>5.9E+03 | 0.125       | 0.50         | 3.218+01             | 4.46E+01     | 4.8E+01            | 24.6 1                              | 23.900 1                            |                         |                           |                       |
| PERC                   | Perchlorate                           | 1.4E+01            | 0.500       | 0.010        | 0.10E+01             | 2.02E+01     | 5.82+03<br>1.4F+01 | 30.4 1                              | 31.800 1                            | 0.031 1 1               | 0.008 1 < 118             | 0.006 1 < 11          |
| RANGE_ORGANICS         | Carbon Range C12-C28                  | 4.0E+02            | 25          | 50           | NE                   | NE           | 4.0E+02            | 34 1 J J                            | 32,700 † J J                        | 0.001 1 0               | 0.000 1 4 03              | 0.000 1 4 0           |
| RANGE_ORGANICS         | CARBON RANGE C28-C35                  | 4.0E+02            | 25          | 50           | NE                   | NE           | 4.0E+02            | 35.3 1 J J                          | 35.000 1 J J                        |                         |                           |                       |
| RANGE_ORGANICS         | Carbon Range C6-C12<br>Bargant Solida | 1.7E+02            | 25          | 50           | NE                   | NE           | 1.7E+02            | 55.5 1 U U                          | 57.300 1 U U                        |                         |                           |                       |
| VOLATILES              | 1.1.1.2-Tetrachlomethane              | 5 2E+00            | 0.0005      | 0.005        | NE                   | NE           | 5 25+00            | 89.5 1                              | 85.000 1                            |                         |                           |                       |
| VOLATILES              | 1,1,1-Trichloroethane                 | 2.3E+02            | 0.0005      | 0.005        | NE                   | NE           | 2.3E+02            |                                     | 0.001 1 J J                         |                         |                           |                       |
| VOLATILES              | 1,1,2,2-Tetrachloroethane             | 5.1E-01            | 0.0005      | 0.005        | NË                   | NE           | 5.1E-01            |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILES              | 1,1,2-Trichloroethane                 | 9.7E-01            | 0.0005      | 0.005        | NE                   | NE           | 9.7E-01            |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILES              | 1.1-Dichloroethene                    | 2.7E+01            | 0.0010      | 0.005        | NE                   | NE           | 8.9E+01            |                                     | 0.003 1 J J                         |                         |                           |                       |
| VOLATILES              | 1,1-Dichloropropene                   | 9.9E-01            | 0.0005      | 0.005        | NE                   | NE           | 9.9E-01            |                                     | 0.005 1 0 0                         |                         |                           |                       |
| VOLATILES              | 1.2,3-Trichlorobenzene                | 4.2E+01            | 0.0005      | 0.005        | NE                   | NĘ           | 4.2E+01            |                                     | 0.005 1 Ŭ Ŭ                         |                         |                           |                       |
| VOLATILES              | 1,2,3-Trichloropropane                | 9.2E-02            | 0.0010      | 0.005        | NE                   | NE           | 9.2E-02            |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILES              | 1.2.4-Trimethylbenzene                | 9.6E+00            | 0.0005      | 0.005        | NE                   | NE           | 1.46+02            |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILES              | 1.2-Dibromo-3-chloropropane           | 3.5E-01            | 0.0020      | 0.005        | NE                   | NE           | 3.5E+00            |                                     | 0.005 1 0 0                         |                         |                           |                       |
| VOLATILES              | 1.2-Dibromoethane                     | 5.3E-02            | 0.0005      | 0.005        | NE                   | NE           | 5.3E-02            |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILES              | 1,2-Dichtorobenzene                   | 5.6E+01            | 0.0005      | 0.005        | NE                   | NE           | 5.6E+01            |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILES              | 1,2-Dichloropropage                   | 2.7E-01<br>1.9E+00 | 0.0005      | 0.005        | NE                   | NE           | 2.7E-01            |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILES              | 1.2-Dimethylbenzene (o-Xviene)        | 3.3E+03            | 0.0005      | 0.005        | NE                   | NE           | 3.35+03            |                                     | 0.005 1 0 0                         |                         |                           |                       |
| VOLATILES              | 1,3.5-Trimethylbenzene                | 8.3E+00            | 0.0005      | 0.005        | NE                   | NE           | 8.3E+00            |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILES              | 1,3-Dichlorobenzene                   | 5.1E+00            | 0.0005      | 0.005        | NE                   | NE           | 5.1E+00            |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILES<br>VOLATILES | 1,3-Dichloropropane                   | 3.0E+00<br>2.7E+01 | 0.0005      | 0.005        | NE                   | NE           | 3.0E+00            |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILES              | 2.2-Dichloropropane                   | 1.7E+00            | 0.0005      | 0.005        | NE                   | NE           | 2./E+01<br>1.7E+00 |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILE\$             | 2-Butanone                            | 2.6E+03            | 0.0025      | 0.010        | NE                   | NE           | 2.6E+03            |                                     | 0.010 1 U U                         |                         |                           |                       |
| VOLATILES              | 2-Chloroethyl vinyl ether             | 2.1E-01            | 0.0020      | 0.010        | NE                   | NE           | 2.1E-01            |                                     | 0.010 1 U U                         |                         |                           |                       |
| VOLATILES              | 2-Chlorotoluene                       | 1.5E+02            | 0.0005      | 0.005        | NE                   | NE           | 1.5E+02            |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILES              | 4-Chlorotoluene                       | 3.4E-01            | 0.0025      | 0.010        | NE                   | NE           | 6.2E+00<br>3.4E-01 |                                     | 0.010 1 U U                         |                         |                           |                       |
| VOLATILES              | Acetone                               | 1.7E+02            | 0.0050      | 0.010        | NE                   | NE           | 1.7E+02            |                                     | 0.010 1 U U                         |                         |                           |                       |
| VOLATILE\$             | Benzene                               | 8.8E-01            | 0.0005      | 0.005        | NE                   | NE           | 8.8E-01            |                                     | 0.005 1 U U                         |                         |                           |                       |
|                        | Bromoblerizene                        | 1.1E+01            | 0.0005      | 0.005        | NE                   | NE           | 1.1E+01            |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILES              | Bromodichloromethane                  | 2.4E+01<br>1.0E+01 | 0.0005      | 0.005        | NE                   |              | 2.4E+01            |                                     | 0.005 1 U U                         |                         |                           |                       |
| VOLATILES              | Bromoform                             | 3.4E+01            | 0.0005      | 0.005        | NE                   | NE           | 3.4E+01            |                                     | 0.005 1 0 0                         |                         |                           |                       |
| VOLATILES              | Bromomethane                          | 3.5E-01            | 0.0010      | 0.010        | NE                   | NE           | 3.5E-01            |                                     | 0.010 1 U U                         |                         |                           |                       |
| VOLATILES              | Carbon disulfide                      | 1.0E+02            | 0.0005      | 0.005        | NE                   | NE           | 1.0E+02            |                                     | 0.005 1 ŪŪ                          |                         |                           |                       |
| VOLATILES              | Chlorobenzene                         | 3.52-01<br>4.05+01 | 0.0005      | 0.005        | NE                   | NE           | 3.5E-01            |                                     | 0.005 t U U                         |                         |                           |                       |
| VOLATILES              | Chloroethane                          | 1.1E+03            | 0.0010      | 0.000        | NE                   | NE           | 4.0E+01<br>1.1E+03 |                                     | 0.005 1 U U<br>0.010 1 1 U          |                         |                           |                       |
| VOLATILES              | Chloroform                            | 3.1E-01            | 0.0005      | 0.005        | NE                   | NE           | 3.1E-01            |                                     | 0.005 1 U U                         |                         |                           |                       |

#### Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

### Shaw Environmental, Inc.

# 00066582

# Table 4-95 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

# Sump - 076

| [SUMP] = SUMP076<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backg<br>Concentrat<br>(95% UPI<br>Surface | round<br>ions in Soil<br>mg/kg)<br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 355UMP076-SB01<br>35-SMP076-SB01-01<br>9/14/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP076-SB01<br>35-SMP076-SB01-02<br>9/14/2006<br>7 - 7 Ft<br>REG | 47SB30<br>47SB30(0-0_5)<br>6/5/2000<br>0 - 0.5 Ft<br>REG | 47SB30<br>47SB30(0-0_5)QC<br>6/5/2000<br>0 - 0.5 Ft<br>FD | 47SB30<br>47SB30(1-2)<br>6/5/2000<br>1 - 2 Ft<br>REG |
|--|---------------------------|--|---------------------|------------------------|--|---|---|---|---|--|---|--|
| Test Group   | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                                 | 1.5 - 2.5 Ft                                  | Value   | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL_LQ_VQ                                     |
| VOLATILES  | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NE   | NE  | 2.3E-01                                       |   | 0.010 1 0 0   |  |   |  |
| VOLATILES  | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NE   | NE  | 1.2E+02                                       |   | 0.010 1   |  |   |  |
| VOLATILES  | cis-1,3-Dichloropropene   | 1,2E+00                                  | 0.0005              | 0,005                  | NE   | NE  | 1.2E+00                                       |   | 0.005 1 0 0   |  |   |  |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NE   | NE  | 7.6E+00                                       |   | 0.005 1 0 0   |  |   |  |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE   | NE  | 1.9E+01                                       |   | 0.005 1 0 0   |  |   |  |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE   | NE  | 2.2E+02                                       |   | 0.010 1 U U   |  |   |  |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE   | NE  | 4.3E+02                                       |   | 0.005 1 U U   |  |   |  |
| VOLATILES  | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NE   | NE  | 1.6E+00                                       |   | 0.005 1 U U   |  |   |  |
| VOLATILES  | isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE   | NE  | 5.4E+02                                       |   | 0.005 1 U U   |  |   |  |
| VOLATILES  | m.p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NE   | NË  | 2.3E+02                                       |   | 0.005 1 U U   |  |   |  |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NE   | NE  | 1.3E+03                                       |   | 0.010 1 U U   |  |   |  |
| VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE   | NE  | 8.7E+00                                       |   | 0.005 1 U U   |  |   |  |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NE   | NE  | 1.8E+01                                       |   | 0.010 1 U U   |  |   |  |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NE   | NE  | 2.7E+02                                       |   | 0.005 1 U U   |  |   |  |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NE   | NE  | 3.2E+02                                       |   | 0.005 1 U U   |  |   |  |
| VOI ATILES   | p-ISOPROPYLTOLUENE        | 4,2E+02                                  | 0.0005              | 0.005                  | NÉ   | NE  | 4.2E+02                                       |   | 0.005 1 U U   |  |   |  |
| VOLATILES  | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE   | NE  | 3.0E+02                                       |   | 0.005 1 U U   |  |   |  |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE   | NE  | 1.3E+03                                       |   | 0.005 1 U U   |  |   |  |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE   | NE  | 2.6E+02                                       |   | 0.005 1 U U   |  |   |  |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NE   | NE  | 6.0E+00                                       |   | 0.004 1 J J   |  |   |  |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE   | NE  | 1.1E+03                                       |   | 0.005 1 U U   |  |   |  |
| VOLATILES  | trans-1.2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE   | NE  | 1.4E+02                                       |   | 0.005 1 U U   |  |   |  |
| VOLATILES  | trans-1.3-Dichloroprogene | 1.8E+00                                  | 0.0005              | 0.005                  | NE   | NE  | 1.8E+00                                       |   | 0.005 1 U U   |  |   |  |
| VOI ATILES   | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE   | NE  | 3.7E+00                                       |   | 0.028 1   |  |   |  |
| VOLATILES  | Tricblorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01                   | NĘ   | NE  | 2.6E+02                                       |   | 0.010 1 U U   |  |   |  |
| VOLATILES  | Vinvi acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NÉ   | NE  | 5.7E+01                                       |   | 0.010 1 U U   |  |   |  |
| VOLATILES  | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.01                   | NE   | NE  | 3.6E-02                                       | 1   | 0.003 1 J J   |  |   |  |

# 00066583

| Table 4-96   |      |
|--|------|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Va | lues |

Sump-077

| SUMP] = SUMP077 |                                   |                    |             |              |                      |                          |                    | 35SUMP077-SB01    | 35SUMP077-SB01    |
|-----------------|-----------------------------------|--------------------|-------------|--------------|----------------------|--------------------------|--------------------|-------------------|-------------------|
| SAMPLE NO       |                                   | TCEQ               |             |              | Backg                | ground                   | Applicble          | 35-SMP077-SB01-01 | 35-SMP077-SB01-02 |
| SAMPLE DATE     |                                   | Risk-Based         |             |              | Concentrat           | tions in Soil            | TCEQ               | 9/14/2006         | 9/14/2006         |
| DEPTH           |                                   | Screening          | Method      | Method       | (95% UP              | L, mg/kg)                | Risk-Based         | 0.5 - 0.5 Ft      | 7-7FL<br>BEG      |
| SAMPLE_PURPOSE  |                                   | Value              | Detection   | Quantitation | Surface              | Subsurface               | Screening          |                   |                   |
| Test Group      | Parameter (Units = mg/kg)         | (RBSV)*            | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft           | 1.5 - 2.5 Ft<br>2 08E+04 |                    | 6480.000 1        | 19600.000 1       |
| METALS          | Antimony                          | 7.36+00            | 0.500       | 0.10         | 9.402-01             | 1.60E+00                 | 7.3E+00            | 0.103 1 U U       | 0.116 1 U U       |
| METALS          | Arsenic                           | 2.0E+01            | 0.075       | 0.30         | 4.81E+00             | 5.54E+00                 | 2.0E+01            | 3.650 1           | 2.130 1           |
| METALS          | Barium                            | 2.6E+03            | 0.075       | 0.30         | 1.52E+02             | 8.55E+01                 | 2.6E+03            | 65.400 1          | 131.000 1         |
| METALS          | Beryllium                         | 4.6E+00            | 0.012       | 0.50         | 6.45E-01             | 7.66E-01                 | 4.6E+00            | 0.419 1           | 0.797 1           |
| METALS          | Cadmium                           | 5.2E+00            | 0.025       | 0.10         | 1.40E+00             | 4.00E-01                 | 5.2E+00            |                   | 392,000 1         |
| METALS          | Calcium                           | 5 0E±03            | NA<br>0.100 | NA<br>0.40   | NA<br>2 66E+01       | 3.01E+01                 | 5.9E+03            | 34.800 1          | 14.300 1          |
| METALS          | Cobalt                            | 1.5E+03            | 0.125       | 0.50         | 7.23E+00             | 5.61E+00                 | 1.5E+03            | 2.560 1           | 5.330 1           |
| METALS          | Copper                            | 1.0E+03            | 0.150       | 0.60         | 5.55E+00             | 9.25E+00                 | 1.0E+03            | 13.800 1          | 4.530 1           |
| METALS          | tron                              | NE                 | NA          | NA           | NA                   | NA                       |                    | 25500.000 1       | 16900.000 1       |
| METALS          | Lead                              | 5.0E+02            | 0.500       | 5.00         | 2.26E+01             | 1.14E+01                 | 5.0E+02            | 37.100 1          | 8.910 1           |
| METALS          | Magnesium                         | NE                 | NA          | NA           | NA<br>1 355 JO2      | NA<br>2.015+02           | 1 75-03            | 410.000 1         | 52 300 1          |
| METALS          | Manganese                         | 1.7E+03            | 0.050       | 0.20         | 1.23ETU3<br>8 10E-02 | 3.605-01                 | 2.5E-01            | 0.041 1 .  .      | 0.306 1 U U       |
| METALS          | Nickel                            | 1 9E+02            | 0.010       | 0.80         | 6.98E+00             | 1.16E+01                 | 1.9E+02            | 4.130 1           | 11.300 1          |
| METALS          | Potassium                         | NE                 | NA          | NA           | NA                   | NA                       | -                  | 272.000 1         | 580.000 1         |
| METALS          | Selenium                          | 1.3E+02            | 0,100       | 0.20         | 3.48E+00             | 5.57E+00                 | 1.3E+02            | 0.395 1           | 0.366 1           |
| METALS          | Silver                            | 4.7E+01            | 0.050       | 0.20         | 3.10E-01             | 3.70E-01                 | 4.7E+01            | 1.530 1 U U       | 1.780 1 U U       |
| METALS          | Sodium                            | NE                 | NA          | NA           | NA<br>A TOT AA       | NA                       | 0.05+00            | 17.000 1 J J      | 0 151 1           |
| METALS          | Thallium                          | 2.0E+00            | 0.010       | 0.02         | 4.708-01             | NE<br>4.465±01           | 2.02+00            | 33.800 1          | 26.900 1          |
| METALS          | Vanadium                          | 4.0ETU1<br>5.9E+03 | 0.125       | 2.50         | 6 16E+01             | 2.02E+01                 | 5.9E+03            | 97.100 1          | 32.200 1          |
| RANGE ORGANICS  | Carbon Range C12-C28              | 4.0E+02            | 25          | 50           | NE                   | NË                       | 4.0E+02            | 33.400 1 J J      | 60.500 1 U U      |
| RANGE ORGANICS  | CARBON RANGE C28-C35              | 4.0E+02            | 25          | 50           | NE                   | NE                       | 4.0E+02            | 37.200 1 J J      | 60.500 1 U U      |
| RANGE_ORGANICS  | Carbon Range C6-C12               | 1.7E+02            | 25          | 50           | NE                   | NE                       | 1.7E+02            | 52.700 1 U U      | 60.500 1 U U      |
| SOLIDS          | Percent Solids                    | NE                 | NE          | NE           | NE                   | NE                       | -<br>5 35+00       | 94.300 1          | 0.005 1 11 11     |
| VOLATILES       | 1,1,1,2-1 etrachloroethane        | 5.2E+00            | 0.0005      | 0.005        |                      | NE                       | 2.3E+02            |                   | 0.005 1 0 0       |
|                 | 1,1,2,2-Tetrachloroethane         | 5 1E-01            | 0.0005      | 0.005        | NE                   | NE                       | 5.1E-01            |                   | 0.005 1 U U       |
| VOLATILES       | 1.1.2-Trichloroethane             | 9.7E-01            | 0.0005      | 0.005        | NE                   | NE                       | 9.7E-01            |                   | 0.005 1 U U       |
| VOLATILES       | 1,1-Dichloroethane                | 8.9E+01            | 0.0010      | 0,005        | NE                   | NE                       | 8.9E+01            |                   | 0.005 1 U U       |
| VOLATILES       | 1,1-Dichloroethene                | 2.7E+01            | 0.0005      | 0.005        | NE                   | NE                       | 2.7E+01            |                   | 0.005 1 U U       |
| VOLATILES       | 1,1-Dichloropropene               | 9.9E-01            | 0.0005      | 0.005        | NE                   | NE                       | 9.9E-01            | 1                 |                   |
| VOLATILES       | 1,2,3-Trichlorobenzene            | 4.28+01            | 0.0005      | 0.005        | NE                   | NE                       | 4.2E+01<br>9.2E-02 |                   | 0.005 1 0 0       |
|                 | 1.2.3-Thchlorophopane             | 9.2E-02<br>1 4F+02 | 0.0010      | 0.005        | NE                   | NE                       | 1.4E+02            |                   | 0.005 1 U U       |
| VOLATILES       | 1.2.4-Trimethylbenzene            | 9.6E+00            | 0.0005      | 0.005        | NE                   | NE                       | 9.6E+00            |                   | 0.005 1 U U       |
| VOLATILES       | 1,2-Dibromo-3-chloropropane       | 3.5E-01            | 0.0020      | 0.005        | NE                   | NE                       | 3.5E-01            |                   | 0.005 1 U U       |
| VOLATILES       | 1,2-Dibromoethane                 | 5.3E-02            | 0.0005      | 0.005        | NË                   | NE                       | 5.3E-02            |                   | 0.005 1 U U       |
| VOLATILES       | 1,2-Dichlorobenzene               | 5.6E+01            | 0.0005      | 0.005        | NE                   | NE                       | 2.0001             |                   | 0.005 1 0 0       |
| VOLATILES       | 1,2-Dichioroemane                 | 1.85+00            | 0.0005      | 0.005        | NE                   | NE                       | 1.85+00            |                   | 0.005 t U U       |
| VOLATILES       | 1.2-Dimethylhenzene (o-Xvlene)    | 3.3E+03            | 0.0005      | 0.005        | NE                   | NE                       | 3.3E+03            |                   | 0.005 1 U U       |
| VOLATILES       | 1,3,5-Trimethylbenzene            | 8.3E+00            | 0.0005      | 0.005        | NE                   | NE                       | 8.3E+00            |                   | 0.005 1 U U       |
| VOLATILES       | 1,3-Dichlorobenzene               | 5.1E+00            | 0.0005      | 0.005        | NE                   | NE                       | 5.1E+00            |                   | 0.005 1 U U       |
| VOLATILES       | 1,3-Dichloropropane               | 3.0E+00            | 0.0005      | 0.005        | NE                   | NE                       | 3.0E+00            | 1                 |                   |
| VOLATILES       | 1,4-Dichlorobenzene               | 2.78+01            | 0.0005      | 0.005        | NE                   | NE                       | 1.7 5+00           |                   | 0.005 1 U U       |
| VOLATILES       | 2.2-Dichloropropane<br>2-Butanone | 2.6E+03            | 0.0005      | 0.010        | NE                   | NE                       | 2.6E+03            |                   | 0.010 1 U U       |
| VOLATILES       | 2-Chloroethyl vinyl ether         | 2.1E-01            | 0.0020      | 0.010        | NE                   | NE                       | 2.1E-01            |                   | 0.010 1 U U       |
| VOLATILES       | 2-Chlorotoluene                   | 1.5E+02            | 0.0005      | 0.005        | NE                   | NE                       | 1.5E+02            |                   | 0.005 1 U U       |
| VOLATILES       | 2-Hexanone                        | 6.2E+00            | 0.0025      | 0.010        | NE                   | NE                       | 6.2E+00            |                   | 0.010 1 U U       |
| VOLATILES       | 4-Chlorotokrene                   | 3.4E-01            | 0.0005      | 0.005        | NE                   | NE                       | 3.4E-01            |                   | 0.005 1 0 0       |
| VOLATILES       | Acetone                           | 1./E+U2<br>9 95 04 | 0.0050      | 0.010        | NE                   |                          | 8.85-01            |                   | 0.005 1 U U       |
| VOLATILES       | Bromohenzene                      | 1 1E+01            | 0.0005      | 0.005        | NE                   | NE                       | 1.1E+01            |                   | 0.005 1 U U       |
| VOLATILES       | Bromochloromethane                | 2.4E+01            | 0.0005      | 0.005        | NE                   | NE                       | 2.4E+01            |                   | 0.005 I U U       |
| VOLATILES       | Bromodichloromethane              | 1.0E+01            | 0.0005      | 0.005        | NE                   | NE                       | 1.0E+01            |                   | 0.005 1 U U       |
| VOLATILES       | Bromoform                         | 3.4E+01            | 0.0005      | 0.005        | NE                   | NE                       | 3.4E+01            |                   | 0.005 1 U U       |
| VOLATILES       | Bromomethane                      | 3.5E-01            | 0.0010      | 0.010        | NE                   | NE                       | 3.5E-01            | 1                 | 0.010 1 0 0       |

Shaw Environmental, Inc.

# 00066584

| Table 4-96   |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
|  |

Sump-077

| SUMP 3 SUMP077<br>LOCATION         TCEQ         Background         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 SB01 - 0<br>(25% UFL, mg/kg)         SSUMP077 |                                    |                           |            |             | •            |            |                |                     |                      |                  |
|---|------------------------------------|---------------------------|------------|-------------|--------------|------------|----------------|---------------------|----------------------|------------------|
| SAMPLE_NO         TCEQ         Background<br>(95% UPL mgkn)         Applicate<br>(7500)         Science (77500)   | [SUMP] = SUMP077<br>LOCATION _CODE |                           |            |             |              | 0          |                |                     | 35SUMP077-SB01       | 35SUMP077-SB01   |
| SAMPLE_DATE         Risk-Based         Concentrations in Solid         TCLQ         of MAXOB         PMAXOB   | SAMPLE_NO                          |                           | TCEQ       |             |              | Back       | ground         | Applicole           | 33-31/1-01/1-3801-01 | 0/14/2006        |
| Screening         Method         Meth   | SAMPLE_DATE                        |                           | Risk-Based |             |              | Concentra  | ations in Soli | TUEQ<br>Dist: Decod | 05 055               | 7 . 7 Et         |
| SAMPLE PURPOSE         Value         Detection         Guantation         Surface         Submote         Result         Pictor         Result         Pictor         Result         Pictor         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         LQ VQ         Result         Dit         U         <  | DEPTH                              |                           | Screening  | Method      | Method       | (95% U)    | -с, тд/кд)     | RISK-Based          | 0.3-0.5 Pt           | PEC              |
| Test Group         Parameter (Units = mg/kg)         (RBSV)*         Limit (MCL) </td <td>SAMPLE_PURPOSE</td> <td></td> <td>Value</td> <td>Detection</td> <td>Quantitation</td> <td>Surface</td> <td>Subsurface</td> <td>Screening</td> <td>REG</td> <td>REG</td>   | SAMPLE_PURPOSE                     |                           | Value      | Detection   | Quantitation | Surface    | Subsurface     | Screening           | REG                  | REG              |
| VOLATILES         Carbon disufficie         1.0E+02         0.0005         0.005         NE         NE         1.0E+02         0.0005         1         U   | Test Group                         | Parameter (Units = mg/kg) | (RBSV)*    | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft   | Value               | Result DIL LQ VQ     | Result DIL LQ VQ |
| VOLATLES         Carbon tetrachioride         3.5E-01         0.0005         1         0  | VOLATILES                          | Carbon disulfide          | 1.0E+02    | 0.0005      | 0.005        | NE         | NE             | 1.0E+02             |                      |                  |
| VOLATILES         Chlorobenzene         4.0E+01         0.0005         0.005         NE         NE         4.0E+01         0.0005         1         U         U           VOLATILES         Chloroform         3.1E-01         0.0005         0.005         NE         NE         3.1E-01         0.0016         1         U         U           VOLATILES         Chloronethane         2.3E-01         0.0020         0.010         NE         NE         2.3E-01         0.001         1         U         U           VOLATILES         dis-12-Dichloronethane         1.2E+02         0.0015         0.005         NE         NE         1.2E+00         0.0005         1         U         U         VOLATILES         Dibromochloronethane         7.6E+00         0.0016         0.005         NE         NE         7.6E+00         0.0005         1         U         U         VOLATILES         Dibromochloronethane         2.2E+02         0.0010         0.005         NE         NE         2.2E+02         0.0011         1         U         U         VOLATILES         Dibromochloronethane         2.2E+02         0.005         0.005         NE         NE         4.3E+02         0.0011         1         U         U         VOLATILES  | VOLATILES                          | Carbon tetrachloride      | 3.5E-01    | 0.0005      | 0.005        | NE         | NE             | 3.5E-01             |                      | 0.005 1 0 0      |
| VOLATILES         Chiorostinane         1.1E+03         C0.010         NE         NE         1.1E+03         C0.010         I         U         U           VOLATILES         Chioromithane         2.3E-01         0.005         NE         NE         3.1E-01         0.005         NE         NE         2.3E-01         0.010         1         U         U           VOLATILES         Chioromithane         1.2E+02         0.0015         0.005         NE         NE         1.2E+00         0.0015         1         U   | VOLATILES                          | Chlorobenzene             | 4.0E+01    | 0.0005      | 0.005        | NE         | NE             | 4.0E+01             |                      | 0.005 1 0 0      |
| VOLATILES         Chloroform         3.1E-01         0.0005         NE         NE         3.1E-01         0.0005         1         U           VOLATILES         chloroforthane         1.2E+02         0.0005         0.005         NE         NE         1.2E+02         0.0011         1         J         J           VOLATILES         cis-1.2-Dichtoroptopene         1.2E+00         0.0005         0.005         NE         NE         1.2E+00         0.0005         1         U         U           VOLATILES         Dibromochtoromethane         1.2E+00         0.0005         0.005         NE         NE         1.2E+00         0.0005         1         U         U           VOLATILES         Dibromochtoromethane         1.2E+01         0.0005         0.005         NE         NE         1.2E+02         0.0101         1         U         U         VOLATILES         Dibromochtoromethane         1.2E+02         0.0010         NE         NE         1.3E+01         0.0051         1         U         U         VOLATILES         biptoptoptoptoptoptoptoptoptoptoptoptoptop   | VOLATILES                          | Chloroethane              | 1.1E+03    | 0.0010      | 0.010        | NE         | NE             | 1.1E+03             |                      | 0.010 1 0 0      |
| VOLATILES         Chloromethane         2.3E-01         0.0010         NE         NE         2.3E-01         0.010         I         U         U           VOLATILES         cis-1,3-Dichloropropene         1.2E+02         0.0005         0.005         NE         NE         1.2E+00         0.0016         I         U         U         0.0015         I         U         0.0015         I         U         U         0.0015         I         U         0.0015         I         U         U         0.0015         I         U         U         0.0015         I         U         U         0.0015         I         U         U         U         0.0015         I         U         U         U         0.0015         I         U         U         U         0.0015         I         U         U         U         0.0015         I         U         U         0.0015         I         U         U         0.0015         I         U         U         0.0015         I         U         U         0.0015         I         U         U         0.0015         I         U         U         0.0015         I         U         U         0.0015         I         U  | VOLATILES                          | Chloroform                | 3.1E-01    | 0.0005      | 0.005        | NE         | NE             | 3.1E-01             |                      | 0.005 1 0 0      |
| VOLATILES         cis-1,2-bichloroethene         1,2E+02         0.0005         0.005         NE         NE         1,2E+02         0.0001         1         J         J           VOLATILES         Dibromochloromethane         7,6E+00         0.0005         0.005         NE         NE         7,6E+00         0.0005         1         U         U           VOLATILES         Dibromonethane         1,9E+01         0.0005         0.005         NE         NE         7,6E+00         0.005         1         U         U           VOLATILES         Dibromonethane         1,9E+01         0.0005         0.005         NE         NE         1,9E+01         0.0005         1         U         U         VOLATILES         Dibromonethane         2,2E+02         0.001         1         U         U         VOLATILES         Hexachbrochutadiene         1,6E+00         0.005         1         U         U         VOLATILES         Naphtaisen         2,3E+02         0.005         NE         NE         5,4E+02         0.005         1         U         U         VOLATILES         Naphtaisen         1,3E+03         0.0025         0.015         NE         NE         3,7E+00         0.005         NE         NE         3,7E+00 </td <td>VOLATILES</td> <td>Chloromethane</td> <td>2.3E-01</td> <td>0.0020</td> <td>0.010</td> <td>NĘ</td> <td>NE</td> <td>2.3E-01</td> <td></td> <td>0.010 1 0 0</td>   | VOLATILES                          | Chloromethane             | 2.3E-01    | 0.0020      | 0.010        | NĘ         | NE             | 2.3E-01             |                      | 0.010 1 0 0      |
| VOLATILES       cis-1,3-Dichloropropene       1.2E+00       0.005       0.005       NE       NE       1.2E+00       0.005       1       U         VOLATILES       Dibromochloromethane       7.6E+00       0.005       0.005       NE       NE       1.9E+01       0.0005       1       U       U         VOLATILES       Dibromochloromethane       1.9E+01       0.0005       0.005       NE       NE       1.9E+01       0.0005       1       U       U         VOLATILES       Dibriomochloromethane       2.2E+02       0.0010       0.010       NE       NE       4.3E+02       0.005       1       U       U       U       VOLATILES       Hexachlorobutadiene       1.6E+00       0.005       0.005       NE       NE       1.6E+00       0.005       1       U       U       VOLATILES       hexachlorobutadiene       1.6E+00       0.005       1       U       U       VOLATILES       Methylisobutylickione       1.3E+03       0.0025       0.011       NE       NE       1.3E+03       0.005       1       U       U       VOLATILES       Methylisobutylickione       1.3E+03       0.005       1       U       U       VOLATILES       Naphinhalene       1.8E+01       0.005 <t< td=""><td>VOLATILES</td><td>cis-1,2-Dichloroethene</td><td>1.2E+02</td><td>0.0005</td><td>0.005</td><td>NE</td><td>NE</td><td>1.2E+02</td><td></td><td>0.001 1 J J</td></t<>  | VOLATILES                          | cis-1,2-Dichloroethene    | 1.2E+02    | 0.0005      | 0.005        | NE         | NE             | 1.2E+02             |                      | 0.001 1 J J      |
| VOLATILES         Dbromochloromethane         7.6E+00         0.005         NE         NE         7.6E+00         0.005         1         U         U           VOLATILES         Dibromomethane         1.9E+01         0.0005         0.005         NE         NE         1.9E+01         0.0005         1         U         U           VOLATILES         Dichlorodfluoromethane         2.2E+02         0.0010         0.005         NE         NE         2.2E+02         0.010         1         U         U           VOLATILES         Ethylbenzene         4.3E+02         0.0005         0.005         NE         NE         4.3E+02         0.0005         1         U         U           VOLATILES         Isopropylbenzene         5.4E+02         0.0005         0.005         NE         NE         5.4E+02         0.0005         1         U         U         VOLATILES         mexathlorobut kistone         1.3E+03         0.0025         0.01         NE         NE         1.3E+03         0.010         0.005         NE         NE         1.3E+03         0.010         1.0U         U         U         VOLATILES         Naphihariene         1.8E+01         0.0005         0.01         NE         NE         1.8E+01 <td>VOLATILES</td> <td>cis-1,3-Dichloropropene</td> <td>1.2E+00</td> <td>0.0005</td> <td>0.005</td> <td>NE</td> <td>NE</td> <td>1.2E+00</td> <td></td> <td>0.005 1 U U</td>  | VOLATILES                          | cis-1,3-Dichloropropene   | 1.2E+00    | 0.0005      | 0.005        | NE         | NE             | 1.2E+00             |                      | 0.005 1 U U      |
| VOLATILES         Dibromonthane         1,9E+01         0.005         NE         NE         1,9E+01         0.0105         1         U         U           VOLATILES         Dichlorodifluoromethane         2,2E+02         0.0010         NE         NE         2,2E+02         0.010         U         U         U           VOLATILES         Ethylbenzene         4,3E+02         0.0005         0.005         NE         NE         4,3E+02         0.0005         1         U         U           VOLATILES         Ethylbenzene         5,4E+02         0.0005         0.005         NE         NE         5,4E+02         0.0005         1         U         U         VOLATILES         Isoproylbenzene         5,4E+02         0.0005         0.005         NE         NE         5,4E+02         0.0005         1         U         U         VOLATILES         Methylisobutyl ketone         1,3E+03         0.0025         0.01         NE         1,3E+03         0.010         1         U         U         VOLATILES         Naphthalene         1,8E+01         0.0005         0.005         NE         NE         3,7E+00         0.0010         1         U         U         VOLATILES         Naphthalene         2,7E+02         0.0005<  | VOLATILES                          | Dibromochloromethane      | 7.6E+00    | 0.0005      | 0.005        | NE         | NE             | 7.6E+00             |                      | 0.005 1 0 0      |
| VOLATILES         Dichloredifiuoromethane         2.2E+02         0.010         NE         NE         2.2E+02         0.010         1         U           VOLATILES         Ethylbenzene         4.3E+02         0.0005         0.005         NE         NE         4.3E+02         0.0005         1         U         U           VOLATILES         Hexachlorobutadiene         1.6E+00         0.0005         0.005         NE         NE         1.6E+00         0.0005         1         U         U           VOLATILES         Hexachlorobutadiene         5.4E+02         0.0005         0.005         NE         NE         5.4E+02         0.0005         1         U         U           VOLATILES         mp-Xylenes         2.3E+02         0.0005         0.005         NE         NE         1.3E+03         0.010         1         U         U           VOLATILES         Mathylene chloride         8.7E+00         0.0010         0.005         NE         NE         1.3E+03         0.010         1 <u< td="">         U         U         VOLATILES         N=DUTYLBENZENE         2.7E+02         0.005         1<u< td="">         U         U         VOLATILES         1.3E+03         0.005         0.005         NE         NE</u<></u<>  | VOLATILES                          | Dibromomethane            | 1.9E+01    | 0.0005      | 0.005        | NE         | NE             | 1.9E+01             |                      | 0.005 1 U U      |
| VOLATILES         Ethylbenzene         4.3E+02         0.0005         0.005         NE         NE         4.3E+02         0.005         1         U         U           VOLATILES         Hexachlorobutadiene         1.6E+00         0.0005         0.005         NE         NE         1.6E+00         0.005         1         U         U           VOLATILES         Hexachlorobutadiene         5.4E+02         0.0005         0.005         NE         NE         5.4E+02         0.005         1         U         U           VOLATILES         m.br/sibotyl ketone         1.3E+01         0.0025         0.01         NE         NE         1.3E+03         0.001         0.005         NE         NE         1.8E+03         0.001         0.005         NE         NE         1.8E+01         0.010         1         U         U           VOLATILES         Naphtina/ene         1.8E+01         0.0005         0.005         NE         NE         1.8E+01         0.010         1         U   | VOLATILES                          | Dichlorodifluoromethane   | 2.2E+02    | 0.0010      | 0.010        | NE         | NE             | 2.2E+02             | 1                    | 0.010 1 U U      |
| VOLATILES         Hexachlorobutadiene         1.6E+00         0.0005         0.005         NE         NE         1.6E+00         0.005         1         U         U           VOLATILES         Isopropylbenzene         5.4E+02         0.0005         0.005         NE         NE         5.4E+02         0.005         1         U         U           VOLATILES         Isopropylbenzene         2.3E+02         0.0005         0.005         NE         NE         5.4E+02         0.005         1         U         U           VOLATILES         Methylisobutyl ketone         1.3E+03         0.0025         0.01         NE         NE         1.3E+03         0.010         1         U         U           VOLATILES         Methylene chloride         8.7E+00         0.0010         0.005         NE         NE         1.8E+01         0.010         1         U         U           VOLATILES         Naphithalene         1.8E+01         0.0005         0.005         NE         NE         2.7E+02         0.005         1         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U  | VOLATILES                          | Ethylbenzene              | 4.3E+02    | 0.0005      | 0.005        | NĔ         | NE             | 4.3E+02             |                      | 0.005 1 U U      |
| VOLATILES         Isopropylbenzene         5.4E+02         0.005         NE         NE         5.4E+02         0.005         1         U         U           VOLATILES         m.p-Xylenes         2.3E+02         0.0005         0.005         NE         NE         2.3E+02         0.005         1         U         U           VOLATILES         Methyl isobutyl ketone         1.3E+03         0.0025         0.01         NE         NE         3.2E+02         0.005         1         U         U           VOLATILES         Methyl isobutyl ketone         1.3E+03         0.0025         0.01         NE         NE         8.7E+00         0.005         1         U         U           VOLATILES         Methyl isobutyl ketone         1.8E+01         0.0005         0.01         NE         NE         8.7E+00         0.005         1         U         U           VOLATILES         n-BUTYLBENZENE         3.2E+02         0.0005         0.005         NE         NE         3.2E+02         0.005         1         U         U         VOLATILES         n-SPROPYLENUZENE         3.2E+02         0.005         0.005         NE         NE         3.2E+02         0.005         1         U         U <td< td=""><td>VOLATILES</td><td>Hexachlorobutadiene</td><td>1.6E+00</td><td>0.0005</td><td>0.005</td><td>NE</td><td>NE</td><td>1,6E+00</td><td></td><td>0.005 1 U U</td></td<>   | VOLATILES                          | Hexachlorobutadiene       | 1.6E+00    | 0.0005      | 0.005        | NE         | NE             | 1,6E+00             |                      | 0.005 1 U U      |
| VOLATILES         mXylenes         2.3E+02         0.005         NE         NE         2.3E+02         0.005         1         U         U           VOLATILES         Methyl isobutyl ketone         1.3E+03         0.0025         0.01         NE         NE         1.3E+03         0.010         1         U         U           VOLATILES         Methylene chloride         8.7E+00         0.0010         0.005         NE         NE         8.7E+00         0.0010         1         U         U           VOLATILES         Mathylene chloride         8.7E+00         0.0010         0.005         NE         NE         8.7E+00         0.000         1         U         U           VOLATILES         n-BUTYLBENZENE         2.7E+02         0.0005         0.005         NE         NE         2.7E+02         0.005         1         U         U           VOLATILES         n-PROPYLBENZENE         3.0E+02         0.0005         0.005         NE         NE         3.0E+02         0.005         1         U         U           VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.005         NE         NE         3.0E+02         0.005         1         U         U         VOLATILES<   | VOLATILES                          | Isopropylbenzene          | 5.4E+02    | 0.0005      | 0.005        | NE         | NE             | 5.4E+02             |                      | 0.005 1 U U      |
| VOLATILES         Methylisobutyk letone         1.3E+03         0.0025         0.01         NE         NE         1.3E+03         0.010         1         U         U           VOLATILES         Methylene chloride         8.7E+00         0.001         0.005         NE         NE         8.7E+00         0.005         1         U         U           VOLATILES         Mathylene chloride         8.7E+00         0.0005         0.01         NE         NE         8.7E+00         0.005         1         U         U           VOLATILES         n-BUTYLBENZENE         2.7E+02         0.005         0.005         NE         NE         2.7E+02         0.005         1         U         U           VOLATILES         n-PROPYLBENZENE         3.2E+02         0.0005         0.005         NE         NE         4.2E+02         0.005         1         U         U           VOLATILES         sc-BUTYLBENZENE         3.0E+02         0.005         NE         NE         3.0E+02         0.005         1         U         U         VOLATILES         testentsurf         0.005         1         U         U         VOLATILES         1.8E+03         0.005         0.005         NE         NE         1.8E+03 </td <td>VOLATILES</td> <td>m,p-Xylenes</td> <td>2.3E+02</td> <td>0.0005</td> <td>0.005</td> <td>NE</td> <td>NE</td> <td>2.3E+02</td> <td></td> <td>0.005 1 U U</td>  | VOLATILES                          | m,p-Xylenes               | 2.3E+02    | 0.0005      | 0.005        | NE         | NE             | 2.3E+02             |                      | 0.005 1 U U      |
| VOLATILES         Methylene chioride         8,7E+00         0.0010         0.005         NE         NE         8,7E+00         0.005         1         U         U           VOLATILES         Naphihalene         1,8E+01         0.005         0.01         NE         NE         1,8E+01         0.010         1         U         U           VOLATILES         Naphihalene         1,8E+01         0.010         1         U         U           VOLATILES         n-BUTYLBENZENE         2,7E+02         0.0005         0.005         NE         NE         1,8E+01         0.005         1         U         U           VOLATILES         n-PROPYLBENZENE         3,2E+02         0.0005         0.005         NE         NE         4,2E+02         0.005         1         U         U           VOLATILES         p-ISOPROPYLTOLUENE         4,2E+02         0.005         0.005         NE         NE         4,2E+02         0.005         1         U         U           VOLATILES         sec-BUTYLBENZENE         3,0E+02         0.005         0.005         NE         NE         1,3E+03         0.005         1         U         U         VOLATILES         1,3E+03         0.005         0.005   | VOLATILES                          | Methyl isobutyl ketone    | 1.3E+03    | 0.0025      | 0.01         | NE         | NE             | 1.3E+03             |                      | 0.010 1 U U      |
| VOLATILES         Naphthalene         1.8E+01         0.0005         0.01         NE         NE         1.8E+01         0.010         1         U         U           VOLATILES         n-BUTYLBENZENE         2.7E+02         0.005         0.005         NE         NE         2.7E+02         0.005         1         U         U           VOLATILES         n-PROPYLBENZENE         3.2E+02         0.0005         0.005         NE         NE         2.7E+02         0.005         1         U         U           VOLATILES         n-PROPYLBENZENE         3.2E+02         0.0005         0.005         NE         NE         3.2E+02         0.005         1         U         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.0005         0.005         NE         NE         3.0E+02         0.005         1         U         U           VOLATILES         Styrene         1.3E+03         0.0005         0.005         NE         NE         3.0E+02         0.005         1         U         U         VOLATILES         Tetrachtoroethene         6.0E+00         0.005         1         U         U         VOLATILES         0.005         1         U         U         VOLA  | VOLATILES                          | Methylene chloride        | 8.7E+00    | 0.0010      | 0.005        | NE         | NE             | 8.7E+00             |                      | 0.005 1 U U      |
| VOLATILES         n-BUTYLBENZENE         2.7E+02         0.005         NE         NE         2.7E+02         0.005         1         U         U           VOLATILES         n-PROPYLBENZENE         3.2E+02         0.005         0.005         NE         NE         3.2E+02         0.005         1         U         U           VOLATILES         n-PROPYLBENZENE         3.2E+02         0.0005         0.005         NE         NE         3.2E+02         0.005         1         U         U           VOLATILES         n-SOPROPYLTOLUENE         4.2E+02         0.0005         0.005         NE         NE         4.2E+02         0.005         1         U         U         VOLATILES         see-BUTYLBENZENE         3.0E+02         0.005         1         U         U         VOLATILES         tet-BUTYLBENZENE         2.6E+02         0.005         1         U         U         VOLATILES         tet-BUTYLBENZENE  | VOLATILES                          | Naphthalene               | 1.8E+01    | 0.0005      | 0.01         | NE         | NE             | 1.8E+01             |                      | 0.010 1 U U      |
| VOLATILES         n-PROPYLBENZENE         3.2E+02         0.005         0.005         NE         NE         3.2E+02         0.005         1         U         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.005         0.005         NE         NE         4.2E+02         0.005         1         U         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.005         0.005         NE         NE         4.2E+02         0.005         1         U         U           VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.005         NE         NE         1.3E+03         0.005         1         U         U         VOLATILES         tet-BUTYLBENZENE         2.6E+02         0.005         1         U         U         VOLATILES         tet-BUTYLBENZENE         2.6E+02         0.005         1         U         U         VOLATILES         tet-BUTYLBENZENE         2.6E+02         0.005         1         U         U         VOLATILES         tet-BUTYLBENZENE         2.6E+02         0.005         1         U         U         VOLATILES         tet-BUTYLBENZENE         2.6E+02         0.005         1         U         U         VOLATILES         tet-BUTYLBENZENE  | VOLATILES                          | n-BUTYLBENZENE            | 2.7E+02    | 0.0005      | 0.005        | NE         | NE             | 2.7E+02             |                      | 0.005 1 U U      |
| VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.005         0.005         NE         NE         4.2E+02         0.005         1         U         U           VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.005         0.005         NE         NE         NE         3.0E+02         0.005         1         U         U           VOLATILES         skyrene         1.3E+03         0.0005         0.005         NE         NE         3.0E+02         0.005         1         U         U           VOLATILES         ter-BUTYLBENZENE         2.6E+02         0.005         0.005         NE         NE         1.3E+03         0.0005         1         U         U         VOLATILES         ter-BUTYLBENZENE         2.6E+02         0.005         1         U         U         VOLATILES         Tetrachtoroethene         6.0E+00         0.005         1         U         U         VOLATILES         Toluene         1.1E+03         0.005         NE         NE         6.0E+00         0.005         1         U         U         VOLATILES         trans-1,2-Dichtoroethene         1.4E+02         0.005         NE         NE         1.4E+02         0.005         1         U         U         VOL   | VOLATILES                          | n-PROPYLBENZENE           | 3.2E+02    | 0.0005      | 0.005        | NE         | NE             | 3.2E+02             |                      | 0.005 t U U      |
| VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.005         0.005         NE         NE         3.0E+02         0.005         1         U         U           VOLATILES         Styrene         1.3E+03         0.0005         0.005         NE         NE         1.3E+03         0.005         1         U         U           VOLATILES         Styrene         1.3E+03         0.0005         0.005         NE         NE         1.3E+03         0.005         1         U         U           VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.0005         0.005         NE         NE         2.6E+02         0.0005         1         U         U           VOLATILES         Tetrachtoroethene         6.0E+00         0.005         NE         NE         6.0E+00         0.005         1         U         U           VOLATILES         Trans-1,2-Dichtoroethene         1.4E+02         0.0005         0.005         NE         NE         1.4E+02         0.005         1         U         U           VOLATILES         trans-1,3-Dichtoropropene         1.8E+00         0.0005         0.005         NE         NE         1.4E+02         0.0005         1         U         U <td>VOLATILES</td> <td>p-ISOPROPYLTOLUENE</td> <td>4.2E+02</td> <td>0.0005</td> <td>0.005</td> <td>NE</td> <td>NE</td> <td>4.2E+02</td> <td></td> <td>0.005 1 U U</td>   | VOLATILES                          | p-ISOPROPYLTOLUENE        | 4.2E+02    | 0.0005      | 0.005        | NE         | NE             | 4.2E+02             |                      | 0.005 1 U U      |
| VOLATILES         Styrene         1.3E+03         0.0005         0.005         NE         NE         1.3E+03         0.005         1         U         U           VOLATILES         tet+BUTYLBENZENE         2.6E+02         0.005         0.005         NE         NE         2.6E+02         0.005         1         U         U           VOLATILES         tet+BUTYLBENZENE         2.6E+02         0.005         NE         NE         2.6E+02         0.005         1         U         U           VOLATILES         Tetrachtoroethene         6.0E+00         0.0005         0.005         NE         NE         2.6E+02         0.005         1         U         U           VOLATILES         Toluene         1.1E+03         0.0005         0.005         NE         NE         1.4E+02         0.005         1         U         U           VOLATILES         trans-1,3-Dichloroethene         1.4E+02         0.005         0.005         NE         NE         1.4E+03         0.005         1         U         U           VOLATILES         trans-1,3-Dichloroethene         1.8E+00         0.0005         0.005         NE         NE         1.4E+02         0.005         1         U         U   | VOLATILES                          | sec-BUTYLBENZENE          | 3.0E+02    | 0.0005      | 0.005        | NE         | NE             | 3.0E+02             |                      | 0.005 1 U U      |
| VOLATILES         ten-BUTYLBENZENE         2.6E+02         0.0005         0.005         NE         NE         2.6E+02         0.005         1         U         U           VOLATILES         Tetrachtoroethene         6.0E+00         0.005         0.005         NE         NE         6.0E+00         0.005         1         U         U           VOLATILES         Toluene         1.1E+03         0.0005         0.005         NE         NE         6.0E+00         0.005         1         U         U           VOLATILES         Toluene         1.1E+03         0.0005         0.005         NE         NE         1.1E+03         0.0005         1         U         U           VOLATILES         trans-1,2-Dichloroptopene         1.8E+02         0.0005         0.005         NE         NE         1.4E+02         0.005         1         U         U           VOLATILES         trans-1,3-Dichloroptopene         1.8E+00         0.005         NE         NE         1.8E+00         0.005         1         U         U           VOLATILES         tricholaroethene         3.7E+00         0.0005         0.005         NE         NE         3.7E+00         0.0002         1         U         U <td>VOLATILES</td> <td>Styrene</td> <td>1.3E+03</td> <td>0.0005</td> <td>0.005</td> <td>NE</td> <td>NE</td> <td>1.3E+03</td> <td></td> <td>0.005 1 U U</td>  | VOLATILES                          | Styrene                   | 1.3E+03    | 0.0005      | 0.005        | NE         | NE             | 1.3E+03             |                      | 0.005 1 U U      |
| VOLATILES         Tetrachtoroethene         6.0E+00         0.0005         0.005         NE         NE         6.0E+00         0.005         1         U         U           VOLATILES         Toluene         1.1E+03         0.0005         0.005         NE         NE         1.1E+03         0.005         1         U         U           VOLATILES         Toluene         1.1E+03         0.0005         0.005         NE         NE         1.1E+03         0.005         1         U         U           VOLATILES         trans-1,2-Dichloroethene         1.4E+02         0.005         0.005         NE         NE         1.4E+02         0.005         1         U         U           VOLATILES         trans-1,3-Dichloropropene         1.8E+00         0.0005         0.005         NE         NE         1.8E+00         0.0005         1         U         U           VOLATILES         Trichloroethene         3.7E+00         0.0005         0.005         NE         NE         3.7E+00         0.002         1         J         J           VOLATILES         Trichlorofluoromethane         2.6E+02         0.0010         0.01         NE         NE         5.7E+01         0.010         1         <   | VOLATILES                          | tert-BUTYLBENZENE         | 2.6E+02    | 0.0005      | 0.005        | NE         | NE             | 2.6E+02             | 1                    | 0.005 1 U U      |
| VOLATILES         Toluene         1.1E+03         0.0005         0.005         NE         NE         1.1E+03         0.005         1         U         U           VOLATILES         trans-1,2-Dichloroethene         1.4E+02         0.005         0.005         NE         NE         1.4E+02         0.005         1         U         U           VOLATILES         trans-1,2-Dichloroethene         1.4E+02         0.005         NE         NE         1.4E+02         0.005         1         U         U           VOLATILES         trans-1,3-Dichloroethene         1.8E+00         0.0005         0.005         NE         NE         1.4E+02         0.005         1         U         U           VOLATILES         Trichloroethene         3.7E+00         0.0005         0.005         NE         NE         3.7E+00         0.002         1         J         J           VOLATILES         Trichloroethene         3.7E+01         0.0010         0.01         NE         NE         3.7E+00         0.002         1         J         J           VOLATILES         Trichloroethene         5.7E+01         0.0010         0.01         NE         NE         5.7E+01         0.010         1         U         <   | VOLATILES                          | Tetrachloroethene         | 6.0E+00    | 0.0005      | 0.005        | NE         | NE             | 6.0E+00             | 1                    | 0.005 1 U U      |
| VOLATILES         trans-1,2-Dichloroethene         1,4E+02         0.005         0.005         NE         NE         1,4E+02         0.005         1         U         U           VOLATILES         trans-1,3-Dichloropropene         1.8E+00         0.005         1         U         U           VOLATILES         trans-1,3-Dichloropropene         1.8E+00         0.005         1         U         U           VOLATILES         trichloroethene         3.7E+00         0.0005         0.005         NE         NE         1.8E+00         0.005         1         U         U           VOLATILES         Trichloroethene         3.7E+00         0.0005         0.005         NE         NE         1.8E+00         0.0005         1         U         U           VOLATILES         Trichlorofuoromethane         2.6E+02         0.0010         0.01         NE         NE         2.6E+02         0.010         1         U   | VOLATILES                          | Toluene                   | 1.1E+03    | 0.0005      | 0.005        | NE         | NE             | 1.1E+03             | 1                    | 0.005 1 U U      |
| VOLATILES         trans-1,3-Dichloropropene         1.8E+00         0.005         0.005         NE         NE         1.8E+00         0.005         1         U           VOLATILES         Trickloroptopene         3.7E+00         0.0005         0.005         NE         NE         3.7E+00         0.002         1         J         J           VOLATILES         Trickloroptopropene         2.6E+02         0.001         0.01         NE         NE         2.6E+02         0.010         1         U           VOLATILES         Vinyl acetate         5.7E+01         0.0010         0.01         NE         NE         2.6E+02         0.010         1         U           VOLATILES         Vinyl acetate         5.7E+01         0.0010         0.01         NE         NE         5.7E+01         0.010         1         U           VOLATILES         Vinyl acetate         3.6E-02         0.0010         0.01         NE         NE         3.6E-02         0.010         1         U  | VOLATILES                          | trans-1.2-Dichloroethene  | 1.4E+02    | 0.0005      | 0.005        | NE         | NE             | 1.4E+02             |                      | 0.005 1 U U      |
| VOLATILES         Trichloroethene         3.7E+00         0.0005         0.005         NE         NE         3.7E+00         0.002         1         J           VOLATILES         Trichlorofiluoromethane         2.6E+02         0.0010         0.01         NE         NE         2.6E+02         0.010         1         U           VOLATILES         Vinyl acetate         5.7E+01         0.0010         0.01         NE         NE         5.7E+01         0.010         1         U         U           VOLATILES         Vinyl acetate         5.7E+01         0.0010         0.01         NE         NE         5.7E+01         0.010         1         U         U           VOLATILES         Vinyl choride         3.6E-02         0.0010         0.01         NE         NE         3.0E-02         0.010         1         U         U  | VOLATILES                          | trans-1.3-Dichloropropene | 1.8E+00    | 0.0005      | 0.005        | NE         | NE             | 1.8E+00             |                      | 0.005 1 U U      |
| VOLATILES         Trichlorofiluoromethane         2.6E+02         0.0010         0.01         NE         NE         2.6E+02         0.010         1         U           VOLATILES         Vinyl acetate         5.7E+01         0.0010         0.01         NE         NE         5.7E+01         0.010         1         U         U           VOLATILES         Vinyl chorde         3.6E-02         0.0010         0.01         NE         NE         5.7E+01         0.010         1         U  | VOLATILES                          | Trichloroetheae           | 3.7E+00    | 0.0005      | 0.005        | NE         | NE             | 3.7E+00             |                      | 0.002 1 J J      |
| VOLATILES         Vinyl acetate         5.7E+01         0.0010         0.01         NE         NE         5.7E+01         0.010         1         U           VOLATILES         Vinyl acetate         3.6E-02         0.0010         0.01         NE         NE         3.6E-02         0.010         1         U         U   | VOLATILES                          | Trichlorofiuoromethane    | 2.6E+02    | 0.0010      | 0.01         | NE         | NE             | 2.6E+02             |                      | 0.010 1 U U      |
| VOLATILES Vinylichloride 3.6E-02 0.0010 0.01 NE NE 3.6E-02 0.010 1 U U  | VOLATILES                          | Vinvi acetate             | 5.7E+01    | 0.0010      | 0.01         | NE         | NE             | 5.7E+01             |                      | 0.010 1 U U      |
|   | VOLATILES                          | Vinyl chloride            | 3.6E-02    | 0.0010      | 0.01         | NE         | NE             | 3.6E-02             |                      | 0.010 1 U U      |

Shaw Environmental, Inc.

00066585

### Table 4-97

### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-081

| [SUMP] = SUMP08<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE | 1   | TCEQ<br>Risk-Based  |             |             | Backg<br>Concentra   | round<br>tions in Soil | Applicable<br>TCEQ | 35SUMP081-SB01<br>SUMP081-SB-01-01<br>9/18/2006 | 35SUMP0<br>SUMP081-<br>9/18/2 | 81-SB01<br>SB-01-02<br>006 | 35SUMP0<br>SUMP082-<br>9/18/2 | 082-SB01<br>-SB-01-01<br>2006 | 35SUMP08<br>SUMP082-S<br>9/18/20 | 2-SB01<br>88-01-02<br>906 | 47SB24<br>47SB24(0-0_5)<br>6/4/2000 | 47\$B24<br>47\$B24(1-2)<br>6/4/2000 | 47\$B25<br>47\$B25(0-0_5)<br>6/4/2000 | 47\$B25<br>47\$B25(1-2)<br>6/4/2000 |
|--|---|---------------------|-------------|-------------|----------------------|------------------------|--------------------|---|-------------------------------|----------------------------|-------------------------------|-------------------------------|----------------------------------|---------------------------|-------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|
| DEPTH  |   | Screening           | Method      | Method .    | (95% UP              | L, mg/kg)              | Risk-Based         | 0-0Ft<br>PEG                                    | 0-0<br>RE                     | Ft                         | 0-0<br>RE                     | ) Ft<br>G                     | 0+0<br>REC                       | Ft                        | REG                                 | REG                                 | REG                                   | REG                                 |
| SAMPLE_PURPOS  | Patameter (i Inits = mo/km)                         | (RBSV) <sup>a</sup> | Limit (MDL) | Limit (MQL) | 0-0.5 Ft             | 1.5 - 2.5 Ft           | Value              | Result DIL LQ VQ                                | Result D                      | IL LO VO                   | Result C                      | DIL LO VO                     | Result D                         | L LQ VQ                   | Result DIL LQ VO                    | Result DIL LO VO                    | Result DIL LQ VQ                      | Result DIL LO VO                    |
| METALS   | Aleminum  | 1.6E+04             | 10.000      | 20.00       | 1.63E+04             | 2.08E+04               | 1.6E+04            | 19200 1   | 5640 1                        | 14 118                     | 6490                          | 1                             | 7750 1                           | 11 (10)                   |                                     |                                     |                                       |                                     |
| METALS   | Antimony  | 7.3E+00             | 0.500       | 0.10        | 9.40E-01             | 1.60E+00               | 7,3E+00            | 0.122 1 U UJL<br>3.950 1                        | 4 210 1                       | i U USL                    | 2,310                         | 1 0 000                       | 0.200 1                          | J J                       |                                     |                                     |                                       |                                     |
| METALS   | Barium  | 2.6E+01             | 0.075       | 0.30        | 1.52E+02             | 8.55E+01               | 2.6E+03            | 52 1  | 63                            | i ·                        | 99                            | i                             | 68 1                             |                           |                                     |                                     |                                       |                                     |
| METALS   | Beryllium   | 4.6E+00             | 0.012       | 0.50        | 6.45E-01             | 7.66E-01               | 4.6E+00            | 0.521 1   | 1.000                         |                            | 0.465                         | 1                             | 1.040 1                          |                           |                                     |                                     |                                       |                                     |
| METALS   | Cadmium   | 5.2E+00             | 0.025       | 0.10        | 1.40E+00             | 4.00E-01               | 5.2E+00            | 0.088 1 J J<br>472 1                            | 458 1                         |                            | 780                           | 1 3 3                         | 319 1                            |                           |                                     |                                     |                                       |                                     |
| METALS   | Chromium  | 5.92+03             | 0.100       | 0.40        | 2.66E+01             | 3.01E+01               | 5.9E+03            | 28.500 1 JH                                     | 7.810                         | i                          | 14.700                        | i JH                          | 17.700 1                         | JH                        |                                     |                                     |                                       |                                     |
| METALS   | Cobalt  | 1.5E+03             | 0.125       | 0.50        | 7.23E+00             | 5.61E+00               | 1.5E+03            | 1,970 1 JL                                      | 16.600                        | L JL                       | 4,740                         | 1 JL                          | 11.800 1                         | JL                        |                                     |                                     |                                       |                                     |
| METALS   | Copper  | 1.0E+03             | 0.150       | 0.60        | 5.55E+00             | 9.25E+00               | 1.02+03            | 7.920 1   | 4,080 1 12200.000 1           |                            | 5,450                         | 1                             | 16700.000 1                      |                           |                                     |                                     |                                       |                                     |
| METALS   | Iron<br>Lead  | NE<br>5.0E+02       | 0.500       | 5.00        | 2.26E+01             | 1.14E+01               | 5.0E+02            | 9 1   | 30.6                          | i                          | 8.3                           | i                             | 3.1 1                            |                           |                                     |                                     |                                       |                                     |
| METALS   | Magnesium   | NE                  | NA          | NA          | NA                   | NA                     | -                  | 1020.000 1                                      | 737.000                       | !                          | 537.000                       | 1                             | 1000.000 1                       |                           |                                     |                                     |                                       |                                     |
| METALS   | Manganese   | 1.7E+03             | 0,050       | 0.20        | 1,25E+03             | 2.01E+02               | 1.7E+03            | 59 1 J  | 166                           | 1 J                        | 131                           | 1 J                           | 0 293 1                          | . J                       |                                     |                                     |                                       |                                     |
| METALS   | Mercury   | 1.1E-02             | 0.010       | 0.25        | 8.19E-02<br>6.98E+00 | 3.60E-01               | 2.5E+01<br>1.9E+02 | 7.060 1   | 13.400                        | 1                          | 5,450                         | 1                             | 19.400 1                         |                           |                                     |                                     |                                       |                                     |
| METALS   | Potassium   | NE                  | NA          | NA          | NA                   | NA                     | -                  | 595,000 1 JH                                    | 302,000                       | t JH                       | 284.000                       | 1 JH                          | 374.000 1                        | I JH                      |                                     |                                     |                                       |                                     |
| METALS   | Selenium  | 1.3E+02             | 0.100       | 0.20        | 3.48E+00             | 5.57E+00               | 1.3E+02            | JL 1 0  | 0.150                         | 1 J JL                     | 0.264                         | 1 UJL                         | 0.225 1                          |                           |                                     |                                     |                                       |                                     |
| METALS   | Sitver  | 4.7E+01             | 0.050       | 0.20        | 3.10E-01             | 3.70E-01               | 4.7E+01            | 1.760 1 0                                       | 270.000                       | 1 0                        | 60.300                        | 1                             | 215.000 1                        | , u                       |                                     |                                     |                                       |                                     |
| METALS   | Thallium  | 2.0E+00             | 0.010       | 0.02        | 4.70E-01             | NE                     | 2.0E+00            | 0.076 1   | 0.056                         | i                          | 0.041                         | 1                             | 0.040                            | I                         |                                     |                                     |                                       |                                     |
| METALS   | Vanadium  | 4.8E+01             | 0.125       | 0.50        | 3.21E+01             | 4.46E+01               | 4.8E+01            | 59.700 1 JH                                     | 17.500                        | 1 JH                       | 20.100                        | 1 5H                          | 20.300 1                         | i JH                      |                                     |                                     |                                       |                                     |
| METALS   | Zinc  | 5.9E+03             | 0.625       | 2.50        | 6.16E+01             | 2.02E+01               | 5.9E+03            | 28.300 1 JH                                     | 41.600                        | 1 JA                       | 16.100                        | 1 JH                          | 43.700                           | 1 JR                      | 0.006 1 < L                         | J 0.006 1 < U                       | J 0.006 1 < U                         | 0.006 1 < U                         |
| PERC   | Percent Solids                                      | 1.4E+01<br>NE       | NE U.005    | NE          | NE                   | NE                     | 1.46107            | 82.200 1  | 84.200                        | 1                          | 87.500                        | 1                             | 85,400 1                         | 1                         |                                     |                                     |                                       |                                     |
| VOLATILES  | 1,1,1,2-Tetrachkoroethane                           | 5.2E+00             | 0.0005      | 0.005       | NE                   | NE                     | 5.2E+00            |   | 0.005                         | 1 U                        |                               |                               | 0.005                            | U U                       |                                     |                                     |                                       |                                     |
| VOLATILES  | 1,1,1-Trichloroethane                               | 2.3E+02             | 0.0005      | 0.005       | NE                   | NE                     | 2.3E+02            |   | 0.005                         | 1 1                        |                               |                               | 0.005                            |                           |                                     |                                     |                                       |                                     |
| VOLATILES  | 1,1,2,2-Tetrachiorostinane<br>1,1,2-Trichloroethane | 9.7E-01             | 0.0005      | 0.005       | NE                   | NE                     | 9.7E-01            |   | 0.005                         | 1 0                        |                               |                               | 0.005                            | ίŪ                        |                                     |                                     |                                       |                                     |
| VOLATILES  | 1,1-Dichloroethane                                  | 8.9E+01             | 0.0010      | 0.005       | NE                   | NE                     | 8.9E+01            |   | 0.005                         | 1 U                        |                               |                               | 0.005                            |                           |                                     |                                     |                                       |                                     |
| VOLATILES  | 1,1-Dichlomethene                                   | 2.7E+01             | 0.0005      | 0.005       | NE                   | NE                     | 2.7E+01            |   | D.005                         | 1 U<br>1 U                 |                               |                               | 0.005                            | 1 0                       |                                     |                                     |                                       |                                     |
| VOLATILES  | 1,1-Dichloropropene<br>1,2,3-Trichloropenzane       | 9.9E-01             | 0.0005      | 0.005       | NE                   | NE                     | 4.2E+01            |   | 0.005                         | 1 0                        |                               |                               | 0.005                            | iū                        |                                     |                                     |                                       |                                     |
| VOLATILES  | 1,2,3-Trichloropropane                              | 9,2E-02             | 0.0010      | 0.005       | NE                   | NE                     | 9.2E-02            |   | 0.005                         | 1 U                        |                               |                               | 0.005                            | 1 U                       |                                     |                                     |                                       |                                     |
| VOLATILES  | 1.2,4-Trichlombenzene                               | 1.4E+02             | 0.0005      | 0.005       | NE                   | NE                     | 1.4E+02            |   | 0.005                         | 1 U                        |                               |                               | 0.005                            | 1 1                       |                                     |                                     |                                       |                                     |
| VOLATILES  | 1,2,4-Trimethyibenzene                              | 9.6E+00<br>3.5E-01  | 0.0005      | 0.005       | NE                   | NE                     | 3.5E+00            |   | 0.005                         | ່້ມ                        |                               |                               | 0.005                            | ίŭ                        |                                     |                                     |                                       |                                     |
| VOLATILES  | 1.2-Dibiomoethane                                   | 5.3E-02             | 0.0005      | 0.005       | NE                   | NE                     | 5.3E-02            |   | 0.005                         | 1 Ū                        |                               |                               | 0.005                            | 1 U                       |                                     |                                     |                                       |                                     |
| VOLATILES  | 1,2-Dichlorobenzene                                 | 5.6E+01             | 0.0005      | 0.005       | NE                   | NE                     | 5.6E+01            |   | 0.005                         | ្រ                         |                               |                               | 0,005                            | 1 U<br>1 II               |                                     |                                     |                                       |                                     |
| VOLATILES  | 1,2-Dichloroethane                                  | 2.7E-01             | 0.0005      | 0.005       | NE                   | NE                     | 2.7E-01<br>1.8E+00 |   | 0.005                         | 1 1                        |                               |                               | 0.005                            | 1 Ŭ                       |                                     |                                     |                                       |                                     |
| VOLATILES  | 1.2-Dimethylbenzene (o-Xylene)                      | 3.3E+03             | 0.0005      | 0.005       | NE                   | NE                     | 3.3E+03            |   | 0.005                         | ίŨ                         |                               |                               | 0.005                            | 1 U                       |                                     |                                     |                                       |                                     |
| VOLATILES  | 1,3,5-Trimethylbenzene                              | 8.3E+00             | 0.0005      | 0.005       | NE                   | NE                     | 8.3E+00            |   | 0.005                         | 1 U                        |                               |                               | 0.005                            | 1 U                       |                                     |                                     |                                       |                                     |
| VOLATILES  | 1,3-Dichlorobenzene                                 | 5.1E+00             | 0.0005      | 0.005       | NE                   | NE                     | 5.1E+00            |   | 0.005                         | 1 U<br>1 II                |                               |                               | 0.005                            | 1 0                       |                                     |                                     |                                       |                                     |
| VOLATILES  | 1.4-Dichlorobenzene                                 | 2.7E+01             | 0.0005      | 0.005       | NE                   | NE                     | 2.7E+01            |   | 0.005                         | i Ū                        |                               |                               | 0.005                            | 1 U                       |                                     |                                     |                                       |                                     |
| VOLATILES  | 2,2-Dichloropropane                                 | 1.7E+00             | 0.0005      | 0.005       | NE                   | NE                     | 1.7E+00            |   | 0.005                         | 1 U                        |                               |                               | 0.005                            | 1 0                       |                                     |                                     |                                       |                                     |
| VOLATILES  | 2-Butanone  | 2.6E+03             | 0.0025      | 0.010       | NE                   | NE                     | 2.6E+03            |   | 0.010                         | 1 0                        |                               |                               | 0.009                            | : Ŭ                       |                                     |                                     |                                       |                                     |
| VOLATILES  | 2-Chlomotoluene                                     | 1.5E+02             | 0.0025      | 0.005       | NE                   | NE                     | 1.5E+02            |   | 0.005                         | i ŭ                        |                               |                               | 0.005                            | ίŪ                        |                                     |                                     |                                       |                                     |
| VOLATILES  | 2-Hexanone  | 6.2E+00             | 0.0025      | 0.010       | NE                   | NE                     | 6.2E+00            |   | 0.010                         | 1 U                        |                               |                               | 0.009                            | 1 U                       |                                     |                                     |                                       |                                     |
| VOLATILES  | 4-Chlorotofuene                                     | 3.4E-01             | 0.0005      | 0.005       | NE                   | NE                     | 3.4E-01            |   | 0.005                         | 1 0                        |                               |                               | 0.009                            | 1 1                       |                                     |                                     |                                       |                                     |
| VOLATILES  | Acetone<br>Benzene                                  | 8.8E-01             | 0.0005      | 0.005       | NE                   | NE                     | 8.8E-01            |   | 0.005                         | iu                         |                               |                               | 0.005                            | 1 Ū                       |                                     |                                     |                                       |                                     |
| VOLATILES  | Bromobenzene  | 1.1E+01             | 0.0005      | 0.005       | NE                   | NE                     | 1.1E+01            |   | 0.005                         | 1 U                        |                               |                               | 0.005                            | 1 U                       |                                     |                                     |                                       |                                     |
| VOLATILES  | Bromochloromethane                                  | 2.4E+01             | 0.0005      | 0.005       | NE                   | NE                     | 2.4E+01            |   | 0.005                         | 1 U<br>1 II                |                               |                               | 0.005                            | 1 0                       |                                     |                                     |                                       |                                     |
| VOLATILES  | Biomoticityoromethane                               | 3.4E+01             | 0.0005      | 0.005       | NE                   | NE                     | 3.4E+01            |   | 0.005                         | 1 0                        |                               |                               | 0.005                            | i Ū                       |                                     |                                     |                                       |                                     |
| VOLATILES  | Bromomethane  | 3,5E-01             | 0.0010      | 0.010       | NE                   | NE                     | 3.5E-01            | 1   | 0.010                         | 1 U                        |                               |                               | 0.009                            | 1 0                       |                                     |                                     |                                       |                                     |
| VOLATILES  | Carbon disulfide                                    | 1.0E+02             | 0.0005      | 0.005       | NE                   | NE                     | 1.0E+02            | 1   | 0.005                         | 1 U                        |                               |                               | 0.005                            | 1 0                       |                                     |                                     |                                       |                                     |
| VOLATILES  | Carbon tetractionde<br>Chlomberzene                 | 3,5E-01<br>4.0E+01  | 0.0005      | 0.005       | NE                   | NE                     | 3.3E-01<br>4.0E+01 |   | 0.005                         | 1 0                        |                               |                               | 0.005                            | i Ū                       |                                     |                                     |                                       |                                     |
| VOLATILES  | Chloroethane  | 1.1E+03             | 0.0010      | 0.010       | NE                   | NE                     | 1.1E+03            |   | 0.010                         | 1 U                        |                               |                               | 0.009                            | 1 U                       |                                     |                                     |                                       |                                     |
| VOLATILES  | Chloroform  | 3.1E-01             | 0,0005      | 0.005       | NE                   | NE                     | 3.1E-01            |   | 0.005                         | 1 U                        |                               |                               | 0.005                            | 1 10                      |                                     |                                     |                                       |                                     |
| VOLATILES  | Chipromethane<br>cis-1 2-Dichloroethene             | 2.3E+01<br>1.2E+02  | 0.0020      | 0.010       | NE                   | NG                     | 2.3E-01<br>1.2E+02 |   | 0.005                         | 1 0                        |                               |                               | 0.005                            | า บั                      |                                     |                                     |                                       |                                     |
| VOLATILES  | cis-1,3-Dichloropropene                             | 1_2E+00             | 0.0005      | 0.005       | NE                   | NE                     | 1.2E+00            |   | 0.005                         | 1 U                        |                               |                               | 0.005                            | 1 U                       |                                     |                                     |                                       |                                     |
| VOLATILES  | Dibromochloromethane                                | 7.6E+00             | 0.0005      | 0.005       | NE                   | NE                     | 7.6E+00            |   | 0.005                         | 10                         |                               |                               | 0.005                            | ч U<br>1 Ц!               |                                     |                                     |                                       |                                     |
| VOLATILES  | Diptomomethane                                      | 1.92+01             | 0.0005      | 0.005       | NE                   | NE                     | 2.2E+01            |   | 0.010                         | iŭ                         |                               |                               | 0.009                            | i ŭ                       |                                     |                                     |                                       |                                     |
| VOLATILES  | Ethylbenzene  | 4.3E+02             | 0.0005      | 0.005       | NE                   | NE                     | 4.3E+02            |   | 0.005                         | 1 U                        |                               |                               | 0.005                            | 1 1                       |                                     |                                     |                                       |                                     |
| VOLATILES  | Hexachlorobutadiene                                 | 1.6E+00             | 0.0005      | 0.005       | NE                   | NE                     | 1.6E+00            |   | 0.005                         | 1 10                       |                               |                               | 0.005                            | 1 1                       |                                     |                                     |                                       |                                     |
| VOLATILES  | nsopropyidenzene<br>m.d-Xylenes                     | 2.3E+02             | 0.0005      | 0.005       | NE                   | NE                     | 2.3E+02            |   | 0.005                         | 1 0                        |                               |                               | 0.005                            | 1 Ū                       |                                     |                                     |                                       |                                     |

Data Evaluation Report

4

Chemical Concentrations in Soil Associated with LHAAP-35/38 Sumps

Shaw Environmental, Inc.

00066586

### Table 4-97 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-081 (SUMP) = SUMP081 LOCATION\_CODE 47\$B25 47SB25 35\$UMP082-SB01 475824 475824 35\$UMP081-SB01 SUMP081-SB-01-02 35SLIMP082-SB01 35SUMP081-SB01 SUMP082-SB-01-01 SUMP082-SB-01-02 47SB24(0-0\_5) 475824(1-2) 47SB25(0-0\_5) 47SB25(1-2) SUMP081-SB-01-01 SAMPLE NO TCEQ Background Applicable 9/18/2006 9/18/2006 6/4/2000 6/4/2000 6/4/2000 6/4/2000 SAMPLE\_DATE Risk-Based **Concentrations in Soil** TCEQ 9/18/2006 9/18/2006 1 - 2 Ft 0 - .5 Ft 1 - 2 Ft 0-0Ft 0-0Ft 0 - .5 Ft DEPTH Screening Method Method (95% UPL, mg/kg) Risk-Base 0 - 0 Ft 0 - 0 Ft REG REG REG REG REG REG SAMPLE\_PURPOSE Value Detection Quantitation Surface Subsurface Screening REG REG VQ Result DIL LQ VQ Result DIL LQ VQ Result DIL LQ VQ Result DIL LQ VQ Result DIL LO VO 0.010 1 U 0.005 1 U Parameter (Units = mg/kg) Methyl isobutyl ketone (RBSV)<sup>3</sup> Limit (MDL) Limit (MQL) 0 - 0.5 Ft 1.5 - 2.5 Fi Value Result DIL LQ VQ Result DIL LO VO Result 0.009 DIL LQ Test Group 1.3E+03 0.0025 0.01 NE 1.3E+03 U 0.005 Ŭ NE 8.7E+00 1.8E+01 1 VOLATILES Methylene chloride 8.7E+00 0.0010 0.005 0.010 ū 0.009 Ú VOLATILES Naphthalene n-BUTYLBENZENE 1.8E+01 0.0005 0.01 NE 0.0005 0.005 NE 2.7E+02 0.005 ū 0.005 ũ VOLATILES 2.7E+02 0.005 0.0005 0.005 3.2E+02 0.005 Ū U **n-PROPYLBENZENE** 3.2E+02 p-ISOPROPYLTOLUENE U U VOLATILES 4.2E+02 0.0005 0.005 4.2E+02 0.005 - 11 0.005 VOLATILES sec-BUTYLBENZENE 3.0E+02 0.0005 0.005 3.0E+02 0.005 1 11 1 0.005 0.005 ũ Ū VOLATILES Styrene tent-BUTYLBENZENE 1.3E+03 0.0005 0.005 1.3E+03 1 0.0005 2.6E+02 0.005 ū 0.005 u VOLATILES VOLATILES VOLATILES 2 6E+02 0.005 0.005 6.0E+00 0.005 Ū 0.005 11 6.0E+00 0.0005 1 Tetrachloroethene 0.005 ū 1.1E+03 0.0005 0.005 1.1E+03 0.005 ū 1 Toluene 0.005 1 0.005 1 0.005 1 VOLATILES trans-1.2-Dichloroethene 1.4E+02 0.0005 0.005 1.4E+02 U 1 1 0.005 ũ VOLATILES trans-1,3-Dichloropropene 1.8E+00 0.0005 0.005 1.8E+00 U 0.005 Ū 0.005 0.01 3.7E+00 3.7E+00 - 11 VOLATILES Trichloroethene 0.0005 Trichlorofluoromethane 0.010 ũ 0.009 Ū 0.0010 2 6E+02 VOLATILES 2.6E+02 1 0.01 NE 0.010 ū 0.009 Ū 5.7E+01 0.0010 5.7E+01 VOLATILES Vinyl acetate 1 3.6E-02 0.010 0.009 0.0010 0.01 3.6E-02

VOLATILES Vinvl chloride Footnotes are shown on cover page to Tables Section.

> MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas

# 00066587

|  | Comparison of Chemical Concentration in Soil to Risk-Based Screening Values   |  |                     |                        |   |   |   |                                      |   |   |   |   |  |                                       |   |  |                |  |  |  |
|--|---|--|---------------------|------------------------|---|---|---|--------------------------------------|---|---|---|---|--|---------------------------------------|---|--|----------------|--|--|--|
| [SUMP] = SUM<br>LOCATION_CO<br>SAMPLE_NO<br>SAMPLE_DATI<br>DEPTH<br>SAMPLE_PUR | P082<br>DDE<br>E<br>POSE  | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UP<br>Surface | round<br>tions in Soil<br>L, mg/kg)<br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP0<br>SUMP081<br>9/18/<br>0 - 0 | 081-SB01<br>-SB-01-01<br>2006<br>0 Ft<br>EG | 35SUMP<br>SUMP081<br>9/18/<br>0 -<br>R8 | 081-SB01<br>-SB-01-02<br>2006<br>0 Ft<br>EG | 35\$UMP0<br>\$UMP082-<br>9/18/2<br>0 - 0<br>RE( | 82-\$801<br>\$8-01-01<br>9006<br>Ft<br>G | 35SUMP<br>SUMP08;<br>9/18<br>0 -<br>R | 082-SB01<br>2-SB-01-02<br>/2006<br>0 Ft<br>EG | 47SB24<br>47SB24(0-0<br>6/4/2000<br>0 - 0.5 F<br>REG | )_5)<br>)<br>t | 475824<br>475824(1-2)<br>6/4/2000<br>1 - 2 Ft<br>REG | 47SB25<br>47SB25(0-0_5)<br>6/4/2000<br>0 - 0.5 Ft<br>REG | 47SB25<br>47SB25(1-2)<br>6/4/2000<br>1 - 2 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg)   | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0-0.5 Ft                                | 1.5 - 2.5 Ft                                      | Value   | Result D                             | NE LO VO                                    | Result D                                | IL LO VO                                    | Result Di                                       | L LO VO                                  | Result                                | <u>DIL LO VO</u>                              | Result DIL L   | Q VQ Rea       | sult DIL LQ VO                                       | Result DIL LO VO   | Result DIL_LQ_VQ_                                    |
| METALS<br>METALS   | Aluminum<br>Antimony  | 1.6E+04<br>7.3E+00                       | 10.000              | 20.00                  | 1.63E+04<br>9.40E-01                    | 2.08E+04<br>1.60E+00                              | 1.6E+04<br>7.3E+00                            | 19200                                | 11 160                                      | 5640                                    | 1 1 11                                      | 6490 1  | 1<br>1 LI LAIL                           | 7750                                  | 1<br>1 D UIL                                  |  |                |  |  |  |
| METALS   | Arsenic   | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                | 5.54E+00  | 2.0E+01                                       | 3.950                                | 0 001                                       | 4.210                                   | 1   | 2.310   | 1  | 0.200                                 | i j j   |  |                |  |  |  |
| METALS   | Barium  | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                | 8.55E+01  | 2.6E+03                                       | 52.3                                 |   | 62.8                                    | 1   | 96.6 1  | 1  | 68.1                                  | 1   |  |                |  |  |  |
| METALS   | Cadmium   | 4.6E+00<br>5.2E+00                       | 0.012               | 0.50                   | 5.45E-UT                                | 4.00E+01  | 4.6E+00<br>5.2E+00                            | 0.521                                |   | 0.083                                   | 1   | 0.465 1   | 1<br>1 J J                               | 0.075                                 | 1.1.1   |  |                |  |  |  |
| METALS   | Calcium   | NE                                       | NA                  | NA                     | NA                                      | NA  | -   | 472                                  |   | 458                                     | 1   | 780 1   | 1  | 319                                   | 1   |  |                |  |  |  |
| METALS   | Chromium  | 5.9E+03                                  | 0.100               | 0.40                   | 2.66E+01                                | 3.01E+01  | 5.9E+03                                       | 28.500                               | JH  | 7.810                                   | 1   | 14.700 1  | 1 JH                                     | 17,700                                | 1 JH  |  |                |  |  |  |
| METALS   | Copper  | 1.0E+03                                  | 0.125               | 0.50                   | 7.23E+00<br>5.55E+00                    | 9.25E+00  | 1.0E+03                                       | 7.920                                | JL  | 4.080                                   | 1 JL<br>1                                   | 5.450 1   | 1 JL                                     | 5.830                                 | 1 JL  |  |                |  |  |  |
| METALS   | iron  | NE                                       | NA                  | NA                     | NA                                      | NA  | -   | 48400.000                            |   | 12200.000                               | i   | 10500.000 1                                     | 1  | 16700.000                             | i   |  |                |  |  |  |
| METALS   | Lead  | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                | 1.14E+01  | 5.0E+02                                       | 9,47                                 |   | 30.60                                   | 1   | 8.25 1  | !  | 3.11                                  | 1   |  |                |  |  |  |
| METALS   | Magnesium<br>Manganese  | N⊫<br>1.7E+03                            | NA<br>0.050         | NA<br>0.20             | NA<br>1.25E+03                          | NA<br>2.01E+02                                    | 1.7E+03                                       | 1020.000                             |   | 737.000                                 | 1   | 537,000 1                                       | 1<br>1 J                                 | 1000.000                              | 1<br>1 J                                      |  |                |  |  |  |
| METALS   | Mercury   | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                | 3.60E-01  | 2.5E-01                                       | 0.068                                | JJ  | 0.290                                   | า บ ั                                       | 0.014   | า๋ ม มั                                  | 0.293                                 | i u T   |  |                |  |  |  |
| METALS   | Nickel  | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                | 1.16E+01  | 1.9E+02                                       | 7.060                                |   | 13.400                                  | 1   | 5.450   | 1  | 19.400                                | 1   |  |                |  |  |  |
| METALS   | Selenium  | N⊑<br>1.3E+02                            | NA<br>0.100         | 0.20                   | NA<br>3.48E+00                          | NA<br>5.57E+00                                    | 1.3E+02                                       | 0.321                                | JH<br>JI.                                   | 302.000                                 | 1 JH  | 0.264   | 1 JA<br>1 UJL                            | 0.225                                 | 1 U UJL                                       |  |                |  |  |  |
| METALS   | Silver  | 4.7E+01                                  | 0.050               | 0.20                   | 3.10E-01                                | 3.70E-01  | 4.7E+01                                       | 1.760                                | U   | 1.800                                   | 1 0   | 1.720 1   | i U 👘                                    | 1.640                                 | 1 U   |  |                |  |  |  |
| METALS   | Sodium  | NE                                       | NA                  | NA                     | NA<br>A TOT OA                          | NA  |   | 15.400                               | JJ  | 270.000                                 | 1   | 60.300 1  | 1  | 215.000                               | 1   |  |                |  |  |  |
| METALS   | Vanadium  | 2.0E+00<br>4.8E+01                       | 0.125               | 0.52                   | 3.21E+01                                | 4.46E+01  | 4.8E+01                                       | 59,700                               | JH  | 17.500                                  | і<br>1 ЈН                                   | 20,100 1  | 1 JH                                     | 20.300                                | і<br>1 JH                                     |  |                |  |  |  |
| METALS   | Zinc  | 5.9E+03                                  | 0.625               | 2.50                   | 6.16E+01                                | 2.02E+01  | 5.9E+03                                       | 28.300                               | JH  | 41.600                                  | 1 JH  | 16,100  | I ĴH                                     | 43.700                                | 1 JH  |  |                |  |  |  |
| PERC   | Perchlorate   | 1.4E+01                                  | 0.005               | 0.010                  | NE                                      | NE  | 1.4E+01                                       | 83 300                               |   | 84 200                                  | 4   | 97 500  |  | 95 200                                |   | 0.006 1 <  | U 0.0          | X06 1 < U  | 0.006 1 < U  | 0.006 1 < U  |
| VOLATILES  | 1.1.1.2-Tetrachioroethane   | 5.2E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 5.2E+00                                       | 02.200                               |   | 0.005                                   | ίu  | 01.000  | 1  | 0.005                                 | iu  |  |                |  |  |  |
| VOLATILES  | 1,1,1-Trichloroethane   | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.3E+02                                       |                                      |   | 0.005                                   | 1 Ū   |   |  | 0.005                                 | 1 Ú   |  |                |  |  |  |
| VOLATILES  | 1,1,2,2-Tetrachioroethane   | 5.1E-01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 5.1E-01                                       |                                      |   | 0.005                                   | 1 U   |   |  | 0.005                                 | 1 0   |  |                |  |  |  |
| VOLATILES  | 1,1-Dichloroethane  | 8.9E+01                                  | 0.0010              | 0.005                  | NE                                      | NE  | 8.9E+01                                       |                                      |   | 0.005                                   | 1 1   |   |  | 0.005                                 | iŭ  |  |                |  |  |  |
| VOLATILES  | 1,1-Dichloroethene  | 2.7E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.7E+01                                       |                                      |   | 0.005                                   | 1 U   |   |  | 0.005                                 | 1 0   |  |                |  |  |  |
| VOLATILES  | 1,1-Dichloropropene<br>1,2,3-Trichloropenzene   | 9.9E-01<br>4 2E+01                       | 0.0005              | 0.005                  | NE                                      | NE  | 9.9E-01                                       |                                      |   | 0.005                                   | 1 U   |   |  | 0.005                                 | 1 U   |  |                |  |  |  |
| VOLATILES  | 1,2,3-Trichloropropane  | 9.2E-02                                  | 0.0010              | 0.005                  | NE                                      | NE  | 9.2E-02                                       |                                      |   | 0.005                                   | iŭ  |   |  | 0.005                                 | iŭ  |  |                |  |  |  |
| VOLATILES  | 1,2,4-Trichlorobenzene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.4E+02                                       |                                      |   | 0.005                                   | 1 U   |   |  | 0.005                                 | 1 U   |  |                |  |  |  |
| VOLATILES  | 1,2,4-1 mmetryibenzene<br>1,2-Ditramo-3-oblatopropane   | 9.6E+00<br>3.5E-01                       | 0.0005              | 0.005                  | NE                                      | NE  | 9.6E+00<br>3.6E_01                            |                                      |   | 0.005                                   | 1 U   |   |  | 0.005                                 | 1 0   |  |                |  |  |  |
| VOLATILES  | 1,2-Dibromoethane   | 5,3E-02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 5.3E-02                                       |                                      |   | 0.005                                   | ίŬ  |   |  | 0.005                                 | iŭ  |  |                |  |  |  |
| VOLATILES  | 1,2-Dichlorobenzene   | 5.6E+01                                  | 0.0005              | 0.005                  | NE                                      | NĒ  | 5.6E+01                                       |                                      |   | 0.005                                   | 1 U   |   |  | 0.005                                 | 1 0   |  |                |  |  |  |
| VOLATILES  | 1,2-Dichiompropane  | 2.7E-01<br>1.8E+00                       | 0.0005              | 0.005                  | NE                                      | NE  | 2.7E-01<br>1.8E+00                            |                                      |   | 0.005                                   | 1 U   |   |  | 0.005                                 | 10  |  |                |  |  |  |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylene)  | 3.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.3E+03                                       |                                      |   | 0.005                                   | 1 0   |   |  | 0.005                                 | iŭ  |  |                |  |  |  |
| VOLATILES  | 1,3,5-Trimethylbenzene  | 8.3E+00                                  | 0.0005              | 0.005                  | NË                                      | NE  | 8.3E+00                                       |                                      |   | 0.005                                   | 1 U   |   |  | 0.005                                 | 1 0   |  |                |  |  |  |
| VOLATILES  | 1.3-Dichloropropane   | 3.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.0E+00                                       |                                      |   | 0.005                                   | 1 10  |   |  | 0.005                                 | 10  |  |                |  |  |  |
| VOLATILES  | 1.4-Dichtorobenzene   | 2.7E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.7E+01                                       |                                      |   | 0.005                                   | i Ũ   |   |  | 0.005                                 | 1 0   |  |                |  |  |  |
| VOLATILES  | 2,2-Dichioropropane<br>2-Butanone   | 1.7E+00<br>2.6E+03                       | 0.0005              | 0.005                  | NE                                      | NE  | 1.7E+00<br>2.6E+03                            |                                      |   | 0.005                                   | 1 0   |   |  | 0.005                                 | 1 0   |  |                |  |  |  |
| VOLATILES  | 2-Chloroethyl vinyl ether   | 2.1E-01                                  | 0.0020              | 0.010                  | NE                                      | NE  | 2.0E+03                                       |                                      |   | 0.010                                   | 1 0   |   |  | 0.009                                 | iŭ  |  |                |  |  |  |
| VOLATILES  | 2-Chlorotoluene   | 1.5E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.5E+02                                       |                                      |   | 0.005                                   | 1 U   |   |  | 0.005                                 | 1 U   |  |                |  |  |  |
| VOLATILES  | 2-Hexanone  | 5.2E+00<br>3.4E-01                       | 0.0025              | 0.010                  | NE                                      | NE  | 6.2E+00                                       |                                      |   | 0.010                                   | 1 U   |   |  | 0.009                                 | 1 0   |  |                |  |  |  |
| VOLATILES  | Acetone   | 1.7E+02                                  | 0.0050              | 0.010                  | NE                                      | NE  | 1.7E+02                                       |                                      |   | 0.015                                   | 1   |   |  | 0.009                                 | iŭ  |  |                |  |  |  |
| VOLATILES  | Benzene   | 8.6E-01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 8.8E-01                                       |                                      |   | 0.005                                   | 1 U   |   |  | 0.005                                 | 1 U   |  |                |  |  |  |
| VOLATILES  | Bromobenzene  | 1.1E+01<br>2.4E+01                       | 0.0005              | 0.005                  | NE                                      | NE  | 1.1E+01<br>2.4E+01                            |                                      |   | 0,005                                   | 1 U   |   |  | 0.005                                 | 10  |  |                |  |  |  |
| VOLATILES  | Bromodichioromethane  | 1.0E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.0E+01                                       |                                      |   | 0.005                                   | 1 บั  |   |  | 0,005                                 | ίŭ  |  |                |  |  |  |
| VOLATILES  | Bromoform   | 3.4E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.4E+01                                       |                                      |   | 0.005                                   | 1 U   |   |  | 0.005                                 | 1 0   |  |                |  |  |  |
| VOLATILES  | Bromometnane<br>Carbon disulfide  | 3.5E-01<br>1.0E+02                       | 0.0010              | 0.010                  | NE                                      | NE  | 3.58-01                                       |                                      |   | 0.010                                   | 1 1   |   |  | 0.009                                 | 1 0   |  |                |  |  |  |
| VOLATILES  | Carbon tetrachloride  | 3.5E-01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.5E-01                                       |                                      |   | 0.005                                   | 1 0   |   |  | 0.005                                 | iŭ  |  |                |  |  |  |
| VOLATILES  | Chlorobenzene   | 4.0E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 4.0E+01                                       |                                      |   | 0.005                                   | 1 8   |   |  | 0.005                                 | 1 U   |  |                |  |  |  |
| VOLATILES  | Chloroform  | 1.1E+03<br>3.1E-01                       | 0,0010              | 0.010                  | NE                                      | NE  | 1.1E+03<br>3.1E-01                            |                                      |   | 0.010                                   | 1 10  |   |  | 0.009                                 | 1 10  |  |                |  |  |  |
| VOLATILES  | Chloromethane   | 2.3E-01                                  | 0.0020              | 0.010                  | NE                                      | NĘ  | 2.3E-01                                       |                                      |   | 0.010                                   | 1 บั  |   |  | 0.009                                 | iŭ  |  |                |  |  |  |
| VOLATILES  | cis-1,2-Dichloroethene  | 1.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.2E+02                                       |                                      |   | 0.005                                   | 1 U   |   |  | 0.005                                 | 1 U   |  |                |  |  |  |
| VOLATILES  | cis- r.o-Olchoropropene<br>Dibromochloromethane   | 7.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.2E+00<br>7.6E+00                            |                                      |   | 0.005                                   | 110   |   |  | 0.005                                 | 1 0   |  |                |  |  |  |
| VOLATILES  | Dibromomethane  | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                      | NE .  | 1.9E+01                                       |                                      |   | 0.005                                   | iŭ  |   |  | 0.005                                 | 10  |  |                |  |  |  |
| VOLATILES  | Dichlorodificoromethane<br>Ethylbenzene   | 2.2E+02<br>4 3E+02                       | 0.0010              | 0.010                  | NE                                      | NE  | 2.2E+02                                       | 1                                    |   | 0.010                                   | 1 0   |   |  | 0.009                                 | 1 U   |  |                |  |  |  |
|  | and the second se |  | 0.0000              |                        | 1 3 64                                  | 136   | 1.00.02                                       |                                      |   | 0.000                                   |   |   |  | 0.000                                 |   |  |                |  |  |  |

Table 4-98

| Shaw | Enviro | ormental, | inc. |
|------|--------|-----------|------|
|------|--------|-----------|------|

# 00066588

| Table 4-98  |
|---|
| Comparison of Chemical Concentration in Soil to Risk-Based Screening Values |
| Sump-082  |

|  | Samp-son                    |  |                     |                        |  |  |   |  |  |  |  |  |  |  |  |
|--|-----------------------------|--|---------------------|------------------------|--|--|---|--|--|--|--|--|--|--|--|
| [SUMP] * SUM<br>LOCATION_C<br>SAMPLE_NO<br>SAMPLE_DAT<br>DEPTH<br>SAMPLE_PUF | 1P082<br>ODE<br>TE<br>1POSE | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backy<br>Concentra<br>(95% UP<br>Surface | ground<br>ations in Soil<br>PL, mg/kg)<br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP081-SB01<br>SUMP081-SB-01-01<br>9/18/2006<br>0 - 0 Ft<br>REG | 35SUMP081-SB01<br>SUMP081-SB-01-02<br>9/18/2006<br>0 - 0 Ft<br>REG | 35\$UMP082-\$B01<br>\$UMP082-\$B-01-01<br>9/16/2006<br>0 - 0 Ft<br>REG | 35SUMP082-SB01<br>SUMP082-SB-01-02<br>9/18/2006<br>0 - 0 Ft<br>REG | 47SB24<br>47SB24(0-0_5)<br>6/4/2000<br>0 - 0.5 Ft<br>REG | 47SB24<br>47SB24(1-2)<br>6/4/2000<br>1 - 2 Ft<br>REG | 47SB25<br>47SB25(0-0_5)<br>6/4/2000<br>0 - 0.5 Ft<br>REG | 47SB25<br>47SB25(1-2)<br>6/4/2000<br>1 - 2 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg)   | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft   | Value   | Result DIL_LQ_VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ                                     | Result DIL LQ_VQ   | Result DIL LO VO                                     |
| VOLATILES  | Hexachlorobutadiene         | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                       | ŃE   | 1.6E+00                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | Isopropylbenzene            | 5.4E+02                                  | 0.0005              | 0,005                  | NÉ                                       | NE   | 5.4E+02                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | m.p-Xvlenes                 | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                       | NÉ   | 2.3E+02                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | Methyl isobutyl ketone      | 1.3E+03                                  | 0.0025              | 0.01                   | NE                                       | NE   | 1.3E+03                                       |  | 0.010 1 U  |  | 0.009 1 U  |  |  |  |  |
| VOLATILES  | Methylene chloride          | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                       | NE   | 8.7E+00                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | Naphthalene                 | 1.8E+01                                  | 0.0005              | 0.01                   | NE                                       | NE   | 1.8E+01                                       |  | 0.010 1 U  |  | 0.009 1 U  |  |  |  |  |
| VOLATILES  | n-BUTYLBENZENE              | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                       | NE   | 2.7E+02                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | n-PROPYLBENZENE             | 3.2E+02                                  | 0.0005              | 0.005                  | NE                                       | NE   | 3.2E+02                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | p-ISOPROPYLTOLUENE          | 4.2E+02                                  | 0.0005              | 0.005                  | NË                                       | NE   | 4.2E+02                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | Sec-BUTYLBENZENE            | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                       | NË   | 3.0E+02                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | Styrene                     | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                       | NË   | 1.3E+03                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | tert-BUTYLBENZENE           | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                       | NE   | 2.6E+02                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | Tetrachioroethene           | 6.0E+00                                  | 0.0005              | 0.005                  | NĘ                                       | NE   | 6.0E+00                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | Toluene                     | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                       | NE   | 1.1E+03                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | trans-1.2-Dichloroethene    | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                       | NE   | 1.4E+02                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | trans-1.3-Dichloropropene   | 1.85+00                                  | 0.0005              | 0.005                  | NE                                       | NE   | 1.6E+00                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | Trichloroethene             | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                       | NE   | 3.7E+00                                       |  | 0.005 1 U  |  | 0.005 1 U  |  |  |  |  |
| VOLATILES  | Trichlorofluoromethane      | 2.6E+02                                  | 0.0010              | 0.01                   | NE                                       | NE   | 2.6E+02                                       |  | 0.010 1 U  |  | 0.009 1 U  |  |  |  |  |
| VOLATILES  | Vinyl acetate               | 5.7E+01                                  | 0.0010              | 0.01                   | NE.                                      | NE   | 5,7E+01                                       |  | 0.010 1 U  |  | 0.009 1 U  |  |  |  |  |
| VOLATILES  | Vinyl chloride              | 3.6E-02                                  | 0.0010              | 0.01                   | NE                                       | NE   | 3.6E-02                                       |  | 0.010 1 U  |  | 0.009 t U  |  |  |  |  |

. e

Shaw Environmental, Inc.

00066589

## Table 4-99 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

| <br>auons | 111 2011 | 10 | UISV- |
|-----------|----------|----|-------|
| Sumn      | -083     |    |       |

|                                    |  |                    |             |              |                |                      |                     | 1                   |                               |                           |                  |
|------------------------------------|--|--------------------|-------------|--------------|----------------|----------------------|---------------------|---------------------|-------------------------------|---------------------------|------------------|
| [SUMP] ≃ SUMP083<br>LOCATION _CODE |  |                    |             |              | <b>.</b> .     |                      |                     | 35SUMP083-SB01      | 35SUMP083-SB01                | 47SB26                    | 47SB26           |
| SAMPLE_NO                          | 1                                      | TCEQ               |             |              | Backg          | pround               | Applicable          | SUMP083-SB-01-01    | SUMP083-SB-01-02<br>0/18/2006 | 473620(0-0_3)<br>6///2000 | 6/4/2000         |
| SAMPLE_DATE                        |  | Risk-Based         | 11-41       | 1 C + 10 + 4 | Concentra:     | tions in Soit        | IGEQ<br>Biok Record | 9/16/2006           | 0-0 Ft                        | 0.4/2000                  | 1-2 Ft           |
|                                    |  | Volue              | Detection   | Quantitation | Surface        | Subsurface           | Screening           | REG                 | REG                           | REG                       | REG              |
| SAMPLE_PURPOSE                     |  | (DDO) 0 8          | L'election  |              |                | 1 5 0 5 5L           | Value               | Reput Di LO VO      | Posult DII 10 VO              | Result DIL LO VO          | Result Oll LO VO |
| HETALS                             | Parameter (Units = mg/kg)              | 1.65+04            | 10 000      | 20.00        | 1 63E+04       | 2 08F+04             | 1.6E+04             | 17800 1             | 4460 1                        | HOUR DIE ER VR            |                  |
| METALS                             | Antimony                               | 7.3E+00            | 0.500       | 0.10         | 9.40E-01       | 1,60E+00             | 7.3E+00             | 0.124 1 U UJL       | 0.118 1 U UJL                 |                           |                  |
| METALS                             | Arsenic                                | 2.0E+01            | 0.075       | 0.30         | 4.81E+00       | 5.54E+00             | 2.0E+01             | 0.833 1             | 0.787 1                       |                           |                  |
| METALS                             | Barium                                 | 2.6E+03            | 0.075       | 0.30         | 1.52E+02       | 8.55E+01             | 2.6E+03             | 34.1 1              | 47.6 1                        |                           |                  |
| METALS                             | Beryllium                              | 4.6E+00            | 0.012       | 0.50         | 6.45E-01       | 7.66E-01             | 4.6E+00             | 0.560 1             | 0.523 1                       |                           |                  |
| METALS                             | Cadmium                                | 5.2E+00            | 0.025       | 0.10         | 1.40E+00       | 4.00E-01             | 5.2E+00             | 0.068 1 J           | 0.411 1 U<br>296 1            |                           |                  |
| METALS                             | Calcium                                | NE<br>E OE 102     | NA<br>0.400 | NA<br>0.40   | NA<br>D 66E+04 | NA<br>2.01E+01       | E 0E103             | 313 I<br>26500 t IH | 8510 1 .5H                    |                           |                  |
| METALS                             | Cobalt                                 | 3.9E+03            | 0.105       | 0.50         | 7.232+01       | 5.61E+00             | 1.5E+03             | 0.265 1 J JL        | 3.720 1 JL                    |                           |                  |
| METALS                             | Conper                                 | 1.0E+03            | 0.150       | 0.60         | 5.55E+00       | 9.25E+00             | 1.0E+03             | 9.470 1             | 4.360 1                       |                           |                  |
| METALS                             | Iron                                   | NE                 | NA          | NA           | NA             | NA                   | -                   | 60000.000 10        | 12500.000 1                   |                           |                  |
| METALS                             | Lead                                   | 5.0E+02            | 0.500       | 5.00         | 2.26E+01       | 1,14E+01             | 5.0E+02             | 5.9 1               | 2.5 1                         |                           |                  |
| METALS                             | Magnesium                              | NE                 | NA          | NA           | NA             | NA                   | -                   | 708.000 1           | 641.000 1                     |                           |                  |
| METALS                             | Manganese                              | 1.7E+03            | 0.050       | 0.20         | 1.25E+03       | 2.01E+02             | 1.76+03             | 34.7 1 J            | 21.7 1 J                      |                           |                  |
| METALS                             | Mercury                                | 1.16-02            | 0.010       | 0.25         | 0.19E-02       | 3.00E-01<br>1.16E+01 | 1 05+01             | 4 640 1             | 5 560 1                       |                           |                  |
| METALS                             | Rotaccium                              | NE                 | 0.200<br>NA | NA NA        | NA NA          | NA                   |                     | 460.000 1 JH        | 301.000 1 JH                  |                           |                  |
| METALS                             | Setenium                               | 1.3E+02            | 0.100       | 0.20         | 3.48E+00       | 5.57E+00             | 1.3E+02             | 0.248 1 U UJL       | 0.236 1 U UJL                 |                           |                  |
| METALS                             | Silver                                 | 4.7E+01            | 0.050       | 0.20         | 3.10E-01       | 3.70E-01             | 4.7E+01             | 1.920 1 U           | 1.640 1 U                     |                           |                  |
| METALS                             | Sodium                                 | NE                 | NA          | NA           | NA             | NA                   | -                   | 25.600 1            | 186.000 1                     |                           |                  |
| METALS                             | Thallium                               | 2.0E+00            | 0.010       | 0.02         | 4.70E-01       | NE                   | 2.0E+00             | 0.031 1             | 0.022 1 J J                   |                           |                  |
| METALS                             | Vanadium                               | 4.8E+01            | 0.125       | 0.50         | 3.21E+01       | 4.46E+01             | 4.8E+01             | 59.900 1 JH         | 26.300 1 JH                   |                           |                  |
| METALS                             | Zinc                                   | 5.9E+03            | 0.625       | 2.50         | 6.16E+U1       | 2.02E+01             | 5.9E+03             | 22.400 t JH         | 13.400 1 34                   | 0.006 1 < 11              | 0.008 1 < U      |
| PERC                               | Perchlorate                            | 1.4E+01            | 0.005       | 0.010        | NE             | NE                   | 1.46+01             | 80.200 1            | 83 900 1                      | 0.000 1 4 0               | 0.000 1 4 0      |
|                                    | 1 1 1 2-Tetrachioroethane              | 5 25+00            |             | 0.005        | NE             | NE                   | 5 2E+00             | 00.200              | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1 1.1-Trichloroethane                  | 2.3E+02            | 0.0005      | 0.005        | NE             | NE                   | 2.3E+02             | 1                   | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1,1,2,2-Tetrachloroethane              | 5.1E-01            | 0.0005      | 0.005        | NE             | NE                   | 5.1E-01             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1,1,2-Trichloroethane                  | 9.7E-01            | 0.0005      | 0.005        | NE             | NE                   | 9.7Ë-01             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1,1-Dichloroethane                     | 8.9E+01            | 0.0010      | 0.005        | NE             | NE                   | 8.9E+01             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1,1-Dichlorcethene                     | 2.7E+01            | 0.0005      | 0.005        | NE             | NE                   | 2.7E+01             |                     | 0.005 1 0                     |                           |                  |
| VOLATILES                          | 1,1-Dichloropropene                    | 9.98-01            | 0.0005      | 0.005        | NE             | NE                   | 9.9E-01             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1.2.3-Trichloropropage                 | 9 26-02            | 0.0000      | 0.005        | NE             | NE                   | 9.2E-02             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1.2.4-Trichlorobenzene                 | 1.4E+02            | 0,0005      | 0.005        | NE             | NE                   | 1.4E+02             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1,2,4-Trimethylbenzene                 | 9.6E+00            | 0.0005      | 0.005        | NE             | NE                   | 9.6E+00             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1,2-Dibromo-3-chloropropane            | 3.5E-01            | 0.0020      | 0.005        | NE             | NE                   | 3.5E-01             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1,2-Dibromoethane                      | 5.3E-02            | 0.0005      | 0.005        | NE             | NE                   | 5.3E-02             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1,2-Dichlorobenzene                    | 5.6E+01            | 0.0005      | 0.005        | NE             |                      | 5.0E+U1             |                     | 0.005 1 11                    |                           |                  |
| VOLATILES                          | 1,2-Dichloroetnane                     | 2.7E-01<br>1.8E+00 | 0.0005      | 0.005        | NE             |                      | 1.85+00             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1.2-Dimethylbenzene (0-Xvlene)         | 3.3E+03            | 0.0005      | 0.005        | NE             | NE                   | 3.3E+03             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1.3.5-Trimethylbenzene                 | 8.3E+00            | 0.0005      | 0.005        | NE             | NE                   | 8.3E+00             |                     | 0.005 t U                     |                           |                  |
| VOLATILES                          | 1,3-Dichlorobenzene                    | 5.1E+00            | 0.0005      | 0.005        | NE             | NE                   | 5.1E+00             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1,3-Dichloropropane                    | 3.0E+00            | 0.0005      | 0.005        | NE             | NE                   | 3.0E+00             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 1.4-Dichlorobenzene                    | 2.7E+01            | 0.0005      | 0.005        | NE             | NE                   | 2.7E+01             |                     | 0.005 1 1                     |                           |                  |
| VOLATILES                          | 2,2-Dichloropropane                    | 1.75+00            | 0,0005      | 0.005        | NE             | NE                   | 1.72+00             |                     | 0.009 1 11                    |                           |                  |
| VOLATILES                          | 2-Butanone<br>2-Chlomethyl vinyt ether | 2.02+03            | 0.0025      | 0.010        | NE             | NE                   | 2.0E+03             |                     | 0.009 1 U                     |                           |                  |
| VOLATILES                          | 2-Chlorotoluene                        | 1.5E+02            | 0.0005      | 0.005        | NE             | NE                   | 1.5E+02             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | 2-Hexanone                             | 6.2E+00            | 0.0025      | 0.010        | NE             | NE                   | 6.2E+00             |                     | 0.009 1 U                     |                           |                  |
| VOLATILES                          | 4-Chlorotoluene                        | 3.4E-01            |             |              | NE             | NE                   | 3.4E-01             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | Acetone                                | 1.7E+02            |             |              | NE             | NE                   | 1.7E+02             |                     | 0.009 1 U                     |                           |                  |
| VOLATILES                          | Benzene                                | 8.8E-01            | 0.0005      | 0.005        | NE             | NE                   | 8.8E-01             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | Bromopenzene                           | 1.1E+01            | 0.0005      | 0.005        |                |                      | 1.1E+01<br>2.4E+01  |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | Bromodichloromethane                   | 1.0F+01            | 0.0005      | 0.005        | NF             | NE                   | 1.0E+01             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | Bromoform                              | 3.4E+01            | 0.0005      | 0.005        | NE             | NE                   | 3.4E+01             |                     | 0.005 1 U                     |                           |                  |
| VOLATILES                          | Bromomethane                           | 3.5E-01            | 0.0010      | 0.010        | NE             | NE                   | 3.5E-01             |                     | 0.009 1 U                     |                           |                  |
| VOLATILES                          | Carbon disulfide                       | 1.0E+02            | 0.0005      | 0.005        | NE             | NE                   | 1.0E+02             | · · ·               | 0.005 1 U                     |                           |                  |
| VOLATILES                          | Carbon tetrachloride                   | 3.5E-01            | 0.0005      | 0.005        | NE             | NE                   | 3.5E-01             |                     | 0.005 1 0                     |                           |                  |
| VOLATILES                          | Chlorobenzene                          | 4.0E+01            | 0.0005      | 0,005        | NE             | NE                   | 4.00+01             |                     | 0.000 1 0                     |                           |                  |
| VULATILEO                          | CHIMICEURINE                           | 1.16703            | 0.0010      | 0.010        | INE            | INC.                 | 1.12703             |                     | 0,000 1 0                     |                           |                  |

Shaw Environmental, Inc.

# 00066590

# Table 4-99 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

| (SUMP083<br>LOCATION LOODE         SAMPLE_NOTE         Sample_FORE <th co<="" th=""><th></th><th></th><th></th><th></th><th></th><th></th><th>Sump-083</th><th></th><th>_</th><th></th><th></th><th></th></th>   | <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>Sump-083</th> <th></th> <th>_</th> <th></th> <th></th> <th></th>  |   |   |   |  |  |   | Sump-083   |  | _   |  |  |  |
|--|---|---|---|---|--|--|---|--|--|---|--|--|--|
| Parameter (Juits = mp/kg)         (PBSV)*         Umit (MDL)         0 - 0.5 Fi         1.5 - 2.5 Ft         Value         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL         LO         VO         Result         DL <t< td=""><td>[SUMP] = SUMP083<br/>LOCATION_CODE<br/>SAMPLE_NO<br/>SAMPLE_DATE<br/>DEPTH<br/>SAMPLE_PURPOSE</td><td></td><td>TCEQ<br/>Risk-Based<br/>Screening<br/>Value</td><td>Method<br/>Detection</td><td>Method .</td><td>Back<br/>Concentra<br/>(95% UF<br/>Surface</td><td>ground<br/>ations in Soil<br/>PL, mg/kg)<br/>Subsurface</td><td>Applicable<br/>TCEQ<br/>Risk-Based<br/>Screening</td><td>35SUMP083-SB01<br/>SUMP083-SB-01-01<br/>9/18/2006<br/>0 - 0 Ft<br/>REG</td><td>35SUMP083-SB01<br/>SUMP083-SB-01-02<br/>9/18/2006<br/>0 - 0 Ft<br/>REG</td><td>47SB26<br/>47SB26(0-0_5)<br/>6/4/2000<br/>0 - 0.5 Ft<br/>REG</td><td>47SB26<br/>47SB26(1-2)<br/>6/4/2000<br/>1 - 2 Ft<br/>REG</td></t<>   | [SUMP] = SUMP083<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE  |   | TCEQ<br>Risk-Based<br>Screening<br>Value  | Method<br>Detection   | Method .   | Back<br>Concentra<br>(95% UF<br>Surface  | ground<br>ations in Soil<br>PL, mg/kg)<br>Subsurface                                    | Applicable<br>TCEQ<br>Risk-Based<br>Screening  | 35SUMP083-SB01<br>SUMP083-SB-01-01<br>9/18/2006<br>0 - 0 Ft<br>REG | 35SUMP083-SB01<br>SUMP083-SB-01-02<br>9/18/2006<br>0 - 0 Ft<br>REG  | 47SB26<br>47SB26(0-0_5)<br>6/4/2000<br>0 - 0.5 Ft<br>REG | 47SB26<br>47SB26(1-2)<br>6/4/2000<br>1 - 2 Ft<br>REG |  |
| VOLATILES         Chioroform         3.16-01         0.0005         NE         NE         3.16-01         0.0005         1         U           VOLATILES         Chioromethane         1.26+02         0.0005         0.005         NE         NE         1.26+02         0.0005         1         U           VOLATILES         cbs-1,2-Dichloropropene         1.26+00         0.0005         NE         NE         1.26+00         0.0005         1         U           VOLATILES         Dibromochloromethane         7.66+00         0.0005         0.005         NE         NE         1.26+00         0.0005         1         U           VOLATILES         Dibromochloromethane         7.66+00         0.005         NE         NE         1.96+01         0.005         1         U           VOLATILES         Dibromochloromethane         2.28+02         0.0010         NO10         NE         NE         4.36+02         0.005         1         U           VOLATILES         Elsybenzone         4.36+02         0.005         NE         NE         4.26+02         0.0065         1         U           VOLATILES         Heachtorobutadiene         1.36+03         0.005         NE         NE         2.36+02 <td>Test Group</td> <td>Parameter (Units = mg/kg)</td> <td>(RBSV)</td> <td>Limit (MDL)</td> <td>Limit (MQL)</td> <td>0 - 0.5 Ft</td> <td>1.5 - 2.5 Ft</td> <td>Value</td> <td>Result DIL LQ VQ</td> <td>Result DIL LQ VQ</td> <td>_Result DiL LQ VQ</td> <td>Result DIL LQ VQ</td>   | Test Group  | Parameter (Units = mg/kg)   | (RBSV)  | Limit (MDL)   | Limit (MQL)  | 0 - 0.5 Ft   | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ   | Result DIL LQ VQ  | _Result DiL LQ VQ  | Result DIL LQ VQ                                     |  |
| VOLATILES         Trichtorofluoromethane         2.6E+02         0.001         NE         NE         2.5E+02         0.009         0           VOLATILES         Vinyl acetate         5.7E+01         0.009         0 <td>Test Group           VOLATILES           ILES           VOLATILES<!--</td--><td>Parameter (Units = mg/kg)<br/>Chioroform<br/>Chioromethane<br/>cis-1,2-Dichtoroethene<br/>cis-1,3-Dichtoropropene<br/>Dibromorethane<br/>Dibromorethane<br/>Dibtoroodflooromethane<br/>Ethylbenzene<br/>Hexachtorobutadiene<br/>Isopropythenzene<br/>m,p-Xylenes<br/>Methyl isobutyl ketone<br/>Methylene chioride<br/>Naphthalene<br/>n-BUTYLBENZENE<br/>p-ISOPROPYLENZENE<br/>p-ISOPROPYLTOLUENE<br/>sec-BUTYLBENZENE<br/>Styrene<br/>tert-BUTYLBENZENE<br/>Tetrachtoroethene<br/>Troluene<br/>trans-1,2-Dichloroethene<br/>trachoroptine</td><td>(RBsV)<br/>3.1E-01<br/>2.3E-01<br/>1.2E+00<br/>1.2E+00<br/>1.9E+01<br/>2.2E+02<br/>4.3E+02<br/>4.3E+02<br/>1.6E+00<br/>5.4E+02<br/>2.3E+02<br/>1.3E+03<br/>8.7E+00<br/>1.8E+01<br/>2.7E+02<br/>3.0E+02<br/>3.0E+02<br/>6.0E+00<br/>1.4E+03<br/>1.4E+02<br/>1.8E+00<br/>3.7E+00<br/>3.7E+00</td><td>Limit (MDL)<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005</td><td>Limit (MQL)<br/>0.005<br/>0.010<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.010<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.0</td><td>0-0.5 FT<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE</td><td>1.5-2.5 H<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE</td><td>Value<br/>3.1E-01<br/>2.3E-01<br/>1.2E+02<br/>1.2E+00<br/>7.6E+00<br/>1.9E+01<br/>2.2E+02<br/>4.3E+02<br/>1.6E+00<br/>5.4E+02<br/>2.3E+02<br/>1.3E+03<br/>8.7E+00<br/>1.8E+01<br/>2.7E+02<br/>3.2E+02<br/>4.2E+02<br/>3.0E+02<br/>1.3E+03<br/>2.6E+02<br/>6.0E+00<br/>1.1E+03<br/>1.4E+00<br/>3.7E+00<br/>3.7E+00</td><td>Result DIL LO VU</td><td>Clip (C</td><td></td><td></td></td> | Test Group           VOLATILES           ILES           VOLATILES </td <td>Parameter (Units = mg/kg)<br/>Chioroform<br/>Chioromethane<br/>cis-1,2-Dichtoroethene<br/>cis-1,3-Dichtoropropene<br/>Dibromorethane<br/>Dibromorethane<br/>Dibtoroodflooromethane<br/>Ethylbenzene<br/>Hexachtorobutadiene<br/>Isopropythenzene<br/>m,p-Xylenes<br/>Methyl isobutyl ketone<br/>Methylene chioride<br/>Naphthalene<br/>n-BUTYLBENZENE<br/>p-ISOPROPYLENZENE<br/>p-ISOPROPYLTOLUENE<br/>sec-BUTYLBENZENE<br/>Styrene<br/>tert-BUTYLBENZENE<br/>Tetrachtoroethene<br/>Troluene<br/>trans-1,2-Dichloroethene<br/>trachoroptine</td> <td>(RBsV)<br/>3.1E-01<br/>2.3E-01<br/>1.2E+00<br/>1.2E+00<br/>1.9E+01<br/>2.2E+02<br/>4.3E+02<br/>4.3E+02<br/>1.6E+00<br/>5.4E+02<br/>2.3E+02<br/>1.3E+03<br/>8.7E+00<br/>1.8E+01<br/>2.7E+02<br/>3.0E+02<br/>3.0E+02<br/>6.0E+00<br/>1.4E+03<br/>1.4E+02<br/>1.8E+00<br/>3.7E+00<br/>3.7E+00</td> <td>Limit (MDL)<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005<br/>0.0005</td> <td>Limit (MQL)<br/>0.005<br/>0.010<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.010<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.005<br/>0.0</td> <td>0-0.5 FT<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE</td> <td>1.5-2.5 H<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE<br/>NE</td> <td>Value<br/>3.1E-01<br/>2.3E-01<br/>1.2E+02<br/>1.2E+00<br/>7.6E+00<br/>1.9E+01<br/>2.2E+02<br/>4.3E+02<br/>1.6E+00<br/>5.4E+02<br/>2.3E+02<br/>1.3E+03<br/>8.7E+00<br/>1.8E+01<br/>2.7E+02<br/>3.2E+02<br/>4.2E+02<br/>3.0E+02<br/>1.3E+03<br/>2.6E+02<br/>6.0E+00<br/>1.1E+03<br/>1.4E+00<br/>3.7E+00<br/>3.7E+00</td> <td>Result DIL LO VU</td> <td>Clip (C</td> <td></td> <td></td> | Parameter (Units = mg/kg)<br>Chioroform<br>Chioromethane<br>cis-1,2-Dichtoroethene<br>cis-1,3-Dichtoropropene<br>Dibromorethane<br>Dibromorethane<br>Dibtoroodflooromethane<br>Ethylbenzene<br>Hexachtorobutadiene<br>Isopropythenzene<br>m,p-Xylenes<br>Methyl isobutyl ketone<br>Methylene chioride<br>Naphthalene<br>n-BUTYLBENZENE<br>p-ISOPROPYLENZENE<br>p-ISOPROPYLTOLUENE<br>sec-BUTYLBENZENE<br>Styrene<br>tert-BUTYLBENZENE<br>Tetrachtoroethene<br>Troluene<br>trans-1,2-Dichloroethene<br>trachoroptine | (RBsV)<br>3.1E-01<br>2.3E-01<br>1.2E+00<br>1.2E+00<br>1.9E+01<br>2.2E+02<br>4.3E+02<br>4.3E+02<br>1.6E+00<br>5.4E+02<br>2.3E+02<br>1.3E+03<br>8.7E+00<br>1.8E+01<br>2.7E+02<br>3.0E+02<br>3.0E+02<br>6.0E+00<br>1.4E+03<br>1.4E+02<br>1.8E+00<br>3.7E+00<br>3.7E+00 | Limit (MDL)<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005 | Limit (MQL)<br>0.005<br>0.010<br>0.005<br>0.005<br>0.005<br>0.005<br>0.010<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.0 | 0-0.5 FT<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE | 1.5-2.5 H<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE | Value<br>3.1E-01<br>2.3E-01<br>1.2E+02<br>1.2E+00<br>7.6E+00<br>1.9E+01<br>2.2E+02<br>4.3E+02<br>1.6E+00<br>5.4E+02<br>2.3E+02<br>1.3E+03<br>8.7E+00<br>1.8E+01<br>2.7E+02<br>3.2E+02<br>4.2E+02<br>3.0E+02<br>1.3E+03<br>2.6E+02<br>6.0E+00<br>1.1E+03<br>1.4E+00<br>3.7E+00<br>3.7E+00 | Result DIL LO VU   | Clip (C |  |  |  |
|  | VOLATILES<br>VOLATILES  | Vinyl acetate   | 2.0E+02<br>5.7E+01  | 0.0010  | 0.01   | NE   | NE  | 5.7E+01  |  | 0.009 1 U<br>0.009 1 U  |  |  |  |

### Shaw Environmental, Inc.

# 00066591

# Table 4-100

| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
|--|
| Sump-084   |

|                  |                                |            |             |              |              |                |            | 4          |         |           |           |             |         |            |          |
|------------------|--------------------------------|------------|-------------|--------------|--------------|----------------|------------|------------|---------|-----------|-----------|-------------|---------|------------|----------|
| [SUMP] = SUMP084 |                                |            |             |              |              |                |            |            |         |           |           |             |         | 000104000  |          |
| LOCATION _CODE   |                                |            |             |              |              |                |            | 35SUMP08   | 4-\$B01 | 35SUMP0   | 14-SB01   | 35SUMP08    | 4-SB02  | 355UMP08   | 4-5802   |
| SAMPLE_NO        |                                | TCEQ       |             |              | Back         | ground         | Applicable | 35-SMP084- | SB01-01 | 35-SMP084 | -\$B01-02 | 35-SMP084-  | SB02-01 | 35-SMP084- | SB02-02  |
| SAMPLE DATE      |                                | Risk-Based |             |              | Concentra    | tions in Soil  | TCEQ       | 9/21/20    | 006     | 9/21/2    | 006       | 9/21/20     | 06      | 9/21/20    | 106      |
| DEPTH            |                                | Screening  | Method      | Method       | (95% UP      | L, ma/kg)      | Risk-Based | 0.5 - 0.5  | 5 Ft    | 2.5 - 2   | 5 Ft      | 0.5 - 0.5   | 5 Ft    | 2.5 - 2.   | 5 Ft     |
| SAMPLE PURPOSE   | 2                              | Value      | Detection   | Quantitation | Surface      | Subsurface     | Screening  | REG        | }       | REG       | 3         | REG         |         | REG        | i i      |
|                  | -                              |            |             |              | 0.065        | 45 05 0        | Malua      | Doout D    |         | Docult F  |           | Docub D     |         | Popult D   |          |
| Test Group       | Parameter (Units = mg/kg)      | (RBSV)     |             |              | 0-0.5 Ft     | 1.3 - 2.3 FL   | value      | Result D   |         | nesul c   |           |             |         | 14900      | 4        |
| METALS           | Aluminum                       | 1.6E+04    | 10.000      | 20.00        | 1.635+04     | 2,08E+04       | 1.6E+04    | 21600      |         | 22800     | 1         | 22600       |         | 0.400      | 4 IN II  |
| METALS           | Antimony                       | 7.3E+00    | 0.500       | 0.10         | 9.40E-01     | 1.606+00       | 7.3E+00    | 0.124      | 1 0     | 0.126     | 1 0       | 0.130       | 00      | 0.122      |          |
| METALS           | Arsenic                        | 2.0E+01    | 0.075       | 0.30         | 4.81E+00     | 5.54E+00       | 2.0E+01    | 5.270      | 1       | 5.150     | 1         | 4.280       |         | 2,520      | 1        |
| METALS           | Barium                         | 2.6E+03    | 0.075       | 0.30         | 1.52E+02     | 8.55E+01       | 2.6E+03    | 65.1       | 1       | 68.2      | 1         | 70.7 1      |         | 134        | 4        |
| METALS           | Beryllium                      | 4.6E+00    | 0.012       | 0.50         | 6.45E-01     | 7.66E-01       | 4.6E+00    | 0.622      | 1       | 0.887     | 1         | 0.622       |         | 0.896      | 4        |
| METALS           | Cadmium                        | 5.2E+00    | 0.025       | 0.10         | 1.40E+00     | 4.00E-01       | 5.2E+00    | 0.195      | 1 J J   | 0.140     | 1 J J     | 0.069 1     | IJJ     | 0.592      | 1        |
| METALS           | Calcium                        | NE         | NA          | NA           | NA           | NA             | -          | 955        | 1       | 2040      | 1         | 277         | l i     | 3010       | 1        |
| METALS           | Chromium                       | 5.9E+03    | 0 100       | 0.40         | 2 66F+01     | 3 01E+01       | 5 9E+03    | 28.000     | 1       | 30,700    | 1         | 29,800      | E       | 13,900     | 1        |
| METALS           | Cobalt                         | 1.5E+03    | 0 125       | 0.50         | 7 23E+00     | 5.615+00       | 1.5E+03    | 1 870      | 1       | 1.860     | 1         | 1.660       | 6       | 9.370      | 1        |
| METALO           | Copper                         | 1.00-00    | 0.120       | 0.00         | 5 555400     | 0.012.00       | 1 05+03    | 9 330      | 1       | 12 200    |           | 7 620       |         | 8 300      | 1        |
| METALS           | Copper                         | 1.02703    | 0.150       | 0.00         | 5.555400     | 9.202400       | 1.02+03    | 0.000      |         | 50300.000 | 10        | 22000.000   |         | 14200.000  | 1        |
| METALS           | iron                           |            | NA<br>0.500 | NA           | NA<br>DOT 01 | NA<br>A 145-01 | E 05.00    | 34700.000  |         | 59300.000 | 4         | . 33900.000 |         | 14200.000  | 4        |
| METALS           | Lead                           | 5.0E+02    | 0.500       | 5.00         | 2.26E+01     | 1.146+01       | 5.0E+02    | 12         | 1       | 11        | 1         |             |         | 1000 000   | 4        |
| METALS           | Magnesium                      | NE         | NA          | NA           | NA           | NA             | -          | 1310.000   | 1       | 1380.000  | 1         | 1310.000    |         | 1200.000   | !        |
| METALS           | Manganese                      | 1.7E+03    | 0.050       | 0.20         | 1.25E+03     | 2.01E+02       | 1.7E+03    | 38         | 1       | 77        | 1         | 18          |         | 106        | !        |
| METALS           | Mercury                        | 1.1E-02    | 0.010       | 0.25         | 8.19E-02     | 3.60E-01       | 2.5E-01    | 0.075      | 1 J J   | 0.055     | 1 J J     | 0.071       | 1 1 1   | 0.052      | I J J    |
| METALS           | Nickel                         | 1.9E+02    | 0.200       | 0.60         | 6.98E+00     | 1.16E+01       | 1.9E+02    | 6.330      | 1       | 6.890     | 1         | 6.030       | 1       | 13.800     | 1        |
| METALS           | Potassium                      | NE         | NA          | NA           | NA           | NA             | -          | 838.000    | 1       | 670.000   | 1         | 804.000     | 1       | 493.000    | 1        |
| METALS           | Selenium                       | 1.3E+02    | 0.100       | 0.20         | 3.48E+00     | 5.57E+00       | 1.3E+02    | 0.752      | 1       | 0.608     | 1         | 0.329       | 1       | 0.258      | t        |
| METALS           | Silver                         | 4.7E+01    | 0.050       | 0.20         | 3.10E-01     | 3 70E-01       | 4 7E+01    | 1.850      | 1 U     | 1,940     | 1 U       | 1.950       | 1 U U   | 1.770      | 1 U U    |
| METALS           | Sodium                         | NE         | NA          | NA           | NA           | NA             |            | 16 200     | 1 J J   | 24 900    | 1         | 20 400      | 1       | 51.300     | 1        |
| METALS           | Thellium                       | 2 05+00    | 0.010       | 0.02         | 4 705-01     | NE             | 2.05+00    | 0.109      | 1 0 0   | 0 143     | 1         | 0.098       | 1       | 0.087      | 1        |
| METALS           | Manadium                       | 4 85-04    | 0.010       | 0.02         | 2 21 - 01    | 4 465+01       | 4 95404    | 55 5001    | •       | 63 000    |           | 62 000      | 1       | 23 700     | 4        |
| METALS           |                                | 4.05.101   | 0.125       | 0.50         | 3.215+01     | 4.402701       | 4.00101    | 00.000     | 4       | 24,900    | -         | 21 100      |         | 50 100     | -        |
| METALS           |                                | 3.95+03    | 0.025       | 2.50         | 0.102701     | 2.026701       | 3,90703    | 20.400     |         | 34.000    |           | 21.100      |         | 0.050      |          |
| PERC             | Perchiorate                    | 1.4E+01    | 0.005       | 0.010        | NE           | NE             | 1.48+01    | 0.040      | 4 0     | 0.020     | 20        | 0.010       | 00      | 0.000      | , , , ,  |
| SOLIDS           | Percent Solids                 | NE         | NE          | NE           | NE           | NE             |            | 80.500     | 1       | 77.900    | 1         | 70.900      | 1       | 61.700     |          |
| VOLATILES        | 1,1,1,2-Tetrachloroethane      | 5.2E+00    | 0.0005      | 0.005        | NE           | NE             | 5.2E+00    |            |         | 0.006     | 1 0       |             |         | 0.005      | 1 0 0    |
| VOLATILES        | 1,1,1-Trichloroethane          | 2.3E+02    | 0.0005      | 0.005        | NE           | NE             | 2.3E+02    |            |         | 0.006     | 1 U       |             |         | 0.005      | 1 0 0    |
| VOLATILES        | 1,1,2,2-Tetrachloroethane      | 5.1E-01    | 0.0005      | 0.005        | NE           | NE             | 5.1E-01    | l .        |         | 0.006     | 1 U       |             |         | 0.005      | 1 0 0    |
| VOLATILES        | 1,1,2-Trichloroethane          | 9.7E-01    | 0.0005      | 0.005        | NE           | NE             | 9.7E-01    | [          |         | 0.006     | 1 U       |             |         | 0.005      | 1 U U    |
| VOLATILES        | 1,1-Dichloroethane             | 8.9E+01    | 0.0010      | 0,005        | NE           | NE             | 8.9E+01    | 1          |         | 0.006     | 1 U       |             |         | 0.005      | 1 U U    |
| VOLATILES        | 1.1-Dichloroethene             | 2.7E+01    | 0.0005      | 0.005        | NE           | NE             | 2.7E+01    |            |         | 0.006     | 1 U       |             |         | 0.005      | 1 U U    |
| VOLATILES        | 1 1-Dichtoropropene            | 9 9F-01    | 0.0005      | 0.005        | NE           | NE             | 9.9E-01    |            |         | 0.006     | 1 U       |             |         | 0.005      | 1 U U    |
| VOLATILES        | 1.2.3-Trichlorobenzene         | 4 2E+01    | 0.0005      | 0.005        | NE           | NE             | 4 2E+01    |            |         | 0.006     | 1 0       |             |         | 0.005      | 1 Ü U    |
| VOLATILES        | 1.2.3 Trichloropropapa         | 6.25 02    | 0.0000      | 0.000        | NE           | ME             | 0.25-02    |            |         | 0.006     | i ŭ       |             |         | 0.005      | า่ มี มี |
| VOLATILES        | 1.2.4 Trichlorohonzono         | 5.2C-02    | 0.0010      | 0.005        | NE           | NE             | 5.20-02    |            |         | 0.006     | 1 11      |             |         | 0.005      | 1 11 11  |
| VOLATILES        | 4.0.4 Trimethylbergene         | 1.46702    | 0.0005      | 0.000        | NE           |                | 0.40702    |            |         | 0.000     | i ŭ       |             |         | 0.000      | 4 11 14  |
| VOLATILES        | 1,2,4-1 nmeunyidenzene         | 9.00+00    | 0.0005      | 0.005        |              | NE             | 9.02+00    |            |         | 0.000     |           |             |         | 0.000      | 1 1 1    |
| VOLATILES        | 1,2-Dibromo-3-Chioropropane    | 3.56-01    | 0.0020      | 0.005        | NE           | NE             | 3.5E-01    |            |         | 0.006     | 1 0       |             |         | 0.005      |          |
| VOLATILES        | 1,2-Dibromoethane              | 5.3E-02    | 0.0005      | 0.005        | NE           | NE             | 5.3E-02    |            |         | 0.006     | 1 U       |             |         | 0.005      |          |
| VOLATILES        | 1,2-Dichlorobenzene            | 5.6E+01    | 0.0005      | 0.005        | NĘ           | NE             | 5.6E+01    |            |         | 0.006     | 1 U       |             |         | 0.005      | 1 4 4    |
| VOLATILES        | 1,2-Dichloroethane             | 2.7E-01    | 0.0005      | 0.005        | NE           | NE             | 2.7E-01    |            |         | 0.006     | 1 U       |             |         | . 0.005    | 1 0 0    |
| VOLATILES        | 1,2-Dichloropropane            | 1.8E+00    | 0.0005      | 0.005        | NE           | NE             | 1.8E+00    |            |         | 0.006     | 1 U       |             |         | 0.005      | 1 U U    |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) | 3.3E+03    | 0.0005      | 0.005        | NE           | NE             | 3,3E+03    |            |         | 0.006     | 1 U       |             |         | 0.005      | 1 U U    |
| VOLATILES        | 1,3,5-Trimethylbenzene         | 8.3E+00    | 0.0005      | 0.005        | NE           | NE             | 8.3E+00    |            |         | 0.006     | 1 U       |             |         | 0.005      | 1 U U    |
| VOLATILES        | 1.3-Dichlorobenzene            | 5.1E+00    | 0.0005      | 0.005        | NÉ           | NE             | 5.1E+00    |            |         | 0.006     | 1 U       |             |         | 0.005      | 1 U U    |
| VOLATILES        | 1.3-Dichloropropane            | 3.0E+00    | 0.0005      | 0.005        | NE           | NE             | 3.0E+00    |            |         | 0.006     | 1 Ú       |             |         | 0.005      | 1 U U    |
| VOLATILES        | 1 & Dichlombenzene             | 2 7E+01    | 0.0005      | 0.005        | NE           | NE             | 2.7E+01    |            |         | 0.006     | ÷ Ū       |             |         | 0.005      | 1 14 11  |
| VOLATILES        | 2.2-Dichloropronane            | 175+00     | 0.0005      | 0.005        | NE           | NE             | 175+00     |            |         | 0.006     | 1 11      |             |         | 0.005      | i Ū Ū    |
| VOLATILES        | 2-Butanono                     | 3 65+03    | 0.0000      | 0.000        | NE           |                | 2 65402    |            |         | 0.012     | 1 Ŭ       |             |         | 0.011      | ร์ มีมี  |
| VOLATILES        | 2 Chlomothyl vinyt other       | 2.02+03    | 0.0020      | 0.010        | NE           |                | 2.02703    |            |         | 0.012     | łŭ        |             |         | 0.011      | 4 11 11  |
| VOLATILES        | 2-Chlorobit varyt eurer        | 2.10-01    | 0.0020      | 0.010        | NE           | INC            | 2.10-01    |            |         | 0.012     |           |             |         | 0.011      |          |
| VOLATILES        | 2-Chiorotoluene                | 1.50+02    | 0.0005      | 0.005        | NE           | NE             | 1.5E+02    |            |         | 0.000     | 1 0       |             |         | 0.005      |          |
| VOLATILES        | 2-Hexanone                     | 6.2E+00    | 0.0025      | 0.010        | NE           | NE             | 6.2E+00    |            |         | 0.012     | τŲ        |             |         | 0.011      |          |
| VOLATILES        | 4-Chlorotoluene                | 3.4E-01    | 0.0005      | 0.005        | NE           | NE             | 3.4E-01    |            |         | 0.006     | 1 U       |             |         | 0.005      |          |
| VOLATILES        | Acetone                        | 1.7E+02    | 0.0050      | 0.010        | NE           | NE             | 1.7E+02    |            |         | 0.012     | 1 U       |             |         | 0.011      | I U U    |
| VOLATILES        | Benzene                        | 8.8E-01    | 0.0005      | 0.005        | NË           | NE             | 8.8E-01    |            |         | 0.006     | 1 U       |             |         | 0.005      | 1 U U    |
| VOLATILES        | Bromobenzene                   | 1.1E+01    | 0.0005      | 0.005        | NE           | NE             | 1.1E+01    | 1          |         | 0.006     | 1 U       |             |         | 0.005      | 1 U U    |
| VOLATILES        | Bromochloromethane             | 2.4E+01    | 0.0005      | 0.005        | NË           | NE             | 2.4E+01    |            |         | 0.006     | 1 U       |             |         | 0.005      | 1 U U    |
| VOLATILES        | Bromodichloromethane           | 1.0E+01    | 0.0005      | 0.005        | NE           | NE             | 1.0E+01    |            |         | 0.006     | 1 U       |             |         | 0.005      | 1 U U    |
| VOLATILES        | Bromoform                      | 3.4E+01    | 0.0005      | 0.005        | NE           | NE             | 3.4E+01    | 1          |         | 0.006     | 1 Ū       |             |         | 0.005      | 1 U Ú    |
| VOLATILES        | Bromomethane                   | 3.5F-01    | 0.0010      | 0.010        | NE           | NF             | 3.55-01    |            | -       | 0.012     | i ŭ       |             |         | 0.011      | 1 Ū Ū    |
| VOLATILES        | Carbon disulfide               | 1.05+02    | 0.0005      | 0.005        | NE           | NE             | 1 0E+02    | 1          |         | 0.006     | i ii      |             |         | 0.005      | i មិ មិ  |
|                  | Carbon tetrachloride           | 3.55.01    | 3000.0      | 0.005        |              |                | 3.5= 01    |            |         | 0.000     | 1 11      |             |         | 0.005      | i ŭ ŭ    |
|                  | Chlombenzene                   | 4 05+01    | 0.00005     | 0.005        |              | NC             | 4 05-01    |            |         | 0.000     | 1 11      |             |         | 0.005      | 1 1 1    |
| VOLATILEO        | Chloraothana                   | 4.02701    | 0.0000      | 0.000        |              |                | 4.02101    | 1          |         | 0.000     | 1 1       |             |         | 0.000      |          |
| VULAHLES         | CHORDBUIRTIE                   | 1.10+03    | 0.0010      | 0.010        | NĘ           | NE             | 1.12+03    | 1          |         | 0.012     | . 0       |             |         | 0.011      |          |

### Shaw Environmental, Inc.

00066592

# Table 4-100 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|   | IDI - SUMP094                    |  |                     |             |   |   |   |   |   |   |   |  |  |  |
|---|----------------------------------|--|---------------------|-------------|---|---|---|---|---|---|---|--|--|--|
| [SUMP] = SUMP084<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOS | E                                | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method      | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>°L, mg/kg)<br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP084-SB01<br>35-SMP084-SB01-01<br>9/21/2006<br>0.5 - 0.5 Ft<br>REG | 355UMP064-SB01<br>35-SMP084-SB01-02<br>9/21/2006<br>2.5 - 2.5 Ft<br>REG | 35SUMP084-SB02<br>35-SMP084-SB02-01<br>9/21/2006<br>0.5 - 0.5 Ft<br>REG | 355UMP084-SB02<br>35-SMP084-SB02-02<br>9/21/2006<br>2.5 - 2.5 Ft<br>REG |  |  |  |
| Test Groun  | Parameter (Units = mg/kg)        | (RBSV) "                                 | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value   | Result DIL LQ VQ  |  |  |  |
| VO: ATILES  | Chloroform                       | 3.1E-01                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.1E-01                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | Chloromethane                    | 2.3E-01                                  | 0.0020              | 0.010       | NE                                      | NE  | 2.3E-01                                       |   | 0.012 1 U   |   | 0.011 1 U U   |  |  |  |
| VOLATILES   | cis-1.2-Dichloroethene           | 1.2E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.2E+02                                       |   | 0,006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATHES  | cis-1 3-Dichloropropene          | 1.2E+00                                  | 0.0005              | 0.005       | NË                                      | NE  | 1.2E+00                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | Dibromochloromethane             | 7.6E+00                                  | 0.0005              | 0.005       | NE                                      | NE  | 7.6E+00                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | Dibromomethane                   | 1.9E+01                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.9E+01                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | Dichlorodifluoromethane          | 2.2E+02                                  | 0.0010              | 0.010       | NE                                      | NE  | 2.2E+02                                       |   | 0.012 1 U   |   | 0.011 1 U U   |  |  |  |
| VOLATILES   | Fibylhenzene                     | 4.3E+02                                  | 0.0005              | 0.005       | NÉ                                      | NE  | 4.3E+02                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | Hexachlorohutadiene              | 1.6E+00                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.6E+00                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | Isopronylbenzene                 | 5.4E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 5.4E+02                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | m n-Xvienes                      | 2.3E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 2.3E+02                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | Methyl isobutyl ketone           | 1.3E+03                                  | 0.0025              | 0.01        | NE                                      | NE  | 1.3E+03                                       |   | 0.012 1 U   |   | 0.011 1 U U   |  |  |  |
| VOLATILES   | Methylene chloride               | 8.7E+00                                  | 0.0010              | 0.005       | NE                                      | NE  | 8.7E+00                                       |   | 0.003 1 J B   |   | 0.003 1 J J   |  |  |  |
| VOLATILES   | Naphthalene                      | 1.8E+01                                  | 0.0005              | 0.01        | NE                                      | NE  | 1.8E+01                                       | 1   | 0.012 1 U   |   | 0.011 1 U U   |  |  |  |
| VOLATILES   | n-BLITYL BENZENE                 | 27E+02                                   | 0.0005              | 0.005       | NE                                      | NE  | 2.7E+02                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   |                                  | 3.2E+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 3.2E+02                                       | ł   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   |                                  | 4 2E+02                                  | 0.0005              | 0.005       | ME                                      | NE  | 4 2E+02                                       | 1   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | PROOF NOT TETOEOLITE             | 305+02                                   | 0.0005              | 0.005       | NE                                      | NE  | 3.0E+02                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | Shrana                           | 130-02                                   | 0.00005             | 0.005       | NE                                      | NE  | 1 3E+03                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | tod BUTVI BENZENE                | 2.65+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 2.6E+02                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | Tetrachloroothone                | 6.05+00                                  | 0.0005              | 0.005       | NE                                      | NE  | 6.05+00                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | Teluane                          | 1 15+02                                  | 0.0005              | 0.000       | NE                                      |   | 1 15+03                                       |   | 0.006 I U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | touene<br>toos 1.2 Dichlamathana | 1.12.00                                  | 0.0005              | 0.005       | NG                                      | NE  | 145+02  |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | trans 4.2 Disbloropropo          | 1.45+02                                  | 0.0005              | 0.005       | NE                                      | NE  | 1.8E+00                                       |   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | Techloraothono                   | 3 75-00                                  | 0.0005              | 0.005       |   | NE  | 3.75+00                                       | 1   | 0.006 1 U   |   | 0.005 1 U U   |  |  |  |
| VOLATILES   | Trichlorofuctomathana            | 3.15700                                  | 0.0000              | 0.000       | NE                                      | NE  | 2.6E+02                                       | 1   | 0.012 1 1   |   | 0.011 1 U U   |  |  |  |
| VOLATILES   | Maul costato                     | 2.0ETU2<br>6.7E±04                       | 0.0010              | 10.0        | NE                                      | NE  | 5.76+01                                       | 1   | 0.012 1 0 11  |   | 0.011 1 U UJ  |  |  |  |
| VOLATILES   | Vinyi acetate                    | 3.4 5701                                 | 0.0010              | 0.01        | NE                                      | NE  | 3.65-02                                       |   | 0.012 1 1   |   | 0.011 1 U U   |  |  |  |
| VULATILES   | VINVI GRIONAE                    | 3,00-02                                  | 0.0010              | 0.01        | 145                                     | INE   | 0.06-02                                       | F   |   |   |   |  |  |  |

Shaw Environmental, Inc.

# 00066593

 Table 4-101

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-085

|                  |                                  |                 |             |              | South-oc         | <b>5</b> 0             |            |                          |                   |                   |
|------------------|----------------------------------|-----------------|-------------|--------------|------------------|------------------------|------------|--------------------------|-------------------|-------------------|
| [SUMP] = SUMP085 |                                  |                 |             |              |                  |                        |            | 35S1IMD085.SB02          | 35SUMP086-SR01    | 35SUMP086-S801    |
| LOCATION CODE    |                                  |                 |             |              | Deele            | mund                   | Analisahia | 35.SMD085-SB01-02        | 35-SMP086-SR01-01 | 35-SMP086-SB01-02 |
| SAMPLE_NO        |                                  | TCEQ            |             |              | Backg            | pround<br>Sens in Seil | Applicable | 0/20/2006                | 9/21/2006         | 9/21/2006         |
| SAMPLE_DATE      |                                  | Risk-Based      |             |              | Concentia        | aons in Son            | ICEQ       | 3/20/2000                | 0.5 0.5 5         | 8 8 54            |
| DEPTH            |                                  | Screening       | Method      | Method       | (95% UP          | L, mg/kg)              | Risk-Based | 4.5 - 4.5 Ft             | 0.5 - 0.5 Ft      | 8-8F(             |
| SAMPLE_PURPOSE   |                                  | Value           | Detection   | Quantitation | Surface          | Subsurface             | Screening  | REG                      | REG               | REG               |
| Test Group       | Parameter (Units = mg/kg)        | (RBSV) *        | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft       | 1.5 - 2.5 Ft_          | Value      | Result DIL LO VO         | Result DIL LQ VQ  | Result DIL LQ VQ  |
| METALS           | Aluminum                         | 1.6E+04         | 10.000      | 20.00        | 1.63E+04         | 2.08E+04               | 1.6E+04    | 12500.000 1              | 5300,000 1        | 4580.000 1        |
| METALS           | Antimony                         | 7.3E+00         | 0.500       | 0.10         | 9.40E-01         | 1.60E+00               | 7.3E+00    | 0.118 1 U                | 0.114 1 0 0       | 0.117 1 0 0       |
| METALS           | Arsenic                          | 2.0E+01         | 0.075       | 0.30         | 4.81E+00         | 5.54E+00               | 2.0E+01    | 0.551 1                  | 3.420 1           | 71 700 1          |
| METALS           | Barlum                           | 2.6E+03         | 0.075       | 0.30         | 1.52E+02         | 8.55E+01               | 2.62+03    | 152.000 1                | 43.000 1          | 0.497 1           |
| METALS           | Beryllium                        | 4.6E+00         | 0.012       | 0.50         | 6.45E-01         | 7.668-01               | 4.62+00    | 0.641                    | 0.009 1 1 1       | 0.062 1 1 .1      |
| METALS           | Cadmium                          | 5.2E+00         | 0.025       | 0.10         | 1.40E+00         | 4.00E-01               | 5.26+00    | 0,100 1 J J<br>E09.000 1 | 0,098 1 3 3       | 254.000 1         |
| METALS           | Calcium                          | NE              | NA          | NA           | NA<br>D COT I OL |                        | F 05102    | 11 100 1                 | 17 700 1          | 4 860 1           |
| METALS           | Chromium                         | 5.9E+03         | 0.100       | 0.40         | 2.000+01         | 3.01E+01               | 3,95+03    | 6300 1                   | 3 600 1           | 4 380 1           |
| METALS           | Cobalt                           | 1.5E+03         | 0.125       | 0.50         | 7.230+00         | 0.055+00               | 1.00-03    | 3.940 1                  | 3.000 t           | 2 160 1           |
| METALS           | Copper                           | 1.02+03         | 0.150       | 0.00         | 5.53ETUU         | 9,232700               | 1.02703    | 11100.000 1              | 11400 000 1       | 5540 000 1        |
| METALS           | Iron                             | INE<br>E OE 102 | 0.500       | 5.00         | 2 265+04         | 1 145+01               | 5 05+02    | 9740 1                   | 10.500 1          | 3.190 1           |
| METALS           | Leao                             | 5.0E+0Z         | 0.000       | 5.00         | 2.200701         | NS                     | 0.00.02    | 1100.000 1               | 187,000 1         | 603.000 1         |
| METALS           | Magnesium                        | 1 75+03         | 0.050       | 0.20         | 1 25E+03         | 2 01E+02               | 1 7E+03    | 60 100 1                 | 143.000 1         | 21,000 1          |
| METALS           | Manyanese                        | 1.15-03         | 0.030       | 0.25         | B 10E-02         | 3.605-01               | 2.5E-01    | 0.012 1 U                | 0.019 1 J J       | 0.012 1 U U       |
| METALS           | Necory                           | 1.05+02         | 0.010       | 0.20         | 6.985+00         | 1 16E+01               | 1.9E+02    | 11.400 1                 | 4.370 1           | 7.240 1           |
| METALS           | Detection                        | NE              | 0.200<br>NA | NA NA        | NA NA            | NA                     |            | 364.000 1                | 207.000 1         | 272.000 1         |
| METALS           | Selenium                         | 1 35+02         | 0 100       | 0.20         | 3 48E+00         | 5.57E+00               | 1.3E+02    | 0.309 1                  | 0.233 1           | 0.235 1 U U       |
| METALS           | Silver                           | 4 7E+01         | 0.050       | 0.20         | 3.10E-01         | 3.70E-01               | 4.7E+01    | 1.750 1 U                | 1.720 1 U U       | 1.830 1 U U       |
| METALS           | Sodium                           | NF              | NA          | NA           | NA               | NA                     |            | 358.000 1                | 13.900 1 J J      | 166.000 1         |
| METALS           | Thallium                         | 2.05+00         | 0.010       | 0.02         | 4.70E-01         | NE                     | 2.0E+00    | 0.074 1                  | 0.264 1           | 0.037 1           |
| METALS           | Vanadium                         | 4.8E+01         | 0.125       | 0.50         | 3.21E+01         | 4 46E+01               | 4.8E+01    | 18.100 1                 | 22.700 1          | 7.550 1           |
| METALS           | Zinc                             | 5.9E+03         | 0.625       | 2.50         | 6.16E+01         | 2.02E+01               | 5.9E+03    | 21.000 1                 | 16.500 1          | 20.000 1          |
| PERC             | Perchlorate                      | 1.4E+01         | 0.005       | 0.010        | NE               | NE                     | 1.4E+01    | 0.098 10 U               | 0.050 5 U U       | 0.199 20 U U      |
| SEMIVOLATILES    | 1.2.4-Trichlorobenzene           | 1.4E+02         | 0.083       | 0.17         | NE               | NE                     | 1.4E+02    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | 1.2 Dichlorobenzene              | 5.6E+01         | 0.083       | 0.17         | NE               | NE                     | 5.6E+01    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | 1,3-Dichlorobenzene              | 5.1E+00         | 0.083       | 0.17         | NE               | NE                     | 5.1E+00    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | 1,4-Dichlorobenzene              | 2.7E+01         | 0.083       | 0.17         | NE               | NE                     | 2.7E+01    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | 2,4,5-Trichlorophenol            | 1.6E+03         | 0.083       | 0.17         | NE               | NE                     | 1.6E+03    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | 2,4,6-Trichlorophenol            | 4.5E+01         | 0.083       | 0.17         | NE               | NE                     | 4.5E+01    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | 2,4-Dichlorophenol               | 4.7E+01         | 0.083       | 0.17         | NE               | NE                     | 4.76+01    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | 2,4-Dimethylphenol               | 3.1E+02         | 0.083       | 0.17         | NE               | NE                     | 3.1E+02    | 0.193 1 0                |                   |                   |
| SEMIVOLATILES    | 2,4-Dinitrophenol                | 3.1E+01         | 0.330       | 0.83         | NE               | NE                     | 3.1E+01    | 0.905 1 0                |                   |                   |
| SEMIVOLATILES    | 2,4-Dinitrotoluene               | 7.2E-01         | 0.083       | 0.17         | NE               | NE                     | 7.20-01    | 0.195 1 0                |                   |                   |
| SEMIVOLATILES    | 2,6-Dinitrotoluene               | 7.2E-01         | 0.083       | 0.17         | NE               |                        | 1.20-01    | 0.103 1 1                |                   |                   |
| SEMIVOLATILES    | 2-Chloronaphthatene              | 1.1E+03         | 0.083       | 0.17         | NE               |                        | 1 15+03    | 0.193 1 11               |                   |                   |
| SEMIVOLATILES    | 2-Chlorophenol                   | 1.12+02         | 0.083       | 0.17         |                  |                        | 5.55+01    | 0.103 1 1                |                   |                   |
| SEMIVOLATILES    | 2-Methylabaaal                   | 5.5E+01         | 0.003       | 0.17         | NE               | NE                     | 7.75+02    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | 2-Methylphenol<br>2 Mitroopilion | 1.75+02         | 0.000       | 0.17         | NE               | NE                     | 47E+00     | 0.965 1 U                |                   |                   |
| SEMIVOLATILES    | 2-Nitrophanol                    | 3 16+01         | 0.000       | 0.00         | NE               | NE                     | 3.1E+01    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | 3.3'-Dichlorobenzidine           | 1 15+00         | 0.165       | 0.33         | NE               | NE                     | 1.1E+00    | 0.386 1 U                |                   |                   |
| SEMIVOLATILES    | 3.Nitmaniline                    | 475+00          | 0.330       | 0.83         | NE               | NE                     | 4.7E+00    | 0.965 1 U                |                   |                   |
| SEMIVOLATILES    | 4 6-Dinitro-2-methylobenal       | 3.1E+01         | 0.330       | 0.83         | NE               | NE                     | 3.1E+01    | 0.965 1 U                |                   |                   |
| SEMIVOLATILES    | 4-Bromochenyl phenyl ether       | 3.1E-02         | 0.083       | 0.17         | NE               | NE                     | 1.7E-01    | 0.097 1 U                |                   |                   |
| SEMIVOLATILES    | 4-Chloro-3-methylphenni          | 7.7E+01         | 0.083       | 0.17         | NE               | NE                     | 7.7E+01    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | 4-Chloroaniline                  | 6.2E+01         | 0.083       | 0.17         | NE               | NE                     | 6.2E+01    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether      | 2.8E-02         | 0.083       | 0.17         | NE               | NË                     | 1.7E-01    | 0.097 1 U                |                   |                   |
| SEMIVOLATILES    | 4-Methylphenol                   | 7.7E+01         | 0.083       | 0.17         | NE               | NE                     | 7.7E+01    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | 4-Nitroaniline                   | 1.3E+01         | 0.330       | 0.83         | NE               | NE                     | 1.3E+01    | 0.965 1 U                |                   |                   |
| SEMIVOLATILES    | 4-Nitrophenol                    | 3.1E+01         | 0.330       | 0.83         | NE               | NE                     | 3.1E+01    | 0.965 1 U                |                   |                   |
| SEMIVOLATILES    | Acenaphthene                     | 8.2E+02         | 0.083       | 0.17         | NE               | NE                     | 8.2E+02    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | Acenaphthylene                   | 8.2E+02         | 0.083       | 0.17         | NE               | NE                     | 8.2E+02    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | Anthracene                       | 4.1E+03         | 0,0825      | 0.165        | NE               | NE                     | 4.1E+03    | 0,193 1 U                |                   |                   |
| SEMIVOLATILES    | Benzo(a)anthracene               | 6.3E-01         | 0.0825      | 0.165        | 1.53E-02         | NE                     | 6.3E-01    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | Benzo(a)pyrene                   | 6.3E-02         | 0.0825      | 0.165        | 1.54E-02         | NE                     | 1.7E-01    | 0.097 1 U                |                   |                   |
| SEMIVOLATILES    | Benzo(b)fluoranthene             | 6.3E-01         | 0.0825      | 0.165        | 1.53E-02         | NE                     | 6.3E-01    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | Benzo(ghi)perylene               | 4.1E+02         | 0.0825      | 0.165        | 1.23E-02         | NE                     | 4.1E+02    | 0.193 1 U                |                   |                   |
| SEMIVOLATILES    | Benzo(k)fluoranthene             | 6.3E+00         | 0.0825      | 0.165        | 1.30E-02         | NE                     | 6.3E+00    | 0.193 1 0                |                   |                   |
| SEMIVOLATILES    | Benzoic Acid                     | 6.2E+04         | 0.3300      | 0.825        | NE               | NE                     | 0.28+04    | 0.900 1 U                |                   |                   |
| SEMIVOLATILES    | Benzyl Alcohol                   | 4.7E+03         | 0.0825      | 0.165        | NE               | NE                     | 4.76+03    | 0,193 1 U                |                   |                   |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane       | 2.9E-01         | 0.0825      | 0,165        | NE               | NĘ                     | 2.96-01    | 0.183 1 0                |                   |                   |

# 00066594

# Table 4-101 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-085

|                  |   |            |             |              | oump-oc    | ·· ·          |                    |                   |                   |                   |
|------------------|---|------------|-------------|--------------|------------|---------------|--------------------|-------------------|-------------------|-------------------|
| [SUMP] = SUMP085 |   |            |             |              |            |               |                    | 35SLIMD085-SB02   | 35SI MP086-\$R01  | 35SUM2086-SB01    |
| LOCATION_CODE    |   | TOFO       |             |              | Backr      | bround        | Applicable         | 35-SMP085-SB01-02 | 35-SMP086-SB01-01 | 35-SMP086-SB01-02 |
| SAMPLE_NO        |   | Risk-Based |             |              | Concentral | tions in Soil | TCEQ               | 9/20/2006         | 9/21/2006         | 9/21/2006         |
|                  |   | Scrooning  | Mathod      | Method       | (95% LIP   | noka)         | Risk-Based         | 4.5 - 4.5 Ft      | 0.5 - 0.5 Ft      | 8 - 8 Ft          |
|                  |   | Value      | Detection   | Quantitation | Surface    | Subsurface    | Screening          | REG               | REG               | REG               |
| Test Group       | Parameter (Lipits = mg/kg)                  | (RBSV)     | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value              | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether                     | 1.5E-01    | 0.0825      | 0,165        | NE         | NE            | 1.7E-01            | 0.097 1 U         |                   |                   |
| SEMIVOLATILES    | bis(2-Chloroisopropyl)ether                 | 4.8E+00    | 0.0825      | 0.165        | NE         | NE            | 4.8E+00            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | bis(2-Ethylhexyl)phthalate                  | 1.7E+01    | 0.0825      | 0.165        | NÉ         | NE            | 1.7E+01            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | Butyi benzyl phthalate                      | 3.1E+03    | 0.0825      | 0.165        | NE         | NE            | 3.15+03            |                   |                   |                   |
| SEMIVOLATILES    | Chrysene<br>Dibasara (a blanthananan        | 6.3E+01    | 0.0825      | 0,105        | 1.512-02   |               | 1.3ET01            | 0.193 1 0         |                   |                   |
| SEMIVOLATILES    | Dibenzofuran                                | 6.3E+02    | 0.0825      | 0.165        | NE         | NE            | 6.2E+01            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | Diethyl ohthalate                           | 1.2E+04    | 0.0825      | 0.165        | NE         | NE            | 1.2E+04            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | Dimethyl phthalate                          | 1.2E+04    | 0.0825      | 0.165        | NE         | NÉ            | 1.2E+04            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | di-n-Butyl phthalate                        | 1.6E+03    | 0.0825      | 0.165        | NÉ         | NE            | 1.6E+03            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | di-n-Octyl phthalate                        | 3.1E+02    | 0.0825      | 0.165        | NE         | NE            | 3.1E+02            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | Fluoranthene                                | 5.5E+02    | 0.0825      | 0.165        | 2.29E-02   | NE            | 5.5E+02            |                   |                   |                   |
| SEMIVOLATILES    | Fluorene                                    | 5.5E+02    | 0.0825      | 0.165        | NE         | NE            | 2.5E-01            | 0.193 1 1         |                   |                   |
| SEMIVOLATILES    | Hexachlorobenzene                           | 2.55-01    | 0.0625      | 0.165        | NE         | NE            | 1.6E+00            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | Hexachlorocyclopentadiene                   | 1.02+00    | 0.0825      | 0.165        | NE         | NE            | 1.0E+00            | 0,193 1 U         |                   |                   |
| SEMIVOLATILES    | Hexachloroethane                            | 1.6E+01    | 0.0825      | 0,165        | NE         | NE            | 1.6E+01            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | Indeno(1,2,3-cd)pyrene                      | 6.3E-01    | 0.0825      | 0.165        | 1.43E-02   | NE            | 6.3E-01            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | Isophorone                                  | 5.2E+02    | 0.0825      | 0.165        | NE         | NĘ            | 5.2E+02            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | Naphthalene                                 | 1.8E+01    | 0.0825      | 0.165        | NE         | NE            | 1.8E+01            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | Nitrobenzene                                | 6.5E+00    | 0.0825      | 0.165        | NE         | NE            | 0.52+00            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine                  | 4.1E-02    | 0.0825      | 0.105        | NE         | NE            | 5.05+01            | 0.057 1 0         |                   |                   |
| SEMIVOLATILES    | n-Naosooipnenylanine<br>Rentachlorophenol   | 3.95+01    | 0.3300      | 0.825        | NE         | NE            | 3.0E+00            | 0.965 1 U         |                   |                   |
| SEMIVOLATILES    | Phenanthrene                                | 4.1E+02    | 0.0825      | 0.165        | NE         | NE            | 4.1E+02            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | Phenol                                      | 4.7E+03    | 0.0825      | 0.165        | NE         | NΕ            | 4.7E+03            | 0.193 1 U         |                   |                   |
| SEMIVOLATILES    | Pyrene                                      | 4.1E+02    | 0.0825      | 0.165        | 1.94E-02   | NE            | 4.1E+02            | 0.193 1 U         |                   |                   |
| SOLIDS           | Percent Solids                              | NE         | NE          | NE           | NE         | NE            |                    | 84.800 1          | 87.600 1          | 83.900 1          |
| VOLATILES        | 1,1,1,2-Tetrachloroethane                   | 5.2E+00    | 0,0005      | 0.005        | NE         | NE            | 5.26+00            | 0.005 1 U         |                   | 0.005 1 0 0       |
| VOLATILES        | 1,1,1-1 richloroethane                      | 2.3E+02    | 0.0005      | 0.005        | NE         |               | 2.3E+02<br>5 1E-01 | 0.005 1 0         |                   | 0.005 1 0 0       |
| VOLATILES        | 1 1 2-Trichlomethane                        | 0.7E-01    | 0.0005      | 0.005        | NE         | NE            | 9.7E-01            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | 1 1-Dichloroethane                          | 8.9E+01    | 0.0010      | 0.005        | NE         | NE            | 8.9E+01            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | 1,1-Dichloroethene                          | 2.7E+01    | 0.0005      | 0.005        | NE         | NE            | 2.7E+01            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | 1,1-Dichloropropene                         | 9.9E-01    | 0.0005      | 0.005        | NE         | NE            | 9.9E-01            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | 1,2,3-Trichlorobenzene                      | 4,2E+01    | 0.0005      | 0.005        | NE         | NE            | 4.2E+01            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | 1,2,3-Trichloropropane                      | 9.2E-02    | 0.0010      | 0.005        | NE         | NE            | 9.2E-02            | 0.005 1 0         |                   | 0.005 1 0 0       |
| VOLATILES        | 1,2,4-I nchlorobenzene                      | 1.42+02    | 0.0005      | 0.005        |            | NE            | 9.65+00            | 0.005 1 11        |                   | 0.005 1 0 0       |
| VOLATILES        | 1,2,4-1101000000000000000000000000000000000 | 3.55-01    | 0.0005      | 0.005        |            | NE            | 3.5E-01            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | 1.2-Dibromoetbane                           | 5.3E-02    | 0.0005      | 0.005        | NE         | NE            | 5.3E-02            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | 1,2-Dichlorobenzene                         | 5.6E+01    | 0.0005      | 0.005        | NE         | NE            | 5.6E+01            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | 1,2-Dichloroethane                          | 2.7E-01    | 0.0005      | 0.005        | NE         | NE            | 2.7E-01            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | 1,2-Dichloropropane                         | 1.8E+00    | 0.0005      | 0.005        | NE         | NE            | 1.8E+00            | 0.005 1 U         |                   |                   |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene)              | 3.3E+03    | 0.0005      | 0.005        | NE         | NE            | 3.3E+03            |                   |                   | 0.005 1 0 0       |
| VOLATILES        | 1,3,5-Inmethylbenzene                       | 8.3E+00    | 0.0005      | 0,005        |            | NE            | 5.3E+00            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | 1.3-Dichloropropage                         | 3.05+00    | 0.0005      | 0.005        |            | NE            | 3.0E+00            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | 1.4-Dichlorobenzene                         | 2.7E+01    | 0.0005      | 0.005        | NE         | NE            | 2.7E+01            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | 2,2-Dichloropropane                         | 1.7E+00    | 0.0005      | 0.005        | NE         | NE            | 1.7E+00            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | 2-Butanone                                  | 2.6E+03    | 0.0025      | 0.010        | NE         | NE            | 2.6E+03            | 0.009 1 U         |                   | 0.010 1 U U       |
| VOLATILES        | 2-Chloroethyl vinyl ether                   | 2.1E-01    | 0.0020      | 0.010        | NE         | NE            | 2.1E-01            | 0.009 1 U         |                   | 0.010 1 0 0       |
| VOLATILES        | 2-Chlorotoluene                             | 1.5E+02    | 0.0005      | 0.005        | NE         | NE            | 1.5E+02            | 0.005 1 U         |                   |                   |
| VOLATILES        | 2-Hexanone                                  | 0.2E+00    | 0.0025      | 0.010        | NE         | NE            | 346-01             | 0.005 1 11        |                   | 0.005 1 0 0       |
| VOLATILES        |   | 3.4C-01    | 0.0000      | 0.000        |            | NE            | 1.7E+02            | 0.009 1 U         |                   | 0.010 1 U U       |
| VOLATILES        | Benzene                                     | 8.8E-01    | 0.0005      | 0.005        | NE         | NE            | 8.8E-01            | 0.005 1 U         |                   | 0.005 1 Ū Ū       |
| VOLATILES        | Bromobenzene                                | 1.1E+01    | 0.0005      | 0.005        | NE         | NE            | 1.1E+01            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | Bromochloromethane                          | 2.4E+01    | 0.0005      | 0.005        | NE         | NË            | 2.4E+01            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | Bromodichloromethane                        | 1.0E+01    | 0.0005      | 0.005        | NE         | NE            | 1.0E+01            | 0.005 1 U         |                   | 0.005 1 U U       |
| VOLATILES        | Bromotorm                                   | 3.4E+01    | 0.0005      | 0.005        | NE         | NE            | 3.4E+01            | 0.005 1 U         |                   |                   |
| VOLATILES        | Bromomethane                                | 3.5E-01    | 0.0010      | 0.010        | NE         | NE            | 3.5E-01            | 0.009 1 0         |                   | 0.010 1 0 0       |

and a measurement of the state

Shaw Environmental, Inc.

00066595

 Table 4-101

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

 Sump-085

| [SUMP] = SUMP085<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE |                           | TCEQ<br>Risk-Based |             |              | Back<br>Concentra | ground<br>tions in Soll | Applicable<br>TCEQ | 35SUMP085-SB02<br>35-SMP085-SB01-02<br>9/20/2006 | 35\$UMP086-SB01<br>35-SMP086-SB01-01<br>9/21/2006 | 35SUMP086-SB01<br>35-SMP086-SB01-02<br>9/21/2006 |
|--|---------------------------|--------------------|-------------|--------------|-------------------|-------------------------|--------------------|--|---|--|
| DEPTH  |                           | Screening          | Method      | Method       | (95% UF           | PL, mg/kg)              | Risk-Based         | 4.5 - 4.5 Ft                                     | 0.5 - 0.5 Ft                                      | 8-8 Ft   |
| SAMPLE_PURPOSE   |                           | Value              | Detection   | Quantitation | Surface           | Subsurface              | Screening          | REG  | REG   | REG  |
| Test Group   | Parameter (Units = mg/kg) | (RBSV)             | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft        | 1.5 - 2.5 Ft            | Value              | Result DIL LQ VQ                                 | Result DIL LQ VQ                                  | Result DIL LQ VQ                                 |
| VOLATILES  | Carbon disulfide          | 1.0E+02            | 0.0005      | 0.005        | NE                | NE                      | 1.0E+02            | 0.005 1 U  |   |  |
| VOLATILES  | Carbon tetrachloride      | 3.5E-01            | 0.0005      | 0.005        | NE                | NE                      | 3.5E-01            | 0.005 1 U  |   | 0.005 1 0 0                                      |
| VOLATILES  | Chlorobenzene             | 4.0E+01            | 0.0005      | 0.005        | NE                | NE                      | 4.0E+01            | 0.005 1 0  |   | 0.005 1 0 0                                      |
| VOLATILES  | Chloroethane              | 1.1E+03            | 0.0010      | 0.010        | NE                | NE                      | 1.1E+03            | 0.009 1 U  |   |  |
| VOLATILES  | Chloroform                | 3.1E-01            | 0.0005      | 0.005        | NE                | NE                      | 3.1E-01            | 0.005 1 U  |   |  |
| VOLATILES  | Chloromethane             | 2.3E-01            | 0.0020      | 0.010        | NE                | NE                      | 2.3E-01            | 0.009 1 U  |   | 0.010 1 0 0                                      |
| VOLATILES  | cis-1,2-Dichloroethene    | 1.2E+02            | 0.0005      | 0.005        | NE                | NE                      | 1.2E+02            | 0.005 1 0  |   | 0,005 1 U U                                      |
| VOLATILES  | cis-1,3-Dichloropropene   | 1.2E+00            | 0.0005      | 0.005        | NE                | NE                      | 1.2E+00            | 0.005 1 U  |   | 0.005 1 0 0                                      |
| VOLATILES  | Dibromochloromethane      | 7.6E+00            | 0.0005      | 0.005        | NE                | NE                      | 7.6E+00            | 0.005 1 U  |   | 0.005 1 0 0                                      |
| VOLATILES  | Dibromomethane            | 1.9E+01            | 0.0005      | 0.005        | NE                | NE.                     | 1.9E+01            | 0.005 1 U  |   | 0.005 1 0 0                                      |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02            | 0.0010      | 0.010        | NE                | NE                      | 2.2E+02            | 0.009 1 U  |   | 0.010 1 0 0                                      |
| VOLATILES  | Ethvibenzene              | 4.3E+02            | 0.0005      | 0.005        | NE                | NE                      | 4.3E+02            | 0.005 1 U  |   | 0.005 1 U U                                      |
| VOLATILES  | Hexachlorobutadiene       | 1.6E+00            | 0.0005      | 0.005        | NE                | NE                      | 1.6E+00            | 0.005 1 U  |   | 0.005 1 0 0                                      |
| VOLATILES  | Isopropylbenzene          | 5.4E+02            | 0.0005      | 0.005        | NE                | NE                      | 5.4E+02            | 0.005 1 U  |   | 0.005 1 U U                                      |
| VOLATILES  | m.n-Xvienes               | 2.3E+02            | 0.0005      | 0.005        | NE                | NE                      | 2.3E+02            | 0.005 1 U  |   | 0.005 1 U U                                      |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03            | 0.0025      | 0.01         | NE                | NE                      | 1.3E+03            | 0.009 1 U  |   | 0.010 1 U U                                      |
| VOLATILES  | Methylene chloride        | 8.7E+00            | 0.0010      | 0.005        | NE                | NE                      | 8.7E+00            | 0.005 1 U  |   | 0.002 1 J J                                      |
| VOLATILES  | Nanhthalene               | 1.8E+01            | 0.0005      | 0.01         | NE                | NE                      | 1.8E+01            | 0.009 1 U  |   | 0.010 1 U U                                      |
| VOLATILES  | n-BUTYI SENZENE           | 2.7E+02            | 0.0005      | 0.005        | NE                | NE                      | 2.7E+02            | 0.005 1 U  |   | 0.005 1 U U                                      |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02            | 0.0005      | 0.005        | NE                | NE                      | 3.2E+02            | 0.005 1 U  |   | 0.005 1 U U                                      |
| VOLATILES  | 6-ISOPROPYLTOLUENE        | 4.2E+02            | 0.0005      | 0.005        | NE                | NE                      | 4.2E+02            | 0.005 1 U  |   | 0.005 1 U U                                      |
| VOLATILES  | SPC-BITTYI BENZENE        | 3.05+02            | 0.0005      | 0.005        | NE                | NE                      | 3.0E+02            | 0.005 1 U  |   | 0.005 1 U U                                      |
| VOLATILES  | Styrene                   | 1 3E+03            | 0.0005      | 0.005        | NE                | NE                      | 1.3E+03            | 0.005 1 U  |   | 0.005 1 U U                                      |
| VOLATILES  | tert-BUTYI BENZENE        | 2.6E+02            | 0.0005      | 0.005        | NE                | NE                      | 2.6E+02            | 0.005 1 U  |   | 0.005 1 U U                                      |
| VOLATILES  | Tetrachloroethene         | 6 0E+00            | 0.0005      | 0.005        | NE                | NE                      | 6.0E+00            | 0.005 1 U  |   | 0.005 1 LI U                                     |
| VOLATILES  | Toluene                   | 1 15+03            | 0.0005      | 0.005        | NE                | NE                      | 1.1E+03            | 0.005 1 U  |   | 0.005 t U U                                      |
| VOLATICES  | trong 1 2 Dichlomethene   | 145+02             | 0.0005      | 0.005        | NE                | NË                      | 1.4E+02            | 0.005 1 U  |   | 0.005 1 U U                                      |
| VOLATILES  | trans-1,2-Dichloropropene | 1.85+00            | 0.0005      | 0.005        | NE                | NE                      | 1.8E+00            | 0.005 1 U  |   | 0.005 1 U U                                      |
| VOLATILES  | Telebloroothono           | 375+00             | 0.0005      | 0.005        | NE                | NE                      | 3.7E+00            | 0.005 1 U  |   | 0,005 1 U U                                      |
| VOLATILES  | Trichlorofluoromothane    | 2.65+02            | 0.0010      | 0.01         | NE                | NE                      | 2.6E+02            | 0.009 1 U  |   | 0.010 1 U U                                      |
| VOLATILES  | View excitor              | 575104             | 0.0010      | 0.01         | NE                | NE                      | 5.7E+01            | 0.009 1 U UJ                                     |   | 0.010 1 U UJ                                     |
| VOLATILES  | Viriyi aceiate            | 2 65 02            | 0.0010      | 0.01         | NE                |                         | 3.6E-02            | 0.009 1 U  |   | 0.010 1 U U                                      |
| VULATILES  | Viriyi CitioRue           | 3.0E-02            | 0,0010      | 0.01         |                   |                         | 0.02.02            |  |   |  |

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066596

### Table 4-102

### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-086

| [SUMP] = SUMP086<br>LOCATION CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOS | E                                | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br><u>PL, mg/kg)</u><br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 355UMP085-S<br>35-SMP085-SB<br>9/20/2006<br>4.5 - 4.5 Ft<br>REG | 8802<br>101-02<br>t | 35SUMP08<br>35-SMP086-<br>9/21/20<br>0.5 - 0.5<br>REG | 5-SB01<br>SB01-01<br>06<br>Ft | 35SUMP<br>35-SMP08<br>9/21/<br>8 -<br>RI | 086-SB01<br>36-SB01-0<br>/2006<br>8 Ft<br>EG | WR\$<br>2 WR\$1<br>9/2<br>0.5 | 617-SB01<br>17-SB01-0<br>25/2006<br>i - 0.5 Ft<br>REG | ท         | WRS17-<br>WRS17-S<br>9/25/2<br>4.5 - 4<br>REG | -\$801<br>801-02<br>006<br>.5 Ft<br>G | WR<br>WRS<br>9(<br>0. | S17-SB<br>17-SB0<br>25/2006<br>5 - 0.5 F<br>REG | 02<br>2-01<br>3<br>1 | WRS17-5<br>WRS17-5<br>9/25/2<br>4.5 - 4<br>RE | SB02<br>B02-02<br>006<br>5 Ft<br>3 |
|---|----------------------------------|--|---------------------|------------------------|---|--|---|---|---------------------|---|-------------------------------|--|--|-------------------------------|---|-----------|---|---------------------------------------|-----------------------|---|----------------------|---|------------------------------------|
| Test Group  | Parameter (Units = mg/kg)        | (RBSV)                                   | Limit (MDL          | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value   | Result Dli.   | LQ VQ               | Result DIL  | LQ VQ                         | Result D                                 | IL LQ V                                      | VQ Result                     | DIL LQ  | VQ        | Result D                                      | <u>IL LO V</u>                        | Q Resu                |   |                      | Result D                                      | <u>IL LQ VQ</u>                    |
| METALS  | Aluminum                         | 1.6E+04                                  | 10.000              | 20.00                  | 1.63E+04                                | 2.08E+04   | 1.6E+04                                       | 12500.000 1   |                     | 5300.000 1  |                               | 4580.000                                 | 1  | 5430.000                      | 1   |           | 4100.000                                      | 1                                     | 8550.00               | 31  |                      | 17400.000                                     | 1<br>4 11 JTH                      |
| METALS  | Antimony                         | 7.3E+00                                  | 0,500               | 0.10                   | 9.40E-01                                | 1.60E+00   | 7.3E+00                                       | 0.118 1   | U                   | 0.114 1   | υu                            | 0.117                                    | 101  | 0.116                         | 10  | UJL<br>11 | 0.115   | 1 0 0                                 | /JL U.11              | 5 1 K   | 0 UJL<br>B           | 0.115   | 1 0 0,0                            |
| METALS  | Arsenic                          | 2.0E+01                                  | 0.075               | 0.30                   | 4.812+00                                | 5.54E+00   | 2.05+01                                       | 0.551 1   |                     | 3.420 1   |                               | 0.900                                    | ]  | 9.070                         |   | JL        | 1.090   | 1 3                                   | L 1.20                | : ¦   | JL                   | 164,000                                       | 1 JL                               |
| METALS  | Banum                            | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                | 7.665.01   | 2.02+03                                       | 0.944 4   |                     | 43.000 1  |                               | 0.497                                    | -  | 40.300                        |   |           | 0.882   | 4                                     | 051                   | 5 1   |                      | 1 010   | 1                                  |
| METALS  | Beryillum                        | 4.0E+00                                  | 0.012               | 0.50                   | 0.40E-01                                | 1.000-01   | 4.0ET00                                       | 0.041 1   | r 1                 | 0.017 1   | 1.1                           | 0.467                                    | 4 1  | 1 1 380                       | 1   | 3         | 0.071   | i                                     | 0.57                  | i i   |                      | 0 105   | 1.1.3                              |
| METALS  | Calaium                          | 5.25700                                  | 0.020               | 0.10                   | 1.400-100                               | 4.002-01   | J.2E+00                                       | 508,000 1   | 3 3                 | 901 000 1   | 5 5                           | 254 000                                  | 1 .  | 2270,000                      | 1   |           | 278.000                                       | 1 0                                   | 1390.00               | i i   |                      | 429.000                                       | 1                                  |
| METALO  | Chromium                         | 5 05403                                  | 0.100               | 0.40                   | 7 665+01                                | 3 01E+01   | 5 0E+03                                       | 11 100 1  |                     | 17 700 1  |                               | 4 860                                    | 1  | 18 600                        | 1   |           | 23.300  | i                                     | 19.60                 | 5 1   |                      | 16,100  | 1                                  |
| METALS  | Cobalt                           | 1.5E+03                                  | 0.125               | 0.50                   | 7 23 - + 00                             | 5.61E+00   | 1.5E+03                                       | 6300 1  |                     | 3,600 1   |                               | 4.380                                    | 1  | 2.550                         | 1   |           | 6,790   | i                                     | 4.60                  | 5 1   |                      | 8.210   | 1                                  |
| METALS  | Conner                           | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                                | 9.25E+00   | 1.0E+03                                       | 3.940 1   |                     | 3.090 1   |                               | 2.160                                    | 1  | 4.810                         | i   |           | 5.690   | 1                                     | 5.93                  | 5 1   |                      | 5.950   | 1                                  |
| METALS  | iron                             | NE                                       | NA                  | NA                     | NA                                      | NA   |   | 11100.000 1   |                     | 11400.000 1   |                               | 5540.000                                 | 1  | 17000.000                     | 1   | 2         | 25600.000                                     | 1                                     | 16500.00              | 1   |                      | 17200.000                                     | 1                                  |
| METALS  | Lead                             | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                | 1.14E+01   | 5.0E+02                                       | 9.740 1   |                     | 10.500 1  |                               | 3.190                                    | 1  | 19.900                        | 1   |           | 13.400  | 1                                     | 9.34                  | D 1   |                      | 13.200  | 1                                  |
| METALS  | Magnesium                        | NE                                       | NA                  | NA                     | NA                                      | NA   | -   | 1100.000 1  |                     | 187.000 1   |                               | 603.000                                  | 1  | 569.000                       | 1   | JΗ        | 1470.000                                      | 1 J                                   | IH 454.00             | 0 1   | JH                   | 1650.000                                      | t JH                               |
| METALS  | Manganese                        | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                | 2.01E+02   | 1.7E+03                                       | 60.100 1  |                     | 143.000 1   |                               | 21.000                                   | 1  | 169.000                       | 1   | J         | 62.500  | 1 J                                   | 241.00                | 21  | J                    | 53.200  | 1 J                                |
| METALS  | Mercury                          | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                | 3.60E-01   | 2.5E-01                                       | 0.012 1   | U                   | 0.019 1   | 1 1                           | 0.012                                    | 1 U I  | U 0.040                       | 1 J   | J         | 0.069   | 1 J J                                 | 0.05                  | ! ! .   | 1 3                  | 0.012   | 100                                |
| METALS  | Nickel                           | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                | 1.16E+01   | 1.9E+02                                       | 11.400 1  |                     | 4.370 1   |                               | 7.240                                    | 1  | 5.870                         | 1   |           | 13.200  | 1                                     | 6.28                  |   |                      | 14.200  | 1                                  |
| METALS  | Potassium                        | NE                                       | NA                  | NA                     | NA                                      | NA   | 4 4 5 4 4 4                                   | 364.000 1   |                     | 207.000 1   |                               | 272.000                                  | 1  | 245.000                       |   |           | 821.000                                       | 1                                     | 301.00                | J 1<br>2 4                                      |                      | 0.363   | 1<br>1 R                           |
| METALS  | Selenium                         | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                | 5.57E+00   | 1.3E+02                                       | 0.309 1   |                     | 0.233 1   | 44 11                         | 0.235                                    | 1 0 0  | U 0.160                       | 4 17  | 3L-       | 1 720   | 1 1 1                                 | 1 0.21                |   |                      | 1 700   | 1 11 11                            |
| METALS  | Silver                           | 4./E+01                                  | 0.050               | 0.20                   | 3.10E-01                                | 3.70E-01   | 4.75+01                                       | 1.750 1   | Ų                   | 1.720 1   | 0 0                           | 1.630                                    | 1 0 1  | 10,500                        | . 1 .   | 1         | 198,000                                       | 1 0 0                                 | 15 50                 | , i (   | 1 1                  | 270,000                                       | 1 0 0                              |
| METALS  | Sodium                           |  | NA<br>0.010         | 0.02                   |   | NA   | 2 05-00                                       | 338.000 1   |                     | 0.264 1   | 9 9                           | 0.037                                    | 1  | 0.000                         | 1   | J         | 0.107   | 4                                     | 0.05                  | <br>  |                      | 0.089   | 1                                  |
| METALO  | Magadium                         | 4 95-101                                 | 0.010               | 0.02                   | 3 215+01                                | 4465+01  | 4.85+01                                       | 18 100 1  |                     | 22 700 1  |                               | 7 550                                    | i  | 23 100                        | i i   |           | 49,5001                                       | i                                     | 28.10                 | 5 i   |                      | 29,200  | i                                  |
| METALS  | Zine                             | 505+03                                   | 0.625               | 2.50                   | 6 165+01                                | 2.02E+01   | 5.9E+03                                       | 21,000 1  |                     | 16 500 1  |                               | 20,000                                   | i  | 128 000                       | 1   |           | 35,200  | i                                     | 41.40                 | 5 i   |                      | 33,400  | 1                                  |
| PERC  | Perchlorate                      | 14E+01                                   | 0.005               | 0.010                  | NE                                      | NF   | 14E+01  | 0.098 10  | tī                  | 0.050 5   | υu                            | 0.199                                    | 20 11 1                                      | U 0.050                       | 5 0   | U         | 0.020   | żυι                                   | J 0.20                | 20 1  | υυ                   | 0.050   | 5 U U                              |
| SEMIVOLATILES   | 1.2.4-Trichlorobenzene           | 1.45+02                                  | 0.083               | 0.17                   | NE                                      | NE   | 1.4E+02                                       | 0.193 1   | ŭ                   |   | • •                           |  |  |                               |   | -         |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 1.2-Dichlorobenzene              | 5.6E+01                                  | 0.083               | 0.17                   | NE                                      | NE   | 5.6E+01                                       | 0.193 1   | ū                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 1.3-Dichlorobenzene              | 5.1E+00                                  | 0.083               | 0.17                   | NE                                      | NE   | 5.1E+00                                       | 0.193 1   | Ū                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 1.4-Dichlorobenzene              | 2.7E+01                                  | 0.083               | 0.17                   | NE                                      | NE   | 2,75+01                                       | 0.193 1   | Ŭ                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 2,4,5-Trichlorophenol            | 1.6E+03                                  | 0.083               | 0.17                   | NE                                      | NE   | 1.6E+03                                       | 0.193 1   | υ                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| <b>\$EMIVOLATILES</b>   | 2,4,6-Trichlorophenol            | 4.5E+01                                  | 0,083               | 0,17                   | NE                                      | NE   | 4.5E+01                                       | 0.193 1   | U                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 2,4-Dichtorophenol               | 4.7E+01                                  | 0.083               | 0.17                   | NE                                      | NE   | 4.7E+01                                       | 0.193 1   | U                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 2,4-Dimethylphenol               | 3.1E+02                                  | 0.083               | 0.17                   | NE                                      | NE   | 3.1E+02                                       | 0.193 1   | Ų                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 2,4-Dinitrophenol                | 3.1E+01                                  | 0.330               | 0.83                   | NE                                      | NE   | 3.1E+01                                       | 0.965 1   | U                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 2,4-Dinitrotoluene               | 7.2E-01                                  | 0.083               | 0.17                   | NE                                      | NE   | 7.2E-01                                       | 0.193 1   | U                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 2,6-Dinitrotoluene               | 7.2E-01                                  | 0.083               | 0.17                   | NE                                      | NE   | 7.2E-01                                       | 0.193 1   | U                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 2-Chloronaphihalene              | 1.1E+03                                  | 0.083               | 0.17                   | NE                                      | NE   | 1.1E+03                                       | 0.193 1   | U.                  |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 2-Chlorophenoi                   | 1.1E+02                                  | 0.083               | 0.17                   | NE                                      | NE   | 1.1E+02                                       | 0.193 1   | N.                  |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVULATILES   | 2-Methylnaprinalene              | 7.75+01                                  | 0,003               | 0.17                   | NE                                      | NE   | 3.3ET01<br>7.7E±02                            | 0.193 1   | ü                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 2-Metrophiling                   | 475+00                                   | 0.000               | 0.17                   | NE                                      | NE   | A 7E+02                                       | 0.135   | ŭ                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 2-Nitrophenol                    | 3 15+01                                  | 0.000               | 0.03                   | NE                                      | NE   | 3 1E+01                                       | 0.193 1   | ŭ                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 3.3'-Dichlorohenzidine           | 1 1E+00                                  | 0.000               | 0.33                   | NE                                      | NE   | 1 1E+00                                       | 0.386 1   | ŭ                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 3-Nitroaniline                   | 4.7E+00                                  | 0.330               | 0.83                   | NE                                      | NE   | 4.7E+00                                       | 0.965 1   | ũ                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 4.6-Dinitro-2-methylphenot       | 3.1E+01                                  | 0.330               | 0.83                   | NE                                      | NE   | 3.1E+01                                       | 0.965 1   | U                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 4-Bromophenyl phenyl ether       | 3.1E-02                                  | 0.083               | 0.17                   | NE                                      | NE   | 1.7E-01                                       | 0.097 1   | U                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 4-Chloro-3-methylphenol          | 7.7E+01                                  | 0.083               | 0.17                   | NE                                      | NE   | 7.7E+01                                       | 0.193 1   | Ų                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 4-Chloroaniline                  | 6.2E+01                                  | 0.083               | 0.17                   | NE                                      | NE   | 6,2E+01                                       | 0.193 1   | u                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 4-Chlorophenyl phenyl ether      | 2.8E-02                                  | 0.083               | 0.17                   | NE                                      | NE   | 1.7E-01                                       | 0.097 1   | U                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 4-Methylphenol                   | 7.7E+01                                  | 0.083               | 0.17                   | NE                                      | NE   | 7.7E+01                                       | 0.193 1   | <u>v</u>            |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 4-Nitroaniline                   | 1.3E+01                                  | 0.330               | 0.83                   | NE                                      | NE   | 1.3E+01                                       | 0.955 1   |                     |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | 4-Natrophenol                    | 3.1E+01                                  | 0.330               | 0.83                   | NE                                      | NE   | 3.18+01                                       | 0.905 1   | 0                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | Acenaphinene                     | 8.20+02                                  | 0.083               | 0.17                   | NE                                      | NE   | 0.26+02                                       | 0,195 1   | ů.                  |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | Acenaphurylene                   | 0.2ETU2                                  | 0.003               | 0.17                   |   | NE   | 0.20102                                       | 0,193 1   | ň –                 |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | Anuilacene<br>Benzo(o)opibrocono | 4.1ET03                                  | 0.0020              | 0.165                  | 1 535-02                                | NE   | 4.1E703                                       | 0.103 1   | ŭ                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMINOLATILES   | Benzo(a)ourana                   | 635-02                                   | 0.0825              | 0.165                  | 1 54E-02                                | NE   | 1 75-01                                       | 0.007 1   | ŭ                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | Benzo(h)fluoranthene             | 6 3E-01                                  | 0.0825              | 0 165                  | 1.53E-02                                | NE   | 63E-01  | 0.193 1   | ŭ                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | Benzo(ghi)perviene               | 4.1E+02                                  | 0.0825              | 0.165                  | 1.23E-02                                | NE   | 4.1E+02                                       | 0.193 1   | มี                  |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | Benzo(k)fluoranthene             | 6.3E+00                                  | 0.0825              | 0.165                  | 1.30E-02                                | NE   | 6.3E+00                                       | 0.193 1   | Ũ                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | Benzoic Acid                     | 6.2E+04                                  | 0.3300              | 0.825                  | NE                                      | NE   | 6.2E+04                                       | 0.965 1   | Ú                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | Benzyl Alcohol                   | 4.7E+03                                  | 0.0825              | 0.165                  | NE                                      | NE   | 4.7E+03                                       | 0.193 1   | U                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | bis(2-Chloroethoxy)methane       | 2.9E-01                                  | 0.0825              | 0.165                  | NE                                      | NE   | 2.9E-01                                       | 0.193 1   | U                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | bis(2-Chloroethyl)ether          | 1.5E-01                                  | 0.0825              | 0.165                  | NE                                      | NE   | 1.7E-01                                       | 0.097 1   | U                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | bis(2-Chloroisopropyl)ether      | 4.8E+00                                  | 0.0825              | 0.165                  | NE                                      | NE   | 4.8E+00                                       | 0.193 1   | U                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | bis(2-Ethylhexyl)phthalate       | 1.7E+01                                  | 0.0825              | 0.165                  | NE                                      | NE   | 1.7E+01                                       | 0.193 1   | <u>u</u>            |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | Butyl benzyl phthalate           | 3.1E+03                                  | 0.0825              | 0.165                  | NE                                      | NE   | 3.1E+03                                       | 0.193 1   | 0                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | Chrysene                         | 6.3E+01                                  | 0.0825              | 0.165                  | 1.516-02                                | NE   | 6.3E+01                                       | 0.193 1   |                     |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMIVOLATILES   | Dibenzo(a,njantnracene           | 0.3E-02<br>6.2E+04                       | 0.0825              | 0.105                  | NE                                      | NE   | 1./E-U1                                       | 0.097 1   | ň                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
| SEMINOLATILES   | Diethyl ohthalete                | 120401                                   | 0.0020              | 0.100                  | NE<br>NE                                |  | 1.20-01                                       | 0.103 1   | ň                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |
|   | a los y printingen               |  | 0.0020              |                        |   | 1.464  |   | 0.100 1   | -                   |   |                               |  |  |                               |   |           |   |                                       |                       |   |                      |   |                                    |

Shaw Environmental, Inc.

00066597

### Table 4-102 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|      | ~~~    |
|------|--------|
|      | NO 196 |
| JULI | 10-000 |

| [SUMP] = SUMP086<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSI   | E  | TCEQ<br>Risk-Based<br>Screening<br>Value  | Method<br>Detection   | Method<br>Quantitation  | Backs<br>Concentral<br>(95% UP<br>Surface                           | round<br>tions in Soil<br>L, mg/kg)<br>Subsurface  | Applicable<br>TCEQ<br>Risk-Based<br>Screening  | 355UMP085-SB02<br>35-SMP085-SB01-02<br>9/20/2006<br>4.5 - 4.5 Ft<br>REG   | 35SUMP088-SB01<br>35-SMP086-SB01-01<br>9/21/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP086-SB01<br>35-SMP086-SB01-02<br>9/21/2006<br>8 - 8 Ft<br>REG   | WRS17-SB01<br>WRS17-SB01-01<br>9/25/2006<br>0.5 - 0.5 Ft<br>REG | WRS17-SB01<br>WRS17-SB01-02<br>9/25/2006<br>4.5 - 4.5 Ft<br>REG   | WR\$17-SB02<br>WR\$17-SB02-01<br>9/25/2006<br>0.5 - 0.5 Ft<br>REG | WRS17-SB02<br>WRS17-SB02-02<br>9/25/2006<br>4.5 - 4.5 Ft<br>REG  |
|---|--|---|---|---|---|--|--|---|---|---|---|---|---|--|
| Test Group<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES | Parameter (Units = mg/kg)<br>Dimethy iphtkalate<br>di-n-Dutyi phthalate<br>fluoranthene<br>Fluoranthene<br>Hexachlorobutadiene<br>Hexachlorobutadiene<br>Hexachlorobutadiene<br>Hexachlorocyclopentadiene<br>Indero(1,2,3-cd)pyrene  | (RBSV)-<br>1.2E+04<br>1.6E+03<br>3.1E+02<br>5.5E+02<br>5.5E+02<br>5.5E+02<br>2.5E-01<br>1.6E+00<br>1.0E+00<br>1.6E+01<br>6.3E-01<br>6.3E-01 | Limit (MDL)<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825 | Limit (MQL)<br>0.165<br>0.165<br>0.165<br>0.165<br>0.165<br>0.165<br>0.165<br>0.165<br>0.165<br>0.165 | 0-0.5Ft<br>NE<br>NE<br>2.29E-02<br>NE<br>NE<br>NE<br>NE<br>1.43E-02 | NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE                             | Value<br>1.2E+04<br>1.6E+03<br>3.1E+02<br>5.5E+02<br>5.5E+02<br>2.5E-01<br>1.6E+00<br>1.0E+00<br>1.6E+01<br>6.3E-01<br>6.3E-01 | Result DL         LQ         VL           0.193         1         U   | <u>Result OL LO VO</u>  |   | Result DIE 10 VO  |   | <u>, result dir, Lo, Vu</u>  |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SOLIDS<br>VOLATILES         | Isophorone<br>Naphthalene<br>Nitroberzene<br>n-Nitroso-din-propylamine<br>Pentachlorophenol<br>Phenol<br>Phenol<br>Phenol<br>Pyrene<br>Percent Solids<br>1,1,2-Tetrachloroethane   | 5.2E+02<br>1.8E+01<br>6.5E+00<br>4.1E-02<br>5.9E+01<br>3.0E+00<br>4.1E+02<br>4.7E+03<br>4.1E+02<br>4.7E+03<br>4.1E+02<br>NE<br>5.2E+00      | 0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825<br>NE<br>0.0005                    | 0.165<br>0.165<br>0.165<br>0.165<br>0.165<br>0.825<br>0.165<br>0.165<br>0.165<br>NE<br>0.005          | NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>1.94E-02<br>NE            | N N N N N N N N N N N N N N N N N N N  | 5.2E+02<br>1.8E+01<br>6.5E+00<br>1.7E-01<br>5.9E+01<br>3.0E+00<br>4.1E+02<br>4.7E+03<br>4.1E+02<br>5.2E+00                     | 0.193 1 U<br>0.193 1 U<br>0.097 1 U<br>0.097 1 U<br>0.097 1 U<br>0.965 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U<br>0.193 1 U  | 87.600 1  | 83.900 1<br>0.005 1 U U   | 86.500 1  | 85.400 1<br>0.006 1 U U   | 88.300 1  | 84.800 1<br>0.005 1 U U  |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES   | 1,1.1-Trichloroethane<br>1,1.2-Trichloroethane<br>1,1.2-Trichloroethane<br>1,1-Dichloroethane<br>1,1-Dichloroethane<br>1,1-Dichloroptopene<br>1,2.3-Trichloroptopene<br>1,2.3-Trichloroptopene<br>1,2.3-Trichloroptopene<br>1,2.3-Trichloroptopene<br>1,2.4-Trinethytberzene<br>1,2.4-Trinethytberzene | 2.3E+02<br>5.1E-01<br>9.7E-01<br>8.9E+01<br>2.7E+01<br>9.9E-01<br>4.2E+01<br>9.2E-02<br>1.4E+02<br>9.6E+00                                  | 0.0005<br>0.0005<br>0.0005<br>0.0010<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005                          | 0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005       |   |  | 2.3E+02<br>5.1E-01<br>9.7E-01<br>8.9E+01<br>2.7E+01<br>9.9E-01<br>4.2E+01<br>9.2E-02<br>1.4E+02<br>9.6E+00                     | 0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U   |   | 0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U |   | 0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U |   | 0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                                      | 1,2-Dibromo-3-chioropropane<br>1,2-Ditromoethane<br>1,2-Dichoroptane<br>1,2-Dichloroptane<br>1,2-Dichloroptane<br>1,2-Dichloroptane<br>1,3-Dichlorobenzene<br>1,3-Dichlorobenzene<br>1,3-Dichlorobenzene   | 3.5E-01<br>5.3E-02<br>5.6E+01<br>2.7E-01<br>1.8E+00<br>3.3E+03<br>8.3E+00<br>5.1E+00<br>3.0E+00<br>2.7E+01                                  | 0.0020<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005                | 0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005       | N N N N N N N N N N N N N N N N N N N                               | N N N N N N N N N N N N N N N N N N N  | 3.5E-01<br>5.3E-02<br>5.6E+01<br>2.7E-01<br>1.8E+00<br>3.3E+03<br>8.3E+00<br>5.1E+00<br>3.0E+00<br>2.7E+01<br>2.7E+01          | 0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U  |   | 0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U           0.005         1         U         U |   | 0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U |   | 0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U                |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                         | 2.2-Dichloropropane<br>2-Chicrobulene<br>2-Chicrobulene<br>2-Hexanone<br>4-Chicrobulene<br>Acetone<br>Benzene<br>Bromochenzene<br>Bromochicromethane<br>Bromochicromethane   | 1.7E+00<br>2.6E+03<br>2.1E-01<br>1.5E+02<br>6.2E+00<br>3.4E-01<br>1.7E+02<br>8.8E-01<br>1.1E+01<br>2.4E+01<br>1.0E+01                       | 0.0005<br>0.0025<br>0.0025<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005                                    | 0.005<br>0.010<br>0.010<br>0.005<br>0.010<br>0.005<br>0.010<br>0.005<br>0.005<br>0.005                |   | ĸĸĸĸĸĸĸĸĸ<br>ĸĸĸĸĸĸĸĸĸ<br>ĸ  | 1.72+00<br>2.62+03<br>2.12-01<br>1.5E+02<br>6.25+00<br>3.4E-01<br>1.7E+02<br>8.8E-01<br>1.1E+01<br>2.4E+01                     | 0.005 1 U<br>0.009 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U   |   | 0.010 1 U U<br>0.010 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U   |   | 0.011 1 U U<br>0.011 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U                |   | 0.010 1 U U<br>0.010 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U                               |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                                      | Bromotom<br>Bromotom<br>Bromotom<br>Carbon disulfide<br>Carbon tetrachloride<br>Chlorobenzene<br>Chlorobenzene<br>Chloroform<br>Chloroform<br>Chloroform<br>cis-1 3-Dichloroptnene<br>cis-1 3-Dichloroptnene   | 3.4E+01<br>3.5E-01<br>1.0E+02<br>3.5E-01<br>4.0E+01<br>1.1E+03<br>3.1E-01<br>2.3E-01<br>1.2E+00   | 0.0005<br>0.0010<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005                          | 0.005<br>0.010<br>0.005<br>0.005<br>0.005<br>0.010<br>0.005<br>0.010<br>0.005<br>0.005                | NUE E E E E E E E E E E E E E E E E E E                             | 9<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2 | 3.4E+01<br>3.5E-01<br>1.0E+02<br>3.5E-01<br>4.0E+01<br>1.1E+03<br>3.1E-01<br>2.3E-01<br>1.2E+02<br>1.2E+00                     | 0.005 1 U<br>0.006 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.009 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U   |   | 0.005 1 U U<br>0.010 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.006 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U   |   | 0.006 1 U U<br>0.011 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.011 1 U U<br>0.011 1 U U<br>0.011 1 U U<br>0.011 1 U U<br>0.016 1 U U |   | 0.005 1 U U<br>0.010 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.010 1 U U<br>0.010 1 U U<br>0.010 1 U U<br>0.010 1 U U<br>0.005 1 U U<br>0.005 1 U U                |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES  | as-r,s-binnoropiopere<br>Dibromochioromethane<br>Dichrocofifuoromethane<br>Ethylkenzene<br>Hexachlorobutadiene<br>Isopropylbenzene<br>m,p-Xylenes<br>Methyl isobutyl kelone  | 7.6E+00<br>1.9E+01<br>2.2E+02<br>4.3E+02<br>1.6E+00<br>5.4E+02<br>2.3E+02<br>1.3E+03  | 0.0005<br>0.0005<br>0.0010<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005  | 0.005<br>0.005<br>0.010<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005<br>0.005                         | NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE                  | т<br>т<br>т<br>т<br>т<br>т<br>т<br>т<br>т<br>т<br>т<br>т<br>т<br>т<br>т<br>т<br>т<br>т<br>т      | 7.6E+00<br>1.9E+01<br>2.2E+02<br>4.3E+02<br>1.6E+00<br>5.4E+02<br>2.3E+02<br>1.3E+03   | 0.005 1 U<br>0.005 1 U<br>0.009 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U   |   | 0.005 1 U U<br>0.005 1 U U<br>0.010 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U   |   | 0.006 1 U U<br>0.006 1 U U<br>0.011 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U<br>0.006 1 U U                               |   | 0.005 1 U U<br>0.005 1 U U<br>0.010 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U<br>0.005 1 U U  |

Shaw Environmental, Inc.

00066598

| Table 4-102  |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump_086   |

|   |                           |  |                     |                        |   |  |   | 3011   | h-000  |   |   |   |   |  |
|---|---------------------------|--|---------------------|------------------------|---|--|---|--|--|---|---|---|---|--|
| SUMP] = SUMP086<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOS | E                         | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br><u>*L, mg/kg)</u><br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 35\$UMP085-SB02<br>35-SMP085-SB01-02<br>9/20/2006<br>4.5 - 4.5 Ft<br>REG | 355SUMP086-SB01<br>35-SMP086-SB01-01<br>9/21/2006<br>0.5 - 0.5 Ft<br>REG | 355UMP086-SB01<br>35-SMP086-SB01-02<br>9/21/2006<br>8 - 8 Ft<br>REG | WR\$17-\$B01<br>WR\$17-\$B01-01<br>9/25/2006<br>0,5 - 0.5 Ft<br>REG | WRS17-SB01<br>WRS17-SB01-02<br>9/25/2006<br>4.5 - 4.5 Ft<br>REG | WR\$17-\$802<br>WR\$17-\$802-01<br>9/25/2006<br>0.5 - 0.5 Ft<br>REG | WRS17-SB02<br>WRS17-SB02-02<br>9/25/2006<br>4.5 - 4.5 Ft<br>REG<br>Boout Dil LO VO |
| Test Group  | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft   | Value   | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LO VO  | Result DIL LO VO  |  |
| VOLATILES   | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                      | ŇE   | 8.7E+00                                       | 0.005 1 U  |  | 0.002 1 J J   |   | 0.005 1 0 0   |   | 0.010 1 U U  |
| VOLATILES   | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NE                                      | NE   | 1.8E+01                                       | 0.009 1 U  |  |   |   | 0.008 1 11 11   |   | 0.005 1 10 10  |
| VOLATILES   | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NË                                      | NE   | 2.7E+02                                       | 0.005 1 U  |  |   |   | 0.000 1 0 0   |   | 0.005 1 U U  |
| VOLATILES   | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.2E+02                                       | 0.005 1 U  |  |   |   | 0.000 1 0 0   |   | 0.005 1 U U  |
| VOLATILES   | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 4.2E+02                                       | 0.005 1 U  |  |   |   |   |   | 0.005 1 U U  |
| VOLATILES   | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.0E+02                                       | 0.005 1 U  |  |   |   | 0.000 1 0 0   |   | 0.005 1 1 1  |
| VOLATILES   | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.3E+03                                       | 0.005 1 U  |  |   |   | 0.000 1 10 11   |   | 0.005 1 1 1  |
| VOLATILES   | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                      | NE   | 2.6E+02                                       | 0.005 1 U  |  | 0.005 1 0 0   |   | 0,000 1 0 0   |   | 0.005 1 1 10   |
| VOLATILES   | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 6.0E+00                                       | 0.005 1 U  |  | 0.005 1 0 0   |   |   |   | 0.005 1 11 11  |
| VOLATILES   | Тојџеле                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.1E+03                                       | 0.005 1 U  |  | 0.005 1 U U   |   |   |   | 0.005 1 11 11  |
| VOLATILES   | trans-1.2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NÉ   | 1.4E+02                                       | 0.005 1 U  |  | 0.005 1 U U   |   |   |   | 0.005 1 13 11  |
| VOLATILES   | trans-1.3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 1.8E+00                                       | 0.005 1 U  |  | 0.005 1 U U   |   |   |   | 0.005 1 11 11  |
| VOLATILES   | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE   | 3.7E+00                                       | 0.005 1 U  |  | 0.005 1 U U   |   |   |   | 0.000 1 10 1   |
| VOLATILES   | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 2.6E+02                                       | 0.009 1 U  |  | 0.010 1 U U   |   | 0.011 1 0 0   |   |  |
| VOLATILES   | Vinvl acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NE                                      | NE   | 5.7E+01                                       | 0.009 1 U UJ   |  | 0.010 1 U UJ  |   | 0.011 1 0 0   |   | 0.010 1 0 0  |
| VOLATILES   | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.01                   | NE                                      | NE   | 3.6E-02                                       | 0.009 1 U  |  | 0.010 1 <u>U U</u>  |   | <u>0,011 1 0 0</u>  |   | 0.010 1 0 0  |

VOLATILES Vinyl chloride 3. Footnotes are shown on cover page to Tables Section.

MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Taxas

### Table 4-103

# Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-087

| [SUMP] = SUMP087<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |   | TCEQ<br>Risk-Based<br>Screening | Method      | Method       | Backs<br>Concentral<br>(95% UP | pround<br>tions in Soil<br>'L, mg/kg} | Applicable<br>TCEQ<br>Risk-Based | 35SUMP087-SB01<br>35-SMP087-SB01-01<br>9/21/2006<br>.55 Ft | 35SUMP087-SB01<br>35-SMP087-SB01-02<br>9/21/2006<br>3.5 - 3.5 Ft | 35SUMP087-\$B02<br>35-\$MP087-\$B02-01<br>9/21/2006<br>.55 Ft | 35SUMP087-SB02<br>35-SMP087-SB02-02<br>9/21/2006<br>3.5 - 3.5 Ft |
|---|---|---------------------------------|-------------|--------------|--------------------------------|---------------------------------------|----------------------------------|--|--|---|--|
| SAMPLE_PURPOSE  |   | Value                           | Detection   | Quantitation | Surface                        | Subsurface                            | Screening                        | REG  | REG  | REG   | REG  |
| Test Group  | Parameter (Units = mg/kg)                             | (R8SV)                          | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft                     | 1.5 - 2.5 Ft                          | Value                            | Result DIL LQ VQ   | Result DIL LQ VQ   | Result DIL LQ VQ  | Result DIL LQ VQ   |
|   | Auminum<br>Antimony                                   | 1.6E+04<br>7.3E+00              | 10.000      | 20.00        | 9 40 F-01                      | 2.08E+04<br>1.60E+00                  | 1.0E+04<br>7.3E+00               |  | 0.126 1 U  | 0.112 1 U   | 0.108 1 U  |
| METALS  | Arsenic   | 2.0E+01                         | 0.075       | 0.30         | 4.81E+00                       | 5.54E+00                              | 2.0E+01                          | 1.300 1  | 3.470 1  | 5.180 1   | 2.830 1  |
| METALS  | Barium  | 2.6E+03                         | 0.075       | 0.30         | 1.52E+02                       | 8.55E+01                              | 2.6E+03                          | 160.000 1  | 131.000 1  | 161.000 1   | 92.700 1   |
| METALS  | Beryllium   | 4.6E+00                         | 0.012       | 0.50         | 6,45E-01                       | 7.66E-01                              | 4.6E+00                          |  | 0.738 1  | 0.353 1 J J<br>0.562 4  | 0.546 1<br>0.367 1 1 1   |
| METALS  | Calcium   | NE                              | NA          | NA           | NA NA                          | 4.00C-01                              | 0.2L100                          | 1050.000 1   | 487.000 1  | 611.000 1   | 2440.000 1   |
| METALS  | Chromium  | 5.9E+03                         | 0.100       | 0.40         | 2.66E+01                       | 3.01E+01                              | 5.9E+03                          | 12.200 1   | 18.900 1   | 28.100 1  | 17.400 1   |
| METALS  | Cobalt  | 1.5E+03                         | 0.125       | 0.50         | 7.23E+00                       | 5.61E+00                              | 1.5E+03                          | 10.400 1   | 6.550 1  | 1.130 1   | 5.580 1  |
| METALS  | kon   | 1.0E+03                         | 0.150       | 0.60<br>NA   | 5.55E+00<br>NA                 | 9.20E+00<br>NA                        | 1.0E+03                          | 8540.000 1   | 17500.000 1  | 20100.000 1   | 13600.000 1  |
| METALS  | Lead  | 5.0E+02                         | 0.500       | 5.00         | 2.26E+01                       | 1.14E+01                              | 5.0E+02                          | 10.900 1   | 12.000 1   | 17.200 1  | 18.300 1   |
| METALS  | Magnesium   | NE                              | NA          | NA           | NA                             | NA                                    |                                  | 281.000 1  | 1460.000 1   | 403.000 1   | 555.000 1  |
| METALS  | Manganese   | 1.7E+03                         | 0.050       | 0.20         | 1.25E+03                       | 2.01E+02                              | 1.7E+03                          | 572.000 1  | 42,400 1<br>0018 1 1 1   | 51.300 1  | 216,000 1  |
| METALS  | Nickel  | 1.9E+02                         | 0.200       | 0.80         | 6.98E+00                       | 1.16E+01                              | 1.9E+02                          | 7.410 1  | 11.400 1   | 3.150 1   | 6.550 1  |
| METALS  | Potassium   | NE                              | NA          | NA           | NA                             | NA                                    |                                  | 219.000 1  | 718.000 1  | 419.000 1   | 361.000 1  |
| METALS  | Selenium  | 1.3E+02                         | 0.100       | 0.20         | 3.48E+00                       | 5.57E+00                              | 1.3E+02                          | 0.278 1  | 0.372 1  | 0.687 1   | 0.426 1  |
| METALS  | Silver  | 4.7E+01                         | 0.050       | 0.20         | 3.10E-01                       | 3.70E-01<br>NA                        | 4.7E+01                          | 1.610 1 U<br>40.600 1                                      | 1,910 1 U<br>242,000 1   | 1.600 1 U<br>12.400 1 J. J.                                   | 1.640 1 0  |
| METALS  | Thallium  | 2.0E+00                         | 0.010       | 0.02         | 4.70E-01                       | NE                                    | 2.0E+00                          | 0.055 1  | 0.118 1  | 0,074 1   | 0.051 1  |
| METALS  | Vanadium  | 4.8E+01                         | 0.125       | 0.50         | 3.21E+01                       | 4.46E+01                              | 4.8E+01                          | 18.900 1   | 31.900 1   | 72.800 1  | 28.400 1   |
| METALS  | Zinc  | 5.9E+03                         | 0.625       | 2.50         | 6.16E+01                       | 2.02E+01                              | 5.9E+03                          | 10.300 1   | 33.200 1   | 41,300 1  | 50.700 1   |
| SOUDS   | Percent Solids  | 1.4E+01                         | 0.500<br>NE | NE           | NE                             | NE                                    | 1.4E+01                          | 89.3 1   | 77.5 1   | 88.2 1  | 92.3 1   |
| VOLATILES   | 1,1,1,2-Tetrachloroethane                             | 5.2E+00                         | 0.0005      | 0.005        | NE                             | NE                                    | 5.2E+00                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | 1,1,1-Trichloroethane                                 | 2.3E+02                         | 0.0005      | 0.005        | NE                             | NÉ                                    | 2.3E+02                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | 1,1,2,2-1 etrachioroethane                            | 5.1E-01<br>9.7E-01              | 0.0005      | 0.005        | NE                             | NE                                    | 5.1E-01<br>9.7E-01               | 1  | 0.00599 1 0  |   | 0.00527 1 U  |
| VOLATILES   | 1,1-Dichloroethane                                    | 8.9E+01                         | 0.0010      | 0.005        | NE                             | NE                                    | 8,9E+01                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | 1,1-Dichloroethene                                    | 2.7E+01                         | 0.0005      | 0.005        | NĘ                             | NE                                    | 2.7E+01                          | 1  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | 1,1-Dichloropropene<br>1,2,3-Tdebloropenzene          | 9.9E-01                         | 0.0005      | 0.005        | NE                             | NE                                    | 9.9E+01                          | 1  | 0.00599 1 U  |   | 0,00527 1 U  |
| VOLATILES   | 1.2.3-Trichloropropane                                | 9.2E-02                         | 0.0010      | 0.005        | NE                             | NE                                    | 9.2E-02                          | 1  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | 1.2,4-Trichlorobenzene                                | 1.4E+02                         | 0.0005      | 0.005        | NË                             | NE                                    | 1.4E+02                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | 1,2,4-Trimethylbenzene                                | 9.6E+00                         | 0.0005      | 0.005        | NE                             | NE                                    | 9,62+00                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | 1.2-Dibromoethane                                     | 5.38-02                         | 0.0020      | 0.005        | NË                             | NE                                    | 5.3E-01                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | 1,2-Dichlorobenzene                                   | 5.6E+01                         | 0.0005      | 0.005        | NE                             | NE                                    | 5.6E+01                          |  | 0.00599 1 U  |   | 0.00527 1 Ü  |
| VOLATILES   | 1,2-Dichloroethane                                    | 2.7E-01                         | 0.0005      | 0.005        | NE                             | NE                                    | 2.7E-01                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | 1,2-Dichloropropane<br>1,2-Dimethylbenzene (n-Xylene) | 1.8E+00<br>3.3E+03              | 0.0005      | 0.005        |                                | NE                                    | 1.8E+00<br>3.3E+03               |  | 0.00599 1 0  |   | 0.00527 1 0  |
| VOLATILES   | 1.3.5-Trimethylbenzene                                | 8.3E+00                         | 0.0005      | 0.005        | NE                             | NE                                    | 8.3E+00                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | 1.3-Dichlorobenzene                                   | 5.1E+00                         | 0.0005      | 0.005        | NE                             | NE                                    | 5.1E+00                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | 1,3-Dichloropropane                                   | 3.0E+00                         | 0.0005      | 0.005        | NE                             | NE                                    | 3.0E+00                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | 2.2-Dichloropropane                                   | 1.7E+00                         | 0.0005      | 0.005        | NE                             | NE                                    | 1.7E+00                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | 2-Butanone  | 2.6E+03                         | 0.0025      | 0.010        | NE                             | NE                                    | 2.6E+03                          |  | 0.01200 1 U  |   | 0.01050 1 U  |
| VOLATILES   | 2-Chloroethyl vinyl ether                             | 2.1E-01                         | 0.0020      | 0.010        | NE                             | NE                                    | 2.1E-01                          |  | 0.01200 1 U  |   | 0.01050 1 U  |
| VOLATILES   | 2-Chiorotoluene<br>2-Hexanone                         | 1.5E+02<br>6.2E+00              | 0.0005      | 0.005        | NE                             | NE                                    | 1.5E+02<br>6 2E+00               |  | 0.00399 1 0  |   | 0.01050 1 U  |
| VOLATILES   | 4-Chlorotoluene                                       | 3.4E-01                         | 0.0005      | 0.005        | NE                             | NE                                    | 3.4E-01                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | Acetone   | 1.7E+02                         | 0.0050      | 0.010        | NE                             | NE                                    | 1.7E+02                          |  | 0.01200 1 U  |   | 0.01050 1 U  |
| VOLATILES   | Benzene   | 8.8E-01                         | 0.0005      | 0.005        | NE                             | NE                                    | 8.8E-01                          |  | 0.00599 1 U  |   | 0.00527 1 0  |
| VOLATILES   | Bromochloromethane                                    | 2.4E+01                         | 0.0005      | 0.005        | NE                             | NE                                    | 2.4E+01                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | Bromodichloromethane                                  | 1.0E+01                         | 0.0005      | 0.005        | NE                             | NE                                    | 1.0E+01                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | Bromoform   | 3.4E+01                         | 0.0005      | 0.005        | NE                             | NE                                    | 3.4E+01                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | Carbon disulfide                                      | 3.5E-01<br>1.0E+02              | 0.0000      | 0.010        | NE                             | NE                                    | 3.5E-01<br>1.0E+02               |  | 0.00200 1 U  |   | 0.00527 1 U  |
| VOLATILES   | Carbon tetrachloride                                  | 3.5E-01                         | 0.0005      | 0.005        | NE                             | NE                                    | 3.5E-01                          |  | 0.00599 1 Ú  |   | 0.00527 1 U  |
| VOLATILES   | Chlorobenzene   | 4.0E+01                         | 0.0005      | 0.005        | NE                             | NE                                    | 4.0E+01                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | Chloroform  | 1.1E+03<br>3.1E_01              | 0.0010      | 0.010        | NE                             | NE                                    | 1.1E+03<br>3.1E-01               |  | 0.01200 1 0  |   | 0.01000 1 0  |
| VOLATILES   | Chloromethane   | 2.3E-01                         | 0.0020      | 0.010        | NE                             | NE                                    | 2.3E-01                          |  | 0.01200 1 U  |   | 0.01050 1 U  |
| VOLATILES   | cis-1,2-Dichloroethene                                | 1.2E+02                         | 0.0005      | 0.005        | NE                             | NE                                    | 1.2E+02                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES<br>VOLATILES  | Cis-1,3-Dichioropropene                               | 1.2E+00<br>7.6E+00              | 0.0005      | 0.005        | NE                             | NE                                    | 1.2E+00                          |  | 0.00599 1 U<br>0.00599 1 U                                       |   | 0.00527 1 U  |
| VOLATILES   | Dibromomethane  | 1.9E+01                         | 0.0005      | 0.005        | NE                             | NE                                    | 1.9E+01                          |  | 0.00599 1 U  |   | 0.00527 1 U  |
| VOLATILES   | Dichlorodifluoromethane                               | 2.2E+02                         | 0.0010      | 0.010        | NE                             | NE                                    | 2.25+02                          |  | 0.01200 1 U  |   | 0.01050 1 U  |

00066599

### Shaw Environmental, Inc.

# 00066600

# Table 4-103 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-087

| [SUMP] = SUMP087<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_DUPDOSE   |  | TCEQ<br>Risk-Based<br>Screening<br>Value   | Method  | Method   | Back<br>Concentra<br>(95% UF<br>Surface   | ground<br>ations in Soil<br>PL, mg/kg)<br>Subsurface                            | Applicable<br>TCEQ<br>Risk-Based<br>Screening   | 35SUMP087-SB01<br>35-SMP087-SB01-01<br>9/21/2006<br>.55 Ft<br>REG | 35SUMP087-SB01<br>35-SMP087-SB01-02<br>9/21/2006<br>3.5 - 3.5 Ft<br>REG   | 35SUMP087-SB02<br>35-SMP087-SB02-01<br>9/21/2006<br>.55 Ft<br>REG | 35SUMP087-SB02<br>35-SMP087-SB02-02<br>9/21/2006<br>3.5 - 3.5 Ft<br>REG   |
|---|--|--|---|--|---|---|---|---|---|---|---|
| SAMPLE_FURFUSE  | Perameter (t Inits = ma/ka)  | (RBSV)*  | Limit (MDL)   | Limit (MQL)  | 0 - 0.5 Ft  | 1.5 - 2.5 Ft  | Value   | Result DIL LQ VQ  | Result_DIL_LQ_VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| Test Group<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES | Parameter (Units = mc/kg)<br>Ethythenzene<br>Hexachlorobutadiene<br>Isopropylbenzene<br>m,p-Xylenes<br>Methyl isobutyl kelone<br>Methylene chloride<br>Naphthalene<br>n-BUTYLBENZENE<br>n-PROPYLBENZENE<br>p-ISOPROPYLTOLUENE<br>sec-BUTYLBENZENE<br>Styrene<br>tert-BUTYLBENZENE<br>Tetrachloroethene<br>Toluene<br>trans-1,2-Dichloroethene<br>trans-1,3-Dichloropropene<br>Trichloroothene<br>Trichloroothene | (HESV)<br>4.3E+02<br>1.6E+00<br>5.4E+02<br>2.3E+02<br>1.3E+03<br>8.7E+00<br>1.8E+01<br>2.7E+02<br>3.2E+02<br>3.0E+02<br>1.3E+03<br>2.6E+02<br>6.0E+00<br>1.1E+03<br>1.4E+00<br>3.7E+00<br>2.6E+02<br>5.7E+01 | <u>- Liniu (MDL)</u><br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.0005<br>0.005 | Linit (MaLL)           0.005 | NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>N | NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>NE<br>N | 4.3E+02<br>1.6E+00<br>5.4E+02<br>2.3E+02<br>1.3E+03<br>8.7E+00<br>1.8E+01<br>2.7E+02<br>3.2E+02<br>3.2E+02<br>3.0E+02<br>4.2E+02<br>3.0E+02<br>6.0E+00<br>1.1E+03<br>1.4E+03<br>1.4E+02<br>1.8E+00<br>3.7E+00<br>2.6E+02<br>2.5.7E+01 |   | 0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.01200         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U           0.00599         1         U |   | 0.00527         1         U           0.00527         1         U |
| VOLATILES   | Vinvi chloride   | 3.6E-02  | 0.0010  | 0.010  | NE  | NE  | 3.62-02   | L   | 0.01200 1 0   | · · · · · · · · · · · · · · · · · · ·                             |   |

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/38 Sumps

00066601

### Table 4-104

### Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-088

|                  |  |                    |             |              |                      |                      |            |          |                 | Jun      | ip-000          |          |             |            |                 |          |                      |            |            |           |          |            |            |            |         |
|------------------|--|--------------------|-------------|--------------|----------------------|----------------------|------------|----------|-----------------|----------|-----------------|----------|-------------|------------|-----------------|----------|----------------------|------------|------------|-----------|----------|------------|------------|------------|---------|
| [SUMP] = SUMPUSE | 5  |                    |             |              |                      |                      |            | 35SUMP(  | 087-SB01        | 35SUMP   | 087-SB01        | 35SUM    | P087-SB02   | 35SUMP     | 087-SB02        | 35SUMPI  | 88-SB01              | 35\$UMP08  | 38-SB01    | 35SUMP0   | 38-5802  | 35SUMP08   | 3-\$802    | 35SUMP08   | 8-SB02  |
| SAMPLE NO        |  | TCEO               |             |              | Backg                | round                | Applicable | 35-SMP08 | 7-SB01-01       | 35-SMP08 | 7-SB01-02       | 2 35-SMP | 187-SB02-01 | 35-SMP08   | 97-\$B02-02     | 35-SMP08 | 3-5801-01            | 35-SMP088- | -SB01-02-5 | -SMP088-S | B01-02-Q | 35-SMP088- | 5802-01    | 35-SMP088- | SB02-02 |
| SAMPLE DATE      |  | Risk-Based         |             |              | Concentrat           | ions in Soil         | TCEQ       | 9/21/    | 2006            | 9/21     | 2006            | 9/2      | 1/2006      | 9/21       | /2006           | 9/20/    | 2006                 | 9/20/20    | 006        | 9/20/2    | 006      | 9/20/20    | 06         | 9/20/20    | 500     |
| DEPTH            |  | Screening          | Method      | Method       | (95% UPI             | L, mg/kg)            | Risk-Based | 0.5 -    | 0.5 Ft          | 3.5 -    | 3.5 Ft          | 0.5      | - 0.5 Ft    | 3.5 -      | 3.5 Ft          | 0.5 - 1  | ).5 Ft               | 7-7        | FC         | 1-1       | 71       | 0.5-0.5    |            | REG        | 3       |
| SAMPLE_PURPOS    | E  | Value              | Detection   | Quantitation | Surface              | Subsurface           | Screening  | R        | G               | Ri       | EG              |          | REG         | к          | EG              | Rt Rt    | .G<br>1. 1. 0. 1/ 0. | RE(        |            | Docut Di  | 10.00    | Recut Dil  | to vo      | Result DR  | ່ ເດ ນດ |
| Test Group       | Parameter (Units = mg/kg)                  | (RBSV)*            | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft           | 1.5 - 2.5 Ft         | Value      | Result D | <u>il la va</u> | Result I | <u>IL LO VI</u> | Q Result |             | 2 Result L | <u>AF FO AG</u> | 2070     | <u>L LU VU</u>       | 13900 1    |            | 12500 1   |          | 3760 1     | 100 100    | 8440 1     |         |
| METALS           | Aluminum                                   | 1.66+05            | 10.000      | 20.00        | 1,552+04             | 1.63E+04<br>9.40E-01 | 735+01     | 0310     | 11              | 0 126    | i u             | 0.112    | 1 ย         | 0.108      | 1 U             | 0.113    | U                    | 0.096 1    | J JL       | 0.120 1   | U        | 0.112 1    | Ų          | 0.115 1    | Ų       |
| METALS           | Amenic                                     | 2.05+01            | 0.000       | 0.10         | 2.00E+01             | 4.81E+00             | 2.0E+01    | 1.300 1  | , J             | 3,470    | i               | 5.180    | 1           | 2.830      | i Č             | 2.400    |                      | 1.540 1    |            | 2.290 1   |          | 1.200 1    |            | 2,960 1    |         |
| METALS           | Barium                                     | 2.6E+04            | 0.075       | 0.30         | 2.61E+03             | 1.52E+02             | 2.6E+04    | 160 1    | 1               | 131.000  | 1               | 161      | 1           | 92.700     | 1               | 383      |                      | 187 1      |            | 186 1     |          | 78.600 1   |            | 99.800 1   |         |
| METALS           | Beryllium                                  | 4.6E+01            | 0.012       | 0.50         | 4.56E+00             | 6.45E-01             | 4.6E+01    | 1.210 1  | t i             | 0.738    | 1               | 0.353    | 1 J J       | 0.546      | 1               | 0.227    | JJ                   | 1.060 1    |            | 1.090 1   |          | 0.4// 1    |            | 0.922 1    |         |
| METALS           | Cadmium                                    | 2.4E+02            | 0.025       | 0.10         | 5.20E+00             | 1.40E+00             | 2.4E+02    | 0.192 1  | 1 1 1           | 0.175    | 1 1 1           | 0.562    | 1           | 0.367      | 1 ] ]           | 1,310    |                      | 0.205 1    | 1 1        | 624 1     | 1 3      | 570 1      | 7 7        | 530 1      |         |
| METALS           | Calcium                                    | NE                 | NA          | NA           | NA                   | NA                   |            | 1050 1   |                 | 487      | 3               | 20 400   | 1           | 17 400     | -               | 9.860    |                      | 12400 1    | .18        | 11,700 1  |          | 16.600 1   |            | 10.700 1   |         |
| METALS           | Chromium                                   | 5.9E+04            | 0.100       | 0.40         | 5.93E+03             | 2.665+01             | 0.9E+04    | 12.200   |                 | 6 550    | 1               | 1 130    | -           | 5 580      | i               | 1.700    |                      | 11.800 1   | JL         | 12.800 1  |          | 2.160 1    |            | 12.700 1   |         |
| METALS           | Copper                                     | 1.52+04            | 0.125       | 0.50         | 1.036+03             | 7.23E+00             | 105+04     | 3.770 1  | 1               | 6.660    | i               | 21.300   | 1           | 6,170      | 1               | 51,600   | ĺ                    | 4.860 1    |            | 5.100 1   |          | 2.780 1    |            | 7.160 1    |         |
| METALO           | Imn  | NE                 | NA          | NA           | NA                   | NA                   |            | 8540     | Í               | 17500    | i               | 20100    | 1           | 13600      | 1               | 6330     | 1                    | 17000 1    |            | 17000 1   |          | 15600 1    |            | 15900 1    |         |
| METALS           | Lead                                       | 5.0E+02            | 0.500       | 5.00         | 5,00E+02             | 2.26E+01             | 5.0E+02    | 10.900 1 | 1               | 12.000   | 1               | 17.200   | 1           | 18.300     | 1               | 12.300   | J                    | 18.600 1   | JL         | 7.860 1   | J        | 10.700 1   | J          | 7,060 1    | J       |
| METALS           | Magnesium                                  | NE                 | NA          | NA           | NA                   | NA                   | _          | 281      | 1               | 1460     | 1               | 403      | 1           | 555        | 1               | 170      |                      | 1860 1     |            | 1890 1    |          | 100 1      |            | 50,800 1   |         |
| METALS           | Manganese                                  | 1.7E+04            | 0.050       | 0,20         | 1.68E+03             | 1.25E+03             | 1.7E+04    | 572      |                 | 42.400   | 1               | 51.300   | 1           | 216        |                 | 0.024    |                      | 0.012 1    | н          | 0.012 1   | н        | 6 013 1    | L L        | 0.012 1    | U       |
| METALS           | Mercury                                    | 1.1E-01            | 0.010       | 0.25         | 1.08E-02             | 8,19E-02             | 2.5E-01    | 7,410    | 1 3 3           | 11 400   | 1 3 .           | 3 150    | 1 3 3       | 8 550      | 1 3 3           | 2.980    |                      | 16,200 1   | •          | 17.200 1  | v        | 3.580 t    | • •        | 18.400 1   | -       |
| METALS           | Nickel                                     | 1.95403            | 0.200       | - 0.00<br>NA | 1.076+02             | 0.90ETUU             | 1.92403    | 210      | t               | 718      | 1               | 419      | i           | 361        | i               | 150      | í                    | 466 1      | JH         | 466 1     |          | 132 1      |            | 429 1      |         |
| METALO           | Setenium                                   | 1 3E+03            | 0 100       | 020          | 1.27E+02             | 3.48E+00             | 1.3E+03    | 0.278    | 1               | 0.372    | 1               | 0,687    | 1           | 0.426      | 1               | 0.230    | 1                    | 0.335 1    |            | 0.380 1   |          | 0.165 1    | J J        | 0.399 1    |         |
| METALS           | Silver                                     | 4.7E+02            | 0.050       | 0.20         | 4.68E+01             | 3.10E-01             | 4.7E+02    | 1.610    | 1 U             | 1.910    | 1 U             | 1.600    | 1 U         | 1.640      | 1 U             | 1.670    | I U                  | 1.850 1    | U          | 1.820 1   | U        | 1.730 1    | <u>.</u>   | 1.790 1    | U       |
| METALS           | Sodium                                     | NE                 | NA          | NA           | NA                   | NA                   | -          | 40.600 1 | 1               | 242      | 1               | 12.400   | 1 J J       | 31.600     | 1               | 12.500   | 1 1 1                | 378 1      |            | 392 1     |          | 11.100 1   | 1 1        | 0.070 1    |         |
| METALS           | Thallium                                   | 2.0E+00            | 0.010       | 0.02         | NE                   | 4.70E-01             | 2.0E+00    | 0.055    | 1               | 0.118    | 1               | 0.074    | 1           | 0.051      | 1               | 0.024    |                      | 21 303 4   | н          | 19700 1   |          | 22 600 1   | 5 3        | 22,800 1   |         |
| METALS           | Vanadium                                   | 4.8E+02            | 0.125       | 0.50         | 4.84E+01             | 3.21E+01             | 4.8E+02    | 18.900   | 1               | 31.900   | 1               | /2.800   | 1           | 20.400     | -               | 61.600   |                      | 33,508 1   | 311<br>JH  | 35.800 1  |          | 12,700 1   |            | 41.700 1   |         |
| METALS           | Zinč                                       | 5.9E+04            | 0.625       | 2.50         | 3.94E+03             | 0,10ETU1             | 1.45+02    | 0.00     | 1<br>6 11       | 0.050    | 5 11            | 0.040    | ส่ บ        | 0.010      | . ย             | 0.010    | เบ                   | 0.099 10   | ט ט        | 0.099 1   | ) U      | 0.020 2    | U          | 0.200 20   | U U     |
| SEMINOLATILES    | 1 2 4 Trichlorobenzene                     | 1.46+02            | 0.000       | 0.165        | 1.36E+02             | NE                   | 1.4E+03    | 0.045    | •••             | 0.000    | • •             | 0.010    | · ·         |            |                 | 0.908    | 5 Ū                  | 0.194 1    | Ú          | 0.195 1   | U        | 0.923 5    | U          | 0.185 1    | U       |
| SEMIVOLATILES    | 1.2-Dichlarobenzene                        | 5.6E+02            | 0.0825      | 0.165        | 5.61E+01             | NĘ                   | 5.6E+02    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 U                  | 0.194 1    | U          | 0.195 1   | U        | 0.923 6    | U          | 0.165 1    | 0       |
| SEMIVOLATILES    | 1.3-Dichlorobenzene                        | 5.1E+01            | 0.0825      | 0.165        | 5.05E+00             | NE                   | 5.1E+01    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 U                  | 0.194 1    | N.         | 0.195 1   | N.       | 0.923 5    | ů.         | 0.185 1    |         |
| SEMIVOLATILES    | 1,4-Dichlorobenzene                        | 2.7E+02            | 0.0825      | 0.165        | 2.67E+01             | NE                   | 2.7E+02    |          |                 |          |                 |          |             |            |                 | 0.908    | 50                   | 0,194 1    | U U        | 0.185 1   | ŭ        | 0,923 5    | ü          | 0.185 1    | ŭ       |
| SEMIVOLATILES    | 2.4,5-Trichlorophenol                      | 1.6E+04            | 0,0825      | 0.165        | 1.55E+03             | NE                   | 1.6E+04    |          |                 |          |                 |          |             |            |                 | 0.900    | 5 0                  | 0.194 1    | ŭ          | 0.195 1   | ŭ        | 0.923 5    | ŭ          | 0.185 1    | Ū       |
| SEMIVOLATILES    | 2,4,6-1 richlorophenol                     | 4.5E+01            | 0.0625      | 0.165        | 4,400101             | NE                   | 4.36+01    | 1        |                 |          |                 |          |             |            |                 | 0.908    | 5 Ū                  | 0.194 1    | Ũ          | 0.195 1   | Û        | 0.923 5    | U          | 0.185 1    | U       |
| SEMMOLATILES     | 2.4-Dimethylohanol                         | 3 15+03            | 0.0825      | 0.165        | 3 10E+02             | NE                   | 3.1E+03    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 U                  | 0.194 1    | Ü          | 0.195 1   | U        | 0.923 5    | U          | 0.185 1    | Ų       |
| SEMIVOLATILES    | 2.4-Dinitrophenol                          | 3.1E+02            | 0.3300      | 0.825        | 3.10E+01             | NE                   | 3.1E+02    |          |                 |          |                 |          |             |            |                 | 4.540    | 5 U                  | 0.971 1    | U          | 0.977 1   | u        | 4.610 5    | 0          | 0.926 1    | U       |
| SEMIVOLATILES    | 2,4-Dinitrotoluene                         | 7,2E-01            | 0.0825      | 0.165        | 7.20E-01             | NE                   | 7.2E-01    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 U                  | 0.194 1    | U          | 0.195 1   | U.       | 0.923 5    | N.         | 0.185 1    | U II    |
| SEMIVOLATILES    | 2,6-Dinitrotoluene                         | 7.2E-01            | 0.0825      | 0.165        | 7.20E-01             | NE                   | 7.2E-01    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 0                  | 0,194 1    | Ŭ          | 0.195 1   | ŭ        | 0,923 5    | ŭ          | 0.185 1    | ŭ       |
| SEMIVOLATILES    | 2-Chloronaphthalene                        | 1.1E+04            | 0.0825      | 0.165        | 1.10E+03             | NE                   | 1.1E+04    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 11                 | 0.194 1    | ŭ          | 0.195 1   | ŭ        | 0.923 5    | ŭ          | 0.185 1    | ũ       |
| SEMIVOLATILES    | 2-Chlorophenol                             | 1.1E+03            | 0.0825      | 0.165        | 1.065+02             | NE                   | 1.12+03    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 ŭ                  | 0.194 1    | ŭ          | 0.195 1   | Ŭ        | 0.923 5    | ũ          | 0.185 1    | Ū       |
| SEMIVOLATILES    | 2-Methymaphualene<br>2-Methydoboool        | 775403             | 0.0825      | 0.165        | 7 74E+02             | NE                   | 7.7E+02    |          |                 |          |                 |          |             |            |                 | 0,908    | 5 Ū                  | 0.194 1    | Ū          | 0.195 1   | U        | 0.923 5    | U          | 0.185 1    | U       |
| SEMIVOLATILES    | 2-Nitmaniline                              | 4.7E+01            | 0.3300      | 0.825        | 4.65E+00             | NE                   | 4.7E+01    |          |                 |          |                 |          |             |            |                 | 4.540    | 5 U                  | 0.971 1    | บ          | 0.977 1   | U        | 4.610 5    | U.         | 0.926 1    | U       |
| SEMIVOLATILES    | 2-Nitrophenol                              | 3.1E+02            | 0.0825      | 0.165        | 3.10E+01             | NE                   | 3.1E+02    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 U                  | 0.194 1    | U          | 0.195 1   | U.       | 0.923 5    | U          | 0.185 1    | Ů       |
| SEMIVOLATILES    | 3,3'-Dichlorobenzidine                     | 1.1E+00            | 0.1650      | 0.330        | 1.09E+00             | NE                   | 1.1E+00    |          |                 |          |                 |          |             |            |                 | 1.820    | 5 0                  | 0.388 1    | U          | 0.391 1   | U.       | 1.850 5    | U II       | 0.370 1    | ü       |
| SEMIVOLATILES    | 3-Nitroaniline                             | 4.7E+01            | 0.3300      | 0.825        | 4.65E+00             | NE                   | 4.7E+01    | 1        |                 |          |                 |          |             |            |                 | 4,540    | 5 0                  | 0.971 1    | ŭ          | 0.977 1   | ŭ        | 4 610 5    | ŭ          | 0.926 1    | ŭ       |
| SEMIVOLATILES    | 4,6-Dinitro-2-methylphenol                 | 3.1E+02            | 0.3300      | 0.825        | 3.10E+01             | NE                   | 3.16+02    |          |                 |          |                 |          |             |            |                 | 0.908    | ธีบ                  | D.194 1    | ŭ          | 0.195 1   | ŭ        | 0.923 5    | Ũ          | 0.185 1    | Ū       |
| SEMIVOLATILES    | 4-Bromophenyi phenyi ether                 | 3.1E-01<br>7.7E+02 | 0.0825      | 0.165        | 3.12E-02<br>7.74E+01 | NE                   | 7 76+02    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 Ū                  | 0.194 1    | Ū          | 0.195 1   | Ŭ        | 0.923 5    | Ú          | 0.185 1    | U       |
| SEMIVOLATILES    | 4-Chloroaniline                            | 6.2E+02            | 0.0825      | 0.165        | 6.20E+01             | NE                   | 6.2E+02    |          |                 |          |                 |          |             |            |                 | 0.906    | 5 U                  | 0.194 1    | U          | 0.195     | U        | 0.923 5    | U          | 0.165 1    | U       |
| SEMIVOLATILES    | 4-Chlorophenyl phenyl ether                | 2.8E-01            | 0.0825      | 0.165        | 2.77E-02             | NE                   | 2.8E-01    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 U                  | 0.194 1    | U U        | 0.195 1   | <u> </u> | 0.923 5    | <u>и</u> . | 0.185 1    | . N     |
| SEMIVOLATILES    | 4-Methylphenol                             | 7.7E+02            | 0.0825      | 0.165        | 7.74E+01             | NE                   | 7.78+02    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 U                  | 0.194 1    |            | 0.195     |          | 4 610 5    | ц          | 0.926 1    | มั      |
| SEMIVOLATILES    | 4-Nitroaniline                             | 1.3E+02            | 0.3300      | 0.825        | 1.295+01             | NE                   | 1.3E+02    |          |                 |          |                 |          |             |            |                 | 4.040    | 50                   | 0.971 1    | ŭ          | 0.977     | บั       | 4.610 5    | ŭ          | 0.926 1    | บั      |
| SEMIVOLATILES    | 4-Nitrophenol                              | 3.1E+02            | 0.3300      | 0.825        | 3.10E+01<br>8.22E+02 | NE                   | 876+02     |          |                 |          |                 |          |             |            |                 | 0.908    | ธีบั                 | 0.194 1    | ับั        | 0.195     | Ű        | 0,923 5    | Ú          | 0.185 1    | U       |
| SEMIVOLATILES    | Acenaphthylene                             | 8 2E+03            | 0.0825      | 0.165        | 8.22E+02             | NE                   | 8.2E+03    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 Ū                  | 0.194 1    | υU         | 0.195     | U        | 0.923 5    | U          | 0.185 1    | U       |
| SEMIVOLATILES    | Anthracene                                 | 4.1E+04            | 0.0825      | 0.165        | 4.11E+03             | NE                   | 4.1E+04    | 1        |                 |          |                 |          |             |            |                 | 809.0    | 5 U                  | 0.194 1    | U U        | 0.195     | U.       | 0.923 5    | 5          | 0.185 1    | U       |
| SEMIVOLATILES    | Benzo(a)anthracene                         | 6.3E-01            | 0.0825      | 0.165        | 6.26E-01             | 1.53E-02             | 6.3E-01    | 1        |                 |          |                 |          |             |            |                 | 0.908    | 5 11                 | 0.194 1    |            | 0.195 1   | . U      | 0.923 5    | ŭ          | 0.400 1    | ŭ       |
| SEMIVOLATILES    | Benzo(a)pyrene                             | 6.3E-02            | 0.0825      | 0.165        | 6.26E-02             | 1.54E-02             | 1.7E-01    | 1        |                 |          |                 |          |             |            |                 | 0 000    | 5 U<br>5 U           | 0.099 1    |            | 0.100     | ŭ        | 0.923 5    | ŭ          | 0.185 1    | ŭ       |
| SEMIVOLATILES    | Benzo(b)filuoranthene                      | 6.3E-01            | 0.0825      | U.165        | 6.25E-01             | 1.03E-02             | 0.3E-01    | 1        |                 |          |                 |          |             |            |                 | 0,908    | รับ                  | 0,194 1    | ίŭ         | 0.195     | ŭ        | 0.923 5    | ū          | 0.185 1    | Ū       |
| SEMIVOLATILES    | Benzo(grijperyjene<br>Benzo(k)fluoranthene | 4.1C+03<br>6.3E+00 | 0.0825      | 0.165        | 6.26E+00             | 1.30E-02             | 6.3E+00    | 1        |                 |          |                 |          |             |            |                 | 0.908    | 5 Ū                  | D.194 1    | Ū          | 0.195     | Ú        | 0,923 5    | U.         | 0.185 1    | U       |
| SEMIVOLATILES    | Benzoic Acid                               | 6.2E+05            | 0.3300      | 0.825        | 6.20E+04             | NE                   | 6.2E+05    |          |                 |          |                 |          |             |            |                 | 4.540    | 5 U                  | 0.971 1    | iU         | 0.977     | U        | 4.610 5    | U          | 0.926 1    | U.      |
| SEMIVOLATILES    | Benzyl Alcohol                             | 4.7E+04            | 0.0825      | 0.165        | 4.65E+03             | NE                   | 4.7E+04    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 U                  | 0.194 1    | U          | 0.195     | U        | 0.923 5    | U          | 0.185 1    | U U     |
| SEMIVOLATILES    | bis(2-Chloroethoxy)methane                 | 2.9E-01            | 0.0825      | 0.165        | 2.89E-01             | NE                   | 2.9E-01    |          |                 |          |                 |          |             |            |                 | 0.908    | 5 U                  | 0.194 1    |            | 0.195     | , U      | 0.923 5    | N.         | 0.165 1    | н       |
| SEMIVOLATILES    | bis(2-Chloroethyl)ether                    | 1.5E-01            | 0.0825      | 0.165        | 1.49E-01             | NE                   | 1.7E-01    | •        |                 |          |                 |          |             |            |                 | 0.000    | a u<br>A u           | 0,099 1    |            | 0.100     | ň        | 0.923 5    | ŭ          | 0.185 1    | เย้     |
| SEMIVOLATILES    | bis(2-Chioroisopropyl)ether                | 4.8E+01            | 0.0825      | 0.165        | 4.75E+00             | NE                   | 4.85+01    |          |                 |          |                 |          |             |            |                 | 0.908    | 50<br>5U             | 0.194 1    | ίŭ         | 0.195     | Ŭ        | 0.923 5    | ŭ          | 0,185 1    | υŨ      |
| SEMIVULATILES    | Dis(2-Emyinexyi)pronalate                  | 1.7E+01<br>3.1E+04 | 0.0825      | 0.165        | 3.105+03             | NE                   | 3.1E+04    |          |                 | 1        |                 |          |             |            |                 | 0.908    | 5 Ŭ                  | 0.194 1    | i Ū        | 0.195     | Ū        | 0.923 5    | U          | 0.185 1    | ย       |
| SEMIVOLATILES    | Chrysene                                   | 6.3E+01            | 0.0825      | 0.165        | 6.26E+01             | 1.51E-02             | 6.3E+01    | 1        |                 |          |                 |          |             |            |                 | 0.908    | 5 Ú                  | 0.194 1    | υ          | 0.195     | υ        | 0.923 5    | U          | 0.185 1    | U       |
| SEMIVOLATILES    | Dibenzo(a,h)anthracene                     | 6.3E-02            | 0.0825      | 0.165        | 6.26E-02             | NE                   | 1.7E-01    |          |                 |          |                 |          |             |            |                 | 0.468    | 5 U                  | 0.099 1    | U          | 0.100     | U        | 0.465 5    | U.         | 0.096 1    | υ       |
| SEMIVOLATILES    | Dibenzofuran                               | 6.2E+02            | 0.0825      | 0.165        | 6.20E+01             | NE                   | 6.2E+02    | 1        |                 |          |                 |          |             |            |                 | 0.908    | 5 0                  | 0.194 1    | I U        | 0.195     | U        | 0.923 5    | H H        | 0.185 1    | U<br>11 |
| SEMIVOLATILES    | Diethyl phthalate                          | 1.2E+05            | 0.0825      | D.165        | 1.24E+04             | NE                   | 1.2E+05    | 1        |                 |          |                 |          |             |            |                 | 0.908    | 0 U                  | 0.194 1    | i U<br>(1) | 0.195     |          | 0,823 5    | ŭ          | 0.100 1    | i ii    |
| SEMIVOLATILES    | Dimethyl phthalate                         | 1.2E+05            | 0.0825      | 0.165        | 1.24E+04             | NE                   | 1.2E+05    | 1        |                 |          |                 |          |             |            |                 | 0.908    | 5 0                  | 0.194 1    | iŭ         | 0.195     | ŭ        | 0.923 5    | ŭ          | 0.185 1    | Ū       |
| SEMIVOLATILES    | di-o-Octol obthalate                       | 3.16+04            | 0.0020      | 0.165        | 1.00E+03<br>3.07E+02 | NE                   | 3 15+03    | 1        |                 |          |                 |          |             |            |                 | 0.908    | รีบี                 | 0.194 1    | iŭ         | 0.195     | Ũ        | 0.923 5    | Ū          | 0.185 1    | U       |
| SEMIVOLATILES    | Fluoranthene                               | 5.5E+03            | 0.0025      | 0.165        | 5.46E+02             | 2.29E-02             | 5.5E+03    | 1        |                 |          |                 |          |             |            |                 | 0.908    | 5 Ū                  | 0,194 1    | ۱Ú         | 0,195     | U        | 0.923 5    | U.         | 0.185 1    | U       |
| SEMIVOLATILES    | Fluorene                                   | 5,5E+03            | 0.0825      | 0.165        | 5.46E+02             | NE                   | 5.5E+03    | 1        |                 |          |                 |          |             |            |                 | 0.908    | 5 U                  | 0.194 1    | U          | 0.195     | U        | 0.923 5    | U          | 0.185 1    | U       |
| SEMIVOLATILES    | Hexachlorobenzene                          | 2.5E-01            | 0.0825      | 0.165        | 2.51E-01             | NE                   | 2,5E-01    | 1        |                 |          |                 |          |             |            |                 | 0,908    | ទ ប្                 | 0.194 1    | ι U        | 0.195     | i U      | 0.923 5    | U          | 0.185 1    |         |
| SEMIVOLATILES    | Hexachlorobutadiene                        | 1.6E+01            | 0.0825      | 0.165        | 1.58E+00             | NE                   | 1.6E+01    | 1        |                 |          |                 |          |             |            |                 | 0.908    | 5 U<br>5 U           | U,194 1    | : U        | 0,190     |          | 0.923 5    | ŭ          | 0.185 1    | ιŭ      |
| SEMIVOLATILES    | Hexachlorocyclopentadiene                  | 1.0E+01            | 0.0825      | 0.165        | 1.02E+00             | NE                   | 1.0E+01    | 1        |                 |          |                 |          |             |            |                 | 0.909    | 5 U                  | 0.194 1    | iŭ         | 0.195     | ើ        | 0.923 5    | ŭ          | 0.185 1    | υŬ      |
| OF MIVOLAHLES    | LIAYSCURIDG/USUG                           | 1.02 +02           | 0.0625      | 0,100        | 1.00E+01             | NE                   | 1.02+02    | 1        |                 |          |                 |          |             |            |                 | 4.000    |                      | 0.104      | · •        |           |          |            | -          | ,          | -       |

Shaw Environmental, Inc.

00066602

# Table 4-104 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-088

| [SUMP] = SUMPOR<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH | 8   | TCEQ<br>Risk-Based<br>Screening | Method           | Method       | Backgro<br>Concentratio<br>(95% UPL, | ound<br>ons in Sall<br>. mg/kg) | Applicable<br>TCEQ<br>Risk-Based | 35SUMP087-SB01<br>35-SMP087-SB01-01<br>9/21/2006<br>0.5 - 0.5 Ft | 35SUMP087-SB01<br>35-SMP087-SB01-02<br>9/21/2006<br>3.5 - 3.5 Ft<br>DEC | 35SUMP087-SB02<br>35-SMP087-SB02-01<br>9/21/2006<br>0.5 + 0.5 Ft<br>PEC | 35SUMP087-SB02<br>35-SMP087-SB02-02<br>9/21/2006<br>3.5 - 3.5 Ft<br>BEG | 35SUMP088-SB01<br>2 35-SMP088-SB01-01<br>9/20/2006<br>0.5 - 0.5 Ft<br>BEG | 35SUMP088-SB01<br>35-SMP088-SB01-02<br>9/20/2006<br>7 - 7 Ft<br>BEG | 35SUMP088-SB02<br>5-SMP088-SB01-02-Q<br>9/20/2006<br>7 - 7 Ft<br>FD | 35SUMP088-SB02<br>35-SMP088-SB02-01<br>9/20/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP088-SB02<br>36-SMP088-SB02-02<br>9/20/2006<br>7 - 7 Ft<br>REG |
|---|---|---------------------------------|------------------|--------------|--------------------------------------|---------------------------------|----------------------------------|--|---|---|---|---|---|---|---|---|
| SAMPLE_PURPOS   |   | Value<br>(DBD) A B              | Detection        | Quantitation | Surface &                            | Subsulface                      | Screening                        | REG<br>Booutt DII 10 VO  | REG<br>Perut DILLO VO   |   |   | Result DILLOVO  | Result DI IOVO  | Result DIL LO VO  | Result DIL LO VO  | Result DIL LQ VQ  |
| SEMIVOLATILES   | Parameter (Units = mg/kg)                   | 6.3E-01                         | 0.0825           | 0.165        | 6.26E-01                             | 1.3 - 2.5 Ft<br>1.43E-02        | 6.3E-01                          | Result DIL LQ VQ   | Result Die La Va  | Result Die EG VG  | Nesal DIL LO VO   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |
| SEMIVOLATILES   | Isophorone                                  | 5.2E+03                         | 0.0825           | 0.165        | 5.15E+02                             | NE                              | 5.2E+03                          |  |   |   |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |
| SEMIVOLATILES   | Naphthalene                                 | 1.8E+02                         | 0.0825           | 0.165        | 1.81E+01                             | NE                              | 1.8E+02                          |  |   |   |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.107 1 J J<br>0.185 1 L)   |
| SEMIVOLATILES   | Nitrobenzene                                | 6.5E+01                         | 0.0825           | 0.165        | 6.49E+00                             | NE                              | 6.5E+01                          |  |   |   |   | 0,908 5 0   | 0.194 1 0   | 0,190 1 0   | 0.923 5 U   | 0.096 1 U   |
| SEMIVOLATILES   | n-Nitroso-oi-n-piopylamine                  | 4.1E-02<br>5.9E+01              | 0.0625           | 0.165        | 4.102-02<br>5.85E+01                 | NE                              | 5.9E+01                          |  |   |   |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0,185 1 U   |
| SEMIVOLATILES   | Pentachlorophenot                           | 3.0E+00                         | 0.3300           | 0.825        | 3.01E+00                             | NE                              | 3.0E+00                          |  |   |   |   | 4.540 5 U   | 0.971 1 U   | 0.977 1 U   | 4.610 5 U   | 0.926 1 U   |
| SEMIVOLATILES   | Phenanthrene                                | 4.1E+03                         | 0.0825           | 0.165        | 4.11E+02                             | NE                              | 4.1E+03                          |  |   |   |   | 0.908 5 U   | 0.194 1 U   | 0.195 1 U<br>0.195 1 JI   | 0.923 5 0   | 0.185 1 U   |
| SEMIVOLATILES   | Phenof                                      | 4.7E+04                         | 0.0825           | 0.165        | 4.65E+03                             | NE<br>1 04E 02                  | 4.76+04                          |  |   |   |   | 0.908 5 0   | 0.194 1 U   | 0.195 1 U   | 0.923 5 U   | 0.185 1 U   |
| SOLIDS  | Pyrene<br>Percent Solids                    | 4.1E+03                         | 0.0525<br>NE     | NE           | 4.11E+02                             | 1.84E=02<br>NE                  | 4.16+03                          | 89.300 1   | 77.500 1  | 88.200 1  | 92.300 1  | 88,500 1  | 83.300 1  | 82.700 1  | 88.700 1  | 86.100 1  |
| VOLATILES   | 1,1,1,2-Tetrachloroethane                   | 5.2E+01                         | 0.0005           | 0.005        | 5,17E+00                             | NE                              | 5.2E+01                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1,1,1-Trichloroethane                       | 2.3E+03                         | 0.0005           | 0.005        | 2.32E+02                             | NE                              | 2.3E+03                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1,1,2,2-Letrachioroethane                   | 5.16+00                         | 0.0005           | 0.005        | 5.08E-01<br>9.69E-01                 | NE                              | 97E+00                           |  | 0.006 1 0   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1.1-Dichloroethane                          | 8.9E+02                         | 0.0010           | 0.005        | 8.89E+01                             | NE                              | 8.9E+02                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1.1-Dichloroethene                          | 2.7E+02                         | 0.0005           | 0.005        | 2.68E+01                             | NE                              | 2.7E+02                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1.1-Dichloropropene                         | 9.9E-01                         | 0.0005           | 0.005        | 9.92E-01                             | NE 1                            | 9.9E-01                          |  | 0.006 1 1   |   | 0.005 1 U   |   | 0.005 1 0   | 0.005 1 0   |   | 0.005 1 U   |
| VOLATILES   | 1,2,3-1 CCNOIDDERZENS                       | 4.2E+02                         | 0.0005           | 0.005        | 4.205+01<br>9.15E-02                 | NE                              | 4.2E+02<br>9.2E+02               |  | 0.006 1 0   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1,2,4-Trichlorobenzene                      | 1.4E+03                         | 0.0005           | 0.005        | 1.36E+02                             | NE                              | 1.4E+03                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1,2,4-Trimethylbenzene                      | 9.6E+01                         | 0.0005           | 0.005        | 9.60E+00                             | NE                              | 9.6Ë+01                          |  | 0.006 t U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1,2-Dibromo-3-chloropropane                 | 3.5E-01                         | 0.0020           | 0.005        | 3.48E-01                             | NE                              | 3.5E-01                          |  | 0.006 1 U   |   | 0,005 1 0   |   | 0.005 1 0   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1.2-Dichlorobenzene                         | 5.66+02                         | 0.0005           | 0.005        | 5.61E+01                             | NE                              | 5.6E+02                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1.2-Dichloroethane                          | 2.7E-01                         | 0.0005           | 0.005        | 2.69E-01                             | NE                              | 2.7E-01                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1.2-Dichloropropane                         | 9.4E+00                         | 0.0005           | 0.005        | 1.80E+00                             | NE                              | 9.4E+00                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 1   | 0.005 1 0   |   | 0.005 1 0   |
| VOLATILES   | 1.2-Dimethylbenzene (o-Xyle)                | 3.3E+04                         | 0.0005           | 0.005        | 3.27E+03<br>8.28E+00                 | NE                              | 3.3E+04<br>8.3E+04               |  | 0.006 1 1   |   | 0.005 1 0   |   | 0.005 1 1   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1.3-Dichlorobenzene                         | 5.1E+01                         | 0.0005           | 0.005        | 5.05E+00                             | NE                              | 5.1E+01                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1,3-Dichloropropane                         | 3.0E+01                         | 0.0005           | 0.005        | 2.98E+00                             | NE                              | 3.0E+01                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 1.4-Dichlorobenzene                         | 2.7E+02                         | 0.0005           | 0.005        | 2.67E+01                             | NE                              | 2.7E+02                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 1   |
| VOLATILES   | 2,2-Dichoroproparie<br>2-Butanone           | 2.6E+04                         | 0.0000<br>0.0025 | 0.005        | 2.61E+03                             | NË                              | 2.6E+04                          |  | 0.012 1 U   |   | 0.011 1 U   |   | 0.010 1 U   | 0.010 1 U   |   | 0.009 1 U   |
| VOLATILES   | 2-Chloroethyl vinyl ether                   | 2.1E+00                         | 0.0020           | 0.010        | 2.14E-01                             | NE                              | 2.1E+00                          |  | 0.012 1 U   |   | 0.011 1 U   |   | 0.010 1 U   | 0.010 1 U   |   | 0.009 1 U   |
| VOLATILES   | 2-Chlorotoluene                             | 1.5E+03                         | 0.0005           | 0.005        | 1.54E+02                             | NE                              | 1.5E+03                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | 2-Hexanone                                  | 6.2E+01<br>3.4E+00              | 0.0025           | 0.010        | 6.20E+00                             | NE<br>N#                        | 6.2E+01<br>3.4E+00               |  | 0.012 1 0   |   | 0.011 1 0   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | Acetone                                     | 1.7E+03                         | 0.0050           | 0.010        | 1.74E+02                             | NE                              | 1.7E+03                          |  | 0.012 1 U   |   | 0.011 1 U   |   | 0.010 1 U   | 0.010 1 U   |   | 0.005 1 J J   |
| VOLATILES   | Benzene                                     | 8.8E-01                         | 0.0005           | 0.005        | 8.82E-01                             | NE                              | 8.8E-01                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | Bromobenzene                                | 1.1E+02                         | 0.0005           | 0.005        | 1.12E+01                             | NE                              | 1.1E+02                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 1   |
| VOLATILES   | Bromochioramethane                          | 2.4E+02<br>1.0E+01              | 0.0005           | 0.005        | 2.41E+01<br>1.03E+01                 | NE                              | 2.4E+02<br>1.0E+01               |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | Bromoform                                   | 3.4E+01                         | 0.0005           | 0.005        | 3.35E+01                             | NE                              | 3.4E+01                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| <b>VOLATILE\$</b>   | Bromomethane                                | 3.5E+00                         | 0.0010           | 0.010        | 3.49E-01                             | NE                              | 3.5E+00                          |  | 0.012 1 U   |   | 0.011 1 U   |   | 0.010 1 U   | 0.010 1 U   |   | 0.009 1 U   |
| VOLATILES   | Carbon disulfide                            | 1.0E+03                         | 0.0005           | 0.005        | 1.03E+02                             | NE                              | 1.0E+03                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 0   | 0.005 1 0   |   | 0.005 1 U   |
| VOLATILES   | Carlon edactione                            | 4.0E+01                         | 0.0005           | 0.005        | 3.98E+01                             | NE                              | 4.0E+02                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | Chioroethane                                | 1.1E+04                         | 0.0010           | 0.010        | 1.13E+03                             | NE                              | 1.1E+04                          |  | 0.012 1 U   |   | 0.011 1 Ū   |   | 0.010 1 U   | 0.010 1 U   |   | 0.009 1 10  |
| VOLATILES   | Chloroform                                  | 3.1E-01                         | 0.0005           | 0.005        | 3.06E-01                             | NE                              | 3.1E-01                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | cis-1 2-Dichlomethene                       | 2.3E+00<br>1.2E+03              | 0.0020           | 0.010        | 2.27E-01<br>1.15E+02                 | NE                              | 2.3E+00<br>1.2E+03               |  | 0.002 1 0   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | cis-1,3-Dichloropropene                     | 1.2E+01                         | 0.0005           | 0.005        | 1.19E+00                             | NE                              | 1.2E+01                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | Dibromochloromethane                        | 7.6E+01                         | 0.0005           | 0.005        | 7.62E+00                             | NE                              | 7.6E+01                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 1   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | Dichioradifluoremethane                     | 1.9E+02                         | 0.0005           | 0.005        | 1.88E+01<br>2.16E+02                 | NE                              | 1.9E+02                          |  | 0.006 1 U   |   | 0.000 1 0   |   | 0.000 1 0   | 0.010 1 U   |   | 0.009 1 U UJ  |
| VOLATILES   | Ethylbenzene                                | 4.3E+03                         | 0.0005           | 0.005        | 4.31E+02                             | NE                              | 4.3E+03                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | Hexachlorobutadlene                         | 1.6E+01                         | 0.0005           | 0.005        | 1.58E+00                             | NE                              | 1.6E+01                          |  | 0.006 1 U   |   | 0.005 1 Ü   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | Isopropyibenzene                            | 5.4E+03                         | 0.0005           | 0.005        | 5.38E+02                             | NE                              | 5.4E+03                          |  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 0   |
| VOLATILES   | m,p-Aylenes<br>Methyl isobutyl ketone       | 2.3E+02<br>1.3E+04              | 0.0005           | 0.005        | NE<br>1 29E+03                       | NE                              | 2.3E+02<br>1.3E+04               |  | 0.012 1 U   |   | 0.011 1 U   |   | 0.010 1 U   | 0.010 1 U   |   | 0.009 1 U   |
| VOLATILES   | Methylene chloride                          | 8.7E+00                         | 0,0010           | 0.005        | 8.68E+00                             | NE                              | 8.7E+00                          | 1  | 0.003 1 J B   |   | 0.003 1 J E   | 1   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | Naphthalene                                 | 1.8E+02                         | 0.0005           | 0.010        | 1.81E+01                             | NE                              | 1.8E+02                          |  | 0.012 1 U   |   | 0.011 1 U   |   | 0.010 1 U   | 0.010 1 U   |   | 0.009 1 U   |
| VOLATILES   |   | 2.7E+03                         | 0.0005           | 0.005        | 2.70E+02                             | NE                              | 2.7E+03<br>3.2E+03               | 1  | 0.006 1 U   |   | 0.005 1 1   |   | 0.005 1 U<br>0.005 1 U  | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | D-ISOPROPYLTOLUENE                          | 4.2E+03                         | 0.0005           | 0.005        | 4.20E+02                             | NE                              | 4.2E+03                          | 1  | 0.006 1 U   |   | 0.005 i U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 t U   |
| VOLATILES   | sec-BUTYLBENZENE                            | 3.0E+03                         | 0.0005           | 0.005        | 3.00E+02                             | NE                              | 3.0E+03                          | 1  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | Styrene                                     | 1.3E+04                         | 0.0005           | 0.005        | 1.31E+03                             | NE                              | 1.3E+04                          | 1  | 0.006 1 U   |   | 0.005 t U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | Tetrachiomethene                            | 2.0E+00                         | 0.0005           | 0.005        | 6.02E+00                             | NE                              | 6.0E+00                          | 1  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 t U   | 0.005 1 U   |   | 0.005 t U   |
| VOLATILES   | Toluene                                     | 1.1E+04                         | 0.0005           | 0.005        | 1.08E+03                             | NE                              | 1.1E+04                          | 1  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 Ú   |   | 0.005 1 U   |
| VOLATILES   | trans-1,2-Dichloroethene                    | 1.4E+03                         | 0.0005           | 0.005        | 1.38E+02                             | NE                              | 1.4E+03                          | 1  | 0.006 1 U   |   | 0.005 1 U   |   | 0.005 1 U   | 0.005 1 U   |   | 0.005 1 U<br>0.005 4 U  |
| VOLATILES   | trans-1,3-Dicnioropropene<br>Trichlomethene | 1.8EH01<br>3.7E+00              | 0.0005           | 0.005        | 1.83E+00<br>3.73E+00                 | NE                              | 1.8E+01<br>3.7E+00               | 1  | 0.006 1 U   |   | 0.005 1 0   |   | 0.005 1 0   | 0.005 1 U   |   | 0.005 1 U   |
| VOLATILES   | Trichlorofluoromethane                      | 2.6E+03                         | 0.0010           | 0.010        | 2.63E+02                             | NE                              | 2.6E+03                          |  | 0.012 1 U   |   | 0.011 1 U   |   | 0.010 1 U   | 0.010 1 U   |   | 0.009 1 U   |
| VOLATILES   | Vinyl acetate                               | 5.7E+02                         | 0.0010           | 0.010        | 5.74E+01                             | NE                              | 5.7E+02                          |  | 0.012 1 U UJ  |   | 0.011 1 U U   | J   | 0.010 1 U UJ  | I 0.010 1 U U.  | I   | 0.009 1 U UJ  |
| VOLATILES   | Vinvi chioride                              | 3.66-02                         | 0.0010           | 0.010        | 3 64E-02                             | NE                              | 3.6F-D2                          | 1  | a a 12 1 13   |   | D.D11 1 U   |   | 0.010 1 0   | 0.010 1 0   |   | 0.008 1 0   |

Shaw Environmental, Inc.

00066603

# Table 4-105 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-089

.

| [SUMP] = SUMP089<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE PURPOSE |                                | TCEQ<br>Risk-Based<br>ScreenIng<br>Value | Method<br>Detection | Method<br>Quantitation | Back(<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>PL, mg/kg)<br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP03<br>SUMP089-3<br>9/18/2<br>0 - 0<br>RE0 | 89-SB01<br>SB-01-01<br>006<br>Ft<br>G | 35SUMP08<br>SUMP089-3<br>9/18/2<br>0 - 0<br>REC | 89-SB01<br>SB-01-02<br>006<br>Ft<br>3 | 35SUMP0<br>SUMP089-<br>9/18/2<br>0 - 0<br>RE | 89-SB02<br>SB-02-01<br>2006<br>Ft<br>G |      | 35SUMP089<br>SUMP089-SI<br>9/18/20<br>0 - 0 f<br>REG | 9-SB02<br>B-02-0<br>106<br>Ft | 2<br>)2 |
|--|--------------------------------|--|---------------------|------------------------|--|---|---|---|---------------------------------------|---|---------------------------------------|--|--|------|--|-------------------------------|---------|
| Test Group   | Parameter (Units = mo/kg)      | (885V)*                                  | Limit (MOL)         | Limit (MQL)            | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value   | Result D  | DIL LO VO                             | Result C  | NL LQ VQ                              | Result I                                     | י טו גע                                | vq   | Result Dif   | LQ                            | VQ      |
| METALS   | Alumiaum                       | 1.6E+04                                  | 10.000              | 20.00                  | 1.63E+04                                 | 2,08E+04  | 1.6E+04                                       | 11500   | 1                                     | 11200.000                                       | 1                                     | 7730.000                                     | 1                                      |      | 9000.000 1   |                               |         |
| METALS   | Antimony                       | 7.3E+00                                  | 0.500               | 0.10                   | 9.40E-01                                 | 1.60E+00  | 7.3E+00                                       | 0.093   | 1 J JL                                | 0.114   | 1 U UJL                               | 0.059  | 1 J -                                  | JL   | 0.114 1  | U                             |         |
| METALS   | Arsenic                        | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                 | 5.54E+00  | 2.0E+01                                       | 0.686   | 1                                     | 0.330   | 1 J J                                 | 1.180  | 1                                      |      | 0.149 1  | J                             | J       |
| METALS   | Barium                         | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                 | 8.55E+01  | 2.6E+03                                       | 107   | 1                                     | 137.000   | 1                                     | 77,500                                       | 1                                      |      | 96.200 1   |                               |         |
| METALS   | Beryllium                      | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                 | 7.66E-01  | 4.6E+00                                       | 0.618   | 1                                     | 1,130   | 1                                     | 0.481  | 1 .                                    |      | 0.892 1  |                               |         |
| METALS   | Cadmium                        | 5.2E+00                                  | 0.025               | 0.10                   | 1.40E+00                                 | 4.00E-01  | 5.2E+00                                       | 0.106   | 1 J J                                 | 0.119   | 1 J J                                 | 0,113  | 1 3                                    | J    | 0.077 1  | J                             |         |
| METALS   | Calcium                        | NE                                       | NE                  | NE                     | NE                                       | NE  | E 05.00                                       | 1820  | 1                                     | 452.000   | 1<br>4 III                            | 1590.000                                     | 1                                      | ш    | 359.000 1  |                               | ш       |
| METALS   | Coromium                       | 5.9E+03                                  | 0.100               | 0.40                   | 2.00E+01                                 | 3.01E+01  | 5.9E+03                                       | 17.300  | 1 JM<br>1 II                          | 14.000  | I JT.<br>1 II                         | 12.100<br>E 150                              | -                                      | 10   | 12 300 1   |                               | 10      |
| METALO   | Coppor                         | 1.00+03                                  | 0.120               | 0.50                   | 5.555+00                                 | 0.255+00  | 1.56+03                                       | 5 120   | 1 JL                                  | 6 330   | 1 JL                                  | 6 890  | 1                                      | 36   | 3 930 1  |                               | ůL.     |
| METALS   | Iron                           | NE                                       | NE                  | 0.00                   | NE                                       | 5.20L100  | 1.02.003                                      | 14200.000                                       | 1                                     | 20100.000                                       | 5                                     | 11800.000                                    | 1                                      |      | 9880.000 1   |                               |         |
| METALS   | Lead                           | 5.0E+02                                  | 0.500               | 5.00                   | 2.26E+01                                 | 1.14E+01  | 5.0E+02                                       | 6.37  | 1                                     | 6.650   | 1                                     | 8.360  | 1                                      |      | 6.000 1  |                               |         |
| METALS   | Magnesium                      | NE                                       | NE                  | NE                     | NE                                       | NE  |   | 940.000   | i                                     | 1850.000  | 1                                     | 606.000                                      | 1                                      |      | 1160.000 1   |                               |         |
| METALS   | Manganese                      | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                 | 2.01E+02  | 1.7E+03                                       | 147   | 1 J                                   | 61.600  | 1 J                                   | 114.000                                      | 1                                      | J    | 47.900 1   |                               | J       |
| METALS   | Mercury                        | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                 | 3.60E-01  | 2.5E-01                                       | 0.012   | 1 J J                                 | 0.294   | 1 U                                   | 0.029  | 1 J                                    | J    | 0.289 1  | Ų                             |         |
| METALS   | Nickel                         | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                 | 1.16E+01  | 1.9E+02                                       | 12.300  | 1                                     | 21.700  | 1                                     | 7.160  | 1                                      |      | 15.000 1   |                               |         |
| METALS   | Potassium                      | NE                                       | NA                  | NA                     | NA                                       | NA  |   | 466.000   | t JH                                  | 521.000   | 1 JH                                  | 317.000                                      | 1                                      | JH   | 461.000 1  |                               | ЧH      |
| METALS   | Selenium                       | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                 | 5.57E+00  | 1.3E+02                                       | 0.226   | 1 U UJL                               | 0.190   | 1 J JL                                | 0.119  | 1 J -                                  | ۶L   | 0.227 1  | U.                            | UJL     |
| METALS   | Silver                         | 4.7E+01                                  | 0.050               | 0.20                   | 3.10E-01                                 | 3.70E-01  | 4./2+01                                       | 1.680   | 10                                    | 1.810   | 1 0                                   | 1.640  | 1 0                                    |      | 1.780 1  | Ų                             |         |
| METALS   | Socium                         |  |                     | NE<br>0.02             | INE<br>4 705 04                          | NE  | 2 05.00                                       | 52.100  | 1                                     | 399,000   | 1                                     | 29.700                                       | 4                                      |      | 0.054 1  |                               |         |
| METALS   | Vanadium                       | 4.85+01                                  | 0.010               | 0.02                   | 4.70E-01<br>3.21E+01                     | 4 465+01  | 2.0E+00<br>4.8E+01                            | 24 100  | 1 เห                                  | 21 900  | - н                                   | 19 700                                       | 1                                      | н    | 14 100 1   |                               | IJН     |
| METALS   | Zinc                           | 5.95+03                                  | 0.625               | 2.50                   | 6 16F+01                                 | 2 025+01  | 5.9E+03                                       | 24 800  | 1 .1H                                 | 57 200  | 1                                     | 17,800                                       | 1                                      | JH   | 39.200 1   |                               | JH      |
| PERC   | Perchlorate                    | 1.4E+01                                  | 0.005               | 0.100                  | NE                                       | NE  | 1.4E+01                                       | 0.040   | 4 U                                   | 0.200 2   | 20 U                                  | 0.020  | 2 U                                    | •••• | 0.200 20   | υ                             |         |
| VOLATILES  | 1,1,1,2-Tetrachloroethane      | 5.2E+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 5.2E+00                                       |   |                                       | 0.005   | 1 Ú                                   |  |  |      | 0.005 1  | U                             |         |
| VOLATILES  | 1,1,1-Trichloroethane          | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 2.3E+02                                       |   |                                       | 0.005   | 1 U                                   |  |  |      | 0.005 1  | ប                             |         |
| VOLATILES  | 1.1,2,2-Tetrachloroethane      | 5.1E-01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 5.1E-01                                       |   |                                       | 0.005   | 1 U                                   |  |  |      | 0.005 1  | U                             |         |
| VOLATILES  | 1,1,2-Trichloroethane          | 9.7E-01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 9.7E-01                                       |   |                                       | 0.005   | 1 U                                   |  |  |      | 0.005 1  | 0                             |         |
| VOLATILES  | 1,1-Dichloroethane             | 8.9E+01                                  | 0.0010              | 0.005                  | NE                                       | NE  | 8.9E+01                                       |   |                                       | 0.005   | 1 0                                   |  |  |      | 0.005 1  |                               |         |
| VOLATILES  | 1,1-Dichloroethene             | 2.75+01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 2.7E+01                                       |   |                                       | 0.005   | 1 U                                   |  |  |      | 0.005 1  |                               |         |
| VOLATILES  | 1,1-Dichloropropene            | 9.9E-01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 9.95-01                                       |   |                                       | 0.005   | 1 1                                   |  |  |      | 0.005 1  | ň                             |         |
| VOLATILES  | 1.2.3-Trichloropropage         | 9.25-02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 9.25-02                                       |   |                                       | 0.005   | ίŭ                                    |  |  |      | 0.005 1  | ŭ                             |         |
| VOLATILES  | 1.2.4-Trichlorobenzene         | 1 4E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.4E+02                                       |   |                                       | 0.005   | 1 0                                   |  |  |      | 0.005 1  | Ū                             |         |
| VOLATILES  | 1,2,4-Trimethylbenzene         | 9.6E+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 9.6E+00                                       |   |                                       | 0.005   | i ũ                                   |  |  |      | 0.005 1  | Ŭ                             |         |
| VOLATILES  | 1,2-Dibromo-3-chloropropane    | 3.5E-01                                  | 0.0020              | 0.005                  | NE                                       | NE  | 3.5E-01                                       |   |                                       | 0.005   | 1 Ū                                   |  |  |      | 0,005 1  | Ų                             |         |
| VOLATILES  | 1,2-Dibromoethane              | 5.3E-02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 5.3E-02                                       |   |                                       | 0.005   | 1 U                                   |  |  |      | 0.005 1  | U                             |         |
| VOLATILES  | 1,2-Dichlorobenzene            | 5.6E+01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 5.6E+01                                       |   |                                       | 0.005   | 1 U                                   |  |  |      | 0.005 1  | υ                             |         |
| VOLATILES  | 1,2-Dichloroethane             | 2.7E-01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 2.7E-01                                       |   |                                       | 0.005   | 1 U                                   |  |  |      | 0.005 1  | U                             |         |
| VOLATILES  | 1,2-Dichloropropane            | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.8E+00                                       |   |                                       | 0.005   | 1 0                                   |  |  |      | 0.005 1  |                               |         |
| VOLATILES  | 1,2-Dimethylbenzene (0-Xylene) | 3.3E+03                                  | 0.0005              | 0.005                  | NE                                       | NE  | 3.3E+03                                       |   |                                       | 0.005   | 1 0                                   |  |  |      | 0.005 1  |                               |         |
| VOLATILES  | 1.3-Dichlorobenzene            | 5 15+00                                  | 0.0005              | 0.005                  |  | NE  | 6.3E+00<br>6.1E+00                            |   |                                       | 0.005   | 1 11                                  |  |  |      | 0.005 1  | й                             |         |
| VOLATILES  | 1.3-Dichlomoronane             | 3.0E+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 3.0E+00                                       |   |                                       | 0.005   | ίŭ                                    |  |  |      | 0.005 1  | ŭ                             |         |
| VOLATILES  | 1.4-Dichlorobenzene            | 2.7E+01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 2.7E+01                                       |   |                                       | 0.005   | i ŭ                                   |  |  |      | 0.005 1  | Ũ                             |         |
| VOLATILES  | 2,2-Dichloropropane            | 1.7E+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.7E+00                                       |   |                                       | 0.005   | 1 Ū                                   |  |  |      | 0.005 1  | U                             |         |
| VOLATILES  | 2-Butanone                     | 2.6E+03                                  | 0.0025              | 0.010                  | NE                                       | NE  | 2.6E+03                                       |   |                                       | 0.010   | 1 Ŭ                                   |  |  |      | 0.009 1  | U                             |         |
| VOLATILES  | 2-Chloroethyl vinyl ether      | 2.1E-01                                  | 0.0020              | 0.010                  | NE                                       | NE  | 2.1E-01                                       |   |                                       | 0.010   | 1 U                                   |  |  |      | 0.009 1  | U                             |         |
| VOLATILES  | 2-Chlorotoluene                | 1.5E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.5E+02                                       |   |                                       | 0.005   | 1 U                                   |  |  |      | 0.005 1  | U                             |         |
| VOLATILES  | 2-Hexanone                     | 6.2E+00                                  | 0.0025              | 0.010                  | NE                                       | NE  | 6.2E+00                                       |   |                                       | 0.010   | 1 U                                   |  |  |      | 0.009 1  | 0                             |         |
| VOLATILES  | 4-Chlorotoluene                | 3.4E-01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 3.4E-01                                       |   |                                       | 0.005   | 1 U                                   |  |  |      | 0.005 1  |                               |         |
| VOLATILES  | Actions                        | 1.7E+02                                  | 0.0050              | 0.010                  | NE                                       | NE  | 1.7E+02                                       |   |                                       | 0.010   | 1 0                                   |  |  |      | 0.009 1  |                               |         |
| VOLATILES<br>VOLATILES   | Bromobenzene                   | 0.0E-01                                  | 0.0005              | 0.005                  | NE                                       |   | 8.8E-01<br>1.1E+01                            |   |                                       | 0.005   | 1 1                                   |  |  |      | 0.005 1  | ŭ                             |         |
| VOLATILES  | Bromochioromethane             | 2.4 =+01                                 | 0.0005              | 0.005                  | NE                                       |   | 24E+01  | 1   |                                       | 0.005   | 1 1                                   |  |  |      | 0.005 1  | й                             |         |
| VOLATILES  | Bromodichioromethane           | 1 0F+01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.05+01                                       |   |                                       | 0.005   | i ŭ                                   |  |  |      | 0.005 1  | บั                            |         |
| VOLATILES  | Bromoform                      | 3.4E+01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 3.4E+01                                       | 1   |                                       | 0.005   | 1 0                                   |  |  |      | 0.005 1  | Ũ                             |         |
| VOLATILES  | Bromomethane                   | 3.5E-01                                  | 0.0010              | 0.010                  | NE                                       | NE  | 3.5E-01                                       |   |                                       | 0.010   | 1 Ū                                   |  |  |      | 0.009 1  | Ū                             |         |
| VOLATILES  | Carbon disulfide               | 1.0E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.0E+02                                       | 1   |                                       | 0.005   | 1 Ú                                   |  |  |      | 0.005 1  | U                             |         |
| VOLATILES  | Carbon tetrachloride           | 3.5E-01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 3.5E-01                                       | 1   |                                       | 0.005   | 1 U                                   |  |  |      | 0.005 1  | U                             |         |
| VOLATILES  | Chlorobenzene                  | 4.0E+01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 4.0E+01                                       | 1   |                                       | 0.005   | 1 U                                   |  |  |      | 0.005 1  | U                             |         |

#### Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

# 00066604

| Table 4-105  |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |

Sump-089 [SUMP] = SUMP089 35SUMP089-SB01 35SUMP089-SB02 35SUMP089-SB02 35SUMP089-SB01 LOCATION \_CODE SUMP089-SB-01-02 SUMP089-SB-02-01 SUMP089-SB-02-02 SUMP089-SB-01-01 Applicable Background TCEQ SAMPLE NO 9/18/2006 9/18/2006 Concentrations in Soil TCEQ 9/18/2006 9/18/2006 Risk-Based SAMPLE\_DATE 0 - 0 Ft 0 - 0 Ft 0 - 0 Ft 0 - 0 Ft Method Method (95% UPL, mg/kg) **Risk-Based** Screening DEPTH REG REG REG REG Subsurface Screening SAMPLE\_PURPOSE Detection Quantitation Surface Value Result DIL LQ VQ Result DIL LQ VQ Result DIL LQ VQ Limit (MQL 0 - 0.5 Ft 1.5 - 2.5 Ft Value Result DIL LQ VQ Tes<u>t Group</u> (RBSV)\* Limit (MDL) Parameter (Units = mg/kg) 0.009 1 U U 0.010 1 1.1E+03 0.0010 0.010 NĘ NE 1.1E+03 Chloroethane VOLATILES 0.005 1 U 0.005 υ ΝE 1 NE 3.1E-01 Chieroform 3.1E-01 0.0005 0.005 VOLATILES 0.009 υ 0.010 11 1 NE 2.3E-01 1 0.010 NE 0.0020 VOLATILES Chloromethane 2.3E-01 ū 0.005 1 NE NE 1.2E+02 0.005 1 U 0.005 NE cis-1.2-Dichloroethene 1.2E+02 0.0005 VOLATILES Ű 0.005 Ū 0.005 1 1 1.2E+00 0.0005 0.005 ΝE 12E+00VOLATILES cis-1,3-Dichloropropene 0.005 1 U 0.005 U 0.005 NE NE 7.6E+00 1 7.6E+00 0.0005 VOLATILES Dibromochloromethane 0.005 1 U NE NE NE 1.9E+01 0.005 1 υ 0.005 1.9E+01 0.0005 **VOLATILES** Dibromomethane 0.009 Ú NE 2.2E+02 0.010 1 u 1 0.010 VOLATILES Dichlorodifluoromethane 2.2E+02 0.0010 Ū 0.005 1 NE 0.005 1 U 4.3E+02 0.0005 0.005 NE 4 3E+02 VOLATILES Ethylbenzene U 0.005 Ū 0.005 1 1 Hexachlorobutadiene 1.6E+00 0.0005 0.005 NE NE 1.6E+00 VOLATILES 11 0.005 1 U 0.005 0.0005 0.005 NE ΝE 5.4E+02 1 VOLATILES Isopropy/benzene 5.4E+02 J 0.001 1 В NE 0.005 1 U NE 2.3E+02 0.0005 0.005 VOLATILES m,p-Xylenes 2.3E+02 Ú 0.009 0.010 U 1 ΝE NĖ 1.3E+03 1 VOLATILES Methyl isobutyl ketone 1.3E+03 0.0025 0.01 Ų 0.005 1 0.005 U Methylene chloride 8.7E+00 0.0010 0.005 NË NE 8.7E+00 1 VOLATILES 0.009 1 U 0.010 -U NE NE 1.8E+01 1 0.0005 0.01 VOLATILES Naphthalene 1.8E+01 Ū 0.005 0.005 ш 1 NE NE 2.7E+02 1 0.005 n-BUTYLBENZENE 2.7E+02 0.0005 VOLATILES Ũ 0.005 0.005 Ŭ 1 NE 3 2E+02 1 n-PROPYLBENZENE 3.2E+02 0.0005 0.005 NE VOLATILES Ū Ū 0.005 1 0.005 1 p-ISOPROPYLTOLUENE 0.0005 0.005 NE NΕ 4.2E+02 4.2E+02 VOLATILES 0.005 1 υ NE NE NE 3.0E+02 0.005 1 ÷υ 0.005 VOLATILES sec-BUTYLBENZENE 3.0E+02 0.0005 0.005 Ŭ 0.005 U 1 NE 1.3E+03 1 0.005 1.3E+03 0.0005 VOLATILES Styrene 0.005 U 0.005 U 1 2.6E+02 0.0005 0.005 NE NE NE 2.6E+02 ten-BUTYLBENZENE VOLATILES U 0.005 Ū 0.005 1 0.0005 0.005 NE 6.0E+00 1 6.0E+00 VOLATILES Tetrachloroethene 0.005 U 1 0.005 U 0.005 NE NE NE 1.1E+03 1 VOLATILES Toluene 1.1E+03 0.0005 0.005 ย 1 NE 1.4E+02 0.005 1 υ trans-1,2-Dichloroethene 1.4E+02 0.0005 0.005 VOLATILES 1 Ú 0.005 0.005 U NE NE 1.8E+00 1 trans-1,3-Dichloropropene 1.8E+00 0.0005 0.005 VOLATILES ŭ 0.005 1 U 0.005 0.0005 0.005 NE NE 3.7E+00 1 37E+00 VOLATILES Trichloroethene 0.009 U 1 υ NE NE 2.6E+02 0.010 1 0.0010 0.01 VOLATILES Trichlorofluoromethane 2.6E+02 ίŪ 0.009 NE 0.010 U NÉ 5.7E+01 1 VOLATILES Vinyl acetate 5.7E+01 0.0010 0.01 0.010 ū 0.009 1 U 3.6E-02 Vinyl chloride 0.0010 0.01 NE NF 3.6E-02 VOLATILES

# 00066605

| Table 4-106   |
|---|
| Comparison of Chemical Concentration in Soil to Risk-Based Screening Values |
|   |

Sump-090

| [SUMP] = SUMP090<br>LOCATION _CODE<br>SAMPLE_NO |                                | TCEQ<br>Biak Papad |             |              | Back       | ground                   | Applicable<br>TCEO | 35SUMP<br>SUMP090<br>9/18 | 090-5<br>)-SB-<br>/200f | 5801<br>01-0 | l<br>1 | 35SUMP<br>SUMP090<br>9/18 | 090-9<br>)-\$B-<br>/2006 | 5801<br>01-0 | 1<br>12 |
|---|--------------------------------|--------------------|-------------|--------------|------------|--------------------------|--------------------|---------------------------|-------------------------|--------------|--------|---------------------------|--------------------------|--------------|---------|
| SAMPLE_UATE                                     |                                | Screening          | Method      | Method       | (95% UF    | Nons in con<br>E. ma/ka) | Risk-Based         | 0 -                       | 0 Ft                    | ·            |        | 0-                        | 0 Ft                     |              |         |
| SAMPLE PURPOSE                                  |                                | Value              | Detection   | Quantitation | Surface    | Subsurface               | Screening          | R                         | EG                      |              |        | R                         | EG                       |              |         |
| Test Group                                      | Parameter (Units = mo/kg)      | (RBSV)*            | Limit (MOL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft             | Value              | Result                    | DIL                     | LQ           | VQ     | Result                    | DILI                     | ı            | VQ      |
| METALS  | Aluminum                       | 1,6E+04            | 10.000      | 20.00        | 1.63E+04   | 2.08E+04                 | 1.6E+04            | 5450.000                  | 1.                      |              |        | 6810.000                  | 1                        |              |         |
| METALS  | Antimony                       | 7.3E+00            | 0.500       | 0.10         | 9.40E-01   | 1.60E+00                 | 7.3E+00            | 0.106                     | 1                       | Ų            | ԱՅԼ    | 0,067                     | 1                        | J            | J۲      |
| METALS  | Arsenic                        | 2.0E+01            | 0,075       | 0.30         | 4.81E+00   | 5.54E+00                 | 2.0E+01            | 1.360                     | 1                       |              |        | 0.854                     | 1                        |              |         |
| METALS  | Barium                         | 2.6E+03            | 0.075       | 0.30         | 1.52E+02   | 8.55E+01                 | 2.6E+03            | 44.000                    | 1                       |              |        | 114.000                   | 1                        |              |         |
| METALS  | Beryllium                      | 4.6E+00            | 0.012       | 0.50         | 6.45E-01   | 7.66E-01                 | 4.6E+00            | 0.191                     | 1                       | Ĵ            | J      | 0.893                     | 4                        |              |         |
| METALS  | Cadmium                        | 5.2E+00            | 0.025       | 0.10         | 1.400+00   | 4.00E+01                 | 5.20+00            | 45400.000                 | 10                      |              |        | 460.000                   | 1                        | 9            | J       |
| METALS  | Calcium                        |                    | NA<br>0.100 | 0.40         | 2.665+01   | 3.015+01                 | 5 0E+03            | 43400.000                 | 1                       |              | лн     | 8.080                     | i                        |              | JH      |
| METALS  | Cabalt                         | 1 55+03            | 0.100       | 0.40         | 7 23E+00   | 5.61E+00                 | 1.5E+03            | 1,860                     | i                       |              | JL     | 12.800                    | i                        |              | JL      |
| METALO  | Copper                         | 1.0E+03            | 0.150       | 0.60         | 5 55E+00   | 9.25E+00                 | 1.0E+03            | 6.540                     | 1                       |              |        | 5.060                     | 1                        |              | -       |
| METALS  | Irop                           | NE                 | NA          | NA           | NA         | NA                       | _                  | 10600.000                 | 1                       |              |        | 9300.000                  | 1                        |              |         |
| METALS  | Lead                           | 5.0E+02            | 0.500       | 5.00         | 2.26E+01   | 1.14E+01                 | 5.0E+02            | 16.100                    | 1                       |              |        | 5.080                     | 1                        |              |         |
| METALS  | Magnesium                      | NE                 | NA          | NA           | NA         | NA                       | -                  | 476.000                   | 1                       |              |        | 1330.000                  | 1                        |              |         |
| METALS  | Manganese                      | 1.7E+03            | 0.050       | 0.20         | 1.25E+03   | 2.01E+02                 | 1.7E+03            | 155.000                   | 1                       |              | J      | 80.700                    | 1                        |              | J       |
| METALS  | Mercury                        | 1.1E-02            | 0.010       | 0.25         | 8.19E-02   | 3.60E-01                 | 2.5E-01            | 0.038                     | 1                       | J            | J      | 0.301                     | 1                        | U            |         |
| METALS  | Nickel                         | 1.9E+02            | 0.200       | 0.80         | 6.98E+00   | 1.16E+01                 | 1.9E+02            | 3,050                     | 1                       |              |        | 13.900                    | 1                        |              |         |
| METALS  | Potassium                      | NE                 | NA          | NA           | NA         | NA                       |                    | 250.000                   | 1                       |              | JH     | 445.000                   | 1                        |              | JH      |
| METALS  | Selenium                       | 1.3E+02            | 0.100       | 0.20         | 3.485+00   | 5.578+00                 | 1.3E+U2            | 0.212                     | 1                       | Υ.           | 036    | 1 850                     | 4                        | ы.<br>П      | J۲      |
| METALS  | Silver                         | 4.72+01            | 0.050       | 0.20         | 3.10E-01   | 3.702-01                 | 4.7 2+01           | 23 300                    | ł                       | J            | 5      | 410 000                   | ÷                        | Ŷ            |         |
| METALS  | Socium                         | NE                 | 0.010       | 0.02         | 4 705 01   | NE                       | 205+00             | 0.029                     | 1                       |              |        | 0.045                     | i                        |              |         |
| METALS  | Vanadium                       | 4.85+01            | 0.010       | 0.02         | 3.216+01   | 4 46E+01                 | 4 8E+01            | 19,900                    | i                       |              | .IH    | 14,100                    | 1                        |              | зн      |
| METALS  | Zinc                           | 5.9E+03            | 0.625       | 2.50         | 6.16E+01   | 2.02E+01                 | 5.9E+03            | 39,300                    | 1                       |              | JH     | 42.400                    | 1                        |              | JH      |
| PERC  | Perchlorate                    | 1.4E+01            | 0.050       | 0.010        | NA         | NA                       | 1.4E+01            | 0.010                     | 1                       | U            |        | 0.100                     | 10                       | U            |         |
| SOLIDS  | Percent Solids                 | NE                 | NA          | NA           | NA         | NA                       |                    | 90.300                    | 1                       |              |        | 83.100                    | 1                        |              |         |
| VOLATILES                                       | 1,1,1,2-Tetrachtoroethane      | 5.2E+00            | 0.0005      | 0.005        | NA         | NA                       | 5.2E+00            |                           |                         |              |        | 0.00506                   | 1                        | U            |         |
| VOLATILES                                       | 1,1,1-Trichloroethane          | 2.3E+02            | 0.0005      | 0.005        | NA         | NA                       | 2.3E+02            |                           |                         |              |        | 0.00506                   | 1                        | 0            |         |
| VOLATILES                                       | 1,1,2,2-Tetrachloroethane      | 5.1E-01            | 0.0005      | 0.005        | NA         | NA                       | 5.1E-01            |                           |                         |              |        | 0.00506                   | 1                        | N.           |         |
| VOLATILES                                       | 1,1,2-Trichloroethane          | 9.7E-01            | 0.0005      | 0.005        | NA         | NA                       | 9.7E-01            |                           |                         |              |        | 0.00506                   | 1                        |              |         |
| VOLATILES                                       | 1,1-Dichloroethane             | 8.92+01            | 0.0010      | 0.005        | NA         | NA                       | 0.9E+01            |                           |                         |              |        | 0.00300                   | ł                        | ŭ            |         |
| VOLATILES                                       | 1,1-Dichloroethene             | 2.72+01            | 0.0005      | 0.005        | NA<br>NA   | NA<br>MA                 | 0.0001             | 1                         |                         |              |        | 0.00200                   | i                        | ŭ            | v       |
| VOLATILES                                       | 1,2-2 Trichlorobonzono         | 4 25-01            | 0.0005      | 0.005        | NA         | NA                       | 4 2E+01            |                           |                         |              |        | 0.00506                   | 1                        | ũ            |         |
| VOLATILES                                       | 1,2,3-Trichloropropage         | 9.2E-02            | 0.0010      | 0.005        | NA         | NA                       | 9.2E-02            | 1                         |                         |              |        | 0.00506                   | 1                        | Ŭ            |         |
| VOLATILES                                       | 1.2.4-Trichlorobenzene         | 1.4E+02            | 0.0005      | 0.005        | NA         | NA                       | 1.4E+02            |                           |                         |              |        | 0.00506                   | 1                        | U            |         |
| VOLATILES                                       | 1.2.4-Trimethylbenzene         | 9.6E+00            | 0.0005      | 0.005        | NA         | NA                       | 9.6E+00            |                           |                         |              |        | 0.00506                   | 1                        | U            |         |
| VOLATILES                                       | 1,2-Dibromo-3-chloropropane    | 3.5E-01            | 0.0020      | 0.005        | NA         | NA                       | 3.5E-01            |                           |                         |              |        | 0.00506                   | 1                        | υ            |         |
| VOLATILES                                       | 1,2-Dibromoetnane              | 5.3E-02            | 0.0005      | 0.005        | NA         | NA                       | 5.3E-02            |                           |                         |              |        | 0.00506                   | 1                        | U            |         |
| VOLATILES                                       | 1,2-Dichlorobenzene            | 5.6E+01            | 0.0005      | 0.005        | NA         | NA                       | 5.6E+01            |                           |                         |              |        | 0.00506                   | 1                        |              |         |
| VOLATILES                                       | 1,2-Dichloroethane             | 2.7E-01            | 0.0005      | 0.005        | NA         | NA                       | 2.7E-01            |                           |                         |              |        | 0.00506                   | 1                        |              |         |
| VOLATILES                                       | 1,2-Dichtoropropane            | 1.8E+00            | 0.0005      | 0.005        | NA         | NA                       | 1.85+00            |                           |                         |              |        | 0.00000                   | 4                        | ň            |         |
| VOLATILES                                       | 1,2-Dimethylbenzene (o-Xylene) | 3.3E+03            | 0.0005      | 0.005        | NA<br>NA   | NA                       | 3.3E+03<br>9.3E+00 | 1                         |                         |              |        | 0,00506                   | ÷                        | й            |         |
| VOLATILES                                       | 1,3,5-Thmethylbenzene          | 5.32+00            | 0.0005      | 0.005        | NA         | MA                       | 5 1E+00            | 1                         |                         |              |        | 0.00506                   | i                        | ŭ            |         |
| VOLATILES                                       | 1,3-Dichloropropage            | 3.05+00            | 0.0005      | 0.005        | NA         | NA                       | 3.0E+00            |                           |                         |              |        | 0.00506                   | 1                        | ŭ            |         |
| VOLATILES                                       | 1.4-Dichlorobenzene            | 2 7E+01            | 0.0005      | 0.005        | NA         | NA                       | 2.7E+01            |                           |                         |              |        | 0.00506                   | 1                        | Ū            |         |
| VOLATILES                                       | 2.2-Dichloropropane            | 1.7E+00            | 0.0005      | 0.005        | NA         | NA                       | 1.7E+00            |                           |                         |              |        | 0,00506                   | 1                        | U            |         |
| VOLATILES                                       | 2-Butanone                     | 2.6E+03            | 0.0025      | 0.010        | NA         | NA                       | 2.6E+03            |                           |                         |              |        | 0.01010                   | 1                        | U            |         |
| VOLATILES                                       | 2-Chloroethyl vinyl ether      | 2.1E-01            | 0.0020      | 0.010        | NA         | NA                       | 2.1E-01            |                           |                         |              |        | 0.01010                   | 1                        | U            |         |
| VOLATILES                                       | 2-Chlorotoluene                | 1.5E+02            | 0.0005      | 0.005        | NA         | NA                       | 1.5E+02            |                           |                         |              |        | 0.00506                   | 1                        |              |         |
| VOLATILES                                       | 2-Hexanone                     | 6.2E+00            | 0.0025      | 0.010        | NA         | NA                       | 6.2E+00            | 1                         |                         |              |        | 0.01010                   | 1                        | U<br>U       |         |
| VOLATILES                                       | 4-Chlorotoluene                | 3.4E-01            | 0.0005      | 0.005        | NA         | NA                       | 3.4E-01            | 1                         |                         |              |        | 0.00000                   | 1                        |              |         |
| VOLATILES                                       | Acetone                        | 1.7E+02            | 0.0050      | 0.010        | NA         | NA                       | 1./E+U2            | 1                         |                         |              |        | 0.01010                   | 1                        | й            |         |
| VOLATILES                                       | Benzene                        | 8.8E-01            | 0.0005      | 0.005        | NA<br>NA   | NA<br>NA                 | 0.02-01            | 1                         |                         |              |        | 0.00506                   | i                        | ŭ            |         |
| VOLATILES                                       | Bromochloromethane             | 2.45+04            | 0.0003      | 0.005        | NA         | NA                       | 2 4E+01            | 1                         |                         |              |        | 0.00506                   | i                        | ŭ            |         |
| VOLATILES                                       | Bromodichlommethane            | 1.05+01            | 0.0005      | 0.005        | NA         | NA                       | 1.0E+01            | 1                         |                         |              |        | 0.00506                   | 1                        | Ũ            |         |
| VOLATILES                                       | Bromoform                      | 3.4E+01            | 0.0005      | 0.005        | NA         | NA                       | 3.4E+01            | 1                         |                         |              |        | 0.00506                   | 1                        | Ų            |         |
| VOLATILES                                       | Bromomethane                   | 3.5E-01            | 0.0010      | 0.010        | NA         | NA                       | 3.5E-01            | 1                         |                         |              |        | 0.01010                   | 1                        | U            |         |
| VOLATILES                                       | Carbon disulfide               | 1.0E+02            | 0.0005      | 0.005        | NA         | NA                       | 1.0E+02            | 1                         |                         |              |        | 0.00506                   | 1                        | υ            |         |

.....

# Shaw Environmental, Inc. 00066606

### Table 4-106 Comparison of Chemical Concentration in Soil to Risk-Based Screening Values Sump-090

.

.

| ISOMPJ = SOMPOD<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backş<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soll<br>PL, mg/kg)<br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP090-SB01<br>SUMP090-SB-01-01<br>9/18/2006<br>0 - 0 Ft<br>REG | 35SUMP090-SB01<br>SUMP090-SB-01-02<br>9/18/2006<br>0 - 0 Ft<br>REG |
|--|---------------------------|--|---------------------|------------------------|--|---|---|--|--|
| Test Group   | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value   | Result DIL LQ VQ   | Result DIL LQ VQ   |
| VOLATILES  | Carbon tetrachloride      | 3.5E-01                                  | 0.0005              | 0.005                  | NA                                       | NA  | 3.5E-01                                       |  | 0.00506 1 U  |
| VOLATILES  | Chlorobenzene             | 4.0E+01                                  | 0.0005              | 0.005                  | NA                                       | NA  | 4.0E+01                                       |  | 0.00506 1 U  |
| VOLATILES  | Chioroethane              | 1.1E+03                                  | 0.0010              | 0.010                  | NA                                       | NA  | 1.1E+03                                       |  | 0.01010 1 U  |
| VOLATILES  | Chloroform                | 3.1E-01                                  | 0.0005              | 0.005                  | NA                                       | NA  | 3.1E-01                                       |  | 0.00506 1 U  |
| VOLATILES  | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NA                                       | NA  | 2.3E-01                                       |  | 0.01010 1 U  |
| VOLATILES  | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NA                                       | NA  | 1.2E+02                                       |  | 0.03760 1  |
| VOLATILES  | cis-1,3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                  | NA                                       | NA  | 1.2E+00                                       |  | 0.00506 1 U  |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NA                                       | NA  | 7.6E+00                                       |  | 0.00506 1 U  |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NA                                       | NA  | 1.9E+01                                       |  | 0.00506 1 U  |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NA                                       | NA  | 2.2E+02                                       |  | 0.01010 1 U  |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NA                                       | NA  | 4.3E+02                                       |  | 0.00506 1 U  |
| VOLATILES  | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NA                                       | NA  | 1.6E+00                                       |  | 0.00506 1 U  |
| VOLATILES  | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NA                                       | NA  | 5.4E+02                                       |  | 0.00506 1 U  |
| VOLATILES  | m,p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NA                                       | NA  | 2.3E+02                                       |  | 0.00506 1 U  |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NA                                       | NA  | 1.3E+03                                       |  | 0.01010 1 U  |
| VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NA                                       | NA  | 8.7E+00                                       |  | 0.00506 1 U  |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NA                                       | NA  | 1.8E+01                                       |  | 0.01010 1 U  |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NA                                       | NA  | 2.7E+02                                       |  | 0.00506 1 U  |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NA                                       | NA  | 3.2E+02                                       |  | 0.00506 1 U  |
| VOLATILES  | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NA                                       | NA  | 4.2E+02                                       |  | 0.00506 1 U  |
| VOLATILES  | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NA                                       | NA  | 3.0E+02                                       |  | 0.00506 1 U  |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NA                                       | NA  | 1.3E+03                                       |  | 0.00506 1 U  |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NA                                       | NA  | 2.6E+02                                       |  | 0.00506 1 U  |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NA                                       | NA  | 6.0E+00                                       |  | 0,00506 1 U  |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NA                                       | NA  | 1.1E+03                                       |  | 0.00506 1 U  |
| VOLATILES  | trans-1,2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NA                                       | NA  | 1.4E+02                                       |  | 0.00506 1 U  |
| VOLATILES  | trans-1,3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NA                                       | NA  | 1.8E+00                                       |  | 0.00506 1 U  |
| VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NA                                       | NA  | 3.7E+00                                       |  | 0.01430 1  |
| VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01                   | NA                                       | NA  | 2.6E+02                                       |  | 0.01010 1 U  |
| VOLATILES  | Vinyl acetate             | 5.7E+01                                  | 0.0010              | 0.01                   | NA                                       | NA  | 5.7E+01                                       |  | 0.01010 1 U  |
| VOLATILES  | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.01                   | NA                                       | NA  | 3.6E-02                                       |  | 0.01010 1 U  |

Shaw Environmental, Inc.

# 00066607

| Table 4-107   |
|---|
| Comparison of Chemical Concentration in Soil to Risk-Based Screening Values |
| Sump-091  |

.

| [SUMP] = SUMP091 |  |                    |           |              |            |               |                    | 35SHMP091-SB01    | 35SUMP091-SB01    |
|------------------|--|--------------------|-----------|--------------|------------|---------------|--------------------|-------------------|-------------------|
| LOCATION_CODE    |  | TOFO               |           |              | Backo      | round         | Applicable         | 35-SMP091-S801-01 | 35-SMP091-SB01-02 |
| SAMPLE_NU        |  | Pick-Based         |           |              | Concentrat | tions in Soil | TCEQ               | 9/21/2006         | 9/21/2006         |
| SAMPLE_DATE      |  | Screening          | Method    | Method       | (95% UP    | L. ma/ko)     | Risk-Based         | 0.5 - 0.5 Ft      | 6 - 6 Ft          |
| SAMPLE PURPOSE   |  | Value              | Detection | Quantitation | Surface    | Subsurface    | Screening          | REG               | REG               |
|                  |  | (000)/04           |           | Limit (MOL)  | 0-055      | 15-25 Et      | Value              | Result DIL LO VO  | Result DIL LO VO  |
| 1est Group       | Parameter (Units = mg/kg)              | 1 65+04            | 10.000    | 20.00        | 1.63E+04   | 2 08E+04      | 1 6E+04            | 11900.000 1       | 17800.000 1       |
| METALS           | Antimony                               | 7 3 =+00           | 0.500     | 0.10         | 940E-01    | 1.60E+00      | 7.3E+00            | 0.115 1 U UJL     | 0,119 1 U UJL     |
| METALO           | Amonio                                 | 205+01             | 0.075     | 0.30         | 4 81E+00   | 5.54E+00      | 2.0E+01            | 2.090 1           | 1.350 1           |
|                  | Badum                                  | 2.65+03            | 0.075     | 0.30         | 1.52E+02   | 8.55E+01      | 2.6E+03            | 68.900 1 JH       | 99.100 1 JH       |
| METALS           | Bendium                                | 4.6E+00            | 0.012     | 0.50         | 6.45E-01   | 7.66E-01      | 4.6E+00            | 0.725 1           | 0.549 1           |
| METALS           | Cadmium                                | 5.2E+00            | 0.025     | 0.10         | 1.40E+00   | 4.00E-01      | 5.2E+00            | 0.091 1 J J       | 0.122 1 J J       |
| METALS           | Calcium                                | NE                 | NA        | NA           | NA         | NA            |                    | 1980.000 1        | 703.000 1         |
| METALS           | Chromium                               | 5.9E+03            | 0.100     | 0.40         | 2.66E+01   | 3.01E+01      | 5.9E+03            | 17.700 1 JH       | 14.500 1 JH       |
| METALS           | Cobalt                                 | 1.5E+03            | 0.125     | 0.50         | 7.23E+00   | 5.61E+00      | 1.5E+03            | 6.030 1           | 13.300 1          |
| METALS           | Copper                                 | 1.0E+03            | 0.150     | 0.60         | 5.55E+00   | 9.25E+00      | 1.0E+03            | 4.150 1           | 4.830 1           |
| METALS           | iron                                   | NE                 | NA        | NA           | NA         | NA            |                    | 19200.000 1 J     | 16400.000 1 J     |
| METALS           | Lead                                   | 5.0E+02            | 0.500     | 5.00         | 2.26E+01   | 1.14E+01      | 5.0E+02            | 7.680 1           | 15.700 1          |
| METALS           | Magnesium                              | NE                 | NA        | NA           | NA         | NA            | -                  | 563.000 1         | 1290.000 1        |
| METALS           | Manganese                              | 1.7E+03            | 0.050     | 0.20         | 1.251+03   | 2,01E+02      | 1.78+03            | 143.000 1 J       | 0.028 1 1 1       |
| METALS           | Mercury                                | 1.1E-02            | 0.010     | 0.25         | 8.19E-02   | 3.606-01      | 2.5E-01            | 6.530 1 /H        | 7330 1            |
| METALS           | Nickel                                 | 1.96+02            | 0.200     | 0.80         | 0.965+00   | 1.102701      | 1.95402            | 366.000 1 IH      | 521 000 1 JH      |
| METALS           | Potassium                              |                    | 0.400     | 0.20         | 2 495400   | 5 575+00      | 1 35+02            | 0.289 1           | 0.124 1 .1 .1     |
| METALS           | Selenium                               | 4 75+04            | 0.100     | 0.20         | 3 105-01   | 3706-01       | 475+01             | 1640 1 U U        | 1.800 1 U U       |
| METALO           | Solum                                  | 4.7E+01            | NA        | NA           | NA NA      | NA            | -                  | 30.000 1          | 115.000 1         |
| METALO           | Thallum                                | 2 0E+00            | 0 010     | 0.02         | 4.70E-01   | NA            | 2.0E+00            | 0.154 1           | 0.080 1           |
| METALS           | Vanadium                               | 4.8E+01            | 0.125     | 0.50         | 3.21E+01   | 4.46E+01      | 4.8E+01            | 34.800 1 JH       | 21.300 1 JH       |
| METALS           | Zinc                                   | 5,9E+03            | 0.625     | 2.50         | 6.16E+01   | 2.02E+01      | 5.9E+03            | 16.900 1 JH       | 24.800 1 JH       |
| SOLIDS           | Percent Solids                         | NE                 | NA        | NA           | NA         | NA            |                    | 86.900 1          | 81.800 1          |
| VOLATILES        | 1,1,1,2-Tetrachloroethane              | 5.2E+00            | 0.0005    | 0.005        | NA         | NA            | 5.2E+00            | 1                 | 0.00455 1 U U     |
| VOLATILES        | 1,1,1-Trichloroethane                  | 2.3E+02            | 0.0005    | 0.005        | NA         | NA            | 2.3E+02            |                   | 0.00455 1 U U     |
| VOLATILES        | 1,1,2,2-Tetrachloroethane              | 5.1E-01            | 0.0005    | 0.005        | NA         | NA            | 5.1E-01            |                   | 0.00455 1 0 0     |
| VOLATILES        | 1,1,2-Trichloroethane                  | 9.7E-01            | 0.0005    | 0.005        | NA         | NA            | 9.7E-01            |                   | 0.00455 1 0 0     |
| VOLATILES        | 1,1-Dichloroethane                     | 8.9E+01            | 0.0010    | 0.005        | NA         | NA            | 8.9E+01            |                   | 0.00455 1 0 0     |
| VOLATILES        | 1,1-Dichloroethene                     | 2.7E+01            | 0.0005    | 0.005        | NA         | NA            | 2.76+01            |                   | 0.00455 1 11 11   |
| VOLATILES        | 1,1-Dichloropropene                    | 9.9E-01            | 0.0005    | 0.005        | NA<br>MA   | N/A<br>N/A    | 9.95-01            |                   | 0.00455 1 11 11   |
| VOLATILES        | 1,2,3-Inchlorobenzene                  | 4.2E+01            | 0.0005    | 0.005        | N/A<br>MA  | NA<br>NA      | 4.25-02            |                   | 0.00455 1 U U     |
| VOLATILES        | 1.2.3- Inchloropropane                 | 0.2E-02<br>1 4E+02 | 0.0015    | 0.005        | NA         | NA            | 1 4E+02            |                   | 0.00455 1 U U     |
| VOLATILES        | 1.2.4-Trimethylbenzene                 | 9.65+00            | 0.0005    | 0.005        | NA         | NA            | 9.6E+00            | 1                 | 0,00455 1 U U     |
| VOLATILES        | 1.2-Dibmmo-3-cbloropropage             | 3.5E-01            | 0.0020    | 0.005        | NA         | NA            | 3.5E-01            |                   | 0.00455 1 U U     |
| VOLATILES        | 1.2-Dibromoethaae                      | 5.3E-02            | 0.0005    | 0.005        | NA         | NA            | 5,3E-02            |                   | 0.00455 1 U U     |
| VOLATILES        | 1.2-Dichlorobenzene                    | 5.6E+01            | 0.0005    | 0.005        | NA         | NA            | 5.6E+01            |                   | 0.00455 1 U U     |
| VOLATILES        | 1.2-Dichloroethane                     | 2.7E-01            | 0.0005    | 0.005        | NA         | NA            | 2.7E-01            |                   | 0.00455 1 U U     |
| VOLATILES        | 1,2-Dichloropropane                    | 1.8E+00            | 0.0005    | 0.005        | NA         | NA            | 1.8E+00            |                   | 0.00455 1 U U     |
| VOLATILES        | 1.2-Dimethylbenzene (o-Xylene)         | 3.3E+03            | 0.0005    | 0.005        | NA         | NA            | 3.3E+03            |                   | 0.00455 1 U U     |
| VOLATILES        | 1,3,5-Trimethylbenzene                 | 8.3E+00            | 0.0005    | 0.005        | NA         | NA            | 8.3E+00            |                   | 0.00455 1 U U     |
| VOLATILES        | 1,3-Dichlorobenzene                    | 5.1E+00            | 0.0005    | 0.005        | NA         | NA            | 5.1E+00            |                   | 0.00455 1 U U     |
| VOLATILES        | 1,3-Dichloropropane                    | 3.0E+00            | 0.0005    | 0.005        | NA<br>NA   | NA<br>NA      | 3,0ET00<br>2,7E±01 |                   | 0.00455 1 1 1     |
| VOLATILES        | 1,4-Dichlorobenzene                    | 2.78+01            | 0.0005    | 0.005        | N/4<br>510 | NA            | 175+00             |                   | 0.00455 1 11 11   |
| VOLATILES        | 2,2-Dichloropropane                    | 1.76+00            | 0.0005    | 0.005        | 114        | NA            | 2.65+03            |                   | 0.00911 1 U U     |
| VOLATILES        | 2-Buarone<br>2 Chloroothul vinul othor | 2.02+03            | 0.0020    | 0.010        | NA         | NA            | 2 1E-01            |                   | 0.00911 1 U U     |
| VOLATILES        | 2-Chlomtoluene                         | 1.5E+02            | 0.0005    | 0.005        | NA         | NA            | 1.5E+02            |                   | 0.00455 t U U     |
| VOLATILES        | 2-Hexanone                             | 6.2E+00            | 0.0025    | 0.010        | NA         | NA            | 6.2E+00            |                   | 0.00911 1 U U     |
| VOLATILES        | 4-Chlorotoluene                        | 3.4E-01            | 0.0005    | 0.005        | NA         | NA            | 3.4E-01            |                   | 0.00455 1 U U     |
| VOLATILES        | Acetone                                | 1.7E+02            | 0.0050    | 0.010        | NA         | NA            | 1.7E+02            |                   | 0.02080 1         |
| VOLATILES        | Benzene                                | 8.8E-01            | 0.0005    | 0.005        | NA         | NA            | 8.8E-01            | 1                 | 0.00455 1 U U     |
| VOLATILES        | Bromobenzene                           | 1.1E+01            | 0.0005    | 0.005        | NA         | NA            | 1.1E+01            | 1                 | 0.00455 1 U U     |
| VOLATILES        | Bromochloromethane                     | 2.4E+01            | 0.0005    | 0.005        | NA         | NA            | 2.4E+01            | 1                 | 0.00455 1 U U     |
| VOLATILES        | Bromodichloromethane                   | 1.0E+01            | 0.0005    | 0.005        | NA         | NA            | 1.0E+01            |                   | 0.00455 1 U U     |
| VOLATILES        | Bromoform                              | 3.4E+01            | 0.0005    | 0.005        | NA         | NA            | 3.4E+01            | 1                 | 0.00455 1 U U     |
| VOLATILES        | Bromomethane                           | 3.5E-01            | 0.0010    | 0.010        | NA         | NA            | 3.5E-01            | 1                 |                   |
| VOLATILES        | Carbon disulfide                       | 1.0E+02            | 0.0005    | 0.005        | NA<br>NA   | NA<br>NA      | 1.0E+02<br>3.5E 04 | 1                 | 0.00455 1 11 11   |
| VOLATILES        | Carbon tetrachionole                   | 3.50-01            | 0.0003    | 0.000        | 1945       | 1104          | 0.02-01            |                   | J.00100 . J J     |
|                  |  |                    |           |              |            |               |                    |                   |                   |

Shaw Environmental, Inc. 00066608

### Table 4-107 Comparison of Chemical Concentration in Soil to Risk-Based Screening Values Sump-091

.

.

| Test Group         Parameter (Units = mg/sq)         (RBSV)*         Limit (MU2)         Limit (MU2)         0 - 0.5 Ft         1.5 - 2.5 Ft         Value         Result DIL LQ         VQ         Res   | [SUMP] = SUMP091<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method .    | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br><sup>2</sup> L, mg/kg}<br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP091-SB01<br>35-SMP091-SB01-01<br>9/21/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP091-SB01<br>35-SMP091-SB01-02<br>9/21/2006<br>6 - 6 Ft<br>REG |
|---|---|---------------------------|--|---------------------|-------------|---|---|---|---|---|
| VOLATILES         Chlorobenzene         4.0E+01         0.0005         NA         NA         4.0E+01         0.00455         1         U         U           VOLATILES         Chlorobma         3.1E-01         0.0005         NA         NA         3.1E+01         0.00455         1         U         U           VOLATILES         Chlorobmathane         2.3E+01         0.0005         NA         NA         3.1E+01         0.00455         1         U         U           VOLATILES         cis-1.2-Dichioropropene         1.2E+02         0.0005         NA         NA         1.2E+02         0.00455         1         U         U         U           VOLATILES         Dibromochloromethane         7.6E+00         0.0005         NA         NA         1.2E+02         0.00455         1         U <t< td=""><td>Test Group</td><td>Parameter (Units = mg/kg)</td><td>(RBSV) <sup>®</sup></td><td>Limit (MDL)</td><td>Limit (MQL)</td><td>0 - 0.5 Ft</td><td>1.5 - 2.5 Ft</td><td>Value</td><td>Result DIL LQ VQ</td><td>Result DIL LQ VQ</td></t<> | Test Group  | Parameter (Units = mg/kg) | (RBSV) <sup>®</sup>                      | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value   | Result DIL LQ VQ  | Result DIL LQ VQ  |
| VOLATILES         Chloroshane         1.1E403         0.0010         NA         NA         1.1E403         0.00911         1         U         U           VOLATILES         Chlorombrane         2.3E-01         0.0020         0.010         NA         NA         2.3E-01         0.00911         1         U         U           VOLATILES         Chlorombrane         2.3E-01         0.0020         0.010         NA         NA         2.3E-01         0.00455         1         U         U           VOLATILES         cis-1,3-Dichloropropene         1.2E+00         0.0005         0.005         NA         NA         1.2E+00         0.00455         1         U         U           VOLATILES         Dibromonhoromethane         1.9E+01         0.0005         0.005         NA         NA         1.3E+01         0.00455         1         U         U           VOLATILES         Dibromonhoromethane         2.2E+02         0.00455         NA         NA         4.3E+02         0.00455         1         U         U         VOLATILES         Dibromonhoromethane         2.2E+02         0.00455         1         U         U         VOLATILES         NA         NA         4.3E+02         0.00265         NA <td>VOLATILES</td> <td>Chlorobenzene</td> <td>4.0E+01</td> <td>0.0005</td> <td>0.005</td> <td>NA</td> <td>NA</td> <td>4.0E+01</td> <td></td> <td>0.00455 1 U U</td>                   | VOLATILES   | Chlorobenzene             | 4.0E+01                                  | 0.0005              | 0.005       | NA                                      | NA  | 4.0E+01                                       |   | 0.00455 1 U U   |
| VOLATILES         Chlaraform         3.1E-01         0.0005         NA         NA         3.1E-01         0.00455         1         U         U           VOLATILES         cis-1,2-Dichloromethane         1.2E+02         0.0005         0.006         NA         NA         1.2E+02         0.00455         1         U         U           VOLATILES         cis-1,3-Dichloropropene         1.2E+02         0.0005         NA         NA         1.2E+02         0.00455         1         U         U           VOLATILES         Dibromonethane         1.9E+01         0.0005         0.005         NA         NA         1.2E+02         0.00145         1         U   | VOLATILES   | Chloroethane              | 1.1E+03                                  | 0.0010              | 0.010       | NA                                      | NA  | 1.1E+03                                       |   | 0.00911 1 U U   |
| VOLATILES         Chloromethane         2.3E-01         0.0020         0.010         NA         NA         2.3E-01         0.00911         1         U         U           VOLATILES         cis-1.3-Dichlorogropene         1.2E+00         0.0005         0.005         NA         NA         1.2E+00         0.00455         1         U         U           VOLATILES         Dibromochloromethane         7.6E+00         0.0005         0.005         NA         NA         1.2E+00         0.00455         1         U         U           VOLATILES         Dibromomethane         1.9E+01         0.0005         0.005         NA         NA         1.9E+01         0.00455         1         U         U           VOLATILES         Dibromomethane         2.2E+02         0.0010         0.010         NA         NA         4.2E+02         0.00455         1         U         U         VOLATILES         Hexachlorobuladiene         1.6E+00         0.0055         NA         NA         1.6E+00         0.00455         1         U         U         VOLATILES         machanolus         0.00455         1         U         U         VOLATILES         machanolus         0.00455         1         U         U         VOLATILES  | VOLATILES   | Chloroform                | 3.1E-01                                  | 0.0005              | 0.005       | NA                                      | NA  | 3.1E-01                                       |   | 0.00455 1 U U   |
| VOLATILES         cis-1,2-Dichloropenen         1,2E+02         0.0005         0.005         NA         NA         1,2E+02         0.00455         1         U         U           VOLATILES         Dibromochloromethane         7,6E+00         0.0005         0.005         NA         NA         1,2E+00         0.00455         1         U         U           VOLATILES         Dibromochloromethane         7,6E+00         0.0005         0.005         NA         NA         1,9E+01         0.00455         1         U         U           VOLATILES         Dibromochloromethane         1,9E+01         0.0005         0.005         NA         NA         1,9E+01         0.00455         1         U         U           VOLATILES         Ethylbenzene         4,3E+02         0.0005         0.005         NA         NA         4,3E+02         0.00455         1         U         U         VOLATILES         hspropylbenzene         5,4E+02         0.0055         NA         NA         4,3E+02         0.00455         1         U         U         VOLATILES         hspropylbenzene         1,3E+03         0.0025         0.01         NA         NA         2,3E+02         0.00455         1         U         U   | VOLATILES   | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010       | NA                                      | NA  | 2.3E-01                                       |   | 0.00911 1 U U   |
| VOLATILES         cis-1,3-Dichloropropene         1.2E+00         0.0005         0.005         NA         NA         1.2E+00         0.00455         1         U         U           VOLATILES         Dibromochloromethane         1.9E+01         0.0005         0.005         NA         NA         7.6E+00         0.00455         1         U         U           VOLATILES         Dibromomethane         2.2E+02         0.0010         NA         NA         1.9E+01         0.0045         1         U         U           VOLATILES         Dibromomethane         2.2E+02         0.0010         NA         NA         4.3E+02         0.0045         1         U         U           VOLATILES         Hexachlorobuladiene         1.6E+00         0.0005         NA         NA         4.3E+02         0.00455         1         U         U           VOLATILES         Isopropyloenzene         5.4E+02         0.0005         NA         NA         2.3E+02         0.0045         1         U         U           VOLATILES         Methyl isobuly ketone         1.3E+03         0.0025         NA         NA         1.3E+03         0.0026         1         U         U         U         U/U/DLATILES         Naph  | VOLATILES   | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005       | NA                                      | NA  | 1.2E+02                                       |   | 0.00455 1 U U   |
| VOLATILES         Dibromochloromethane         7.6E+00         0.0005         0.005         NA         NA         7.6E+00         0.00455         1         U         U           VOLATILES         Dibromochloromethane         1.9E+01         0.0005         NA         NA         1.9E+01         0.00455         1         U         U           VOLATILES         Dichlorodifluoromethane         2.2E+02         0.0010         NA         NA         4.3E+02         0.00455         1         U         U           VOLATILES         Haxachlorobulzdiene         1.6E+00         0.0005         NA         NA         4.3E+02         0.00455         1         U         U           VOLATILES         Isopropylbenzene         5.4E+02         0.0005         0.005         NA         NA         5.4E+02         0.00455         1         U         U         VOLATILES         mspropylbenzene         3.8E+01         0.005         NA         NA         3.8E+02         0.00455         1         U         U         VOLATILES         Methylisobulyl ketone         1.3E+03         0.0025         0.01         NA         NA         3.8E+02         0.0065         1         U         U         VOLATILES         Naphthaliene         1.8   | VOLATILES   | cis-1,3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005       | NA                                      | NA  | 1.2E+00                                       |   | 0.00455 1 U U   |
| VOLATILES         Dibromomethane         1.9E+01         0.0005         NA         NA         1.9E+01         0.00495         1         U         U           VOLATILES         Dichlorodifiuoromethane         2.2E+02         0.0010         0.010         NA         NA         2.2E+02         0.00455         1         U         U           VOLATILES         Ethylbenzene         4.3E+02         0.0045         0.005         NA         NA         4.3E+02         0.00455         1         U         U           VOLATILES         Hexachlorobutadiene         1.6E+00         0.0005         0.005         NA         NA         1.6E+00         0.00455         1         U         U           VOLATILES         hexachlorobutadiene         1.3E+03         0.0025         0.005         NA         NA         2.3E+02         0.00455         1         U         U           VOLATILES         Methyl isobutyl ketone         1.3E+03         0.0025         0.01         NA         NA         1.3E+03         0.00071         1         U         U           VOLATILES         Methylisobutyl ketone         1.8E+01         0.0010         0.005         NA         NA         2.3E+02         0.00455         1  | VOLATILES   | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005       | NA                                      | NA  | 7.6E+00                                       |   | 0.00455 1 U U   |
| VOLATILES         Dichlorodifluoromethane         2.2E+02         0.001         NA         NA         2.2E+02         0.0011         1         U         V           VOLATILES         Ethylbenzene         4.3E+02         0.0005         0.005         NA         NA         4.3E+02         0.00455         1         U         V           VOLATILES         Haxachkorobutadiene         1.6E+00         0.00455         1         U         U           VOLATILES         Isopropylbenzene         5.4E+02         0.0005         0.005         NA         NA         5.4E+02         0.00455         1         U         U           VOLATILES         Isopropylbenzene         5.4E+02         0.0005         0.005         NA         NA         5.4E+02         0.00455         1         U         U           VOLATILES         Methylisobutyl ketone         1.3E+03         0.0025         0.01         NA         NA         1.3E+03         0.00911         1         U         U           VOLATILES         Methylisobutyl ketone         1.3E+03         0.0025         0.01         NA         NA         1.8E+01         0.00911         1         U         U         VOLATILES         nebtylisobutyl ketone         0.0015   | VOLATILES   | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005       | NA                                      | NA  | 1.9E+01                                       |   | 0.00455 1 U U   |
| VOLATILES         Ethylenzene         4.3E+02         0.0015         0.005         NA         NA         4.3E+02         0.00455         1         U         U           VOLATILES         Hexachlorobutadiene         1.6E+00         0.0005         0.005         NA         NA         1.6E+00         0.00455         1         U         U           VOLATILES         Isopropythenzene         6.4E+02         0.0005         0.005         NA         NA         2.3E+02         0.00455         1         U         U           VOLATILES         m.p-Xylenes         2.3E+02         0.0005         0.005         NA         NA         2.3E+02         0.00455         1         U         U           VOLATILES         Methylisobutyl ketone         1.3E+03         0.0005         0.01         NA         NA         8.7E+00         0.00911         1         U         U           VOLATILES         Naphthalene         1.8E+01         0.0005         0.005         NA         NA         2.7E+02         0.00455         1         U         U         VUCATILES         n-BROPYLESNZENE         3.2E+02         0.0005         0.005         NA         NA         3.2E+02         0.00455         1 <u< td="">         U</u<>  | VOLATILES   | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010       | NA                                      | NA  | 2.2E+02                                       |   | 0.00911 1 U U   |
| VOLATILES         Hexachlorobutadiene         1,6E+00         0.0005         0.005         NA         NA         1,6E+00         0.00455         1         U         U           VOLATILES         Isopropylbenzene         5.4E+02         0.0005         0.005         NA         NA         5.4E+02         0.00455         1         U         U           VOLATILES         m.p-Xylenes         2.3E+02         0.0015         0.005         NA         NA         1.3E+03         0.00455         1         U         U           VOLATILES         Methyl isobutyl ketone         1.3E+03         0.0010         0.005         NA         NA         1.3E+03         0.00672         1         V         U         VOLATILES         Methylene chloride         3.7E+00         0.0005         0.005         NA         NA         1.8E+01         0.00672         1         U         U         VOLATILES         n-BUTYLENZENE         3.2E+02         0.0005         0.005         NA         NA         3.2E+02         0.00455         1         U         U         VOLATILES         n-BUTYLENZENE         3.2E+02         0.0005         0.005         NA         NA         4.2E+02         0.00455         1         U         U         VOLATI  | VOLATILES   | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005       | NA                                      | NA  | 4.3E+02                                       |   | 0.00455 1 U U   |
| VOLATILES         Isoprophenzene         5.4E+02         0.0005         0.005         NA         NA         5.4E+02         0.00455         1         U         U           VOLATILES         m.p-Xylenes         2.3E+02         0.0005         0.005         NA         NA         2.3E+02         0.00455         1         U         U           VOLATILES         Methylene chloride         8.7E+00         0.0010         0.005         NA         NA         8.7E+00         0.00911         1         U         U           VOLATILES         Methylene chloride         8.7E+00         0.0010         0.005         NA         NA         8.7E+00         0.00911         1         U         U           VOLATILES         Naphthalene         1.8E+01         0.0005         0.01         NA         NA         8.7E+00         0.00455         1         U         U           VOLATILES         n-BUTYLBENZENE         2.7E+02         0.0005         0.005         NA         NA         3.2E+02         0.00455         1         U         U         VOLATILES         p.SOPROPYUTOLUENE         4.2E+02         0.0005         0.005         NA         NA         3.0E+02         0.00455         1 <u< td="">         U</u<>   | VOLATILES   | Rexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005       | NA                                      | NA  | 1.6E+00                                       |   | 0.00455 1 U U   |
| VOLATILES         m.p-Xylenes         2.3E+02         0.0005         0.005         NA         NA         2.3E+02         0.00455         1         U         U           VOLATILES         Methyl isobutyl ketone         1.3E+03         0.0025         0.01         NA         NA         1.3E+03         0.00911         1         U         U           VOLATILES         Methylene chloride         8.7E+00         0.0015         NA         NA         8.7E+00         0.00911         1         U         U           VOLATILES         Naphthalene         1.8E+01         0.0005         0.01         NA         NA         1.8E+01         0.00911         1         U         U           VOLATILES         n-BUTYLBENZENE         2.7E+02         0.0005         0.005         NA         NA         2.8E+02         0.00455         1         U         U           VOLATILES         n-PROPYLECNLENE         3.2E+02         0.0005         0.005         NA         NA         3.2E+02         0.00455         1         U         U         VU         VULATILES         sec-BUTYLBENZENE         3.0E+02         0.00455         1         U         U         VULATILES         sec-BUTYLBENZENE         2.6E+02         0.00  | VOLATILES   | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005       | NA                                      | NA  | 5.4E+02                                       |   | 0.00455 1 U U   |
| VOLATILES         Methyl isobutyl ketone         1.8E+03         0.0025         0.01         NA         NA         1.3E+03         0.00911         1         U         U           VOLATILES         Methylene ctioride         8.7E+00         0.0010         0.005         NA         NA         8.7E+00         0.00672         1         U         U           VOLATILES         Maphthalene         1.8E+01         0.00911         1         U         U         U         VOLATILES         n-BUTYLEENZENE         2.7E+02         0.0005         0.005         NA         NA         2.7E+02         0.00455         1         U         U           VOLATILES         n-PROPYLBENZENE         2.7E+02         0.0005         0.005         NA         NA         3.2E+02         0.00455         1         U         U           VOLATILES         n-PROPYLBENZENE         3.2E+02         0.0005         0.005         NA         NA         4.2E+02         0.00455         1         U         U           VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.0005         0.005         NA         NA         1.3E+03         0.00455         1         U         U           VOLATILES         tert-BUTYLBENZENE  | VOLATILES   | m.p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005       | NA                                      | NA  | 2.3E+02                                       |   | 0.00455 1 U U   |
| VOLATILES         Methylene chloride         8.7E+00         0.0010         0.005         NA         NA         8.7E+00         0.00672         1           VOLATILES         Naphthalene         1.8E+01         0.0005         0.01         NA         NA         1.8E+01         0.00911         1         U         U           VOLATILES         Naphthalene         1.8E+01         0.0005         0.005         NA         NA         2.7E+02         0.00915         1         U         U           VOLATILES         n-BUTYLBENZENE         2.7E+02         0.0005         0.005         NA         NA         3.2E+02         0.00455         1         U         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.0005         0.005         NA         NA         3.0E+02         0.00455         1         U         U           VOLATILES         sec-BUTYLENZENE         3.0E+02         0.0005         0.005         NA         NA         3.0E+02         0.00455         1         U         U         VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.00455         1         U         U         VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.00455         1   | VOLATILES   | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01        | NA                                      | NA  | 1.3E+03                                       |   | 0.00911 1 U U   |
| VOLATILES         Naphihalene         1,8E+01         0,0005         0,01         NA         NA         1,8E+01         0,00911         1         U         U           VOLATILES         n-BUTYLENZENE         2.7E+02         0,0005         0,005         NA         NA         2.7E+02         0,0005         1         U         U           VOLATILES         n-PROPYLENZENE         3.2E+02         0,0005         0,005         NA         NA         3.2E+02         0,00455         1         U         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0,0005         0,005         NA         NA         4.2E+02         0,00455         1         U         U           VOLATILES         sec-BUTYLBENZENE         3.0E+02         0,0005         0,005         NA         NA         4.2E+02         0,00455         1         U         U           VOLATILES         strand         0,005         0,005         NA         NA         1.3E+03         0,00455         1         U         U           VOLATILES         tert-6UTYLBENZENE         2.6E+02         0,0005         0,005         NA         NA         2.6E+02         0,00455         1         U         U </td <td>VOLATILES</td> <td>Methylene chloride</td> <td>8.7E+00</td> <td>0.0010</td> <td>0.005</td> <td>NA</td> <td>NA</td> <td>8.7E+00</td> <td></td> <td>0.00672 1</td>                                       | VOLATILES   | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005       | NA                                      | NA  | 8.7E+00                                       |   | 0.00672 1   |
| VOLATILES         n-BUTYLEENZENE         2.7E+02         0.0005         0.005         NA         NA         2.7E+02         0.00455         1         U         U           VOLATILES         n-PROPYLBENZENE         3.2E+02         0.0005         0.005         NA         NA         3.2E+02         0.00455         1         U         U           VOLATILES         p-ISOPROPYLEENZENE         3.2E+02         0.0005         0.005         NA         NA         4.2E+02         0.00455         1         U         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.00455         1         U         U         U         VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.0005         NA         NA         3.0E+02         0.00455         1         U         U           VOLATILES         tert-BUTYLBENZENE         3.0E+02         0.0005         0.005         NA         NA         2.0E+02         0.00455         1         U         U           VOLATILES         tert-BUTYLBENZENE         2.0E+02         0.0005         0.005         NA         NA         1.2E+02         0.00455         1         U         U         VOLATILES         Toluene         1.1E+03         0.00  | VOLATILES   | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01        | NA                                      | NA  | 1.8E+01                                       |   | 0.00911 1 U U   |
| VOLATILES         n-PROPYLBENZENE         3.2E+02         0.0005         0.005         NA         NA         3.2E+02         0.00455         1         U         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.0005         0.005         NA         NA         4.2E+02         0.00455         1         U         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.0005         0.005         NA         NA         4.2E+02         0.00455         1         U         U           VOLATILES         sec-BUTYLEENZENE         3.0E+02         0.0005         0.005         NA         NA         1.3E+03         0.00455         1         U         U           VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.0005         0.005         NA         NA         1.3E+03         0.00455         1         U         U           VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.0005         0.005         NA         NA         6.0E+00         0.00455         1         U         U           VOLATILES         Tetrachloroethene         1.1E+03         0.0005         0.005         NA         NA         1.4E+02         0.00455   | VOLATILES   | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005       | NA                                      | NA  | 2.7E+02                                       |   | 0.00455 1 U U   |
| VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.0005         0.005         NA         NA         4.2E+02         0.00455         1         U         U           VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.0005         0.005         NA         NA         3.0E+02         0.00455         1         U         U           VOLATILES         skrene         1.3E+03         0.00455         1         U         U           VOLATILES         tert-6UTYLBENZENE         2.6E+02         0.0005         0.005         NA         NA         2.6E+02         0.00455         1         U         U           VOLATILES         tert-6UTYLBENZENE         2.6E+02         0.0005         0.005         NA         NA         2.6E+02         0.00455         1         U         U           VOLATILES         tert-achioroethene         6.0E+00         0.0005         0.005         NA         NA         6.0E+00         0.00455         1         U         U           VOLATILES         trans-1,2-Dichloroethene         1.4E+02         0.0005         0.005         NA         NA         1.4E+02         0.00455         1         U         U           VOLATILES         trans-1,2-D  | VOLATILES   | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005       | NA                                      | NA  | 3.2E+02                                       |   | 0.00455 1 U U   |
| VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.0005         0.005         NA         NA         3.0E+02         0.00455         1         U         U           VOLATILES         Styrene         1.3E+03         0.0005         0.005         NA         NA         1.3E+03         0.00455         1         U         U           VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.0005         0.005         NA         NA         1.3E+03         0.00455         1         U         U           VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.0005         0.005         NA         NA         2.6E+02         0.00455         1         U         U           VOLATILES         Tetrachloroethene         6.0E+00         0.0005         0.005         NA         NA         1.1E+02         0.00455         1         U         U           VOLATILES         trans-1,2-Dichloroethene         1.4E+03         0.0005         0.005         NA         NA         1.4E+02         0.00455         1         U         U           VOLATILES         trans-1,3-Dichloroethene         3.7E+00         0.0005         0.005         NA         NA         1.8E+00         0.00455   | VOLATILES   | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005       | NA                                      | NA  | 4.2E+02                                       |   | 0.00455 1 U U   |
| VOLATILES         Styrene         1.3E+03         0.0005         0.005         NA         NA         1.3E+03         0.00455         1         U         U           VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.0005         0.005         NA         NA         2.6E+02         0.00455         1         U         U           VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.0005         0.005         NA         NA         2.6E+02         0.00455         1         U         U           VOLATILES         Tetrachloroethene         6.0E+00         0.0005         0.005         NA         NA         6.0E+00         0.00455         1         U         U           VOLATILES         trans-1,2-Dichloroethene         1.4E+02         0.0005         0.005         NA         NA         1.4E+02         0.00455         1         U         U           VOLATILES         trans-1,2-Dichloroethene         1.4E+02         0.0005         0.005         NA         NA         1.4E+02         0.00455         1         U         U           VOLATILES         trans-1,2-Dichloroethene         3.7E+00         0.0005         0.005         NA         NA         1.8E+02         0.00455   | VOLATILES   | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005       | NA                                      | NA  | 3.0E+02                                       |   | 0.00455 1 U U   |
| VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.0005         0.005         NA         NA         2.6E+02         0.00455         1         U         U           VOLATILES         Tetrachloroethene         6.0E+00         0.0005         0.005         NA         NA         6.0E+00         0.00455         1         U         U           VOLATILES         Tetrachloroethene         6.0E+00         0.0005         0.005         NA         NA         6.0E+00         0.00455         1         U         U           VOLATILES         Toluene         1.1E+03         0.00455         1         U         U           VOLATILES         trans-1,2-Dichloroethene         1.4E+02         0.0005         0.005         NA         NA         1.4E+02         0.00455         1         U         U           VOLATILES         trans-1,2-Dichloroethene         1.8E+00         0.0005         0.005         NA         NA         1.4E+02         0.00455         1         U         U           VOLATILES         trans-1,2-Dichloroethene         3.7E+00         0.0005         0.005         NA         NA         3.7E+00         0.00455         1         U         U         VOLATILES         Trichloroethene<   | VOLATILES   | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005       | NA                                      | NA  | 1.3E+03                                       |   | 0.00455 1 U U   |
| VOLATILES         Tetrachloroethene         6.0E+00         0.0005         0.005         NA         NA         6.0E+00         0.00455         1         U         U           VOLATILES         Toluene         1.1E+03         0.0005         0.005         NA         NA         1.1E+03         0.00455         1         U         U           VOLATILES         trans-1,2-Dichloroethene         1.4E+02         0.0005         0.005         NA         NA         1.4E+03         0.00455         1         U         U           VOLATILES         trans-1,2-Dichloroethene         1.8E+00         0.0005         0.005         NA         NA         1.4E+02         0.00455         1         U         U           VOLATILES         trans-1,3-Dichloropopene         1.8E+00         0.0005         0.005         NA         NA         1.8E+00         0.00455         1         U         U           VOLATILES         Trichloroethene         3.7E+00         0.0005         0.005         NA         NA         3.7E+00         0.00455         1         U         U           VOLATILES         Trichloroethene         3.7E+00         0.0010         0.01         NA         NA         3.7E+00         0.00911  | VOLATILES   | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005       | NA                                      | NA  | 2.6E+02                                       |   | 0.00455 1 U U   |
| VOLATILES         Toluene         1.1E+03         0.0005         0.005         NA         NA         1.1E+03         0.00455         1         U         U           VOLATILES         trans-1,2-Dichloroethene         1.4E+02         0.0005         0.005         NA         NA         1.4E+02         0.00455         1         U         U           VOLATILES         trans-1,2-Dichloroethene         1.4E+02         0.0005         0.005         NA         NA         1.4E+02         0.00455         1         U         U           VOLATILES         trans-1,2-Dichloropropene         1.8E+00         0.0005         0.005         NA         NA         1.8E+00         0.00455         1         U         U           VOLATILES         trichloropthene         3.7E+00         0.0005         0.005         NA         NA         3.7E+00         0.00455         1         U         U           VOLATILES         Trichloropfuoromethane         2.6E+02         0.0010         0.01         NA         NA         2.6E+02         0.00911         1         U           VOLATILES         Vinyl chloride         3.6E-02         0.0010         0.01         NA         NA         3.6E-02         0.00911         1  | VOLATILES   | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005       | NA                                      | NA  | 6.0E+00                                       |   | 0.00455 1 U U   |
| VOLATILES         trans-1,2-Dichloroethene         1,4E+02         0.0005         0.005         NA         NA         1,4E+02         0.00455         1         U         U           VOLATILES         trans-1,3-Dichloropropene         1,8E+00         0.0005         0.005         NA         NA         1.8E+00         0.00455         1         U         U           VOLATILES         trans-1,3-Dichloropropene         1.8E+00         0.0005         0.005         NA         NA         1.8E+00         0.00455         1         U         U           VOLATILES         Trichloroethene         3.7E+00         0.0015         0.005         NA         NA         3.7E+00         0.00455         1         U         U           VOLATILES         Trichloroethene         2.6E+02         0.0010         0.01         NA         NA         2.6E+02         0.00911         1         U         U           VOLATILES         Vinyl cetate         5.7E+01         0.0010         0.01         NA         NA         3.6E-02         0.00911         1         U         U           VDLATILES         Vinyl chloride         3.6E-02         0.0011         NA         NA         3.6E-02         0.00911         1   | VOLATILES   | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005       | NA                                      | NA  | 1.1E+03                                       |   | 0.00455 1 U U   |
| VOLATILES         trans-1,3-Dichloropropene         1.8E+00         0.0005         0.005         NA         NA         1.8E+00         0.00455         1         U         U           VOLATILES         Trichloropethene         3.7E+00         0.0005         0.005         NA         NA         3.7E+00         0.00455         1         U         U           VOLATILES         Trichloropfluoromethane         2.6E+02         0.001         NA         NA         3.7E+00         0.00911         1         U         U           VOLATILES         Vinyl acetate         5.7E+01         0.0010         0.01         NA         NA         2.6E+02         0.00911         1         U         U           VOLATILES         Vinyl acetate         5.7E+01         0.0010         0.01         NA         NA         5.7E+01         0.00911         1         U           VOLATILES         Vinyl choirde         3.6E-02         0.0010         0.01         NA         NA         5.7E+01         0.00911         U         U  | VOLATILES   | trans-1.2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005       | NA                                      | NA  | 1.4E+02                                       |   | 0.00455 1 U U   |
| VOLATILES         Trichloroethene         3.7E+00         0.0005         0.005         NA         NA         3.7E+00         0.00455         1         U         U           VOLATILES         Trichloroftuoromethane         2.6E+02         0.0010         0.01         NA         NA         2.6E+02         0.00911         U         U           VOLATILES         Vinyl acetate         5.7E+01         0.0010         0.01         NA         NA         5.7E+01         0.00911         U         U           VOLATILES         Vinyl chorde         3.6E-02         0.0010         NA         NA         5.7E+01         0.00911         U         U   | VOLATILES   | trans-1,3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005       | NA                                      | NA  | 1.8E+00                                       |   | 0.00455 1 U U   |
| VOLATILES         Trichlorofluoromethanes         2.6E+02         0.0010         0.01         NA         NA         2.6E+02         0.00911         1         U         U           VOLATILES         Vinyl acetate         5.7E+01         0.0010         0.01         NA         NA         5.7E+01         0.00911         1         U         U           VOLATILES         Vinyl chloride         3.6E-02         0.0010         0.01         NA         NA         3.6E-02         0.00911         1         U         U  | VOLATILES   | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005       | NA                                      | NA  | 3.7E+00                                       |   | 0.00455 1 U U   |
| VOLATILES         Vinyl acetate         5.7E+01         0.0010         0.01         NA         NA         5.7E+01         0.00911         1         U UJ           VOLATILES         Vinyl chloride         3.6E-02         0.0010         0.01         NA         NA         3.6E-02         0.00911         1         U         U   | VOLATILES   | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01        | NA                                      | NA  | 2.6E+02                                       |   | 0.00911 1 U U   |
| VOLATILES Vinvi chioride 3.6E-02 0.0010 0.01 NA NA 3.6E-02 0.00911 1 U U  | VOLATILES   | Vinyl acetate             | 5.7E+01                                  | 0.0010              | 0.01        | NA                                      | NA  | 5.7E+01                                       |   | 0.00911 1 U UJ  |
|   | VOLATILES   | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.01        | NA                                      | NA  | 3.6E-02                                       |   | 0.00911 1 U U   |
Shaw Environmental, Inc.

### 00066609

### Table 4-108 Comparison of Chemical Concentration in Soil to Risk-Based Screening Values Sump-092

| [SUMP] = SUMP<br>LOCATION_COI | 092<br>DE                      | -050               |             | •            | Baalu              |              | 5 - miliochio | 35SUMP09  | 2-SB01       |
|-------------------------------|--------------------------------|--------------------|-------------|--------------|--------------------|--------------|---------------|-----------|--------------|
| SAMPLE_NO                     |                                | ICEQ<br>Disk Based |             |              | Concentra          | from in Soil |               | 0/10/20   | 106          |
| SAMPLE_DATE                   |                                | Risk-Based         | Method      | Method       | (05% LIP           | luns (130)   | Risk-Based    | 7.5 - 7.5 | 5 Ft         |
|                               | 795                            | Value              | Detection   | Quantitation | Surface            | Subsurface   | Screening     | REG       |              |
| Test Group                    | Parameter (Linits = mg/kg)     | (RBSV) *           | Limit (MDL) | Limit (MOL)  | 0 - 0.5 Ft         | 1.5 - 2.5 Ft | Value         | Result DI | L LQ VQ      |
| METALS                        | Aluminum                       | 1.6E+04            | 10.000      | 20.00        | 1.6E+04            | 2.1E+04      | 1.6E+04       | 8320.000  |              |
| METALS                        | Antimony                       | 7.3E+00            | 0.500       | 0.10         | 9.4E-01            | 1.6E+00      | 7.3E+00       | 0.084     | 1 ] ]        |
| METALS                        | Arsenic                        | 2.0E+01            | 0.075       | 0.30         | 4.8E+00            | 5.5E+00      | 2.0E+01       | 0.202     | 1 ] ]        |
| METALS                        | Barium                         | 2.6E+03            | 0.075       | 0.30         | 1.5E+02            | 8.5E+01      | 2.6E+03       | 116.000   | 1            |
| METALS                        | Beryllium                      | 4.6E+00            | 0.012       | 0.50         | 6.5E-01            | 7.7E-01      | 4.6E+00       | 0.527     | 1            |
| METALS                        | Cadmium                        | 5.2E+00            | 0.025       | 0.10         | 1.4E+00            | 4.0E-01      | 5.2E+00       | 0.101     | 1 3 3        |
| METALS                        | Calcium                        | NE                 | NA          | NA           | NA                 | NA           | -             | 4/9.000   | 1            |
| METALS                        | Chromium                       | 5.9E+03            | 0.100       | 0.40         | 2.72+01            | 3.06+01      | 5.9E+03       | 7.030     | 1            |
| METALS                        | Cobalt                         | 1.5E+03            | 0.125       | 0.50         | (,2E+00<br>E EE+00 | 0.02700      | 1.00+03       | 3.050     | 1            |
| METALS                        | Copper                         | I.UETUS<br>ME      | 0,150       | 0.00         | 3.3E+00            | 5.2C.TOU     | 1.02103       | 7500.000  | 1            |
| METALO                        | lead                           | 505+02             | 0.600       | 500          | 2 3E+01            | 116+01       | 5.0E+02       | 3.330     | 1            |
| METALS                        | Maanasium                      | 0.0E+02            | NA          | NA NA        | NA NA              | NA           | 0.02.02       | 1050.000  | 1            |
| METALS                        | Manganese                      | 1 7E+03            | 0.050       | 0 20         | 1.3E+03            | 2.0E+02      | 1.7E+03       | 28,900    | t            |
| METALS                        | Mercury                        | 1.1E-02            | 0.010       | 0.25         | 8.2E-02            | 3.6E-01      | 2.5E-01       | 0.283     | <b>i</b> u u |
| METALS                        | Nickel                         | 1.9E+02            | 0.200       | 0.80         | 7.0E+00            | 1.2E+01      | 1.9E+02       | 8.370     | 1            |
| METALS                        | Potassium                      | NE                 | NA          | NA           | NA                 | NA           | -             | 281.000   | 1            |
| METALS                        | Selenium                       | 1.3E+02            | 0.100       | 0.20         | 3.5E+00            | 5.6E+00      | 1.3E+02       | 0,235     | 1 U U        |
| METALS                        | Silver                         | 4.7E+01            | 0.050       | 0.20         | 3.1E-01            | 3.7E-01      | 4.7E+01       | 1.730     | 1 0 0        |
| METALS                        | Sodium                         | NE                 | NA          | NA           | NA                 | NA           |               | 230.000   | 1            |
| METALS                        | Thallium                       | 2.0E+00            | 0.010       | 0.02         | 4.7E-01            | NE           | 2.0E+00       | 0.049     | 1            |
| METALS                        | Vanadium                       | 4.8E+01            | 0.125       | 0.50         | 3.2E+01            | 4.5E+01      | 4.86+01       | 8.650     | 1            |
| METALS                        | Zinc<br>Descent Balida         | 5.9E+03            | 0.625       | 2.50         | 6.2E+01            | 2.08+01      | 5.9E+03       | 84,000    | 1            |
| SOLIDS                        | Percent Solids                 | 1110               | 0.0005      | 0.005        |                    | NE           | 5.25+00       | 0.005     | • • • • •    |
| VOLATILES                     | 1.1.1.7 detachioroethane       | 235+02             | 0.0005      | 0.005        | NE                 | NE           | 2 3E+02       | 0.005     | 1 1 1        |
| VOLATILES                     | 1 1 2 2-Tetrachloroethane      | 5 15-01            | 0.0005      | 0.005        | NE                 | NE           | 5.1E-01       | 0.005     | ่า บับ       |
| VOLATILES                     | 1 1 2-Trichloroethane          | 9.7E-01            | 0.0005      | 0.005        | NE                 | NE           | 9.7E-01       | 0.005     | i ŭ ŭ        |
| VOLATILES                     | 1.1-Dictionoethane             | 8.9E+01            | 0.0010      | 0.005        | NE                 | NE           | 8.9E+01       | 0.005     | 1 U U        |
| VOLATILES                     | 1.1-Dichloroethene             | 2.7E+01            | 0.0005      | 0.005        | NE                 | NE           | 2.7E+01       | 0.005     | 1 U U        |
| VOLATILES                     | 1.1-Dichloropropene            | 9.9E-01            | 0.0005      | 0.005        | NE                 | NE           | 9.9E-01       | 0.005     | 1 U U        |
| VOLATILES                     | 1,2,3-Trichlorobenzene         | 4.2E+01            | 0.0005      | 0.005        | NE                 | NE           | 4.2E+01       | 0.005     | 1 U U        |
| VOLATILES                     | 1,2,3-Trichloropropane         | 9.2E-02            | 0.0010      | 0.005        | NE                 | NE           | 9.2E-02       | 0.005     | 1 U U        |
| VOLATILES                     | 1,2,4-Trichlorobenzene         | 1.4E+02            | 0.0005      | 0.005        | NE                 | NE           | 1.4E+02       | 0.005     | 1 0 0        |
| VOLATILES                     | 1,2,4-Trimethylbenzene         | 9.6E+00            | 0.0005      | 0.005        | NE                 | NE           | 9.6E+00       | 0.005     | 1 0 0        |
| VOLATILES                     | 1,2-Dibromo-3-chloropropane    | 3.5E-01            | 0.0020      | 0.005        | NE                 | NE           | 3,5E-01       | 0.005     | * • •        |
| VOLATILES                     | 1,2-Dibromoethane              | 5.3E-02            | 0.0005      | 0.005        |                    | NE           | 5.30-02       | 0.005     |              |
| VOLATILES                     | 1,2-Dichloroothano             | 2.02+01            | 0.0005      | 0.005        |                    | NE           | 2.0E+01       | 0.005     | 1 11 11      |
| VOLATRES                      | 1,2-Dichloropropage            | 1.8E+00            | 0.0005      | 0.005        | NE                 | NE           | 1.8E+00       | 0.005     | 1 มีมี       |
| VOLATILES                     | 1 2-Dimethylhenzene (o-Xvlene) | 3.3E+03            | 0.0005      | 0.005        | NE                 | NE           | 3.3E+03       | 0.005     | 1 0 0        |
| VOLATILES                     | 1.3.5-Trimethylbenzene         | 8.3E+00            | 0.0005      | 0.005        | NE                 | NE           | 8.3E+00       | 0.005     | 1 U U        |
| VOLATILES                     | 1,3-Dichlorobenzene            | 5.1E+00            | 0.0005      | 0.005        | NÉ                 | NE           | 5.1E+00       | 0.005     | 1 U U        |
| VOLATILES                     | 1,3-Dichloropropane            | 3.0E+00            | 0.0005      | 0.005        | NE                 | NE           | 3.0E+00       | 0.005     | 1 U U        |
| VOLATILES                     | 1,4-Dichlorobenzene            | 2.7E+01            | 0.0005      | 0.005        | NE                 | NE           | 2.7E+01       | 0.005     | 1 U U        |
| VOLATILES                     | 2,2-Dichloropropane            | 1.7E+00            | 0.0005      | 0.005        | NE                 | NE           | 1.7E+00       | 0.005     | 1 0 0        |
| VOLATILES                     | 2-Butanone                     | 2.6E+03            | 0.0025      | 0.010        | NE                 | NE           | 2.6E+03       | 0.010     | 1 0 0        |
| VOLATILES                     | 2-Chloroethyl vinyl ether      | 2.1E-01            | 0,0020      | 0.010        | NE                 | NE           | 2.1E-01       | 0.010     | 1 0 0        |
| VOLATILES                     | 2-Chlorotoluene                | 1.5E+02            | 0.0005      | 0.005        | NE                 | NE           | 1.50+02       | 0.005     |              |
| VOLATILES                     | 2-riexanone                    | 0.20+00            | 0.0025      | 0.010        | NE                 |              | 345.01        | 0.010     | 1 11 11      |
| VOLATILES                     | 4-Ciliolotoluene               | 3.42-01            | 0.0005      | 0.005        |                    | NE           | 17E+02        | 0.006     | 1            |
| VOLATILES                     | Benzene                        | 8.85-01            | 0.0005      | 0.005        | NE                 | NE           | 8.8E-01       | 0.005     | เบ็บ         |
| VOLATILES                     | Bromohenzene                   | 1.1E+01            | 0.0005      | 0.005        | NE                 | NE           | 1.1E+01       | 0.005     | 1 Ŭ Ŭ        |
| VOLATILES                     | Bromochloromethane             | 2.4E+01            | 0.0005      | 0.005        | NE                 | NE           | 2.4E+01       | 0.005     | เบิบิ        |
| VOLATILES                     | Bromodichloromethane           | 1.0E+01            | 0.0005      | 0.005        | NE                 | NE           | 1.0E+01       | 0.005     | 1 U U        |
| VOLATILES                     | Bromoform                      | 3.4E+01            | 0.0005      | 0.005        | NE                 | NE           | 3.4E+01       | 0.005     | 1 U U        |
| VOLATILES                     | Bromomethane                   | 3.5E-01            | 0.0010      | 0.010        | NË                 | NE           | 3.5E-01       | 0.010     | 1 U U        |
| VOLATILES                     | Carbon disulfide               | 1.0E+02            | 0.0005      | 0.005        | NE                 | NE           | 1.0E+02       | 0.005     | 1 U U        |
| VOLATILES                     | Carbon tetrachloride           | 3.5E-01            | 0,0005      | 0.005        | NE                 | NE           | 3.5E-01       | 0.005     | 1 U U        |
| VOLATILES                     | Chlorobenzene                  | 4.0E+01            | 0.0005      | 0.005        | NE                 | NE           | 4.0E+01       | 0.005     | 1 0 0        |
| VOLATILES                     | Chloroethane                   | 1.1E+03            | 0.0010      | 0.010        | NE                 | NE           | 1.76+03       | 0.010     | 1 0 0        |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

| 00066610 |  |
|----------|--|
|----------|--|

| Table 4-108   |
|---|
| Comparison of Chemical Concentration in Soil to Risk-Based Screening Values |
| Sump_092  |

|              |                           |            | ÷           |              |            |               |            |                    |
|--------------|---------------------------|------------|-------------|--------------|------------|---------------|------------|--------------------|
| SUMP] = SUMP | 092                       |            |             |              |            |               |            | 2FCI IMD002 CP04   |
| OCATION_CO   | ÞE                        |            |             |              |            |               | A          | 305UMP082-3001     |
| SAMPLE_NO    |                           | TCEQ       |             |              | Backg      | ground        | Applicable | 33-3MP92-3801-02   |
| SAMPLE_DATE  |                           | Risk-Based |             |              | Concentra  | tions in Soil | TCEQ       | 9/19/2006          |
| DEPTH        |                           | Screening  | Method      | Method       | (95% UP    | PL, mg/kg)    | Risk-Based | 7.5-7.5 PL         |
| SAMPLE_PURP  | OSE                       | Value      | Detection   | Quantitation | Surface    | Subsurface    | Screening  | REG                |
| Test Group   | Parameter (Units = mg/kg) | (RBSV) *   | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value      | Result DIL LQ VQ   |
| VOLATILES    | Chloroform                | 3.1E-01    | 0.0005      | 0.005        | NE         | NE            | 3.1E-01    |                    |
| VOLATILES    | Chloromethane             | 2.3E-01    | 0.0020      | 0.010        | NE         | NE            | 2,3E-01    |                    |
| VOLATILES    | cis-1,2-Dichloroethene    | 1.2E+02    | 0.0005      | 0.005        | NE         | NE            | 1.2E+02    |                    |
| VOLATILES    | cis-1,3-Dichloropropene   | 1.2E+00    | 0.0005      | 0.005        | NË         | NE            | 1.2E+00    | 0.005 1 0 0        |
| VOLATILES    | Dibromochloromethane      | 7.6E+00    | 0.0005      | 0.005        | NE         | NE            | 7.6E+00    | 0,005 1 0 0        |
| VOLATILES    | Dibromomethane            | 1.9E+01    | 0.0005      | 0.005        | NE         | NE            | 1.9E+01    | 0.005 1 0 0        |
| VOLATILES    | Dichlorodifluoromethane   | 2.2E+02    | 0.0010      | 0.010        | NE         | NE            | 2.2E+02    | 0.010 1 0 0        |
| VOLATILES    | Ethylbenzene              | 4.3E+02    | 0.0005      | 0.005        | NE         | NE            | 4.3E+02    | 0.005 1 0 0        |
| VOLATILES    | Hexachlorobutadiene       | 1.6E+00    | 0.0005      | 0.005        | NË         | NÉ            | 1.6E+00    | 0.005 1 0 0        |
| VOLATILES    | Isopropylbenzene          | 5.4E+02    | 0.0005      | 0.005        | NE         | NE            | 5.4E+02    | 0.005 1 U U        |
| VOLATILES    | m.p-Xylenes               | 2.3E+02    | 0.0005      | 0.005        | NE         | NE            | 2.3E+02    | 0.005 1 U U        |
| VOLATILES    | Methyl isobutyl ketone    | 1.3E+03    | 0.0025      | 0.01         | NE         | NE            | 1.3E+03    | 0.010 1 U U        |
| VOLATILES    | Methylene chloride        | 8.7E+00    | 0.0010      | 0.005        | NE         | NE            | 8.7E+00    | 0.005 1 U U        |
| VOLATILES    | Naphthalene               | 1.8E+01    | 0.0005      | 0.01         | NE         | NE            | 1.8E+01    | 0.010 1 0 0        |
| VOLATILES    | n-BUTYLBENZENE            | 2.7E+02    | 0.0005      | 0.005        | NE         | NE            | 2.7E+02    | 0.005 1 U U        |
| VOLATILES    | n-PROPYLBENZENE           | 3.2E+02    | 0.0005      | 0.005        | NE         | NE            | 3.2E+02    | 0.005 1 U U        |
| VOLATILES    | p-ISOPROPYLTOLUENE        | 4.2E+02    | 0.0005      | 0.005        | NE         | NE            | 4.2E+02    | 0,005 1 U U        |
| VOLATILES    | Sec-BUTYLBENZENE          | 3.0E+02    | 0.0005      | 0.005        | NE         | NE            | 3.0E+02    | 0.005 1 U U        |
| VOLATILES    | Styrene                   | 1.3E+03    | 0.0005      | 0.005        | NE         | NE            | 1.3E+03    | 0.005 1 U U        |
| VOLATILES    | tert-BUTYLBENZENE         | 2.6E+02    | 0.0005      | 0.005        | NE         | NE            | 2.6E+02    | 0.005 1 U U        |
| VOLATILES    | Tetrachloroetbene         | 6.0E+00    | 0.0005      | 0.005        | NE         | NE            | 6.0E+00    | 0.005 1 U U        |
| VOLATILES    | Toluene                   | 1.1E+03    | 0.0005      | 0.005        | NE         | NE            | 1.1E+03    | 0.005 1 U U        |
| VOLATILES    | trans-1.2-Dichloroethene  | 1.4E+02    | 0.0005      | 0.005        | NE         | NE            | 1.4E+02    | 0.005 1 U U        |
| VOLATILES    | trans-1.3-Dichloropropene | 1.8E+00    | 0.0005      | 0.005        | NE         | NE            | 1.8E+00    | 0.005 1 U U        |
| VOLATILES    | Trichloroethene           | 3.7E+00    | 0.0005      | 0.005        | NE         | NE            | 3.7E+00    | 0.005 1 U U        |
| VOLATILES    | Trichlorofluoromethane    | 2.6E+02    | 0.0010      | 0.01         | NE         | NE            | 2.6E+02    | 0.010 1 U U        |
| VOLATIEES    | Vinvi acetate             | 5.7E+01    | 0.0010      | 0.01         | NE         | NE            | 5.7E+01    | 0.010 1 U U        |
| VOLATILES    | Vind chloride             | 3 6E-02    | 0.0010      | 0.01         | NË         | NE            | 3.6E-02    | <u>0.010 1 U U</u> |

# Table 4-109 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-093

| [SUMP] = SUMPO | 093<br>DE  |            |              |             | • • • • •      |               |                    | 2551140002 5001          | 25911MD003 6804   |
|----------------|--|------------|--------------|-------------|----------------|---------------|--------------------|--------------------------|-------------------|
| SAMPLE NO      | JE   | TCEQ       |              |             | Back           | around        | Applicable         | 35-SMP093-SB01-01        | 35-SMP093-SB01-02 |
| SAMPLE_DATE    |  | Risk-Based |              |             | Concentra      | tions in Soil | TCEQ               | 9/21/2006                | 9/21/2006         |
| DEPTH          |  | Screening  | Method       | Method      | (95% UP        | L, mg/kg)     | Risk-Based         | .55 Ft                   | 6.5 - 6.5 Ft      |
| Test Group     | Parameter (Units = mo/ko)                              | (RBSV) *   | Limit (MD) ) | Limit (MQL) | 0-05 Ft        | 15-25 Et      | Value              | Result DIL LO VO         | Result DII 10 VO  |
| METALS         | Aluminum   | 1.6E+04    | 10.000       | 20.00       | 1.63E+04       | 2.08E+04      | 1.6E+04            | 2420.000 1               | 10100.000 1       |
| METALS         | Antimony   | 7.3E+00    | 0.500        | 0.10        | 9.40E-01       | 1.60E+00      | 7.3E+00            | 0.111 1 U UJL            | 0.114 1 U UJL     |
| METALS         | Arsenic  | 2.0E+01    | 0.075        | 0.30        | 4.81E+00       | 5.54E+00      | 2.0E+01            | 1.380 1                  | 1.850 1           |
| METALS         | Barium   | 2.6E+03    | 0.075        | 0.30        | 1.52E+02       | 8.55E+01      | 2.6E+03            | 38.500 1 JH              | 38.400 1 JH       |
| METALS         | Beryilium  | 4.6E+00    | 0.012        | 0.50        | 6.45E-01       | 7.66E-01      | 4.6E+00            | 0.318 1 J J              | 1.180 1           |
| METALS         | Cadmium  | 5.2E+00    | 0.025        | 0.10        | 1.40E+00       | 4.00E-01      | 5.2E+00            | 0.136 1 J J              | 0.055 1 J J       |
| METALS         | Chromium   | 5 95+03    | 0 100        | 0.40        | NA<br>2 665-01 | 3.015+01      | 5 05+03            | 456.000 1<br>5.020 1 III | 19300 1 14        |
| METALS         | Cohalt   | 1.5E+03    | 0.125        | 0.50        | 7 23E+00       | 5.61E+00      | 1.5E+03            | 2 720 1                  | 12 200 1          |
| METALS         | Copper   | 1.0E+03    | 0.150        | 0.60        | 5.55E+00       | 9.25E+00      | 1.0E+03            | 2.110 1                  | 8.250 1           |
| METALS         | Iron   | NE         | NA           | NA          | NA             | NA            | -                  | 4640.000 1 J             | 34000.000 1 J     |
| METALS         | Lead   | 5.0E+02    | 0.500        | 5.00        | 2.26E+01       | 1.14E+01      | 5.00+02            | 10.200 1                 | 5.250 1           |
| METALS         | Magnesium  | NE         | NA           | NA          | NA             | NA .          | -                  | 130.000 1                | 1200.000 1        |
| METALS         | Manganese  | 1.7E+03    | 0.050        | 0.20        | 1.25E+03       | 2.01E+02      | 1.7E+03            | 191.000 1 J              | 103.000 1 J       |
| METALS         | Mercury  | 1.1E-02    | 0.010        | 0.25        | 8.19E-02       | 3.60E-01      | 2.5E-01            | 0.014 1 J J              | 0.269 1 0 0       |
| METALS         | Nickel<br>Betassium                                    | 1.9E+0Z    | 0.200        | 0.80        | 6.98E+00       | 1.168+01      | 1.9E+02            | 2.110 1 JH               | 16.700 1 JH       |
| METALS         | Selectum   | 1 3E+02    | 0 100        | 0.20        | 3.485+00       | 5 57E+00      | 1 35+02            | 0.211 1 1                | 0 177 1 I I       |
| METALS         | Silver   | 4.7E+01    | 0.050        | 0.20        | 3 10F-01       | 3 70 - 01     | 4.7E+01            | 1690 1 U U               | 1740 1 11 11      |
| METALS         | Sodium   | NE         | NA           | NA          | NA             | NA            |                    | 8.450 1 J J              | 126.000 1         |
| METALS         | Thailium   | 2.0E+00    | 0.010        | 0.02        | 4.70E-01       | NE            | 2.0E+00            | 0.028 1                  | 0.071 1           |
| METALS         | Vanadium   | 4.8E+01    | 0.125        | 0.50        | 3.21E+01       | 4.46E+01      | 4.8E+01            | 9.270 1 JH               | 37.700 1 JH       |
| METALS         | Zinc   | 5.9E+03    | 0.625        | 2.50        | 6.16E+01       | 2.02E+01      | 5.9E+03            | 7.810 1 JH               | 42.000 1 JH       |
| SOLIDS         | Percent Solids   | NE         | NE           | NE          | NE             | NE            |                    | 89.800 1                 | 87.200 1          |
| VOLATILES      | 1,1,1,2-1 etrachioroethane                             | 5.2E+00    | 0.0005       | 0.005       | NE             | NE            | 5.2E+00            |                          | 0.00452 1 U U     |
| VOLATILES      | 1,1,1+ nucleoroethane                                  | 5 15-01    | 0.0005       | 0.005       | NE             | NE            | 2,30+02            |                          | 0.00452 1 U U     |
| VOLATILES      | 1.1.2-Trichloroethane                                  | 9.7E-01    | 0.0005       | 0.005       | NE             | NE            | 9.7E-01            |                          | 0.00452 1 0 0     |
| VOLATILES      | 1.1-Dichloroethane                                     | 8.9E+01    | 0.0010       | 0.005       | NE             | NE            | 8.9E+01            |                          | 0.00452 1 U U     |
| VOLATILES      | 1,1-Dichloroethene                                     | 2.7E+01    | 0.0005       | 0.005       | NE             | NE            | 2.7E+01            |                          | 0.00452 1 U U     |
| VOLATILES      | 1,1-Dichloropropene                                    | 9.9E-01    | 0.0005       | 0.005       | NE             | NE            | 9.9E-01            |                          | 0.00452 1 U U     |
| VOLATILES      | 1,2,3-Trichlorobenzene                                 | 4.2E+01    | 0.0005       | 0.005       | NE             | NE            | 4.2E+01            |                          | 0.00452 1 U U     |
| VOLATILES      | 1,2,3-Trichloropropane                                 | 9.2E-02    | 0.0010       | 0.005       | NE             | NÉ            | 9.2E-02            |                          | 0.00452 1 U U     |
| VOLATILES      | 1,2,4-Irichlorobenzene                                 | 1.4E+02    | 0.0005       | 0.005       | NE             | NE            | 1.4E+02            |                          | 0.00452 1 U U     |
| VOLATILES      | 1,2,4-TrimediyiDenzene<br>1,2,Dibromo,3, chloropropapa | 9.000      | 0.0005       | 0.005       | NE             |               | 9.6E+00            |                          | 0.00452 1 0 0     |
| VOLATILES      | 1.2-Dibromoethane                                      | 5.3E-02    | 0.0025       | 0.005       | NE             | NE            | 5.5E-01<br>5.3E-02 |                          | 0.00452 1 0 0     |
| VOLATILES      | 1.2-Dichlorobenzene                                    | 5.6E+01    | 0.0005       | 0.005       | NE             | NE            | 5.6E+01            |                          | 0.00452 1 U U     |
| VOLATILES      | 1,2-Dichloroethane                                     | 2.7E-01    | 0.0005       | 0.005       | NE             | NE            | 2.7E-01            |                          | 0.00452 1 U U     |
| VOLATILES      | 1,2-Dichloropropane                                    | 1.8E+00    | 0.0005       | 0.005       | NE             | NE            | 1.8E+00            |                          | 0.00452 1 U U     |
| VOLATILES      | 1,2-Dimethylbenzene (o-Xylene)                         | 3.3E+03    | 0.0005       | 0.005       | NE             | NE            | 3.3E+03            |                          | 0.00452 1 U U     |
| VOLATILES      | 1,3,5-Trimethylbenzene                                 | 8.3E+00    | 0.0005       | 0.005       | NE             | NE            | 8.3E+00            |                          | 0.00452 1 U U     |
| VOLATILES      | 1,3-Dichloropenzene                                    | 5.1E+00    | 0.0005       | 0.005       | NE             | NE            | 5.1E+00            |                          | 0.00452 1 U U     |
| VOLATILES      | 1.3-Dichloropenzene                                    | 3.00+00    | 0.0005       | 0.005       | NE             | NE            | 3.0E+00            |                          | 0.00452 1 0 0     |
| VOLATILES      | 2 2-Dichloropronane                                    | 176+00     | 0.0005       | 0.005       | NE             | NE            | 1.75+00            |                          | 0.00452 1 0 0     |
| VOLATILES      | 2-Butanone   | 2.6E+03    | 0.0025       | 0.010       | NE             | NE            | 2.6E+03            |                          | 0.00904 1 U U     |
| VOLATILES      | 2-Chloroethyl vinyl ether                              | 2.1E-01    | 0.0020       | 0.010       | NE             | NE            | 2.1E-01            |                          | 0.00904 1 U U     |
| VOLATILES      | 2-Chlorotoluene  | 1.5E+02    | 0.0005       | 0.005       | NE             | NE            | 1.5E+02            |                          | 0.00452 1 U U     |
| VOLATILES      | 2-Hexanone   | 6.2E+00    | 0.0025       | 0.010       | NE             | NE            | 6.2E+00            |                          | 0.00904 1 U U     |
| VOLATILES      | 4-Chlorotoluene  | 3.4E-01    | 0.0005       | 0.005       | NE             | NE            | 3.4E-01            |                          | 0.00452 1 U U     |
| VOLATILES      | Acetone  | 1.7E+02    | 0.0050       | 0.010       | NE             | NE            | 1.7E+02            |                          | 0.00904 1 U U     |
| VOLATILES      | Denzene<br>Romebaaraa                                  | 8.8E-01    | 0.0005       | 0.005       | NE             | NE            | 8.8E-01            |                          | 0.00452 1 U U     |
| VOLATILES      | Bromochleromethane                                     | 2.45+01    | 0.0005       | 0.005       |                |               | 1.1E+01            |                          | 0.00452 1 0 0     |
| VOLATILES      | Bromodichloromethane                                   | 1.0E+01    | 0.0005       | 0.005       |                | NE            | 10001              |                          | 0.00452 1 0 0     |
| VOLATILES      | Bromoform  | 3.4E+01    | 0.0005       | 0.005       | NE             | NE            | 3.4E+01            |                          | 0.00452 1 1/ 1/   |
| VOLATILES      | Bromomethane   | 3.5E-01    | 0.0010       | 0.010       | NE             | NE            | 3.5E-01            |                          | 0.00904 1 U U     |
| VOLATILES      | Carbon disulfide                                       | 1.0E+02    | 0.0005       | 0.005       | NE             | NE            | 1.0E+02            |                          | 0.00452 1 U U     |
| VOLATILES      | Carbon tetrachloride                                   | 3.5E-01    | 0.0005       | 0.005       | NE             | NE            | 3.5E-01            |                          | 0.00452 1 U U     |
| VOLATILES      | Chlorobenzene  | 4.0E+01    | 0.0005       | 0.005       | NE             | NE            | 4.0E+01            |                          | 0,00452 1 U U     |

| Table 4-109  |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump-093   |

| [SUMP] = SUMPO<br>LOCATION _COE<br>SAMPLE_NO<br>SAMPLE_DATE | 093<br>DE                 | TCEQ<br>Risk-Based |             |              | Backç<br>Concentrai | pround<br>tions in Soil | Applicable<br>TCEQ | 35SUMP093-SB01<br>35-SMP093-SB01-01<br>9/21/2006 | 35SUMP093-SB01<br>35-SMP093-SB01-02<br>9/21/2006 |
|---|---------------------------|--------------------|-------------|--------------|---------------------|-------------------------|--------------------|--|--|
| DEPTH   |                           | Screening          | Method      | Method       | (95% UP             | L, mg/kg)               | Risk-Based         | .55Ft  | 0.0+0.0Ft  |
| SAMPLE_PURPO  | JSE                       | value              | Detection   | Quantitation | Sunace              | Subsurface              | Screening          | REG  | REG  |
| Test Group  | Parameter (Units = mg/kg) | (RBSV)*            | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft          | 1.5 - 2.5 Ft            | Value              | Result DIL_LQ_VQ                                 | Result DIL LQ VQ                                 |
| VOLATILES   | Chtoroethane              | 1.1E+03            | 0.0010      | 0.010        | NE                  | NE                      | 1.1E+03            |  | 0.00904 1 U U                                    |
| VOLATILES   | Chloroform                | 3.1E-01            | 0.0005      | 0.005        | NE                  | NE                      | 3.1E-01            |  | 0.00452 1 U U                                    |
| VOLATILES   | Chloromethane             | 2.3E-01            | 0.0020      | 0.010        | NE                  | NE                      | 2.3E-01            |  | 0.00904 1 U U                                    |
| VOLATILES   | cis-1,2-Dichloroethene    | 1.2E+02            | 0.0005      | 0.005        | NE                  | NE                      | 1.2E+02            |  | 0.00452 1 U U                                    |
| VOLATILES   | cis-1,3-Dichloropropene   | 1.2E+00            | 0.0005      | 0.005        | NE                  | NE                      | 1.2E+00            |  | 0.00452 1 U U                                    |
| VOLATILES   | Dibromochloromethane      | 7.6E+00            | 0.0005      | 0.005        | NE                  | NE                      | 7.6E+00            |  | 0.00452 1 U U                                    |
| VOLATILES   | Dibromomethane            | 1.9E+01            | 0.0005      | 0.005        | NE                  | NE                      | 1,9E+01            |  | 0.00452 1 U U                                    |
| VOLATILES   | Dichlorodifluoromethane   | 2.2E+02            | 0.0010      | 0.010        | NE                  | NE                      | 2.2E+02            |  | 0.00904 1 U U                                    |
| VOLATILES   | Ethylbenzene              | 4.3E+02            | 0.0005      | 0.005        | NE                  | NE                      | 4.3E+02            |  | 0.00452 1 U U                                    |
| VOLATILES   | Hexachtorobutadiene       | 1.6E+00            | 0.0005      | 0.005        | NÉ                  | NE                      | 1.6E+00            |  | 0.00452 1 U U                                    |
| VOLATILES   | Isopropylbenzene          | 5.4E+02            | 0.0005      | 0.005        | NE                  | NE                      | 5.4E+02            |  | 0.00452 1 U U                                    |
| VOLATILES   | m,p-Xylenes               | 2.3E+02            | 0.0005      | 0.005        | NE                  | NE                      | 2.3E+02            |  | 0.00452 1 U U                                    |
| VOLATILES   | Methyl isobutyl ketone    | 1.3E+03            | 0.0025      | 0.01         | NE                  | NE                      | 1.3E+03            |  | 0.00904 1 U U                                    |
| VOLATILES   | Methylene chloride        | 8.7E+00            | 0.0010      | 0.005        | NE                  | NE                      | 8.7E+00            |  | 0.03270 1  |
| VOLATILES   | Naphthalene               | 1.8E+01            | 0.0005      | 0.01         | NE                  | NE                      | 1.8E+01            |  | 0.00904 1 U U                                    |
| VOLATILES   | n-BUTYLBENZENE            | 2.7E+02            | 0.0005      | 0.005        | NE                  | NE                      | 2.7E+02            |  | 0.00452 1 U U                                    |
| VOLATILES   | n-PROPYLBENZENE           | 3.2E+02            | 0.0005      | 0.005        | NE                  | NE                      | 3.2E+02            |  | 0.00452 1 U U                                    |
| VOLATILES   | p-ISOPROPYLTOLUENE        | 4.2E+02            | 0.0005      | 0.005        | NE                  | NE                      | 4.2E+02            |  | 0.00452 1 U U                                    |
| VOLATILES   | sec-BUTYLBENZENE          | 3.0E+02            | 0.0005      | 0.005        | NE                  | NE                      | 3.0E+02            |  | 0.00452 1 U U                                    |
| VOLATILES   | Styrene                   | 1.3E+03            | 0.0005      | 0.005        | NE                  | NE                      | 1,3E+03            |  | 0.00452 1 U U                                    |
| VOLATILES   | tert-BUTYLBENZENE         | 2.6E+02            | 0.0005      | 0.005        | NE                  | NE                      | 2.6E+02            |  | 0.00452 1 U U                                    |
| VOLATILES   | Tetrachloroethene         | 6.0E+00            | 0.0005      | 0.005        | NE                  | NE                      | 6.0E+00            |  | 0.00452 1 U U                                    |
| VOLATILES   | Toluene                   | 1.1E+03            | 0.0005      | 0.005        | NE                  | NE                      | 1.1E+03            |  | 0.00452 1 U U                                    |
| VOLATILES   | trans-1.2-Dichloroethene  | 1.4E+02            | 0.0005      | 0.005        | NE                  | NE                      | 1,4E+02            |  | 0.00452 1 U U                                    |
| VOLATILES   | trans-1.3-Dichloropropene | 1.8E+00            | 0.0005      | 0.005        | NE                  | NE                      | 1.8E+00            |  | 0.00452 1 U U                                    |
| VOLATILES   | Trichloroethene           | 3.7E+00            | 0.0005      | 0.005        | NE                  | NË                      | 3.7E+00            |  | 0.00452 1 U U                                    |
| VOLATILES   | Trichlorofluoromethane    | 2.6E+02            | 0.0010      | 0.01         | NE                  | NE                      | 2.6E+02            |  | 0.00904 1 U U                                    |
| VOLATILES   | Vinvl acetate             | 5.7E+01            | 0.0010      | 0.01         | NE                  | NE                      | 5.7E+01            |  | 0.00904 1 U UJ                                   |
| VOLATILES   | Vinyl chloride            | 3.6E-02            | 0.0010      | 0.01         | NE                  | NE                      | 3.6E+02            |  | 0.00904 1 U U                                    |

| Table 4-110  |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Proven 404   |

| Sum  | n1  | 21       |  |
|------|-----|----------|--|
| QUIN | µ-, | <b>-</b> |  |

|   |            |             | -            |                       | 1                      |                         |                   |                          |
|---|------------|-------------|--------------|-----------------------|------------------------|-------------------------|-------------------|--------------------------|
| [SUMP] = SUMP121                          |            |             |              |                       |                        |                         | 35SUMP121_SB01    | 35SUMP121-S801           |
| LOCATION _CODE                            |            |             |              | Deale                 | mound                  | Applichia               | 35-SMP121-SB01-01 | 35-SMP121-SB01-02        |
| SAMPLE_NO                                 | TCEQ       |             |              | Concerts              | giouna<br>Hene in Sait | TOEO                    | 9/14/2006         | 9/14/2006                |
| SAMPLE_DATE                               | Risk-Based |             |              | Concenua<br>(CEO/ LIE | atons at son           | Dick.Sacod              | 5- 5 Et           | 10 - 10 Ft               |
| DEPTH                                     | Screening  | Method      | Method _     | 190% 0F               | <u>ч., пкр/крј</u>     | Risk-Daseu<br>Careoning | REG               | REG                      |
| SAMPLE_PURPOSE                            | Value      | Detection   | Quantitation | Sunace                | Subsurface             | Scieeuma                |                   |                          |
| Test Group Parameter (Units = mg/kg)      | (RBSV)*    | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft            | 1.5 - 2.5 Ft           | Value                   | Result DIL LO V   | <u> Result DIL LQ VQ</u> |
| SEMIVOLATILES 124-Trichlorobenzene        | 1.36E+03   | 0.0825      | 0.165        | NE                    | NE                     | 1.4E+03                 | 0.182 1 U U       | 3.780 20 0 0             |
| SEMIVOLATILES 12-Dichlombenzene           | 5.61E+02   | 0.0825      | 0.165        | NE                    | NE                     | 5.6E+02                 | 0.182 1 U L       | 3.780 20 U U             |
| SEMINOLATILES 1,2 Dichlorobenzene         | 5 05E+01   | 0.0825      | 0.165        | NE                    | NE                     | 5.1E+01                 | 0.182 1 U L       | J 3.780 20 U U           |
| SEMIVOLATILES 1,5-Dictionoberzone         | 2.67E+02   | 0.0825      | 0.165        | NE                    | NË                     | 2.7E+02                 | 0.182 1 U L       | J 3.780 20 U U           |
| SEMIVOLATILES 1,4-Dictoloberizerie        | 4 555-04   | 0.0825      | 0.165        | NF                    | NE                     | 1.6E+04                 | 0.182 1 U U       | J 3,780 20 U U           |
| SEMIVOLATILES 2,4,5-Thchlorophenol        | 4.455+04   | 0.0025      | 0.165        | NE                    | NE                     | 4.5E+01                 | 0.182 1 U U       | ) 3.780 20 U U           |
| SEMIVOLATILES 2,4,6-Trichlorophenol       | 4.435701   | 0.0025      | 0.165        | NE                    | NE                     | 4.7E+02                 | 0.182 1 U U       | ) 3.780 20 U U           |
| SEMIVOLATILES 2.4-Dichlorophenol          | 4.000002   | 0.0025      | 0.165        |                       | NE                     | 3 1E+03                 | 0.182 1 U U       | 3,780 20 U U             |
| SEMIVULATILES 2,4-Dimetryphenol           | 3.100703   | 0.0023      | 0.105        | 씨둔                    | NE                     | 3 1E+02                 | 0.912 1 U L       | ) 18,900 20 U U          |
| SEMIVOLATILES 2,4-Dinitrophenol           | 3.1005.04  | 0.3300      | 0,025        | NE                    | NE                     | 7 2E-01                 | 0.182 1 U L       | 3.780 20 U U             |
| SEMIVOLATILES 2,4-Dinitrotoluene          | 7.20E-01   | 0.0625      | 0.100        |                       | NE                     | 7 2E-01                 | 0.182 1 U L       | 3.780_20 U U             |
| SEMIVOLATILES 2,6-Dinitrotoluene          | 7.20E-01   | 0.0825      | 0.105        |                       |                        | 1 1 5+04                | 0.182 1 11 1      | 3780 20 U U              |
| SEMIVOLATILES 2-Chloronaphinalene         | 1.10E+04   | 0.0825      | 0.165        | NE                    | NE                     | 4 16+04                 | 0.102 1 11 1      | 3780 20 U U              |
| SEMIVOLATILES 2-Chlorophenol              | 1.06E+03   | 0.0825      | 0.165        | NE                    |                        | 5.55100                 | 0.182 1 11 1      | 3 780 20 11 11           |
| SEMIVOLATILES 2-Methylnaphthalene         | 5.48E+02   | 0.0825      | 0.165        | NE                    | NE                     | 3,32702                 | 0.102 1 0 0       | 1 3,780 20 U U           |
| SEMIVOLATILES 2-Methylphenol              | 7.74E+03   | 0.0825      | 0.165        | NE                    | NE                     | 1.12703                 | 0.102 1 0 1       | 18900 20 11 11           |
| SEMIVOLATILES 2-Nitroaniline              | 4.65E+01   | 0.3300      | 0.825        | NE                    | NE                     | 4.7E+01                 | 0.182 1 0 0       | 1 3780 20 U U            |
| SEMIVOLATILES 2-Nitrophenol               | 3.10E+02   | 0.0825      | 0.165        | NE                    | NE                     | 3.1E+02                 | 0.102 1 0 0       | 7 550 20 0 0             |
| SEMIVOLATILES 3,3-Dichlorobenzidine       | 1.09E+00   | 0.1650      | 0.330        | NE                    | NE                     | 1.16+00                 | 0.300 1 0 0       | 1 19000 20 0 0 0         |
| SEMIVOLATILES 3-Nitroaniline              | 4.65E+01   | 0.3300      | 0.825        | NE                    | NE                     | 4.7E+01                 | 0.912 1 0 0       |                          |
| SEMIVOLATILES 4.6-Dinitro-2-methylphenol  | 3.10E+02   | 0.3300      | 0.825        | NE                    | NE                     | 3.1E+02                 | 0.912 1 U U       | 18.900 20 0 0            |
| SEMIVOLATILES 4-Bromonhenvi phenvi ether  | 3.12E-01   | 0.0825      | 0.165        | NE                    | NE                     | 3.1E-01                 | 0.182 1 U         | J 3.780 20 U U           |
| SEMIVOLATILES 4-Chloro-3-methylohenol     | 7.74E+02   | 0.0825      | 0.165        | NE                    | NE                     | 7.7E+02                 | 0.182 1 U         | J 3.780 20 0 0           |
| SEMIVOLATILES 4-Chloroanitine             | 6.20E+02   | 0.0825      | 0.165        | NE                    | NE                     | 6.2E+02                 | 0.182 1 U U       | J 3.780 20 0 U           |
| SEMIVOLATILES 4-Chlorophenyl nhenyl ether | 2.77E-01   | 0.0825      | 0.165        | NÉ                    | NÉ                     | 2.8E-01                 | 0.182 1 U U       | J 3.780 20 U U           |
| CEMIVOLATILES 4-Motorburghengi            | 7 74E+02   | 0.0825      | 0.165        | NE                    | NE                     | 7.7E+02                 | 0.182 1 U         | J 3.780 20 U U           |
| CEMB/OLATILES 4-Microphine                | 1 29E+02   | 0.3300      | 0.825        | NE                    | NE                     | 1.3E+02                 | 0.912 1 U         | J 18.900 20 U U          |
| SENAVOLATILES 4 Nitrophonol               | 3 105+02   | 0.3300      | 0.825        | NE                    | NE                     | 3.1E+02                 | 0.912 1 U         | J 18.900 20 U U          |
| SEMIYODATILES 4-Induction                 | 8.25+02    | 0.0825      | 0.165        | NE                    | NE                     | 8.2E+02                 | 0.182 1 U         | J 3.780 20 U U           |
| SEMIVOLATILES Acceleptionene              | 8 22 = +03 | 0.0825      | 0.165        | NE                    | NE                     | 8.2E+03                 | 0.182 1 U         | J 3.780 20 ປັປ           |
| SEMIVOLATILES Adenapharysene              | 4 112-04   | 0.0025      | 0 165        | NE                    | NE                     | 4.1E+04                 | 0,182 1 U         | J 3.780 20 U U           |
| SEMIVOLATILES Anutacene                   | 6.265-01   | 0.0825      | 0.165        | 0.0153                | NE                     | 6.3E-01                 | 0.182 1 U         | ⊔ 3.780 20 U U           |
| SEMIVOLATILES Benzolajaninracene          | 6.200-01   | 0.0025      | 0.165        | 0.0154                | NE                     | 1.7E-01                 | 0.092 1 U         | U 1,910 20 U U           |
| SEMIVOLATILES Benzo(a)pyrene              | 0.200-02   | 0.0025      | 0.165        | 0.0153                | NE                     | 6 3E-01                 | 0.182 1 U         | U 3.780 20 U U           |
| SEMIVOLATILES Benzo(b)nuoraninene         | 0.200-01   | 0.0025      | 0.165        | 0.0100                | NE                     | 4 1E+03                 | 0.182 1 U         | U 3.780 20 U U           |
| SEMIVOLATILES Benzo(ghi)perviene          | 4.11E+03   | 0.0620      | 0.100        | 0.0123                | NE                     | 6 3E+00                 | 0.182 1 U         | 3,780 20 U U             |
| SEMIVOLATILES Benzo(k)nuorantnene         | 0.202700   | 0.0020      | 0.105        | NE                    | ME                     | 6.2E+05                 | 0.912 1 U         | U 18.900 20 U U          |
| SEMIVOLATILES Benzoic Acid                | 6.20E+00   | 0.3300      | 0.025        | NE                    | NE                     | 4 7E+04                 | 0.182 1 U         | 3.780 20 U U             |
| SEMIVOLATILES Benzyl Alconol              | 4,000+04   | 0.0025      | 0.105        | 200                   | NE                     | 2.95-01                 | 0.182 1 U         | Ü 3.780 20 U U           |
| SEMIVOLATILES bis(2-Chloroethoxy)methane  | 3 2.89E-01 | 0.0023      | 0.100        | NE                    | NE                     | 1.75-01                 | 0.092 1 11        | U 1940 20 U U            |
| SEMIVOLATILES bis(2-Chloroethyl)ether     | 1.49E-01   | 0.0825      | 0,105        | NE                    | NE                     | 4 8E+01                 | 0.182 1 U         | 3.780 20 U U             |
| SEMIVOLATILES bis(2-Chloroisopropyl)ether | 4.758+01   | 0.0825      | 0.100        |                       | NE                     | 1 7E+01                 | 0.107 1 1         | 1 3,780 20 U U           |
| SEMIVOLATILES bis(2-Ethylhexyl)phtnalate  | 1,745+01   | 0.0825      | 0.100        | NE                    | NE                     | 3 15+01                 | 0.182 1 11        | 1 3,780 20 U U           |
| SEMIVOLATILES Butyl benzyl phthalate      | 3.10E+04   | 0.0825      | 0.100        | NE<br>A OIEI          | NE                     | 635+01                  | 0.182 1 1         | Ŭ 3,780 20 U U           |
| SEMIVOLATILES Chrysene                    | 6.26E+U1   | 0.0825      | 0.165        | 0.0131                |                        | 172.01                  | 0.002 1 11        | 1 910 20 U U             |
| SEMIVOLATILES Dibenzo(a,h)anthracene      | 6.26E-02   | 0.0825      | 0.165        | NE                    | NE                     | 6.05+02                 | 0.022 1 11        | U 3780 20 U U            |
| SEMIVOLATILES Dibenzofuran                | 6.20E+02   | 0.0825      | 0.165        | NE                    | NE                     | 1 25405                 | 0.102 1 0         | U 3780 20 U U            |
| SEMIVOLATILES Diethyl phthalate           | 1.246+05   | 0.0825      | 0.105        | NE                    |                        | 1.25+05                 | 0.182 1 1         | 1 3780 20 U U            |
| SEMIVOLATILES Dimethyl phthalate          | 1.24E+05   | 0.0825      | 0.165        | NE                    |                        | 1.20100                 | 0.182 1 1         | 1 3 780 20 U U           |
| SEMIVOLATILES di-n-Butyl phthalate        | 1.55E+04   | 0.0825      | 0,165        | NE                    | NE                     | 2.45+02                 | 0,182 1 1         | U 3780 20 U U            |
| SEMIVOLATILES di-n-Octyl phthalate        | 3.07E+03   | 0.0825      | 0.165        | NE                    | NC                     | 5.16403                 | 0,102 1 0         | 1 3780 20 U U            |
| SEMIVOLATILES Fluoranthene                | 5.48E+03   | 0.0825      | 0.165        | 0.0229                | NE                     | 5.567.03                | 0.182 1 0         | 1 3780 20 U U            |
| SEMIVOLATILES Fluorene                    | 5.48E+03   | 0.0825      | 0.165        | NE                    | NE                     | 5.5E+03                 | 0.102 1 0         | 1 3790 20 U U            |
| SEMIVOLATILES Hexachlorobenzene           | 2.51E-01   | 0.0825      | 0.165        | NE                    | NE                     | 2.5E-U1                 | 0.102 1 0         | 1 2780 20 11 11          |
| SEMIVOLATILES Hexachlorobutadiene         | 1.58E+01   | 0.0825      | 0.165        | NE                    | NE                     | 1.02+01                 | 0.182 1 0         | U 1780 20 U U            |
| SEMIVOLATILES Hexachiorocyclopentadiene   | 1.02E+01   | 0.0825      | 0.165        | NE                    | NE                     | 1,0E+01                 | 0.182 1 0         | 0 3.780 20 0 0           |
| SEMIVOLATILES Hexachloroethane            | 1.55E+02   | 0.0825      | 0.165        | NE                    | NE                     | 1.6E+02                 | 0.182 1 U         | 0 3.760 20 0 0           |
| SEMIVOLATILES Indeno(1.2.3-cd)pyrene      | 6.26E-01   | 0.0825      | 0.165        | 0.0143                | NE                     | 6.3E-01                 | 0.182 1 0         | 0 3.760 20 0 0           |
| SEMIVOLATILES Isophorone                  | 5.15E+03   | 0.0825      | 0.165        | NE                    | NE                     | 5.2E+03                 | 0.182 1 0         | 0 3,780 20 0 0           |
| SEMIVOLATILES Naphthalene                 | 1.81E+02   | 0.0825      | 0.165        | NE                    | NE                     | 1.8E+02                 | 0,182 1 0         | U 3,760 20 U U           |
| SEMIVOLATILES Nitrobenzene                | 6.49E+01   | 0.0825      | 0.165        | NË                    | NE                     | 6.5E+01                 | 0.182 1 U         | U 3.780 20 U U           |
| SEMIVOLATILES n-Nitroso-di-n-propylamine  | 4.10E-02   | 0.0825      | 0.165        | NE                    | NE                     | 1.7E-01                 | 0.092 1 U         |                          |
| SEMIVOLATILES n-Nitrosodiphenvlamine      | 5.85E+01   | 0.0825      | 0.165        | NE                    | NE                     | 5.9E+01                 | 0.182 1 U         | U 3.780 20 U U           |
| SEMIVOLATILES Pentachlorophenol           | 3.01E+00   | 0.3300      | 0.825        | NE                    | NE                     | 3.0E+00                 | 0.912 1 U         | U 18.900 20 U U          |
| SEMIVOLATILES Phenanthrene                | 4.11E+03   | 0.0825      | 0,165        | NE                    | NE                     | 4.1E+03                 | 0.182 1 U         | U 3.780 20 U U           |
| SEMIVOLATILES Phenol                      | 4.65E+04   | 0.0825      | 0.165        | NË                    | NE                     | 4.7E+04                 | 0.182 1 U         | U 3.780 20 U U           |
| SEMIVOLATILES Pyrene                      | 4.11E+03   | 0.0825      | 0.165        | 0.0194                | NE                     | 4.1E+03                 | 0.182 1 U         | 0 3.780 20 0 0           |
| SOLIDS Percent Solids                     | NE         | NE          | NE           | NE                    | NE                     |                         | 89.600 1          | 85,400 1                 |
| VOLATILES 1.1.1.2-Tetrachloroethane       | 5.17E+01   | 0.0005      | 0.005        | NË                    | NE                     | 5.2E+01                 |                   | 0,005 1 0 0              |
| VOLATILES 1,1,1-Trichloroethane           | 2.32E+03   | 0.0005      | 0.005        | NE                    | NÉ                     | 2.3E+03                 | 1                 | 0.005 1 0 0              |

### Table 4-110 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-121

| [SUMP] = SUMP1 | 21   |                      |             |              |            |               |            |                  |             | 0004     |
|----------------|--|----------------------|-------------|--------------|------------|---------------|------------|------------------|-------------|----------|
| SAMPLE NO      | )E   | TCEO                 |             |              | Back       | round         | Annlichte  | 3550MP121-5801   | 35-SMP121-S | -SEU1    |
| SAMPLE DATE    |  | Risk-Based           |             |              | Concentra  | tions in Soil | TCEQ       | 9/14/2006        | 9/14/200    | 36       |
| DEPTH -        |  | Screening            | Method      | Method _     | (95% UP    | 'L, mg/kg)    | Risk-Based | .55 Ft           | 10 - 10     | Ft       |
| SAMPLE_PURPO   | DSE  | Value                | Detection   | Quantitation | Surface    | Subsurface    | Screening  | REG              | REG         |          |
| Test Group     | Parameter (Units = mg/kg)                    | (RBSV) *             | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | Value      | Result DIL LQ VQ | Result DI   | L LQ VQ  |
| VOLATILES      | 1,1,2,2-Tetrachioroethane                    | 5.08E+00             | 0.0005      | 0.005        | NE         | NE            | 5.1E+00    |                  | 0.005 1     | 0 0      |
| VOLATILES      | 1,1,2-1 nchloroethane                        | 9.09E+00             | 0.0005      | 0.005        | NE         |               | 9.72+00    |                  | 0.005 1     | 0 U      |
| VOLATILES      | 1.1-Dictioroethene                           | 2.68E+02             | 0.0005      | 0.005        | NE         | NE            | 275+02     |                  | 0.005 1     | υŭ       |
| VOLATILES      | 1.1-Dichloropropene                          | 9.92E-01             | 0.0005      | 0.005        | NE         | NE            | 9.9E-01    |                  | 0.005 1     | ŭŭ       |
| VOLATILES      | 1,2,3-Trichlorobenzene                       | 4.20E+02             | 0.0005      | 0.005        | NE         | NE            | 4.2E+02    |                  | 0.005 1     | ŪŪ       |
| VOLATILES      | 1,2,3-Trichloropropane                       | 9.15E-02             | 0.0010      | 0.005        | NE         | NE            | 9.2E-02    |                  | 0.005 1     | Ųυ       |
| VOLATILES      | 1,2,4-Trichlorobenzene                       | 1.36E+03             | 0.0005      | 0.005        | NE         | NE            | 1.4E+03    |                  | 0.005 1     | U U      |
| VOLATILES      | 1,2,4-1 rimethylbenzene                      | 9.605+01             | 0.0005      | 0.005        | NE         | NE            | 9.6E+01    |                  | 0.005 1     |          |
| VOLATILES      | 1,2-Dibromoethage                            | 3.40E-01<br>5 31E-02 | 0.0020      | 0.005        | NE         | NE            | 5.35-01    |                  | 0,005 1     | 0 0      |
| VOLATILES      | 1.2-Dichlorobenzene                          | 5.61E+02             | 0.0005      | 0.005        | NE         | NE            | 5.6E+02    |                  | 0.005 1     | ម័រ      |
| VOLATILES      | 1.2-Dichloroethane                           | 2.69E-01             | 0.0005      | 0.005        | NE         | NË            | 2.7E-01    |                  | 0.005 1     | บีบี     |
| VOLATILES      | 1,2-Dichloropropane                          | 9.42E+00             | 0.0005      | 0.005        | NE         | NE            | 9.4E+00    |                  | 0.005 1     | ŪŪ       |
| VOLATILES      | 1,2-Dimethylbenzene (o-Xylene)               | 3.27E+04             | 0.0005      | 0.005        | NE         | NE            | 3.3E+04    |                  | 0.005 1     | υυ       |
| VOLATILES      | 1,3,5-Trimethylbenzene                       | 8.28E+01             | 0.0005      | 0.005        | NE         | NË            | 8.3E+01    |                  | 0.005 1     | 0 0      |
| VOLATILES      | 1,3-Dichlorobenzene<br>1,3 Dichloroproposo   | 5.05E+01             | 0.0005      | 0.005        | NE         | NE            | 5.1E+01    |                  | 0.005 1     | 0 0      |
| VOLATILES      | 1.3-Dichloropeozene                          | 2.80E+01<br>2.67E+02 | 0.0005      | 0.005        | NE         |               | 3,05+01    |                  | 0.005 1     |          |
| VOLATILES      | 2.2-Dichloropropage                          | 1.70E+01             | 0.0005      | 0.005        | NE         | NE            | 1.7E+01    |                  | 0.005 1     | йй       |
| VOLATILES      | 2-Butanone                                   | 2.61E+04             | 0.0025      | 0.010        | NE         | NE            | 2.6E+04    |                  | 0.009 1     | ŭŬ       |
| VOLATILES      | 2-Chloroethyl vinyl ether                    | 2.14E+00             | 0.0020      | 0.010        | NE         | NE            | 2.1E+00    |                  | 0.009 1     | ŪŪ       |
| VOLATILES      | 2-Chtorotoluene                              | 1.54E+03             | 0.0005      | 0.005        | NE         | NE            | 1.5E+03    |                  | 0.005 1     | υυ       |
| VOLATILES      | 2-Hexanone                                   | 6.20E+01             | 0.0025      | 0.010        | NE         | NE            | 6.2E+01    |                  | 0.009 1     | υu       |
| VOLATILES      | 4-Chiorotoluene                              | 3.446+00             | 0.0005      | 0.005        | NE         | NE            | 3.4E+00    |                  | 0.005 1     |          |
| VOLATILES      | Renzene                                      | 8.825-01             | 0.0000      | 0.070        | NE         | NE            | 9.95.01    |                  | 0.009 1     |          |
| VOLATILES      | Bromobenzene                                 | 1.12E+02             | 0.0005      | 0.005        | NE         | NE            | 1 1E+02    |                  | 0.005 1     | ŭŭ       |
| VOLATILES      | Bromochloromethane                           | 2.41E+02             | 0.0005      | 0.005        | NE         | NE            | 2.4E+02    |                  | 0.005 1     | ŭŬ       |
| VOLATILES      | Bromodichloromethane                         | 1.03E+01             | 0.0005      | 0.005        | NE         | NE            | 1.0E+01    |                  | 0.005 1     | υÚ       |
| VOLATILES      | Bromoform                                    | 3.35E+01             | 0.0005      | 0.005        | NE         | NE            | 3.4E+01    |                  | 0.005 1     | υυ       |
| VOLATILES      | Bromomethane                                 | 3.49E+00             | 0.0010      | 0.010        | NE         | NE            | 3.5E+00    |                  | 0.009 1     |          |
| VOLATILES      | Carbon disultate                             | 1.030+03             | 0.0005      | 0.005        | NE         | NE            | 1.02+03    |                  | 0.005 1     |          |
| VOLATILES      | Chlorobenzene                                | 3.98E+02             | 0.0005      | 0.005        | NE         | NE            | 3.52-01    |                  | 0.005 1     | ЦЦ       |
| VOLATILES      | Chloroethane                                 | 1.13E+04             | 0.0010      | 0.010        | NE         | NE            | 1.1E+04    |                  | 0.009 1     | ŭŭ       |
| VOLATILES      | Chloroform                                   | 3.06E-01             | 0.0005      | 0.005        | NE         | NE            | 3.1E-01    |                  | 0.005 1     | ŨŨ       |
| VOLATILES      | Chloromethane                                | 2.27E+00             | 0.0020      | 0.010        | NE         | NE            | 2.3E+00    |                  | 0.009 1     | υυ       |
| VOLATILES      | cis-1,2-Dichlaraethene                       | 1.15E+03             | 0.0005      | 0.005        | NE         | NE            | 1.2E+03    |                  | 0.033 1     |          |
| VOLATILES      | cis-1,3-Dichloropropene                      | 1.196+01             | 0.0005      | 0.005        | NE         | NE            | 1.2E+01    |                  | 0.005 1     | 0 0      |
| VOLATILES      | Dibromomethane                               | 1.02E+01             | 0.0005      | 0.005        | NE         | NE            | 1.02+01    |                  | 0.005 1     | 00       |
| VOLATILES      | Dichlorodifluommethane                       | 2 16E+03             | 0.0000      | 0.010        | NE         | NE            | 2.25+03    |                  | 0.000 1     | йŭ       |
| VOLATILES      | Ethylbenzene                                 | 4.31E+03             | 0.0005      | 0.005        | NE         | NE            | 4.3E+03    |                  | 0.005 1     | ŭΫ       |
| VOLATILES      | Hexachlorobutadiene                          | 1.58E+01             | 0.0005      | 0.005        | NE         | NE            | 1.6E+01    |                  | 0.005 1     | ÚÚ       |
| VOLATILES      | Isopropylbenzene                             | 5.38E+03             | 0.0005      | 0.005        | NE         | NE            | 5.4E+03    |                  | 0.005 1     | υυ       |
| VOLATILES      | m,p-Xylenes                                  | 2.32E+02             | 0.0005      | 0.005        | NE         | NE            | 2.3E+02    |                  | 0.005 1     | U U      |
| VOLATILES      | Melnyi isoburyi kelone<br>Melbulana oblarida | 1.29E+04             | 0.0025      | 0.01         | NE         | NE            | 1.3E+04    |                  | 0.009 1     |          |
| VOLATILES      | Nachthalene                                  | 1.81E+02             | 0.0010      | 0.005        | NE         | NE NE         | 1 95-102   |                  | 0.000 1     | Π ŭ      |
| VOLATILES      | n-BUTYLBENZENE                               | 2.70E+03             | 0.0005      | 0.005        | NE         | NE            | 2.7E+03    |                  | 0.005 1     | ŭŭ       |
| VOLATILES      | n-PROPYLBENZENE                              | 3.21E+03             | 0.0005      | 0.005        | NE         | NE            | 3.2E+03    |                  | 0.005 1     | ŬŬ       |
| VOLATILES      | p-ISOPROPYLTOLUENE                           | 4.20E+03             | 0.0005      | 0.005        | NE         | NE            | 4.2E+03    |                  | 0.005 1     | υU       |
| VOLATILES      | Sec-BUTYLBENZENE                             | 3.00E+03             | 0.0005      | 0.005        | NE         | NE            | 3.0E+03    |                  | 0.005 1     | UU       |
| VOLATILES      | Styrene                                      | 1.31E+04             | 0.0005      | 0.005        | NE         | NE            | 1.3E+04    |                  | 0.005 1     | <u> </u> |
| VOLATILES      | Tetrachlomethese                             | 2.61E+03             | 0.0005      | 0.005        | NE         | NE            | 2.6E+03    |                  | 0.005 1     | U U      |
| VOLATILES      | Toluene                                      | 1.085+04             | 0.0005      | 0.005        | NE         | NE            | 1 15+04    |                  | 0.005 1     | 00       |
| VOLATILES      | trans-1,2-Dichloroethene                     | 1.38E+03             | 0.0005      | 0.005        | NE         | NE            | 1.4E+03    |                  | 0.005 1     | ŬЙ       |
| VOLATILES      | trans-1,3-Dichloropropene                    | 1.83E+01             | 0.0005      | 0.005        | NE         | NE            | 1.8E+01    |                  | 0.005 1     | ΰŭ       |
| VOLATILES      | Trichloroethene                              | 3.73E+00             | 0.0005      | 0.005        | NE         | NE            | 3.7E+00    |                  | 0.085 1     |          |
| VOLATILES      | Trichlorofluoromethane                       | 2.63E+03             | 0.0010      | 0.01         | NE         | NE            | 2.6E+03    |                  | 0.009 1     | υU       |
| VOLATILES      | Vinyi acetate                                | 5.74E+02             | 0.0010      | 0.01         | NE         | NE            | 5.7E+02    |                  | 0.009 1     |          |
| VOLATILES      | VILIVI CHIOTIOR                              | 3.64E-02             | 0.0010      | 0.01         | NE         | NE            | 3.6E-02    |                  | 0.009 1     | <u> </u> |

### Data Evaluation Report ChemIcal Concentrations in Soil Associated with LHAAP-35/36 Sumps

Table 4-111 Comparison of Chemical Concengtrations In Soil to Risk-Based Screening Values WRSump-014

| [SUMP] = WRSUMP014<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                              | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backg<br>Concentrat<br>(95% UP<br>Surface | iround<br>tions in Soil<br><u>L, mg/kg)</u><br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WRS14-SB01<br>WRS14-SB01-01<br>9/25/2006<br>.55 Ft<br>REG | WRS14-SB01<br>WRS14-SB01-02<br>9/25/2006<br>5 - 5 Ft<br>REG |
|--|------------------------------|--|---------------------|------------------------|---|---|--|---|---|
| Tost Group   | Parameter (Linits = mo/ko)   | (RBSV)*                                  | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft  | Value  | Result_DIL_LQ_VQ_   | Result Dir LO VQ  |
| EXPLOSIVES   | 1.3.5-Trinitrobenzene        | 4.7E+02                                  | 0.1                 | 0.25                   | NE  | NE  | 4.7E+02                                      | 0.250 1 0 0   |   |
| EXPLOSIVES   | 1.3-Dinitrobenzene           | 1.6E+00                                  | 0.1                 | 0.25                   | NE  | NE  | 1.62+00                                      |   | 0.250 1 1 1   |
| EXPLOSIVES   | 2.4.6-Trinitrotoluene        | 7.7E+00                                  | 0.1                 | 0.25                   | NE  | NE  | 7.7E+00                                      |   | 0.250 1 0 0   |
| EXPLOSIVES   | 2,4-Dinitrotoluene           | 7.2E-01                                  | 0.1                 | 0.25                   | NE  | NE  | 7.2E-01                                      | 0.250 1 0 0   | 0.250 1 0 0   |
| EXPLOSIVES   | 2,6-Dinitrotoluene           | 7.2E-01                                  | 0.1                 | 0.26                   | NE  | NE  | 7.25-01                                      | 0.260 1 0 0   | 0260 1 U U  |
| EXPLOSIVES   | 2-Amino-4,6-dinitrotoluene   | 2.6E+00                                  | 0.1                 | 0.28                   | NE  | NE  | 2.65+00                                      | 0.260 1 U U   | 0.260 t U U   |
| EXPLOSIVES   | 4-Amino-2,6-dinitrotoluene   | 2.6E+00                                  | 0.1                 | 0.26                   | NE  | NE  | 2.00+00                                      | 2.200 1 U U   | 2.200 1 U U   |
| EXPLOSIVES   | HMX                          | 2.2E+02                                  | 0.1                 | 0.25                   | NE  | NE  | 4.4E+01                                      | 0.250 1 U U   | 0.250 1 U U   |
| EXPLOSIVES   | m-Nitrotoluene               | 4.46701                                  | 0.13                | 0.26                   | NE  | NE  | 6.5E+00                                      | 0.260 1 U U   | 0,260 1 U U   |
| EXPLOSIVES   | Nitrobenzene                 | 4 7E+01                                  | 0.10                | 0.25                   | NE  | NE  | 4.7E+01                                      | 0.250 1 U UJ  | 0.250 1 U UJ  |
| EXPLOSIVES   | o-Intrototuene               | 445+01                                   | 0.1                 | 0.25                   | NE  | NE  | 4.4E+01                                      | 0.250 1 U U   | 0.250 1 U U   |
| EXPLOSIVES   | p-Mirolouene                 | 3.6E+00                                  | 0.1                 | 1                      | NE  | NE  | 3.6E+00                                      | 1.000 1 U U   | 1.000 1 U U   |
| EXPLOSIVES   | Totod                        | 1.6E+02                                  | 0.2                 | 0.65                   | NE  | NE  | 1.6E+02                                      | 0.650 1 U U   | 0.650 1 U U   |
| METALS   | Atumioum                     | 1.6E+04                                  | 10.000              | 20.00                  | 1.63E+04                                  | 2.08E+04  | 1.6E+04                                      | 6340.000 1  | 11600.000 1   |
| METALS   | Antimopy                     | 7.3E+00                                  | 0.500               | 0.10                   | 9.40E-01                                  | 1.60E+00  | 7.3E+00                                      | 0.108 1 0 0.00  |   |
| METALS   | Arsenic                      | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                  | 5.54E+00  | 2.0E+01                                      | 1.080 1 JL  | 150,000 1   |
| METALS   | Barium                       | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                  | 8.55E+01  | 2.6E+03                                      | 33.200 1  | 0.845 1   |
| METALS   | Beryllium                    | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                  | 7.66E-01  | 4,02+00                                      | 0.055   | 0.118 1 J J   |
| METALS   | Cadmium                      | 5.2E+00                                  | 0.025               | 0.10                   | 1.406+00                                  | 4.002-01  | 5.22+00                                      | 51800.000 5   | 749.000 1   |
| METALS   | Calcium                      | NE                                       | NA                  | NA<br>0.40             | NA<br>0.655104                            | 3 01 5+01   | 5 9E+03                                      | 30,800 1  | 16.400 1  |
| METALS   | Chromium                     | 5.9E+03                                  | 0.100               | 0.40                   | 7.000-01                                  | 5.61E+00  | 1.5E+03                                      | 2.650 1   | 8.870 1   |
| METALS   | Cobalt                       | 1.5E+U3                                  | 0,120               | 0.50                   | 5.55E+00                                  | 9.25E+00  | 1.0E+03                                      | 2.590 1   | 10.400 1  |
| METALS   | Copper                       | 1.02+03                                  | 0.150               | NA                     | NA  | NA  |  | 73100.000 5   | 28800.000 1   |
| METALS   | iron                         | 5 05+02                                  | 0.500               | 5.00                   | 2 26 =+ 01                                | 1.14E+01  | 5.0E+02                                      | 12.400 1  | 17.600 1  |
| METALS   | Lead                         | NE                                       | NA                  | NA                     | NA  | NA  |  | 340.000 1 JH  | 1940.000 1 JH   |
| METALS   | Magnesium                    | 1.7E+03                                  | 0.050               | 0.20                   | 1.26E+03                                  | 2.01E+02  | 1.7E+03                                      | 163.000 1 J   | 366.000 1 J   |
|  | Marcury                      | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                  | 3.60E-01  | 2.5E-01                                      | 0.045 1 J J   | 0.019 1 J J   |
| METALO   | Nickel                       | 1.9E+02                                  | 0.200               | 0.80                   | 6.98E+00                                  | 1.16E+01  | 1.9E+02                                      | 5.620 1   | 18.200 1  |
| METALS   | Potassium                    | NE                                       | NA                  | NA                     | NA  | NA  |  | 115.000 1   | 455,000 1   |
| METALS   | Selenium                     | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                  | 5.57E+00  | 1.3E+02                                      |   | 1740 1 11 11  |
| METALS   | Silver                       | 4.7E+01                                  | 0.050               | 0.20                   | 3.10E-01                                  | 3.70E-01  | 4.7E+01                                      |   | 120,000 1   |
| METALS   | Sodium                       | NÉ                                       | NA                  | NA                     | NA<br>4 705 04                            | NA<br>ME  | 2 05+00                                      | 0.027 1   | 0.083 1   |
| METALS   | Thallium                     | 2.0E+00                                  | 0.010               | 0.02                   | 2 245+01                                  | 4.46E+01  | 4 8E+01                                      | 62,500 1  | 26.100 1  |
| METALS   | Vanadium                     | 4.8E+01                                  | 0.125               | 0.50                   | 5.21ETVI                                  | 2 02E+01  | 5.9E+03                                      | 79,600 1  | 69.300 1  |
| METALS   | Zinc                         | 5.95+03                                  | 0.025               | 2.30<br>0.17           | NF  | NE  | 1.4E+02                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | 1,2,4-Trichlorobenzene       | 1.42+02                                  | 0.003               | 0.17                   | NE  | NE  | 5.6E+01                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | 1,2-Dichlorobenzene          | 5 1 =+ 00                                | 0.083               | 0.17                   | NE  | NE  | 5.1E+00                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | 1,3-Dichlorobenzene          | 2.75+01                                  | 0.083               | 0.17                   | NE  | NE  | 2.7E+01                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | 2 4 5-Trichlorophenol        | 1.6E+03                                  | 0.083               | 0.17                   | NE  | NË  | 1.6E+03                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | 2 4 6-Trichlorophenol        | 4.5E+01                                  | 0.083               | 0.17                   | NE  | NE  | 4.5E+01                                      | 1.760 10 U U  |   |
| SEMIVOLATILES  | 2.4-Dichlorophenol           | 4.7E+01                                  | 0.083               | 0.17                   | NE  | NË  | 4.7E+01                                      | 1,760 10 0 0  | 0.191 1 0 0   |
| SEMIVOLATILES  | 2.4-Dimethylphenol           | 3.1E+02                                  | 0.083               | 0.17                   | NE  | NE  | 3.1E+02                                      |   | 0.191 1 0 0   |
| SEMIVOLATILES  | 2,4-Dinitrophenol            | 3.1E+01                                  | 0.330               | 0.83                   | NE  | NE  | 3.1E+01                                      | 4 760 10 U U  | 0.191 1 11 11   |
| SEMIVOLATILES  | 2.4-Dinitrotoluene           | 7.2E-01                                  | 0.083               | 0.17                   | NE  | NE  | 7.20-01                                      | 1 760 10 0 0  | 0 191 1 U U   |
| SEMIVOLATILES  | 2.6-Dinitrotoluene           | 7.2E-01                                  | 0.083               | 0.17                   | NE  | NE  | 1 18+03                                      | 1 760 10 U U  | 0.191 1 0 0   |
| SEMIVOLATILES  | 2-Chloronaphthalene          | 1.1E+03                                  | 0.083               | 0.17                   | NE  |   | 1 1E+02                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | 2-Chlorophenol               | 1.1E+02                                  | 0.083               | 0.17                   |   | NÊ  | 5.5E+01                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | 2-Methylnaphthalene          | 5.5E+01<br>7 7E+02                       | 0.003               | 0.17                   | NE  | NE  | 7.7E+02                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | 2-Methylphenol               | 476+00                                   | 0.330               | 0.83                   | NE  | NE  | 4.7E+00                                      | 8,790 10 U U  | 0.956 1 U U   |
| SEMIVOLATILES  | 2-Naroanane<br>2 Nitrophonol | 3 1E+01                                  | 0.083               | 0.17                   | NE  | NE  | 3.1E+01                                      | 1.760 10 U U  | 0.191 1 U U   |
|  | 3.3-Dichlorobenzidine        | 1.1E+00                                  | 0.165               | 0.33                   | NE  | NE  | 1.1E+00                                      | 3.520 10 U U  | 0.382 1 U U   |
| SEMIVOLATILES  | 3-Nitroaniline               | 4.7E+00                                  | 0.330               | 0.83                   | NE  | NE  | 4,7E+00                                      | 8.790 10 U U  | 0.956 1 0 0   |
| SEMIVOLATILES  | 4.6-Dinitro-2-methylohenol   | 3.1E+01                                  | 0.330               | 0.83                   | NE  | NE  | 3.1E+01                                      | 8.790 10 U U  |   |
| SEMIVOLATILES  | 4-Bromophenyl phenyl ether   | 3.1E-02                                  | 0.083               | 0.17                   | NE  | NE  | 1.7E-01                                      | 1 760 10 0 0  | 0.097 1 0 0   |
| SEMIVOLATILES  | 4-Chioro-3-methylphenol      | 7.7E+01                                  | 0.083               | 0.17                   | NE  | NE  | 7.7E+01<br>e 2E+04                           | 1,700 10 0 0  | 0 191 1 1 1   |
| SEMIVOLATILES  | 4-Chloroaniline              | 6.2E+01                                  | 0.083               | 0.17                   | NE  |   | 1.75-01                                      | 0 894 10 11 11  | 0.097 1 U U   |
| SEMIVOLATILES  | 4-Chlorophenyl phenyl ether  | 2.8E-02                                  | 0.083               | 0.17                   | NE  | NE  | 775+01                                       | 1.760 10 U 1  | 0.191 1 U U   |
| SEMIVOLATILES  | 4-Methylphenol               | 7.7E+01                                  | 0.083               | 0.17                   | INC                                       |   | 1 1.12.01                                    |   |   |

Shaw Environmental, Inc.

### 00066616

| Table 4-111  |        |
|--|--------|
| Comparison of Chemical Concengtrations in Soil to Risk-Based Screening | Values |
| WRSump-014   |        |

| [SUMP] = WRSUMP014<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                                | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backg<br>Concentral<br>(95% UP<br>Surface | ground<br>tions in Soil<br><sup>2</sup> L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WRS14-SB01<br>WRS14-SB01-01<br>9/25/2006<br>.55 Ft<br>REG | WRS14-SB01<br>WRS14-SB01-02<br>9/25/2006<br>5 - 5 Ft<br>REG |
|--|--------------------------------|--|---------------------|------------------------|---|---|--|---|---|
| Test Group   | Parameter (Units = mg/kg)      | (RBSV)*                                  | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| SEMIVOLATILES  | 4-Nitroaniline                 | 1.3E+01                                  | 0.330               | 0.83                   | NE  | NE  | 1.3E+01                                      | 8.790 10 U U  | 0.956 1 U U   |
| SEMIVOLATILES  | 4-Nitrophenol                  | 3.1E+01                                  | 0.330               | 0.83                   | NE  | NE  | 3.1E+01                                      | 8.790 10 U U  | 0.955 1 U U   |
| SEMIVOLATILES  | Acenaphthene                   | 8.2E+02<br>8.2E+02                       | 0.083               | 0.17                   | NE  | NE  | 8.2E+02                                      | 1760 10 U U   | 0.191 1 U U   |
| SEMIVOLATILES  | Anthracene                     | 4.12+03                                  | 0.0825              | 0.165                  | NE  | NE  | 4.1E+03                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | Benzo(a)anthracene             | 6.3E-01                                  | 0.0825              | 0.165                  | 1.53E-02                                  | NE  | 6.3E-01                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | Benzo(a)pyrene                 | 6.3E-02                                  | 0.0825              | 0.165                  | 1.54E-02                                  | NE  | 1.7E-01                                      | 0.894 10 U U  | 0.097 1 U U   |
| SEMIVOLATILES  | Benzo(b)fluoranthene           | 6.3E-01                                  | 0.0825              | 0.165                  | 1.53E-02                                  | NE  | 6.3E-01                                      | 1.760 10 0 0  | 0.191 1 0 0   |
| SEMIVOLATILES  | Benzo(ghi)perylene             | 4.1E+02<br>6.2E+00                       | 0.0825              | 0.165                  | 1.236-02                                  | NE  | 4.12702<br>6.3E+00                           | 1760 10 U U   | 0.191 1 U U   |
| SEMIVOLATILES  | Benzoic Acid                   | 6 2E+00                                  | 0.3300              | 0.825                  | NE  | NE  | 6.2E+04                                      | 8.790 10 U UJ   | 0.956 1 U UJ  |
| SEMIVOLATILES  | Benzyl Alcohol                 | 4,7E+03                                  | 0.0825              | 0.165                  | NE  | NE  | 4.7E+03                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | bis(2-Chloroethoxy)methane     | 2.9E-01                                  | 0.0825              | 0.165                  | NE  | NË  | 2.9E-01                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | bis(2-Chloroethyl)ether        | 1.5E-01                                  | 0.0825              | 0.165                  | NE  | NE  | 1.7E-01                                      | 0.894 10 U U  | 0.097 1 U U   |
| SEMIVOLATILES  | bis(2-Chloroisopropyi)ether    | 4.86+00                                  | 0.0825              | 0.165                  | NE  | NE  | 4.85+00                                      | 1760 10 0 0   | 0.191 1 U U   |
| SEMIVOLATILES  | Butul benzyl obthalate         | 3 1E+03                                  | 0.0825              | 0.165                  | NE  | NE  | 3.1E+03                                      | 1,760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | Chrysene                       | 6.3E+01                                  | 0.0825              | 0.165                  | 1.51E-02                                  | NE  | 6.3E+01                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | Dibenzo(a,h)anthracene         | 6.3E-02                                  | 0.0825              | 0.165                  | NE  | NE  | 1.7E-01                                      | 0,894 10 U U  | 0.097 1 U U   |
| SEMIVOLATILES  | Dibenzofuran                   | 6.2E+01                                  | 0.0825              | 0.165                  | NE  | NE  | 6.2E+01                                      | 1.760 10 U U  | 0.191 1 0 0   |
| SEMIVOLATILES  | Diethyl phthalate              | 1.2E+04                                  | 0.0825              | 0.165                  | NE  | NE  | 1.28+04                                      | 1,760 10 0 0  |   |
| SEMIVOLATILES  | dinemyi phinalate              | 1.2ET04<br>1.6E+03                       | 0.0825              | 0.105                  | NE  | NE  | 1.6E+03                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | di-n-Octyl phthalate           | 3.1E+02                                  | 0.0825              | 0.165                  | NE  | NE  | 3.1E+02                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | Fluoranthene                   | 5.5E+02                                  | 0.0825              | 0.165                  | 2.29E-02                                  | NE  | 5.6E+02                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | Fluorene                       | 5.5E+02                                  | 0.0825              | 0.165                  | NE  | NE  | 5.5E+02                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | Hexachlorobenzene              | 2.5E-01                                  | 0.0825              | 0.165                  | NE  | NE  | 2.5E-01                                      |   | 0.191 1 U U   |
| SEMIVOLATILES  | Hexachlorobutadiene            | 1.66+00                                  | 0.0825              | 0.165                  | NE  | NE  | 1.02+00                                      | 1760 10 U U   | 0.191 1 U U   |
| SEMIVOLATILES  | Hexachloroethane               | 1.6E+01                                  | 0.0825              | 0.165                  | NE  | NE  | 1.6E+01                                      | 1,760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | Indeno(1,2,3-cd)pyrene         | 6.3E-01                                  | 0.0825              | 0.165                  | 1.43E-02                                  | NE  | 6.3E-01                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | Isophorone                     | 5.2E+02                                  | 0.0825              | 0.165                  | NE  | NE  | 5.2E+02                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | Naphthalene                    | 1.8E+01                                  | 0.0825              | 0.165                  | NE  | NE  | 1.85+01                                      |   | 0.191 1 0 0   |
| SEMIVOLATILES  | Nitropenzene                   | 0.0E+00<br>4 1E-02                       | 0.0825              | 0,105                  | NE  |   | 17E-01                                       | 0 894 10 U U  | 0.097 1 U U   |
| SEMIVOLATILES  | n-Nitrosodiphenvlamine         | 5.9E+01                                  | 0.0825              | 0.165                  | NE  | NE  | 5.9E+01                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | Pentachlorophenol              | 3.0E+00                                  | 0.3300              | 0.825                  | NE  | NE  | 3.0E+00                                      | 8.790 10 U U  | 0.956 1 U U   |
| SEMIVOLATILES  | Phenanthrene                   | 4.1E+02                                  | 0.0825              | 0.165                  | NE  | NE  | 4.1E+02                                      | 1.760 10 U U  | 0.191 1 U U   |
| SEMIVOLATILES  | Phenol                         | 4.7E+03                                  | 0.0825              | 0.165                  | NE  | NE  | 4.7E+03                                      | 1.760 10 U U  |   |
| SEMIVOLATILES  | Pyrene<br>Derecet Selide       | 4.1E+U2                                  | 0.0825              | 0.165                  | 1.94E-02                                  | NE  | 4,15702                                      | 92 300 1  | 85 300 1  |
| VOLATILES  | 1 1 1 2-Tetrachimoethane       | 5.2E+00                                  | 0.0005              | 0.005                  | NE  | NE  | 5.2E+00                                      |   | 0.006 1 U U   |
| VOLATILES  | 1,1,1-Trichloroethane          | 2.3E+02                                  | 0.0005              | 0,005                  | NE  | NE  | 2.3E+02                                      |   | 0.006 1 U U   |
| VOLATILES  | 1,1,2,2-Tetrachloroethane      | 5.1E-01                                  | 0.0005              | 0.005                  | NE  | NE  | 5.1E-01                                      |   | 0.006 1 U U   |
| VOLATILES  | 1,1,2-Trichloroethane          | 9.7E-01                                  | 0.0005              | 0.005                  | NE  | NE  | 9.7E-01                                      |   |   |
| VOLATILES  | 1,1-Dichloroethane             | 8.95+01                                  | 0.0010              | 0.005                  | NE  | NE  | 2.9E+01                                      |   | 0.006 1 0 0   |
| VOLATILES  | 1,1-Dicaloroenene              | 9.9E-01                                  | 0.0005              | 0.005                  | NE  | NE  | 9.9E-01                                      |   | 0.006 t U U   |
| VOLATILES  | 1,2,3-Trichlorobenzene         | 4.2E+01                                  | 0.0005              | 0.005                  | NE  | NE  | 4.2E+01                                      |   | 0.006 1 U U   |
| VOLATILES  | 1,2,3-Trichloropropane         | 9.2E-02                                  | 0.0010              | 0.005                  | NE  | NE  | 9.2E-02                                      |   | 0.006 1 U U   |
| VOLATILES  | 1,2,4-Trichlorobenzene         | 1.4E+02                                  | 0.0005              | 0.005                  | NE  | NE  | 1.4E+02                                      |   | 0.006 1 U U   |
| VOLATILES  | 1,2,4-Trimethy/benzene         | 9.6E+00                                  | 0.0005              | 0.005                  | NE  | NE  | 9.0E+00<br>3.5E-01                           |   | 0.006 1 11 11   |
| VOLATILES  | 1.2-Dibromoethane              | 5.5E-01                                  | 0.0020              | 0.005                  | NE  | NE  | 5.3E-02                                      |   | 0.006 1 U U   |
| VOLATILES  | 1,2-Dichlorobenzene            | 5.6E+01                                  | 0.0005              | 0.005                  | NE  | NE  | 5.6E+01                                      |   | 0.006 1 U U   |
| VOLATILES  | 1,2-Dichloroethane             | 2.7E-01                                  | 0.0005              | 0.005                  | NE  | NE  | 2.7E-01                                      |   | 0.006 1 U U   |
| VOLATILES  | 1,2-Dichloropropane            | 1.8E+00                                  | 0.0005              | 0.005                  | NE  | NE  | 1.8E+00                                      |   | 0.006 1 U U   |
| VOLATILES  | 1,2-Dimethylbenzene (ö-Xylene) | 3.3E+03                                  | 0.0005              | 0.005                  | NE  | NE  | 3.3E+03<br>8.3E+00                           |   | 0.006 1 U U   |
| VOLATILES  | 1.3-Dichlombenzene             | 5.1E+00                                  | 0.0005              | 0.005                  | NE  | NE  | 5.1E+00                                      |   | 0.006 1 U U   |
| VOLATILES  | 1,3-Dichloropropane            | 3.0E+00                                  | 0.0005              | 0.005                  | NE  | NE  | 3.0E+00                                      |   | 0.006 1 U U   |
| VOLATILES  | 1 4-Dichlorobenzene            | 2.7E+01                                  | 0.0005              | 0.005                  | NE  | NË  | 2.7E+01                                      | 1   | 0.006 1 U U   |

### Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

| 00066617 | • |
|----------|---|
|----------|---|

 Table 4-111

 Comparison of Chemical Concengtrations in Soil to Risk-Based Screening Values

 WRSump-014

| [SUMP] = WRSUMP014<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>DEPTH |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backs<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WRS14-SB01<br>WRS14-SB01-01<br>9/25/2006<br>.55 Ft<br>REG | WRS14-SB01<br>WRS14-SB01-02<br>9/25/2006<br>5 - 5 Ft<br>REG |
|--|---------------------------|--|---------------------|------------------------|--|--|--|---|---|
| SAMPLE_PORPOSE   |                           | (086)/) #                                | Limit (MDL)         | Limit (MOE)            | 0-05Ft                                   | 1.5 - 2.5 Ft                                       | Value  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| Test Group   | Parameter (Units = mg/kg) | (KBSV)<br>4.75±00                        | 0.0005              | 0.005                  | NE                                       | NE   | 1.7E+00                                      |   | 0.006 1 U U   |
| VOLATILES  | 2,2-Dichloropropane       | 2.65+03                                  | 0.0025              | 0.010                  | NE                                       | NE   | 2.6E+03                                      |   | 0.011 1 U U   |
| VOLATILES  | 2-Butanone                | 2.001                                    | 0.0020              | 0.010                  | NE                                       | NE   | 2.1E-01                                      |   | 0.011 1 U U   |
| VOLATILES  | 2-Chloroethyl vinyl ether | 1.55+01                                  | 0.0025              | 0.005                  | NE                                       | NE   | 1.5E+02                                      |   | 0.006 1 U U   |
| VOLATILES  | 2-Chlorotoluene           | 1.0E+02<br>6.2E+00                       | 0.0005              | 0.010                  | NE                                       | NE   | 6.2E+00                                      |   | 0.011 1 0 0   |
| VOLATILES  | 2-Hexanone                | 3 45.01                                  | 0.0025              | 0.010                  | NE                                       | NE   | 3.4E-01                                      |   | 0.006 1 U U   |
| VOLATILES  | 4-Chlorotoluene           | 1.75,00                                  | 0.0000              | 0.000                  | NE                                       | NE   | 1.7E+02                                      |   | 0.011 1 U U   |
| VOLATILES  | Acetone                   | 995.01                                   | 0.0005              | 0.005                  | NE                                       | NE   | 8.8E-01                                      |   | 0.006 1 U U   |
| VOLATILES  | Benzene                   | 8.0E-01                                  | 0.0005              | 0.005                  | NE                                       | NE   | 1.1E+01                                      |   | 0.006 1 V V   |
| VOLATILES  | Bromobenzene              | 1.12+01                                  | 0.0005              | 0.005                  | NE                                       | NE   | 2.4E+01                                      |   | 0.006 1 U U   |
| VOLATILES  | Bromochloromethane        | 2.4E+01                                  | 0.0005              | 0.005                  | NE                                       | NE   | 1.0E+01                                      |   | 0.006 1 U U   |
| VOLATILES  | Bromodichloromethane      | 1.02+01                                  | 0.0005              | 0.005                  | NE                                       | NE   | 3.4E+01                                      |   | 0,006 1 U U   |
| VOLATILES  | Bromoform                 | 3.46+01                                  | 0.0005              | 0.000                  | NE                                       | NE   | 3.5E-01                                      |   | 0.011 1 U U   |
| VOLATILES  | Bromomethane              | 3.5E-01                                  | 0.0010              | 0.010                  | NE                                       | NE   | 1.0E+02                                      |   | 0.006 1 U U   |
| VOLATILES  | Carbon disulfide          | 1.0E+02                                  | 0.0005              | 0.005                  | NE                                       | NE   | 3.5E-01                                      |   | 0.006 1 U U   |
| VOLATILES  | Carbon tetrachloride      | 3.5E-01                                  | 0.0005              | 0.005                  | NE                                       | NE   | 4.0E+01                                      |   | 0.006 1 U U   |
| VOLATILES  | Chlorobenzene             | 4.0E+01                                  | 0.0005              | 0.005                  | NE                                       | NE   | 1.1E+03                                      |   | 0.011 1 U U   |
| VOLATILES  | Chloroethane              | 1.1E+03                                  | 0.0010              | 0.010                  | NE                                       | NE   | 3 1E-01                                      |   | 0.006 1 U U   |
| VOLATILES  | Chloroform                | 3.1E-01                                  | 0.0005              | 0.000                  |  | NE   | 2 3E-01                                      |   | 0.011 1 U U   |
| VOLATILES  | Chloromethane             | 2.3E-01                                  | 0,0020              | 0.010                  | INE                                      |  | 1 25+02                                      |   | 0.006 1 U U   |
| VOLATILES  | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0,005                  | NE                                       |  | 1.26+02                                      |   | 0.006 1 U U   |
| VOLATILES  | cis-1,3-Dichtoropropene   | 1.2E+00                                  | 0.0005              | 0.005                  | NE                                       | NE   | 7.65+00                                      |   | 0.006 1 U U   |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NE                                       | NE   | 1.00+00                                      |   | 0.006 1 U U   |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                       | NE   | 1.95+02                                      |   | 0.011 1 U U   |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                       | NE   | 2.20102                                      |   | 0.006 1 U U   |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                       | NE   | 4.3E+02                                      |   | 0.006 1 1 1   |
| VOLATILES  | Hexachlorobuladiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                       | NE   | 1.02700                                      | l   | 0.006 1 U U   |
| VOLATILES  | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                       | NE   | 0.46+02                                      |   | B 006 1 U U   |
| VOLATILES  | m p-Xvlenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                       | NE   | 2.36+02                                      |   | 0.011 1 1 1   |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01                   | NE                                       | NE   | 1.32+03                                      |   | 0.006 1 11 11   |
| VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                       | NE   | 8.7E+00                                      | 1   | 0.000 1 0 0   |
| VOLATILES  | Nanhthalene               | 1.8E+01                                  | 0.0005              | 0.01                   | NE                                       | NE   | 1.8E+01                                      |   | 0.006 1 U U   |
| VOLATILES  | n-BITYI BENZENE           | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                       | NE   | 2.76+02                                      |   |   |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NĘ                                       | NE   | 3.2E+02                                      |   | 0.006 1 11 11   |
| VOLATILES  | n-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                       | NE   | 4.26+02                                      |   | 0.006 1 11 11   |
| VOLATILES  | sec-BUTYL BENZENE         | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                       | NE   | 3.0E+02                                      | 1   | 0,000 1 0 0   |
| VOLATIES   | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                       | NE   | 1,3E+03                                      |   | 0,006 1 1 1   |
| VOLATILES  | tert-BUTYI BENZENE        | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                       | NE   | 2.62+02                                      |   | 0.006 1 1 1   |
| VOLATILES  | Tetrachlomethene          | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                       | NE   | 6.0E+00                                      |   | 0.006 1 0 0   |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                       | NE   | 1.1E+03                                      | 1   | 0.000 1 0 0   |
|  | trans-1 2-Dicklorgethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                       | NE   | 1.4E+02                                      | I   |   |
|  | trans-1 3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                       | NE   | 1.8E+00                                      | I   |   |
| VOLATILES  | Trichlomethene            | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                       | NE   | 3.7E+00                                      | 1   |   |
| VOLATILES  | Trichlorofluoromethase    | 2.6E+02                                  | 0.0010              | 0.01                   | NE                                       | NE   | 2.8E+02                                      | 1   |   |
| VOLATILES  | Vind acetate              | 5.7E+01                                  | 0.0010              | 0.01                   | NE                                       | NE   | 5.7E+01                                      |   |   |
| VOLATILES  | View chlorido             | 3.6E-02                                  | 0.0010              | 0.01                   | NE                                       | NE   | 3.6E-02                                      |   | 0.011 1 0 0   |

VOLATILES Vinyt chloride Footnotes are shown on cover page to Tables Section.

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

### 00066618

# Table 4-112 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-017

| SUMP] = WRSUMP<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOS | 2017<br>F                      | TCEQ<br>Risk-Based<br>Screening<br>Value | Method      | Method<br>Quantitation | Backg<br>Concentrat<br>(95% UP<br>Surface | ground<br>tions in Solt<br>'L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WRS04-SB0<br>WRS04-SB01<br>9/25/2006<br>0.5 -0.5 F<br>REG | )1<br>-01 | WRS04-<br>WRS04-\$<br>9/25/2<br>4.5 - 4<br>RE | -SB0<br>1801-<br>2006<br>.5 Ft<br>G | 1<br>-02 |         |
|--|--------------------------------|--|-------------|------------------------|---|---|--|---|-----------|---|-------------------------------------|----------|---------|
| Gradif 22 <u>-</u> 1 Grad Ga   | Recompeter /Lipits = ma/ka)    | (RBSV) *                                 | Limit (MDL) | Limit (MQL)            | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft  | Value  | Result DIL  | Q VQ      | Result D                                      | L_I                                 | LQ       | vq      |
| METALS   | Aluminum                       | 1.55E+04                                 | 10.000      | 20.00                  | 16300                                     | 2.08E+04  | 1.6E+04                                      | 17400 1   |           | 10200   | 1                                   |          |         |
|  | Antimony                       | 7.25E+00                                 | 0.500       | 0.10                   | 0.94                                      | 1.6   | 7.3E+00                                      | 0.115 1 0   | յ Սյլ     | 0.113   | 1 (                                 | ונ       | UJL     |
| METALS   | Arconic                        | 2.005+01                                 | 0.075       | 0.30                   | 4.81E+00                                  | 5.54E+00  | 2.0E+01                                      | 0.533 1   | JL        | 0.386   | 1                                   |          | JL      |
| METALS   | Barium                         | 2.61E+03                                 | 0.075       | 0.30                   | 1.52E+02                                  | 8.55E+01  | 2.6E+03                                      | 164.000 1   |           | 21.300  | 1                                   |          |         |
| METALS   | Bervillum                      | 4.56E+00                                 | 0.012       | 0.50                   | 6.45E-01                                  | 7.66E-01  | 4.6E+00                                      | 1.010 1   |           | 0.403   | 1 J                                 |          | J       |
| METALS   | Cadmium                        | 5.20E+00                                 | 0.025       | 0.10                   | 1.4                                       | 0.4   | 5.2E+00                                      | 0.105 1   | 1         | 0,413   | 1 1                                 | , ו      | U       |
| METALS   | Calcium                        | NE                                       | NA          | NA.                    | NA  | NA  |  | 429.000 1   |           | 514.000                                       | 1                                   |          |         |
| METALS   | Chromium                       | 5.93E+03                                 | 0.100       | 0.40                   | 2.66E+01                                  | 3.01E+01  | 5.9E+03                                      | 16.100 1  |           | 10.700  | 1                                   |          |         |
| METALS   | Cobalt                         | 1.53E+03                                 | 0.125       | 0.50                   | 7.23E+00                                  | 5.61E+00  | 1.5E+03                                      | 0.210   |           | 2,400   | -                                   |          |         |
| METALS   | Copper                         | 1.02E+03                                 | 0.150       | 0.60                   | 5.55E+00                                  | 9.25E+00  | 1.06703                                      | 17200.000 1   |           | 10200.000                                     | ÷                                   |          |         |
| METALŚ   | Iron                           | NE                                       | NA          | NA                     | NA  | NA<br>4.45-04                                       | E 05103                                      | 13 200 1  |           | 5 090   | i                                   |          |         |
| METALS   | Lead                           | 5.00E+02                                 | 0.500       | 5.00                   | 2.202+01                                  | 1, 142701   | 3.02702                                      | 1650.000 1  | .IH       | 890.000                                       | i                                   |          | JН      |
| METALS   | Magnesium                      |  | 0.050       | 0.20                   | 1 265+03                                  | 2 01E+02  | 1 7E+03                                      | 53 200 1  | J         | 17,100  | 1                                   |          | J       |
| METALS   | Manganese                      | 1.000000                                 | 0,000       | 0.20                   | 8 19F-02                                  | 0.36  | 2.5E-01                                      | 0.288 1   | JŪ        | 0.011   | 1 1                                 | J.       | J       |
| METALS   | Mercury                        | 1.000-02                                 | 0.010       | 0.20                   | 6 98E+00                                  | 1 16E+01  | 1.9E+02                                      | 14,200 1  |           | 9.570   | 1                                   |          |         |
|  | Reference                      | NE                                       | NA          | NA NA                  | NA  | NA  |  | 581.000 1   |           | 336.000                                       | 1                                   |          |         |
| METALS   | Solonium                       | 1 27E+02                                 | 0 100       | 0.20                   | 3.48E+00                                  | 5.57E+00  | 1.3E+02                                      | 0.363 t   | JL        | 0.226   | 1ι                                  | J        | UJL.    |
| METALS   | Silver                         | 4.68E+01                                 | 0.050       | 0.20                   | 0.31                                      | 0.37  | 4.7E+01                                      | 1.700 1   | JU        | 1.650   | 1 l                                 | J        | U       |
| METALS   | Sodium                         | NE                                       | NA          | NA                     | NA  | NA  |  | 270.000 1   |           | 254.000                                       | 1                                   |          |         |
| METALS   | Thallium                       | 2.0E+00                                  | 0.010       | 0.02                   | 0.47                                      | NE  | 2.0E+00                                      | 0.089 1   |           | 0.055   | 1                                   |          |         |
| METALS   | Vanadium                       | 4.84E+01                                 | 0.125       | 0.50                   | 3.21E+01                                  | 4.46E+01  | 4.8E+01                                      | 29.200 1  |           | 13.900  | 1                                   |          |         |
| METALS   | Zinc                           | 5.94E+03                                 | 0.625       | 2.50                   | 61.6                                      | 2.02E+01  | 5.9E+03                                      | 33.400 1  |           | 17.800  | 1                                   |          |         |
| PERC   | Perchlorate                    | 1.39E+01                                 | 0.005       | 0.010                  | NE  | NE  | 1.4E+01                                      | 0.050 5   | JU        |   |                                     |          |         |
| SOLIDS   | Percent Solids                 | NE                                       | NÉ          | NE                     | NE  | NE  |  | 84.800 1  |           | 0.004   | • •                                 |          | 14      |
| VOLATILES  | 1,1,1,2-Tetrachloroethane      | 5.17E+00                                 | 0.0005      | 0.005                  | NE  | NE  | 5.22+00                                      | 0.005 1   |           | 0.004   | 1 1                                 | ŭ,       | ŭ       |
| VOLATILES  | 1,1,1-Trichloroethane          | 2.32E+02                                 | 0.0005      | 0.005                  | NE  | NE  | 2.36+02                                      | 0.005 1   | а U       | 0.004   | ii                                  | ŭ        | ŭ       |
| VOLATILES  | 1,1,2,2-Tetrachloroethane      | 5.086-01                                 | 0.0005      | 0.005                  | NE  | INE<br>NE   | 0.7E-01                                      | 0.005 1   | йй        | 0 004   | i i                                 | ň.       | ū –     |
| VOLATILES  | 1,1,2-Enchloroethane           | 9.09E-01                                 | 0.0005      | 0.005                  | NE  | NE  | 8.95+01                                      | 0.005 1   | มีมี      | 0.004   | 1 1                                 | Ū        | Ū       |
| VOLATILES  | 1,1-Dichloroethane             | 2 695+01                                 | 0.0010      | 0.005                  | NE  | NE  | 2.7E+01                                      | 0.005 1   | ŪŨ        | 0.004   | 1 1                                 | U        | U       |
| VOLATILES  | 1 1-Dichloropmpene             | 9.925-01                                 | 0.0005      | 0.005                  | NE  | NE  | 9.9E-01                                      | 0.005 1   | υU        | 0.004   | 1 1                                 | U        | U       |
| VOLATILES  | 1,1-Dichlorobenzene            | 4 20E+01                                 | 0.0005      | 0.005                  | NE  | NE  | 4.2E+01                                      | 0.005 1   | υυ        | 0.004   | 1                                   | Ų        | U       |
| VOLATILES  | 1.2.3-Trichloropropage         | 9.15E-02                                 | 0.0010      | 0.005                  | NE  | NE  | 9.2E-02                                      | 0.005 1   | υu        | 0.004   | 1                                   | U        | U       |
| VOLATILES  | 1.2.4-Trichlorobenzene         | 1.36E+02                                 | 0.0005      | 0.005                  | NE  | NE  | 1.4E+02                                      | 0.005 1   | บบ        | 0.004   | 1                                   | U        | 0       |
| VOLATILES  | 1,2,4-Trimethylbenzene         | 9.60E+00                                 | 0.0005      | 0.005                  | NE  | NE  | 9.6E+00                                      | 0.005 1   | U U       | 0.004   | 1                                   |          | U<br>U  |
| VOLATILES  | 1,2-Dibromo-3-chloropropane    | 3.48E-01                                 | 0.0020      | 0.005                  | NE  | NE  | 3.5E-01                                      | 0.005 1   | 0 0       | 0.004   | 1                                   | U.       | U<br>II |
| VOLATILES  | 1,2-Dibromoethane              | 5.31E-02                                 | 0.0005      | 0.005                  | NE  | NE  | 5.3E-02                                      | 0.005 1   |           | 0.004   | 4 4                                 |          | n.      |
| VOLATILES  | 1,2-Dichlorobenzene            | 5.61E+01                                 | 0.0005      | 0.005                  | NE  | NE  | 5.6E+01                                      | 0.005 1   | 0 0       | 0.004   | 1                                   | ŭ        | ŭ.      |
| VOLATILES  | 1,2-Dichloroethane             | 2.69E-01                                 | 0.0005      | 0.005                  | NE  | NE  | 1.95+00                                      | 0,005 1   | u u       | 0.004   | 1                                   | ŭ        | ŭ       |
| VOLATILES  | 1,2-Dichteropropane            | 1.802+00                                 | 0.0005      | 0,005                  | NE  |   | 335+03                                       | 0.005 1   | ŭŭ        | 0.004   | 1                                   | ŭ        | Ũ       |
| VOLATILES  | 1,2-Dimethylbenzene (o-Xylene) | 3.27 E+03                                | 0.0005      | 0.005                  | NE  |   | 8.3E+00                                      | 0.005 1   | บับั      | 0.004   | 1                                   | Ũ        | Ū       |
| VOLATILES  | 1,3,5-1 Ameinyldenzene         | 6.20E+00                                 | 0.0005      | 0.005                  | NE  | NE  | 5.1E+00                                      | 0.005 1   | ŪŪ        | 0.004   | 1                                   | U        | U       |
| VOLATILES  | 1.3 Dichloropropage            | 2.98E+00                                 | 0.0005      | 0.005                  | NE  | NE  | 3.0E+00                                      | 0.005 1   | υu        | 0.004   | 1                                   | υ        | υ       |
| VOLATILES  | 1 4-Dichlorobenzene            | 2.67E+01                                 | 0.0005      | 0.005                  | NE  | NE  | 2.7E+01                                      | 0.005 1   | υU        | 0.004   | 1                                   | U        | U       |
| VOLATILES  | 2 2-Dichloropronane            | 1.70E+00                                 | 0.0005      | 0.005                  | NE  | NE  | 1.7E+00                                      | 0.005 1   | υu        | 0.004   | 1                                   | U        | U       |
| VOLATILES  | 2-Butanone                     | 2.61E+03                                 | 0.0025      | 0.010                  | NE  | NE  | 2.6E+03                                      | 0.010 1   | υ υ       | 0.009   | 1                                   | U        | U       |
| VOLATILES  | 2-Chloroethyl vinyl ether      | 2.14E-01                                 | 0.0020      | 0.010                  | NE  | NE  | 2.1E-01                                      | 0.010 1   | υυ        | 0.009   | 1                                   | U        | 0       |
| VOLATILES  | 2-Chlorotoluene                | 1.54E+02                                 | 0.0005      | 0.005                  | NE  | NE  | 1.5E+02                                      | 0.005 1   | υu        | 0.004   | 1                                   |          | 0       |
| VOLATILES  | 2-Hexanone                     | 6.20E+00                                 | 0.0025      | 0.010                  | NE  | NE  | 6.2E+00                                      | 0.010 1   | U U       | 0.009   | 1                                   |          | 0       |
| VOLATILES  | 4-Chlorotoluene                | 3.44E-01                                 | 0.0005      | 0.005                  | NE  | NE  | 3.4E-01                                      | 0.005 1   | 0 0       | 0.004   | 4                                   |          | ŭ.      |
| VOLATILES  | Acetone                        | 1.74E+02                                 | 0.0050      | 0.010                  | NE  | NE  | 1./E+02                                      | 0.010 1   |           | 0.009   | ł                                   | ii ii    | ň       |
| VOLATILES  | Benzene                        | 8.82E-01                                 | 0.0005      | 0.005                  | NE  |   | 0.00-01                                      | 0.005 1   | ι Π       | 0.004   | i.                                  | ŭ        | й       |
| VOLATILES  | Bromobenzene                   | 1.12E+01                                 | 0.0005      | 0.005                  | NE  | NE  | 2.46+01                                      | 0.005 1   | йй        | 0.004   | 1                                   | บ้       | ŭ       |
| VULATILES  | Bromochioromethane             | 2.418+01                                 | 0.0000      | 0.005                  | NE  | NE  | 1.0=+01                                      | 0,005 1   | υŪ        | 0.004   | 1                                   | U        | Ū       |
| VOLATILES  | Bromoform                      | 3 355401                                 | 0.0005      | 0.005                  | NE  | NF  | 3.4E+01                                      | 0,005 1   | ŪŪ        | 0.004   | 1                                   | U        | U       |
| VOLATILES  | Bromomethane                   | 3.495-01                                 | 0.0010      | 0.010                  | NE  | NE  | 3,5E-01                                      | 0.010 1   | υυ        | 0.009   | 1                                   | U        | U       |
| VOLATILES  | Carboa disulfide               | 1.03E+02                                 | 0.0005      | 0.005                  | NE  | NE  | 1.0E+02                                      | 0.005 1   | ບບ        | 0.004   | 1                                   | U        | U       |
| VOLATILES  | Carbon tetrachloride           | 3.53E-01                                 | 0.0005      | 0.005                  | NE  | NE  | 3.5E-01                                      | 0.005 1   | υυ        | 0.004   | 1                                   | υ        | υ       |
| VOLATILES  | Chloroberizerie                | 3.98E+01                                 | 0.0005      | 0.005                  | NE  | NE  | 4.0E+01                                      | 0.005 1   | υυ        | 0.004   | 1                                   | U        | U       |

Data Evaluation Report Chemical Concentrations in Soll Associated with LHAAP-35/36 Sumps

### 00066619

### Table 4-112 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-017

| (SUMP) = WRSUA<br>LOCATION_COE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPO | AP017<br>DE<br>DSE        | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backs<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>2L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | WRS04-SB01<br>WRS04-SB01-01<br>9/25/2006<br>0.5 -0.5 Pt<br>REG<br>Boott Dil 1.0 VO | WRS04-SB01<br>WRS04-SB01-02<br>9/25/2006<br>4.5 - 4.5 Ft<br>REG<br>Result DIL 1:0 VQ |
|---|---------------------------|--|---------------------|------------------------|--|---|--|--|--|
| Test Group  | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | 1 15±03                                      |  | 0.009 1 U U  |
| VOLATILES   | Chloroethane              | 1.13E+03                                 | 0.0010              | 0.010                  | NE                                       | NE  | 3.1E-01                                      | 0 005 1 U U  | 0,004 1 U U  |
| VOLATILES   | Chloroform                | 3.06E-01                                 | 0.0005              | 0.005                  |  | NE  | 235.01                                       | 0.010 1 1 1  | 0.009 1 U U  |
| VOLATILES   | Chloromethane             | 2.27E-01                                 | 0.0020              | 0.010                  |  | NE  | 1 25+02                                      | 0.005 1 U U  | 0.004 1 U U  |
| VOLATILES   | cis-1,2-Dichloroethene    | 1.15E+02                                 | 0.0005              | 0.005                  |  | NE  | 1.2E+00                                      | 0.005 1 U U  | 0.004 1 U U  |
| VOLATILES   | cis-1 3-Dichloropropene   | 1.19E+00                                 | 0,0005              | 0.005                  |  | NE  | 7.65+00                                      | 0.005 1 1 1  | 0.004 1 U U  |
| VOLATILES   | Dibromochloromethane      | 7.62E+00                                 | 0.0005              | 0.005                  |  |   | 1.05+01                                      | 0.005 1 U U  | 0.004 1 U U  |
| VOLATILES   | Dibromomethane            | 1.88E+01                                 | 0,0005              | 0.005                  | NE                                       | 치드  | 2 2E+02                                      | 0.010 1 U U  | 0.009 1 U U  |
| VOLATILES   | Dichlorodifuoromethane    | 2.16E+02                                 | 0.0010              | 0.010                  |  | NE  | 435+02                                       | 0.005 1 11 1   | 0.004 1 U U  |
| VOLATILES   | Ethylbenzene              | 4.31E+02                                 | 0.0005              | 0.005                  | NE                                       | NE  | 1.6E+00                                      | 0.005 t L U  | 0.004 1 U U  |
| VOLATILES   | Hexachlorobutadiene       | 1.58E+00                                 | 0.0005              | 0,005                  |  | NE  | 545+02                                       | 0.005 1 U U  | 0.004 1 U U  |
| VOLATILES   | Isopropylbenzene          | 5.38E+02                                 | 0.0005              | 0.005                  |  |   | 235+02                                       | 0.005 1 U U  | 0.004 1 U U  |
| VOLATILES   | m,p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 135+03                                       | 0.010 1 U U  | 0.009 1 U U  |
| VOLATILE\$  | Methyl isobutyl ketone    | 1.29E+03                                 | 0.0025              | 0.01                   | SVC                                      | NE  | 9.75+00                                      | 0.005 1 11 11  | 0.004 1 U U  |
| VOLATILES   | Methylene chloride        | 8.68E+00                                 | 0.0010              | 0.005                  | NE                                       | NE  | 1.95+01                                      |  | 0.009 1 U U  |
| VOLATILES   | Naphthalene               | 1.81E+01                                 | 0.0005              | 0.01                   | NE                                       | NE  | 275+02                                       | 0.005 1 U U  | 0.004 1 U U  |
| VOLATILES   | n-BUTYLBENZENE            | 2.70E+02                                 | 0.0005              | 0.005                  | NE                                       |   | 2.76+02                                      | 0.005 1 11 11  | 0.004 1 U U  |
| VOLATILES   | n-PROPYLBENZENE           | 3.21E+02                                 | 0.0005              | 0.005                  | NE                                       | NE  | 3.25+02                                      | 0.005 1 1 1  | 0.004 1 U U  |
| VOLATILES   | p-ISOPROPYLTOLUENE        | 4.20E+02                                 | 0.0005              | 0.005                  | NE                                       | NE  | 4.20102                                      | 0.005 1 11 11  | 0.004 1 U U  |
| VOLATILES   | sec-BUTYLBENZENE          | 3.00E+02                                 | 0.0005              | 0.005                  | NE                                       | NE  | 1 25402                                      | 0.005 1 1 1  | 0.004 1 U U  |
| VOLATILES   | Styrene                   | 1.31E+03                                 | 0.0005              | 0.005                  | NE                                       | NE  | 1.35703                                      | 0.005 1 11 11  | 0.004 1 U U  |
| VOLATILES   | tert-BUTYLBENZENE         | 2.61E+02                                 | 0.0005              | 0.005                  | NE                                       | NE  | 2.00702                                      | 0.005 1 11 11  | 0.004 1 U U  |
| VOLATILES   | Tetrachloroethene         | 6.02E+00                                 | 0,0005              | 0.005                  | NE                                       | NE  | 0,02700                                      |  | 0.004 1 U U  |
| VOLATILES   | Toluene                   | 1.08E+03                                 | 0.0005              | 0.005                  | NE                                       | NE  | 1.12+03                                      | 0.005 1 1 1  | 0.004 1 1 1  |
| VOLATILES   | trans-1,2-Dichloroethene  | 1.38E+02                                 | 0.0005              | 0.005                  | NE                                       | NE  | 1.40702                                      |  | 0.004 1 11 13  |
| VOLATILES   | trans-1,3-Dichloropropene | 1.83E+00                                 | 0.0005              | 0.005                  | NE                                       | NE  | 0.75.00                                      | 0.005 1 11 11  | 0.004 1 U U  |
| VOLATILES   | Trichloroethene           | 3.73E+00                                 | 0.0005              | 0.005                  | NE                                       | NE  | 3.7E+00                                      |  | 0.009 1 U U  |
| VOLATILES   | Trichlorofluoromethane    | 2.63E+02                                 | 0.0010              | 0.01                   | NE                                       | NE  | 2.06+02                                      |  | 0.009 1 11 11  |
| VOLATILES   | Vinyl acetate             | 5.74E+01                                 | 0.0010              | 0.01                   | NE                                       | NE  | 5.7E+01                                      |  | 0.009 1 11 11  |
| VOLATILES   | Vinvi chloride            | 3.64 <u>E-02</u>                         | 0.0010              | 0.01                   | NE                                       | NE  | 3.6E-02                                      |  | 0.000 1 0 0  |

Shaw Environmental, Inc. 00066620

### Table 4-113 Comparison of Chemic al Concentration of Chemicals in Soil to Risk-Based Screening Values WRSump-018

| [SUMP] = WRSUMPO<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_NO | 18                                    | TCEQ<br>Bick-Bacad |             |              | Back                | ground                   | Applicble          | 35SUMP0<br>35-SMP076 | 76-SB01-(         | 1<br>01 | 35SUMP0<br>35-SMP076 | 76-SB0<br>-SB01-                              | 1<br>02     | WRS016<br>WRS018- | -SB01<br>SB01-01   |    | WRS01<br>WRS018  | 6-SB0<br>-SB01- | 1<br>02           | WRS0<br>WRS01   | 18-SB02<br>8-SB02-0 | 1   | WRS01<br>WRS018- | 8-SB02<br>SB02-0 | 12           |
|---|---------------------------------------|--------------------|-------------|--------------|---------------------|--------------------------|--------------------|----------------------|-------------------|---------|----------------------|---|-------------|-------------------|--------------------|----|------------------|-----------------|-------------------|-----------------|---------------------|-----|------------------|------------------|--------------|
| DEPTH   |                                       | Screening          | Method      | Method       | (95% UP             | Ľ, mg/kg)                | Risk-Based         | _5                   | 5 Ft              |         | 7-7                  | Ft  |             | _5                | 5 Ft               |    | 4_5 -            | 4_5 Ft          |                   | _5              | _5 Ft               |     | 4_5-4            | _5 Ft            |              |
| SAMPLE_PURPOSE  |                                       | Value              | Detection   | Quantitation | Surface             | Subsurface               | Screening          | RE                   | 3                 |         | RE                   | Ġ   |             | RE                | G                  |    | Ri               | EG .            |                   |                 | REG                 |     | RE               | G                |              |
| METALS  | Parameter (Units = mg/kg)<br>Aluminum | (RBSV)*            | 10.000      | 20.00        | 0 - 0.5 Pt<br>16300 | 1.5 - 2.5 Ft<br>2.08E+04 | Value<br>1.6E+04   | Result D             | <u>IL LQ</u><br>1 | vq      | Result C             | <u> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</u> | α να        | Result 1<br>3030  | <u>)IL LQ</u><br>1 | va | Result<br>184001 | 1               | LQ VC             | Result<br>10200 | <u> חור נס</u>      |     | Result<br>zonnot | <u>01 1</u>      | <u>.a va</u> |
| METALS  | Antimony                              | 7.3E+00            | 0.500       | 0.10         | 0.94                | 1.6                      | 7.3E+00            | 0.110                | i u               | υ       | 0.116                | iι  | J U         | 0.110             | i U                | υĽ | 0.120            | i               | υu                | 0.114           | i u                 | ີປີ | 0.121            | i ı              | υu           |
| METALS  | Arsenic                               | 2.0E+01            | 0.075       | 0.30         | 4.81E+00            | 5.54E+00                 | 2.0E+01            | 10.600               | 1                 |         | 1.810                | 1   |             | 3.670             | 1                  |    | 8.830            | 1               |                   | 3,100           | 1                   |     | 2.990            | 1                |              |
| METALS  | Barollium                             | 2.6E+00            | 0.012       | 0.50         | 6.45E-01            | 7.66E-01                 | 2.6E+03            | 0641                 | 1                 |         | 0 786                | 1   |             | 0 128             | 1                  | л  | 0.939            | 1               |                   | 0.808           | 1                   |     | 78<br>0.654      | ł                |              |
| METALS  | Cadmium                               | 5.2E+00            | 0.025       | 0.10         | 1.4                 | 0.4                      | 5.2E+00            | 0,104                | i J               | J       | 0.046                | i J   | JJ          | 1.170             | 1                  |    | 0.145            | i               | JJ                | 0.323           | i J                 | J   | 0.082            | i.               | L L          |
| METALS  | Calcium                               | NE                 | NA          | NA           | NA                  | NA                       |                    | 746                  | 1                 |         | 563                  | 1   |             | 129000 1          | 00                 | J  | 955              | 1               | J                 | 1770            | 1                   | J   | 4150             | 1                | J            |
| METALS  | Chromium                              | 5.9E+03            | 0.100       | 0.40         | 2.66E+01            | 3.01E+01                 | 5.9E+03            | 13.900               | 1                 |         | 14.700               | 1   |             | 14.700            | 1                  | J  | 23,100           | 1               | J                 | 29.000          | 1                   | J   | 21.000           | 1                | 3            |
| METALS  | Conner                                | 1.0E+03            | 0.125       | 0.60         | 5.55E+00            | 9.25E+00                 | 1.0E+03            | ▲ 120                | 1                 |         | 5 850                | 1   |             | 7.140             | 1                  | J  | 15.200           | 1               | J                 | 7.200           | 1                   | Ĵ   | 3.570            | 1                | 3            |
| METALS  | Iron                                  | NE                 | NA          | NA           | NA                  | NA                       | -                  | 13200.000            | 1                 |         | 14300.000            | i   |             | 11500.000         | 1                  | J  | 32600.000        | 1               | J                 | 31900.000       | i                   | J   | 19700.000        | i                | J            |
| METALS  | Lead                                  | 5.0E+02            | 0.500       | 5.00         | 2.26E+01            | 1.14E+01                 | 5.0E+02            | 10.1                 | 1                 |         | 7.8                  | 1   |             | 33.1              | 1                  |    | 7.8              | 1               |                   | 11.9            | 1                   |     | 6.8              | 1                |              |
| METALS  | Magnessum                             | NE<br>1 7E+02      | NA<br>0.050 | NA<br>0.20   | NA<br>4 265 402     | NA 2 01 5 402            | 1 75 102           | 947.000              | 1                 |         | 1020.000             | 1   |             | 996.000           | 1                  | j  | 971.000          | 1               | 1                 | 621.000         | 1                   | J   | 1090.000         | 1                | j            |
| METALS  | Mercury                               | 1.1E-02            | 0.010       | 0.25         | 8.19E-02            | 0.36                     | 2.55-01            | 0.027                | 1 .               | л       | 40                   | 1 1   |             | 0.016             | 1 .                |    | 400              | 1               | J                 | 209<br>0.029    | 1 1                 | 1   | 101              | 1                | л <i>4</i>   |
| METALS  | Nickel                                | 1.9E+02            | 0.200       | 0.80         | 6.98E+00            | 1.16E+01                 | 1.9E+02            | 7.900                | 1                 | •       | 9.560                | 1   |             | 3.270             | 1                  | J  | 8.790            | i               | Ĵ                 | 8,030           | 1                   | Ĵ   | 8.260            | 1                | Ĵ            |
| METALS  | Potassium                             | NE                 | NA          | NA           | NA                  | NA                       |                    | 588.000              | 1                 |         | 530.000              | 1   |             | 192.000           | 1                  |    | 552.000          | 1               |                   | 322.000         | 1.                  |     | 615.000          | 1                |              |
| METALS  | Silver                                | 1.JE+02<br>4.7E+01 | 0.100       | 0.20         | 3.48E+00            | 5.57E+00                 | 1.3E+02            | 0.362                | 1                 |         | 0.226                | 1 1   | 1 1         | 0.286             | 1                  |    | 0.428            | 1               |                   | 0,353           | 1                   |     | 0.464            | 1                |              |
| METALS  | Sodium                                | NE                 | NA          | NA           | NA                  | NA                       | 4.72.401           | 34,400               | 1                 | ~       | 319.000              | i   |             | 20,700            | 1                  | •  | 76,700           | 1               | 0 0               | 18,700          | 1 J                 | J   | 46.400           | 1 1              | 5 0          |
| METALS  | Thallium                              | 2.0E+00            | 0.010       | 0.02         | 0.47                | NE                       | 2.0E+00            | 0.076                | i                 |         | 0.126                | i   |             | 0.018             | i J                | J  | 0.189            | 1               |                   | 0.069           | 1                   | -   | 0.180            | 1                |              |
| METALS  | Vanadium                              | 4.8E+01            | 0.125       | 0.50         | 3.21E+01            | 4.46E+01                 | 4.8E+01            | 24,600               | 1                 |         | 23,900               | 1   |             | 19.800            | 1                  | Ĺ  | 52.200           | 1               |                   | 55.200          | 1                   |     | 40.900           | 1                |              |
| PERC  | Perchlorate                           | 1.4E+01            | 0.005       | 0.010        | NE                  | 2.02E+01                 | 5.9E+03            | 30.400               | ,                 |         | 31.800               | 1   |             | 88.100            | 1                  |    | 22.400           | 1               |                   | 33.700          | 1                   |     | 25.100           | 1                |              |
| RANGE_ORGANICS  | Carbon Range C12-C28                  | 4.0E+02            | 25          | 50           | NE                  | NE                       | 4.0E+02            | 34.000               | 1 J               | J       | 32.700               | 1 J   | I J         | 44.200            | 1 J                | в  | 42.300           | 1               | JВ                | 57.300          | 1 U                 | U   | 60.300           | 1 L              | υυ           |
| RANGE_ORGANICS  | Carbon Range C28-C35                  | 4.0E+02            | 25          | 50           | NE                  | NE                       | 4.0E+02            | 35.300               | 1 J               | J       | 35.000               | 1 3   | 1 J         | 37.100            | 1 J                | в  | 59.500           | 1               | υυ                | 57.300          | 1 U                 | U   | 60.300           | 1 L              | ม บ          |
| RANGE_ORGANIUS  | Carbon Range Cb-C12<br>Percent Solide | 1.76+02<br>NE      | 25<br>NE    | 50<br>ME     | NE                  | NĘ<br>NE                 | 1.7E+02            | 55.500               | 1 1               | U       | 57.300               | 1 L   | 1 0         | 54.700            | 1 U                | U  | 59,500           | 1               | υυ                | 57,300          | 1 0                 | U   | 60.300           | 1 L              | JU           |
| VOLATILES   | 1,1,1,2-Tetrachiomethane              | 5.2E+00            | 0.0005      | 0.005        | NE                  | NE                       | 5.2E+00            | 03.505               | ,                 |         | 0.005                | ίL  | JU          | 30.100            |                    |    | 0.005            | i               | u u               | 60.000          | •                   |     | 0.005            | i ı              | uυ           |
| VOLATILES   | 1,1,1-Trichloroethane                 | 2.3E+02            | 0.0005      | 0.005        | NE                  | NE                       | 2.3E+02            |                      |                   |         | 0.001                | 1 J   | jĴ          |                   |                    |    | 0.005            | i               | ΰŨ                |                 |                     |     | 0.005            | i ī              | อี บิ        |
| VOLATILES   | 1,1,2,2-Tetrachloroethane             | 5.1E-01            | 0.0005      | 0.005        | NE                  | NE                       | 5.1E-01            |                      |                   |         | 0.005                | 1 4   | i U         |                   |                    |    | 0.005            | 1               | υU                |                 |                     |     | 0.005            | 1 L              | a u          |
| VOLATILES   | 1,1,2-manoroeunane                    | 8.9E+01            | 0.0005      | 0.005        | NE                  | NE                       | 9.7E-01<br>8.9E+01 |                      |                   |         | 0.005                | 1 L<br>1 I                                    |             |                   |                    |    | 0.005            | 1               | 00                |                 |                     |     | 0.005            | 1 L              | JU.          |
| VOLATILES   | 1,1-Dichloroethene                    | 2.7E+01            | 0.0005      | 0.005        | NE                  | NE                       | 2.7E+01            |                      |                   |         | 0.003                | 1 1   | έĴ          |                   |                    |    | 0.005            | 1               | บับ               |                 |                     |     | 0.005            | iŭ               | ប៍ប័         |
| VOLATILES   | 1,1-Dichloropropene                   | 9.9E-01            | 0.0005      | 0.005        | NE                  | NE                       | 9.9E-01            |                      |                   |         | 0.005                | 1 L   | ЪЯ          |                   |                    |    | 0.005            | 1               | υυ                |                 |                     |     | 0.005            | i i              | ŪŪ.          |
| VULATILES   | 1,2,3-1 nchlorobenzene                | 4.2E+01            | 0.0005      | 0.005        | NE                  | NE                       | 4.2E+01            |                      |                   |         | 0.005                | 1 1   | , n         |                   |                    |    | 0.005            | 1               | 0 0               |                 |                     |     | 0.005            | 1 1              | មួយ          |
| VOLATILES   | 1.2.4-Trichkorobenzene                | 1.4E+02            | 0.0005      | 0.005        | NÉ                  | NE                       | 9.2E+02<br>1.4F+02 |                      |                   |         | 0.005                | 1 1   | i ŭ         |                   |                    |    | 0.005            | 1               | <u>บ บ</u><br>ม ม |                 |                     |     | 0.005            | 1 L              | J U<br>11 11 |
| VOLATILES   | 1,2,4-Trimethylbenzene                | 9.6E+00            | 0.0005      | 0.005        | NE                  | NE                       | 9.6E+00            |                      |                   |         | 0.005                | 1 1   | ίŭ          |                   |                    |    | 0.005            | 1               | บับ               |                 |                     |     | 0.005            | i ĭ              | น์ บั        |
| VOLATILES   | 1,2-Dibromo-3-chloropropane           | 3.5E-01            | 0.0020      | 0.005        | NE                  | NE                       | 3.5E-01            |                      |                   |         | 0.005                | 1 L   | J U         |                   |                    |    | 0.005            | 1               | υu                |                 |                     |     | 0.005            | 1 L              | υU           |
| VOLATILES   | 1,2-Dictomoetnane                     | 5.3E-02<br>5.6E+01 | 0.0005      | 0.005        | NE                  | NE                       | 5.3E-02<br>5.6E+01 |                      |                   |         | 0.005                | 1 L   |             |                   |                    |    | 0.005            | 1               | 0 0               |                 |                     |     | 0.005            | 1 1              | 1 0          |
| VOLATILES   | 1,2-Dichloroethane                    | 2.7E-01            | 0.0005      | 0.005        | NE                  | NE                       | 2.7E-01            |                      |                   |         | 0.005                | 1 1   | ίŭ          |                   |                    |    | 0.005            | i               | ŭŭ                |                 |                     |     | 0.005            | ίì               | ជីបី         |
| VOLATILES   | 1,2-Dichloropropane                   | 1.8E+00            | 0.0005      | 0.005        | NE                  | NE                       | 1.8E+00            |                      |                   |         | 0.005                | i i   | Ĵ Ũ.        |                   |                    |    | 0.005            | 1               | υŬ                |                 |                     |     | 0.005            | i ī              | มับั         |
| VOLATILES   | 1,2-Dimethylbenzene (o-Xyl            | 3.3E+03            | 0.0005      | 0.005        | NË                  | NĘ                       | 3.3E+03            |                      |                   |         | 0.005                | 1 1   | i n         |                   |                    |    | 0.005            | 1               | <u>u</u> u        |                 |                     |     | 0.005            | 1 L              | 1 U          |
| VOLATILES   | 1.3-Dichlorobenzene                   | 5.1E+00            | 0.0005      | 0.005        | NE                  | NE                       | 5.1E+00            |                      |                   |         | 0.005                | 1 1   | , u         |                   |                    |    | 0.005            | 1               | 0 0               |                 |                     |     | 0.005            | 1 1              | J U          |
| VOLATILES   | 1,3-Dichloropropane                   | 3.0E+00            | 0.0005      | 0.005        | NE                  | NE                       | 3.0E+00            |                      |                   |         | 0.005                | iŭ  | ίŭ          |                   |                    |    | 0.005            | i               | ŭŭ                |                 |                     |     | 0.005            | i i              | ບັບັ         |
| VOLATILES   | 1,4-Dichlorobenzene                   | 2.7E+01            | 0.0005      | 0.005        | NE                  | NE                       | 2.7E+01            |                      |                   |         | 0.005                | 1 L   | n r         |                   |                    |    | 0.005            | 1               | U U               |                 |                     |     | 0.005            | 1 (              | U U          |
| VOLATILES   | 2,2*Olchoropropane<br>2-Butanone      | 1.7E+00<br>2.6E+03 | 0.0005      | 0.005        | NE                  | NE                       | 1.7E+00<br>2.65+03 |                      |                   |         | 0.005                | 1 1   | J U<br>1 II |                   |                    |    | 0.005            | 1               | 0 0               |                 |                     |     | 0.005            | 1 1              | ט נ          |
| VOLATILES   | 2-Chloroethyl vinyl ether             | 2.1E-01            | 0.0020      | 0.010        | NE                  | NE                       | 2.1E-01            |                      |                   |         | 0.010                | iŭ  | ίŭ          |                   |                    |    | 0.009            | i i             | υŭ                |                 |                     |     | 0.010            | i ĭ              | มีนั้        |
| VOLATILES   | 2-Chlorotoluene                       | 1.5E+02            | 0.0005      | 0.005        | NE                  | NE                       | 1.6E+02            |                      |                   |         | 0.005                | 1 0   | ĴŪ.         |                   |                    |    | 0.005            | 1               | ŪŪ                |                 |                     |     | 0.005            | 1 i              | ΰŪ.          |
| VOLATILES   | 2-Hexanone<br>A-Chlorotoluene         | 6.2E+00            | 0.0025      | 0.010        | NE                  | NE                       | 6.2E+00            |                      |                   |         | 0.010                | 1 6   | 1 11        |                   |                    |    | 0.009            | 1               | 0 0               |                 |                     |     | 0.010            | 1 1              | <u> </u>     |
| VOLATILES   | Acetone                               | 1.7E+02            | 0.0050      | 0.010        | NE                  | NE                       | 3.4E-01<br>1 7E+02 |                      |                   |         | 0.000                | 1 6   | , U         |                   |                    |    | 0.000            | 1               | 0 0               |                 |                     |     | 0.005            | 1 1              | J U          |
| VOLATILES   | Benzene                               | 8.8E-01            | 0.0005      | 0.005        | NE                  | NE                       | 8.8E-01            |                      |                   |         | 0.005                | 1 0   | រ៍បី        |                   |                    |    | 0.005            | i               | ŭΰ                |                 |                     |     | 0.005            | i ĭ              | úŭ           |
| VOLATILES   | Bromobenzene                          | 1.1E+01            | 0.0005      | 0.005        | NE                  | NE                       | 1.1Ë+01            |                      |                   |         | 0.005                | 1 Ų   | ιU          |                   |                    |    | 0.005            | 1               | υv                |                 |                     |     | 0.005            | 1 L              | u u          |
| VOLATILES   | Biomochoromethane                     | 2.4E+01<br>1.0E+01 | 0.0005      | 0.005        | NE                  | NE                       | 2.4E+01            |                      |                   |         | 0.005                | 1 0   |             |                   |                    |    | 0.005            | 1               | u u               |                 |                     |     | 0.005            | 1 1              | 1 0          |
| VOLATILES   | Bromoform                             | 3.4E+01            | 0.0005      | 0.005        | NE                  | NE                       | 3.4E+01            |                      |                   |         | 0.005                | 1 1   | ίŭ          |                   |                    |    | 0.005            | 1               | υŭ                |                 |                     |     | 0.005            | 1 1              | йй.          |
| VOLATILES   | Bromomethane                          | 3.5E-01            | 0.0010      | 0.010        | NE                  | NE                       | 3.5E-01            |                      |                   |         | 0.010                | i ũ   | ĴŪ.         |                   |                    |    | 0.009            | 1               | υŭ                |                 |                     |     | 0.010            | i ī              | υŬ           |
| VOLATILES   | Carbon disultide                      | 1.0E+02            | 0.0005      | 0.005        | NE                  | NE                       | 1.0E+02            |                      |                   |         | 0.005                | 1 U   | I U         |                   |                    |    | 0.005            | 1               | u u               |                 |                     |     | 0.005            | 1 1              | u u          |
| VOLATILES   | Chlorobenzene                         | 4.0E+01            | 0.0005      | 0.005        | NE                  | N는<br>NF                 | 3.5E-01            |                      |                   |         | 0.005                | 1 U   | ט נ<br>וו ו |                   |                    |    | 0.005            | 1               | ט ט<br>יי וו      |                 |                     |     | 0.005            | 1 1              |              |
| VOLATILES   | Chloroethane                          | 1.1E+03            | 0.0010      | 0.010        | NE                  | NE                       | 1.1E+03            |                      |                   |         | 0.010                | i ŭ   | ίŭ          |                   |                    |    | 0.009            | i               | ŭŭ                |                 |                     |     | 0.010            | ii               | ย์ มั        |
| VOLATILES   | Chloroform                            | 3.1E-01            | 0.0005      | 0.005        | NE                  | NE                       | 3.1E-01            |                      |                   |         | 0.005                | 1 Ū   | ŪL          |                   |                    |    | 0.005            | 1               | น นี้             |                 |                     |     | 0.005            | 1 ĭ              | ป บั         |
| VOLATILES   | cisolomethane                         | 2.3E+01<br>1.2E+02 | 0.0020      | 0.010        | NE                  | NE                       | 2.3E-01            |                      |                   |         | 0.010                | 1 U   | υU          |                   |                    |    | 0.009            | 1               | ម ម               |                 |                     |     | 0.010            | 1 1              | 1 1          |
| VOLATILES   | cts-1,3-Dichloropropene               | 1.2E+00            | 0.0005      | 0.005        | NE                  | NE                       | 1.2E+00            |                      |                   |         | 0.005                | 1 1   | J U         |                   |                    | •  | 0.005            | 1               | υ υ<br>υ υ        |                 |                     |     | 0.005            | 1 1              | 5 U<br>15 U  |
| VOLATILES   | Dibromochloromethane                  | 7.6E+00            | 0.0005      | 0.005        | NE                  | NE                       | 7.6E+00            |                      |                   |         | 0.005                | ่ ข้  | υŪ          |                   |                    |    | 0.005            | i               | υŭ                |                 |                     |     | 0.005            | i i              | ΰũ           |
| VOLATILES   | Dibromomethane                        | 1.9E+01            | 0.0005      | 0.005        | NE                  | NE                       | 1.9E+01            |                      |                   |         | 0.005                | 1 U   | i U         |                   |                    |    | 0.005            | 1               | U U               |                 |                     |     | 0.005            | 1 (              | 10           |
| VOLATILES   | Ethylbenzene                          | 4.3E+02            | 0.0005      | 0.005        | NE                  | NE                       | 2.2E+02<br>4.3E+02 |                      |                   |         | 0.010                | 1 U<br>1 B                                    |             |                   |                    |    | 0.009            | 1               | 0 U<br>11 II      |                 |                     |     | 0.010            | 1 U              | . U          |
|   |                                       |                    |             |              |                     |                          |                    |                      |                   |         | 0.000                |   |             |                   |                    |    |                  |                 | ~ ~               |                 |                     |     | 0.000            | · ·              | ~ ~          |

00066621

Shaw Environmental, Inc.

| Table 4-113   |
|---|
| Comparison of Chemic al Concentration of Chemicals in Soil to Risk-Based Screening Values |
| WRSump-018  |

| [SUMP] = WRSUMPO<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE | 18                         | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method      | Back<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soit<br>L. mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP076-SB01<br>35-SMP076-SB01-01<br>9/14/2006<br>_5 - 5 Ft<br> | 35SUMP0<br>35-SMP074<br>9/14/<br>7 - 1<br>RE | )76-SB<br>6-SB01<br>2006<br>7 Ft<br>:G | 01<br> -02 |     | WRS018-SB01<br>WRS018-SB01-01<br>9/26/2006<br>_5 - 5 Ft<br> | WRS<br>WRS0<br>9/<br>4_5 | 018-SB<br>18-SB0<br>26/2006<br>- 4_5 F<br>REG | 01<br>1-02<br>1 |          | WRS0<br>WRS01<br>9/2<br>_5 | 018-SB0<br>8-SB02-<br>6/2006<br>5 Ft<br>REG | 2<br>01     | WRS0<br>WRS0<br>9/2<br>4_5 | 018-SB0<br>18-SB02<br>26/2006<br>- 4_5 FI<br>REG | 02<br>5-02<br>1 |           |
|--|----------------------------|--|---------------------|-------------|---|--|--|---|--|--|------------|-----|---|--------------------------|---|-----------------|----------|----------------------------|---|-------------|----------------------------|--|-----------------|-----------|
| Test Group   | Parameter (Linits # mo/ko) | (RBSV) <sup>a</sup>                      | Limit (MDL)         | Limit (MOL) | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft                                       | Value  | Result DIL LQ VQ  | Result                                       | DILI                                   | LQ V       | /Q  | Result DIL LO VO  | Result                   | DIL   | LQ              | va       | Result                     |   | <u>o va</u> | Result                     | DIL  | LQ              | <u>vo</u> |
| VOLATILES  | Hexachlorobutadiena        | 1.6E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.6E+00                                      |   | 0.005  | 1                                      | υι         | Ų   |   | 0.005                    | 1   | Ų               | U        |                            |   |             | 0.005                      | 1  | U               | U.        |
| VOLATILES  | isopropylbenzene           | 5.4E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 5.4E+02                                      |   | 0.005  | 1                                      | υι         | U   |   | 0.005                    | 1   | υ               | U        |                            |   |             | 0.005                      | 1  |                 | U.        |
| VOLATILES  | m.p-Xvienes                | 2.3E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.3E+02                                      |   | 0.005  | 1                                      | υι         | U   |   | 0.005                    | 1   | U               | U        |                            |   |             | 0.005                      |  |                 | U.        |
| VOLATILES  | Methyl isobutyl ketone     | 1.3E+03                                  | 0.0025              | 0.01        | NE                                      | NE   | 1,3E+03                                      |   | 0.010  | 1                                      | υι         | U   |   | 0.009                    | 1   | U               | U.       |                            |   |             | 0.010                      | 1  |                 |           |
| VOLATILES  | Methviene chloride         | 8.7E+00                                  | 0.0010              | 0.005       | NE                                      | NE   | 8.7E+00                                      |   | 0.005  | 1                                      | υι         | u   |   | 0.005                    | 1   | U               | 0        |                            |   |             | 0.005                      | 1  |                 |           |
| VOLATILES  | Naphthalene                | 1.8E+01                                  | 0.0005              | 0.01        | NE                                      | NE   | 1.8E+01                                      |   | 0.010  | 1                                      | υι         | U   |   | 0.009                    | 1   | U               | U        |                            |   |             | 0.010                      |  |                 |           |
| VOLATILES  | n-BUTYLBENZENE             | 2.7E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.7E+02                                      |   | 0.005  | 1                                      | บเ         | U   |   | 0.005                    | 1   | U               | Ų        |                            |   |             | 0.005                      | 1  | U.              |           |
| VOLATILES  | <b>R-PROPYLBENZENE</b>     | 3.2E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.2E+02                                      |   | 0,005  | 1                                      | υι         | U   |   | 0.005                    | 1   | u               | Ų        |                            |   |             | 0.005                      | 1  |                 |           |
| VOLATILES  | D-ISOPROPYLTOLUENE         | 4.2E+02                                  | 0.0005              | 0.005       | NE                                      | NË   | 4.2E+02                                      |   | 0.005  | 1                                      | Uł         | U   |   | 0.005                    | 1   | U               | U        |                            |   |             | 0.005                      | 1  |                 | 8         |
| VOLATILES  | sec-BUTYLBENZENE           | 3.0E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.0E+02                                      |   | 0.005  | 1                                      | Ųι         | U   |   | 0.005                    | 1   | U               | U        |                            |   |             | 0.005                      | 1  |                 |           |
| VOLATILES  | Styrene                    | 1.3E+03                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.3£+03                                      |   | 0.005  | 1                                      | υι         | U   |   | 0.005                    | 1   | U               | U        |                            |   |             | 0.005                      | 1  |                 |           |
| VOLATILES  | tert-BUTYLBENZENE          | 2.6E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 2.6E+02                                      |   | 0.005  | 1                                      | 0 1        | U U |   | 0.005                    | 1   | U               | U        |                            |   |             | 0.005                      |  | 0               | .u        |
| VOLATILES  | Tetrachloroethene          | 6.0E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 6.0E+00                                      |   | 0.004  | 1                                      | J.         | 1   |   | 0.005                    | 1   | U               | U        |                            |   |             | 0.005                      |  |                 | U.        |
| VOLATILES  | Toluene                    | 1.1E+03                                  | 0.0005              | 0.005       | NE                                      | NE 1   | 1.1E+03                                      |   | 0.005  | 1                                      | υι         | U   |   | 0.005                    | 1   | U               | U        |                            |   |             | 0.005                      | 1  |                 | U.        |
| VOLATILES  | trans-1.2-Dichloroethene   | 1.4E+02                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.4E+02                                      |   | 0.005  | 1                                      | υι         | U   |   | 0.005                    | 1   | Ų               | U        |                            |   |             | 0.005                      | 1  | U.              |           |
| VOI ATILES   | trans-1.3-Dichiompropene   | 1.8E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 1.8E+00                                      |   | 0.005  | 1                                      | υι         | U   |   | 0.005                    | 1   | υ               | Ų        |                            |   |             | 0.005                      | 1  |                 |           |
| VOLATIES   | Tricbloroethene            | 3.7E+00                                  | 0.0005              | 0.005       | NE                                      | NE   | 3.7E+00                                      |   | 0.028  | 1                                      |            |     |   | 0.005                    | 1   | υ               | U        |                            |   |             | 0.005                      | 1  |                 | 0         |
| VOLATILES  | Trichlorofluoromethane     | 2.6E+02                                  | 0.0010              | 0.01        | NE                                      | NE   | 2.6E+02                                      |   | 0.00965                                      | 1                                      | υι         | U   |   | 0.00925                  | 1   | U               | U        |                            |   |             | 0.00984                    | 1  | U.              |           |
| VOLATILES  | Vinvl acetate              | 5.7E+01                                  | 0.0010              | 0.01        | NE                                      | NE   | 5.7E+01                                      |   | 0.010  | 1                                      | υı         | υ   |   | 0.009                    | 1   | Ľ               | U        |                            |   |             | 0.010                      | 1  | U.              | U         |
| VOLATILES  | Vinyl chloride             | 3.6E-02                                  | 0.0010              | 0.01        | NE                                      | NE   | 3.6E-02                                      |   | 0.003  | 1                                      | J.,        | 1   |   | 0.009                    |   | U               | <u> </u> |                            |   |             | 0.010                      | 1  |                 | <u> </u>  |

### Table 4-114 Upper Confidence Limits of Mean Concentrations in Soil at LHAAP-47 Locations Where One or More Values Exceed Risk-Based Screening Values Samples Collected After 2003

|  |          | Soil Concent | ration (mg/kg) |          |
|--|----------|--------------|----------------|----------|
| Sample Number                            | Aluminum | Manganese    | Mercury        | Vanadium |
| 35-SMP48-SB01-01                         | 6890     | 308          | 0.342          | 33.5     |
| 35-SMP48-SB01-02                         | 10500    | 106          | 0.31           | 16.4     |
| 35-SMP050-SB01-01                        | 10300    | 55.60        | 0.023          | 59.0     |
| 35-SMP050-SB01-02                        | 13700    | 24.40        | 0.282          | 17.0     |
| 35-SMP53-SB01-01                         | 8250     | 219          | 0.037          | 63.5     |
| 35-SMP53-SB01-02                         | 7110     | 485          | 0.275          | 22.7     |
| 35-SMP073-SB01-01                        | 13100    | 173          | 0.0257         | 22.4     |
| 35-SMP073-SB01-02                        | 9520     | 114          | 0.789          | 19.1     |
| 35-SMP073-SB02-01                        | 10000    | 165          | 0.273          | 22.7     |
| 35-SMP073-SB02-02                        | 9980     | 109          | 0.0444         | 44.7     |
| 35-SMP074-SB01-01                        | 7340     | 236          | 0.0161         | 19.6     |
| 35-SMP074-SB01-02                        | 11900    | 3650         | 0.285          | 40.8     |
| 35-SMP074-SB01-02-QC                     | 8930     | 241          | 0.284          | 21.0     |
| 35-SMP074-SB02-01                        | 9730     | 237          | 0.0218         | 22.4     |
| 35-SMP074-SB02-02                        | 8810     | 80.3         | 0.281          | 12.3     |
| 35-SMP077-SB01-01                        | 6480     | 137          | 0.0408         | 33.8     |
| 35-SMP077-SB01-02                        | 19600    | 52.3         | 0.306          | 26.9     |
| SUMPORT-SB-01-01                         | 19200    | 59.1         | 0.0678         | 59.7     |
| SIMPORT-SB-01-02                         | 5640     | 166          | 0.290          | 17.5     |
| SUMP082-SB-01-01                         | 6490     | 131          | 0.014          | 20.1     |
| SUMP082-SB-01-07                         | 7750     | 55.8         | 0.293          | 20.3     |
| SUMP002-SD-01-02                         | 17800    | 34.7         | 0.083          | 59.9     |
| STIMD083-SB-01-07                        | 4460     | 21.7         | 0.290          | 26.3     |
| 2551 MD084-SB01                          | 21600    | 37.8         | 0.075          | 55.5     |
| 2551 MAD084 SB01                         | 22800    | 77.4         | 0.055          | 63.0     |
| 2550 WF 004-500 P                        | 22800    | 18.4         | 0.071          | 63.9     |
| 25SLIMD084-SB02                          | 11800    | 106.0        | 0.052          | 23.7     |
| 25 SMD085-SB01-02                        | 12500    | 60           | 0.295          | 18.10    |
| 35-SMP085-SB01-02                        | 5300     | 143          | 0.019          | 22.70    |
| 25-SMP080-SB01-01                        | 4580     | 21           | 0.294          | 7.55     |
| WPS17-SB01-01                            | 5430     | 169          | 0.040          | 23.1     |
| WDC17-CB01-07                            | 24100    | 63           | 0.069          | 49.5     |
| WRS17-5001-02                            | 8550     | 241          | 0.051          | 28.1     |
| MRS17-0002-01                            | 17400    | 53.2         | 0.288          | 29.2     |
| 25 SMD087-SB01-01                        | 6310     | 572.0        | 0.012          | 18.9     |
| 35-SMP087-SP01-07                        | 22700    | 42.4         | 0.018          | 31.9     |
| 35-SMP087-SB02-01                        | 10300    | 51.3         | 0.084          | 72.8     |
| 35-SMP087-SB02-02                        | 9210     | 216.0        | 0.049          | 28.4     |
| 35-SMP091-SB01-01                        | 11900    | 143.0        | 0.022          | 34.8     |
| 35-SMP091-SB01-02                        | 17800    | 244.0        | 0.028          | 21.3     |
| 35-SMP92-SB01-02                         | 8320     | 28.9         | 0.283          | 8.7      |
| 35-SMP01_SP01-01                         | 5300     | 143.0        | 0.019          | 22.70    |
| 35-SMP01-SB01-02                         | 4580     | 21.0         | 0.294          | 7.55     |
| 35-SMP01-SB02-01                         | 4800     | 182.0        | 0.100          |          |
| 35-SMP01-SB02-01                         | 6490     | 17.5         | 0.100          |          |
| M/DS04_SB01_01                           | 17400    | 53.2         | 0.288          | 29.20    |
| MR304-3001-01                            | 10200    | 17.1         | 0.011          | 13.90    |
| WR304-300 F02                            | 6340     | 163          | 0.045          | 62.5     |
| WR314-3001-01                            | 11600    | 366          | 0.019          | 26.1     |
| 25 CNID076 CD01 01                       | 12300    | 181.0        | 0.027          | 24.60    |
| 35-SMD076-SB01-07                        | 13000    | 48.4         | 0.275          | 23.90    |
| 30-31417-070-300 1-04<br>MIDE019 ED01 01 | 3030     | 117.0        | 0.016          | 19.80    |
| 10-100-0100-0100 NO                      | 18400    | 455.0        | 0.038          | 52.20    |
| WR0010-0001-02                           | 10200    | 209.0        | 0.029          | 56.20    |
| WROUID-0602-01                           | 20000    | 101.0        | 0.028          | 40.90    |
| WR3018-3802-02                           | 1.135+04 | 2.04F+02     | 1.41E-01       | 3.17E+01 |
| mean (mg/Kg)                             | 5 65E+03 | 4.88E+02     | 1.50E-01       | 1.72E+01 |
| Sta. Dev. (mg/kg)                        | 5.552.00 | 55           | 55             | 53       |
| Sample Size (N)                          | 4.055.04 | 3 705+02     | 1 74E-01       | 3 39E+01 |

 95% UCL EPC (mg/kg) Post-2003 Samples \*
 1.25E+04
 2.

 \* 95% upper confidence limit (UCL) determined using bootstrapping (2000 replications).

### Table 4-115a Revision of Cancer Risk Estimates Based on Pre-2003 Measurements of Metals in Soil by Using Post-2003 Soil Analysis Results LHAAP-47

| Chemical  | Jacobs (2003)<br>Exposure Point<br>Concentration<br>(EPC) (mg/kg) <sup>a,b</sup> | Jacobs (2003)<br>Incremental<br>Lifetime Cancer<br>Risk (ILCR) <sup>c</sup> | Jacobs Total<br>Soil Incremental<br>Lifetime Cancer<br>Risk (ILCR) <sup>d</sup> | Post-2003 EPC<br>(mg/kg) <sup>e</sup> | Post-2003<br>Incremental<br>Lifetime Cancer<br>Risk (ILCR) | Revised Total<br>Soil Cancer<br>Risk (ILCR) |
|-----------|--|---|---|---------------------------------------|--|---|
| Aluminum  | 8.82E+03   | NA  | 1.80E-05  | 1.25E+04                              | NA   | NA  |
| Manganese | 3.60E+02   | NA  |   | 2.79E+02                              | NA   |   |
| Mercury   | 5.78E+00   | NA  |   | 1.73E-01                              | NA   |   |
| Vanadium  | 3.40E+01   | NA  |   | 3.39E+01                              | NA   |   |

# Table 4-115b Revision of Noncancer Hazard Estimates Based on Pre-2003 Measurements of Metals in Soil by Using Post-2003 Soil Analysis Results LHAAP-47

| <b>,</b>  | Jacobs (2003)<br>Exposure Point<br>Concentration | Jacobs (2003)<br>Hazard Index | Jacobs (2003)<br>Total Soil<br>Hazard Index | Post-2003 EPC        | Post-2003<br>Hazard Index | Net Increase in<br>Hazard Index | Revised Total<br>Soil Hazard |
|-----------|--|-------------------------------|---|----------------------|---------------------------|---------------------------------|------------------------------|
| Chemical  | (EPC) (mg/kg) <sup>b</sup>                       | (HI) <sup>f</sup>             | (HI) <sup>g</sup>                           | (mg/kg) <sup>e</sup> | (HI) <sup>h</sup>         | (HI) <sup>1</sup>               | Index (HI) k                 |
| Aluminum  | 8.82E+03   | 1.50E-02                      | 4.60E-01                                    | 1.25E+04             | 2.12E-02                  | 6.21E-03                        | 4.7E-01                      |
| Manganese | 3.60E+02   | 1.70E-02                      |   | 2.79E+02             | NC                        | NA                              |                              |
| Mercury   | 5.78 <b>E+</b> 00                                | 3.60E-02                      |   | 1.73E-01             | NC                        | NA                              |                              |
| Vanadium  | 3.40E+01   | 1.70E-02                      |   | 3.39E+01             | NC                        | NA                              |                              |

#### Notes:

a Jacobs Engineering Group, Inc., Final Baseline Human Health and Screening Ecological Risk Assessment for the Group 4 Sites, Sites 04, 08,

35A, 35B, 35C, 46, 47, 48, 50, 60, 67, Goose Prairie Creek, Saunder's Branch, and Caddo Lakelolume 1, Longhorn Army Ammunition Plant,

Karnack, Texas, Oak Ridge, Tennessee, June 2003.

b Table 3-44 of Jacobs (2003) risk assessment.

c ILCR calculated for exposures to the metal in soil by all pathways evaluated, Table C-125 of Jacobs (2003) risk assessment.

d ILCR calculated for exposures to all chemicals in soil by all pathways evaluated, Table C-125 of Jacobs (2003) risk assessment.

e Value based on samples collected since 2003, Table 4-114

f HI calculated for exposures to the metal in soil by all pathways evaluated, Table C-122 of Jacobs (2003) risk assessment.

g Hi calculated for exposures to all chemicals in soil by all pathways evaluated, Table C-122 of Jacobs (2003) risk assessment.

h Values for aluminum Post-2003 HI = Jacobs HI x (Post-2003 EPC/Jacobs-2003 EPC).

i Net increase in HI for aluminum = Post-2003 HI - Jacobs-2003 HI.

k Revised Hi = Jacobs-2003 Total HI + Sum of Net Increase in HI associated with aluminum.

NA - not applicable

NC - not calculated, Post 2003 EPC is less than or equal to Jacobs (2003) EPC.

Shaw Environmental, Inc.

### 00066624

Table 4-116 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-111

.

.

| [SUMP] = SUMP111<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                                  | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backg<br>Concentral<br>(95% UP<br>Surface | round<br>tions in Soit<br>L, mg/kg)<br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 355UMP111-SB01<br>35-SMP111-SB01-01<br>9/20/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP111-SB01<br>35-SMP111-SB01-02<br>9/20/2006<br>3.5 - 3.5 Ft<br>REG |
|--|----------------------------------|--|---------------------|------------------------|---|---|---|---|---|
| Test Group   | Parameter (Units = mg/kg)        | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft                                      | Value   | Result DIL LQ VQ  | Result DIL LQ VQ  |
| METALS   | Aluminum                         | 1.8E+04                                  | 10.000              | 20.00                  | 1.63E+04                                  | 2.08E+04  | 1.6E+04                                       | 4400.000 1  | 9500.000 1  |
| METALS   | Antimony                         | 7.3E+00                                  | 0.050               | 0.10                   | 9.40E-01                                  | 1.60E+00  | 7.3E+00                                       | 0.056 1 J J   | 0.112 1 0   |
| METALS   | Arsenic                          | 2.0E+01                                  | 0.075               | 0.30                   | 4.81E+00                                  | 5.54E+00  | 2.0E+01                                       | 1.210 1   | 20,100, 1   |
| METALS   | Barium                           | 2.6E+03                                  | 0.075               | 0.30                   | 1.52E+02                                  | 8.55E+01  | 2.05+03                                       | 0.000 1   | 0.421 1   |
| METALS   | Beryllium                        | 4.6E+00                                  | 0.012               | 0.50                   | 6.45E-01                                  | 7.00E-01  | 4.0E+00<br>5.2E+00                            | 0.166 1 1   | 0398 1 1  |
| METALS   | Cadmium                          | 5.22+00                                  | 0.025               | 0.10                   | 1.40E+00                                  | 4.002-01  | 0.20100                                       | 783.000 1   | 136.000 1   |
| METALS   | Calcium                          | INE INE                                  | 0.100               | 0.40                   | 2.665+01                                  | 3.015+01  | 5.9E+03                                       | 18.200 1  | 19.100 1  |
| METALS   | Cabalt                           | 1.55+03                                  | 0.100               | 0.40                   | 7 23E+00                                  | 5.61E+00  | 1.5E+03                                       | 7.920 1   | 2.420 1   |
| METALS   | Copper                           | 1.0E+03                                  | 0.150               | 0.60                   | 5.55E+00                                  | 9.25E+00  | 1.0E+03                                       | 1,610 1   | 2.830 1   |
| METALS   | Iron                             | NE                                       | NA                  | NA                     | NA  | NA  |   | 5030.000 1  | 26500,000 1   |
| METALS   | Lead                             | 5.0E+02                                  | 0.100               | 0.20                   | 2.26E+01                                  | 1.14E+01  | 5.0E+02                                       | 10.600 1  | 7.110 1   |
| METALS   | Magnesium                        | NE                                       | NA                  | NA                     | NA  | NA  |   | 608.000 1   | 370.000 1   |
| METALS   | Manganese                        | 1.7E+03                                  | 0.050               | 0.20                   | 1.25E+03                                  | 2.01E+02  | 1.7E+03                                       | 478.000 1   | 16.200 1  |
| METALS   | Mercury                          | 1.1E-02                                  | 0.010               | 0.25                   | 8.19E-02                                  | 3.60E-01  | 2.5E-01                                       | 0.012 1 J J   | 0.042 1 J J   |
| METALS   | Nickel                           | 1.9E+02                                  | 0.200               | 0.80                   | 6,98E+00                                  | 1.16E+01  | 1.9E+02                                       | 7.240 1   | 3.210 1   |
| METALS   | Potassium                        | NE                                       | NA                  | NA                     | NA  | NA  | -   | 425.000 1   | 236,000 1   |
| METALS   | Selenium                         | 1.3E+02                                  | 0.100               | 0.20                   | 3.48E+00                                  | 5.57E+00  | 1.3E+02                                       | 0.228 1   | 1.810   |
| METALS   | Silver                           | 4.7E+01                                  | 0.050               | 0.20                   | 3.10E-01                                  | 3.70E-01  | 4.7E+01                                       | 1.620 1 0   | 193,000 1   |
| METALS   | Sođium                           | NE                                       | NA                  | NA                     | NA  | NA  |   | 55.900  | 0.030 1   |
| METALS   | Thallium                         | 2.0E+00                                  | 0.010               | 0.02                   | 4.70E-01                                  |   | 2.02+00                                       | 11 900 1  | 45 000 1  |
| METALS   | Vanadium                         | 4.86+01                                  | 0.125               | 0.50                   | 3.210+01                                  | 4.40ETV1  | 5.05+03                                       | 10.000 1  | 8 350 1   |
| METALS   | Zinc<br>Deseate Calida           | 5.9E+03                                  | 0.025               | 2.00                   | D. IOETOT                                 | 2.022701  | 5.02100                                       | 88.100 1  | 87.300 1  |
| SOLIDS   | Percent Solids                   | 5 25+00                                  | 0.0005              | 0.005                  | NE  | NE  | 5.2E+00                                       |   | 0,006 1 U   |
| VOLATILES  | 1.1.1.7.7eteuacilioroetinane     | 2 3E+02                                  | 0.0005              | 0.005                  | NE  | NE  | 2.3E+02                                       |   | 0.006 1 U   |
| VOLATILES  | 1 4 2 2-Tetrachloroethane        | 5 1E-01                                  | 0.0005              | 0.000                  | NE  | NE  | 5.1E-01                                       |   | 0.006 1 U   |
| VOLATILES  | 1 1 2-Trichloroethane            | 9 7E-01                                  | 0.0005              | 0.005                  | NE  | NE  | 9.7E-01                                       | · ·   | 0.006 1 U   |
| VOLATILES  | 1.1-Dichloroethane               | 8.9E+01                                  | 0.0010              | 0.005                  | NE  | NE  | 8.9E+01                                       |   | 0.006 1 U   |
| VOLATILES  | 1.1-Dichlorgethene               | 2.7E+01                                  | 0.0005              | 0.005                  | NE  | NE  | 2.7E+01                                       |   | 0.006 1 U   |
| VOLATILES  | 1,1-Dichloropropene              | 9.9E-01                                  | 0.0005              | 0.005                  | NE  | ΝE  | 9.9E-01                                       |   | 0.006 1 U   |
| VOLATILES  | 1,2,3-Trichlorobenzene           | 4.2E+01                                  | 0.0005              | 0.005                  | NE  | NE  | 4.2E+01                                       |   | 0.006 1 U   |
| VOLATILES  | 1,2,3-Trichloropropane           | 9.2E-02                                  | 0.0010              | 0.005                  | NE  | NE  | 9.2E-02                                       |   | 0.006 1 0   |
| VOLATILES  | 1,2,4-Trichlorobenzene           | 1.4E+02                                  | 0.0005              | 0.005                  | NE  | NE  | 1.4E+02                                       |   | 0.006 1 0   |
| VOLATILES  | 1,2,4-Trimethylbenzene           | 9.6E+00                                  | 0.0005              | 0.005                  | NE  | NE  | 9.66+00                                       | 1   | 0.006 1 1   |
| VOLATILES  | 1,2-Dibromo-3-chloropropane      | 3.5E-01                                  | 0,0020              | 0.005                  | NE  | NE  | 5.00-01                                       |   | 0.006 1 U   |
| VOLATILES  | 1,2-Dibromoethane                | 5.3E-02                                  | 0.0005              | 0.005                  | NE  |   | 5.6E+01                                       |   | 0.006 1 U   |
| VOLATILES  | 1,2-Dichlorobenzene              | 5.0E+U1                                  | 0.0005              | 0.005                  | NE  | NË  | 2.7E-01                                       |   | 0.006 1 U   |
| VOLATILES  | 1,2-Dichloropeinane              | 195-00                                   | 0.0005              | 0.000                  | NE  | NE  | 1.8E+00                                       |   | 0.00 <del>6</del> 1 U   |
| VOLATILES  | 1.2-Directive bonzone (o-Xidene) | 3.3E+03                                  | 0.0005              | 0.005                  | NE  | NE  | 3.3E+03                                       |   | 0.006 1 U   |
| VOLATILES  | 1 3 5-Trimethylbenzene           | 8.3E+00                                  | 0.0005              | 0.005                  | NE  | NE  | 8.3E+00                                       |   | 0.006 1 U   |
| VOLATILES  | 1.3-Dichlorobenzene              | 5.1E+00                                  | 0.0005              | 0.005                  | NE  | NE  | 5.1E+00                                       | 1   | 0.006 1 U   |
| VOLATILES  | 1.3-Dichloropropane              | 3.0E+00                                  | 0.0005              | 0.005                  | NE  | NE  | 3.0E+00                                       |   | 0.006 1 U   |
| VOLATILES  | 1.4-Dichlorobenzene              | 2.7E+01                                  | 0.0005              | 0.005                  | NE  | NE  | 2.7E+01                                       |   | 0.006 1 U   |
| VOLATILES  | 2,2-Dichloropropane              | 1.7E+00                                  | 0.0005              | 0.005                  | NE  | NE  | 1.7E+00                                       |   | 0.006 1 U   |
| VOLATILES  | 2-Butanone                       | 2.6E+03                                  | 0.0025              | 0.010                  | NE  | NE  | 2.6E+03                                       |   | 0.011 1 U   |
| VOLATILES  | 2-Chloroethyl vinyl ether        | 2.1E-01                                  | 0.0020              | 0.010                  | NE  | NE  | 2.1E-01                                       |   |   |
| VOLATILES  | 2-Chlorotoluene                  | 1.5E+02                                  | 0.0005              | 0.005                  | NE  | NE  | 1.5E+02                                       |   |   |
| VOLATILES  | 2-Hexanone                       | 6.2E+00                                  | 0.0025              | 0.010                  | NE  | NE  | 6.2E+00                                       |   | 0.006 1 1   |
| VOLATILES  | 4-Chiorotoluene                  | 3.4E-01                                  | 0.0005              | 0.005                  | NE  | NE  | 3.4E+01<br>4.7E+02                            | 1   | 0.028 1   |
| VOLATILES  | ACEIONE                          | 1./E+02                                  | 0.0050              | 0.010                  | NE  |   | 8.85-01                                       | 1   | 0.006 1 U   |
| VOLATILES  | Bernzene                         | 0.02-01                                  | 0.0005              | 0,005                  | NE  | NE  | 1 15+01                                       |   | 0.006 1 U   |
| VOLATILES  | Bramochlaromethane               | 245+01                                   | 0.0005              | 0.005                  | NE  | NE  | 2.45+01                                       |   | 0.006 1 U   |
| VOLATILES  | Bromodichloromethane             | 1.0E+01                                  | 0.0005              | 0.005                  | NE  | NE  | 1.0E+01                                       |   | 0.006 1 U   |
| VOLATILES  | Bromotorm                        | 3.4E+01                                  | 0.0005              | 0.005                  | NE  | NE  | 3.4E+01                                       | 1   | 0.006 1 U   |
| VOLATILES  | Bromomethane                     | 3.5E-01                                  | 0.0010              | 0,010                  | NE  | NE  | 3.5E-01                                       |   | 0.011 1 U   |
| VOLATILES  | Carbon disulfide                 | 1.0E+02                                  | 0.0005              | 0.005                  | NE  | NE  | 1.0E+02                                       |   | 0.006 I U   |
| VOLATILES  | Carbon tetrachloride             | 3.5E-01                                  | 0.0005              | 0,005                  | NE  | NE  | 3.5E-01                                       | I   | 0,006 1 U   |

Shaw Environmental, Inc.

### 00066625

| Table 4-116   |   |
|---|---|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Value | S |
| Sump-111  |   |

[SUMP] = SUMP111 35SUMP111-SB01 35SUMP111-SB01 LOCATION CODE Applicable 35-SMP111-SB01-01 35-SMP111-SB01-02 Background SAMPLE\_NO TÇEQ TCEQ 9/20/2006 9/20/2006 Concentrations in Soil Risk-Based SAMPLE\_DATE 3.5 - 3.5 Ft 0.5 - 0.5 Ft (95% UPL, mg/kg) **Risk-Based** Method Method DEPTH Screening REG Screening REG SAMPLE\_PURPOSE Quantitation Surface Subsurface Value Detection Result DIL LQ VQ 1.5 - 2.5 Ft Value Result DIL LQ VQ 0 - 0.5 Ft (RBSV)<sup>a</sup> Limit (MDL Limit (MQL) Parameter (Units = mg/kg) Test Group VOLATILES 0.006 1 U 0.005 NE NE 4.0E+01 0.0005 Chlorobenzene 4.0E+01 0.011 1 U NE 1.1E+03 0.0010 0.010 NE VOLATILES Chloroethane 1.1E+03 NE NE NE 0.006 1 U NE 3.1E-01 Chloroform 3.1E-01 0.0005 0.005 VOLATILES 0.011 1 U 2.3E-01 0.0020 0.010 NE 2.3E-01 VOLATILES Chlommethane 0.006 1 Ū 0.005 ΝE 1.2E+02 1.2E+02 0.0005 cis-1,2-Dichloroethene VOLATILES 0.006 1 U NE NE NE 1.2E+00 0.0005 0.005 cis-1,3-Dichloropropene 1.2E+00 VOLATILES NENE 7.6E+00 0.006 1 U VOLATILES Dibromochloromethane 7.6E+00 0.0005 0.005 0.006 1 U 1 9E+01 1.9E+01 0.0005 0.005 NE VOLATILES Dibromometharie 0.011 1 U NE 2.2E+02 0.0010 0.010 2.2E+02 VOLATILES Dichlorodifluoromethane 0.006 1 Ū 0.0005 0.005 NE NE 4.3E+02 VOLATILES Ethylbenzene 4.3E+02 0.006 Ц NE NE NE 1.6E+00 1 VOLATILES Hexachlorobutadiene 1.6E+00 0.0005 0.005 NE 0.006 1 U 5.4E+02 5.4E+02 0.0005 0.005 VOLATILES Isopropylbenzene 0.006 U NĒ 2.3E+02 1 2.3E+02 0.0005 0.005 NE VOLATILES m.p-Xylenes 0.011 Ū 1 0.0025 0.010 NE NE 1.3E+03 1.3E+03 VOLATILES Methyl isobutyl ketone 0.007 B NE NE 8.7E+00 1 0.005 VOLATILES Methylene chloride 8.7E+00 0.0010 0.011 1 U. NE 1.8E+01 NE 1.8E+01 0.0005 0.010 VOLATILES Nanhthalene 0.006 Ú NE NE 2.7E+02 1 0.005 n-BUTYLBENZENE 2.7E+02 0.0005 VOLATILES ū 0.006 1 0.005 NE NE 3.2E+02 n-PROPYLBENZENE 0.0005 VOLATILES 3.2E+02 NE NE 4.2E+02 0.006 1 U p-ISOPROPYLTOLUENE 4.2E+02 0.0005 0.005 VOLATILES 0.006 U NE 3.0E+02 1 sec-BUTYLBENZENE NÉ 3.0E+02 0.0005 0.005 VOLATILES 0.006 U 0.005 NE NE 1.3E+03 0.0005 1.3E+03 VOLATILES Styrene 0.006 Ū 0.005 NE NE 2.6E+02 1 VOLATILES tert-BUTYLBENZENE 2.6E+02 0.0005 1 U NE NE 6.0E+00 0.0066.0E+00 0.0005 0.005 VOLATILES Tetrachloroethene 1.1E+03 0.006 1 U 0.0005 0.005 NE NE Toluene 1.1E+03 VOLATILES 0.006 1 Ŭ 0.0005 0.005 NE NE 1.4E+02 VOLATILES trans-1,2-Dichloroethene 1.4E+02 1 U 0.005 NE NE 1.8E+00 0.006 0.0005 VOLATILES trans-1,3-Dichloropropene 1.8E+00 0.006 1 U VOLATILES NE NE 3.7E+00 Trichloroethene 3.7E+00 0.0005 0.005 0.011 1 U 2.6E+02 2.6E+02 0.0010 0.010 NË NE VOLATILES Trichlorofluoromethane 0.011 1 U UJ NE NE 5.7E+01 0.0010 0.010 VOLATILES Vinyl acetate 5.7E+01 0.011 1 U 0.010 NE NE 3.6E-02 0.0010 Vinyl chloride 3.6E-02 VOLATILES

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Sector procession of the transmission of the

| Table 4-117 |  |
|-------------|--|
|-------------|--|

Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-112

|                  |                                |            |             | 90101        | P-112      | -              |                    |                   |                   |
|------------------|--------------------------------|------------|-------------|--------------|------------|----------------|--------------------|-------------------|-------------------|
| [SUMP] ≈ SUMP112 |                                |            |             |              |            |                |                    | 35SUMP111-SB01    | 35SUMP111-SB01    |
| LOCATION_CODE    |                                | TOFO       |             |              | Backo      | round          | Applicble          | 35-SMP111-SB01-01 | 35-SMP111-S801-02 |
|                  |                                | Rick-Rased |             |              | Concentra  | tions In Soil  | TCEQ               | 9/20/2006         | 9/20/2006         |
| SAMPLE_DATE      |                                | Screening  | Method      | Method       | (95% UP    | L, mg/kg)      | Risk-Based         | 0.5 - 0.5 Ft      | 3.5 - 3.5 Ft      |
| SAMPLE PURPOSE   |                                | Value      | Detection   | Quantitation | Surface    | Subsurface     | Screening          | REG               | REG               |
| Test Group       | Parameter (Units = mg/kg)      | (RBSV) *   | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft   | Value              | Result DIL LQ VQ  | Result DIL LQ VQ  |
| METALS           | Aluminum                       | 1.6E+04    | 10.000      | 20.00        | 1.63E+04   | 2.08E+04       | 1.6E+04            | 4400.000 1        | 9500.000 1        |
| METALS           | Antimony                       | 7.3E+00    | 0.050       | 0.10         | 9.40E-01   | 1,60E+00       | 7.35+00            | 0.056 1 3 3       | 3.640 1           |
| METALS           | Arsenic                        | 2.0E+01    | 0.075       | 0.30         | 4.81E+00   | 5.542+00       | 2.0E+01            | 108.000 1         | 20 100 1          |
| METALS           | Barium                         | 2.6E+03    | 0.075       | 0.30         | 1,526+02   | 7 665 01       | 2.0E+03            | 0.888 1           | 0.421 1           |
| METALS           | Beryllium                      | 4.65+00    | 0.012       | 0.50         | 1.405-01   | 4 00E-01       | 5 2E+00            | 0166 1 J J        | 0.398 1 U         |
| METALS           | Cadmium                        | 5.2E+00    | 0.025       | 0, 10<br>MA  | NA         | NA NA          | -                  | 783.000 1         | 136.000 1         |
| METALS           | Calcium                        | 5 05+03    | 0 100       | 040          | 2.66E+01   | 3.01E+01       | 5.9E+03            | 18.200 1          | 19.100 1          |
| METALS           | Cobalt                         | 1.5E+03    | 0.125       | 0.50         | 7.23E+00   | 5.61E+00       | 1.5E+03            | 7.920 1           | 2.420 1           |
| METALO           | Conzer                         | 1.0E+03    | 0.150       | 0.60         | 5.55E+00   | 9.25E+00       | 1.0E+03            | 1.610 1           | 2.830 1           |
| METALS           | tron                           | NE         | NA          | NA           | NA         | NA             | -                  | 5030.000 1        | 26500.000 1       |
| METALS           | Lead                           | 5.0E+02    | 0.100       | 0.20         | 2.26E+01   | 1.14E+01       | 5.0E+02            | 10.600 1          | 7.110 1           |
| METALS           | Magnesium                      | NE         | NA          | NA           | NA         | NA             |                    | 608.000 1         | 3/0.000 1         |
| METALS           | Manganese                      | 1.7E+03    | 0.050       | 0.20         | 1.25E+03   | 2.01E+02       | 1.7E+03            | 478.000 1         | 10.200 1          |
| METALS           | Mercury                        | 1.1E-02    | 0.010       | 0.25         | 8.19E-02   | 3.60E-01       | 2.5E-01            | 0.012 1 3 3       | 2 2 2 1 2 3       |
| METALS           | Nickel                         | 1.9E+02    | 0.200       | 0.80         | 6.98E+00   | 1,16E+01       | 1.9E+0Z            | 425,000, 1        | 236 000 1         |
| METALS           | Potassium                      | NE         | NA          | NA<br>0.00   | 2 40E+00   | NA<br>5 575±00 | 1 35+02            | 0.228 1           | 0.816 1           |
| METALS           | Selenium                       | 1.3E+02    | 0.100       | 0.20         | 3.400-00   | 3705-01        | 4 7E+01            | 1.620 1 U         | 1.590 1 U         |
| METALS           | Silver                         | 4.7E+01    | 0.050       | 0.20         | 3.10E-01   | NA             |                    | 55.900 1          | 183.000 1         |
| METALS           | Socium                         | 2 05+00    | 0.010       | 0.02         | 4 705-01   | NF             | 2.0E+00            | 0.047 1           | 0.039 1           |
| METALS           | Venedium                       | 2.0E+00    | 0.010       | 0.50         | 3.21E+01   | 4.46E+01       | 4,8E+01            | 11.800 1          | 45.000 1          |
| METALS           | Zinc                           | 5.9E+03    | 0.625       | 2.50         | 6.16E+01   | 2.02E+01       | 5.9E+03            | 10.000 1          | 8.350 1           |
| SOLIDS           | Percent Solids                 | NË         | NVA         | NVA          | NE         | NE             |                    | 88.100 1          | 87.300 1          |
| VOLATILES        | 1.1.1.2-Tetrachloroethane      | 5.2E+00    | 0.0005      | 0.005        | NE         | NE             | 5.2E+00            |                   | 0.006 1 U         |
| VOLATILES        | 1,1,1-Trichloroethane          | 2.3E+02    | 0.0005      | 0.005        | NE         | NE             | 2.3E+02            |                   | 0.006 1 U         |
| VOLATILES        | 1,1,2,2-Tetrachloroethane      | 5.1E-01    | 0.0005      | 0.005        | NE         | NE             | 5.1E-01            | 1                 | . 0.006 1 U       |
| VOLATILES        | 1,1,2-Trichloroethane          | 9.7E-01    | 0.0005      | 0.005        | NE         | NE             | 9.7E+01            |                   | . 0.006 1 U       |
| VOLATILES        | 1,1-Dichloroethane             | 8.9E+01    | 0.0010      | 0.005        | NE         | NE             | 0.95+01            |                   | 0.006 1 U         |
| VOLATILES        | 1,1-Dichloroethene             | 2.76+01    | 0.0005      | 0.005        |            | NE             | 9.95.61            |                   | 0.006 1 U         |
| VOLATILES        | 1,1-Dichloropropene            | 9.95-01    | 0,0005      | 0.005        | NE         | NE             | 4 2E+01            |                   | 0.006 1 U         |
| VOLATILES        | 1,2,3-Trichloropropage         | 925-02     | 0.0000      | 0.005        | NE         | NE             | 9.2E-02            |                   | 0.006 1 U         |
| VOLATILES        | 1.2.4-Trichlorobenzene         | 1 4E+02    | 0.0005      | 0.005        | NE         | NE             | 1.4E+02            |                   | 0.006 1 U         |
| VOLATILES        | 1 2 4-Trimethylbenzene         | 9.6E+00    | 0.0005      | 0.005        | NE         | NE             | 9.6E+00            | 1                 | 0,006 1 U         |
| VOLATILES        | 1.2-Dibromo-3-chloropropane    | 3.5E-01    | 0.0020      | 0.005        | NE         | NE             | 3.5E-01            |                   | 0.006 1 U         |
| VOLATILES        | 1,2-Dibromoethane              | 5.3E-02    | 0.0005      | 0.005        | NE         | NE             | 5.3E-02            |                   | 0.006 1 U         |
| VOLATILES        | 1,2-Dichlorobenzene            | 5.6E+01    | 0.0005      | 0.005        | NE         | NE             | 5.6E+01            |                   | 0.006 1 0         |
| VOLATILES        | 1,2-Dichloroethane             | 2.7E-01    | 0.0005      | 0.005        | NE         | NE             | 2.7E-01            |                   | 0.000 1 0         |
| VOLATILES        | 1,2-Dichloropropane            | 1.8E+00    | 0.0005      | 0.005        | NE         | NE             | 1.85+00            | 1                 | 0.006 1 U         |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene) | 3.3E+03    | 0.0005      | 0.005        | NE         | INE            | 8 35+00            |                   | 0.006 1 U         |
| VOLATILES        | 1,3,5-Trimethylbenzene         | 8.3E+00    | 0.0005      | 0.005        |            | NE             | 5 1E+00            |                   | 0.006 1 U         |
| VOLATILES        | 1,3-Dichloropenzene            | 3.05+00    | 0.0005      | 0.005        | NE         | NE             | 3.0E+00            |                   | 0.006 1 U         |
| VOLATILES        | 1,3-Dichlorobenzene            | 2 7E+01    | 0.0005      | 0.005        | NE         | NE             | 2.7E+01            |                   | 0.006 1 U         |
| VOLATILES        | 2.2-Dichloropropage            | 1.7E+00    | 0.0005      | 0.005        | NE         | NE             | 1.7E+00            | 1                 | 0.006 1 U         |
| VOLATILES        | 2-Butanone                     | 2.6E+03    | 0.0025      | 0.010        | NÉ         | NE             | 2.6E+03            | 1                 | 0.011 1 U         |
| VOLATILES        | 2-Chloroethyl vinyl ether      | 2.1E-01    | 0.0020      | 0.010        | NE         | NE             | 2.1E-01            |                   | 0.011 1 U         |
| VOLATILES        | 2-Chlorotoluene                | 1.5E+02    | 0.0005      | 0.005        | NE         | NE             | 1.5E+02            |                   |                   |
| VOLATILES        | 2-Hexanone                     | 6.2E+00    | 0.0025      | 0.010        | NE         | NE             | 6.2E+00            |                   |                   |
| VOLATILES        | 4-Chlorotoluene                | 3.4E-01    | 0.0005      | 0.005        | NE         | NE             | 3.42-01            |                   | 0.000 1 0         |
| VOLATILES        | Acetone                        | 1.7E+02    | 0.0050      | 0.010        | NE         |                | 1.72102            |                   | 0.006 1 1         |
| VOLATILES        | Benzene                        | 8.8E-01    | 0.0005      | 0.005        |            | NE             | 0.0E-01<br>1 1E+01 |                   | 0.006 1 U         |
| VOLATILES        | Bromobenzene                   | 1.1E+01    | 0.0005      | 0.005        |            | NE             | 24E+01             |                   | 0.006 1 U         |
| VOLATILES        | Bromocnioromethane             | 2.46+01    | 0.0005      | 0.005        |            | NE             | 1.0E+01            | 1                 | 0.006 1 U         |
| VOLATILES        | Bromoform                      | 3.45+01    | 0.0005      | 0.005        | NE         | NE             | 3.4E+01            |                   | 0.006 1 U         |
| VOLATILES        | Bromomethane                   | 3.5E-01    | 0.0010      | 0.010        | NE         | NE             | 3.5E-01            |                   | 0.011 1 U         |
| VOLATILES        | Carbon disulfide               | 1.0E+02    | 0.0005      | 0.005        | NE         | NE             | 1.0E+02            |                   | 0.006 1 U         |
| VOLATILES        | Carbon tetrachloride           | 3.5E-01    | 0.0005      | 0.005        | NE         | NE             | 3.5E-01            | 1                 | 0.006 1 U         |
|                  |                                |            |             |              |            |                |                    |                   |                   |

Shaw Environmental, Inc.

### 00066627

| Table 4-117  |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
|  |

Sump-112

| ISUMP112<br>LOCATION CODE         TCEQ         Background         Applicable         35SUMP111-SB01         35SUMP111-SB0           SAMPLE_NO<br>SAMPLE_DATE         Risk-Based         Creaning         Method         Method         (95%,UPL_mg/kg)         Risk-Based         35SUMP111-SB01         35SUMP111-SB01         35SUMP111-SB01         920202006         92020206  |   |                           |  |                     | ound                   |   |   |  |   |   |
|---|---|---------------------------|--|---------------------|------------------------|---|---|--|---|---|
| Test Group         Parameter (Units = mg/kg)         (RBSV)*         Limit (MOL)         0.0.6 Ft         1.5-2.5 Ft         Value         Result Dit. LD. VU         Result Dit. LD. VU           VOLATILES         Chiorobenzene         4.0E+01         0.0005         NE         NE         4.0E+01         0.0016         LU           VOLATILES         Chiorofernane         3.1E+01         0.0005         0.005         NE         NE         4.0E+01         0.0011         1         U           VOLATILES         Chiorofern         3.1E+01         0.0020         0.010         NE         NE         3.1E+01         0.0016         1         U         0.0011         1         U           VOLATILES         Chiorofernane         2.3E+01         0.0020         0.010         NE         NE         1.2E+02         0.0065         NE         NE         1.2E+02         0.0061         U         0.0061         U         0.0061         U         0.0061         U         0.0061         U         0.0061         U         0.0061         U         0.0061         U         0.0061         U         0.0061         U         0.0061         U         0.0061         U         0.0061         U         0.0061         U <t< td=""><td>[SUMP] = SUMP112<br/>LOCATION _CODE<br/>SAMPLE_NO<br/>SAMPLE_DATE<br/>DEPTH<br/>SAMPLE_PURPOSE</td><td></td><td>TCEQ<br/>Risk-Based<br/>Screening<br/>Value</td><td>Method<br/>Detection</td><td>Method<br/>Quantitation</td><td>Back<br/>Concentra<br/>(95% UF<br/>Surface</td><td>ground<br/>tions in Soil<br/><sup>2</sup>L, mg/kg)<br/>Subsurface</td><td>Applicble<br/>TCEQ<br/>Risk-Based<br/>Screening</td><td>35SUMP111-SB01<br/>35-SMP111-SB01-01<br/>9/20/2006<br/>0.5 - 0.5 Ft<br/>REG</td><td>355UMP111-SB01<br/>35-SMP111-SB01-02<br/>9/20/2006<br/>3.5 - 3.5 Ft<br/>REG</td></t<> | [SUMP] = SUMP112<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br><sup>2</sup> L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP111-SB01<br>35-SMP111-SB01-01<br>9/20/2006<br>0.5 - 0.5 Ft<br>REG | 355UMP111-SB01<br>35-SMP111-SB01-02<br>9/20/2006<br>3.5 - 3.5 Ft<br>REG |
| VOLATILES         Chiorobenzene         4.0E+01         0.0005         NE         NE         4.0E+01         0.0001         0.0011         1         0           VOLATILES         Chioroethane         1.1E+03         0.0010         0.010         NE         NE         1.1E+03         0.0011         1         0           VOLATILES         Chioroethane         3.1E-01         0.0005         0.005         NE         NE         3.1E-01         0.011         1         U           VOLATILES         Chioroethane         2.3E-01         0.0005         0.005         NE         NE         3.1E-01         0.011         1         U           VOLATILES         Chioroethane         2.3E-01         0.0005         0.005         NE         NE         1.2E+02         0.006         1         U           VOLATILES         Dibromochioromethane         1.9E+01         0.0005         0.005         NE         NE         1.2E+02         0.006         1         U           VOLATILES         Dibromochioromethane         1.9E+01         0.0005         0.005         NE         NE         1.9E+01         0.006         1         U           VOLATILES         Dibromochidragena         2.3E+02 <t< td=""><td>Test Group</td><td>Parameter (Units = mg/kg)</td><td>(RBSV) *</td><td>Limit (MDL)</td><td>Limit (MQL)</td><td>0 - 0.5 Ft</td><td>1.5 - 2.5 Ft</td><td>Value</td><td>Result DIL LQ VQ</td><td>Result DIL LQ VQ</td></t<>   | Test Group  | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| VOLATILES         Chlorostinane         1.1E+03         0.0010         NE         NE         1.1E+03         0.0011         1         0           VOLATILES         Chloroform         3.1E-01         0.0005         0.005         NE         NE         3.1E-01         0.0011         1         U           VOLATILES         Chloromethane         2.3E-01         0.0025         0.005         NE         NE         2.3E-01         0.006         1         U           VOLATILES         Chioromethane         2.3E-01         0.0005         0.005         NE         NE         1.2E+02         0.006         1         U           VOLATILES         Dibromochhormethane         7.6E+00         0.0005         0.005         NE         NE         1.2E+02         0.006         1         U           VOLATILES         Dibromochhormethane         7.6E+00         0.0005         0.005         NE         NE         1.9E+01         0.006         1         U           VOLATILES         Dibromochhormethane         2.2E+02         0.0010         NE         NE         4.3E+02         0.006         1         U         VOLATILES         Hexachlorobutadiene         1.6E+00         0.006         1         U   | VOLATILES   | Chlorobenzene             | 4.0E+01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 4.0E+01                                      |   | 0.011 1 11  |
| VOLATILES         Chloroform         3.1E-01         0.0005         0.005         NE         NE         3.1E-01         0.001         I         U           VOLATILES         Chloromethane         2.3E-01         0.0020         0.010         NE         NE         2.3E-01         0.011         U           VOLATILES         cis-1,2-Dichloroethene         1.2E+02         0.0005         0.005         NE         NE         1.2E+02         0.006         1         U           VOLATILES         cis-1,2-Dichloroptopene         1.2E+00         0.0005         0.005         NE         NE         1.2E+02         0.006         1         U           VOLATILES         Dibromochloromethane         7.8E+00         0.0005         0.005         NE         NE         1.9E+01         0.0005         0.005         NE         NE         1.9E+01         0.0005         0.005         NE         NE         1.9E+01         0.006         1         U           VOLATILES         Dibromochloromethane         2.2E+02         0.001         0.010         NE         NE         4.3E+02         0.006         1         U           VOLATILES         Dichlorodfiluoromethane         1.6E+00         0.0005         0.005 <td< td=""><td>VOLATILES</td><td>Chloroethane</td><td>1.1E+03</td><td>0.0010</td><td>0.010</td><td>NE</td><td>NE</td><td>1.1E+03</td><td></td><td>0.006 4 U</td></td<>  | VOLATILES   | Chloroethane              | 1.1E+03                                  | 0.0010              | 0.010                  | NE                                      | NE  | 1.1E+03                                      |   | 0.006 4 U   |
| VOLATILES         Chtoromethane         2.3E-01         0.002         0.010         NE         NE         2.3E-01         0.0011         1         0           VOLATILES         cis-1,2-Dichloropethen         1.2E+02         0.0005         0.005         NE         NE         1.2E+00         0.006         1         U           VOLATILES         cis-1,3-Dichloropropene         1.2E+00         0.0005         0.005         NE         NE         1.2E+00         0.006         1         U           VOLATILES         Dibromochloromethane         7.8E+00         0.0005         0.005         NE         NE         1.9E+01         0.006         U         VOLATILES         Dibromomethane         2.2E+02         0.011         U         VOLATILES         Dibromomethane         2.2E+02         0.006         1         U           VOLATILES         Ethylonzene         4.3E+02         0.0005         0.005         NE         NE         4.3E+02         0.006         1         U           VOLATILES         Biopropylenezene         6.4E+02         0.0005         0.005         NE         NE         5.4E+02         0.006         1         U           VOLATILES         Meinyl isobutyl kelone         1.3E+03         0.  | VOLATILES   | Chloroform                | 3.1E-01                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.1E-01                                      |   | 0.011 1 1   |
| VOLATILES         Cis-1,2-Dichloroethene         1.2E+02         0.0005         0.005         NE         NE         1.2E+02         0.0006         0           VOLATILES         Dibromochloromethane         7.6E+00         0.0005         0.005         NE         NE         1.2E+00         0.006         1         U           VOLATILES         Dibromochloromethane         1.9E+01         0.0005         0.005         NE         NE         1.9E+01         0.006         1         U           VOLATILES         Dibromochloromethane         1.9E+01         0.0005         0.005         NE         NE         1.9E+01         0.006         1         U           VOLATILES         Dibromochloromethane         2.2E+02         0.0010         NI         NE         2.2E+02         0.011         U           VOLATILES         Ethyloenzene         4.3E+02         0.0005         NI         NE         4.3E+02         0.006         1         U           VOLATILES         Hexachlorobutadiene         1.6E+00         0.0005         NI         NE         5.4E+02         0.006         1         U           VOLATILES         hexachlorobutadiene         1.6E+00         0.0005         NI         NE         5.4E+02 </td <td>VOLATILES</td> <td>Chloromethane</td> <td>2.3E-01</td> <td>0.0020</td> <td>0.010</td> <td>NE</td> <td>NE</td> <td>2.3E-01</td> <td></td> <td>0.006 1 11</td>  | VOLATILES   | Chloromethane             | 2.3E-01                                  | 0.0020              | 0.010                  | NE                                      | NE  | 2.3E-01                                      |   | 0.006 1 11  |
| VOLATILES         cis-1,3-Dichloropropene         1.2E+00         0.0005         0.005         NE         NE         1.2E+00         0.0005         0.005         VOLATILES         Dibromochloromethane         7.6E+00         0.006         1         U           VOLATILES         Dibromochloromethane         1.9E+01         0.0005         0.005         NE         NE         1.9E+01         0.006         1         U           VOLATILES         Dibromomethane         1.9E+01         0.0005         0.005         NE         NE         1.9E+01         0.006         1         U           VOLATILES         Dichtorodfiluoromethane         2.2E+02         0.011         NE         NE         2.2E+02         0.006         1         U           VOLATILES         Hexachlorobutadiene         1.6E+00         0.0005         0.005         NE         NE         4.3E+02         0.006         1         U           VOLATILES         Hexachlorobutadiene         1.6E+00         0.0005         0.005         NE         NE         5.4E+02         0.006         1         U           VOLATILES         mp-Xylenes         2.3E+02         0.0005         0.005         NE         NE         1.3E+03         0.0071         VOLA  | VOLATILES   | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.2E+02                                      |   | 0.006 1 11  |
| VOLATILES         Dibromochloromethane         7.6E+00         0.005         NE         NE         1.6E+00         0.006         1           VOLATILES         Dibromomethane         1.9E+01         0.0005         0.005         NE         NE         1.9E+01         0.006         1         U           VOLATILES         Dibromomethane         2.2E+02         0.001         0.010         NE         NE         2.2E+02         0.006         1         U           VOLATILES         Ethylbenzene         4.3E+02         0.0005         0.005         NE         NE         4.3E+02         0.006         1         U           VOLATILES         Isopropylbenzene         6.4E+02         0.0005         0.005         NE         NE         1.6E+00         0.006         1         U           VOLATILES         Isopropylbenzene         6.4E+02         0.0005         0.005         NE         NE         5.4E+02         0.006         1         U           VOLATILES         Methyl isobutyl ketone         1.3E+03         0.0025         0.010         NE         NE         1.3E+03         0.011         U         VOLATILES         Nethyl isobutyl ketone         1.7E+00         0.007         1         U         VOLA   | VOLATILES   | cis-1,3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.20+00                                      |   | 0.006 1 11  |
| VOLATILES         Dibromomsthane         1.9E+01         0.0005         0.005         NE         NE         1.9E+01         0.0001         0           VOLATILES         Dichlorodiffuoromethane         2.2E+02         0.0010         0.010         NE         NE         2.2E+02         0.011         U           VOLATILES         Ethylbenzene         4.3E+02         0.005         NE         NE         4.3E+02         0.006         1         U           VOLATILES         Hexachlorobutadione         1.6E+00         0.0005         0.005         NE         NE         4.3E+02         0.006         1         U           VOLATILES         Hexachlorobutadione         1.6E+00         0.0005         0.005         NE         NE         1.6E+00         0.006         1         U           VOLATILES         mp-Xylenes         2.3E+02         0.0005         0.005         NE         NE         2.3E+02         0.006         1         U           VOLATILES         Methylisobutyl ketone         1.3E+03         0.0025         0.010         NE         NE         1.3E+03         0.0011         U         VOLATILES         Naphthalene         1.0E+01         0.0011         U         VOLATILES         Naphthalene   | VOLATILES   | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 7.6E+00                                      |   | 0.006 1 U   |
| VOLATILES         Dichtorodifiuoromethane         2.2E+02         0.001         0         NE         NE         2.2E+02         0.001         1         0           VOLATILES         Ethylbenzene         4.3E+02         0.0005         0.005         NE         NE         4.3E+02         0.006         1         U           VOLATILES         Hexachlorobuladiene         1.6E+00         0.0005         0.005         NE         NE         1.6E+00         0.006         1         U           VOLATILES         Hexachlorobuladiene         1.6E+02         0.0005         0.005         NE         NE         1.6E+00         0.006         1         U           VOLATILES         Hexachlorobuladiene         1.6E+02         0.0005         0.005         NE         NE         2.3E+02         0.006         1         U           VOLATILES         Methylisobutyl ketone         1.3E+03         0.0025         0.010         NE         NE         1.3E+03         0.007         1         U           VOLATILES         Methylisobutyl ketone         1.3E+01         0.0005         0.005         NE         NE         1.8E+01         0.0011         U         VOLATILES         Naphthalane         0.2T+10.00005         0.005   | VOLATILES   | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                      | NĘ  | 1.92+01                                      |   | 0.000 1 0   |
| VOLATILES         Ethylbenzene         4.35+02         0.0005         0.005         NE         NE         4.36+02         0.0006         1           VOLATILES         Hexachlorobutadiene         1.66+00         0.0005         0.005         NE         NE         1.66+00         0.006         1         U           VOLATILES         Isopropylbenzene         6.46+02         0.0005         0.005         NE         NE         1.66+00         0.006         1         U           VOLATILES         Isopropylbenzene         6.46+02         0.0005         0.005         NE         NE         5.45+02         0.006         1         U           VOLATILES         Meihylisobutyl ketone         1.36+03         0.0011         NE         NE         1.36+03         0.011         U           VOLATILES         Meihylisobutyl ketone         1.36+03         0.0005         0.010         NE         NE         8.76+00         0.007         1           VOLATILES         Meihylisobutyl ketone         1.76+01         0.0005         0.010         NE         NE         1.82+03         0.001         1         U           VOLATILES         Naphthatene         1.88+01         0.0005         0.005         NE  | VOLATILES   | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                      | NE  | 2.22+02                                      |   | 0.006 1 1   |
| VOLATILES         Hexachlorobutadione         1.6E+00         0.005         0.05         NE         NE         1.6E+00         0.005         1         0         0.005         1         0         0.005         1         0         0.005         1         0         0.005         1         0         0.005         1         0         0.005         1         0         0.006         1         0         0.006         1         0<   | VOLATILES   | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 4.3E+02                                      |   |   |
| VOLATILES         isopropybenzene         6.4E+02         0.0005         NE         NE         5.4E+02         0.0005         I         U           VOLATILES         m.pXylenes         2.3E+02         0.0005         0.005         NE         NE         2.8E+02         0.0005         0.005         NE         NE         2.3E+02         0.001         U         0.001         1         U           VOLATILES         Methy isobutyl ketone         1.3E+03         0.011         1         U         V         0.001         0.005         NE         NE         1.3E+03         0.011         1         U           VOLATILES         Methy isobutyl ketone         1.3E+03         0.001         0.005         NE         NE         8.7E+00         0.001         1         U           VOLATILES         Methyl isobutyl ketone         1.8E+01         0.0005         0.010         NE         NE         8.7E+00         0.001         1         U           VOLATILES         Naphthalene         1.8E+01         0.0005         0.005         NE         NE         2.7E+02         0.006         1         U           VOLATILES         n-PROPYLBENZENE         3.2E+02         0.0005         0.005         NE   | VOLATILES   | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.6E+00                                      |   | 0.006 1 1   |
| VOLATILES         m.p.×ylenes         2.3E+02         0.005         0.05         NE         NE         2.3E+02         0.005         1         0           VOLATILES         Meihyl isobutyl ketone         1.3E+03         0.0025         0.010         NE         NE         1.3E+03         0.011         U           VOLATILES         Meihyl isobutyl ketone         1.3E+03         0.0025         0.010         NE         NE         1.3E+03         0.007         1           VOLATILES         Meihylene chloride         8.7E+00         0.001         0.005         NE         NE         8.7E+00         0.001         1         U           VOLATILES         Naphthatene         1.8E+01         0.0005         0.010         NE         NE         1.8E+01         0.001         1         U           VOLATILES         n-BUTYLENZENE         2.7E+02         0.0005         0.005         NE         NE         3.2E+02         0.006         1         U           VOLATILES         n-BROPYLENZENE         3.2E+02         0.0005         0.005         NE         NE         3.2E+02         0.006         1         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.0005         0.005 </td <td>VOLATILES</td> <td>Isopropyibenzene</td> <td>5.4E+02</td> <td>0.0005</td> <td>0.005</td> <td>NE</td> <td>NE</td> <td>5.4E+02</td> <td></td> <td>0.006 1 U</td>   | VOLATILES   | Isopropyibenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 5.4E+02                                      |   | 0.006 1 U   |
| VOLATILES         Methyl isobutyl kelone         1.3E+03         0.001         1         0.011         1           VOLATILES         Methylene chloride         8.7E+00         0.001         0.005         NE         NE         8.7E+00         0.001         1         0           VOLATILES         Methylene chloride         8.7E+00         0.0005         NE         NE         8.7E+00         0.001         1         U           VOLATILES         Maphthalene         1.8E+01         0.005         NE         NE         1.8E+01         0.006         1         U           VOLATILES         n-BUTYLENZENE         2.7E+02         0.0005         0.005         NE         NE         2.2E+02         0.006         1         U           VOLATILES         n-PROPYLEENZENE         3.2E+02         0.0005         0.005         NE         NE         3.2E+02         0.006         1         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.0005         0.005         NE         NE         3.0E+02         0.006         1         U           VOLATILES         Styrene         1.3E+03         0.0005         0.005         NE         NE         1.3E+03         0.006 <td< td=""><td>VOLATILES</td><td>m,p-Xylenes</td><td>2.3E+02</td><td>0.0005</td><td>0.005</td><td>NE</td><td>NE</td><td>2.3E+02</td><td></td><td></td></td<>   | VOLATILES   | m,p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.3E+02                                      |   |   |
| VOLATILES         Methylene chloride         8.7E+00         0.005         NE         NE         8.7E+00         0.007         1           VOLATILES         Naphthalene         1.8E+01         0.005         0.010         NE         NE         1.8E+01         0.011         U           VOLATILES         Naphthalene         1.8E+01         0.005         0.010         NE         NE         1.8E+01         0.011         U           VOLATILES         n-BUTYLBENZENE         2.7E+02         0.005         0.005         NE         NE         2.7E+02         0.006         1         U           VOLATILES         n-PROPYLBENZENE         3.2E+02         0.0005         0.005         NE         NE         3.2E+02         0.006         1         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.0005         0.005         NE         NE         3.0E+02         0.006         1         U           VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.0005         0.005         NE         NE         3.0E+02         0.006         1         U           VOLATILES         Styrene         1.3E+03         0.0005         0.005         NE         NE         1.3E+0  | VOLATILES   | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.010                  | NE                                      | NE  | 1.3E+03                                      |   | 0.011 1 0   |
| VOLATILES         Naphthatene         1.8E+01         0.0005         0.010         NE         NE         1.8E+01         0.001         1         0           VOLATILES         n-BUTYLBENZENE         2.7E+02         0.0005         0.005         NE         NE         2.7E+02         0.006         1         U           VOLATILES         n-BUTYLBENZENE         3.2E+02         0.0005         0.005         NE         NE         3.2E+02         0.006         1         U           VOLATILES         n-BROPYLBENZENE         3.2E+02         0.0005         0.005         NE         NE         3.2E+02         0.006         1         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.0005         0.005         NE         NE         4.2E+02         0.006         1         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.0005         0.005         NE         NE         3.0E+02         0.006         1         U           VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.0005         0.005         NE         NE         1.3E+03         0.006         1         U           VOLATILES         tert-BUTYLBENZENE         2.6E+02   | VOLATILES   | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                      | NE  | 8.7E+00                                      |   | 0.007 1 B   |
| VOLATILES         n-BUTYLBENZENE         2.7E+02         0.0005         NE         NE         2.7E+02         0.0006         1         U           VOLATILES         n-PROPYLBENZENE         3.2E+02         0.0005         0.005         NE         NE         3.2E+02         0.006         1         U           VOLATILES         p-ISOPROPYLBENZENE         3.2E+02         0.0005         0.005         NE         NE         4.2E+02         0.006         1         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.0005         0.005         NE         NE         4.2E+02         0.006         1         U           VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.006         1         U         VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.006         1         U           VOLATILES         Styrene         1.3E+03         0.0005         0.005         NE         NE         1.3E+03         0.006         1         U           VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.0005         0.005         NE         NE         2.6E+02         0.006         1         U           VOLATILES         Tetrachloroethene         6.0E+00 </td <td>VOLATILES</td> <td>Naphthalene</td> <td>1.8E+01</td> <td>0.0005</td> <td>0.010</td> <td>NE</td> <td>NE</td> <td>1.8E+01</td> <td></td> <td>0.011 1 0</td>  | VOLATILES   | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.010                  | NE                                      | NE  | 1.8E+01                                      |   | 0.011 1 0   |
| VOLATILES         n-PROPYLBENZENE         3.2E+02         0.005         NE         NE         3.2E+02         0.006         1         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.005         0.005         NE         NE         4.2E+02         0.006         1         U           VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.005         NE         NE         4.2E+02         0.006         1         U           VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.005         0.005         NE         NE         3.0E+02         0.006         1         U           VOLATILES         Styrene         1.3E+03         0.0005         0.005         NE         NE         1.3E+03         0.006         1         U           VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.0005         0.005         NE         NE         2.6E+02         0.006         1         U           VOLATILES         Tetrachloroethene         6.0E+00         0.0005         0.005         NE         NE         6.0E+00         0.006         1         U           VOLATILES         Tetrachloroethene         1.1E+03         0.005         NC5   | VOLATILES   | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.7E+02                                      |   | 0.006 1 0   |
| VOLATILES         p-ISOPROPYLTOLUENE         4.2E+02         0.005         NE         NE         4.2E+02         0.006         1         U           VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.005         0.005         NE         NE         3.0E+02         0.006         1         U           VOLATILES         Styrene         1.3E+03         0.0005         0.005         NE         NE         1.3E+03         0.006         1         U           VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.0005         0.005         NE         NE         1.3E+03         0.006         1         U           VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.0005         0.005         NE         NE         2.6E+02         0.006         1         U           VOLATILES         Tetrachiorocthene         6.0E+00         0.0005         0.005         NE         NE         6.0E+00         0.006         1         U           VOLATILES         Tetrachiorocthene         1.1E+03         0.006         NE         NE         1.1E+03         0.006         1         U   | VOLATILES   | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.2E+02                                      |   | · 0.006 1 U   |
| VOLATILES         sec-BUTYLBENZENE         3.0E+02         0.0005         0.005         NE         NE         3.0E+02         0.0006         1         U           VOLATILES         Styrene         1.3E+03         0.0005         0.005         NE         NE         1.3E+03         0.006         1         U           VOLATILES         Styrene         1.3E+03         0.0005         0.005         NE         NE         1.3E+03         0.006         1         U           VOLATILES         tert-BUTYLBENZENE         2.6E+02         0.0005         0.005         NE         NE         2.6E+02         0.006         1         U           VOLATILES         Tetrachloroethene         6.0E+00         0.0005         0.005         NE         NE         6.0E+00         0.006         1         U           VOLATILES         Toluene         1.1E+03         0.0005         0.005         NE         NE         1.1E+03         0.006         1         U   | VOLATILES   | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 4.2E+02                                      |   | 0.006 1 0   |
| VOLATILES         Styrene         1.3E+03         0.0005         0.005         NE         NE         1.3E+03         0.006         1         0           VOLATILES         tort-BUTYLBENZENE         2.65+02         0.0005         0.005         NE         NE         2.6E+02         0.006         1         U           VOLATILES         Tetrachloroethene         6.0E+00         0.0005         0.005         NE         NE         6.0E+00         0.006         1         U           VOLATILES         Totrachloroethene         6.0E+00         0.0005         0.005         NE         NE         6.0E+00         0.006         1         U           VOLATILES         Toluene         1.1E+03         0.0005         0.005         NE         NE         1.1E+03         0.006         1         U  | VOLATILES   | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.0E+02                                      |   | · 0.006 1 U   |
| VOLATILES         tent-BUTYLBENZENE         2.65±02         0.0005         0.005         NE         NE         2.65±02         0.0006         1         U           VOLATILES         Tetrachlorocthene         6.05±00         0.0005         0.005         NE         NE         6.05±00         0.006         1         U           VOLATILES         Tetrachlorocthene         1.15±03         0.0005         0.005         NE         NE         1.15±03         0.006         1         U   | VOLATILES   | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.3E+03                                      |   | 0.006 1 0   |
| VOLATILES         Tetrachloroethene         6.0E+00         0.0005         0.005         NE         NE         6.0E+00         0.006         1         U           VOLATILES         Tokuene         1.1E+03         0.0005         0.005         NE         NE         1.1E+03         0.006         1         U   | VOLATILES   | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.6E+02                                      | 1   | 0.006 1 U   |
| VOLATILES Toluene 1.1E+03 0.0005 0.005 NE NE 1.1E+03 0.006 1 U  | VOLATILES   | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 6.0E+00                                      |   | 0.006 1 U   |
|   | VOLATILES   | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.1E+03                                      |   | 0.006 1 U   |
| VOLATILES trans-1.2-Dichloroethene 1.4E+02 0.0005 0.005 NE NE 1.4E+02 0.006 1 U   | VOLATILES   | trans-1.2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.4E+02                                      |   | 0.006 1 U   |
| VOLATILES trans-1.3-Dichloropropene 1.8E+00 0.0005 0.005 NE NE 1.8E+00 0.006 1 U  | VOLATILES   | trans-1.3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.8E+00                                      |   | 0.006 1 0   |
| VOLATILES Tichtoroethene 3.7E+00 0.0005 0.005 NE NE 3.7E+00 0.006 1 U   | VOLATILES   | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.7E+00                                      |   | 0.006 1 U   |
| VOLATILES Trichlorofluoromethane 2.6E+02 0.0010 0.010 NE NE 2.6E+02 0.011 1 U   | VOLATILES   | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.010                  | NË                                      | NE  | 2.6E+02                                      | 1   | 0.011 1 U   |
| VOLATILES Vinviacetate 5.7E+01 0.0010 0.010 NE NE 5.7E+01 0.011 1 U   | VOLATILES   | Vinvl acetate             | 5.7E+01                                  | 0.0010              | 0.010                  | NE                                      | NE  | 5.7E+01                                      | 1   | 0.011 1 U UJ  |
| VOLATILES Vinyl chloride 3.6E-02 0.0010 0.010 NE NE 3.6E-02 0.011 1 U   | VOLATILES   | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.010                  | NE                                      | NE  | 3.6E-02                                      |   | 0.011 1 U   |

المستقلقة بتنابع ليراد الاثار واثبت

1

Shaw Environmental, Inc.

### 00066628

| Table 4-118  |       |
|--|-------|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Va | alues |
| Sump-113   |       |

|  |   |                    |             | oump 110               |                    | 1                       |                         | 1  |   |
|--|---|--------------------|-------------|------------------------|--------------------|-------------------------|-------------------------|--|---|
| [SUMP] = SUMP113<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE |   | TCEQ<br>Risk-Based |             |                        | Back(<br>Concentra | ground<br>tions in Soll | Applicble<br>TCEQ       | 35SUMP113-SB01<br>35-SMP113-SB01-02<br>9/20/2006 | 35\$UMP113-SB02<br>35-SMP113-SB02-02<br>9/20/2006 |
| DEPTH  |   | Screening<br>Value | Method      | Method<br>Quantitation | (95% UP<br>Surface | L, mg/kg)<br>Subsurface | Risk-Based<br>Screening | REG  | REG   |
| SAMPLE_PORPOSE   | Parameter (Linits = mo/kg)              | (RBSV)             | Limit (MDL) | Limit (MQL)            | 0 - 0.5 Ft         | 1.5 - 2.5 Ft            | Value                   | Result DIL LQ VQ                                 | Result DIL LQ VQ                                  |
| RANGE_ORGANICS   | Carbon Range C12-C28                    | 4.0E+02            | 25          | 50                     | NE                 | NE                      | 4.0E+02                 | 57.9 1 U   | 55.1 1 U  |
| RANGE_ORGANICS   | CARBON RANGE C28-C35                    | 4.0E+02            | 25          | 50                     | NE                 | NE                      | 4.0E+02                 | 57.9 1 U   | 5511U   |
| RANGE_ORGANICS   | Carbon Range C6-C12                     | 1.76+02            | 25          | 0 0005                 | NE                 | NE                      | 5.2E+00                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 1 1 1-Trichloroethane                   | 2.3E+02            | 0.005       | 0.0005                 | NE                 | NE                      | 2.3E+02                 | 0.006 1 U  | 0.004 1 J J                                       |
| VOLATILES  | 1,1,2,2-Tetrachloroethane               | 5.1E-01            | 0.005       | 0.0005                 | NE                 | NE                      | 5.1E-01                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 1,1,2-Trichloroethane                   | 9.7E-01            | 0.005       | 0.0005                 | NE                 | NE                      | 9.7E-01                 | 0.006 1 0  | 0.005 1 0   |
| VOLATILES  | 1,1-Dichloroethane                      | 8.9E+01            | 0.005       | 0.0010                 | NE                 |                         | 2.7E+01                 | 0.003 1 J J                                      | 0.005 1 U   |
| VOLATILES  | 1,1-Dichloropropene                     | 2.7E+01<br>9.9E-01 | 0.005       | 0.0005                 | NE                 | NE                      | 9.9E-01                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 1.2.3-Trichlorobenzene                  | 4.2E+01            | 0.005       | 0.0005                 | NE                 | NE                      | 4.2E+01                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 1,2,3-Trichloropropane                  | 9.2E-02            | 0.005       | 0.0010                 | NE                 | NE                      | 9.2E-02                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 1,2,4-Trichlorobenzene                  | 1.4E+02            | 0.005       | 0.0005                 | NE                 | NE                      | 1.46+02                 | 0.006 1 U  | 0.005 1 0   |
| VOLATILES  | 1,2,4-Trimethylbenzene                  | 9.6E+00<br>3.5E-01 | 0.005       | 0.0005                 | NE                 | NE                      | 3.5E-01                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 1,2-Dibromoethane                       | 5.3E-02            | 0.005       | 0.0005                 | NE                 | NE                      | 5.3E-02                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 1.2-Dichlorobenzene                     | 5.6E+01            | 0.005       | 0.0005                 | NE                 | NE                      | 5.6E+01                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 1,2-Dichloroethane                      | 2.7E-01            | 0.005       | 0.0005                 | NE                 | NE                      | 2.7E-01                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 1,2-Dichloropropane                     | 1.8E+00            | 0.005       | 0.0005                 | NE                 | NE                      | 1.8E+00<br>3.3E+03      | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 1,2-Dimethylbenzene (0-Xylene)          | 3.3E+03<br>8.3E+00 | 0.005       | 0.0005                 | NE                 | NE                      | 8.3E+00                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 1.3-Dichlorobenzene                     | 5.1E+00            | 0.005       | 0.0005                 | NE                 | NE                      | 5.1E+00                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 1,3-Dichloropropane                     | 3.0E+00            | 0.005       | 0.0005                 | NE                 | NE                      | 3.0E+00                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 1,4-Dichlorobenzene                     | 2.7E+01            | 0.005       | 0.0005                 | NE                 | NE                      | 2.7E+01                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 2,2-Dichloropropane                     | 1.7E+00            | 0.005       | 0.0005                 | NE                 | NE                      | 2.6E+03                 | 0.000 1 0  | 0.010 1 U   |
| VOLATILES  | 2-Butanone<br>2-Chloroethyl vioyl ether | 2.0E+03            | 0.010       | 0.0020                 | NE                 | NE                      | 2.1E-01                 | 0.011 1 U  | 0.010 1 U   |
| VOLATILES  | 2-Chlorotoluene                         | 1.5E+02            | 0.005       | 0,0005                 | NE                 | NE                      | 1.5E+02                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | 2-Hexanone                              | 6.2E+00            | 0.010       | 0.0025                 | NE                 | NE                      | 6.2E+00                 | 0.011 1 U UJ                                     | 0.010 1 U   |
| VOLATILES  | 4-Chlorotoluene                         | 3.4E-01            | 0.005       | 0.0005                 | NE                 | NE                      | 3.4E-01<br>4.7E+02      | 0.005 1 0  | 0.005 1 0   |
| VOLATILES  | Acetone                                 | 1.76+02            | 0.010       | 0.0050                 | NE                 | NE                      | 8.8E-01                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | Benzene<br>Bromobenzene                 | 1 15+01            | 0.005       | 0.0005                 | NE                 | NE                      | 1.1E+01                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | Bromochloromethane                      | 2.4E+01            | 0.005       | 0.0005                 | NE                 | NË                      | 2.4E+01                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | Bromodichloromethane                    | 1.0E+01            | 0.005       | 0.0005                 | NE                 | NE                      | 1.0E+01                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | Bromoform                               | 3.4E+01            | 0.005       | 0.0005                 | NE                 | NE                      | 3.4E+03<br>3.5E-01      |  | 0.005 1 0   |
| VOLATILES  | Bromomethane                            | 3.5E-01            | 0.010       | 0.0010                 | NE                 | NE                      | 1.0E+02                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | Carbon letrachloride                    | 3.5E-01            | 0.005       | 0.0005                 | NE                 | NE                      | 3.5E-01                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | Chlorobenzene                           | 4.0E+01            | 0.005       | 0.0005                 | NE                 | NE                      | 4.0E+01                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | Chloroethane                            | 1.1E+03            | 0.010       | 0.0010                 | NE                 | NE                      | 1.1E+03                 | 0.011 1 0  | 0.010 1 0   |
| VOLATILES  | Chloroform                              | 3.1E-01            | 0.005       | 0.0005                 | NE                 | NE                      | 2.3E-01                 | 0.011 1 U  | 0.010 1 U   |
| VOLATILES  | cis-1 2-Dichloroethene                  | 1.2E+02            | 0.005       | 0.0005                 | NE                 | NE                      | 1.2E+02                 | 0.008 1  | 0.005 1 U   |
| VOLATILES  | cis-1.3-Dichloropropene                 | 1.2E+00            | 0.005       | 0.0005                 | NE                 | NE                      | 1.2E+00                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | Dibromochtoromethane                    | 7.6E+00            | 0.005       | 0.0005                 | NE                 | NE                      | 7.6E+00                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | Dibromomethane                          | 1.9E+01            | 0.005       | 0.0005                 | NE                 | NE                      | 1.9E+01<br>2.2E+02      | 0.006 1 0  | 0.005 1 U   |
| VOLATILES  | Dichlorodifluoromethane                 | 2.26+02            | 0.010       | 0.0010                 | NE                 | NE                      | 4.3E+02                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | Hexachlorobutadiene                     | 1.6E+00            | 0.005       | 0.0005                 | NE                 | NE                      | 1.6E+00                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | Isopropylbenzene                        | 5.4E+02            | 0.005       | 0.0005                 | NE                 | NE                      | 5.4E+02                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | m,p-Xylenes                             | 2.3E+02            | 0.005       | 0.0005                 | NE                 | NE                      | 2.3E+02                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | Methyl isobutyl ketone                  | 1.3E+03            | 0.010       | 0.0025                 | NE                 | NE                      | 1.3E+03<br>8.7E+00      |  | 0.001 1 J B                                       |
|  | Meinylene chlonde<br>Naphthalene        | 0./E+UU<br>1.8⊑+01 | 0.005       | 0.0005                 | NE                 | NE                      | 1.8E+01                 | 0.011 1 U  | 0.010 1 U   |
| VOLATILES  | n-BUTYLBENZENE                          | 2.75+02            | 0.005       | 0.0005                 | NE                 | NE                      | 2.7E+02                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | n-PROPYLBENZENE                         | 3.2E+02            | 0.005       | 0.0005                 | NE                 | NE                      | 3.2E+02                 | 0.006 1 U  | 0.005 1 U   |
| VOLATILES  | p-ISOPROPYLTOLUENE                      | 4.2E+02            | 0.005       | 0.0005                 | NE                 | NE                      | 4.2E+02                 | 0.006 1 U  | 0.005 1 0   |
| VOLATILES  | sec-BUTYLBENZENE                        | 3.0E+02            | 0.005       | 0.0005                 |                    | NE                      | 3.0E+02<br>1.3E+03      | 0.006 1 11                                       | 0.005 1 U   |
| VOLATILES  | Styrene                                 | 1.36+03            | 0.000       | 0.0000                 | INC                | 196-                    | \$ 1.0                  |  |   |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

| 0006662 | 29 |
|---------|----|
|---------|----|

### Table 4-118 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-113

|  |                           |  |                     | Sumh-112               |  |   |  | r   |   |
|--|---------------------------|--|---------------------|------------------------|--|---|--|---|---|
| [SUMP] = SUMP113<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backy<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>²L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP113-SB01<br>35-SMP113-SB01-02<br>9/20/2006<br>4 - 4 Ft<br>REG | 35SUMP113-SB02<br>35-SMP113-SB02-02<br>9/20/2006<br>4 - 4 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.005               | 0.0005                 | NE                                       | NE  | 2.6E+02                                      | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.005               | 0.0005                 | NE                                       | NE  | 6.0E+00                                      | 0.006 1 U   | 0.002 1 J J   |
| VOLATHES   | Toluene                   | 1.1E+03                                  | 0.005               | 0.0005                 | NE                                       | NË  | 1.1E+03                                      | 0.006 1 U   | 0.005 1 0   |
| VOLATILES  | trans-1 2-Dichlomethene   | 1.4E+02                                  | 0.005               | 0.0005                 | NE                                       | NE  | 1.4E+02                                      | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | trans-1.3-Dichlomoropene  | 1.8E+00                                  | 0.005               | 0.0005                 | NE                                       | NE  | 1.8E+00                                      | 0.006 1 U   | 0.005 1 U   |
| VOLATILES  | Trichlomethene            | 3.7E+00                                  | 0.005               | 0.0005                 | NE                                       | NE  | 3.7E+00                                      | 0.008 1   | 0.002 1 J J   |
| VOLATILES  | Trichlarofluoromethane    | 2.6E+02                                  | 0.010               | 0.0010                 | NE                                       | NE  | 2.6E+02                                      | 0.011 1 U   | 0.010 1 U   |
| VOLATILES  | Visual acetate            | 5.7E+01                                  | 0.010               | 0.0010                 | NE                                       | NE  | 5.7E+01                                      | 0.011 1 U UJ  | 0.010 1 U UJ  |
| VULATILES  | Vinyi acciaic             | 3.65-07                                  | 0.010               | 0.0010                 | NE                                       | NE  | 3.6E-02                                      | 0.011 1 U   | 0.010 <u>1 U</u>  |
| VOLATILES  | VINVI CITIONOB            | 0.06-04                                  | 0.010               | 0.0010                 |  |   |  |   |   |

Data Evaluation Report Chemical Concentrations In Soil Associated with LHAAP-35/36 Sumps



 Table 4-119

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

 Sump-117

| [SUMP] = SUMP117 |                                   |            |             |              |            |               |                     | 35SUMP117-SB01                        | 35SUMP117-SB01    | 35SUMP117-SB02    |
|------------------|-----------------------------------|------------|-------------|--------------|------------|---------------|---------------------|---------------------------------------|-------------------|-------------------|
| SAMPLE NO        |                                   | TCEQ       |             |              | Backg      | ground        | Applicble           | 35-SMP117-SB01-01                     | 35-SMP117-SB01-02 | 35-SMP117-SB02-02 |
| SAMPLE DATE      |                                   | Risk-Based |             |              | Concentra  | tions In Soll | TCEQ                | 9/19/2006                             | 9/19/2006         | 10 - 10 Ft        |
| DEPTH            |                                   | Screening  | Method      | Method       | (95% UF    | L, mg/kg}     | Risk-Based          | .3 • .5 FL<br>REG                     | REG               | REG               |
| SAMPLE_PURPOSE   |                                   | Value      | Detection   | Quantitation | Surface    | Subsumace     | Screening           | Deput DI LO VO                        | Regult Dil LO VO  | Result DIL LO VO  |
| Test Group       | Parameter (Units = mg/kg)         | (RBSV) *   | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft  | 1 6E+04             | 12200.000 1                           | 15700.000 1       | 15900.000 1       |
| METALS           | Aluminum                          | 1.6E+04    | 10.00       | 20.000       | 0.04       | 2.002+04      | 7.30+00             | 0.266 1                               | 0.126 1 U U       | 0.126 1 U U       |
| METALS           | Anumony                           | 205+01     | 0.05        | 0.100        | 4 81E+00   | 5.54E+00      | 2.0E+01             | 4.790 1                               | 0.450 1           | 0.523 1           |
| METALS           | Arsenic                           | 2.6E+03    | 0.08        | 0.300        | 1.52E+02   | 8.55E+01      | 2.6E+03             | 79.300 1                              | 315.000 1         | 149.000 1         |
|                  | Bendium                           | 4.6E+00    | 0.01        | 0.500        | 6.45E-01   | 7.66E-01      | 4.6E+00             | 0.510 1                               | 0.784 1           | 0.654 1           |
| METALS           | Cadmium                           | 5.2E+00    | 0.03        | 0.100        | 1.4        | 0.4           | 5.2E+00             | 0.185 1 J J                           | 0.657 1           | 0.342 1 J J       |
| METALS           | Calcium                           | NE         | NA          | NA           | NA         | NA            |                     | 1570.000 1                            | 3390.000 1        | 22 400 1          |
| METALS           | Chromium                          | 5.9E+03    | 0.10        | 0.400        | 2.66E+01   | 3.01E+01      | 5.9E+03             | 15.300 1                              | 23.000 1          | 13 100 1          |
| METALS           | Cobalt                            | 1.5E+03    | 0.13        | 0.500        | 7.23E+00   | 5.61E+00      | 1.52+03             | 14 800 1                              | 27 500 1          | 26.100 1          |
| METALS           | Copper                            | 1.0E+03    | 0.15        | 0.600        | 5.55E+UU   | 9.252700      | 1.02703             | 19200.000 1                           | 23900.000 1       | 21600.000 1       |
| METALS           | tron                              |            | 0.40        | 0.200        | 2 26E+01   | 1 14E+01      | 5 0E+02             | 13.100 1                              | 16.500 1          | 10.200 1          |
| METALS           | Lead                              | 5.0E+02    | NA NA       | NA           | NA         | NA            | _                   | 1150.000 1                            | 6810.000 1        | 6780.000 1        |
| METALS           | Magnesium                         | 1.7E+03    | 0.05        | 0.200        | 1,25E+03   | 2.01E+02      | 1.7E+03             | 160.000 1                             | 2640.000 10       | 714.000 1         |
| METALS           | Mercury                           | 1.1E-02    | 0.01        | 0.250        | 8.19E-02   | 0.36          | 2.5E-01             | 0.152 1 J J                           | 0.024 1 J J       | 0.038 1 J J       |
| METALS           | Nickel                            | 1.9E+02    | 0.20        | 0.800        | 6.98E+00   | 1.16E+01      | 1.9E+02             | 9.440 1                               | 62.600 1          | 33.900 1          |
| METALS           | Potassium                         | NE         | NA          | NA           | NA         | NA            | -                   | 550.000 1                             | 0.273 1           | 0.251 1 1 1       |
| METALS           | Selenium                          | 1.3E+02    | 0.10        | 0.200        | 3.48E+00   | 5.5/E+00      | 1.3E+02             |                                       | 1910 1 11 11      | 1.820 1 U U       |
| METALS           | Silver                            | 4.7E+01    | 0.05        | 0.200        | 0.31       | 0.37          | 4.72701             | 30 100 1                              | 1370.000 1        | 1420.000 1        |
| METALS           | Sodium                            |            | 0.02        | 0.010        | 0.47       | NE            | 2 0E+00             | 0.066 1                               | 0.167 1           | 0.094 1           |
| METALS           | i naulum<br>Masadium              | 2.0E+00    | 0.02        | 0.125        | 3 21E+01   | 4.46E+01      | 4.8E+01             | 29.600 1                              | 28.400 1          | 24.900 1          |
| METALO           | Zine                              | 5.95+03    | 2 50        | 0.625        | 61.6       | 2.02E+01      | 5.9E+03             | 62.700 1                              | 107.000 1         | 102.000 1         |
| RANGE ORGANICS   | Carbon Bange C12-C28              | 4.0E+03    | 25          | 50           | NE         | NE            | 4.0E+03             | 61,600 1 U U                          | 62.400 1 U U      | 63.700 1 U U      |
| RANGE ORGANICS   | CARBON RANGE C28-C35              | 4.0E+03    | 25          | 50           | NE         | NE            | 4.0E+03             | 61.600 1 U U                          | 62.400 1 U U      | 63.700 1 U U      |
| RANGE ORGANICS   | Carbon Range C6-C12               | 1.7E+03    | 25          | 50           | NE         | NE            | 1.7E+03             | 61.600 1 U U                          | 62.400 1 U U      | 0.005 1 1 1       |
| VOLATILES        | 1,1,1,2-Tetrachloroethane         | 5.2E+00    | 0.005       | 0.0005       | NE         | NE            | 5.2E+00             |                                       |                   | 0.005 1 0 0       |
| VOLATILES        | 1,1,1-Trichloroethane             | 2.3E+02    | 0.005       | 0.0005       | NE         | NE            | 2.3E+02             |                                       | 0.005 1 0 0       | 0.005 1 U U       |
| VOLATILES        | 1,1,2,2-Tetrachloroethane         | 5.1E-01    | 0.005       | 0.0005       | NE         | NE            | 975-01              |                                       | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | 1,1,2-Inchloroethane              | 9.7E-01    | 0.005       | 0.0000       | NE         | NE            | 8.9E+01             | 1                                     | 0.005 1 J J       | 0.033 1           |
| VOLATILES        | 1 1-Dichloroethese                | 2.7E+01    | 0.005       | 0.0005       | NE         | NE            | 2.7E+01             | i i i i i i i i i i i i i i i i i i i | 0.005 1 U U       | 0.003 1 J J       |
| VOLATUES         | 1.1-Dichloropropene               | 9.9E-01    | 0.005       | 0.0005       | NE         | NE            | 9.9E-01             |                                       | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | 1,2,3-Trichlorobenzene            | 4.2E+01    | 0.005       | 0.0005       | NE         | NE            | 4.2E+01             |                                       | 0.005 1 U U       | 0.005 1 0 0       |
| VOLATILES        | 1,2,3-Trichloropropane            | 9.2E-02    | 0.005       | 0.0010       | NE         | NE            | 9.2E-02             |                                       | 0.005 1 U U       | 0.005 1 0 0       |
| VOLATILES        | 1,2,4-Trichlorobenzene            | 1.4E+02    | 0.005       | 0.0005       | NE         | NE            | 1.4E+02             |                                       | 0.005 1 0 0       | 0.005 1 U U       |
| VOLATILES        | 1,2,4-Trimethylbenzene            | 9.6E+00    | 0.005       | 0.0005       | NE         | NE            | 3.5E-01             | 1                                     | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | 1,2-Dibromo-3-chloropropane       | 3.55-01    | 0.005       | 0.0020       | NE         | NE            | 5.3E-02             |                                       | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | 1,2-Diptomoentane                 | 5.8E+01    | 0.005       | 0.0005       | NE         | NE            | 5.6E+01             |                                       | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | 1 2-Dichloroethane                | 2.7E-01    | 0.005       | 0.0005       | NE         | NE            | 2.7E-01             |                                       | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | 1.2-Dichloropropane               | 1.8E+00    | 0.005       | 0.0005       | NE         | NE            | 1.8E+00             |                                       | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | 1,2-Dimethylbenzene (o-Xylene)    | 3.3E+03    | 0.005       | 0.0005       | NE         | NE            | 3.3E+03             |                                       |                   |                   |
| VOLATILES        | 1,3,5-Trimethylbenzene            | 8.3E+00    | 0.005       | 0.0005       | NE         | NE            | 8.3E+00             |                                       | 0.005 1 0 0       | 0.005 1 0 0       |
| VOLATILES        | 1,3-Dichlorobenzene               | 5.1E+00    | 0.005       | 0.0005       | NE         | NE            | 3.12+00             | 1                                     | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | 1,3-Dichloropropane               | 3.08+00    | 0.005       | 0.0005       | NE         | NE            | 2 7E+01             |                                       | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | 1,4-Dichloropenzene               | 4.7 === 00 | 0.005       | 0.0005       | NE         | NE            | 1.7E+00             |                                       | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | 2.2-Dichlorophopane<br>2.Butanone | 2.65+03    | 0.010       | 0.0025       | NE         | NE            | 2.6E+03             |                                       | 0.011 1 U U       | 0.011 1 U U       |
| VOLATILES        | 2-Chloroethyl vinyl ether         | 2.1E-01    | 0.010       | 0.0020       | NE         | NE            | 2.1E-01             |                                       | 0.011 1 U U       | 0.011 1 U U       |
| VOLATILES        | 2-Chlorotoluene                   | 1.5E+02    | 0.005       | 0.0005       | NE         | NE            | 1.5E+02             |                                       | 0.005 1 0 0       | 0,005 1 0 0       |
| VOLATILES        | 2-Hexanone                        | 6.2E+00    | 0.010       | 0.0025       | NE         | NE            | 6.2E+00             |                                       | 0.005 1 U U       |                   |
| VOLATILES        | 4-Chlorotoluene                   | 3.4E-01    | 0.005       | 0.0005       | NE         | NE            | 3.4E-01             |                                       | 0.000 1 0 0       | 0.011 1 U U       |
| VOLATILES        | Acetone                           | 1.7E+02    | 0.010       | 0.0050       | NE         |               | 1.7 E+02<br>8 8E-01 |                                       | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | Benzene                           | 8.8E-01    | 0.005       | 0.0005       |            | NF            | 1.15+01             |                                       | 0.005 1 U U       | 0.005 1 U U       |
|                  | Bromachloromethage                | 2 4 =+01   | 0.005       | 0,0005       | NÉ         | NE            | 2.4E+01             |                                       | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | Bromodichloromethane              | 1.0E+01    | 0.005       | 0.0005       | NE         | NE            | 1.0E+01             |                                       | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | Bromoform                         | 3.4E+01    | 0.005       | 0.0005       | NE         | NE            | 3.4E+01             |                                       | 0.005 1 U U       | 0.005 1 U U       |
| VOLATILES        | Bromomethane                      | 3.5E-01    | 0.010       | 0.0010       | NE         | NE            | 3.5E-01             |                                       | 0.011 1 U U       |                   |
| VOLATILES        | Carbon disulfide                  | 1.0E+02    | 0.005       | 0.0005       | NE         | NE            | 1.0E+02             | 1                                     |                   |                   |
| VOLATILES        | Carbon tetrachloride              | 3.5E-01    | 0.005       | 0.0005       | NE         | NE            | 3.5E-01             | 1                                     | 0.005 1 0 0       | 0.000 1 0 0       |

### Shaw Environmental, Inc.

### 00066631

 Table 4-119

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

 Sump-117

| [SUMP] = SUMP117<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Delection | Method<br>Quantitation | Backy<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>°L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP117-SB01<br>35-SMP117-SB01-01<br>9/19/2006<br>.5 - 5 Ft<br>REG | 355UMP117-SB01<br>35-SMP117-SB01-02<br>9/19/2006<br>10 - 10 Ft<br>REG | 35SUMP117-SB02<br>35-SMP117-SB02-02<br>9/19/2006<br>10 - 10 Fl<br>REG<br>Browth Dill LO MO |
|--|---------------------------|--|---------------------|------------------------|--|---|--|--|---|--|
| Test Group   | Parameter (Units = mg/kg) | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | <u>0 - 0.5 Ft</u>                        | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ   |   |  |
| VOLATILES  | Chlorobenzene             | 4.0E+01                                  | 0.005               | 0.0005                 | NE                                       | NE  | 4.0E+01                                      |  | 0.000 1 0 0   | 0.011 1 U U  |
| VOLATILES  | Chloroethane              | 1.1E+03                                  | 0.010               | 0.0010                 | NE                                       | NE  | 1.12+03                                      |  | 0.005 1 1 1   | 0.005 1 0 0  |
| VOLATILES  | Chloroform                | 3.1E-01                                  | 0.005               | 0.0005                 | NE                                       | NE  | 3.1E-01                                      |  | 0.003 1 0 0   | 0.011 1 1 1  |
| VOLATILES  | Chloromethane             | 2.3E-01                                  | 0.010               | 0.0020                 | NE                                       | NE  | 2.3E-01                                      |  | 0.005 1 11 11   | 0.001 1  |
| VOLATILES  | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0,005               | 0.0005                 | NE                                       | NE  | 1.28+02                                      |  | 0,005 1 11 11   | 0.005 1 11 11  |
| VOLATILES  | cis-1,3-Dichloropropene   | 1.2E+00                                  | 0.005               | 0.0005                 | NE                                       | NE  | 1.2E+00                                      |  |   | 0.005 1 14 14  |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.005               | 0.0005                 | NE                                       | NE  | 7.6E+00                                      |  |   | 0.005 1 0 0  |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.005               | 0.0005                 | NE                                       | NE  | 1.9E+01                                      |  | 0.003 1 0 0   | 0.011 1 1 1  |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02                                  | 0.010               | 0.0010                 | NE                                       | NE  | 2.26+02                                      |  |   | 0.005 1 11 11  |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.005               | 0.0005                 | NE                                       | NE  | 4.3E+02                                      |  |   | 0.005 1 11 11  |
| VOLATILES  | Hexachlorobutadiene       | 1.6E+00                                  | 0.005               | 0.0005                 | NE                                       | NE  | 1.6E+00                                      |  |   | 0.005 1 U U  |
| VOI ATILES   | Isopropyibenzene          | 5.4E+02                                  | 0.005               | 0.0005                 | NE                                       | NE  | 5.4E+02                                      |  |   | 0.005 1 11 11  |
| VOLATILES  | m.p-Xvienes               | 2.3E+02                                  | 0.005               | 0.0005                 | NE                                       | NE  | 2.3E+02                                      |  |   | 0.011 1 11 11  |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.010               | 0.0025                 | NE                                       | NE  | 1.3E+03                                      |  |   | 0.005 1 11 11  |
| VOLATILES  | Methviene chloride        | 8.7E+00                                  | 0.005               | 0.0010                 | NE                                       | NE  | 8.7E+00                                      |  | 0.005 1 0 0   | 0.005 1 0 0  |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.010               | 0.0005                 | NE                                       | NE  | 1.8E+01                                      |  |   |  |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                                  | 0.005               | 0.0005                 | NE                                       | NE  | 2.7E+02                                      |  | 0.005 1 0 0   |  |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.005               | 0.0005                 | NE                                       | NE  | 3.2E+02                                      |  | 0.005 1 0 0   |  |
| VOLATILES  | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.005               | 0.0005                 | NE                                       | NE  | 4.2E+02                                      | l  | 0.005 1 0 0   |  |
| VOLATILES  | SEC-BUTYL BENZENE         | 3.0E+02                                  | 0.005               | 0.0005                 | NE                                       | NE  | 3.0E+02                                      |  | 0.005 1 0 0   | 0,005 1 0 0  |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.005               | 0.0005                 | NE                                       | NÉ  | 1.3E+03                                      |  | 0.005 1 0 0   |  |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.005               | 0.0005                 | NE                                       | NE  | 2.6E+02                                      |  | 0.005 1 0 0   |  |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.005               | 0.0005                 | NE                                       | NE  | 6.0E+00                                      |  | 0.005 1 U U   | 0.005 1 0 0  |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.005               | 0.0005                 | NE                                       | NE  | 1.1E+03                                      |  | 0.005 1 0 0   |  |
| VOLATILES  | trans-1 2-Dichlomethene   | 1.4E+02                                  | 0.005               | 0.0005                 | NE                                       | NE  | 1.4E+02                                      |  | 0.005 1 U U   | 0.005 1 0 0  |
| VOLATILES  | trans-1.3-Dichloropropene | 1.8E+00                                  | 0,005               | 0.0005                 | NE                                       | NE  | 1.8E+00                                      |  | 0.005 1 U U   |  |
| VOLATILES  | Trichlomethene            | 3.7E+00                                  | 0.005               | 0.0005                 | NE                                       | NE  | 3.7E+00                                      |  | 0.005 1 U U   |  |
| VOLATILES  | Trichlorofuoromethane     | 2.6E+02                                  | 0.010               | 0.0010                 | NE                                       | NE  | 2.6E+02                                      |  | 0.011 1 U U   |  |
| VOLATILES  | Vinvi acetate             | 5.7E+01                                  | 0.010               | 0.0010                 | NE                                       | NE  | 5.7E+01                                      | 1  | 0.011 1 U U   | 0.011 1 0 0  |
| VOLATILES  | Vinyl chloride            | 3.6E-02                                  | 0.010               | 0.0010                 | NE                                       | NE  | 3.6E-02                                      |  | 0.011 1 U U   | 0.011 1 0 0  |

3

Shaw Environmental, Inc.



Table 4-120 Comparison of Chemical Concentration in Soil to Risk-Based Screening Values Sump-125

|  |                                |                                 |             |              | ump-120                      |                                       |                                 | 1  |  |  |
|--|--------------------------------|---------------------------------|-------------|--------------|------------------------------|---------------------------------------|---------------------------------|--|--|--|
| [SUMP] = SUMP125<br>LOCATION _CODE ==<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH |                                | TCEQ<br>Risk-Based<br>Screening | Method      | Method       | Back<br>Concentra<br>(95% UF | ground<br>tions in Soil<br>°L, mg/kg) | Applicble<br>TCEQ<br>Risk-Based | 35SUMP125-SB01<br>35-SMP125-SB01-02<br>9/20/2006<br>10 - 10 Ft | 35SUMP125-SB02<br>35-SMP125-SB02-02<br>9/20/2006<br>10 - 10 Ft | LH-DL723-01<br>LH-DL723-01-BERASS02<br>10/5/2006<br>0 - 0 Ft |
| SAMPLE_PURPOSE   | ,                              | Value                           | Detection   | Quantitation | Surface                      | Subsurface                            | Screening                       | REG  | REG  | REG  |
| Test Group   | Parameter (Units = mg/kg)      | (RBSV)                          | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft                   | 1.5 - 2.5 Ft                          | Value                           | Result DIL LQ VQ   | Result DIL LO VQ   | Result DIL LQ VQ   |
| METALS   | Aluminum                       | 1.6E+04                         | 10.000      | 20.00        | 1.63E+04                     | 2.08E+04                              | 1.6E+04                         |  |  | 3790.000 1<br>0.170 1 B I                                    |
| METALS   | Antimony                       | 7.3E+00                         | 0.050       | 0.10         | 9.405-01                     | 1.60E+00                              | 7.3E+00                         |  |  | 1900 1 .11   |
| METALS   | Arsenic                        | 2.02+01                         | 0.075       | 0.30         | 4.01E+00                     | 8.55E+01                              | 2.65+03                         |  |  | 52.500 1 J   |
| METALS   | Berdium                        | 4.6E+00                         | 0.012       | 0.50         | 6.45E-01                     | 7.66E-01                              | 4.6E+00                         |  |  | 0.270 1  |
| METALS   | Cadmium                        | 5.2E+00                         | 0.025       | 0.10         | 1.40E+00                     | 4.00E-01                              | 5.2E+00                         |  |  | 0.095 1 B J  |
| METALS   | Calcium                        | NE                              | NA          | NA           | NA                           | NA                                    | -                               |  |  | 2160.000 1 J   |
| METALS   | Chromium                       | 5.9E+03                         | 0.100       | 0.40         | 2.66E+01                     | 3.01E+01                              | 5.9E+03                         |  |  | 11.700 1   |
| METALS   | Cobalt                         | 1.5E+03                         | 0.125       | 0.50         | 7.23E+00                     | 5.61E+00                              | 1.00+03                         |  |  | 4.000 1 J  |
| METALS   | Lopper                         | 1.0E+03                         | 0.150       | 0.00<br>NE   | 5.55E+00                     | 9.23E+00                              | -                               |  | 2 C  | 6930.000 1   |
| METALS   | tead :                         | 5 0E+02                         | NA          | NA           | 2.26E+01                     | 1.14E+01                              | 5.0E+02                         |  | e:   | 38.500 1 J   |
| METALS   | Magnesium                      | NE                              | NA          | NA           | NA                           | NA                                    | -                               |  |  | 303.000 1 J J  |
| METALS   | Manganese                      | 1.7E+03                         | NA          | NA           | 1.25E+03                     | 2.01E+02                              | 1.7E+03                         |  |  | 321.000 1 J J  |
| METALS   | Nickel                         | 1.9E+02                         | 0.010       | 0.25         | 6.98E+00                     | 1.16E+01                              | 1.9E+02                         |  |  | 3.600 1  |
| METALS   | Potassium                      | NE                              | NA          | NA           | NA<br>2 495+00               | NA<br>5 675+00                        | 1 35+02                         |  |  | 0410 1 B .IL   |
| METALS   | Selenium                       | 1.3E+02                         | NA<br>0.100 | NA<br>0.20   | 3.46E+00<br>3.10E-01         | 3.705-01                              | 4.7E+01                         |  |  | 0.081 1 B J  |
| METALS<br>METALS   | Sodium                         | NE                              | NA          | NA           | NA                           | NA                                    | -                               |  |  | 43.400 1 J   |
| METALS   | Thallium                       | 2.0E+00                         | 0.010       | 0.02         | 4.70E-01                     | NE                                    | 2.0E+00                         |  |  | 0.072 1 B J  |
| METALS   | Vanadium                       | 4.8E+01                         | 0.125       | 0.50         | 3.21E+01                     | 4.46E+01                              | 4.8E+01                         |  |  | 16.900 1 J   |
| METALS   | Zinc                           | 5.9E+03                         | 0.625       | 2.50         | 6.16E+01                     | 2.02E+01                              | 5.9E+03                         |  |  | 28.100 1 J   |
| PERC   | Perchlorate                    | 1.4E+01                         | 0.005       | 0.010        | NE                           | NE                                    | 1.4E+01<br>5.2E+00              | 0.004 3 12   | 0.005 1 U  | 0.043 1 8 0  |
| VOLATILES 3  | 1,1,1,2-Tetrachloroethane      | 5.2E+00<br>2.3E+02              | 0.0005      | 0.005        | NE                           | NE                                    | 2.3E+02                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 1.1.2.2-Tetrachloroethane      | 5.1E-01                         | 0.0005      | 0.005        | NE                           | NE                                    | 5.1E-01                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 1,1,2-Trichloroethane          | 9.7E-01                         | 0.0005      | 0.005        | NE                           | NE                                    | 9.7E-01                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 1,1-Dichtoroethane             | 8.9E+01                         | 0.0010      | 0.005        | NE                           | NE                                    | 8.9E+01                         | 0.004 1 U  | 0:005 1 U  |  |
| VOLATILES  | 1,1-Dichloroethene             | 2.7E+01                         | 0.0005      | 0.005        | NE                           | NE                                    | 2.7E+01                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 1,1-Dichloropropene            | 9.98-01                         | 0,0005      | 0.005        |                              | NE                                    | 9.9E-01                         | 0.004 1 0  | 0.005 1 1  |  |
| VOLATILES  | 1,2,3-Tricbloropropage         | 9 25-02                         | 0.0005      | 0.005        | NE                           | NE                                    | 9.2E-02                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 1.2.4-Trichlorobenzene         | 1.4E+02                         | 0.0005      | 0.005        | NE                           | NE                                    | 1.4E+02                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 1,2,4-Trimethylbenzene         | 9.6E+00                         | 0.0005      | 0.005        | NE                           | NE                                    | 9.6E+00                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 1,2-Dibromo-3-chloropropane    | 3.5E-01                         | 0.0020      | 0.005        | NE                           | NÉ                                    | 3.5E-01                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 1,2-Dibromoethane              | 5.3E-02                         | 0.0005      | 0.005        | NE                           | NE                                    | 5.3E-02                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 1,2-Dichlorobenzene            | 5.5E+01                         | 0.0005      | 0.005        | NE                           | NE                                    | 2.75-01                         | 0.004 1 1  | 0.005 1 U  |  |
| VOLATILES  | 1.2-Dichloropropane            | 1 8E+00                         | 0.0005      | 0.005        | NE                           | NE                                    | 1.8E+00                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 1.2-Dimethylbenzene (o-Xvlene) | 3.3E+03                         | 0.0005      | 0.005        | NE                           | NE                                    | 3.3E+03                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 1,3,5-Trimethylbenzene         | 8.3E+00                         | 0.0005      | 0.005        | NE                           | NE                                    | 8.3E+00                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 1,3-Dichlorobenzene            | 5.1E+00                         | 0.0005      | 0.005        | NE                           | NE                                    | 5.1E+00                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 1,3-Dichloropropane            | 3.0E+00                         | 0.0005      | 0.005        | NE                           |                                       | 3.0E+00<br>2.7E+01              | 0.004 1 0  | 0.005 1 U  |  |
| VOLATILES  | 1,4-Dichloropenzene            | 175+00                          | 0.0005      | 0.005        | NE                           | NE                                    | 1.7E+00                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 2-Butanose                     | 2.6E+03                         | 0.0025      | 0.010        | NE                           | NE                                    | 2.6E+03                         | 0.009 1 U  | 0.010 1 U  |  |
| VOLATILES  | 2-Chloroethyl vinyl ether      | 2.1E-01                         | 0.0020      | 0.010        | NE                           | NE                                    | 2.1E-01                         | 0.009 1 U  | 0.010 1 U  |  |
| VOLATILES .  | 2-Chlorotoluene                | 1.5E+02                         | 0.0005      | 0.005        | NE                           | NE                                    | 1.5E+02                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | 2-Hexanone                     | 6.2E+00                         | 0.0025      | 0.010        | NE                           | NE                                    | 6.2E+00                         | 0.009 1 U  | 0.010 1 0  |  |
| VOLATILES  | 4-Chlorotoluene                | 3.4E-01                         | 0.0005      | 0.005        | NE                           | NE                                    | 1.75+01                         | 0,004 1 0  | 0.005 1 0  |  |
| VOLATILES  | Benzene                        | 8.8E-01                         | 0.0000      | 0.010        | NE                           | NE                                    | 8.8E-01                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | Bromobenzene                   | 1.1E+01                         | 0.0005      | 0,005        | NE                           | NE                                    | 1.1E+01                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | Bromochloromethane             | 2.4E+01                         | 0.0005      | 0.005        | NE                           | NE                                    | 2.4E+01                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | Bromodichloromethane           | 1.0E+01                         | 0.0005      | 0.005        | NE                           | NE                                    | 1.0E+01                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | Bromotorm                      | 3.4E+01                         | 0.0005      | 0.005        | NE                           | NE                                    | 3.42+01                         | 0.004 1 0  | 0.005 1 0  |  |
| VULATILES  | Carbon disulfide               | 3.50-01                         | 0.0010      | 0.010        | NE                           | NE                                    | 1.05+02                         | 0.004 1 11   | 0.005 1 U  |  |
| VOLATILES  | Carbon tetrachioride           | 3.5E-01                         | 0,0005      | 0,005        | NE                           | NE                                    | 3.5E-01                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | Chlorobenzene                  | 4.0E+01                         | 0.0005      | 0.005        | NE                           | NE                                    | 4.0E+01                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | Chloroethane                   | 1.1E+03                         | 0.0010      | 0.010        | NE                           | NE                                    | 1.1E+03                         | 0.009 1 U  | 0.010 1 U  |  |
| VOLATILES  | Chloroform                     | 3.1E-01                         | 0.0005      | 0.005        | NE                           | NE                                    | 3.1E-01                         | 0.004 1 U  | 0.005 1 U  |  |
| VOLATILES  | Chloromethane                  | 2.3E-01                         | 0.0020      | 0.010        | NE                           | NE                                    | 2.3E-01                         | 0.009 1 0  | 0.010 1 U  |  |

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066633

### Table 4-120 Comparison of Chemical Concentration in Soil to Risk-Based Screening Values Sump-125

|  |                           |  |                     |                          |   | -  | _  |   |   |   |
|--|---------------------------|--|---------------------|--------------------------|---|--|--|---|---|---|
| [SUMP] = SUMP125<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _<br>Quantitation | Backg<br>Concentrat<br>(95% UP<br>Surface | round<br>ions in Soil<br>L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP125-SB01<br>35-SMP125-SB01-02<br>9/20/2006<br>10 - 10 Ft<br>REG | 35SUMP125-SB02<br>35-SMP125-SB02-02<br>9/20/2006<br>10 - 10 Ft<br>REG | LH-DL723-01<br>LH-DL723-01-BERASS02<br>10/5/2006<br>0 - 0 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg) | (RBSV)*                                  | Limit (MDL)         | Limit (MQL)              | 0 - 0.5 Ft                                | 1.5 - 2.5 Ft                                     | Value  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ  |
| VOLATILES  | cis-1,2-Dichloroethene    | 1.2E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 1.2E+02                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | cis-1.3-Dichloropropene   | 1.2E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 1.2E+00                                      | 0.004 t U   | 0.005 1 U   |   |
| VOLATILES  | Dibromochloromethane      | 7.6E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 7.6E+00                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                    | NE  | NE   | 1.9E+01                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                    | NE  | NE   | 2.2E+02                                      | 0.009 1 U   | 0.010 1 U   |   |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 4.3E+02                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | Hexachtorobutadiene       | 1.6E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 1.6E+00                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 5.4E+02                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | m,p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005                    | NE  | NÉ   | 2.3E+02                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.010                    | NE  | NE   | 1.3E+03                                      | 0.009 1 U   | 0.010 1 U   |   |
| VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                    | NE  | NE   | 8.7E+00                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.010                    | NE  | NE   | 1.8E+01                                      | 0.009 1 U   | 0.010 1 U   |   |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 2.7E+02                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 3.2E+02                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 4.2E+02                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 3.0E+02                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                    | NÉ  | NE   | 1.3E+03                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES *  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 2.6E+02                                      | 0.004 1 U   | 0.005 1 Ų   |   |
| VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 6.0E+00                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                    | NE  | NE   | 1.1E+03                                      | 0.004 1 U   | 0,005 1 U   |   |
| VOLATILES  | trans-1,2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                    | NE  | NE   | 1.4E+02                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | trans-1,3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 1.8E+00                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                    | NE  | NE   | 3.7E+00                                      | 0.004 1 U   | 0.005 1 U   |   |
| VOLATILES  | Trichtorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.010                    | NE  | NE   | 2.6E+02                                      | 0.009 1 U   | 0.010 1 U   |   |
| VOLATILES  | Vinyl acetate             | 5.7E+01                                  | 0.0010              | 0.010                    | NE  | NE   | 5.7E+01                                      | 0.009 1 U UJ  | 0.010 1 U UJ  |   |
| VOLATILES  | Vinyl chloride            | 3.6E-02                                  | 0.0010              | 0.010                    | NE  | NĘ   | 3.6E-02                                      | 0.009 1 U   | 0.010 1 U   |   |
|  |                           |  |                     |                          |   |  |  |   |   |   |

Footnotes are shown on cover page to Tables Section.

۰.

5.

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas

### Shaw Environmental, Inc.

## 00066634

| Table 4-121   |
|---|
| Comparison of Chemical Concentration in Soil to Risk-Based Screening Values |
| Sump-114  |

|    |   |   |                    |             |              | •                             |                         |                                  | 9  |  |
|----|---|---|--------------------|-------------|--------------|-------------------------------|-------------------------|----------------------------------|--|--|
| -  | [SUMP] = SUMP114<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE |   | TCEQ<br>Risk-Based | Method      | Method       | Backg<br>Concentra<br>(95% UP | pround<br>tions in Soil | Applicable<br>TCEQ<br>Risk-Based | 35SUMP114-SB01<br>35-SMP114-SB01-01<br>9/15/2006<br>0.5 - 0.5 Et | 35SUMP114-SB01<br>35-SMP114-SB01-02<br>9/15/2006<br>0.5 - 0.5 Ft |
|    | SAMPLE PURPOSE  |   | Value              | Detection   | Quantitation | Surface                       | Subsurface              | Screening                        | REG  | REG  |
|    | Test Group  | Parameter (Units = mg/kg)                       | (RBSV) *           | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft                    | 1.5 - 2.5 Ft            | Value                            | Result Dit LQ VQ   | Result DIL LQ VQ   |
|    | EXPLOSIVES  | 1,3,5-Trinitrobenzene                           | 4.7E+02            | 0.1         | 0.25         | NE                            | NË                      | 4.7E+02                          | 0.249 1 U U  | 0.243 1 U U  |
|    | EXPLOSIVES  | 1,3-Dinitrobenzene                              | 1.6E+00            | 0.1         | 0.25         | NE                            | NE                      | 1.6E+00                          | 0.249 1 U U  | 0.243 1 0 0  |
|    | EXPLOSIVES  | 2,4,6-1 nnitrotoluene                           | 7.75+00            | 0.1         | 0.25         |                               | NE                      | 7.725-01                         | 0.249 1 0 0  | 0.243 1 0 0  |
|    | EXPLOSIVES  | 2,4-Dinitrotolizene                             | 7.25-01            | 0.1         | 0.26         | NE                            | NE                      | 7.2E-01                          | 0.259 1 U U  | 0.252 1 U U  |
| •  | EXPLOSIVES  | 2-Amino-4.6-dinitrotoluene                      | 2.6E+00            | 0.1         | 0.26         | NE                            | NE                      | 2.6E+00                          | 0.259 1 U U  | 0.252 1 U U  |
|    | EXPLOSIVES  | 4-Amino-2,6-dinitrotoluene                      | 2.6E+00            | 0.1         | 0.26         | NE                            | NE                      | 2.6E+00                          | 0.259 1 U U  | 0.252 1 U U  |
|    | EXPLOSIVES  | HMX   | 2.2E+02            | 0.1         | 2.2          | NE                            | NE                      | 2.2E+02                          | 2.190 1 U U  | 2.140 1 U U  |
|    | EXPLOSIVES  | m-Nitrotoluene                                  | 4.4E+01            | 0.1         | 0.25         | NE                            | NE                      | 4.4±+01                          | 0.249 1 0 0  | 0.243 1 0 0  |
|    | EXPLOSIVES<br>EXPLOSIVES                                      | o-Nitrototuene                                  | 6.5E+01            | 0.13        | 0.25         | NE                            | NE                      | 4 7F+01                          | 0.249 1 1 1  | 0.243 1 U U  |
|    | EXPLOSIVES  | n-Nitrotoluene                                  | 4.4E+01            | 0.1         | 0.25         | NE                            | NE                      | 4.4E+01                          | 0.249 1 U U  | 0.243 1 U U  |
| •  | EXPLOSIVES  | RDX   | 3.6E+00            | 0.1         | 1            | NE                            | NĖ                      | 3.6E+00                          | 0.995 1 U U  | 0.971 1 U U  |
|    | EXPLOSIVES  | Tetryl  | 1.6E+02            | 0.2         | 0.65         | NE                            | NE                      | 1.6E+02                          | 0.647 1 U U  | 0.631 1 U U  |
|    | SOLIDS  | Percent Solids                                  | NE                 | NE          | NE           | NE                            | NE                      | -                                | 90.9 1   | 86.000 1   |
|    | VOLATILES   | 1,1,1,2-Tetrachloroethane                       | 5.2E+00            | 0.0005      | 0.005        | NE                            |                         | 5.2E+00                          |  | 0.006 1 U U  |
| ۰. | VOLATILES   | 1,1,1-1101000emane<br>1,1,2,2-Tetrachloroethane | 2.3ET02<br>5.1E-01 | 0.0005      | 0.005        | NE                            | NE                      | 5 1E-01                          |  | 0.006 1 U U  |
|    | VOLATILES   | 1.1.2-Trichloroethane                           | 9.7E-01            | 0.0005      | 0.005        | NE                            | NE                      | 9.7E-01                          |  | 0.006 1 U U  |
|    | VOLATILES   | 1,1-Dichloroethane                              | 8.9E+01            | 0.0010      | 0.005        | NE                            | NE                      | 8.9E+01                          |  | 0.006 1 U U  |
|    | VOLATILES   | 1,1-Dichloroethene                              | 2.7E+01            | 0.0005      | 0.005        | NE                            | NE                      | 2.7E+01                          |  | 0.006 1 U U  |
|    | VOLATILES   | 1,1-Dichloropropene                             | 9.9E-01            | 0.0005      | 0.005        | NE                            | NE                      | 9.9E-01                          |  | 0.006 1 U U  |
|    | VOLATILES   | 1,2,3-Trichlorobenzene                          | 4.2E+01            | 0.0005      | 0.005        | NE                            | NE                      | 4.2E+01                          |  | 0.006 1 0 0  |
|    | VOLATILES   | 1.2.4-Trichlorobenzene                          | 9.2E-02<br>1.4E+02 | 0.0010      | 0.005        | NE                            | NE                      | 145+02                           |  | 0.006 1 U U  |
|    | VOLATILES   | 1.2.4-Trimethylbenzene                          | 9.6E+00            | 0.0005      | 0.005        | NE                            | NE                      | 9.62+00                          |  | 0.006 1 U U  |
|    | VOLATILES   | 1,2-Dibromo-3-chloropropane                     | 3,5E-01            | 0.0020      | 0.005        | NE                            | NE                      | 3.5E-01                          |  | 0.006 1 U U  |
|    | VOLATILES   | 1,2-Dibromoethane                               | 5.3E-02            | 0.0005      | 0.005        | NE                            | NE                      | 5.3E-02                          |  | 0.006 1 U U  |
|    | VOLATILES   | 1,2-Dichlorobenzene                             | 5.6E+01            | 0.0005      | 0.005        | NE                            | NE                      | 5.6E+01                          |  | 0.006 1 U U  |
|    | VOLATILES   | 1,2-Dichloroethane                              | 2.7E-01            | 0.0005      | 0.005        | NE                            | NE                      | 2.7E-01                          |  | 0.006 1 U U  |
|    | VOLATILES   | 1,2-Dimethylbenzene (o-Xylene)                  | 3.35+03            | 0.0005      | 0.005        | NE                            | NE                      | 3.3E+03                          |  | 0.006 1 U U  |
|    | VOLATILES   | 1.3.5-Trimethylbenzene                          | 8.3E+00            | 0.0005      | 0.005        | NE                            | NE                      | 8.3E+00                          |  | 0.006 1 U U  |
|    | VOLATILES   | 1,3-Dichlorobenzene                             | 5.1E+00            | 0.0005      | 0.005        | NE                            | NE                      | 5.1E+00                          | 1  | 0.006 1 U U  |
|    | VOLATILES   | 1,3-Dichloropropane                             | 3.0E+00            | 0.0005      | 0.005        | NE                            | NE                      | 3.0E+00                          |  | 0.006 1 U U  |
|    | VOLATILES   | 1,4-Dichlorobenzene                             | 2.7E+01            | 0.0005      | 0.005        | NE                            | NE                      | 2.7E+01                          |  | 0.006 1 0 0  |
|    |   | 2,2-Dichloropropane<br>2-Butanope               | 1./E+00<br>2.6E+03 | 0.0005      | 0.005        | NE                            | NE                      | 2.6E+03                          |  | 0.000 1 0 0  |
|    | VOLATILES   | 2-Chloroethyl vinyl ether                       | 2.1E-01            | 0.0020      | 0.010        | NE                            | NE                      | 2.1E-01                          |  | 0.012 1 U U  |
|    | VOLATILES   | 2-Chlorotoluene                                 | 1.5E+02            | 0.0005      | 0.005        | NE                            | NE                      | 1.5E+02                          |  | 0.006 1 U U  |
|    | VOLATILES   | 2-Hexanone                                      | 6.2E+00            | 0.0025      | 0.010        | NE                            | NE                      | 6.2E+00                          |  | 0.012 1 U U  |
| ÷. | VOLATILES   | 4-Chlorotoluene                                 | 3.4E-01            | 0.0005      | 0.005        | NE                            | NE                      | 3.4E-01                          |  | 0.006 1 U U  |
|    | VOLATILES   | Acetone   | 1./E+02            | 0.0050      | 0.010        | NE                            | NE                      | 1./E+02<br>8.9E-01               |  | 0.012 1 0 0  |
|    | VOLATILES   | Bromohenzene                                    | 1 1 1 + 01         | 0.0005      | 0.005        | NE                            | NE                      | 1.1E+01                          |  | 0.006 1 U U  |
|    | VOLATILES   | Bromochloromethane                              | 2.4E+01            | 0.0005      | 0.005        | NE                            | NE                      | 2.4E+01                          |  | 0.006 1 U U  |
|    | VOLATILES   | Bromodichloromethane                            | 1.0E+01            | 0.0005      | 0.005        | NE                            | , NE                    | 1.0E+01                          |  | 0.006 1 U U  |
|    | VOLATILES   | Bromoform                                       | 3.4E+01            | 0.0005      | 0.005        | NE                            | NE                      | 3.4E+01                          |  | 0.006 1 U U  |
|    | VOLATILES   | Bromomethane                                    | 3.5E-01            | 0.0010      | 0.010        | NE                            | NE                      | 3.5E-01                          |  | 0.012 1 U U  |
|    | VOLATILES   | Carbon disuinde                                 | 1.0E+02<br>3.5E-01 | 0.0005      | 0.005        | NE                            | NE                      | 3.5E-01                          |  | 0.006 1 0 0  |
|    | VOLATILES   | Chlorohenzene                                   | 4.05+01            | 0.0005      | 0.005        | NE                            | NE                      | 4.0E+01                          |  | 0.006 1 U U  |
|    | VOLATILES   | Chloroethane                                    | 1.1E+03            | 0.0010      | 0.010        | NE                            | NE                      | 1.1E+03                          |  | 0.012 1 U U  |
| ~  | VOLATILES   | Chloroform                                      | 3.1E-01            | 0.0005      | 0.005        | NE                            | NE                      | 3.1E-01                          |  | 0.006 1 U U  |
|    | VOLATILES   | Chloromethane                                   | 2.3E-01            | 0.0020      | 0.010        | NE                            | NE                      | 2.3E-01                          | 1  | 0.012 1 U U  |
|    |   | cis-1,2-Dichloroethene                          | 1.2E+02            | 0.0005      | 0.005        | NE                            | NE                      | 1.2E+02<br>1.2E+00               |  |  |
|    | VOLATILES   | Dibromochloromethane                            | 7.60               | 0.0005      | 0.005        | NF                            | NE                      | 7.6E+00                          | 1  | 0.006 1 U U  |
|    | VOLATILES   | Dibromomethane                                  | 1.9E+01            | 0.0005      | 0.005        | NE                            | NE                      | 1.9E+01                          |  | 0.006 I U U  |
|    | VOLATILES   | Dichlorodifluoromethane                         | 2.2E+02            | 0.0010      | 0.010        | NE                            | NE                      | 2.2E+02                          |  | 0.012 1 U U  |
|    | VOLATILES   | Ethylbenzene                                    | 4.3E+02            | 0.0005      | 0.005        | NE                            | NE                      | 4.3E+02                          | l  | 0.006 1 U U  |

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

| 00066635 |
|----------|
|----------|

| Table 4-121   |
|---|
| Comparison of Chemical Concentration in Soil to Risk-Based Screening Values |
| Sump-114  |

|    |  |                           |  |                     | o ann pro   | •  |   |   |   |   |
|----|--|---------------------------|--|---------------------|-------------|--|---|---|---|---|
|    | [SUMP] = SUMP114<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method _    | Back¢<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soit<br><u>L, mg/kg)</u><br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP114-SB01<br>35-SMP114-SB01-01<br>9/15/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP114-SB01<br>35-SMP114-SB01-02<br>9/15/2006<br>0.5 - 0.5 Ft<br>REG |
| ۰. | Tost Group   | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL) | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value   | Result DIL LQ VQ  | Result DIL LQ VQ  |
|    |  | Hevachlorobutadiese       | 1.6E+00                                  | 0.0005              | 0.005       | NE                                       | NE  | 1.6E+00                                       |   | 0.006 1 U U   |
|    | VOLATILES  | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005       | NE                                       | NE  | 5.4E+02                                       |   | 0.006 1 U U   |
|    | VOLATILES  | m n-Xvienes               | 2.3E+02                                  | 0.0005              | 0.005       | NE                                       | NE  | 2.3E+02                                       |   | 0.006 1 U U   |
|    | VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.01        | NE                                       | NE  | 1.3E+03                                       |   | 0.012 1 U U   |
|    | VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005       | NE                                       | NE  | 8.7E+00                                       |   | 0.006 1 U U   |
|    | VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.01        | NE                                       | NE  | 1.8E+01                                       |   | 0.012 1 U U   |
| 5  | VOLATILES  | n-BUTYI BENZENE           | 2 7E+02                                  | 0.0005              | 0.005       | NE                                       | NE  | 2.7E+02                                       |   | 0.006 1 U U   |
|    | VOLATILES  | n-DROPYI BENZENE          | 3.2E+02                                  | 0.0005              | 0.005       | NE                                       | NE  | 3.2E+02                                       |   | 0.006 1 U U   |
|    | VOLATILES  | ALSOPROPYLTO! UENE        | 4.2E+02                                  | 0.0005              | 0.005       | NE                                       | NE  | 4.2E+02                                       |   | 0.006 1 U U   |
|    | VOLATILES  | Sec-BUTYI BENZENE         | 3.0E+02                                  | 0.0005              | 0.005       | NE                                       | NE  | 3.0E+02                                       |   | 0.006 I U U   |
|    | VOLATILES  | Styrane                   | 1.3E+03                                  | 0.0005              | 0.005       | NE                                       | NE  | 1.3E+03                                       |   | 0.006 1 U U   |
| 1  | VOLATILES  | tort-BI (TVI BENZENE      | 2 6E+02                                  | 0.0005              | 0.005       | NĒ                                       | NE  | 2.6E+02                                       |   | 0.006 1 U U   |
|    | VOLATILES  | Tetrachloroethene         | 6.0E+00                                  | 0.0005              | 0.005       | NE                                       | NÉ  | 6.0E+00                                       |   | 0.006 1 U U   |
|    | VOLATILES  | Toluope                   | 1 1E+03                                  | 0.0005              | 0.005       | NE                                       | NE  | 1.1E+03                                       |   | 0.006 1 U U   |
|    | VOLATILES  | trans-1 2-Dichloroethene  | 1 4E+02                                  | 0.0005              | 0.005       | NE                                       | NE  | 1.4E+02                                       |   | 0.006 1 U U   |
|    | VOLATILES  | trans-1.3-Dickloropropene | 1.8E+00                                  | 0.0005              | 0.005       | NE                                       | NE  | 1.8E+00                                       |   | 0.006 1 U U   |
|    | VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005       | NE                                       | NE  | 3.7E+00                                       |   | 0.006 1 U U   |
|    | VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.01        | NE                                       | NE  | 2.6E+02                                       |   | 0.012 1 U U   |
|    | VOLATILES  | Viewl acetate             | 57E+01                                   | 0.0010              | 0.01        | NE                                       | NE  | 5.7E+01                                       |   | 0.012 1 U U   |
|    | VOLATILES  | Viovi chloride            | 3.6E-02                                  | 0.0010              | 0.01        | NE                                       | NE  | 3.6E-02                                       | L   | <u>0.012 1 U U</u>  |

VOLATILES Vinyl chlonde Footnotes are shown on cover page to Tables Section.



| Table 4-122  |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump-115   |

| Test Dip         Description         PRESUP         Linet MOL         Linet MOL         0 - 0.5 Fr         1.5 - 2.5 Fr         Value         Result DIL LQ VQ         Result   | [SUMP] = SUMP115<br>LOCATION _CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |  | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method      | Backg<br>Concentra<br>(95% UP<br>Surface | ground<br>tions in Soil<br>PL, mg/kg)<br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP115-\$B01<br>35-SMP115-SB01-01<br>9/19/2006<br>55 Ft<br>REG | 35SUMP115-SB01<br>35-SMP115-SB01-02<br>9/19/2006<br>8 - 8 Ft<br>REG |
|---|---|--|--|---------------------|-------------|--|---|---|---|---|
| EPHC.GSUES         1,3.6-Trinkhousznie         4.76-02         0.1         0.25         NE         NE         4.76-03         0.244         1         0.250         1           EPRC.GSUES         2.4.6-Trinktoblane         7.76-00         0.1         0.25         NE         NE         1.6-00         0.244         1         0.250         1         U           EPRC.GSUES         2.4-Dinktoblane         7.76-00         0.1         0.25         NE         NE         7.76-00         0.244         1         0.220         1         U         0.244         1         0.220         1         U         0.244         1         0.220         1         U         0.244         1         0.220         1         U         0.242         1         0.220         1         U         0.244         1         0.220         1         U         0.244         1         0.220         1         U         0.244         1         0.220         1         U         0.244         1         0.220         1         U         0.244         1         0.2200         1         U         0.244         1         0.2200         1         U         0.244         1         0.2200         1  | Test Group  | Parameter /I Inits = mn/kn)                              | (RBSV) *                                 | Limit (MDL)         | Limit (MOL) | 0-05 Ft                                  | 15-25Ft   | Value   | Result DIL LO VO  | Result DIL LQ VQ  |
| EPCIGSVES         1.2-Dintrobenzarie         1.6E-00         0.1         0.25         NE         NE         NE         NE         0.244         1         0         0.250         1         U           EPCIGSVES         2.4-Dintrobusione         7.2E-01         0.1         0.25         NE         NE         7.2E-01         0.244         1         0         0.200         1         0.264         1         0         0.200         1         0.264         1         0         0.200         1         0         0.244         1         0         0.200         1         0         0         0         0.244         1         0         0.200         1         0         0.264         1         0         0.200         1         0         0.200         1         0         0.200         1         0         0.200         1         0         0.200         1         0         0.200         1         0         0.200         1         0         0.200         1         0         0.200         1         0         0.200         1         0         0.200         1         0         0.200         1         0         0.200         1         0         0.200  | EXPLOSIVES  | 1.3.5-Trinitrobenzene                                    | 4.7E+02                                  | 0,1                 | 0.25        | NE                                       | NE  | 4.7E+02                                       | 0.244 1 U   | 0.250 1 U   |
| EXPLOSIVES         2.4.6         Printinchame         7.7E-00         0.241         1         U         0.250         1           EXPLOSIVES         2.4.0         Printinchame         7.2E-01         0.254         1         U         0.250         1 <thu< td=""><td>EXPLOSIVES</td><td>1,3-Dinitrobenzene</td><td>1.6E+00</td><td>0.1</td><td>0.25</td><td>NE</td><td>NE</td><td>1.6E+00</td><td>0.244 1 U</td><td>0.250 1 U</td></thu<>  | EXPLOSIVES  | 1,3-Dinitrobenzene                                       | 1.6E+00                                  | 0.1                 | 0.25        | NE                                       | NE  | 1.6E+00                                       | 0.244 1 U   | 0.250 1 U   |
| EPFLOSIVES         2.4-Dinizoblame         7.2-Dil         0.24         1         0         0.20         1         0           EPRLOSIVES         2.4-Dinizoblame         2.6E+00         0.11         0.26         NE         NE         7.2-Dil         0.254         1         0         0.200         1         0.2000         1  | EXPLOSIVES  | 2,4,6-Trinitrotoluene                                    | 7.7E+00                                  | 0.1                 | 0.25        | NE                                       | NE  | 7.7É+00                                       | 0.244 1 U   | 0.250 1 U   |
| Expr. 2018B         2.467-00         0.1         0.28         NE         PE         2.667-00         0.258         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         I         0         0.280         1         0         0.280         1         0         0.280         1         0         0.280         1         0         0.280         1         0         0.280         1         0         0.280         1         0         0.280         1         0         0.280         1         0         0.280         1         0         0.280         1         0         0.280         1         0         0.280         1  | EXPLOSIVES  | 2,4-Dinitrotoluene                                       | 7.2E-01                                  | 0.1                 | 0.25        | NE                                       | NE  | 7.2E-01                                       | 0.244 1 U   | 0.250 1 0   |
| Expr. GSIVES         A-minitor 2-distribution         26E-00         0.1         0.28         NE         NE         2.26-00         0.28-0         1         U         0.280         1         U           EXPL.GSIVES         n-Mitobacname         4.48-01         0.1         0.26         NE         NE         4.26-01         0.244         1         U         0.260         1         U         2.260         1         U         0.260         <   | EXPLOSIVES  | 2,6-Dinitrotoluene<br>2-Amina-4 6-dinitrotoluene         | 7.25-01                                  | 0.1                 | 0.20        | NE                                       | NE  | 2.6E+00                                       | 0.254 1 0   | 0.260 1 U   |
| EXPLOSIVES         MAX         Column         22E-02         0.1         220         NE         NE         22E-02         0.1         0.2         0           EXPLOSIVES         Invitroblance         6.5E+00         0.1         0.26         NE         NE         6.6E+00         0.244         1         0         0.260         1         0           EXPLOSIVES         Invitroblance         4.4E+01         0.1         0.26         NE         NE         6.4E+01         0.244         1         0         0.260         1         0           EXPLOSIVES         Philotoluone         4.4E+01         0.1         0.25         NE         NE         4.4E+01         0.0         0.260         1         0         0.244         1         0         0.601         1         0.254         1         0         0.601         1         0         0.601         1         0         0.601         1         0         0.601         1         0         0.601         1         0         0.601         1         0         0.601         1         0         0.654         1         0         0.611         1         0         0.611         1         0         0.611         1 <td>EXPLOSIVES</td> <td>4-Amino-2 6-dinitrotokiene</td> <td>2.0E+00<br/>2.6E+00</td> <td>0.1</td> <td>0.26</td> <td>NE</td> <td>NE</td> <td>2.6E+00</td> <td>0.254 1 U</td> <td>0.260 1 U</td>   | EXPLOSIVES  | 4-Amino-2 6-dinitrotokiene                               | 2.0E+00<br>2.6E+00                       | 0.1                 | 0.26        | NE                                       | NE  | 2.6E+00                                       | 0.254 1 U   | 0.260 1 U   |
| EXPLOSIVES         m. Nitrobalene         4.4E-01         0.1         0.25         NE         NE         4.4E-01         0.244         1         U         0.250         1           EXPLOSIVES         O-Nitrobalene         4.7E+01         0.1         0.25         NE         NE         4.7E+01         0.244         1         0         0.250         1         0           EXPLOSIVES         PANTroblome         4.4E+01         0.1         0.25         NE         NE         4.4E+01         0.244         1         0         0.250         1         0           EXPLOSIVES         PANTroblomberzene         1.24-Triblomberzene         0.2         1.05         NE         NE         1.4E+02         0.033         0.17         NE         NE         1.4E+02         0.033         0.17         NE         NE         5.1E+01         0.019         1         0.019         1         0         0.019         1         0         0.019         1         0         0.019         1         0         0.019         1         0         0.019         1         0         0.019         1         0         0.019         1         0         0.019         1         0         0.019         1<   | EXPLOSIVES  | HMX  | 2.2E+02                                  | 0.1                 | 2.20        | NE                                       | NE  | 2.2E+02                                       | 2.150 1 U   | 2.200 1 U   |
| EXPLOSIVES         Numbersame         6.5E+00         0.1         0.26         NE         NE         6.5E+00         0.254         1         U         0.256         1         U         0.256         1         U         0.256         1         U         0.256         1         U         0.256         1         U         0.256         1         U         0.256         1         U         0.656         1         U         0.656         1         U         0.666         1         U         0.666         1         U         0.666         1         U         0.666         1         U         0.666         1         U         0.666         0.073         0.17         NE         NE         5.16+00         0.178         1         U         0.191         1         U         0.581         1         0.178         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         U         0.178         1   | EXPLOSIVES  | m-Nitrotoluene   | 4.4E+01                                  | 0.1                 | 0.25        | NE                                       | NE  | 4.4E+01                                       | 0.244 1 U   | 0.250 1 U   |
| EXPLOSIVES         O-Mitrolouene         4.7E+01         0.24         1         0         0.240         1         0         0.240         1         0         0.240         1         0         0.240         1         0         0.240         1         0         0.240         1         0         0.240         1         0         0.240         1         0         0.240         1         0         0.240         1         0         0.240         1         0         0.240         1         0         0.240         1         0         0.240         1         0         0.240         1         0         0.243         1         0         0.243         1         0         0.243         1         0         0.243         1         0         0.243         1         0         0.243         1         0         0.243         1         0         0.243         1         0         0.243         1         0         0.243         1         0         0.243         1         0         0.243         1         0         0.243         1         0         0.243         1         0         0.243         1         0         0.243         1         0   | EXPLOSIVES  | Nitrobenzene   | 6.5E+00                                  | 0.1                 | 0.26        | NE                                       | NE  | 6.5E+00                                       | 0.254 1 U   | 0.260 1 U   |
| EAK-LUSINGE         p-Mintrolucine         4 4 E-10         0.1         0.0         NE         NE         NE         14 E-00         0.0         0.0         0.0           SEMIVOLATILES         12 A-Trichlorobenzone         14 E+02         0.63         0.17         NE         NE         14 E+02         0.61         1         0.0050         1         0.0050         1         0.0050         1         0.0050         1         0.0050         1         0.0050         0.17         NE         NE         5.6E+01         0.0178         1         0.0191         1   | EXPLOSIVES  | o-Nitrotoluene   | 4.7E+01                                  | 0.1                 | 0.25        | NE                                       | NE  | 4.7E+01                                       | 0.244 1 0   | 0.250 1 U   |
| EXERCISIVES         Truny         0.2         0.65         NE         NE         NE         1.62-02         0.53         1         U         0.865         1           SEMVOLATLES         1.2.6/Troborbenzane         5.6E+01         0.063         0.17         NE         NE         1.6E+02         0.178         1         U         0.191         1         U           SEMVOLATLES         1.3.2.6/Troborbenzane         5.6E+01         0.063         0.17         NE         NE         5.6E+00         0.178         1         U         0.191         1         U           SEMVOLATLES         1.4.2.6/Troborbenzane         2.7E+01         0.063         0.17         NE         NE         6.6E+01         0.181         1         U         0.191         1         U         5.9E         0.191         1         U         5.9E         0.191         1         U         5.9E         0.191         1         U         5.9E         0.191         1         U         5.9E         0.191         1         U         5.9E         0.191         1         U         5.9E         0.191         1         U         5.9E         0.191         1         U         5.9E         0.191         1<   | EXPLOSIVES<br>EXPLOSIVES  |  | 4.42+01                                  | 0.1                 | 1.00        |  | NE  | 4.4E+01<br>3.6E+00                            | 0.244 1 0   | 1000 1 1  |
| SEMPOLATILES         1.2.4-Tridulorphersone         1.4E+02         0.178         1         U         0.101         1         U           SEMVOLATILES         1.3.2-Chionobersone         5.1E+00         0.083         0.17         NE         NE         5.6E+01         0.083         0.17         NE         NE         5.6E+00         0.178         1         U         0.101         1         U           SEMVOLATILES         1.3.2-Chionobersone         5.1E+00         0.078         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.101         1         U         0.111 <th< td=""><td>EXPLOSIVES</td><td>Tetrd</td><td>1.6E+02</td><td>0.1</td><td>0.65</td><td>NE</td><td>NÉ</td><td>1.6E+02</td><td>0.634 1 U</td><td>0.650 1 U</td></th<>   | EXPLOSIVES  | Tetrd  | 1.6E+02                                  | 0.1                 | 0.65        | NE                                       | NÉ  | 1.6E+02                                       | 0.634 1 U   | 0.650 1 U   |
| SEMUCIATLES         1.2. Olchiorobenzene         5.6E+01         0.178         1         U         0.191         1         U           SEMUCIATLES         1.3. Olchiorobenzene         2.7E+01         0.083         0.17         NE         NE         2.7E+01         0.178         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.178         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U  | SEMIVOLATILES   | 1.2.4-Trichlorobenzene                                   | 1.4E+02                                  | 0.083               | 0.17        | NE                                       | NE  | 1.4E+02                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES         1.3-Dichlorobenzene         5.1E+00         0.013         0.17         NE         NE         5.1E+00         0.178         1         U         0.191         1         U           SEMIVOLATILES         1.4.5-Erchlorophenol         1.6E+03         0.083         0.17         NE         NE         1.6E+03         0.178         1         U         0.191         1           SEMIVOLATILES         2.4.5-Trichlorophenol         4.5E+01         0.083         0.17         NE         NE         4.5E+01         0.178         1         U         0.191         1           SEMIVOLATILES         2.4.4-Dichlorophenol         3.1E+02         0.083         0.17         NE         NE         4.7E+01         0.0161         1         U         0.191         1         U         0.191         1         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.171         NE         NE  | SEMIVOLATILES   | 1,2-Dichlorobenzene                                      | 5.6E+01                                  | 0.083               | 0.17        | NE                                       | NE  | 5.6E+01                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES         1.4-Dichlorober.zene         2.7E-01         0.083         0.17         NE         NE         2.7E-01         0.178         1         U         0.191         1         U           SEMIVOLATILES         2.4.5-Tichlorophenol         4.5E+01         0.083         0.17         NE         NE         4.5E+01         0.178         1         U         0.191         1           SEMIVOLATILES         2.4.5-Tichlorophenol         4.5E+01         0.083         0.17         NE         NE         3.1E+02         0.073         1         U         0.191         1           SEMIVOLATILES         2.4.5-Dinkholusen         7.2E-01         0.083         0.17         NE         NE         3.1E+02         0.017         U         0.178         U         0.191         1         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191 <td>SEMIVOLATILES</td> <td>1,3-Dichlorobenzene</td> <td>5.1E+00</td> <td>0.063</td> <td>0.17</td> <td>NE</td> <td>NE</td> <td>5.1E+00</td> <td>0.178 1 U</td> <td>0.191 1 U</td>   | SEMIVOLATILES   | 1,3-Dichlorobenzene                                      | 5.1E+00                                  | 0.063               | 0.17        | NE                                       | NE  | 5.1E+00                                       | 0.178 1 U   | 0.191 1 U   |
| Stem         Stem         NE         NE         NE         NE         No         0.178         1         0         0.191         1         0           SEM         24,4,5-Inchlorophenol         4,5E+01         0.083         0.17         NE         NE         4,4E+01         0.178         1         U         0.191   | SEMIVOLATILES   | 1,4-Dichlorobenzene                                      | 2.7E+01                                  | 0.083               | 0.17        | NE                                       | NE  | 2.7E+01                                       | 0.178 1 U   | 0.191 1 U   |
| Stein VOLA ILES       2.4.0       17.0       4.0       0.003       0.17       NE       NE       NE       1.0       0.07       1       0       0.19       1       0       0.19       1       0       0.19       1       0       0.19       1       0       0.191       1       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <td< td=""><td>SEMIVOLATILES</td><td>2,4,5-Trichlorophenol</td><td>1.6E+03</td><td>0.083</td><td>0.17</td><td>NE</td><td>NE</td><td>1.65+03</td><td>0.178 1 0</td><td>0.191 1 U</td></td<>  | SEMIVOLATILES   | 2,4,5-Trichlorophenol                                    | 1.6E+03                                  | 0.083               | 0.17        | NE                                       | NE  | 1.65+03                                       | 0.178 1 0   | 0.191 1 U   |
| SEMIVOLATILES         2.4-Dimethylphenol         3.1E+02         0.033         0.17         NE         NE         3.1E+02         0.178         1         U         0.191         1           SEMIVOLATILES         2.4-Dimitrophenol         3.1E+02         0.033         0.43         NE         NE         3.1E+01         0.807         1         U         0.957         1         U         0.957         1         U         0.957         1         U         0.957         1         U         0.957         1         U         0.957         1         U         0.917         N </td <td>SEMIVOLATILES</td> <td>2,4,0- Inchlorophenol</td> <td>4.52+01</td> <td>0.003</td> <td>0.17</td> <td>NE</td> <td>NE</td> <td>4.76+01</td> <td>0.178 1 1</td> <td>0.191 1 U</td>  | SEMIVOLATILES   | 2,4,0- Inchlorophenol                                    | 4.52+01                                  | 0.003               | 0.17        | NE                                       | NE  | 4.76+01                                       | 0.178 1 1   | 0.191 1 U   |
| EXEMUCIATLES         2.4-Dintroducen         3.1E+01         0.330         0.43         NE         NE         NE         3.1E+01         0.997         1         U         0.997         1  | SEMIVOLATILES   | 2.4-Dimethylphenol                                       | 3.1E+02                                  | 0.083               | 0.17        | NE                                       | NE  | 3.1E+02                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATLES         2.4-Dinitroiousne         7.2E-01         0.083         0.17         NE         NE         7.2E-01         0.178         1         U         0.191         1         U           SEMIVOLATLES         2-Chloronaphthalene         1.1E+03         0.083         0.17         NE         NE         1.1E+03         0.178         1         U         0.191         1         U           SEMIVOLATLES         2-Chloronaphthalene         5.5E+01         0.083         0.17         NE         NE         1.1E+02         0.178         1         U         0.191         1         U           SEMIVOLATLES         2-Methylnaphthalene         5.5E+01         0.083         0.17         NE         NE         5.7E+01         0.178         1         U         0.191         1         U         0.957         1         U         5.5E+01         0.333         0.83         NE         NE         4.7E+00         0.363         1         U         0.967         1         U         0.967         1         U         0.967         1         U         0.967         1         U         0.967         1         U         0.967         1         U         0.967         1         U  | SEMIVOLATILES   | 2,4-Dinitrophenol  | 3.1E+01                                  | 0.330               | 0.83        | NE                                       | NE  | 3.1E+01                                       | 0.890 1 U   | 0.957 1 U   |
| SEMIVOLATILES         2,6-Dinitrotoluene         7,2E-01         0.078         1         U         0.191         1         U           SEMIVOLATILES         2-Chloropaphtalanene         1.1E+02         0.083         0.17         NE         NE         1.1E+02         0.178         1         U         0.191         1         U           SEMIVOLATILES         2-Methylphenol         1.1E+02         0.083         0.17         NE         NE         5.5E+01         0.178         1         U         0.191         1         U           SEMIVOLATILES         2-Methylphenol         7.7E+02         0.083         0.17         NE         NE         7.7E+02         0.178         1         U         0.191         1         U           SEMIVOLATILES         2-Nitrophenol         3.1E+01         0.083         0.17         NE         NE         3.7E+01         0.356         1         U         0.957         1         U         SEMIVOLATILES         3.7E+01         0.330         0.83         NE         NE         3.7E+01         0.368         1         U         0.957         1         U         SEMIVOLATILES         4.5E+01         0.901         1         0.9587         1         U   | SEMIVOLATILES   | 2,4-Dinitrotoluene                                       | 7.2E-01                                  | 0.083               | 0.17        | NE                                       | NE  | 7.2E-01                                       | 0.178 1 U   | 0.191 1 U   |
| SEMMVOLATILES         2-Chiorophenol         1.1E+03         0.083         0.17         NE         NE         1.1E+03         0.176         1         0         0.191         1         0           SEMMVOLATILES         2-Chiorophenol         1.1E+02         0.083         0.17         NE         NE         5.55+01         0.178         1         0         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         U         0.191         U         0.191         U         0.191         U         0.191         U         0.997         1         U         0.830         NE         NE         4.7E+00         0.800         1         U         0.987         1         U         0.987         1         U         0.987         1         U         0.987         1         U         0.987         1         U         0.987         1   | SEMIVOLATILES   | 2,6-Dinitrotoluene                                       | 7.2E-01                                  | 0.083               | 0.17        | NE                                       | NE  | 7.2E-01                                       | 0.178 1 U   | 0,191 1 U   |
| SEMMOLATILES         2-Unifordphenol         1.12-02         0.003         0.17         NE         NE         1.12-02         0.176         1         0         0.181         1         0           SEMMOLATILES         2-Midhyliphenol         7.7E+02         0.083         0.17         NE         NE         7.7E+02         0.178         1         0         0.191         1         0           SEMMOLATILES         2-Midhyliphenol         3.1E+01         0.083         0.17         NE         NE         4.7E+00         0.8967         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1         0         0.9977         1  | SEMIVOLATILES   | 2-Chloronaphthalene                                      | 1.1E+03                                  | 0.083               | 0.17        | NE                                       | NE  | 1.1E+03                                       | 0.178 1 U   | 0.191 1 U   |
| Stem VOLTILES         2-Metry inspinite         0.02-01         0.000         0.11         NL         NL         NL         NL         0.0000         0.0000         0.0000         0.0000         0.0000 <td>SEMIVOLATILES</td> <td>2-Chiorophenol<br/>2-Methylapopthalapo</td> <td>1.12+02</td> <td>0.083</td> <td>0.17</td> <td>NE</td> <td>NE</td> <td>1.1E+02<br/>5.5E+01</td> <td>0.178 1 0</td> <td>0.191 1 ()</td>  | SEMIVOLATILES   | 2-Chiorophenol<br>2-Methylapopthalapo                    | 1.12+02                                  | 0.083               | 0.17        | NE                                       | NE  | 1.1E+02<br>5.5E+01                            | 0.178 1 0   | 0.191 1 ()  |
| SEMIOLATILES         2-Nitrophenol         4.7E+00         0.330         0.83         NE         NE         4.7E+00         0.800         1         0         0.977         1         0           SEMIVOLATILES         2-Nitrophenol         3.1E+01         0.083         0.17         NE         NE         1.1E+01         0.178         1         0         0.850         1         0         0.851         1         0         0.851         1         0         0.851         1         0         0.851         1         0         0.851         1         0         0.851         1         0         0.851         1         0         0.857         1         0         0.851         1         0         0.890         1         0         0.967         1         0         0.890         1         0         0.967         1         0         0.890         1         0         0.967         1         0         0.890         1         0         0.967         1         0         0.967         1         0         0.890         1         0         0.967         1         0         0.967         1         0         0.967         1         0         0.961         1<   | SEMIVOLATILES   | 2-Methylobenol   | 7 7E+02                                  | 0.083               | 0.17        | NE                                       | NE  | 7.7E+02                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES       2-Nitrophenol       3.1E-01       0.083       0.17       NE       NE       3.1E+01       0.178       1       U       0.138       1       U         SEMIVOLATILES       3-Nitroaniline       1.1E+00       0.165       0.33       NE       NE       1.1E+00       0.356       1       U       0.937       1       U       0.937       1       U       0.937       1       U       0.937       1       U       0.937       1       U       0.937       1       U       0.937       1       U       0.957       1       U       0.957       1       U       0.957       1       U       0.957       1       U       0.957       1       U       0.957       1       U       0.957       1       U       0.957       1       U       0.957       1       U       0.957       1       U       0.957       1       U       0.957       1       U       0.951       1       U       0.961       U       0.957       1       U       0.957       1       U       0.957       1       U       0.957       1       U       0.957       1       U       0.957       1       U  | SEMIVOLATILES   | 2-Nitroaniline   | 4.7E+00                                  | 0.330               | 0.83        | NE                                       | NE  | 4.7E+00                                       | 0.890 1 U   | 0.957 1 U   |
| SEMIVOLATILES       3,3*Olchtarobenzidine       1,1E+00       0,615       0,33       NE       NE       1,1E+00       0,355       1       U       0,383       1       U         SEMIVOLATILES       4,6*Dinitro-2-methylpheno!       3,1E+01       0,330       0,83       NE       NE       NE       4,7E+00       0,800       1       U       0,957       1       U         SEMIVOLATILES       4-Gromophenyl phenyl either       3,1E+01       0,330       0,83       NE       NE       NE       1,7E+01       0,061       1       U       0,957       1       U         SEMIVOLATILES       4-Chioro-3-methylphenyl either       3,1E+01       0,083       0,17       NE       NE       1,7E+01       0,011       U       0,0957       1       U       0,191       1       U       0,191       1       U       0,191       1       U       0,191       1       U       0,191       1       U       0,191       1       U       0,191       1       U       0,191       1       U       0,191       1       U       0,191       1       U       0,191       1       U       0,191       1       U       0,191       1       U       0,191 </td <td>SEMIVOLATILES</td> <td>2-Nitrophenol</td> <td>3.1E+01</td> <td>0.083</td> <td>0.17</td> <td>NE</td> <td>NE</td> <td>3.1E+01</td> <td>0.178 1 U</td> <td>0.191 1 U</td>  | SEMIVOLATILES   | 2-Nitrophenol  | 3.1E+01                                  | 0.083               | 0.17        | NE                                       | NE  | 3.1E+01                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES       3-Nitroaniline       4.7E+00       0.330       0.63       NE       NE       4.7E+00       0.890       1       U       0.957       1       U         SEMIVOLATILES       4-Bromophenyl phenyl ether       3.1E+01       0.330       0.83       NE       NE       NE       1.7E+01       0.091       1       U       0.957       1       U         SEMIVOLATILES       4-Chioro-3-methylphenol       7.7E+01       0.083       0.17       NE       NE       7.7E+01       0.078       1       U       0.998       1       U       0.998       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991       1       U       0.991   | SEMIVOLATILES   | 3,3'-Dichtorobenzidine                                   | 1.1E+00                                  | 0.165               | 0.33        | NE                                       | NE  | 1.1E+00                                       | 0.356 1 U   | 0.383 1 U   |
| SEEMVOLATILES       4,6-Dinito-2-methylphenol       3.1E+01       0.33       NE       NE       1.E       0.1201       0.033       1       0         SEMIVOLATILES       4-Chioro-3-methylphenol       7.7E+01       0.083       0.17       NE       NE       1.7E-01       0.091       1       0       0.111       1       0       0.111       1       0.111       1       0       0.111       0 <td< td=""><td>SEMIVOLATILES</td><td>3-Nitroaniline</td><td>4.7E+00</td><td>0.330</td><td>0.83</td><td>NE</td><td>NE</td><td>4.7E+00</td><td>0.890 1 0</td><td>0.957 1 0</td></td<>  | SEMIVOLATILES   | 3-Nitroaniline   | 4.7E+00                                  | 0.330               | 0.83        | NE                                       | NE  | 4.7E+00                                       | 0.890 1 0   | 0.957 1 0   |
| Definition         Definition <thdefinition< th="">         Definition         Definiti</thdefinition<>   | SEMIVOLATILES   | 4.6-Dinitro-2-methylpheno:<br>4-Bromophenid phenid ether | 3.1E+01<br>3.1E-02                       | 0.330               | 0.83        | NE                                       | NE  | 3.1E+01<br>1.7E-01                            | 0.090 1 0   | 0.957 1 0   |
| SEMIVOLATILES         4-Chioroaniline         6.2E+01         0.083         0.17         NE         NE         6.2E+01         0.178         1         U         0.191         1         U           SEMIVOLATILES         4-Chiorophenyl phenyl ether         2.8E-02         0.083         0.17         NE         NE         1.7E-01         0.091         1         U         0.098         1         U         0.098         1         U         0.091         1         U         0.091         1         U         0.091         1         U         0.091         1         U         0.091         1         U         0.091         1         U         0.091         1         U         0.091         1         U         0.091         1         U         0.091         1         U         0.091         1         U         0.091         1         U         0.957         1         U         0.957         1         U         0.957         1         U         0.957         1         U         0.957         1         U         0.957         1         U         0.957         1         U         0.957         1         U         0.957         1         U         0.911 <td>SEMIVOLATILES</td> <td>4-Chipro-3-methylohenot</td> <td>7.7E+01</td> <td>0.083</td> <td>0.17</td> <td>NE</td> <td>NE</td> <td>7.7E+01</td> <td>0.178 1 U</td> <td>0.191 1 U</td>  | SEMIVOLATILES   | 4-Chipro-3-methylohenot                                  | 7.7E+01                                  | 0.083               | 0.17        | NE                                       | NE  | 7.7E+01                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES         4-Chlorophenyl phenyl ether         2.8E-02         0.083         0.17         NE         NE         1.7E-01         0.091         1         U         0.098         1         U           SEMIVOLATILES         4-Methylphenol         7.7E+01         0.083         0.17         NE         NE         7.7E+01         0.091         1         U         0.997         1         U           SEMIVOLATILES         4-Nitroaniline         1.3E+01         0.330         0.83         NE         NE         NE         1.3E+01         0.897         1         U         0.997         1         U         0.991         1         U         0.991         1         U         0.991   | SEMIVOLATILES   | 4-Chloroaniline  | 6.2E+01                                  | 0.083               | 0.17        | NE                                       | NE  | 6.2E+01                                       | 0.178 1 U   | 0.191 1 U   |
| SEEMIVOLATILES         4-Methylphenol         7.7E+01         0.083         0.17         NE         NE         7.7E+01         0.178         1         U         0.191         1         U           SEMIVOLATILES         4-Nitrogniline         1.3E+01         0.330         0.83         NE         NE         1.3E+01         0.800         1         U         0.957         1         U           SEMIVOLATILES         4-Nitrognienol         3.1E+01         0.330         0.83         NE         NE         1.3E+01         0.800         1         U         0.957         1         U           SEMIVOLATILES         A-comaphthylene         8.2E+02         0.083         0.17         NE         NE         8.2E+02         0.178         1         U         0.191         1         U           SEMIVOLATILES         Acenaphthylene         8.2E+02         0.083         0.17         NE         NE         4.1E+02         0.178         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1 <t< td=""><td>SEMIVOLATILES</td><td>4-Chlorophenyl phenyl ether</td><td>2.8E-02</td><td>0.083</td><td>0.17</td><td>NE</td><td>NE</td><td>1.7E-01</td><td>0.091 1 U</td><td>0.098 1 U</td></t<>  | SEMIVOLATILES   | 4-Chlorophenyl phenyl ether                              | 2.8E-02                                  | 0.083               | 0.17        | NE                                       | NE  | 1.7E-01                                       | 0.091 1 U   | 0.098 1 U   |
| SEMIVOLATILES       4-Nitrognating       1.3E+01       0.330       0.83       NE       NE       1.3E+01       0.890       1       U       0.957       1       U         SEMIVOLATILES       4-Nitrognanding       3.1E+01       0.330       0.83       NE       NE       NE       3.1E+01       0.890       1       U       0.957       1       U         SEMIVOLATILES       Acenaphthene       8.2E+02       0.083       0.17       NE       NE       8.2E+02       0.178       1       U       0.191       1       U   | SEMIVOLATILES   | 4-Methylphenol   | 7.7E+01                                  | 0.083               | 0.17        | NE                                       | NE  | 7.7E+01                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES         4-Mitrophietron         3.1E+01         0.330         0.63         NE         NE         SETOR         0.550         1         U         0.11         U           SEMIVOLATILES         Acenaphthylene         8.2E+02         0.083         0.17         NE         NE         8.2E+02         0.178         1         U         0.191         1         U           SEMIVOLATILES         Acenaphthylene         8.2E+02         0.083         0.17         NE         NE         8.2E+02         0.178         1         U         0.191         1         U           SEMIVOLATILES         Acenaphthylene         6.3E-01         0.083         0.17         NE         NE         4.1E+03         0.178         1         U         0.191         1         U           SEMIVOLATILES         Benzo(a)anthracene         6.3E-01         0.083         0.17         1.54E-02         NE         1.7E-01         0.091         1         U         0.191         1         U   | SEMIVOLATILES   | 4-Nitroaniline   | 1.3E+01                                  | 0.330               | 0.83        | NE                                       | NE  | 1.3E+01                                       | 0.890 1 0   | 0.957 1 U   |
| SLEINVOLATILES         Accaraphilitylene         6.2E+02         0.083         0.17         NE         NE         8.2E+02         0.178         1         U         0.191         1         U           SEMIVOLATILES         Acenaphilitylene         8.2E+02         0.083         0.17         NE         NE         4.1E+03         0.178         1         U         0.191         1         U           SEMIVOLATILES         Acenaphilitylene         6.3E-01         0.083         0.17         NE         NE         4.1E+03         0.178         1         U         0.191         1         U           SEMIVOLATILES         Benzo(a)prime         6.3E-01         0.083         0.17         1.54E-02         NE         6.3E-01         0.078         1         U         0.191         1         U           SEMIVOLATILES         Benzo(b)fluoranthene         6.3E-01         0.083         0.17         1.54E-02         NE         6.3E-01         0.178         1         U         0.191         1         U           SEMIVOLATILES         Benzo(b)fluoranthene         6.3E+00         0.083         0.17         1.28E-02         NE         4.1E+02         0.178         1         U         0.191         1  | SEMIVOLATILES   | 4-Nitrophesol  | 3.15+01                                  | 0,330               | 0.63        | NE                                       |   | 3.1E+01<br>8.2E+02                            | 0.050 1 0   | 0.191 1 U   |
| SEMIVOLATILES         Anthracene         4.1E+03         0.083         0.17         NE         NE         4.1E+03         0.178         1         U         0.191         1         U           SEMIVOLATILES         Benzo(a)anthracene         6.3E-01         0.083         0.17         1.53E-02         NE         6.3E-01         0.078         1         U         0.191         1         U           SEMIVOLATILES         Benzo(a)anthracene         6.3E-01         0.083         0.17         1.54E-02         NE         6.3E-01         0.078         1         U         0.191         1         U           SEMIVOLATILES         Benzo(b)fluoranthene         6.3E-01         0.083         0.17         1.53E-02         NE         6.3E-01         0.178         1         U         0.191         1         U           SEMIVOLATILES         Benzo(b)fluoranthene         6.3E+00         0.083         0.17         1.32E-02         NE         4.1E+02         0.178         1         U         0.191         1         U           SEMIVOLATILES         Benzo(b)fluoranthene         6.3E+00         0.083         0.17         1.30E-02         NE         4.1E+02         0.178         1         U         0.191   | SEMIVOLATILES   | Acenaphthylene   | 8.2E+02                                  | 0.083               | 0.17        | NE                                       | NE  | 8.2E+02                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES         Benzo(a)anthracene         6.3E-01         0.083         0.17         1.53E-02         NE         6.3E-01         0.178         1         U         0.191         1         U           SEMIVOLATILES         Benzo(a)aptrene         6.3E-01         0.083         0.17         1.54E-02         NE         1.7E-01         0.091         1         U         0.098         1         U           SEMIVOLATILES         Benzo(b)incenthene         6.3E-01         0.083         0.17         1.53E-02         NE         1.7E-01         0.017         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191 <td< td=""><td>SEMIVOLATILES</td><td>Anthracene</td><td>4.1E+03</td><td>0.083</td><td>0.17</td><td>NE</td><td>NE</td><td>4.1E+03</td><td>0.178 1 U</td><td>0.191 1 U</td></td<>  | SEMIVOLATILES   | Anthracene   | 4.1E+03                                  | 0.083               | 0.17        | NE                                       | NE  | 4.1E+03                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES         Benzo(a)pyrene         6.3E-02         0.093         0.17         1.54E-02         NE         1.7E-01         0.091         1         U         0.098         1         U           SEMIVOLATILES         Benzo(b)fluoranthene         6.3E-01         0.083         0.17         1.55E-02         NE         1.7E-01         0.011         1         U         0.19  | SEMIVOLATILES   | Benzo(a)anthracene                                       | 6.3E-01                                  | 0.083               | 0.17        | 1.53E-02                                 | NE  | 6.3E-01                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES         Benzo(b)fluoranthene         6.3E-01         0.083         0.17         1.33E-02         NE         5.8-01         0.178         1         0         0.191         1         0           SEMIVOLATILES         Benzo(b)fluoranthene         6.3E+00         0.083         0.17         1.23E-02         NE         4.1E+02         0.178         1         U         0.191         1         U           SEMIVOLATILES         Benzo(b)fluoranthene         6.3E+00         0.083         0.17         1.23E-02         NE         4.1E+02         0.178         1         U         0.191         1         U           SEMIVOLATILES         Benzo(k)fluoranthene         6.3E+00         0.083         0.17         1.30E-02         NE         4.1E+04         0.890         1         U         0.191         1         U           SEMIVOLATILES         Benzol Acid         6.2E+04         0.330         0.83         NE         NE         4.7E+03         0.178         1         U         0.191         1         U           SEMIVOLATILES         bis(2-Chloroethoxy)methane         2.9E-01         0.083         0.17         NE         NE         2.9E-01         0.178         1         U         0.191   | SEMIVOLATILES   | Benzo(a)pyrene   | 6.3E-02                                  | 0.083               | 0.17        | 1.54E-02                                 | NE  | 1.7E-01                                       | 0.091 1 U   | 0.098 1 U   |
| SEMIVOLATILES         Benzok/Rifuenzanthene         6.3E+00         0.083         0.17         1.23E-02         NE         4.1E+02         0.178         1         0         0.191         1         0           SEMIVOLATILES         Benzok/Rifuenzanthene         6.3E+00         0.083         0.17         1.30E-02         NE         4.1E+02         0.178         1         U         0.191         1         U           SEMIVOLATILES         Benzok/Rifuenzanthene         6.3E+00         0.083         0.17         1.30E-02         NE         6.3E+04         0.690         1         U         0.997         1         U           SEMIVOLATILES         Benzok/Rifuenza         2.9E-01         0.083         0.17         NE         NE         4.7E+03         0.178         1         U         0.997         1         U           SEMIVOLATILES         bis(2-Chloroethoxymethane         2.9E-01         0.083         0.17         NE         NE         4.7E+03         0.098         1         U         0.191         1         U           SEMIVOLATILES         bis(2-Chloroisopropylyether         1.5E-01         0.083         0.17         NE         NE         1.7E+01         0.091         1         U         0.98<   | SEMIVOLATILES   | Benzo(b)fluoranthene                                     | 6.3E-01                                  | 0.083               | 0.17        | 1.53E-02                                 | NE  | 6.3E-01                                       | 0.178 1 0   | 0.191 1 0   |
| SEMIVOLATILES         Benzoic Add         6.2E+04         0.300         0.83         NE         NE         NE         6.2E+04         0.800         1         U         0.957         1         U           SEMIVOLATILES         Benzoic Add         6.2E+04         0.330         0.83         NE         NE         NE         6.2E+04         0.800         1         U         0.957         1         U           SEMIVOLATILES         Benzoic Add         0.2E+03         0.083         0.17         NE         NE         4.7E+03         0.178         1         U         0.191         1         U           SEMIVOLATILES         bis(2-Chloroethoxylmethane         2.9E-01         0.083         0.17         NE         NE         4.7E+03         0.078         1         U         0.191         1         U           SEMIVOLATILES         bis(2-Chloroethylpether         1.5E+01         0.083         0.17         NE         NE         1.7E+01         0.091         1         U         0.988         1           SEMIVOLATILES         bis(2-Chloroisopropylpether         4.8E+00         0.083         0.17         NE         NE         1.7E+01         0.178         1         U         0.285  | SEMIVOLATILES   | Benzo(k)fluoranthere                                     | 4.1E+02<br>6.3E+00                       | 0.083               | 0.17        | 1.235-02                                 | NE  | 4.1E+02<br>6.3E+00                            | 0.178 1 1   | 0.191 1 U   |
| SEMIVOLATILES         Benzyl Alcohol         4.7E+03         0.083         0.17         NE         NE         4.7E+03         0.178         1         U         0.191         1         U           SEMIVOLATILES         bis(2-chloroethoxy)methane         2.9E-01         0.083         0.17         NE         NE         2.9E-01         0.178         1         U         0.191         1         U           SEMIVOLATILES         bis(2-chloroethoxy)methane         2.9E-01         0.083         0.17         NE         NE         2.9E-01         0.078         1         U         0.191         1         U           SEMIVOLATILES         bis(2-chlorostopropy)ether         1.8E-01         0.083         0.17         NE         NE         1.7E-01         0.098         1         U         0.198         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1 <t< td=""><td>SEMIVOLATILES</td><td>Benzoic Acid</td><td>6.2E+04</td><td>0.330</td><td>0.83</td><td>NE</td><td>NE</td><td>6.2E+04</td><td>0.890 1 U</td><td>0,957 1 U</td></t<>   | SEMIVOLATILES   | Benzoic Acid   | 6.2E+04                                  | 0.330               | 0.83        | NE                                       | NE  | 6.2E+04                                       | 0.890 1 U   | 0,957 1 U   |
| SEMIVOLATILES         bis(2-Chloroethoxy)methane         2.9E-01         0.083         0.17         NE         NE         2.9E-01         0.178         1         U         0.191         1         U           SEMIVOLATILES         bis(2-Chloroethoxy)methane         1.5E-01         0.083         0.17         NE         NE         1.7E-01         0.091         1         U         0.198         1         U           SEMIVOLATILES         bis(2-Chloroethoxy)methane         1.5E-01         0.083         0.17         NE         NE         1.7E-01         0.091         1         U         0.198         1         U         0.198         1         U         0.198         1         U         0.198         1         U         0.198         1         U         0.198         1         U         0.198         1         U         0.198         1         U         0.198         1         U         0.198         1         U         0.198         1         U         0.198         1         U         0.198         1         U         0.198         1         U         0.205         1           SEMIVOLATILES         Butyl benzyl phthalate         3.1E+03         0.083         0.17   | SEMIVOLATILES   | Benzyl Alcohol   | 4.7E+03                                  | 0.083               | 0.17        | NE                                       | NE  | 4.7E+03                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES         bis(2-chloroethylsether         1.5E-01         0.083         0.17         NE         NE         1.7E-01         0.091         1         U         0.098         1         U           SEMIVOLATILES         bis(2-chloroisopropylether)         4.8E+00         0.083         0.17         NE         NE         4.8E+00         0.178         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.285         1           SEMIVOLATILES         bis(2-Ethylsehthexyl)phthalate         3.1E+03         0.083         0.17         NE         NE         3.1E+03         0.178         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1         U         0.191         1   | SEMIVOLATILES   | bis(2-Chloroethoxy)methane                               | 2.9E-01                                  | 0.083               | 0.17        | NE                                       | NE  | 2.9E-01                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES         bis(2-chloroisopropy)eliter         4.8E+00         0.083         0.17         NE         NE         4.8E+00         0.178         1         0         0.191         1           SEMIVOLATILES         bis(2-chloroisopropy)eliter         1.7E+01         0.083         0.17         NE         NE         1.7E+01         0.178         1         U         0.285         1           SEMIVOLATILES         bis(2-chloroisopropy)eliter         3.1E+03         0.083         0.17         NE         NE         1.7E+01         0.178         1         U         0.285         1           SEMIVOLATILES         bity benzy iphthalate         3.1E+03         0.083         0.17         NE         NE         3.1E+03         0.178         1         U         0.191         1         U   | SEMIVOLATILES   | bis(2-Chloroethyl)ether                                  | 1.5E-01                                  | 0.083               | 0.17        | NE                                       | NE  | 1.7E-01                                       | 0.091 1 U   | 0.098 1 U   |
| SEMIVOLATILES Bits/2-Ethylinexylphithalate 1.7E+01 0.063 0.17 NE NE 1.7E+01 0.176 1 0 0.205 1<br>SEMIVOLATILES Buts/ benzyl phthalate 3.1E+03 0.083 0.17 NE NE 3.1E+03 0.178 1 U 0.191 1 U  | SEMIVOLATILES   | bis(2-Chloroisopropyl)ether                              | 4.8E+00                                  | 0.083               | 0.17        | NE                                       | NE  | 4.8E+00                                       | 0.178 1 0   | 0.191 1 0   |
|   | SEMIVOLATILES   | ois(2-cinyihexyi)phinalate<br>Butyi benzyi obthalate     | 1.7E+01<br>3.1E+03                       | 0.083               | 0.17        | NE                                       | NE  | 3.1E+03                                       | 0.178 1 U   | 0.200 I<br>0.191 1 U  |
| SEMIVOLATILES Chrysene 6.3E+01 0.0825 0.165 1.51E-02 NE 6.3E+01 0.178 1 U 0.191 1 U   | SEMIVOLATILES   | Chrysene   | 6.3E+01                                  | 0.0825              | 0.165       | 1.51E-02                                 | NE  | 6.3E+01                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES Dibenzo(a,h)anthracene 6.3E-02 0.0825 0.105 NE NE 1.7E-01 0.091 1 U 0.098 1 U   | SEMIVOLATILES   | Dibenzo(a,h)anthracene                                   | 6.3E-02                                  | 0.0825              | 0.165       | NE                                       | NE  | 1.7E-01                                       | 0.091 1 U   | 0.098 1 U   |
| SEMIVOLATILES Dibenzofuran 6.2E+01 0.0825 0.165 NE NE 6.2E+01 0.178 1 U 0.191 1 U   | SEMIVOLATILES   | Dibenzofuran   | 6.2E+01                                  | 0.0825              | 0.165       | NE                                       | NE  | 6.2E+01                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES Diethyl phthalate 1.2E+04 0.0825 0.165 NE NE 1.2E+04 0.178 1 U 0.191 1 U  | SEMIVOLATILES   | Diethyl phthalate  | 1.2E+04                                  | 0.0825              | 0.165       | NE                                       | NE  | 1.2E+04                                       | 0.178 1 U   | 0.191 1 U   |
| SEMIVOLATILES Umemy phanalate 1.22E+04 0.0825 0.165 NE NE 1.22E+04 0.178 t U 0.191 t U 5 EMU/04 0.178 t U 0.191 t U | SEMIVOLATILES   | Lumethyl phthalate                                       | 1.2E+04                                  | 0.0825              | 0.165       | NE                                       | NE  | 1.2E+04                                       | 0.178 1 U   | 0.191 1 U<br>0.101 1 U  |
| SEMIVOLATILES di-Docty finite 3,1E+02 0,0825 0,165 NE NE NE 3,1E+02 0,178 1 U 0,191 1 U   | SEMIVOLATILES   | di-n-Octyl phthalate                                     | 3.1E+02                                  | 0.0825              | 0,165       | NE                                       | NE  | 3.1E+02                                       | 0.178 1 U   | 0.191 1 U   |

Shaw Environmental, Inc.

### 00066637

| Table 4-122   |     |
|---|-----|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Value | les |

Sump-115

|                  |                             |            |           | •            |           |               |            |                   |                   |
|------------------|-----------------------------|------------|-----------|--------------|-----------|---------------|------------|-------------------|-------------------|
| [SUMP] = SUMP115 |                             |            |           |              |           |               |            | 35SUMP115-SB01    | 35SUMP115-SB01    |
| LOCATION_CODE    |                             | TOFO       |           |              | Back      | hauma         | Applicable | 35-SMP115-SB01-01 | 35-SMP115-SB01-02 |
| SAMPLE_NO        |                             | Diek Roard |           |              | Concentra | tions in Soil | TCEQ       | 9/19/2006         | 9/19/2006         |
| SAMPLE_DATE      |                             | Scrooping  | Method    | Method       | (95% LIF  | L. ma/kg}     | Risk-Based | .55 Ft            | 8 - 8 Ft          |
|                  |                             | Value      | Detection | Quantitation | Surface   | Subsurface    | Screening  | REG               | REG               |
| SAMPLE_PURPUSE   |                             | value      | Detection |              | 0.055     | 15.255        | Value      | Result OIL FO VO  | Result DIL LO VQ  |
| Test Group       | Parameter (Units = mg/kg)   | (RBSV)*    |           |              | 2 205-02  | 1.5 2.5 Ft    | 5 5E+02    | 0.178 1 U         | 0.191 1 U         |
| SEMIVOLATILES    | Fluoranthene                | 5.5E+02    | 0.0625    | 0.105        | 2.29C-02  | NE            | 5.5E+02    | 0.178 1 U         | 0,191 1 U         |
| SEMIVOLATILES    |                             | 0.55402    | 0.0025    | 0.165        | NE        | NE            | 2.5E-01    | 0.178 1 U         | 0.191 1 U         |
| SEMIVOLATILES    | Hexachlorobutadiana         | 1.65+00    | 0.0825    | 0 165        | NE        | NE            | 1.6E+00    | 0.178 1 U         | 0.191 1 U         |
| SEMIVOLATILES    | Hexachiorocyclonentadiene   | 1 0E+00    | 0.0825    | 0.165        | NE        | NE            | 1.0E+00    | 0.178 1 U         | 0.191 1 U         |
| SEMIVOLATILES    | Hexachioroethane            | 1.6E+01    | 0.0825    | 0.165        | NE        | NE            | 1.6E+01    | 0.178 1 U         | 0.191 1 U         |
| SEMIVOLATILES    | Indeno(1.2.3-cd)ovrene      | 6.3E-01    | 0.0825    | 0.165        | 1,43E-02  | NE            | 6.3E-01    | 0.178 1 U         | 0.191 1 U         |
| SEMIVOLATILES    | isophorone                  | 5.2E+02    | 0.0825    | 0.165        | NE        | NE            | 5.2E+02    | 0.178 t U         | 0.191 1 U         |
| SEMIVOLATILES    | Naphthalene                 | 1.8E+01    | 0.0825    | 0.165        | NE        | NE            | 1.8E+01    | 0.178 1 U         | 0.191 1 0         |
| SEMIVOLATILES    | Nitrobenzene                | 6.5E+00    | 0.0825    | 0.165        | NE        | NE            | 6.5E+00    | 0.178 1 U         | 0.191 1 0         |
| SEMIVOLATILES    | n-Nitroso-di-n-propylamine  | 4.1E-02    | 0.0825    | 0.165        | NE        | NE            | 1.7E-01    | 0.091 1 0         | 0.098 1 0         |
| SEMIVOLATILES    | n-Nitrosodiphenylamine      | 5.9E+01    | 0.0825    | 0.165        | NE        | NE            | 5.95+01    | 0.178 1 U         | 0.191 1 0         |
| SEMIVOLATILES    | Pentachlorophenol           | 3.0E+00    | 0.3300    | 0.825        | NE        | NE            | 3.0E+00    | 0.090 1 0         | 0.101 1 11        |
| SEMIVOLATILES    | Phenanthrene                | 4.1E+02    | 0.0825    | 0.165        | NE        | NE            | 4.12702    | 0.178 1 11        | 0.191 1 1         |
| SEMIVOLATILES    | Phenol                      | 4.76+03    | 0.0825    | 0.100        | NE        | NE            | 4.15+02    | 0.178 1 U         | 0.191 1 U         |
| SEMIVOLATILES    | Pyrene                      | 4.1E+02    | 0,0623    | 0.105        | NE        | NE            | -          | 90.500 1          | 84.000 1          |
| SOLIDS           | Percent Solids              | 5 2E+00    | 0.0005    | 0.005        | NE        | NE            | 5.2E+00    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1,1,1,2-relacinoroemane     | 235+02     | 0.0005    | 0.005        | NE        | NE            | 2.3E+02    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1 1 2 2-Tetrachloroethana   | 5 1E-01    | 0.0005    | 0.005        | NE        | NE            | 5.1E-01    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1 1 2-Trichlomethane        | 9.7E-01    | 0.0005    | 0.005        | NE        | NË            | 9.7E-01    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1 1-Dichlomethane           | 8.9E+01    | 0.0010    | 0.005        | NE        | NE            | 8.9E+01    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1.1-Dichloroethene          | 2.7E+01    | 0.0005    | 0.005        | NE        | NE            | 2.7E+01    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1.1-Dichloropropene         | 9.9E-01    | 0.0005    | 0.005        | NÉ        | NE            | 9.9E-01    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1,2,3-Trichlorobenzene      | 4.2E+01    | 0.0005    | 0.005        | NE        | NE            | 4.2E+01    | 0.000             | 0.005 1 0         |
| VOLATILES        | 1,2,3-Trichloropropane      | 9.2E-02    | 0.0010    | 0.005        | NE        | NE            | 9.2E-02    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1,2,4-Trichlorobenzene      | 1.4E+02    | 0.0005    | 0.005        | NE        | NE            | 1.4E+02    | 0.000             | 0.005 1 0         |
| VOLATILES        | 1,2,4-Trimethylbenzene      | 9.6E+00    | 0.0005    | 0.005        | NE        | NE            | 9.66+00    | 0.000             | 0.005 1 11        |
| VOLATILES        | 1,2-Dibromo-3-chloropropane | 3.5E-01    | 0.0020    | 0.005        | NE        | NE            | 5.00-01    | 0.000             | 0.005 1 0         |
| VOLATILES        | 1,2-Dibromoethane           | 5.3E-02    | 0.0005    | 0.005        | NE        |               | 5.65+01    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1,2-Dichlorobenzene         | 5.62+01    | 0,0005    | 0,005        | NE        |               | 275-01     | 0.000             | 0.005 1 U         |
| VOLATILES        | 1,2-Dichloroethane          | 2.72-01    | 0.0005    | 0.005        | NE        | NE            | 1.8E+00    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1,2-Dichloropropane         | 3.35+03    | 0.0005    | 0.005        | NE        | NE            | 3.3E+03    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1.3.5-Trimethylbenzene      | 8.3E+00    | 0.0005    | 0.005        | NE        | NE            | 8.3E+00    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1.3 Dichlorobenzene         | 5.1E+00    | 0.0005    | 0.005        | NE        | NE            | 5.1E+00    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1.3-Dichloropronane         | 3.0E+00    | 0.0005    | 0.005        | NE        | NE            | 3.0E+00    | 0.000             | 0.005 1 U         |
| VOLATILES        | 1.4-Dichlorobenzene         | 2.7E+01    | 0.0005    | 0.005        | NE        | NE            | 2.7E+01    | 0.000             | 0.005 1 U         |
| VOLATILES        | 2.2-Dichloropropane         | 1.7E+00    | 0.0005    | 0.005        | NE        | NË            | 1.7E+00    | 0.000             | 0.005 1 U         |
| VOLATILES        | 2-Butanone                  | 2.6E+03    | 0.0025    | 0.010        | NE        | NE            | 2.6E+03    | 0.000             | 0.010 1 U         |
| VOLATILES        | 2-Chloroethyl vinyl ether   | 2.1E-01    | 0.0020    | 0.010        | NE        | NE            | 2,1E-01    | 0.000             | 0.010 1 0         |
| VOLATILES        | 2-Chlorotoluene             | 1.5E+02    | 0.0005    | 0.005        | NE        | NE            | 1.5E+02    | 0.000             | 0.005 1 0         |
| VOLATILES        | 2-Hexanone                  | 6.2E+00    | 0.0025    | 0.010        | NE        | NE            | 0.2E+00    | 0.000             | 0.010 1 0         |
| VOLATILES        | 4-Chlorotoluene             | 3.4E-01    | 0.0005    | 0.005        |           | NE            | 1 75+02    | 0.000             | 0.000 1 U         |
| VOLATILES        | Acetone                     | 1.7E+02    | 0.0050    | 0,010        | NE        | NE            | 8.85.01    | 0.000             | 0.005 1 U         |
| VOLATILES        | Benzene                     | 0.05-01    | 0.0005    | 0.000        | NE        | NE            | 1.1E+01    | 0.000             | 0.005 1 U         |
| VOLATILES        | Bromochleromethane          | 2.45+01    | 0.0005    | 0.005        | NE        | NE            | 2.4E+01    | 0.000             | 0.005 1 U         |
| VOLATILES        | Bromodiableremethane        | 1.05+01    | 0.0005    | 0.005        | NE        | NE            | 1.0E+01    | 0.000             | 0.005 1 U         |
| VOLATILES        | Bromotorm                   | 34E+01     | 0 0005    | 0.005        | NE        | NE            | 3.4E+01    | 0.000             | 0.005 1 U         |
| VOLATILES        | Bromomethate                | 3.5E-01    | 0.0010    | 0.010        | NE        | NE            | 3.5E-01    | 0.000             | 0.010 1 U         |
| VOLATILES        | Carboo disulfide            | 1.0E+02    | 0.0005    | 0.005        | NE        | NE            | 1.0E+02    | 0.000             | 0.005 1 U         |
| VOLATILES        | Carbon tetrachloride        | 3.5E-01    | 0.0005    | 0.005        | NE        | NE            | 3.5E-01    | 0.000             | 0.005 1 U         |
| VOLATILES        | Chlorobenzene               | 4.0E+01    | 0.0005    | 0.005        | NE        | NE            | 4.0E+01    | 0.000             | 0.005 1 U         |
| VOLATILES        | Chloroethane                | 1.1E+03    | 0.0010    | 0.010        | NË        | NE            | 1.1E+03    | 0.000             | 0.010 1 U         |
| VOLATILES        | Chloroform                  | 3.1E-01    | 0,0005    | 0.005        | NE        | NE            | 3.1E-01    | 0.000             | 0.005 1 0         |
| VOLATILES        | Chloromethane               | 2.3E-01    | 0.0020    | 0.010        | NE        | NE            | 2.3E-01    | 0.000             | 0.010 1 0         |
| VOLATILES        | cis-1,2-Dichloroethene      | 1.2E+02    | 0.0005    | 0.005        | NE        |               | 1.20+02    | 0.000             | 0.005 1 11        |
| VOLATILES        | cis-1,3-Dichloropropene     | 1.2E+00    | 0.0005    | 0.005        | NG        |               | 7 65+00    | 0.000             | 0.005 1 U         |
| VOLATILES        | Dipromocnioromethane        | 1.02+00    | 0.0005    | 0.005        | NE        | NE            | 1.9E+01    | 0.000             | 0.005 1 U         |
| VOLATILES        | Dishloradifluoromethane     | 2.95+02    | 0.0000    | 0.000        | NE        | NE            | 2.2E+02    | 0.000             | 0.010 1 U         |
| VOLATILES        | Ethylhenzene                | 4.3E+02    | 0.0005    | 0.005        | NE        | NE            | 4.3E+02    | 0.000             | 0.005 1 U         |
| T VILL I HANNY   |                             |            |           | ÷            |           |               | -          | -                 |                   |

Page 2 of 3

# Table 4-122 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values Sump-115

|   |                                 |  |                     | -                      |   |   |   |   |   |
|---|---------------------------------|--|---------------------|------------------------|---|---|---|---|---|
| ISOMPJE SUMPTIS<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                                 | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Back<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Seil<br>PL, mg/kg)<br>Subsurface | Applicable<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP115-SB01<br>35-SMP115-SB01-01<br>9/19/2006<br>.55 Ft<br>REG | 35SUMP115-SB01<br>35-SMP115-SB01-02<br>9/19/2006<br>8 - 8 Ft<br>REG |
| Test Group  | Parameter (Units = mg/kg)       | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value   | Result DIL LQ VQ  | Result DIL LQ VQ  |
| VOLATILES   | Hexachlorobutadiene             | 1.6E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.6E+00                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | Isopropylbenzene                | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 5.4E+02                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | m,p-Xylenes                     | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.3E+02                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | Methyl isobutyl ketone          | 1.3E+03                                  | 0.0025              | 0.010                  | NE                                      | NE  | 1.3E+03                                       | 0.000   | 0.010 1 U   |
| VOLATILES   | Methylene chloride              | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                      | NE  | 8.7E+00                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | Naphthalene                     | 1.8E+01                                  | 0.0005              | 0.010                  | NE                                      | NE  | 1.8E+01                                       | 0.000   | 0.010 1 U   |
| VOLATILES   | n-BUTYLBENZENE                  | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.7E+02                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | n-PROPYLBENZENE                 | 3.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NË  | 3.2E+02                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | p-ISOPROPYLTOLUENE              | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 4.2E+02                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | sec-BUTYLBENZENE                | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.0E+02                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | Styrene                         | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.3E+03                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | tert-BUTYLBENZENE               | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 2.6E+02                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | Tetrachloroethene               | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 6.0E+00                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | Toluene                         | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.1E+03                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | trans-1,2-Dichloroethene        | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.4E+02                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | trans-1,3-Dichloropropene       | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 1.8E+00                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | Trichloroethene                 | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                      | NE  | 3.7E+00                                       | 0.000   | 0.005 1 U   |
| VOLATILES   | Trichlorofluoromethane          | 2.6E+02                                  | 0.0010              | 0.010                  | NE                                      | NE  | 2.6E+02                                       | 0.000   | 0.010 1 U   |
| VOLATILES   | Vinyl acetate                   | 5.7E+01                                  | 0.0010              | 0.010                  | NE                                      | NE  | 5.7E+01                                       | 0.000   | 0.010 1 U   |
| VOLATILES   | Vinyl chloride                  | 3.6E-02                                  | 0.0010              | 0.010                  | NE                                      | NE  | 3.6E-02                                       | 0.000   | 0.010 1 U   |
| Contrates are about   | an anuar name in Tables Costing |  |                     |                        |   |   |   |   |   |

### Shaw Environmental, Inc.

### 00066639

 Table 4-123

 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

Sump-116

| [SUMP] = SUMP116<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                             | TCEQ<br>Risk-8ased<br>Screening<br>Value | Method<br>Detection | Methoo .<br>Quantitation | Background<br>Concentrations in Soil<br>(95% UPL, mg/kg)<br>Surface Subsurface |              | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP116-SB01<br>35-SMP116-SB01-01<br>9/19/2006<br>0.5 - 0.5 Ft<br>REG |          | 35SUMP116-SB01<br>35-SMP116-SB01-02<br>9/19/2006<br>6.5 - 6.5 Ft<br>REG |             | 35SUMP1<br>35-SMP116<br>9/19/2<br>0.5 - 0<br>REC | 6-SB02<br>SB02-01<br>006<br>5 Ft<br>S | 35SUMP<br>35-SMP11<br>9/19/<br>6.5 - (<br>RE | 35SUMP116-SB02<br>35-SMP116-SB02-02<br>9/19/2006<br>6.5 - 6.5 Ft<br>REG |    |  |
|--|-----------------------------|--|---------------------|--------------------------|--|--------------|--|---|----------|---|-------------|--|---------------------------------------|--|---|----|--|
| Test Group   | Parameter (Units = mg/kg)   | (RBSV) *                                 | Limit (MDL)         | Limit (MQL)              | 0 - 0.5 Ft   | 1.5 - 2.5 Ft | Value  | Result D  | il là và | Result D  | IL LO VO    | Result 1   | <u>DIL LQ VO</u>                      | Result                                       | <u>DIL LQ</u>   | VQ |  |
| METALS   | Aluminum                    | 1.6E+04                                  | 10.000              | 20.00                    | 1.63E+04   | 2.08E+04     | 1.6E+04                                      | 6740.000 1  | 1        | 5960.000  |             | 9770,000   | 1                                     | 8390.000                                     | 1   |    |  |
| METALS   | Antimony                    | 7.3E+00                                  | 0.050               | 0.10                     | 9.40E-01   | 1.60E+00     | 7.3E+00                                      | 0.110 1   | U        | 0.117   | i U         | 0.079  | 1 J J<br>4                            | 0.122  | 1 0   |    |  |
| METALS   | Arsenic                     | 2.0E+01                                  | 0.075               | 0.30                     | 4.81E+00   | 5.54E+00     | 2.0E+01                                      | 6.900 1   |          | 1.000   | 1           | 252,000  | 1                                     | 111 000                                      | ÷   |    |  |
| METALS   | Barlum                      | 2.6E+03                                  | 0.075               | 0.30                     | 1.52E+02   | 8.558+01     | 2.6E+03                                      | 04.000  |          | 0.214   | 1 1 1       | 0.526  |                                       | 0.277  | 1.1   | Ъ  |  |
| METALS   | Berykium                    | 4.6E+00                                  | 0.012               | 0.50                     | 1 405+00   | 4 00E-01     | 4.0E+00<br>5.2E+00                           | 0.462   |          | 0.064   |             | 0.519  | 1                                     | 0.154  | 1 Ĵ   | Ĵ  |  |
| METALS   | Cadmium                     | 5.2E+0V                                  | 0.025<br>MA         | 0.10<br>NA               | NA   | NA           | 5.26.00                                      | 3370.000 1  | 1        | 632.000   | 1           | 1920.000   | 1                                     | 719.000                                      | 1   |    |  |
| METALS   | Chromium                    | 5 95403                                  | 0 100               | 0.40                     | 2.66E+01   | 3.01E+01     | 5.9E+03                                      | 31.800 1  | I J      | 11.900  | 1           | 19.400   | 1                                     | 12.800                                       | 1   |    |  |
| METALS   | Cobalt                      | 1.5E+03                                  | 0.125               | 0.50                     | 7.23E+00   | 5,61E+00     | 1.5E+03                                      | 2.600   | 1        | 1.400   | 1           | 6.800  | 1                                     | 2.300  | 1   |    |  |
| METALS   | Соррег                      | 1.0E+03                                  | 0.150               | 0.60                     | 5.55E+00   | 9.25E+00     | 1.0E+03                                      | 4.040 1   | 1        | 8.550   | 1           | 17.500   | 1                                     | 10.100                                       | 1   |    |  |
| METALS   | Iron                        | NE                                       | NA                  | NA                       | NA   | NA           | -  | 63800.000   | 5        | 16300.000   | 1           | 24600.000  | 1                                     | 15000.000                                    | 1   |    |  |
| METALS   | Lead                        | 5.0E+02                                  | 0.500               | 5.00                     | 2.26E+01   | 1.14E+01     | 5.0E+02                                      | 6.940   |          | 5.810   | 1           | 17.000   | 1                                     | 9.720  | 1   |    |  |
| METALS   | Magnesium                   | NE                                       | NA                  | NA                       | NA   | NA           |  | 563,000   |          | 549,000   | 1           | 1400.000   | 1                                     | 55 600                                       | 1   |    |  |
| METALS   | Manganese                   | 1.7E+03                                  | 0.050               | 0.20                     | 1.25E+03   | 2.01E+02     | 1.75+03                                      | 0.026   | 1 1      | 0.051   |             | 0.037  | 1.1.1                                 | 0.075  | 1 J   | Ъ  |  |
| METALS   | Mercury                     | 1.1E-02                                  | 0.010               | 0.25                     | 0.19E+02<br>6.09E+00   | 3.00E-01     | 1 05+02                                      | 5,930   | 1 5 5    | 2.240   | 1 0 0       | 14.300   | 1                                     | 3.500  | 1   | -  |  |
| METALO   | Nickel                      | I.SETUZ                                  | 0.200               | 0.00<br>MA               | NA   | NA           | 1.00102                                      | 268.000   | 1        | 450.000   | 1           | 488.000  | 1                                     | 501.000                                      | 1   |    |  |
| METALS   | Selectum                    | 135+02                                   | 0 100               | 0.20                     | 3.48E+00   | 5.57E+00     | 1.3E+02                                      | 0.447   | 1        | 0.385   | 1           | 0.437  | 1                                     | 0.427  | 1   |    |  |
| METALS   | Silver                      | 4 7E+01                                  | 0.050               | 0.20                     | 3.10E-01   | 3.70E-01     | 4.7E+01                                      | 0.242   | i JJ     | 1.860   | 1 U         | 1.690  | 1 U                                   | 1.770  | 1 U   |    |  |
| METALS   | Sodium                      | NE                                       | NA                  | NA                       | NA   | NA           | -  | 32.600  | 1        | 366.000   | 1           | 27,200   | 1                                     | 395.000                                      | 1   |    |  |
| METALS   | Thallium                    | 2.0E+00                                  | 0.010               | 0.02                     | 4.70E-01   | NE           | 2.0E+00                                      | 0.078   | t        | 0.045   | 1           | 0.074  | 1                                     | 0.056  | 1   |    |  |
| METALS   | Vanadium                    | 4.8E+01                                  | 0.125               | 0.50                     | 3.21E+01   | 4.46E+01     | 4.8E+01                                      | 62.300  | 1        | 18.400  | 1           | 26.900   | 1                                     | 20.000                                       | 1   |    |  |
| METALS   | Zinc                        | 5.9E+03                                  | 0.625               | 2.50                     | 6.16E+01   | 2.02E+01     | 5.9E+03                                      | 33.900  | 1        | 9.890   | 1           | 00.000   | 2 11                                  | 0.400  | 1 11  |    |  |
| SEMIVOLATILES  | 1,2,4-Trichlorobenzene      | 1.4E+02                                  | 0.083               | 0.17                     | NE   | NE           | 1,4E+02                                      | 0.170   | 1 0      | 0.195   | 1 11        | 0.377  | 2 11                                  | 0 194  | i ŭ   |    |  |
| SEMIVOLATILES  | 1,2-Dichlorobenzene         | 5.65+01                                  | 0.083               | 0.17                     | NE   |              | 5.02+01                                      | 0.178   | 1 11     | 0.195   | 1 11        | 0.377  | 2 0                                   | 0,194  | 1 Ū   |    |  |
| SEMIVOLATILES  | 1,3-Dichlorobenzene         | 2 76+01                                  | 0,083               | 0.17                     | NE   | NE           | 2 7E+01                                      | 0.178   | 1 Ŭ      | 0.195   | i Ū         | 0.377  | 2 Ū                                   | 0.194  | 1 U   |    |  |
| SEMIVOLATILES  | 2 4 5-Trichlorophenol       | 1 6E+03                                  | 0.083               | 0.17                     | NE   | NE           | 1.6E+03                                      | 0.178   | i Ū      | 0.195   | 1 Ū         | 0.377  | 2 U                                   | 0.194  | 1 U   |    |  |
| SEMIVOLATILES  | 2.4.6-Trichlorophenol       | 4.5E+01                                  | 0.083               | 0.17                     | NE   | NE           | 4.5E+01                                      | 0.178   | 1 U      | 0.195   | 1 Ų         | 0,377  | 2 U                                   | 0.194  | 1 U   |    |  |
| SEMIVOLATILES  | 2,4-Dichlorophenol          | 4.7E+01                                  | 0.083               | 0.17                     | NE   | NE           | 4.7E+01                                      | 0.178   | 1 U      | 0.195   | 1 U         | 0.377  | 2 U                                   | 0.194  | 1 U   |    |  |
| SEMIVOLATILES  | 2,4-Dimethylphenol          | 3.1E+02                                  | 0.083               | 0.17                     | NE   | NE           | 3.1E+02                                      | 0.178   | 1 U      | 0.195   | 1 U         | 0.377  | 2 0                                   | 0.194  |   |    |  |
| SEMIVOLATILES  | 2,4-Dinitrophenol           | 3.1E+01                                  | 0.330               | 0.83                     | NE   | NE           | 3.1E+01                                      | 0.888   | 1 U      | 0.977   | 1 U         | 1.890  | 2 11                                  | 0.912  | 1 11  |    |  |
| SEMIVOLATILES  | 2,4-Dinitrotoluene          | 7.2E-01                                  | 0.083               | 0,17                     | NE   | NE           | 7.2E-01                                      | 0.178   | 1 0      | 0.195   | 1 0         | 0.377  | 2 11                                  | 0.194  | 1 1   |    |  |
| SEMIVOLATILES  | 2,6-Dinitrotoluene          | 7.2E-01                                  | 0.083               | 0.17                     | NE   | NE           | 1.2E+01                                      | 0,178   | 1 11     | 0.195   | 1 11        | 0.377  | 2 Ŭ                                   | 0.194  | ίũ  |    |  |
| SEMIVOLATILES  | 2-Chloronaphinalerie        | 1.12+03                                  | 0.065               | 0.17                     | NE   | NE           | 1.1E+02                                      | 0.178   | i ŭ      | 0.195   | 1 Ŭ         | 0,377  | 2 Ū                                   | 0.194  | 1 0   |    |  |
| SEMIVOLATILES  | 2-Methylosophthalene        | 5.5E+01                                  | 0.083               | 0.17                     | NE   | NE           | 5.5E+01                                      | 0.178   | i Ū      | 0.195   | i Ū         | 0.377  | 2 U                                   | 0.194  | 1 U   |    |  |
| SEMIVOLATILES  | 2-Methylphenol              | 7.7E+02                                  | 0.083               | 0.17                     | NE   | NE           | 7.7E+02                                      | 0.178   | 1 U      | 0.195   | 1 U         | 0.377  | 2 U                                   | 0.194  | 1 U   |    |  |
| SEMIVOLATILES  | 2-Nitroaniline              | 4.7E+00                                  | 0.330               | 0.83                     | NE   | NE           | 4.7E+00                                      | 0.888   | 1 U      | 0,977   | 1 U         | 1.890  | 2 U                                   | 0.972  | 1 0   |    |  |
| SEMIVOLATILES  | 2-Nitrophenol               | 3.1E+01                                  | 0.083               | 0.17                     | NE   | NE           | 3.1E+01                                      | 0.178   | 1 U      | 0.195   | 1 U         | 0.377  | 2 0                                   | 0.194  | 1 0   |    |  |
| SEMIVOLATILES  | 3,3'-Dichlorobenzidine      | 1.1E+00                                  | 0.165               | 0.33                     | NE   | NE           | 1.1E+00                                      | 0.355   | 1 U      | 0.391   | 1 U         | 0.754  | 2 0                                   | 0.389  | 1 1   |    |  |
| SEMIVOLATILES  | 3-Nitroaniline              | 4.7E+00                                  | 0.330               | 0.83                     | NE   | NE           | 4.76+00                                      | 0.868   | 1 0      | 0.977   | 1 0         | 1,050  | 2 1                                   | 0.972  | iŭ  |    |  |
| SEMIVOLATILES  | 4.6-Dinitro-2-methylphenol  | 3.1E+01                                  | 0.330               | 0.83                     | NE   | NE           | 3.1E+01<br>5.7E.01                           | 0,000   | 1 11     | 0.977   | i ŭ         | 0 193  | 2 Ŭ                                   | 0.101  | i ŭ   |    |  |
| SEMIVOLATILES  | 4-Bromophenyl prienyl ether | 3.1E+UZ                                  | 0.003               | 0.17                     | NE   |              | 7.7E+01                                      | 0 178   | i ŭ      | 0.195   | 1 Ü         | 0.377  | 2 Ū                                   | 0.194  | 1 0   |    |  |
| SEMIVOLATILES  | 4-Chlorospiline             | 6 2E+01                                  | 0.000               | 0.17                     | NE   | NE           | 6.2E+01                                      | 0,178   | i Ū      | 0.195   | 1 0         | 0.377  | 2 U                                   | 0.194  | 1 U   |    |  |
| SEMIVOLATILES  | 4-Chlorophenvi phenvi ether | 2.8E-02                                  | 0.083               | 0.17                     | NE   | NE           | 1.7E-01                                      | 0.091   | 1 Ú      | 0.102   | 1 U         | 0,193  | 2 U                                   | 0.101  | 1 U   |    |  |
| SEMIVOLATILES  | 4-Methylphenol              | 7.7E+01                                  | 0.083               | 0.17                     | NE   | NE           | 7.7E+01                                      | 0.178   | 1 U      | 0.195   | 1 U         | 0.377  | 2 U                                   | 0.194  | 1 U   |    |  |
| SEMIVOLATILES  | 4-Nitroaniline              | 1.3E+01                                  | 0.330               | 0.83                     | NE   | NE           | 1.3E+01                                      | 0.888   | 1 U      | 0.977   | 1 U         | 1.890  | 2 0                                   | 0.972  | 1 0   |    |  |
| SEMIVOLATILES  | 4-Nitrophenol               | 3.1E+01                                  | 0.330               | 0.83                     | NE   | NE           | 3.1E+01                                      | 0.888   | 1 U      | 0.977   | 1 0         | 1.890  | 2 0                                   | 0.972  | 1 1   |    |  |
| SEMIVOLATILES  | Acenaphthene                | 8.2E+02                                  | 0.083               | 0.17                     | NE   | NE           | 8.2E+02                                      | 0.178   | 1 0      | 0.195   | 1 0         | 0.377  | 2 11                                  | 0.194  | 1 11  |    |  |
| SEMIVOLATILES  | Acenaphthylese              | 8.2E+02                                  | 0.083               | 0.17                     | NE   | NE           | 8.2E+02<br>4.1E+03                           | 0.170   | 1 1      | 0.185   | 1 11        | 0.377  | 2 1                                   | 0.194  | iŭ  |    |  |
| SEMIVOLATILES  | Aninracene                  | 4.15+03                                  | 0.005               | 0.17                     | 1535-02  | NE           | 6.3E-01                                      | 0.178   | 1 1      | 0.195   | เป็         | 0.377  | 2 Ŭ                                   | 0.194  | 1 Ŭ   |    |  |
| SEMIVOLATILES  | Benzo(a)nyrana              | 6 3E-02                                  | 0.000               | 0.17                     | 1.54E-02   | NE           | 1.7E-01                                      | 0.091   | i ŭ      | 0.102   | i Ŭ         | 0,193  | 2 U                                   | 0.101  | 1 U   |    |  |
| SEMIVOLATILES  | Benzo(b)Suoranthene         | 6.3E-01                                  | 0.083               | 0.17                     | 1.53E-02   | NE           | 6.3E-01                                      | 0.178   | 1 Ū      | 0.195   | 1 U         | 0.377  | 2 U                                   | 0.194  | 1 U   |    |  |
| SEMIVOLATILES  | Benzo(ghi)perviene          | 4.1E+02                                  | 0.083               | 0.17                     | 1.23E-02   | NE           | 4.1E+02                                      | 0.178   | 1 U      | 0.195   | 1 U         | 0.377  | 2 U                                   | 0.194  | 1 U   |    |  |
| SEMIVOLATILES  | Benzo(k)fluoranthene        | 6.3E+00                                  | 0.083               | 0.17                     | 1.30E-02   | NE           | 6.3E+00                                      | 0.178   | 1 U      | 0.195   | 1 U         | 0.377  | 2 U                                   | 0.194  | 1 0   |    |  |
| SEMIVOLATILES  | Benzoic Acld                | 6.2E+04                                  | 0.330               | 0.83                     | NE   | NE           | 6.2E+04                                      | 0.888   | 1 0      | 0.977   | 1 U         | 1.890  | 2 U                                   | 0.972  | 1 0   |    |  |
| SEMIVOLATILES  | Benzyl Alcohol              | 4.7E+03                                  | 0.063               | 0.17                     | NE   | NE           | 4.7E+03                                      | 0.178   | 1 0      | 0.195   | 4 U<br>1 JI | 0.377  | 2 11                                  | 0.194  | 1 1   |    |  |
| SEMIVOLATILES  | bis(2-Chioroethoxy)methane  | 2.96-01                                  | 0.083               | 0.17                     |  |              | 175-01                                       | 0.170   | 1 1      | 0 102   | i ŭ         | 0 193  | 2 Ŭ                                   | 0.101  | iŭ  |    |  |
| SEIVITVOLATILES  | Dista-Chiloroethyrjeater    | 1.52-01                                  | 0.003               | 0.17                     |  |              | 1.16-01                                      |   |          |   |             | 20120-002020209000-00209000-0020                 |                                       |  | -   |    |  |

Data Evaluation Report

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

### 00066640

Table 4-123 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|  | Sump-116   |   |  |   |   |                            |   |  |  |  |  |  |  |  |
|--|--|---|--|---|---|----------------------------|---|--|--|--|--|--|--|--|
| [SUMP] = SUMP116<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE PURPOSE |  | TCEQ<br>Risk-Based<br>Screening<br>Value            | Method<br>Detection                                      | Method<br>Quantitation                    | Background<br>Concentrations in Soil<br>Method (95% UPL, mg/kg)<br>Oursettotion Subject for Subject |                            | Applicble<br>TCEQ<br>Risk-Based<br>Screening        | 35SUMP116-SB01<br>35-SMP116-SB01-01<br>9/19/2006<br>0.5 - 0.5 Ft<br>REG    | 35SUMP116-SB01<br>35-SMP116-SB01-02<br>9/19/2006<br>6.5 - 6.5 Ft<br>REG    | 35SUMP116-SB02<br>35-SMP116-SB02-01<br>9/19/2006<br>0.5 - 0.5 Ft<br>REG    | 35SUMP116-SB02-<br>35-SMP116-SB02-02<br>9/19/2006<br>6.5 - 6.5 Ft<br>REG   |  |  |  |
| Test Group   | Parameter (Units = mg/kg)  | (RB\$V)*  | Limit (MDL)  | Limit (MQL)                               | 0 - 0.5 Ft  | 1.5 - 2.5 Ft               | Value   | Result DIL LQ VQ   |  |  |  |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES        | bis(2-Chloroisopropyl)ether<br>bis(2-Ethylhexyl)phthalate<br>Butyl benzyl phthalate<br>Chrysene<br>Dibenzo(a blanthracene        | 4.8E+00<br>1.7E+01<br>3.1E+03<br>6.3E+01<br>6.3E-02 | 0.083<br>0.083<br>0.083<br>0.0825<br>0.0825              | 0.17<br>0.17<br>0.17<br>0.165<br>0.165    | NE<br>NE<br>1.51E-02<br>NE  | NE<br>NE<br>NE<br>NE       | 4.8E+00<br>1.7E+01<br>3.1E+03<br>6.3E+01<br>1.7E-01 | 0.178 1 U<br>0.178 1 U<br>0.178 1 U<br>0.178 1 U<br>0.178 1 U<br>0.091 1 U | 0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.102 1 U | 0.377 2 U<br>0.377 2 U<br>0.377 2 U<br>0.377 2 U<br>0.377 2 U<br>0.377 2 U | 0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.101 1 U |  |  |  |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES                         | Dibenzofuran<br>Diethyl phthalate<br>Dimethyl phthalate<br>di-n-Butyl phthalate  | 6.2E+01<br>1.2E+04<br>1.2E+04<br>1.6E+03            | 0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825           | 0.165<br>0.165<br>0.165<br>0.165<br>0.165 | NE<br>NE<br>NE  | NE<br>NE<br>NE<br>NE       | 6.2E+01<br>1.2E+04<br>1.2E+04<br>1.6E+03<br>3.1E+02 | 0.178 1 U<br>0.178 1 U<br>0.178 1 U<br>0.178 1 U<br>0.178 1 U              | 0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U | 0.377 2 U<br>0.377 2 U<br>0.377 2 U<br>0.377 2 U<br>0.377 2 U<br>0.377 2 U | 0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U |  |  |  |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES        | Fluoranthene<br>Fluoranthene<br>Hexachlorobenzene<br>Hexachlorobenzene   | 5.5E+02<br>5.5E+02<br>5.5E+02<br>2.5E-01<br>1.6E+00 | 0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825           | 0.165<br>0.165<br>0.165<br>0.165<br>0.165 | 2.29E-02<br>NE<br>NE<br>NE<br>NE  | NE<br>NE<br>NE<br>NE       | 5.5E+02<br>5.5E+02<br>2.5E-01<br>1.6E+00            | 0.178 1 U<br>0.178 1 U<br>0.178 1 U<br>0.178 1 U<br>0.178 1 U<br>0.178 1 U | 0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U | 0.377 2 U<br>0.377 2 U<br>0.377 2 U<br>0.377 2 U<br>0.377 2 U<br>0.377 2 U | 0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U |  |  |  |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES        | Hexachlorocyclopentadlene<br>Hexachloroethane<br>Indeno(1,2,3-cd)pyrene<br>Isophorone<br>Naphthalene                             | 1.02+00<br>1.6E+01<br>6.3E-01<br>5.2E+02<br>1.8E+01 | 0.0825<br>0.0825<br>0.0825<br>0.0825<br>0.0825           | 0.165<br>0.165<br>0.165<br>0.165<br>0.165 | NE<br>1,43E-02<br>NE<br>NE  | NE<br>NE<br>NE<br>NE       | 1.6E+01<br>6.3E-01<br>5.2E+02<br>1.8E+01            | 0.178 1 U<br>0.178 1 U<br>0.178 1 U<br>0.178 1 U<br>0.178 1 U              | 0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U<br>0.195 1 U              | 0.377 2 U<br>0.377 2 U<br>0.377 2 U<br>0.377 2 U<br>0.377 2 U              | 0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U<br>0.194 1 U |  |  |  |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES<br>SEMIVOLATILES        | Nitrobenzene<br>n-Nitroso-di-n-propylamine<br>n-Nitrosodiphenylamine<br>Pentachlorophenol<br>Phenanthrene                        | 6.5E+00<br>4.1E-02<br>5.9E+01<br>3.0E+00<br>4.1E+02 | 0.0825<br>0.0825<br>0.0825<br>0.3300<br>0.0825           | 0.165<br>0.165<br>0.165<br>0.825<br>0.165 | NE<br>NE<br>NE<br>NE<br>NE  | NE<br>NE<br>NE<br>NE<br>NE | 6.5E+00<br>1.7E-01<br>5.9E+01<br>3.0E+00<br>4.1E+02 | 0.178 1 U<br>0.091 1 U<br>0.178 1 U<br>0.888 1 U<br>0.178 1 U              | 0.195 1 U<br>0.102 1 U<br>0.195 1 U<br>0.977 1 U<br>0.195 1 U              | 0.377 2 U<br>0.377 2 U<br>1.890 2 U<br>0.377 2 U                           | 0.101 1 U<br>0.194 1 U<br>0.972 1 U<br>0.194 1 U<br>0.194 1 U              |  |  |  |
| SEMIVOLATILES<br>SEMIVOLATILES<br>SOLIDS<br>VOLATILES<br>VOLATILES                       | Phenol<br>Pyrene<br>Percent Solids<br>1,1,1,2-Tetrachloroethane<br>1,1,1-Trichloroethane   | 4.7E+03<br>4.1E+02<br>NE<br>5.2E+00<br>2.3E+02      | 0.0825<br>0.0825<br>NE<br>0.0005<br>0.0005               | 0.165<br>0.165<br>NE<br>0.005<br>0.005    | NE<br>1.94E-02<br>NE<br>NE<br>NE  | ne<br>Ne<br>Ne<br>Ne       | 4.7±+03<br>4.1E+02<br><br>5.2E+00<br>2.3E+02        | 0.178 1 0<br>0.178 1 U<br>90.500 1<br>0.000<br>0.000                       | 0.195 1 U<br>0.195 1 U<br>80.900 1<br>0.007 1 U<br>0.594 50 J J            | 0.377 2 U<br>85.700 1<br>0.000<br>0.000                                    | 0.194 1 U<br>81.800 1<br>0.005 1 U<br>0.273 1 E J                          |  |  |  |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                            | 1,1,2,2-Tetrachloroethane<br>1,1,2-Trichloroethane<br>1,1-Dichloroethane<br>1,1-Dichloroethane<br>1,1-Dichloroethane             | 5.1E-01<br>9.7E-01<br>8.9E+01<br>2.7E+01<br>9.9E-01 | 0.0005<br>0.0005<br>0.0010<br>0.0005<br>0.0005           | 0.005<br>0.005<br>0.005<br>0.005<br>0.005 | NE<br>NE<br>NE<br>NE  | NE<br>NE<br>NE<br>NE       | 5.1E-01<br>9.7E-01<br>8.9E+01<br>2.7E+01<br>9.9E-01 | 0.000<br>0.000<br>0.000<br>0.000<br>0.000<br>0.000                         | 0.007 1 U<br>0.001 1 J<br>0.038 1<br>0.099 1<br>0.007 1 U                  | 0.000<br>0.000<br>0.000<br>0.000<br>0.000                                  | 0.005 1 0<br>0.013 1<br>0.056 1<br>0.373 1 E J<br>0.005 1 U                |  |  |  |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES   | 1,2,3-Trichlorobenzene<br>1,2,3-Trichlorobenzene<br>1,2,4-Trichlorobenzene<br>1,2,4-Tricmelhylbenzene<br>1,2,0-Tricmelhylbenzene | 4.2E+01<br>9.2E-02<br>1.4E+02<br>9.6E+00<br>3.5E-01 | 0.0005<br>0.0010<br>0.0005<br>0.0005<br>0.0005           | 0.005<br>0.005<br>0.005<br>0.005<br>0.005 | NE<br>NE<br>NE<br>NE  | NE<br>NE<br>NE<br>NE       | 4.2E+01<br>9,2E-02<br>1.4E+02<br>9.6E+00<br>3.5E-01 | 0.000<br>0.000<br>0.000<br>0.000<br>0.000                                  | 0.007 1 U<br>0.007 1 U<br>0.007 1 U<br>0.011 1<br>0.007 1 U                | 0.000<br>0.000<br>0.000<br>0.000<br>0.000<br>0.000                         | 0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.015 1 U<br>0.011 1<br>0.005 1 U   |  |  |  |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES   | 1,2-Dichlorobenzene<br>1,2-Dichlorobenzene<br>1,2-Dichlorobenzene<br>1,2-Dichloropenane  | 5.3E-01<br>5.3E-02<br>5.6E+01<br>2.7E-01<br>1.8E+00 | 0.0005<br>0.0005<br>0.0005<br>0.0005                     | 0.005<br>0.005<br>0.005<br>0.005          |   |                            | 5.3E-02<br>5.6E+01<br>2.7E-01<br>1.8E+00<br>3.7E+00 | 0.000<br>0.000<br>0.000<br>0.000<br>0.000                                  | 0.007 1 U<br>0.007 1 U<br>0.007 1 U<br>0.007 1 U<br>0.007 1 U<br>0.007 1 J | 0.000<br>0.000<br>0.000<br>0.000<br>0.000                                  | 0.005 1 U<br>0.005 1 U<br>0.001 1 J J<br>0.005 1 U<br>0.016 1              |  |  |  |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                            | 1,3-Dimetrylbenzene<br>1,3-5-Trimethylbenzene<br>1,3-Dichlorabenzene<br>1,3-Dichlorapropane<br>1,4-Dichlorabenzene               | 3.3E+03<br>8.3E+00<br>5.1E+00<br>3.0E+00<br>2.7E+01 | 0.0005<br>0.0005<br>0.0005<br>0.0005                     | 0.005<br>0.005<br>0.005<br>0.005          | NE<br>NE<br>NE<br>NE  |                            | 8.3E+00<br>5.1E+00<br>3.0E+00<br>2.7E+01            | 0.000<br>0.000<br>0.000<br>0.000<br>0.000                                  | 0.004 1 J J<br>0.007 1 U<br>0.007 1 U<br>0.007 1 U<br>0.007 1 U            | 0.000<br>0.000<br>0.000<br>0.000   | 0.004 1 J<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U<br>0.005 1 U              |  |  |  |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                            | 2,2-Dichloropropane<br>2-Butanone<br>2-Chloroethyl vinyl ether<br>2-Chlorotoluene<br>2-Hexanone                                  | 1.7E+00<br>2.6E+03<br>2.1E-01<br>1.5E+02<br>6.2E+00 | 0.0005<br>0.0025<br>0.0020<br>0.0005<br>0.0025           | 0.005<br>0.010<br>0.010<br>0.005<br>0.010 | NE<br>NE<br>NE<br>NE  | NE<br>NE<br>NE<br>NE       | 1.7E+00<br>2.6E+03<br>2.1E-01<br>1.5E+02<br>6.2E+00 | 0.000<br>0.000<br>0.000<br>0.000<br>0.000                                  | 0.007 1 U<br>0.015 1 U<br>0.015 1 U<br>0.007 1 U<br>0.015 1 U              | 0.000<br>0.000<br>0.000<br>0.000<br>0.000                                  | 0.009 1 J J<br>0.010 1 U<br>0.005 1 U<br>0.010 1 U                         |  |  |  |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES                            | 4-Chlorotoluene<br>Acetone<br>Benzene<br>Bromobenzene<br>Bromochloromethane  | 3.4E-01<br>1.7E+02<br>8.8E-01<br>1.1E+01<br>2.4E+01 | 0.0005<br>0.0050<br>0.0005<br>0.0005<br>0.0005<br>0.0005 | 0.005<br>0.010<br>0.005<br>0.005<br>0.005 | NE<br>NE<br>NE<br>NE<br>NE  | NE<br>NE<br>NE<br>NE       | 3.4E-01<br>1.7E+02<br>8.8E-01<br>1.1E+01<br>2.4E+01 | 0,000<br>0,000<br>0,000<br>0,000<br>0,000                                  | 0.007 1 U<br>0.049 1<br>0.001 1 J J<br>0.007 1 U<br>0.007 1 U              | 0.000<br>0.000<br>0.000<br>0.000<br>0.000                                  | 0.005 1 0<br>0.048 1<br>0.002 1 J J<br>0.005 1 U<br>0.005 1 U              |  |  |  |
| VOLATILES<br>VOLATILES<br>VOLATILES<br>VOLATILES   | Bromodichloromethane<br>Bromoform<br>Bromomethane<br>Carbon disulfide  | 1.0E+01<br>3.4E+01<br>3.5E-01<br>1.0E+02            | 0.0005<br>0.0005<br>0.0010<br>0.0005                     | 0.005<br>0.005<br>0.010<br>0.005          | NE<br>NE<br>NE  | NE<br>NE<br>NE             | 1.0E+01<br>3.4E+01<br>3.5E-01<br>1.0E+02            | 0.000<br>0.000<br>0.000<br>0.000   | 0.007 1 U<br>0.007 1 U<br>0.015 1 U<br>0.007 1 U                           | 0.000<br>0.000<br>0.000<br>0.000<br>0.000                                  | 0.005 1 U<br>0.005 1 U<br>0.010 1 U<br>0.005 1 U                           |  |  |  |

Shaw Environmental, Inc.

### 00066641

Table 4-123 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values

|  |   |  |                            |                         |   | Sump-1  | 16   |   |   |  |  |
|--|---|--|----------------------------|-------------------------|---|---|--|---|---|--|--|
| [SUMP] = SUMP116<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |   | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection        | Method -                | Back<br>Concentra<br>(95% Uf<br>Surface | ground<br>ttions in Soil<br><u>PL, mg/kg)</u><br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP116-SB01<br>35-SMP116-SB01-01<br>9/19/2006<br>0.5 - 0.5 Ft<br>REG | 35SUMP116-SB01<br>35-SMP116-SB01-02<br>9/19/2006<br>6.5 - 6.5 Ft<br>REG | 355SUMP116-SB02<br>35-SMP116-SB02-01<br>9/19/2008<br>0.5 - 0.5 Ft<br>REG | 355SUMP116-SB02<br>35-SMP116-SB02-02<br>9/19/2006<br>6.5 - 6.5 Ft<br>REG |
| Test Group   | Parameter (Units = mg/kg)                             | (RB\$V) *                                | Limit (MDL)                | Limit (MQL)             | 0 - 0.5 Ft                              | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DIL LQ VQ  | Result DIL LQ VQ   | Result DiL LQ VQ   |
| VOLATILES<br>VOLATILES<br>VOLATILES  | Carbon tetrachloride<br>Chlorobenzene<br>Chloroethane | 3.5E-01<br>4.0E+01<br>1.1E+03            | 0.0005<br>0.0005<br>0.0010 | 0.005<br>0.005<br>0.010 | NE<br>NE<br>NE                          | NE<br>NE<br>NE  | 3.5E-01<br>4.0E+01<br>1.1E+03                | 0.000<br>0.000<br>0.000   | 0.007 1 U<br>0.007 1 U<br>0.015 1 U                                     | 0.000<br>0.000<br>0.000  | 0.005 1 U<br>0.005 1 U<br>0.010 1 U                                      |
| VOLATILES  | Chloroform  | 3.1E-01                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 3.1E-01                                      | 0.000   | 0.002 1 J J   | 0.000  | 0.001 1 J J  |
| VOLATILES  | Chloromethane   | 2.3E-01                                  | 0.0020                     | 0.010                   | NE                                      | NE  | 2.3E-01                                      | 0.000   | 0.015 1 U   | 0.000  | 0.010 1 U  |
| VOLATILES  | cis-1,2-Dichloroethene                                | 1.2E+02                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 1.2E+02                                      | 0.000   | 3.610 50  | 0.000  | 11.800 1 E J   |
| VOLATILES  | cis-1.3-Dichloropropene                               | 1.2E+00                                  | 0,0005                     | 0.005                   | NE                                      | NE  | 1.2E+00                                      | 0.000   | 0.007 1 U   | 0.000  | 0.005 1 U  |
| VOLATILES  | Dibromochloromethane                                  | 7.6E+00                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 7.6E+00                                      | 0.000   | 0.007 1 U   | 0.000  | 0.005 1 U  |
| VOLATILES  | Dibromomethane  | 1.9E+01                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 1.9E+01                                      | 0.000   | 0.007 1 U   | 0.000  | 0.005 1 U  |
| VOLATILES  | Dichlorodifluoromethane                               | 2.2E+02                                  | 0.0010                     | 0.010                   | NE                                      | NE  | 2.2E+02                                      | 0.000   | 0.015 1 U   | 0.000  | 0.010 1 U  |
| VOLATILES  | Ethylbenzene  | 4.3E+02                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 4.3E+02                                      | 0.000   | 0.074 1   | 0.000  | 2.440 1 E J  |
| VOLATILES  | Hexachlorobutadiene                                   | 1.6E+00                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 1.6E+00                                      | 0.000   | 0.007 1 U   | 0.000  | 0.005 1 U  |
| VOLATILES  | Isopropylbenzene                                      | 5.4E+02                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 5.4E+02                                      | 0.000   | 0.007 1 U   | 0.000  | 0.003 1 J J  |
| VOLATILES  | Methyl isobutyl ketone                                | 1.3E+03                                  | 0.0025                     | 0.010                   | NE                                      | NE  | 1.3E+03                                      | 0.000   | 0.015 1 U   | 0.000  | 0.010 1 U  |
| VOLATILES  | Methylene chloride                                    | 8.7E+00                                  | 0.0010                     | 0.005                   | NE                                      | NE  | 8.7E+00                                      | 0.000   | 0.648 50 J J  | 0.000  | 0.079 1  |
| VOLATILES  | Naphthalene   | 1.8E+01                                  | 0.0005                     | 0.010                   | NE                                      | NE  | 1.8E+01                                      | 0.000   | 0.004 1 J   | 0.000  | 0.005 1í J J   |
| VOLATILES  | n-BUTYLBENZENE  | 2.7E+02                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 2.7E+02                                      | 0.000   | 0.000   | 0.000  | 0.001 1 J J  |
| VOLATILES  | n-PROPYLBENZENE                                       | 3.2E+02                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 3.2E+02                                      | 0.000   | 0.001 1 J J   | 0.000  | 0.002 1 J J  |
| VOLATILES  | p-ISOPROPYLTOLUENE                                    | 4.2E+02                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 4.2E+02                                      | 0.000   | 0.003 1 J   | 0.000  | 0.002 1 J J  |
| VOLATILES  | sec-BUTYLBENZENE                                      | 3.0E+02                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 3.0E+02                                      | 0.000   | 0.001 1 J J   | 0.000  | 0.001 1 J J  |
| VOLATILES  | Styrene   | 1.3E+03                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 1.3E+03                                      | 0.000   | 0.046 1   | 0.000  | 0.633 1 E J  |
| VOLATILES  | tert-BUTYLBENZENE                                     | 2.6E+02                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 2.6E+02                                      | 0.000   | 0.007 1 U   | 0.000  | 0.005 1 U  |
| VOLATILES  | Tetrachloroethene                                     | 6.0E+00                                  | 0.0005                     | 0.005                   | NÉ                                      | NE  | 6.0E+00                                      | 0.000   | 0.006 1 J J   | 0.000  | 0.013 1  |
| VOLATILES  | Toluene   | 1.1E+03                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 1.1E+03                                      | 0.000   | 0.036 1   | 0.000  | 0.157 1  |
| VOLATILES  | trans-1,2-Dichloroethene                              | 1.4E+02                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 1.4E+02                                      | 0.000   | 0.004 1 J J   | 0.000  | 0.009 1  |
| VOLATILES  | trans-1,3-Dichloropropene                             | 1.8E+00                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 1.8E+00                                      | 0.000   | 0.007 1 U   | 0.000  | <u>0.005</u> 1 U   |
| VOLATILES  | Trichloroethene                                       | 3.7E+00                                  | 0.0005                     | 0.005                   | NE                                      | NE  | 3.7E+00                                      | 0.000   | 11.000 50   | 0.000  | 9.930 1 E J  |
| VOLATILES  | Trichlorofluoromethane                                | 2.6E+02                                  | 0.0010                     | 0.010                   | NE                                      | NE  | 2.6E+02                                      | 0.000   | 0.015 1 U   | 0.000  | 0.010 1 U  |
| VOLATILES  | Vinyl acetate   | 5.7E+01                                  | 0.0010                     | 0.010                   | NE                                      | NE  | 5.7E+01                                      | 0.000   | 0.015 1 U   | 0.000 _  | <u>0.010</u> 1 U   |
| VOLATILES  | Vinyl chloride  | 3.6E-02                                  | 0,0010                     | 0.010                   | NE                                      | NE  | 3.6E-02                                      | 0.000   | 0.094 1   | 0.000  | 4.750 1 E J  |

Shaw Environmental, Inc.

### 00066642

| Table 4-124  |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump-118   |

| [SUMP] = SUMP118 |                             |                    |             |              |            |               |                    | 35SUMP118-SB01    | 35SUMP118-SB01    |
|------------------|-----------------------------|--------------------|-------------|--------------|------------|---------------|--------------------|-------------------|-------------------|
| LOCATION_CODE    |                             | TOPO               |             |              | Poole      | around        | Applichie          | 35-SMP118-SB01-01 | 35-SMP118-SB01-02 |
| SAMPLE_NO        |                             | ICEU<br>Dick Based |             |              | Concentra  | tions in Soit | TCEQ               | 9/19/2006         | 9/19/2006         |
| SAMPLE_DATE      |                             | Screening          | Method      | Method       | (95% UF    | PL. ma/ka)    | Risk-Based         | .55 Ft            | 4 - 4 Ft          |
|                  |                             | Value              | Detection   | Quantitation | Surface    | Subsurface    | Screening          | REG               | REG               |
| Test Casua       | Remmeter (Lipite = ma(ka)   | (DBS)/)            | Limit (MDL) | Limit (MOL)  | 0 - 0 5 Ft | 1.5 - 2.5 Ft  | Value              | Result DIL LQ VQ  | Result DIL LQ VQ  |
| EXPLOSIVES       | 1 3 5-Trinitrobenzene       | 4.7E+02            | 0.1         | 0.25         | NE         | NE            | 4.7E+02            | 0.243 1 U         | 0.240 1 U         |
| EXPLOSIVES       | 1.3-Dinitrobenzene          | 1.6E+00            | 0.1         | 0.25         | NE         | NE            | 1.6E+00            | 0.243 1 U         | 0.240 1 U         |
| EXPLOSIVES       | 2.4.6-Trinitrotoluene       | 7.7E+00            | 0.1         | 0.25         | NE         | NË            | 7.7E+00            | 0.243 1 U         | 0.240 1 U         |
| EXPLOSIVES       | 2,4-Dinitrotoluene          | 7.2E-01            | 0.1         | 0.25         | NE         | NE            | 7.2E-01            | 0.243 1 U         | 0.240 1 U         |
| EXPLOSIVES       | 2,6-Dinitrotoluene          | 7.2E-01            | 0.1         | 0.26         | NE         | NE            | 7.2E-01            | 0.252 1 U         | 0.250 1 U         |
| EXPLOSIVES       | 2-Amino-4,6-dinitrotoluene  | 2.6E+00            | 0.1         | 0.26         | NE         | NE            | 2.6E+00            | 0.252 1 0         | 0.250 1 0         |
| EXPLOSIVES       | 4-Amino-2,6-dinitrotoluene  | 2.6E+00            | 0.1         | 0.26         | NE         | NE            | 2.00400            | 0.252 1 0         | 2 120 1 1         |
| EXPLOSIVES       | HMX                         | 2.2E+02            | 0.1         | 2,20         | NE         |               | 2.2E+02<br>4.4E+01 | 0.243 1 1         | 0.240 1 U         |
| EXPLOSIVES       | m-Nitrotoluene              | 4.45+01            | 0.1         | 0.25         | NE         | NE            | 6.5E+00            | 0.252 1 U         | 0.250 1 U         |
| EXPLOSIVES       | Nitrobenzene                | 4.75+00            | 0.1         | 0.25         | NE         | NE            | 4.7E+01            | 0.243 1 U         | 0.240 1 U         |
| EXPLOSIVES       | o-Nitrotoluene              | 4.7 2 +01          | 0.1         | 0.25         | NE         | NE            | 4.4E+01            | 0.243 1 U         | 0.240 1 U         |
| EXPLOSIVES       | RDX                         | 3.6E+00            | 0.1         | 1.00         | NË         | NE            | 3.6E+00            | 0.971 1 U         | 0.962 1 U         |
| EXPLOSIVES       | Tetryl                      | 1.6E+02            | 0.2         | 0.65         | NE         | NE            | 1.6E+02            | 0.631 1 U         | 0.625 1 U         |
| RANGE ORGANICS   | Carbon Range C12-C28        | 4.0E+02            | 25          | 50           | NE         | NE            | 4.0E+02            | 57.7 1 U          | 66.3 1 U          |
| RANGE_ORGANICS   | CARBON RANGE C28-C35        | 4.0E+02            | 25          | 50           | NE         | NE            | 4.0E+02            | 57.7 1 U          | 66.3 1 U          |
| RANGE_ORGANICS   | Carbon Range C6-C12         | 1.7E+02            | 25          | 50           | NE         | NE            | 1.7E+02            | 57.7 1 U          | 00.3 1 U          |
| SOLIDS           | Percent Solids              | NE                 | NE          | NE           | NE         | NE            | E 05.00            | 85.4 1            | 0.0063 1 11       |
| VOLATILES        | 1,1,1,2-Tetrachloroethane   | 5.2E+00            | 0.0005      | 0.005        | NE         | NE            | 0.20+00            |                   | 0.0003 1 U        |
| VOLATILES        | 1,1,1-Trichloroethane       | 2.3E+02            | 0.0005      | 0.005        |            | NE            | 5.1E-01            |                   | 0.0063 1 U        |
| VOLATILES        | 1,1,2,2-Jetrachioroethane   | 5.1E-01            | 0.0005      | 0.005        | NE         | NE            | 9.7E-01            |                   | 0.0063 1 U        |
| VOLATILES        | 1,1,2-Inchloroethane        | 8.05+01            | 0.0000      | 0.005        | NE         | NE            | 8.9E+01            |                   | 0.0063 1 U        |
| VOLATILES        | 1 1-Dichlomethane           | 275+01             | 0.0005      | 0.005        | NE         | NE            | 2.7E+01            | 1                 | 0.0063 1 U        |
| VOLATILES        | 1 1-Dichloropropene         | 9.9E-01            | 0.0005      | 0.005        | NE         | NE            | 9.9E-01            |                   | 0.0063 1 U        |
| VOLATILES        | 1 2 3-Trichlorobenzene      | 4.2E+01            | 0.0005      | 0.005        | NE         | NE            | 4.2E+01            |                   | 0.0063 1 U        |
| VOLATILES        | 1.2.3-Trichtoropropane      | 9.2E-02            | 0.0010      | 0.005        | NE         | NE            | 9.2E-02            |                   | 0.0063 1 U        |
| VOLATILES        | 1.2.4-Trichlorobenzene      | 1.4E+02            | 0.0005      | 0.005        | NE         | NE            | 1.4E+02            |                   | 0.0063 1 U        |
| VOLATILES        | 1,2,4-Trimethylbenzene      | 9.6E+00            | 0.0005      | 0.005        | NE         | NE            | 9.6E+00            |                   | 0.0063 1 0        |
| VOLATILES        | 1,2-Dibromo-3-chloropropane | 3.5E-01            | 0.0020      | 0.005        | NE         | NE            | 3.5E-01            |                   | 0.0003 1 0        |
| VOLATILES        | 1,2-Dibromoethane           | 5.3E-02            | 0.0005      | 0.005        | NE         | NE            | 5.3E-02            |                   | 0.0003 1 0        |
| VOLATILES        | 1,2-Dichlorobenzene         | 5.6E+01            | 0.0005      | 0.005        | NE         | NE            | 2.75-01            |                   | 0.0063 1 U        |
| VOLATILES        | 1,2-Dichloroethane          | 2.7E-01            | 0.0005      | 0.005        |            |               | 1.8E+00            |                   | 0.0063 1 U        |
| VOLATILES        | 1,2-Dichloropropane         | 1.85+00            | 0.0005      | 0.005        | NE         | NE            | 3.3E+03            |                   | 0.0063 1 U        |
| VOLATILES        | 1.2.5 Trimethylograph       | 8.3E+00            | 0.0005      | 0.005        | NE         | NE            | 8.3E+00            |                   | 0.0063 1 U        |
| VOLATILES        | 1 3-Dichlorobenzene         | 5 1E+00            | 0.0005      | 0.005        | NE         | NE            | 5.1E+00            |                   | 0.0063 1 U        |
| VOLATILES        | 1.3-Dichloropropane         | 3.0E+00            | 0.0005      | 0.005        | NE         | NE            | 3.0E+00            |                   | 0.0063 1 U        |
| VOLATILES        | 1.4-Dichlorobenzene         | 2.7E+01            | 0.0005      | 0.005        | NE         | NE            | 2.7E+01            |                   | 0.0063 1 U        |
| VOLATILES        | 2,2-Dichloropropane         | 1.7E+00            | 0.0005      | 0.005        | NE         | NE            | 1.7E+00            |                   | 0.0063 1 U        |
| VOLATILES        | 2-Butanone                  | 2.6E+03            | 0.0025      | 0.010        | NE         | NE            | 2.6E+03            |                   | 0.0125 1 0        |
| VOLATILES        | 2-Chloroethyl vinyl ether   | 2.1E-01            | 0.0020      | 0.010        | NE         | NE            | 2.16+01            |                   | 0.0123 1 0        |
| VOLATILES        | 2-Chtorotoluene             | 1.5E+02            | 0.0005      | 0.005        | NE         | NE            | 6.25+00            | 1                 | 0.0125 1 U        |
| VOLATILES        | 2-Hexanone                  | 0.2E+00            | 0.0025      | 0.010        | NE         | NE            | 3 45-01            |                   | 0.0063 1 U        |
| VOLATILES        | 4-Chiorotoluene             | 3.42-01            | 0.0050      | 0.000        | NE         | NE            | 1.7E+02            |                   | 0.0125 1 U        |
| VOLATILES        | Reatione                    | 8.8E-01            | 0.0005      | 0.015        | NE         | NE            | 8.8E-01            |                   | 0.0063 1 U        |
| VOLATILES        | Bromobenzene                | 1.1E+01            | 0.0005      | 0.005        | NE         | NE            | 1.1E+01            |                   | 0.0063 1 U        |
| VOLATILES        | Bromochloromethane          | 2.4E+01            | 0.0005      | 0.005        | NE         | NE            | 2.4E+01            |                   | 0.0063 1 U        |
| VOLATILES        | Bromodichloromethane        | 1.0E+01            | 0.0005      | 0.005        | NE         | NE            | 1.0E+01            |                   | 0.0063 1 U        |
| VOLATILES        | Bromoform                   | 3.4E+01            | 0.0005      | 0.005        | NE         | NE            | 3.4E+01            |                   | 0.0063 1 U        |
| VOLATILES        | Bromomethane                | 3.5E-01            | 0.0010      | 0.010        | NE         | NE            | 3.5E-01            |                   | 0.0125 1 U        |
| VOLATILES        | Carbon disulfide            | 1.0E+02            | 0.0005      | 0.005        | NE         | NE            | 1.0E+02            |                   | 0.0003 1 0        |
| VOLATILES        | Carbon tetrachloride        | 3.5E-01            | 0.0005      | 0.005        | NE         | NE            | 3.5E-01<br>4.0E+04 |                   | 0.0003 1 0        |
| VOLATILES        | Chlorobenzene               | 4.0E+01            | 0.0005      | 0.005        | NE         |               | 4.001              |                   | 0.0125 1 1        |
| VOLATILES        | Chierofethane               | 1.10+03            | 0.0010      | 0.010        | NE         | NE            | 3 1E-01            |                   | 0.0063 1 U        |
| VOLATILES        | Chloromothana               | 3.1E-01<br>2.3E-01 | 0.0000      | 0.003        | NE         | NE            | 2.3E-01            |                   | 0.0125 1 U        |
| VOLATILES        | cis-1 2-Dicbloroethene      | 1.2E+02            | 0.0005      | 0.005        | NE         | NE            | 1.2E+02            | 1.                | 0.0063 1 U        |
| VOLATILES        | cis-1.3-Dichloropropene     | 1.2E+00            | 0.0005      | 0.005        | NE         | NE            | 1.2E+00            |                   | 0.0063 1 U        |
| VOLATILES        | Dibromochloromethane        | 7.6E+00            | 0.0005      | 0.005        | NE         | NE            | 7.6E+00            | 1                 | 0.0063 1 U        |

### 00066643

| Table 4-124  |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| Sump_118   |

|  |                           |  |                     | oumpin                 |  |   |  |   |  |           |
|--|---------------------------|--|---------------------|------------------------|--|---|--|---|--|-----------|
| [SUMP] = SUMP118<br>LOCATION_CODE<br>SAMPLE_NO<br>SAMPLE_DATE<br>DEPTH<br>SAMPLE_PURPOSE |                           | TCEQ<br>Risk-Based<br>Screening<br>Value | Method<br>Detection | Method<br>Quantitation | Backy<br>Concentra<br>(95% UF<br>Surface | ground<br>tions in Soil<br>2L, mg/kg)<br>Subsurface | Applicble<br>TCEQ<br>Risk-Based<br>Screening | 35SUMP118-SB01<br>35-SMP118-SB01-01<br>9/19/2006<br>.55 Ft<br>REG | 35SUMP118-SB0<br>35-SMP118-SB01-<br>9/19/2006<br>4 - 4 Ft<br>REG | (1<br>-02 |
| Test Group   | Parameter (Units = mg/kg) | (RBSV)                                   | Limit (MDL)         | Limit (MQL)            | 0 - 0.5 Ft                               | 1.5 - 2.5 Ft  | Value  | Result DIL LQ VQ  | Result DIL LQ  | VQ        |
| VOLATILES  | Dibromomethane            | 1.9E+01                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.9E+01                                      |   | 0,0063 1 0   |           |
| VOLATILES  | Dichlorodifluoromethane   | 2.2E+02                                  | 0.0010              | 0.010                  | NE                                       | NE  | 2.2E+02                                      |   | 0.0125 1 0   |           |
| VOLATILES  | Ethylbenzene              | 4.3E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 4.30+02                                      |   | 0.0003 1 0   |           |
| VOLATILES  | Hexachlorobutadiene       | 1.6E+00                                  | 0.0005              | 0,005                  | NE                                       | NE  | 1.6E+00                                      |   | 0.0003 1 0   |           |
| VOLATILES  | Isopropylbenzene          | 5.4E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 5.4E+U2                                      |   | 0.0003 1 0   |           |
| VOLATILES  | m,p-Xylenes               | 2.3E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 2.32+02                                      |   | 0.0005 1 U   |           |
| VOLATILES  | Methyl isobutyl ketone    | 1.3E+03                                  | 0.0025              | 0.010                  | NE                                       | NE  | 1,32403                                      |   | 0.0120 1 0   |           |
| VOLATILES  | Methylene chloride        | 8.7E+00                                  | 0.0010              | 0.005                  | NE                                       | NE  | 8.7E+00                                      |   | 0,0003 1 0   |           |
| VOLATILES  | Naphthalene               | 1.8E+01                                  | 0.0005              | 0.010                  | NE                                       | NE  | 1.8E+01                                      |   | 0.0123 1 0   |           |
| VOLATILES  | n-BUTYLBENZENE            | 2.7E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 2.70+02                                      |   | 0.0003 1 U   |           |
| VOLATILES  | n-PROPYLBENZENE           | 3.2E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 3.2E+02                                      |   | 0.0003 1 0   |           |
| VOLATILES  | p-ISOPROPYLTOLUENE        | 4.2E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 4.20+02                                      |   | 0.0003 1 0   |           |
| VOLATILES  | Sec-BUTYLBENZENE          | 3.0E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 3.0E+02                                      |   | 0.0003 1 0   |           |
| VOLATILES  | Styrene                   | 1.3E+03                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.3E+03                                      |   | 0,0003 1 0   |           |
| VOLATILES  | tert-BUTYLBENZENE         | 2.6E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 2.6E+02                                      |   | 0.0003 1 0   |           |
| VOLATILES  | Tetrachloroetherre        | 6.0E+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 6.0E+00                                      |   | 0,0003 1 0   |           |
| VOLATILES  | Toluene                   | 1.1E+03                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.1E+03                                      | 1   | 0.0003 1 0   |           |
| VOLATILES  | trans-1,2-Dichloroethene  | 1.4E+02                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.40+02                                      |   | 0.0003 1 0   |           |
| VOLATILES  | trans-1,3-Dichloropropene | 1.8E+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 1.82+00                                      |   | 0.0003 1 U   |           |
| VOLATILES  | Trichloroethene           | 3.7E+00                                  | 0.0005              | 0.005                  | NE                                       | NE  | 3.7E+00                                      |   | 0.0003 1 0   |           |
| VOLATILES  | Trichlorofluoromethane    | 2.6E+02                                  | 0.0010              | 0.010                  | NE                                       | NE  | 2.6E+02                                      |   | 0.0120 1 0   |           |
| VOLATILES  | Vinyl acetate             | 5.7E+01                                  | 0.0010              | 0.010                  | NE                                       | NE  | 5.7E+01                                      |   | 0.0125 1 U   |           |
| VOLATILES  | Vinvl chloride            | 3.6E-02                                  | 0.0010              | 0.010                  | NĒ                                       | NE  | 3.6E-02                                      | 1   | 0.0125 1 0   |           |

Footnotes are shown on cover page to Tables Section.

### MARC No. W912QR-04-D-0027, TO No. DS02 Longhom Army Ammunition Plant, Kamack, Texas

 $21,\ldots,n_{n-1}$ 

### Shaw Environmental, Inc.

00066644

# Table 4-125 Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values WRSump-013

|                          |                                |                |             |              | · · · · ·        |                |                    |            |          |               |            |        |
|--------------------------|--------------------------------|----------------|-------------|--------------|------------------|----------------|--------------------|------------|----------|---------------|------------|--------|
| [SUMP] = WRSUMP013       |                                |                |             |              |                  |                |                    |            |          |               |            |        |
| LOCATION_CODE            |                                | TOFO           |             |              | Book             | round          | Annliabla          |            | 9001     | 14/021 14/012 | LSB01      |        |
| SAMPLE_NU                |                                | Pick-Based     |             |              | Concentra        | tions in Soil  | TCEO               | WRSUMP13-S | 801-01   | WRSUMP13-     | SB01-02    | ,      |
|                          |                                | Screeping      | Method      | Method       | /05% LID         |                | Pick-Racod         | 11/15/20   | 06       | 11/15/20      | 06         |        |
|                          |                                | Value          | Detection   | Ouentitation | Surface          | Subsurface     | Screening          | 0-5 FI     |          | 1-2 F         | ť          |        |
| Test Group               | Parameter (Units = mo/kg)      | (RBSV)*        | Limit (MDL) | Limit (MOL)  | 0 - 0 5 Ft       | 15-25 Et       | Value              | Result Di  | LOVO     | Result D      | LLQV       | vQ     |
| EXPLOSIVES               | 1.3.5-Trinitrobenzene          | 4.65E+02       | 0.1         | 0.25         | NE               | NE             | 4.7E+02            | 0.244 1    | <u> </u> | 0.249 1       | <u> </u>   | Ū      |
| EXPLOSIVES               | 1,3-Dinitrobenzene             | 1.55E+00       | 0.1         | 0.25         | NE               | NE             | 1.6E+00            | 0.244 1    | ບບ       | 0.249 1       | U I        | U .    |
| EXPLOSIVES               | 2,4,6-Trinitrotoluene          | 7.74E+00       | 0.1         | 0.25         | NE               | NE             | 7.7E+00            | 0.244 1    | υu       | 0.249 1       | U          | υ      |
| EXPLOSIVES               | 2,4-Dinitrotoluene             | 7.20E-01       | 0,1         | 0.25         | NË               | NE             | 7.2E-01            | 0.244 1    | υu       | 0.249 1       | U          | U      |
| EXPLOSIVES               | 2,6-Dinitrotoluene             | 7.20E-01       | 0.1         | 0.26         | NE               | NE             | 7.2E-01            | 0.254 1    | 0 0      | 0.259 1       |            |        |
| EXPLOSIVES               | 2-Amino-4,6-dinitrotoluene     | 2.585+00       | 0.1         | 0.26         | NE               | NE             | 2.62+00            | 0.254 1    |          | 0.259 1       |            | n.     |
| EXPLUSIVES<br>EXPLOSIVES | 4-Anino-2,0-dinitrolouene      | 2,365+00       | 0,1         | 2.20         |                  |                | 2.02+00            | 2 150 1    | 00       | 2 196 1       | ŭ          | ň      |
| EXPLOSIVES               | m-Nitrotoluene                 | 4.40E+01       | 0.1         | 0.25         | NE               | NE             | 4.4E+01            | 0.244 1    | ี ยั มี- | 0.249 1       | Ŭ          | ŭ      |
| EXPLOSIVES               | Nitrobenzene                   | 6.49E+00       | 0.1         | 0.26         | NE               | NE             | 6.5E+00            | 0.254 1    | ŨŨ       | 0.259 1       | Ū          | Ũ.     |
| EXPLOSIVES               | o-Nitrotoluene                 | 4.67E+01       | 0.1         | 0.25         | NE               | NE             | 4.7E+01            | 0.244 1    | υÜ       | 0.249 1       | U          | U      |
| EXPLOSIVES               | p-Nitrotoluene                 | 4.37E+01       | 0.1         | 0.25         | NE               | NE             | 4.4E+01            | 0.244 1    | UU       | 0.249 1       | U          | υ      |
| EXPLOSIVES               | RDX                            | 3.59E+00       | 0.1         | 1.00         | NE               | NE             | 3.6E+00            | 0.976 1    | υu       | 0.995 1       | U          | U.     |
| EXPLOSIVES               | Tetryl                         | 1.55E+02       | 0.2         | 0.65         | NE               | NE             | 1.6E+02            | 0.634 1    | υu       | 0,647 1       | U          | U      |
| METALS                   | Aluminum                       | 1.55E+04       | 10.000      | 20.00        | 16300            | 2.08E+04       | 1.6E+04            | 12/00 1    |          | 12500 1       |            |        |
| METALO                   | Ananony                        | 2 005+01       | 0.050       | 0.10         | 0.94<br>4 915±00 | 5.645-00       | 7.3ET00<br>2.0E±01 | 4 010 1    | 7 7      | 0.121         | 0          | 0      |
| METALS                   | Barium                         | 2.00E+01       | 0.075       | 0.30         | 4.01E+00         | 8.55E+01       | 2.6E+03            | 60,800, 1  |          | 118,000 1     |            |        |
| METALS                   | Bervilium                      | 4.56E+00       | 0.012       | 0.50         | 6.45E-01         | 7.66E-01       | 4.6E+00            | 0.482 1    |          | 0.434 1       | ٦          | J      |
| METALS                   | Cadmium                        | 5.20E+00       | 0.025       | 0.10         | 1.4              | 0.4            | 5.2E+00            | 0,439 1    | υυ       | 0.458 1       | Ð          | Ū      |
| METALS                   | Calcium                        | NE             | NA          | NA           | NA               | NA             | -                  | 2880 1     |          | 797 1         |            |        |
| METALS                   | Chromium                       | 5.93E+03       | 0.100       | 0.40         | 2.66E+01         | 3.01E+01       | 5.9E+03            | 11.600 1   |          | 11.400 1      |            |        |
| METALS                   | Cobalt                         | 1.53E+03       | 0.125       | 0.50         | 7.23E+00         | 5.61E+00       | 1.5E+03            | 2.810 1    |          | 5.920 1       |            |        |
| METALS                   | Copper                         | 1.02E+03       | 0.150       | 0.60         | 5.55E+00         | 9,25E+00       | 1.0E+03            | 2.830 1    |          | 2,900 1       |            |        |
| METALS                   | Iron                           |                | NA<br>0.500 | NA<br>5.00   | 1.//E+04         | 3.18E+04       | 1.86+04            | 11000 1    |          | 13800 1       |            |        |
| METALS                   | Magnesium                      | 5.00E702       | 0.500<br>NA | 5.00         | 2.20E701         | 1.14ETUT<br>NA | 5.0E+02            | 24.000     |          | 1010 1        |            |        |
| METALS                   | Manganese                      | 1.68E+03       | 0.050       | 0.20         | 1.25E+03         | 2.01E+02       | 1.7E+03            | 49,900 1   |          | 88,500 1      |            |        |
| METALS                   | Mercurv                        | 1.08E-02       | 0.010       | 0.25         | 8.19E-02         | 0.36           | 2.5E-01            | 0.039 1    | JJ       | 0.286 1       | U ·        | U      |
| METALS                   | Nickel                         | 1.87E+02       | 0.200       | 0.80         | 6.98E+00         | 1.16E+01       | 1.9E+02            | 4.410 1    |          | 5.720 1       |            |        |
| METALS                   | Potassium                      | NE             | NA          | NA           | NA               | NA             |                    | 491 1      |          | 379 1         |            |        |
| METALS                   | Selenium                       | 1.27E+02       | 0.100       | 0.20         | 3.48E+00         | 5.57E+00       | 1.3E+02            | 0.357 1    |          | 0.242 1       | U          | U      |
| METALS                   | Silver                         | 4.68E+01       | 0.050       | 0.20         | 0.31             | 0.37           | 4.7E+01            | 1.760 1    | υυ       | 1,830 1       | Ų          | U      |
| METALS                   | Socium                         | NE             | NA          | NA           | NA<br>0.47       | NA             | 4 75 04            | 39.300 1   |          | 239.000 1     |            |        |
| METALS                   | Vacadium                       | NE<br>4 84E±04 | 0.010       | 0.02         | 0.4/<br>3.31E±01 |                | 4.7E-01            | 26 200 1   |          | 23 000 1      |            |        |
| METALS                   | Zinc                           | 5.94E+03       | 0.625       | 2.50         | 616              | 2.02E+01       | 5 9E+03            | 25.200 1   |          | 18 500 1      |            |        |
| SOLIDS                   | Percent Solids                 | NË             | NE          | NVA          | NE               | NE             | -                  | 81.300 1   |          | 82.800 1      |            |        |
| VOLATILES                | 1,1,1,2-Tetrachloroethane      | 5.17E+00       | 0.0005      | 0.005        | NE               | NE             | 5.2E+00            |            |          | 0.005 1       | U.         | U      |
| VOLATILES                | 1,1,1-Trichloroethane          | 2.32E+02       | 0.0005      | 0.005        | NĘ               | NE             | 2.3E+02            |            |          | 0.005 1       | U          | U      |
| VOLATILES                | 1,1,2,2-Tetrachloroethane      | 5.08E-01       | 0.0005      | 0.005        | NE               | NE             | 5.1E-01            |            |          | 0.005 1       | U          | U.     |
| VOLATILES                | 1,1,2-Trichloroethane          | 9.69E-01       | 0.0005      | 0.005        | NE               | NE             | 9.7E-01            |            |          | 0.005 1       |            | U.     |
| VOLATILES                | 1,1-Dichloroethane             | 8.895+01       | 0.0010      | 0.005        | NE               | NE             | 8.9E+01            |            |          | 0.005 1       | . U        |        |
| VOLATILES                | 1,1-Dichlorogropene            | 2.0000701      | 0.0005      | 0.005        | NE               | NE             | 2.7 2701           |            |          | 0.005 1       | i ii       | ŭ      |
| VOLATILES                | 1.2.3-Trichlorohenzene         | 4 20E+01       | 0.0005      | 0.005        | NE               | NE             | 4 2E+01            |            |          | 0.005 1       | ŭ          | ŭ      |
| VOLATILES                | 1.2.3-Trichloropropane         | 9.15E-02       | 0.0010      | 0.005        | NE               | NE             | 9.2E-02            |            |          | 0.005 1       | Ŭ          | Ũ      |
| VOLATILES                | 1,2,4-Trichlorobenzene         | 1.36E+02       | 0.0005      | 0.005        | NE               | NE             | 1.4E+02            |            |          | 0.005 1       | U .        | U      |
| VOLATILES                | 1,2,4-Trimethylbenzene         | 9.60E+00       | 0.0005      | 0.005        | NÉ               | NE             | 9.6E+00            |            |          | 0.005 1       | U          | U      |
| VOLATILES                | 1,2-Dibromo-3-chloropropane    | 3.48E-01       | 0.0020      | 0.005        | NE               | NE             | 3.5E-01            |            |          | 0.005 1       | U          | U      |
| VOLATILES                | 1,2-Dibromoethane              | 5.31E-02       | 0.0005      | 0.005        | NE               | NE             | 5.3E-02            |            |          | 0.005 1       |            | 8      |
| VOLATILES                | 1,2-Dichlorobenzene            | 5.61E+01       | 0.0005      | 0.005        | NE               | NE             | 5.0E+01            |            |          | 0,005 1       |            |        |
| VOLATILES                | 1.2-Dichloropropage            | 1.80E+00       | 0.0005      | 0.005        | NE               | NE             | 1.85+00            |            |          | 0.005 1       | ŭ          | ŭ.     |
| VOLATILES                | 1.2-Dimethylbenzene (o-Xvlene) | 3.27E+03       | 0.0005      | 0.005        | NE               | NE             | 3.3E+03            |            |          | 0.005 1       | มั         | ū      |
| VOLATILES                | 1,3,5-Trimethylbenzene         | 8.28E+00       | 0.0005      | 0.005        | NE               | NE             | 8.3E+00            |            |          | 0.005 1       | Ū          | Ű      |
| VOLATILES                | 1,3-Dichlorobenzene            | 5.05E+00       | 0.0005      | 0.005        | NE               | NE             | 5.1E+00            |            |          | 0.005 1       | U          | Ų      |
| VOLATILES                | 1,3-Dichloropropane            | 2.98E+00       | 0.0005      | 0.005        | NE               | NE             | 3.0E+00            |            |          | 0.005 1       | U          | U      |
| VOLATILES                | 1,4-Dichlorobenzene            | 2.67E+01       | 0.0005      | 0.005        | NE               | NE             | 2.7E+01            |            |          | 0.005 1       | U          | U      |
| VOLATILES                | 2,2-Ucnioropropane             | 1.70E+00       | 0.0005      | 0.005        | NE               | NE             | 1.7E+00            |            |          | 0.005 1       |            | U<br>U |
| VOLATILES                | 2-chlomethyl vinvl ether       | 2.012703       | 0.0025      | 0.010        |                  |                | 2.02703            |            |          | 0.010 1       | 11         | 1      |
|                          | = withorowity mity output      |                | 0.0020      | 0.010        | 1 1              |                | AL 1 M 9 4         |            |          |               | <b>.</b> . |        |
### Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

00066645

| Table 4-125  |
|--|
| Comparison of Chemical Concentrations in Soil to Risk-Based Screening Values |
| WRSump-013   |

| [SUMP] = WRSUMP013 |                           |            |             |              |            |                        |              |         |            |             |              |              |
|--------------------|---------------------------|------------|-------------|--------------|------------|------------------------|--------------|---------|------------|-------------|--------------|--------------|
| LOCATION_CODE      |                           |            |             |              | De el-     | أستنصب                 | ā a attabija |         | D12 C001   | WDSHMD1     | 1.580        | 14           |
| SAMPLE_NO          |                           | ICEQ       |             |              | Carabata   | ground<br>Mana in Sai? | Аррисон      | WEGUN   | 12 2201-01 | MINDSI MP13 | SB01         |              |
| SAMPLE_DATE        |                           | Risk-Based |             |              | Concentra  |                        |              | 14/A    | E/1006     | 11/16/2     | 0001         | 01           |
| DEPTH              |                           | Screening  | Method      | Method       | (95% UF    | <sup>2</sup> L, mg/kg) | Risk-Based   | 1 1 1 1 | 5/2000     | 1110/2      |              |              |
| SAMPLE_PURPOSE     |                           | Value      | Detection   | Quantitation | Surface    | Subsurace              | Screening    |         | - 5 FL     | 1+Z-        | -L<br>11 1 / | ~ ~~~        |
| Test Group         | Parameter (Units = mg/kg) | (R8SV)*    | Limit (MDL) | Limit (MQL)  | 0 - 0.5 Ft | 1.5 - 2.5 Ft           | Value        | Result  | DIL LQ VQ  | Result L    | 1 10         | <u> - va</u> |
| VOLATILES          | 2-Chlorotoluene           | 1.54E+02   | 0.0005      | 0.005        | NE         | NE                     | 1.5E+02      |         |            | 0.005       |              | : N          |
| VOLATILES          | 2-Hexanone                | 6.20E+00   | 0.0025      | 0.010        | NE         | NE                     | 6.2E+00      | -       |            | 0.010       |              |              |
| VOLATILES          | 4-Chlorotoluene           | 3.44E-01   | 0.0005      | 0.005        | NE         | NE                     | 3.4E-01      |         |            | 0.005       | 1 U<br>4 U   |              |
| VOLATILES          | Acetone                   | 1.74E+02   | 0.0050      | 0.010        | NE         | NE                     | 1.7E+02      |         |            | 0.010       |              |              |
| VOLATILES          | Benzene                   | 8.82E-01   | 0.0005      | 0.005        | NE         | NE                     | 8.8E-01      |         |            | 0.005       |              |              |
| VOLATILES          | Bromobenzene              | 1.12E+01   | 0.0005      | 0.005        | NE         | NE                     | 1,1E+01      |         |            | 0.005       |              |              |
| VOLATILES          | Bromochloromethane        | 2.41E+01   | 0.0005      | 0.005        | NE         | NE                     | 2.4E+01      |         |            | 0.005       |              |              |
| VOLATILES          | Bromodichloromethane      | 1.03E+01   | 0.0005      | 0.005        | NE         | NE                     | 1.0E+01      | 1       |            | 0.005       |              | : ::         |
| VOLATILES          | Bromoform                 | 3.35E+01   | 0.0005      | 0.005        | NE         | NE                     | 3.4E+01      |         |            | 0.005       | 1 5          |              |
| VOLATILES          | Bromomethane              | 3.49E-01   | 0.0010      | 0.010        | NE         | NE                     | 3.5E-01      |         |            | 0.010       |              | 1 0          |
| VOLATILES          | Carbon disulfide          | 1.03E+02   | 0.0005      | 0.005        | NE         | NE                     | 1.0E+02      |         |            | 0.005       |              | 1 0          |
| VOLATILES          | Carbon tetrachloride      | 3.53E-01   | 0.0005      | 0.005        | NE         | NE                     | 3.5E-01      |         |            | 0.005       |              | 1 0          |
| VOLATILES          | Chlorobenzene             | 3.98E+01   | 0.0005      | 0.005        | NE         | NE                     | 4.0E+01      |         |            | 0.005       | 1 1          |              |
| VOLATILES          | Chloroethane              | 1.13E+03   | 0.0010      | 0.010        | NE         | NE                     | 1.1E+03      |         |            | 0.010       | 1 .          | 1 0          |
| VOLATILES          | Chloroform                | 3.06E-01   | 0.0005      | 0.005        | NE         | NE                     | 3.1E-01      |         |            | 0.005       | 1 1          |              |
| VOLATILES          | Chloromethane             | 2.27E-01   | 0.0020      | 0.010        | NE         | NE                     | 2.3E-01      |         |            | 0.010       | 1 L          | 5 U          |
| VOLATILES          | cis-1,2-Dichloroethene    | 1.15E+02   | 0.0005      | 0.005        | NE         | NE                     | 1.2E+02      |         |            | 0.005       | 1 4          | , ,          |
| VOLATILES          | cis-1,3-Dichloropropene   | 1.19E+00   | 0.0005      | 0.005        | NE         | NE                     | 1.2E+00      | 1       |            | 0.005       | 1 (          | 1 0          |
| VOLATILES          | Dibromochloromethane      | 7.62E+00   | 0.0005      | 0.005        | NE         | NE                     | 7.6E+00      | 1       |            | 0.005       | 1 L          | 10           |
| VOLATILES          | Dibromomethane            | 1.88E+01   | 0.0005      | 0.005        | NE         | NE                     | 1.9E+01      |         |            | 0.005       | 1 L          | 10           |
| VOLATILES          | Dichlorodifluoromethane   | 2.16E+02   | 0.0010      | 0.010        | NE         | NE                     | 2.2E+02      |         |            | 0.010       | 1 1          | 10           |
| VOLATILES          | Ethylbenzene              | 4.31E+02   | 0.0005      | 0.005        | NE         | NE                     | 4.3E+02      |         |            | 0.005       | 1 L          | 10           |
| VOLATILES          | Hexachlorobutadiene       | 1.58E+00   | 0.0005      | 0.005        | NE         | NE                     | 1.62+00      |         |            | 0.005       | 1 4          | 10           |
| VOLATILES          | Isopropylbenzene          | 5.38E+02   | 0.0005      | 0.005        | NE         | NE                     | 5.4E+02      |         |            | 0.005       | 1 L          | i ü          |
| VOLATILES          | m,p-Xylenes               | NE         | 0.0005      | 0.005        | NE         | NE                     | 5.0E-03      |         |            | 0.005       | 1 L          | 1 U          |
| VOLATILES          | Methyl isobutyl ketone    | 1.29E+03   | 0.0025      | 0.010        | NE         | NE                     | 1.3E+03      |         |            | 0.010       | 1 L          | 1 0          |
| VOLATILES          | Methylene chloride        | 8.68E+00   | 0.0010      | 0.005        | NE         | NE                     | 8.7E+00      |         |            | 0.005       | 1 L          | 1 0          |
| VOLATILES          | Naphthalene               | 1.81E+01   | 0.0005      | 0.010        | NE         | NE                     | 1.8E+01      | 1       |            | 0.010       | 1 (          | , n          |
| VOLATILES          | n-BUTYLBENZENE            | 2.70E+02   | 0.0005      | 0.005        | NE         | NE                     | 2.7E+02      | 1       |            | 0.005       | 1 (          | 10           |
| VOLATILES          | n-PROPYLBENZENE           | 3.21E+02   | 0.0005      | 0.005        | NE         | NË                     | 3.2E+02      | 1       |            | 0.005       | 1 (          | 1 0          |
| VOLATILES          | p-ISOPROPYLTOLUENE        | 4.20E+02   | 0.0005      | 0.005        | NE         | NE                     | 4.2E+02      |         |            | 0,005       | 1 (          | 1 0          |
| VOLATILES          | sec-BUTYLBENZENE          | 3.00E+02   | 0.0005      | 0.005        | NE         | NE                     | 3.0E+02      |         |            | 0.005       | 1 L          |              |
| VOLATILES          | Styrene                   | 1.31E+03   | 0.0005      | 0.005        | NE         | NE                     | 1.3E+03      |         |            | 0.005       | 1 (          | 1 0          |
| VOLATILES          | tert-BUTYLBENZENE         | 2.61E+02   | 0.0005      | 0.005        | NE         | NE                     | 2.6E+02      |         |            | 0.005       | 1 L          | 1 0          |
| VOLATILES          | Tetrachloroethene         | 6.02E+00   | 0.0005      | 0.005        | NE         | NE                     | 6.0E+00      |         |            | 0.005       | 1 1          | 10           |
| VOLATILES          | Toluene                   | 1.08E+03   | 0.0005      | 0.005        | NE         | NE                     | 1.1E+03      |         |            | 0.005       | 1 [          | J U          |
| VOLATILES          | trans-1,2-Dichloroethene  | 1.38E+02   | 0.0005      | 0.005        | NE         | NE                     | 1.4E+02      | 1       |            | 0.005       | 1 L          | i U          |
| VOLATILES          | trans-1,3-Dichloropropene | 1.83E+00   | 0.0005      | 0.005        | NE         | NE                     | 1.8E+00      | 1       |            | 0.005       | 1            | J U          |
| VOLATILES          | Trichloroethene           | 3.73E+00   | 0.0005      | 0.005        | NE         | NE                     | 3.7E+00      | 1       |            | 0.005       | 1 [          | 1 U          |
| VOLATILES          | Trichlorofluoromethane    | 2.63E+02   | 0.0010      | 0.010        | NE         | NĘ                     | 2.6E+02      | 1       |            | 0.010       | 1            | JU           |
| VOLATILES          | Vinyl acetate             | 5.74E+01   | 0.0010      | 0.010        | NE         | NE                     | 5.7E+01      | 1       |            | 0.010       | 1 6          | JU           |
| VOLATILES          | Vinvi chloride            | 3.64E-02   | 0.0010      | 0.010        | NE         | NE                     | 3.6E-02      | 1       |            | 0.010       | 1 (          | <u>j U</u>   |

## 00066646

### Table 4-126a Incremental Lifetime Cancer Risk (ILCR) for Potential Ingestion Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-35A(58) Site

### CARCINOGENIC EFFECTS

| ASSUMPTIONS:                       |                                 |                           | E            | QUATIONS           |                                     |
|------------------------------------|---------------------------------|---------------------------|--------------|--------------------|-------------------------------------|
| Soil Ingestion Rate, IRsoil (mg/d) | 50                              |                           |              |                    | -                                   |
| Exposure Frequency, EF (d/yr)      | 250                             |                           |              | EPC * IRsoil * MCI | = * ED * EF                         |
| Exposure Duration, ED (yr)         | 25                              |                           | ID = -       |                    |                                     |
| Body Weight, BW (kg)               | 70                              |                           |              | BW * ATc * `       | TCF                                 |
| Averaging Time, ATc (yr)           | 70                              |                           |              |                    |                                     |
| Conversion Factors                 |                                 |                           | ILCR = ID    | * SFo              |                                     |
| Mass, MCF (kg/mg)                  | 1.00E-06                        |                           |              |                    |                                     |
| Time, TCF (d/yr)                   | 365                             |                           |              |                    |                                     |
|                                    | Exposure Point<br>Concentration | Oral Slope<br>Factor, SFo | Weight<br>of | Intake Dose<br>ID  | Incremental Lifetime<br>Cancer Risk |
| Chemical Name                      | EPC (mg/kg)                     | 1/(mg/kg/d)               | Evidenc      | e (mg/kg/d)        | ILCR                                |
| Manganese                          | 2.64E+03                        | NA                        | D            | 4.61E-04           | 0.00E+00                            |

PATHWAY CANCER RISK

0.00E+00

### Table 4-126b Hazard Index (HI) for Potential Ingestion Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-35A(58) Site

### NON-CARCINOGENIC EFFECTS

| ASSUMPTIONS:                       |                |           | EQUATIONS  |                              |  |  |  |
|------------------------------------|----------------|-----------|------------|------------------------------|--|--|--|
| Soil Ingestion Rate, IRsoil (mg/d) | 50             |           |            |                              |  |  |  |
| Exposure Frequency, EF (d/yr)      | 250            |           | E          | EPC * IRsoil * MCF * ED * EF |  |  |  |
| Exposure Duration, ED (yr)         | iD =           |           |            |                              |  |  |  |
| Body Weight, BW (kg)               | 70             |           |            | BW * ATn * TCF               |  |  |  |
| Averaging Time, ATn (yr)           | 25             |           |            |                              |  |  |  |
| Conversion Factors                 |                |           | ID         |                              |  |  |  |
| Mass, MCF (kg/mg)                  | 1.00E-06       |           | HQ =       | •                            |  |  |  |
| Time, TCF (d/yr)                   | 365            |           | RfD        | 0                            |  |  |  |
|                                    | Exposure Point | Oral      | Intake Dos | 9                            |  |  |  |
|                                    | Concentration  | RfDo      | ID         | Hazard Quotient              |  |  |  |
| Chemical Name                      | EPC (mg/kg)    | (mg/kg/d) | (mg/kg/d)  | HQ                           |  |  |  |
| Manganese                          | 2.64E+03       | 1.40E-01  | 1.29E-02   | 9.23E-02                     |  |  |  |

TOTAL PATHWAY HAZARD INDEX

9.23E-02



### Table 4-127a Incremental Lifetime Cancer Risk (ILCR) for Potential Inhalation Exposure of Future Maintenance Workers to Airborne Chemicals from Soil at the LHAAP-35Å(58) Site

### CARCINOGENIC EFFECTS

| ASSUMPTIONS:                                | -              |                |          |                              |                           | EQUATION                           | s            |                      |         | _                    |                      |                   |                     |
|---|----------------|----------------|----------|------------------------------|---------------------------|------------------------------------|--------------|----------------------|---------|----------------------|----------------------|-------------------|---------------------|
| Particulate Emissions Factor, PEF (m3A      | 4.63E+09       |                |          |                              |                           |                                    |              |                      |         |                      |                      |                   |                     |
| Exposure Frequency, EF (d/yr)               | 250            |                | •        |                              | EPC                       | * MCF * (1/VF+1/PEF) * EF          | *ED          |                      |         |                      |                      |                   |                     |
| Exposure Duration, ED (yr)                  | 25             |                |          | Air Concentration (u         | g/m <sup>3</sup> ) =      |                                    |              |                      |         |                      |                      |                   |                     |
| Averaging Time, ATc (yr)                    | 70             |                |          |                              |                           | ATc * TCF                          |              |                      |         |                      |                      |                   |                     |
| Conversion Factor                           |                |                |          |                              |                           |                                    |              |                      |         |                      |                      |                   |                     |
| Time, TCF (d/yr)                            | 365            |                |          | ILCR = Air concentr          | stion * URF               |                                    |              |                      |         |                      |                      |                   |                     |
| Mass, MCF (microg/mg)                       | 1600           |                |          |                              |                           |                                    |              |                      |         |                      |                      |                   |                     |
| SITE DATA / DEFAULT FACTORS:                | -              |                |          |                              |                           |                                    |              |                      |         |                      |                      |                   |                     |
| Length of contaminated area, LS (m)         | 4.50E+01       | LHAAP-46 speci | lic      | (LS * V * DH)                | (                         | 8.14 * a * T) <sup>1/2</sup>       |              | Dei * E              |         |                      |                      |                   |                     |
| True soil porosity, E (unitless)            | 0.35           |                |          | VF =                         | X                         |                                    |              | a =                  | ******  |                      |                      |                   |                     |
| Wind speed in mixing zone, V (m/s)          | 2.25           |                |          | Α                            | (2 * Dei                  | * E * Kas * 10 <sup>-3</sup> kg/g) |              | E + (ps) * (1-E) /   | Kas     |                      |                      |                   |                     |
| True soil density, ps (g/cm³)               | 2.65           |                |          |                              |                           |                                    |              |                      |         |                      |                      |                   |                     |
| Diffusion height, DH (m)                    | 2              |                |          |                              |                           |                                    |              |                      |         |                      |                      |                   |                     |
| Exposure interval, T (s)                    | 7.90E+08       |                |          | Dei = Di * E <sup>0.33</sup> |                           |                                    |              |                      |         |                      |                      |                   |                     |
| Area of contamination, A (cm <sup>2</sup> ) | 2.03E+07       | LHAAP-48 speci | lic      |                              |                           |                                    |              |                      |         |                      |                      |                   |                     |
| Organic carbon content, OC (unitiess)       | 0.02           |                |          | Kd = Koc * OC                |                           | Kas = (H / Kd) * 41                |              |                      |         |                      |                      |                   |                     |
|   | Exposure Point | Unit Risk      | Weight   | Molecular                    | Henry's Law               | Organic Carbon                     | Effective    | Soil-Water Partition |         | Soil/air Partition   | Volatilization       |                   | Incremental Lifetim |
|   | Concentration  | Factor, URF    | of       | Diffusivity, Di              | Constant, H               | Partition Coefficient,             | Diffusivity, | Coefficient, Kd      | a       | Coefficient, Kas     | factor, VF           | Air Concentration | Cancer Risk         |
| Chemical Name                               | EPC (mg/kg)    | 1/(microg/m³)  | Evidence | (cm²/s)                      | (atm-m <sup>3</sup> /mol) | Koc (cm³/g)                        | Dei (cm²/s)  | (cm <sup>3</sup> /g) | (cm²/s) | (cm <sup>3</sup> /g) | (m <sup>3</sup> /kg) | (ug/m³)           | ILCR                |
| Manganese                                   | 2.64E+03       | NA             | D        | NA                           | 0.00E+00                  | NA                                 | NA           | NA                   | NA      | NA                   | NA                   | 1.38E-04          | 0.00E+00            |

TOTAL PATHWAY CANCER RISK

0.00E+00

### Table 4-127b Hazard Index (HI) for Potential Inhalation Exposure of Future maintenance Workers to Airborne Chemicals from Soil at the LHAAP-35A(58) Site

| NON-CARCINOGENIC EFFECTS   |                                 |            |                              |              |  |              |                      |         |                    |                |                   |                 |
|--|---------------------------------|------------|------------------------------|--------------|--|--------------|----------------------|---------|--------------------|----------------|-------------------|-----------------|
| ASSUMPTIONS:   |                                 |            |                              |              | EQUATIONS                                | 3            |                      |         | -                  |                |                   |                 |
| Particulate Emissions Factor, PEF (m <sup>3</sup> /kg<br>Exposure Frequency, EF (d/yr)<br>Exposure Duration, ED (yr)<br>Averaging Time, ATn (yr)<br>Conversion Factors | 4.63E+09<br>250<br>25<br>25     |            | Air Concentration (m         | g/m**3) =    | EPC * (1/VF+1/PEF) * EF * (<br>ATn * TCF | D            | Air Concentrati      | ion     |                    |                |                   |                 |
| Time, TCF (d/yr)   | 365                             |            |                              |              |  |              | KIG.                 |         |                    |                |                   |                 |
| SITE DATA / DEFAULT FACTORS:   |                                 |            |                              |              |  |              |                      |         |                    |                |                   |                 |
| Length of contaminated area, LS (m)<br>True soil porosity, E (unitless)  | 4.50E+01 LHAAP-46 speci<br>0.35 | flc        | (LS * V * DH)<br>VF =        | x(i          | 8.14 * a * T} <sup>1/2</sup>             |              | Del * E              |         |                    |                |                   |                 |
| Wind speed in mixing zone, V (m/s)   | 2.25                            |            | A                            | (2 * Dei     | * E * Kas * 10 <sup>-3</sup> kg/g)       |              | E + (ps) * (1-E) / K | las     |                    |                |                   |                 |
| True soil density, ps (g/cm <sup>3</sup> )<br>Diffusion height, DH (m)   | 2.65<br>2                       |            |                              |              |  |              |                      |         |                    |                |                   |                 |
| Exposure interval, T (s)   | 7.90E+08                        |            | Dei = Di * E <sup>0.33</sup> |              |  |              |                      |         |                    |                |                   |                 |
| Area of contamination, A (cm <sup>2</sup> )<br>Organic carbon content, OC (unitless)   | 2.03E+07 LHAAP-46 speci<br>0.02 | ific       | Kd = Koc * OC                |              | Kas = (H / Kd) * 41                      |              |                      |         |                    |                |                   |                 |
|  | Exposure Point                  | Reference  | Molecular                    | Henry's Law  | Organic Carbon                           | Effective    | Soil-Water Partition |         | Soilfair Partition | Volatilization |                   |                 |
|  | Concentration                   | Conc., RfC | Diffusivity, Di              | Constant, H  | Partition Coefficient,                   | Diffusivity, | Coefficient, Kd      | а       | Coefficient, Kas   | factor, VF     | Air Concentration | Hazard Quotient |
| Chemical Name  | EPC (mg/kg)                     | (mg/m³)    | (cm²/s)                      | {atm•m³/mol} | Koc (cm³/g)                              | Dei (cm²/s)  | (cm³/g)              | (cm²/s) | (cm³/g)            | m³/kg          | (mg/m³)           | HQ              |
| Manganese  | 2.64E+03                        | 5.0E-05    | NA                           | 0.00E+00     | NA                                       | NA           | NA                   | NA      | NĂ                 | NA             | 3.91E-07          | 7.81E-03        |

TOTAL PATHWAY HAZARD INDEX 7.81E-03

Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

Shaw Environmental, Inc.

## 00066650

Table 4-128a

Incremental Lifetime Cancer Risk (ILCR) for Potential Dermal Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-35A(58) Site

| CARCINOGENIC EFFECTS |  |
|----------------------|--|
|----------------------|--|

| ASSUMPTIONS:                                     |                |                       | EQUAT                     | TIONS             | -            |          |                 |                      |
|--|----------------|-----------------------|---------------------------|-------------------|--------------|----------|-----------------|----------------------|
| Exposed Skin Surface Area, SA (cm2) - Adult      | 2,500          |                       |                           |                   |              |          |                 |                      |
| Adherence Factor, AF (mg/cm <sup>2</sup> -event) | 0.2            |                       |                           |                   |              |          | ÷               |                      |
| Exposure Frequency, EF (d/yr)                    | 250            |                       |                           |                   |              |          |                 |                      |
|  |                | EPC * MCF * ED        | * EF * SA * AF * ABSd     |                   |              |          |                 |                      |
| Exposure Duration, ED (yr)                       | 25             | DAD =                 |                           |                   |              |          |                 |                      |
| Body Weight, BW (kg)                             | 70             | BW                    | / * ATc * TCF             |                   |              |          |                 |                      |
| Averaging Time, AT (yr)                          | 70             |                       |                           |                   |              |          |                 |                      |
| Conversion Factors                               |                | (LCR = DAD * DERMAL S | F                         |                   |              |          |                 |                      |
| Mass, MCF (kg/mg)                                | 1.00E-06       | DERMAL SF = ORAL SF   | / ABS <sub>GI</sub>       |                   |              |          |                 |                      |
| Time, TCF (d/yr)                                 | 365            |                       |                           |                   |              |          |                 |                      |
|  |                |                       | Gastrointestinal          |                   |              |          |                 |                      |
|  | Exposure Point | Oral                  | Absorption                | Dermal            | Absorption   | Weight   | Dermal Absorbed | Incremental Lifetime |
|  | Concentration  | Slope factor, SF      | Factor, ABS <sub>GI</sub> | Slope factor, SFd | Factor, ABSd | of       | Dose, DAD       | Cancer Risk          |
| Chemical Name                                    | EPC (mg/kg)    | 1/(mg/kg/d)           | (unitless)                | 1/(mg/kg/d)       | (unitiess)   | Evidence | (mg/kg/d)       | ILCR                 |
| Manganese  | 2.64E+03       | NA                    | 6.00E-02                  | NA                | 1.00E-02     | D        | 4.61E-05        | 0.00E+00             |

TOTAL PATHWAY CANCER RISK

0.00E+00

## 00066651

### Table 4-128b Hazard Index (HI) for Potential Dermal Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-35A(58) Site

| NON-CARCINOGENIC EFFECTS                   |                |                   |                              |           |              |                 |   |  |
|--|----------------|-------------------|------------------------------|-----------|--------------|-----------------|---|--|
| ASSUMPTIONS:                               |                |                   | EQUATIO                      | DNS       | _            |                 |   |  |
| Skin Surface Area, SA (cm²)                | 2,500          | EPC * MC          | CF * ED * EF * SA * AF * ABS | d         |              |                 |   |  |
| Adherence Factor, AF (mg/cm <sup>2</sup> ) | 0.2            | DAD =             | ****                         |           |              |                 |   |  |
| Exposure Frequency, EF (d/yr)              | 250            |                   | BW * ATn * TCF               |           |              |                 |   |  |
| Exposure Duration, ED (yr)                 | 25             |                   |                              |           |              |                 |   |  |
| Body Weight-adult, BW (kg)                 | 70             | DAD               |                              |           |              |                 |   |  |
| Averaging Time-adult, ATn (yr)             | 25             | HQ =              |                              |           |              |                 |   |  |
| Conversion Factors                         |                | DERMAL RfD        | )                            |           |              |                 |   |  |
| Mass, MCF (kg/mg)                          | 1.00E-06       |                   |                              |           |              |                 |   |  |
| Time, TCF (d/yr)                           | 365            | DERMAL RfD = ORAL | RfD x ABS <sub>GI</sub>      |           |              |                 | · · · - · - · · · · · · · · · · · · · · |  |
|  |                |                   | Gastrointestinal             |           |              |                 |   |  |
|  | Exposure Point | Oral              | Absorption                   | Dermal    | Absorption   | Dermal Absorbed |   |  |
|  | Concentration  | RfD               | Factor, ABS <sub>GI</sub>    | RfD       | Factor, ABSd | Dose, DAD       | Hazard Quotient                         |  |
| Chemical Name                              | EPC (mg/kg)    | (mg/kg/d)         | (unitless)                   | (mg/kg/d) | (unitiess)   | (mg/kg/d)       | HQ                                      |  |
| Manganese                                  | 2.64E+03       | 1.40E-01          | 6.00E-02                     | 8.40E-03  | 1.09E-02     | 1.29E-04        | 1.54E-02                                |  |

TOTAL PATHWAY HAZARD INDEX

1.54E-02

## 00066652

# Table 4-129a Exposures and Incremental Lifetime Cancer Risks for Potential Expoure of Future Maintenance Workers to Soil at the LHAAP-35A(58) Site

|                            |               | Soil Ingestion | Soil Inhalation | Dermal  |
|----------------------------|---------------|----------------|-----------------|---------|
|                            | Source Term   | Cancer         | Cancer          | Cancer  |
|                            | Concentration | Risk           | Risk            | Risk    |
| Chemical                   | (mg/kg)       | (ILCR)         | (ILCR)          | (ILCR)  |
| Manganese                  | 2.64E+03      | 0.0E+00        | 0.0E+00         | 0.0E+00 |
| Pathway Cancer Risk (ILCR) |               | 0.0E+00        | 0.0E+00         | 0.0E+00 |
| Total ILCR                 |               |                |                 | 0.0E+00 |

## Table 4-129b Exposures and Noncancer Hazards for Potential Expoure of Future Future Maintenance Workers to Soil at the LHAAP-35A(58) Site

| Chemical                  | Source Term<br>Concentration<br>(mg/kg) | Soil Ingestion<br>HQ | Soil Inhalation<br>HQ | Dermal<br>HQ |
|---------------------------|---|----------------------|-----------------------|--------------|
| Manganese                 | 2.64E+03                                | 9.2E-02              | 7.8E-03               | 1.5E-02      |
| Pathway Hazard Index (HI) |   | 9.2E-02              | 7.8E-03               | 1.5E-02      |
| Total HI                  |   |                      |                       | 1.2E-01      |

## 00066653

### Table 4-130a Revision of Cancer Risk Estimates Based on Pre-2003 Measurements of Metals in Soil by Using Post-2003 Soil Analysis Results LHAAP-35A(58)

|           |                              |                          | Jacobs Total             |                      |                 |               |  |
|-----------|------------------------------|--------------------------|--------------------------|----------------------|-----------------|---------------|--|
|           | Jacobs (2003)                | Jacobs (2003)            | Soil                     |                      | Post-2003       |               |  |
|           | Exposure Point               | Incremental              | Incremental              |                      | incremental     | Revised Total |  |
|           | Concentration                | Lifetime Cancer          | Lifetime Cancer          | Post-2003 EPC        | Lifetime Cancer | Soil Cancer   |  |
| Chemical  | (EPC) (mg/kg) <sup>a,b</sup> | Risk (ILCR) <sup>c</sup> | Risk (ILCR) <sup>d</sup> | (mg/kg) <sup>e</sup> | Risk (ILCR)     | Risk (ILCR)   |  |
| Manganese | NA                           | NC                       | 2.0E-05                  | 2.64E+03             | NC              | 2.0E-05       |  |

### Table 4-130b Revision of Noncancer Hazard Estimates Based on Pre-2003 Measurements of Metals in Soil by Using Post-2003 Soil Analysis Results LHAAP-35A(58)

|           | Jacobs (2003)<br>Exposure Point | Jacobs (2003)<br>Hazard Index | Jacobs (2003)<br>Total Soil<br>Hazard Index | Post-2003 EPC        | Post-2003         | Revised Total           |  |
|-----------|---------------------------------|-------------------------------|---|----------------------|-------------------|-------------------------|--|
| Chemical  | (EPC) (mg/kg) <sup>a,b</sup>    | (HI) <sup>f</sup>             | (HI) <sup>9</sup>                           | (mg/kg) <sup>e</sup> | (HI) <sup>h</sup> | Index (HI) <sup>i</sup> |  |
| Manganese | NA                              | 1.70E-02                      | 4.7E-01                                     | 2.64E+03             | 1.2E-01           | 5.9E-01                 |  |

### Notes:

<sup>a</sup> Jacobs Engineering Group, Inc., Final Baseline Human Health and Screening Ecological Risk Assessment for the Group 4 Sites, Sites 04, 08,

35A, 35B, 35C, 46, 47, 48, 50, 60, 67, Goose Prairie Creek, Saunder's Branch, and Caddo Lake, Volume 1, Longhorn Army Ammunition Plant,

Karnack, Texas, Oak Ridge, Tennessee, June 2003.

<sup>®</sup> Manganese was not identified as a chemical of potential concern (COPC) in the Jacobs (2003) risk assessment

<sup>c</sup> ILCR calculated for exposures to the metal in soil by all pathways evaluated, Table C-47 of Jacobs (2003) risk assessment.

<sup>a</sup> ILCR calculated for exposures to all chemicals in soil by all pathways evaluated, Table C-47 of Jacobs (2003) risk assessment.

<sup>e</sup> Value of single sample collected since 2003 with concentration exeeding RBSV, Table 4-119

<sup>1</sup> HI calculated for exposures to the metai in soil by all pathways evaluated, Table 4-129b.

<sup>9</sup> HI calculated for exposures to all chemicals in soil by all pathways evaluated, Table C-50 of Jacobs (2003) risk assessment.

<sup>b</sup> Value calculated for manganese using Post-2003 EPC, Tables 4-126 through 4-129.

'Revised HI = Jacobs-2003 Total HI + Post-2003 HI

NA - not applicable

NC - not calculated, chemical is not a carcinogen

Charles and a Relation of

Shaw Environmental, Inc.

00066654

### Table 4-131a Incremental Lifetime Cancer Risk (ILCR) for Potential Ingestion Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-18/24 Site

### CARCINOGENIC EFFECTS EQUATIONS **ASSUMPTIONS:** Soil Ingestion Rate, IRsoil (mg/d) 50 EPC \* IRsoil \* MCF \* ED \* EF 250 Exposure Frequency, EF (d/yr) 25 1D = Exposure Duration, ED (yr) 70 BW \* ATc \* TCF Body Weight, BW (kg) 70 Averaging Time, ATc (yr) ILCR = ID \* SFo **Conversion Factors** 1.00E-06 Mass, MCF (kg/mg) 365 Time, TCF (d/yr) Incremental Lifetime Weight Intake Dose **Exposure Point** Oral Slope Cancer Risk ID Concentration Factor, SFo of ILCR 1/(mg/kg/d) Evidence (mg/kg/d) EPC (mg/kg) **Chemical Name** 1.09E-05 0.00E+00 6.23E+01 NA NA Vanadium 2.11E-08 1.10E-02 **B**2 1.92E-06 1.10E+01 Trichloroethene 8.30E-07 1.24E-06 4.75E+00 1.50E+00 Α Vinyl Chloride

PATHWAY CANCER RISK

1.27E-06

## 00066655

| Table 4-131b  |
|---|
| Hazard Index (HI) for Potential Ingestion Exposure of Future Maintenance Workers to |
| Chemicals in Soil Associated with Sumps at the LHAAP-18/24 Site                     |

### NON-CARCINOGENIC EFFECTS

| ASSUMPTIONS:                       |                |           | EQUATIONS     |                              |  |  |
|------------------------------------|----------------|-----------|---------------|------------------------------|--|--|
| Soil Ingestion Rate, IRsoil (mg/d) | 50             |           | <del>_,</del> |                              |  |  |
| Exposure Frequency, EF (d/yr)      | 250            |           | EPO           | EPC * IRsoil * MCF * ED * EF |  |  |
| Exposure Duration, ED (yr)         | 250            |           | ID =          |                              |  |  |
| Body Weight, BW (kg)               | 70             |           |               | BW * ATn * TCF               |  |  |
| Averaging Time, ATn (yr)           | 25             |           |               |                              |  |  |
| Conversion Factors                 |                |           | ID            |                              |  |  |
| Mass, MCF (kg/mg)                  | 1.00E-06       |           | HQ =          |                              |  |  |
| Time, TCF (d/yr)                   | 365            |           | RfDo          |                              |  |  |
|                                    | Exposure Point | Oral      | Intake Dose   |                              |  |  |
|                                    | Concentration  | RfDo      | , ID          | Hazard Quotient              |  |  |
| Chemical Name                      | EPC (mg/kg)    | (mg/kg/d) | (mg/kg/d)     | HQ                           |  |  |
| Vanadium                           | 6.23E+01       | 7.00E-03  | 3.05E-04      | 4.35E-02                     |  |  |
| Trichloro <del>c</del> thene       | 1.10E+01       | 6.00E-03  | 5.38E-05      | 8.97E-03                     |  |  |
| Vinyl Chloride                     | 4.75E+00       | 3.00E-03  | 2.32E-05      | 7.75E-03                     |  |  |

TOTAL PATHWAY HAZARD INDEX

6.03E-02

à.

.

Shaw Environmental, Inc.

## 00066656

### Table 4-132a Incremental Lifetime Cancer Risk (ILCR) for Potential Inhalation Exposure of Future Maintenance Workers to Airborne Chemicals from Soll at the LHAAP-18/24 Site

| CARCINOGENIC EFFECTS                        |                      |                            |          |                            |                           |                         |                          |                      |                      |                      |                |                   |                     |
|---|----------------------|----------------------------|----------|----------------------------|---------------------------|-------------------------|--------------------------|----------------------|----------------------|----------------------|----------------|-------------------|---------------------|
| ASSUMPTIONS:                                | -                    |                            |          |                            |                           | EQUATIONS               | 3                        |                      |                      | -                    |                |                   |                     |
| Particulate Emissions Factor, PEF (m3/kg)   | 4.63E+09             |                            |          |                            | 500 Å                     |                         | 4 F.D.                   |                      |                      |                      |                |                   |                     |
| Exposure Frequency, EF (d/yr)               | 250                  |                            |          |                            | EPG*1                     | MCF * (NVF+NPEF) * EF * | EU                       |                      |                      |                      |                |                   |                     |
| Exposure Duration, ED (yr)                  | 25                   |                            |          | Air Concentration (        | ig/m*) =                  |                         | -                        |                      |                      |                      |                |                   | -                   |
| Averaging Time, ATc (yr)                    | 70                   |                            |          |                            |                           | AIC* ICF                |                          |                      |                      |                      |                |                   |                     |
| Conversion Factor                           |                      |                            |          |                            |                           |                         |                          |                      |                      |                      |                |                   |                     |
| Time, TCF (d/yr)                            | 365                  |                            |          | LCR = Air concent          | ation * URF               |                         |                          |                      |                      |                      |                |                   |                     |
| Mass, MCF (microg/mg)                       | 1000                 |                            |          |                            |                           |                         |                          |                      |                      |                      |                |                   |                     |
| SITE DATA / DEFAULT FACTORS:                | -                    |                            |          |                            |                           |                         |                          |                      |                      |                      |                |                   |                     |
| Length of contaminated area, LS (m)         | 4.50E+01 1           | TCEQ default               |          | (LS * V * D)               | (3.14                     | (*a*T) <sup>1/2</sup>   |                          | Dei*E                |                      |                      |                | 5a                |                     |
| True soil porosity, E (unitiess)            | 0.35                 |                            |          | VF =                       | х                         |                         |                          | a =                  | ******               |                      |                |                   |                     |
| Wind speed in mixing zone, V (m/s)          | 2.25                 |                            |          | A                          | (2 * Dei * E              | E * Kas * 10° kg/g)     |                          | E + (ps) * (1-t      | :) / Kas             |                      |                |                   |                     |
| True soil density, ps (g/cm³)               | 2.65                 |                            |          |                            |                           |                         |                          |                      |                      |                      |                |                   |                     |
| Diffusion height, DH (m)                    | 2                    |                            |          | • • •                      |                           |                         |                          |                      |                      |                      |                |                   |                     |
| Exposure interval, T (s)                    | 7.90E+08             |                            |          | Dei= Di* E <sup>0.33</sup> |                           |                         |                          |                      |                      |                      |                |                   |                     |
| Area of contamination, A (cm <sup>2</sup> ) | 2.03E+07             | TCEQ defauit               |          |                            |                           |                         |                          |                      |                      |                      |                |                   |                     |
| Organic carbon content, OC (unitiess) 🧠     | 0.02                 |                            |          | Kd = Koc * OC              |                           | Kas = (H / Kd) * 41     |                          |                      |                      |                      |                |                   |                     |
|   | Exposure Point       | Unit Risk                  | Weight   | Molecular                  | Henry's Law               | Organic Carbon          | Effective                | Soil-Water Partitior |                      | Soil/air Partition   | Volatilization | 12-0              | Incremental Lifetim |
|   | Concentration        | Factor, URF                | of       | Diffusivity, Di            | Constant, H               | Partition Coefficient,  | Diffusivity,             | Coefficient, Kd      | a<br>, 2, ,          | Coefficient, Kas     | Tactor, VF     | Air Concentration | Lancer rusk         |
| Chemical Name                               | EPC (mg/kg)          | 1/(microg/m <sup>3</sup> ) | Evidence | (cm²/s)                    | (atm-m <sup>3</sup> /mol) | Koc (cm³/g)             | Dei (cm <sup>-</sup> /s) | (cm°/g)              | (cm <sup>-</sup> /s) | (cm <sup>-</sup> /g) | (m /Xg)        | 0 72E-01          | 1.655-06            |
| Trichloroethene<br>Vinyl Chloride           | 1.10E+01<br>4.75E+00 | 1.70E-06<br>8.80E-06       | B2<br>A  | 7.90E-02<br>1.06E-01       | 1.04E-02<br>8.51E-02      | 9.33E+01<br>1.10E+01    | 5.59E-02<br>7.50E-02     | 1.87E+00<br>2.19E-01 | 2.48E-03<br>5.73E-02 | 1.59E+01             | 1.42E+02       | 8.16E+00          | 7.18E-05            |

TOTAL PATHWAY CANCER RISK

7.35E-05

÷

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps Shaw Environmental, Inc. 00066657

### Table 4-132b Hazard Index (HI) for Potential Inhalation Exposure of Future maintenance Workers to Airborne Chemicals from Soil at the LHAAP-18/24 Site

| NON-CARCINOGENIC EFFECTS  | _                                  |                      |                              |                      |                                |              |                       |          |                    |                    |                   |                 |
|---|------------------------------------|----------------------|------------------------------|----------------------|--------------------------------|--------------|-----------------------|----------|--------------------|--------------------|-------------------|-----------------|
| ASSUMPTIONS:  | _                                  |                      |                              |                      | EQUATION                       | 6            |                       |          |                    |                    |                   |                 |
| Particulate Emissions Factor, PEF (m <sup>3</sup> /kg)<br>Exposure Frequency, EF (d/yr) | 4.63E+09<br>250                    |                      |                              | E                    | PC * (1/VF+1/PEF) * EF * I     | Đ            |                       |          |                    |                    |                   |                 |
| Exposure Duration, ED (yr)<br>Averaging Time, ATn (yr)                                  | 25<br>25                           |                      | Air Concentration (          | mg/m**3) =           | ATn * TCF                      |              | Air Conce             | ntration |                    |                    |                   |                 |
| Time, TCF (d/yr)  | 365                                |                      |                              |                      |                                |              | Hu = RfC              |          |                    |                    |                   |                 |
| SITE DATA / DEFAULT FACTORS:  | _                                  |                      |                              |                      |                                |              |                       |          |                    |                    |                   |                 |
| Length of contaminated area, LS (m)<br>True soil porosity, E (unitiess)                 | 4.50E+01 LHAAP-46 specific<br>0.35 |                      | (LS * V * D)<br>VF =         | (3.1)<br>X           | 4 * a * T) <sup>1/2</sup>      |              | Dei*E                 |          |                    |                    |                   |                 |
| Wind speed in mixing zone, V (m/s)  | 2.25                               |                      | <br>A                        | (2 * Dei * 8         | * Kas * 10 <sup>-3</sup> kg/g) |              | E + (ps) * (1-1       | E) / Kas |                    |                    |                   |                 |
| True soil density, ps (g/cm <sup>3</sup> )<br>Diffusion height, DH (m)                  | 2.65<br>2                          |                      |                              | <b>,</b>             |                                |              |                       | ,        |                    |                    |                   |                 |
| Exposure interval, T (s)  | 7.90E+08                           |                      | Dei = Di * E <sup>0.33</sup> |                      |                                |              |                       |          |                    |                    |                   |                 |
| Area of contamination, A (cm <sup>2</sup> )<br>Organic carbon content, OC (unitiess)    | 2.03E+07 LHAAP-46 specific<br>0.02 |                      | Kd = Koc * OC                |                      | Kas = (H / Kd) * 41            |              |                       |          |                    |                    |                   |                 |
| · · ·   | Exposure Point                     | Reference            | Molecular                    | Henry's Law          | Organic Carbon                 | Effective    | Soil-Water Partitior  |          | Soil/air Partition | Volatilization     |                   |                 |
|   | Concentration                      | Conc., RfC           | Diffusivity, Di              | Constant, H          | Partition Coefficient,         | Diffusivity, | Coefficient, Kd       | a        | Coefficient, Kas   | factor, VF         | Air Concentratior | Hazard Quotient |
| Chemical Name   | EPC (mg/kg)                        | (mg/m <sup>3</sup> ) | (cm²/s)                      | (atm·m³/mol)         | Koc (cm³/g)                    | Dei (cm²/s)  | (cm <sup>\$</sup> /g) | (cm²/s)  | (cm³/g)            | m <sup>3</sup> /kg | (mg/m³)           | HQ              |
| Vanadium  | 6.23E+01                           | 5.0E-05              | NA                           | 0.00E+00             | NA                             | NA           | NA                    | NA       | NA                 | NA                 | 9.22E-09          | 1.84E-04        |
| Trichloroethene<br>Vinyl Chloride   | 1.10E+01<br>4.75E+00               | NA<br>1.05-01        | 7.90E-02                     | 1.04E-02<br>8.51E-02 | 9.33E+01                       | 5.59E-02     | 1.87E+00              | 2.48E-03 | 2.28E-01           | 2.77E+03           | 2.72E-03          | 0.00E+00        |
| Tingi olioneo   | 7.1 42 . 04                        | 1.02.01              | 1.000-01                     | 0.012-02             | 1.102701                       | 1.JUE-UZ     | 2. IJC-V I            | 0.100-02 | 1.002401           | 1.746702           | 2.232-02          | 2.202-01        |

TOTAL PATHWAY HAZARD INDEX 2.29E-01

### Data Evaluation Report Chemicat Concentrations in Soil Associated with LHAAP-35/36 Sumps

# Shaw Environmental, Inc. 00066658

### Table 4-133a

Incremental Lifetime Cancer Risk (ILCR) for Potential Dermal Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-18/24 Site

| CARCINOGENIC EFFECTS                             |                |                       |                           |                   |                  |           |                 |                      |
|--|----------------|-----------------------|---------------------------|-------------------|------------------|-----------|-----------------|----------------------|
| ASSUMPTIONS:                                     |                |                       | EQUAT                     | IONS              | -                |           |                 |                      |
| Exposed Skin Surface Area, SA (cm2) - Adult      | 2,500          |                       |                           |                   |                  |           |                 |                      |
| Adherence Factor, AF (mg/cm <sup>2</sup> -event) | 0.2            |                       |                           |                   |                  |           |                 |                      |
| Exposure Frequency, EF (d/yr)                    | 250            |                       |                           |                   |                  |           |                 |                      |
|  |                | EPC * MCF * EI        | ) * EF * SA * AF * ABSd   |                   |                  |           |                 |                      |
| Exposure Duration, ED (yr)                       | 25             | DAD =                 |                           |                   |                  |           |                 |                      |
| Body Weight, BW (kg)                             | 70             | BI                    | BW * ATC * TCF            |                   |                  |           |                 |                      |
| Averaging Time, AT (yr)                          | 70             |                       |                           |                   |                  |           |                 |                      |
| Conversion Factors                               |                | ILCR = DAD * DERMAL S | ILCR = DAD * DERMAL SF    |                   |                  |           |                 |                      |
| Mass, MCF (kg/mg)                                | 1.00E-06       | DERMAL SF = ORAL SF   | / ABS <sub>GI</sub>       |                   |                  |           |                 |                      |
| Time, TCF (d/yr)                                 | 365            |                       |                           |                   |                  |           |                 |                      |
|  |                |                       | Gastrointestinal          |                   |                  |           |                 |                      |
|  | Exposure Point | Oral                  | Absorption                | Dermal            | Absorption       | Weight    | Dermal Absorbed | Incremental Lifetime |
|  | Concentration  | Slope factor, SF      | Factor, ABS <sub>61</sub> | Slope factor, SFd | Factor, ABSd     | of        | Dose, DAD       | Cancer Risk          |
| Chemical Name                                    | EPC (mg/kg)    | 1/(mg/kg/d)           | (unitless)                | 1/(mg/kg/d)       | (unitless)       | Evidence  | (mg/kg/d)       | ILCR                 |
| Vanadium   | 6.23E+01       | NA                    | 2.60E-02                  | NA                | 1.00E-02         | NA        | 1.09E-06        | 0.00E+00             |
| Trichloroethene                                  | 1.10E+01       | 1.10E-02              | 1.00E+00                  | 1.10E-02          | 0.00E+00         | B2        | 0.00E+00        | 0.00E+00             |
| Vinyl Chloride                                   | 4.75E+00       | 1.50E+00              | 1.00E+00                  | 1.50E+00          | 0.00E+00         | A         | 0.00E+00        | 0.00E+00             |
|  |                |                       |                           |                   | TOTAL PATHWAY CA | NCER RISK |                 | 0.00E+00             |

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas

## 00066659

### Table 4-133b Hazard Index (HI) for Potential Dermal Exposure of Future Maintenance Workers to Chemicals in Soil Associated with Sumps at the LHAAP-18/24 Site

### NON-CARCINOGENIC EFFECTS

| ASSUMPTIONS:                               |                |                     | EQUATION                     | S         |              |                 |                 |  |
|--|----------------|---------------------|------------------------------|-----------|--------------|-----------------|-----------------|--|
| Skin Surface Area, SA (cm <sup>2</sup> )   | 2,500          | EPC * MC            | F * ED * EF * SA * AF * ABSd |           |              |                 |                 |  |
| Adherence Factor, AF (mg/cm <sup>2</sup> ) | 0.2            | DAD =               |                              |           |              |                 |                 |  |
| Exposure Frequency, EF (d/yr)              | 250            |                     | BW * ATn * TCF               |           |              |                 |                 |  |
| Exposure Duration, ED (yr)                 | 25             |                     |                              |           |              |                 |                 |  |
| Body Weight-adult, BW (kg)                 | 70             | DAD                 |                              |           |              |                 |                 |  |
| Averaging Time-adult, ATn (yr)             | 25             | HQ =                |                              |           |              |                 |                 |  |
| Conversion Factors                         |                | DERMAL RfD          |                              |           |              |                 |                 |  |
| Mass, MCF (kg/mg)                          | 1.00E-06       |                     |                              |           |              |                 |                 |  |
| Time, TCF (d/yr)                           | 365            | DERMAL RfD = ORAL F | RfD x ABS <sub>GI</sub>      |           |              |                 |                 |  |
|  |                |                     | Gastrointestinal             |           |              |                 |                 |  |
|  | Exposure Point | Oral                | Absorption                   | Dermal    | Absorption   | Dermal Absorbed |                 |  |
|  | Concentration  | RfD                 | Factor, ABS <sub>GI</sub>    | RfD       | Factor, ABSd | Dose, DAD       | Hazard Quotient |  |
| Chemical Name                              | EPC (mg/kg)    | (mg/kg/d)           | (unitless)                   | (mg/kg/d) | (unitless)   | (mg/kg/d)       | HQ              |  |
| Vanadium                                   | 6.23E+01       | 7.00E-03            | 2.60E-02                     | 1.82E-04  | 1.00E-02     | 3.05E-06        | 1.67E-02        |  |
| Trichloroethene                            | 1.10E+01       | 6.00E-03            | 1.00E+00                     | 6.00E-03  | 0.00E+00     | 0.00E+00        | 0.00E+00        |  |
| Vinyl Chloride                             | 4.75E+00       | 3.00E-03            | 0.00E+00                     | 0.00E+00  | 0.00E+00     | 0.00E+00        | 0.00E+00        |  |

TOTAL PATHWAY HAZARD INDEX

MARC No. W912QR-04-D-0027, TO No. DS02 Longhorn Army Ammunition Plant, Karnack, Texas 1.67E-02

Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps Shaw Environmental, Inc.

00066660

| Expos                        | ures and incremental Lifetin | me Cancer Risks for Pot | tential Expoure of Future | Maintenance Worker | rs to                 |  |  |  |  |  |  |
|------------------------------|------------------------------|-------------------------|---------------------------|--------------------|-----------------------|--|--|--|--|--|--|
| Soil at the LHAAP-18/24 Site |                              |                         |                           |                    |                       |  |  |  |  |  |  |
|                              |                              | Soil Ingestion          | Soil Inhalation           | Dermal             | Total Cancer Risk for |  |  |  |  |  |  |
|                              | Source Term                  | Cancer                  | Cancer                    | Cancer 🦂           | Chemical by           |  |  |  |  |  |  |
|                              | Concentration                | Risk                    | Risk                      | Risk               | All Exposure Pathways |  |  |  |  |  |  |
| Chemical                     | (mg/kg)                      | (ILCR)                  | (ILCR)                    | (ILCR)             | (ILCR)                |  |  |  |  |  |  |
| Vanadium                     | 6.23E+01                     | 0.00E+00                | 0.00E+00                  | 0.00E+00           | 0.00E+00              |  |  |  |  |  |  |
| Trichloroethene              | 1.10E+01                     | 2.11E-08                | 1.65E-06                  | 0.00E+00           | 1.67E-06              |  |  |  |  |  |  |
| Vinyl Chloride               | 4.75E+00                     | 1.24E-06                | 7.18E-05                  | 0.00E+00           | 7.31E-05              |  |  |  |  |  |  |
| Pathway Cancer Risk (ILCR)   |                              | 1.3E-06                 | 7.3E-05                   | 0.0E+00            |                       |  |  |  |  |  |  |
| Total ILCR                   |                              |                         |                           |                    | 7.5E-05               |  |  |  |  |  |  |

Table 4-134a

| Exposures and Noncancer Hazards for Potential Expoure of Future Future Maintenance Workers to<br>Soil at the LHAAP-18/24 Site |   |                                       |                       |              |   |  |  |  |  |  |  |
|---|---|---------------------------------------|-----------------------|--------------|---|--|--|--|--|--|--|
| Chemical  | Source Term<br>Concentration<br>(ma/ka) | Soil Ingestion<br>HQ                  | Soil Inhalation<br>HQ | Dermal<br>HQ | Total<br>Noncancer Hazard for<br>Chemical by<br>All Exposure Pathways<br>(HI) |  |  |  |  |  |  |
| Vanadium  | 6.23E+01                                | 4.35E-02                              | 1.84E-04              | 1.67E-02     | 6.05E-02  |  |  |  |  |  |  |
| Trichloroethene   | 1.10E+01                                | 8.97E-03                              | 0.00E+00              | 0.00E+00     | 8.97E-03  |  |  |  |  |  |  |
| Vinyl Chloride  | 4.75E+00                                | 7.75E-03                              | 2.29E-01              | 0.00E+00     | 2.36E-01  |  |  |  |  |  |  |
| Pathway Hazard Index (HI)   |   | 6.0E-02                               | 2.3E-01               | 1.7E-02      |   |  |  |  |  |  |  |
| Total HI  |   | · · · · · · · · · · · · · · · · · · · |                       |              | 3.1E-01   |  |  |  |  |  |  |

| Table 4-134b  |
|---|
| Exposures and Noncancer Hazards for Potential Expoure of Future Future Maintenance Workers to |
| Soil at the LHAAP-18/24 Site  |

000666661

### Data Evaluation Report Chemical Concentrations in Soil Associated with LHAAP-35/36 Sumps

### Table 4-135a Revision of Cancer Risk Estimates Based on Pre-2003 Measurements of Metals in Soil by Using Post-2003 Soil Analysis Results LHAAP-18/24

|                 | Jacobs (2002)<br>Exposure Point<br>Concentration | Jacobs (2002)<br>Incremental<br>Lifetime Cancer | Jacobs Total<br>Soil Incremental<br>Lifetime Cancer | Post-2002 EPC        | Post-2002<br>Incremental<br>Lifetime Cancer | Revised Total<br>Soil Cancer | · |  |
|-----------------|--|---|---|----------------------|---|------------------------------|---|--|
| Chemical        | (EPC) (mg/kg) <sup>a,b</sup>                     | Risk (ILCR) <sup>b</sup>                        | Risk (ILCR) <sup>c</sup>                            | (mg/kg) <sup>e</sup> | Risk (ILCR)                                 | Risk (ILCR) 9                |   |  |
| Vanadium        | NA   | NA  | 5.0E-07   | 6.23E+01             | 0.00E+00                                    | 7.5E-05                      |   |  |
| Trichloroethene | NA   | NA  |   | 1.10E+01             | 1.67E-06                                    |                              |   |  |
| Vinyl Chloride  | NA   | NA  |   | 4.75E+00             | 7.31E-05                                    |                              |   |  |

### Table 4-135b Revision of Noncancer Hazard Estimates Based on Pre-2003 Measurements of Metals in Soil by Using Post-2003 Soil Analysis Results LHAAP-18/24

| Chemical        | Jacobs (2002)<br>Exposure Point<br>Concentration<br>(EPC) (mg/kg) <sup>a,b</sup> | Jacobs (2002)<br>Hazard Index<br>(HI) <sup>b</sup> | Jacobs (2002)<br>Total Soil<br>Hazard Index<br>(HI) <sup>h</sup> | Post-2002 EPC<br>(mg/kg) <sup>e</sup> | Post-2002<br>Hazard Index<br>(HI) <sup>i</sup> | Revised Total<br>Soil Hazard<br>Index (HI) <sup>j</sup> |  |
|-----------------|--|--|--|---------------------------------------|--|---|--|
| Vanadium        | NA   | NÁ   | 4.2E-02  | 6.23E+01                              | 6.05E-02                                       | 3.5E-01   |  |
| Trichloroethene | NA   | NA   |  | 1.10E+01                              | 8.97E-03                                       |   |  |
| Vinyl Chloride  | NA   | NA   |  | 4.75E+00                              | 2.36E-01                                       |   |  |

### <u>Notes:</u>

\* Jacobs Engineering Group, Inc., Final Baseline Human Health and Screening Ecological Risk Assessment, Group 2 Sites, Sites 12,17,

18/24, 29, 32, 49, Harrison Bayou and Caddo Lake/Volume 1, Longhorn Army Ammunition Plant,

Karnack, Texas, Oak Ridge, Tennessee, August, 2002.

<sup>b</sup> Chemical was not identified as a chemical of potential concern (COPC) in Table 3-65 of the Jacobs (2002) risk assessment

<sup>6</sup> ILCR calculated for exposures to all chemicals in soil by all pathways evaluated for exposure point concentration (EPC)

including samples within the 5,000 foot trench, Table C-41 of Jacobs (2002) risk assessment.

\* Maximum concentration of samples collected since 2003 with concentration exceeding RBSV, Table 4-123

<sup>1</sup> Value calculated for exposures to the chemical in soil by all pathways evaluated, Table 4-134a.

<sup>9</sup> Value equals sum of Jacobs (2002) value and result of calculations summarized in Table 4-134a.

\* HI calculated for exposures to all chemicals in soit by all pathways evaluated for exposure point concentration (EPC)

including samples within the 5,000 foot trench, Table C-38 of Jacobs (2002) risk assessment.

Value calculated for exposures to the chemical in soll by all pathways evaluated, Table 4-134b.

<sup>3</sup> Value equals sum of Jacobs (2002) value and result of calculations summarized in Table 4-134b.

NA - not applicable